z/VM
7.4

CP Messages and Codes

GC24-6270-74

Note:

Before you use this information and the product it supports, read the information in “Notices” on page 1035.

This edition applies to version 7, release 4 of IBM® z/VM® (product number 5741-A09) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this document

This document contains reference information that is intended to help you understand the control program (CP), installation and upgrade, and VM Dump Tool (VMDT) messages and codes produced by IBM z/VM 7.4, and recommends actions you can take in response to them. This document also explains message formats, conventions, and where to find additional information.

Intended audience

This information is intended for anyone using z/VM who wants descriptive explanations, system actions, and suggested responses to system-issued CP, installation and upgrade, and VMDT messages and codes. A general knowledge of z/VM commands is useful for implementing recommended responses.

Where to find more information

For information about related documents, see “Bibliography” on page 1039.

Links to Other Documents and Websites

The PDF version of this document contains links to other documents and websites. A link from this document to another document works only when both documents are in the same directory or database, and a link to a website works only if you have access to the Internet. A document link is to a specific edition. If a new edition of a linked document has been published since the publication of this document, the linked document might not be the latest edition.

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How to provide feedback to IBM

We welcome any feedback that you have, including comments on the clarity, accuracy, or completeness of the information. See How to send feedback to IBM for additional information.

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Summary of changes for z/VM: CP Messages and Codes

This information includes terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations for the current edition are indicated by a vertical line (**|**) to the left of the change.

GC24-6270-74, z/VM 7.4 (May 2026)

This edition includes terminology, maintenance, and editorial changes.

The following messages are updated:

- “HCP2832E” on page 634
- “HCP3200E” on page 695

GC24-6270-74, z/VM 7.4 (April 2026)

This edition includes changes to support product changes that are provided or announced after the general availability of z/VM 7.4.

[7.4 VM66891] Control-only access for guest crypto domains

With the PTF for APAR VM66891, z/VM supports control-only access for guest crypto domains. Control-only access for guest crypto domains enables virtual machines to submit key management requests to crypto domains for which those virtual machines have control access. Control-only access is made per domain and applies to the domain across all APs that are assigned to the APDED virtual machine. This feature is designed to allow the TKE Catcher or other key management software to run in a virtual machine and manage domains for which it does not have usage-and-control access. Access rights can be managed through the virtual machine's directory settings or dynamically at the command line by using ATTACH CRYPTO and DETACH CRYPTO commands. Current rights can be queried by using the QUERY CRYPTO command.

The following messages are updated:

- “HCP1713E” on page 461
- “HCP1723I” on page 463
- “HCP1728E” on page 464
- “HCP1730E” on page 465
- “HCP1737E” on page 466
- “HCP1738E” on page 467
- “HCP1748E” on page 470
- “HCP1749E” on page 472

[7.4 VM66891] CRYPTO APVIRT NONE

With the PTF for APAR VM66891, z/VM provides a new option, NONE, on the CRYPTO APVIRTUAL system configuration statement. When a CRYPTO APVIRTUAL NONE statement exists in the SYSTEM CONFIG file, z/VM does not attempt to assign crypto resources to the shared pool when the system IPLs. This allows all crypto resources on the system to be available for dedicated use.

The following topic is updated:

- “HCP1720I” on page 462

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[7.4 VM66891] Removal of paging pack without an IPL

With the PTF for APAR VM66891, the dynamic configuration capabilities of z/VM memory management are enhanced, allowing a system administrator to remove a page volume from a running z/VM system without requiring an IPL. The administrator can change an existing page volume without an IPL. This can include enlarging a volume on the same DASD server or replacing a page volume with a volume on a different server.

The following abend is new:

- "DRA001" on page 42

The following messages are updated:

- "HCP6891I" on page 877
- "HCP6893I" on page 878

[7.4 VM66891] FICON RAS improvements

With the PTF for APAR VM66891, RAS updates to z/VM FICON support are provided to mitigate impactful hardware and software issues and improve diagnostics. z/VM implemented the link-recovery-threshold facility on a system where this support is available. This prevents a channel path with a flapping link condition from tying up system resources by disabling and re-enabling the channel path repeatedly, which can potentially cause a system hang condition. Instead, the facility would make the channel path not operational, thus avoiding unnecessary work for the system. In addition, a new error message will inform clients about why the path is not operational, providing suggestions about what might be wrong on the FICON link and what needs to be fixed.

The following message is new:

- "HCP1284I" on page 419

The following message is updated:

- "HCP1283I" on page 419

GC24-6270-74, z/VM 7.4 (December 2025)

This edition includes changes to support product changes that are provided or announced after the general availability of z/VM 7.4.

The following topic is updated:

- "HCP2718E" on page 600

GC24-6270-74, z/VM 7.4 (November 2025)

This edition includes changes to support product changes that are provided or announced after the general availability of z/VM 7.4.

The following topic is updated:

- "HCP3034E" on page 679

GC24-6270-74, z/VM 7.4 (October 2025)

This edition includes terminology, maintenance, and editorial changes.

The following topics are new:

- "Message prefixes" on page 2
- "IIS message prefixes" on page 4

The following topics are updated:

- "z/VM message format" on page 1
- "Message prefixes for other products" on page 5
- "Messages sent through IUCV" on page 8

GC24-6270-74, z/VM 7.4 (September 2025)

This edition includes changes to support product changes that are provided or announced after the general availability of z/VM 7.4.

[7.4 VM66877] Soft abend improvements

With the PTF for APAR VM66877, z/VM 7.4 provides support that allows the number of soft abend dumps to be limited and enables a soft abend dump to be skipped if it would result in a hard abend. With this support, clients can keep their systems up when soft abends occur. Non-fatal problems can be prevented from causing system outages and dump space can be preserved for SNAPDUMP or hard abend dumps by limiting the number of soft abend dumps. A soft abend history table can be reviewed to assess whether there might be any problems with the system.

The following messages are updated:

- "HCP1011I" on page 392
- "HCP9309E" on page 967

[7.4 VM66844, 7.3 VM66850] Transactional execution disablement

With the PTFs for APARs VM66844 (7.4 CP) and VM66850 (7.3 CP), z/VM 7.4 and 7.3 provide support for transactional execution disablement. This support introduces a way to test application migration and detect usage of the transactional-execution facilities with z/VM 7.4 and 7.3, thus preparing z/VM 7.4 and 7.3 users for the eventual reduction and removal of support for these facilities.

The following messages are new:

- "HCP865I" on page 369
- "HCP866I" on page 369

The following message is updated:

- "HCP1944I" on page 508

GC24-6270-74, z/VM 7.4 (July 2025)

This edition includes changes to support product changes that are provided or announced after the general availability of z/VM 7.3 and 7.4.

The following topic is updated:

- "[7.4 VM66824, VM66854, VM66858] z/VM support for the IBM z17 family" on page xiii

GC24-6270-74, z/VM 7.4 (June 2025)

This edition includes changes to support product changes that are provided or announced after the general availability of z/VM 7.4.

[7.4 VM66824, VM66854, VM66858] z/VM support for the IBM z17 family

With the PTFs for APARs VM66824 and VM66854 (7.4 CP), VM66858 (7.4 RACF), VM66823 and VM66853 (7.3 CP), and VM66857 (7.3 RACF), z/VM 7.4 and 7.3 provide support for the IBM z17® family. For more information, see z/VM support for the IBM z17 family in the *z/VM: Migration Guide*.

The following messages are new:

- “HCP3172E ” on page 688
- “HCP3226E ” on page 703
- “HCP3227I ” on page 703
- “HCP3228I ” on page 703
- “HCP3229E” on page 703
- “HCP3231E” on page 704
- “HCP3234E” on page 704
- “HCP3240E” on page 707
- “HCP3241E” on page 707

The following messages are updated:

- “HCP1167E” on page 415
- “HCP1705I” on page 459
- “HCP1706I” on page 459
- “HCP1995I” on page 527
- “HCP2832E” on page 634

The following abends are new:

- “EBS001” on page 44
- “EQA001” on page 45
- “EQL001” on page 45
- “EQS001” on page 45
- “IQC001” on page 83
- “IQG001” on page 83
- “IQH001” on page 83
- “IQN001” on page 85
- “IQO001” on page 85
- “IQO002” on page 85
- “IQP001” on page 85
- “IQS001” on page 86
- “IQV001” on page 86
- “VLE001” on page 217
- “VLG001” on page 218
- “VLI001” on page 218
- “VLM001” on page 218
- “VNS001” on page 220
- “VQH001” on page 224
- “VQQ005” on page 225
- “VQT002” on page 225

The following abend is updated:

- “VNS001” on page 220

GC24-6270-74, z/VM 7.4 (March 2025)

This edition includes changes to support product changes that are provided or announced after the general availability of z/VM 7.4.

[7.4 VM66829] Two-speed Monitor sampling

With the PTF for APAR VM66829, support is added to z/VM 7.4 to collect z/VM Monitor data at two different sampling rates. Particular guests can collect detailed data for a relatively brief period and preserve the data in case a situation arises that requires the data for analysis. Other guests can collect data less frequently and over longer time periods for customary purposes such as real-time monitoring or feeding the z/VM Performance Data Pump.

The following message is updated:

- “HCP6255I” on page 759

The following messages are new:

- “HCP6225I” on page 751
- “HCP6232E” on page 752
- “HCP6264I” on page 761

GC24-6270-74, z/VM 7.4 (September 2024)

This edition supports the general availability of z/VM 7.4. Note that the publication number suffix (-74) indicates the z/VM release to which this edition applies.

The supported product changes include:

- Required architecture level set (ALS) and supported servers

GC24-6270-73, z/VM 7.3 (July 2024)

This edition includes changes to support product changes that are provided or announced after the general availability of z/VM 7.3.

[7.3 VM66749] Relax SCSI alternate path restrictions

With the PTF for APAR VM66749, the uniqueness requirement for the DEVICE *fcp_vdev* operand of the LOADDEV user directory statement and the SET LOADDEV and SET DUMPDEV commands is relaxed. Previously, the device number was required to be unique from any device numbers that were specified in any ALTERNATE path definitions. When the PTF is applied, the *combination of device number and port name* must be unique from those specified in any ALTERNATE path definitions.

The following message is updated:

- “HCP1611E ” on page 438

[7.3 VM66742] VSwitch recovery logic is updated to eliminate endless recovery attempts

With the PTF for APAR VM66742, the VSwitch recovery logic is updated. When a device reset and re-initialization of a VSwitch Uplink Port does not clean up an error condition after multiple attempts, the VSwitch recovery logic now stops its device recovery attempts and issues message HCP3233E.

The “HCP3233E” on page 704 message topic is created.

GC24-6270-73, z/VM 7.3 (December 2023)

This edition includes updates to support product changes that are provided or announced after the general availability of z/VM 7.3.

The changes include the following features:

- FCP SCSI List-directed IPL alternate paths

GC24-6270-73, z/VM 7.3 (September 2023)

This edition includes updates to support product changes that are provided or announced after the general availability of z/VM 7.3.

The changes include the following features:

- Warning track interruption facility
- Enable larger NVMe EDEVICE page space allocations

GC24-6270-73, z/VM 7.3 (May 2023)

This edition includes changes to support product changes that are provided or announced after the general availability of z/VM 7.3.

The changes include the following features:

- Guest secure IPL
- Crypto stateless-command filtering
- Thin stack adapter interrupt support
- Increase crashkernel area size

GC24-6270-73, z/VM 7.3 (September 2022)

This edition supports the general availability of z/VM 7.3. Note that the publication number suffix (-73) indicates the z/VM release to which this edition applies.

The supported product changes include:

- Eight-member SSI support
- Required architecture level set (ALS) and supported servers
- NVMe emulated device (EDEVICE) support

Chapter 1. Introduction

This publication documents a subset of the messages issued by z/VM. For other publications that document z/VM messages, see "z/VM message prefixes" on page 2. In general, messages are issued to alert you to a problem, to request that you perform some action, or to provide information. When diagnosing system problems, use this publication in conjunction with the *z/VM: Diagnosis Guide*.

This publication does not attempt to define job responsibilities or indicate who might receive a particular message.

Information about z/VM messages

z/VM message format

Messages consist of a message identifier (for example, DMSACC017E) and message text. The identifier distinguishes messages from each other. The text is a phrase or sentence describing a condition that has occurred or requesting a response from the user.

The format of most message identifiers is: *xxxmmm###s* or *xxxmmm####s*

The message format consists of four fields:

xxx
: The 3-character prefix indicates which z/VM component, facility, or feature, or which other product, contains the module that generated the message. See "z/VM message prefixes" on page 2, "IIS message prefixes" on page 4, and "Message prefixes for other products" on page 5.

mmm
: The 3-character module code indicates which module generated the message. This field is usually an abbreviation of the name of the module in which the error occurred.

  Note: Most z/VM books that provide reference information for messages omit this field from the listed messages as a message might be issued by several modules. If you request HELP information for a message, you can include the module code or omit it. (HELP ignores it.)

or
: The numeric message number consists of three or four digits that are associated with the condition that caused the message to be generated.

s
: The 1-character severity code is a letter that indicates what kind of condition caused the message. The severity codes used by z/VM and their meanings are:

  A
  : Immediate action required

  D
  : Decision

  E
  : Error

  I
  : Information only

  R
  : Response

  S
  : Severe error

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T
Terminating error

W
System wait (CP only), warning (all others)

Message prefixes

This publication includes information about message prefixes for z/VM, IIS products, and other products. For more information, see the following topics:

- "z/VM message prefixes" on page 2
- "IIS message prefixes" on page 4
- "Message prefixes for other products" on page 5

z/VM message prefixes

The following table lists the message prefixes used by z/VM components, facilities, and features, and indicates where those messages are documented.

Table 1. z/VM message prefixes

Prefix	z/VM component, facility, or feature	Where the messages are documented
ACHA	RSCS Data Interchange Manager	*z/VM: RSCS Networking Messages and Codes*
AGW	APPC/VM VTAM® Support (AVS)	*z/VM: Other Components Messages and Codes*
ATS	Transparent Services Access Facility (TSAF)	*z/VM: Other Components Messages and Codes*
CBD	Hardware Configuration Definition (HCD)	z/OS and z/VM: Hardware Configuration Manager User's Guide (https://www.ibm.com/docs/en/SSLTBW_3.2.0/pdf/eequ100_v3r2.pdf)
CEE	Language Environment®	z/OS: Language Environment Runtime Messages (https://www.ibm.com/docs/en/SSLTBW_3.2.0/pdf/ceea900_v3r2.pdf)
CST	RACF® Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
DGT	Data Facility Storage Management Subsystem for z/VM (DFSMS/VM)	*z/VM: DFSMS/VM Messages and Codes*
DMKRPD	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
DMKRPI	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
DMS	Conversational Monitor System (CMS)	*z/VM: CMS and REXX/VM Messages and Codes*
DMSDFF	Unified DIFF and PATCH support for CMS	*z/VM: CMS and REXX/VM Messages and Codes*
DMSFLD	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
DMSPTC	Unified DIFF and PATCH support for CMS	*z/VM: CMS and REXX/VM Messages and Codes*
DMT	RSCS Networking for z/VM	*z/VM: RSCS Networking Messages and Codes*
DTC	TCP/IP for z/VM	*z/VM: TCP/IP Messages and Codes*

Table 1. z/VM message prefixes (continued)

Prefix	z/VM component, facility, or feature	Where the messages are documented
DVH	Directory Maintenance Facility for	*z/VM: Directory Maintenance Facility Messages*
EDC	Language Environment	*z/VM: Language Environment User's Guide*
EEQ	Hardware Configuration Manager (HCM)	z/OS and z/VM: Hardware Configuration Manager User's Guide (https://www.ibm.com/docs/en/SSLTBW_3.2.0/pdf/eequ100_v3r2.pdf)
FCX	Performance Toolkit for z/VM	*z/VM: Performance Toolkit Reference*
FPL	CMS Pipelines	*z/VM: CMS Pipelines User's Guide and Reference*
FSM	Data Facility Storage Management Subsystem for z/VM (DFSMS/VM)	*z/VM: DFSMS/VM Messages and Codes*
GCT	Group Control System (GCS)	*z/VM: Other Components Messages and Codes*
GSU	OpenExtensions Shell and Utilities	*z/VM: OpenExtensions Commands Reference*
HCP	Control Program (CP)	*z/VM: CP Messages and Codes*
HCPRPD	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
HCPRPI	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
HCPRPW	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
HCQ	VM Dump Tool	*z/VM: CP Messages and Codes*
HCS	Dump Viewing Facility	*z/VM: Other Components Messages and Codes*
IBM	Language Environment	z/OS: Language Environment Runtime Messages (https://www.ibm.com/docs/en/SSLTBW_3.2.0/pdf/ceea900_v3r2.pdf)
ICH	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
IGC	Language Environment	*z/VM: Language Environment User's Guide*
IGD	Data Facility Storage Management Subsystem for z/VM (DFSMS/VM)	*z/VM: DFSMS/VM Messages and Codes*
IKJ	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
IOA	Open Systems Adapter Support Facility (OSA/SF)	Open Systems Adapter-Express Customer's Guide and Reference (https://www.ibm.com/docs/en/SSLTBW_2.3.0/pdf/ioa2z1f0.pdf)
IRM	Virtual Machine Resource Manager (VMRM)	*z/VM: CMS and REXX/VM Messages and Codes*
IRR	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
IUG	z/VM installation and upgrade	*z/VM: CP Messages and Codes*
RAC	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
RPI	RACF Security Server for z/VM	*z/VM: RACF Security Server Messages and Codes*
SNM	TCP/IP for z/VM	*z/VM: TCP/IP Messages and Codes*
SQE	TCP/IP for z/VM	*z/VM: TCP/IP Messages and Codes*
TCP	TCP/IP for z/VM	*z/VM: TCP/IP Messages and Codes*

Table 1. z/VM message prefixes (continued)		
Prefix	**z/VM component, facility, or feature**	**Where the messages are documented**
UFT	TCP/IP for z/VM	*z/VM: TCP/IP Messages and Codes*
VMF	Virtual Machine Service Enhancements Staged/Extended (VMSES/E)	*z/VM: Other Components Messages and Codes*

IIS message prefixes

The following table lists the message prefixes used by products that make up the IBM Infrastructure Suite (IIS) for z/VM and Linux, and indicates where those messages are documented.

Table 2. IIS message prefixes		
Prefix	**Product or component**	**Where the messages are documented**
ANE	IBM Storage Protect Extended Edition	Messages, return codes, and error codes (https://www.ibm.com/docs/en/storage-protect/8.1.26?topic=messages-return-codes-error-codes)
ANR	IBM Storage Protect Extended Edition	Messages, return codes, and error codes (https://www.ibm.com/docs/en/storage-protect/8.1.26?topic=messages-return-codes-error-codes)
ANS	IBM Storage Protect Extended Edition	Messages, return codes, and error codes (https://www.ibm.com/docs/en/storage-protect/8.1.26?topic=messages-return-codes-error-codes)
AOP to VEB	OMEGAMON XE monitoring agents, Tivoli Management Services components	OMEGAMON Troubleshooting Guide: Component prefixes (https://www.ibm.com/docs/en/om-zvm-linux/4.3.0?topic=guide-component-prefixes)
BKR	IBM Backup and Restore Manager for z/VM	Administrator Guide: Messages and Codes (https://www.ibm.com/docs/en/backup-restore-zvm/1.3.0?topic=guide-messages-codes)
CTG	IBM Tivoli OMEGAMON XE on z/VM and Linux	Troubleshooting Guide: List of messages (https://www.ibm.com/docs/en/om-zvm-linux/4.3.0?topic=messages-list#Chunk1392040524)
EUM	IBM Tape Manager for z/VM	Installation and Administration Guide (https://www.ibm.com/docs/en/SSMR3B_1.3/pdf/tape_mgr_oxygen_adming.pdf) (Appendix I, Messages and codes)
GOM	IBM Operations Manager for z/VM	Administrator Guide: Messages and Codes (https://www.ibm.com/docs/en/operations-mgr-zvm/1.6.0?topic=guide-messages-codes)
KVL	IBM Tivoli OMEGAMON XE on z/VM and Linux	Troubleshooting Guide: List of messages (https://www.ibm.com/docs/en/om-zvm-linux/4.3.0?topic=messages-list#Chunk1392040524)
Unnumbered messages	IBM Cloud Infrastructure Center	Troubleshooting (https://www.ibm.com/docs/en/cic/1.2.4?topic=troubleshooting)

Message prefixes for other products

Many other products are available for use with z/VM, but the messages generated by those products are not documented in this publication. Messages for other products usually have a 3-character or 4-character message prefix that is unique to that product. The following table lists many of the message prefixes you might encounter and provides you with the corresponding product names.

Note: Though this list is not all-inclusive, it can help you determine the source of most other messages that are not issued by IIS products or by z/VM.

Table 3. Message prefixes for other products

Prefix	Product name
ADM	Graphical Data Display Manager (GDDM®)
AKQ	Page Printer Formatting Aid/370 (PPFA/370)
APB	Print Services Facility™/VM (PSF/VM)
APK	Print Services Facility/VM (PSF/VM)
APQ	Print Services Facility/VM (PSF/VM)
APR	Print Services Facility/VM (PSF/VM)
APS	Print Services Facility/VM (PSF/VM)
ARI	Db2® Server for VM
ASM	High Level (HL) Assembler
CXA	Network Control Program (NCP)
CXB	Network Control Program (NCP)
CXC	Network Control Program (NCP)
CXD	Network Control Program (NCP)
CXS	Network Control Program (NCP)
CXT	Network Control Program (NCP)
DIT	Data Interfile Transfer, Testing, & Operations (DITTO)
DSI	NetView®
DSM	Document Composition Facility (DCF)
DSQ	Query Management Facility (QMF)
DTI	VM Systems Network Architecture (SNA) Service Application
DTO	Data Interfile Transfer, Testing, & Operations (DITTO)
DUI	NetView
DUT	Data Interfile Transfer, Testing, & Operations (DITTO)
DVM	VM/Pass-Through Facility (PVM)
DWO	NetView
DZA	ProcessMaster®
DZG	VisualGen Host Services
DZI	Overlay Generation Language (OGL/370)

Table 3. Message prefixes for other products (continued)	
Prefix	**Product name**
EAG	REXX Runtime Library
EDF	BookMaster®
EDJ	BookManager®
EFG	VM/Pass-Through Facility
EGV	NetView
EIJ	BookManager
EKG	NetView
ELA	VisualGen Host Services
EMG	Graphical Display and Query Facility (GDQF)
EMH	Graphical Display and Query Facility (GDQF)
EMI	Graphical Display and Query Facility (GDQF)
EPU	OfficeVision/VM (OV/VM)
EUW	Cross-System Product (CSP)
EUY	NetView
EYV	NetView
FAN	REXX Compiler
IBM	Programming Language 1 (PL/1)
IBM	SAA AD/Cycle® Language Environment/370 (LE/370)
ICK	Device Support Facilities (ICKDSF)
IEL	Programming Language 1 (PL/1)
IFC	Environmental Error Record Editing and Printing (EREP)
IKF	VS COBOL/FORTRAN
ILX	VS COBOL/FORTRAN
ISP	Interactive System Productivity Facility (ISPF)
IST	Virtual Telecommunications Access Method (VTAM)
ITP	Teleprocessing Network Simulator (TPNS)

z/VM message syntax conventions

The syntax used in the z/VM messages follows:

- Some messages are displayed in uppercase, while others are displayed in mixed case or lowercase. However, there are many situations in which the same message is displayed in mixed case and uppercase.
- Single quotation marks (') in message text shown in the book are displayed when the message appears on your screen.
- Anything within braces {...|...} indicates alternative text that will be selected at execution time.
- Anything within brackets [...] might optionally be left out, depending on the condition that arises.

z/VM XEDIT messages

Error messages for XEDIT are located in *z/VM: CMS and REXX/VM Messages and Codes*. z/VM XEDIT messages are spread between message numbers 497E and 700E. However, the messages within the 500 range (DMS*mmm*500E - DMS*mmm*599S) are issued only for XEDIT.

Messages with 4nxx identifiers

All messages issued from the CMSBAM saved segment, as well as many of the messages issued from the CMSVSAM and CMSAMS saved segments are identified by a 4*nxx* prefix. The text of these messages is in z/VSE™ format rather than the standard CMS format. Explanations for these messages are not in this manual.

The appropriate message manual to be used for referencing 4*nxx* prefix messages is determined by the associated access method. Messages relating to Sequential Access Method (SAM) are described in z/VSE publications. Messages relating to Virtual Storage Access Method (VSAM) are described in VSAM publications.

Unnumbered responses

All unnumbered responses indicating the successful completion of a command (such as ready messages) are included in the following publications:

- *z/VM: CMS Commands and Utilities Reference*
- *z/VM: CP Commands and Utilities Reference*

Unnumbered responses can also be the result of executing system generation macro instruction or service programs. These responses, referred to as MNOTES, are documented in logic listings only.

Displaying messages at the terminal

Messages are displayed differently depending on how you enter the CP SET EMSG command. The commands, what they display, and their format are:

Table 4. Displaying messages

Command	Displays	Format
SET EMSG CODE	Message identifier only	*xxxmmm####s*
SET EMSG OFF	Nothing	Not applicable
SET EMSG ON	Message identifier and text	*xxxmmm####s text*
SET EMSG TEXT	Message text only	*text*
SET EMSG IUCV	If EMSG is set to IUCV, see "Messages sent through IUCV" on page 8 for a description of the output	*xxxmmm####s text*

Note: CMS messages with a severity of S for severe or T for terminating are displayed as if the CP EMSG setting was ON, regardless of which CP SET EMSG setting is in effect at the time. For more information about message severity codes and the message format, see "z/VM message format" on page 1.

When you log onto z/VM, the initial setting for the display of messages is installation-dependent. Use the CP QUERY SET command to determine the current EMSG setting.

Use the message number to refer to the appropriate messages section of this publication for a description of the message.

In some cases, the text of a message is longer than a line on the display screen. The message text might be divided in the middle of a word and continued on the next line.

For more information about the SET EMSG command, see SET EMSG in the *z/VM: CP Commands and Utilities Reference*.

Messages sent through IUCV

If SET EMSG IUCV has been specified and a connection to the message system service exists, the error code and message text are to be passed to the virtual machine through IUCV. The application or code running in the virtual machine would then be responsible for processing the message and displaying it if necessary. If no IUCV connection exists, the message is handled as if SET EMSG ON had been entered.

The format of the information sent using IUCV is:

```
xxxmmm####s text
```

For more information about the message format, see "z/VM message format" on page 1.

Note: When IUCV is SET for CPCONIO, EMSG, IMSG, MSG, SMSG, VMCONIO, or WNG and you have a secondary user defined, messages will be delivered to the secondary user under certain conditions, as described under TERMINAL PRECEDENCE in the *z/VM: CP Commands and Utilities Reference*.

Displaying messages in other languages

All messages are documented in this publication in American English; however, most messages are displayed at your terminal in the language set for your virtual machine. If your virtual machine is set to another language (either by the SET LANGUAGE command or the OPTION LANG directory statement), you will receive most z/VM messages in that language.

Using the online HELP facility

You can receive information about the messages described in this publication using the z/VM HELP Facility. To display information about a message, enter one of the following commands:

```
help msgid or help msg msgid
```

For example, to display information about message DMS001E, you can enter one of the following commands:

```
help dms001e or help msg dms001e
```

For more information about using the HELP Facility, see the *z/VM: CMS User's Guide*. To display the main HELP Task Menu, enter:

```
help
```

For more information about the HELP command, see HELP in the *z/VM: CMS Commands and Utilities Reference* or enter:

```
help cms help
```

Getting information for a message with no message ID

If you receive a message without a message ID, it could be because you have issued the CP command SET EMSG TEXT to display message text only, or an application program might have issued this command. Without the message ID, you might not be able to determine which z/VM component or feature issued the message, and therefore you might not know where to find information about the message. In that case, you can go to IBM Documentation - z/VM (https://www.ibm.com/docs/en/zvm) and use the search capability to search for a portion of the message text.

Note: For your search string, do not use any portion of the message text containing values provided by the system. The documentation for the message uses variables to represent fields in which data is returned. If you use actual values, your search string will not match.

Chapter 2. System Codes

Codes are generated by the system in response to either an action or lack of action that has been detected. This section provides a summary of the various z/VM codes a user might receive. However, this summary is not all inclusive because of the unique codes that are generated for specific applications.

For more in-depth information about the z/VM functions these codes originate from, see the z/VM documentation related to the function in question.

General User Action

If error messages in the range of 001 to 349 persist while using z/VM commands, you should perform the following steps before contacting your system representative for programming assistance.

1. Keep the console listing identifying the problem.
2. Attempt to reproduce the problem with full error message turned on.

   ```
   SET EMSG ON
   ```

3. Obtain the virtual machine's current configuration.

   ```
   QUERY VIRTUAL
   ```

4. Where appropriate, and depending upon conditions, obtain a virtual storage dump.

   ```
   VMDUMP 0-END  or  DUMP 0-END
   ```

System Operator Action

System operators (classes A, B, C, and D) should do the following when they observe problems with z/VM commands.

1. Keep the console listing identifying the problem.
2. Try to reproduce the problem with full error message turned on.

   ```
   SET EMSG ON
   ```

3. Obtain the real machine's current configuration.

   ```
   QUERY ALL
   ```

4. Issue the failing CP command again. If the problem recurs, obtain a CP dump by issuing the SNAPDUMP command. Use the DUMPLOAD utility (preferred) or the DUMPLD2 utility and the VM Dump Tool to inspect the dump.

   For more information about DUMPLOAD, DUMPLD2, and SNAPDUMP, see *z/VM: CP Commands and Utilities Reference*. For more information about the VM Dump Tool, see *z/VM: VM Dump Tool*.

CP Abend Codes

CP-issued abend codes (hard, soft, and snap dump) are listed in alphanumeric order and include an explanation of why the abend occurred and a suggested user response.

Hard abends occur when CP detects an error condition that it cannot isolate to a single virtual machine or when system integrity is endangered. All abends are hard abends unless otherwise noted.

Soft abends occur when an error condition can be isolated to a single virtual machine or when system integrity is not endangered. Soft abends apply to CP abends only and automatic recovery (auto-restart) is attempted. You can control the type of dump that is created as a result of a soft abend by using the

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CP SET ABEND command. Soft abends are indicated by the following notation at the beginning of the explanation: (soft).

Snap dump abends occur when the SNAPDUMP command is issued by a user (or called by a module) to generate a system dump, identical to a hard abend dump, without terminating the system. Snap dump abends are indicated by the following notation at the beginning of the explanation: (snap).

Note that if more than one dump type is possible for an abend, all possible types are indicated in the parentheses.

For more information about abends, see Hard and Soft Abend Dumps in *z/VM: System Operation*.

Abend Dumps

CP generates an abend dump whenever the system is restarted using the system console (hardware), or when a software error occurs while CP is still operational. You should collect and save the dump for problem diagnosis and for your IBM Support Center personnel.

Abend Code Format

The format of an abend code is *mmm###*, where:

mmm
Is the name, without its prefix, of the module that issued the abend. The complete module name is prefaced by HCP (for example, HCPmmm).

###
Is the code number. If the abend is issued from CP module PRG, this value is the program exception number.

In the abend code descriptions, the names of registers are abbreviated; for example, R3 for register 3.

Abend Codes A - Z

AAK001

Explanation

(soft) The activation block lock has been destroyed. The lock word should never be destroyed when the activation block is found. The transaction is discarded.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AAL001

Explanation

(soft) The activation block lock has been destroyed. The transaction is discarded and a close is sent to the partner. The lock word should never be destroyed when the activation block is found.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AAS001

Explanation

(soft) A nonzero condition code was returned on an IUCV SEVER in the ISFC APPC mailbox. The IUCV SEVER should always complete with condition code zero. Conversation clean up will continue.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AAS002

Explanation

(soft) A condition code of zero was returned on an APPCVM RECEIVE in the ISFC APPC mailbox.

At this point in the APPC mailbox processing, a Message Pending Interrupt has been received. A condition code of zero (indicating receive-ahead) should never occur. Processing continues as if an error occurred on the APPCVM RECEIVE (condition code 1).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AAT002

Explanation

(soft) During open_complete processing in the ISFC APPC mailbox, the target side of the APPC conversation is expecting PIP data on the connect, but the source side never indicated that it was sending PIP data.

This is most likely a timing problem. The APPC conversation is severed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AAU001

Explanation

(soft) A non-zero condition code was received on an IUCV SEVER of the *IDENT path for an ISFC owned gateway in the ISFC APPC mailbox. The IUCV SEVER should always complete with condition code zero. The cleanup of the gateway path will continue.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ABC001

Explanation

(soft) HCPABC received an unexpected return code when scanning for or opening a soft abend dump file.

User response

If message HCPABC9309E preceded this abend, the return code from an attempt to open a soft abend dump file is in R3. Otherwise, the return code is from a scanning operation and is in R15. Determine what the return code is and see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ABF001

Explanation

An unexpected return code was received when opening the system dump spool file.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ABF002

Explanation

An unexpected return code was received when reading, writing, or positioning the system dump spool file.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ABF003

Explanation

An unexpected return code was received when closing the system dump spool file.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ABN001

Explanation

An incorrect PSW address was calculated as the return address in the abending module when an asynchronous dump was requested.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ABN002

Explanation

Not enough storage was available to provide the necessary amount of static save areas for the soft abend process.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ABR001

Explanation

(hard, soft) This is a generic abend that CP takes when it receives an unexpected return code from a routine.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ABR002

Explanation

(soft) CP detected an unsupported return code being returned from an exit routine.

User response

Check the trace table to determine which exit and entry point was called. Review the code associated with this entry point to determine the reason for returning an unsupported return code and correct the error. This is an error in customer or vendor written code; contact the author for additional assistance.

ACP002

Explanation

(soft) Issued when two or more journaling messages for the same failed Directory Broadcast request are received by an ISFC node with enhanced broadcast routing capabilities.

The directory broadcast completes normally, but no journaling messages are sent to any nodes that responded with 'invalid password' on a failed userid/password directory broadcast. There is a programming error either in ISFC directory broadcast code, or in APPC delayed-connect processing.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ACR100

Explanation

(soft) An attempt to acquire the System Resource Table lock (LKWRD defined in SSCSRTLK) failed because it had been destroyed. This indicates a programming error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ACS001

Explanation

(soft) The ISFC directory broadcast routine was called with an incorrect value in the field containing the number of requests (DBHNREQS). The value was either zero or negative.

The directory broadcast does not complete. There is a programming error either in the ISFC directory broadcast code or in APPC delayed-connect processing.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ACV100

Explanation

(soft) An attempt to acquire the System Resource Table lock (LKWRD defined in SSCSRTLK) failed because it had been destroyed. This indicates a programming error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFF001

Explanation

Issued by the HCPAFF module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the processor affinity function, where an error has occurred due to a virtual processing unit establishing a processor feature requirement for a feature it had already required.

You cannot directly circumvent this problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFF002

Explanation

Issued by the HCPAFF module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the processor affinity function, where an error has occurred attempting to find a processor that can satisfy a user's feature requirements.

You cannot directly circumvent this problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFF004

Explanation

Issued by the HCPAFF module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the processor affinity function, where an error has occurred due to an attempt to add a feature that the processor already had.

You cannot directly circumvent this problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFF005

Explanation

Issued by the HCPAFF module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the processor affinity function, where an error has occurred due to an attempt to delete a feature that the processor did not have.

You cannot directly circumvent this problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFR001

Explanation

The address passed to the absolute aligned free storage manager (detected on block release only) was not valid because of one of these reasons:

- The block is not contained in an absolute aligned free storage frame.
- The address of the block is not properly aligned.
- The block already resides on an absolute aligned free storage available block list.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFR002

Explanation

Absolute aligned free storage internal chain damage occurred (detected on block release only) because of one of these reasons:

- The size of the block in the FRMTE has been destroyed.
- The FRMTE representing storage is not on the SUBBK list, but it should be.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFR003

Explanation

An invalid size was specified for an absolute aligned free storage block.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFS001

Explanation

The address passed to the aligned free storage manager (detected on block release only) was not valid because of one of these reasons:

- The block is not contained in an aligned free storage frame.
- The address of the block is not properly aligned.
- The block already resides on an aligned free storage available block list.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFS002

Explanation

Aligned free storage internal chain damage occurred (detected on block release only) because of one of these reasons:

- The size of the block in the SXSTE has been destroyed.
- The SXSTE representing storage is not on the SUBBK list, but it should be.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AFS003

Explanation

An invalid size was specified for a host logical aligned free storage block.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALC001

Explanation

(soft) The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALC002

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALC003

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALC004

Explanation

(soft) The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing

the problem; then contact your IBM Support Center personnel.

ALC005

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALD003

Explanation

An attempt was made to decrement a count of resident pages for a VMDBK or ASCBK, but the count was already negative or would go negative.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALD004

Explanation

A non-pageable FRMTE was found on a frame-owned list (UFO, VUFO, or SUFO).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALD005

Explanation

During the demand scan phase of available list replenishment, a required address in general register 9 did not point a Frame Table Entry (FRMTE).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALD007

Explanation

An attempt was made to decrement a count of invalid-but-resident pages for a VMDBK, but the count was already negative or would go negative.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALD008

Explanation

VMDBK global cyclic lock not held shared as expected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALE001

Explanation

(soft) Issued by the HCPALE module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALE002

Explanation

(soft) Issued by the HCPALE module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALF002

Explanation

An attempt was made to reclaim a real storage frame currently containing a pageable page, but the required serialization (the owning virtual configuration's base VMDBK VMDPTIL Page Table Invalidation Lock) is not held shared or exclusive.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALF003

Explanation

An attempt was made to discard backing storage for a guest page declared as unused, volatile, or potentially volatile and unchanged, but HCPHPCCR reported the page unexpectedly resident.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALF010

Explanation

While adding a frame to the available list or taking a frame from the available list, CP determined that the frames on the list were chained improperly. It may also be that the count of available frames became negative.

User response

Inspect the process of chaining and unchaining frames on the available list. Examine the dump for previous manipulations of the available list to see when and where the damage occurred. Examine the code for the module that caused the damage. R14 points to the address in HCPALF where CP detected the abend.

ALF013

Explanation

The available list replenishment function was attempting to decrease the count of resident pages for an address space (ASCCTPRS), but the count was already negative.

User response

Inspect the process of increasing and decreasing the count of resident pages (ASCCTPRS). Examine the dump and determine the ASCBK or SNTBK for which this count is being decreased. A negative count indicates an invalid list. This count increases when a frame is added to the list and decreases when a frame is taken from the list. Inspect the validity of the list. R14 points to the address in HCPALF where CP detected the abend.

ALF014

Explanation

One of the following invalid page states was detected:

- Logically-zero with a valid PTE.
- Logically-zero, with an invalid PTE, and not invalid-but-resident (IBR).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALG001

Explanation

Incorrect input parameters were provided to a routine called during the demand scan phase of available list replenishment.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the

documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALG003

Explanation

An attempt was made to decrement a count of resident pages for a VMDBK or ASCBK, but the count was already negative or would go negative.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALL001

Explanation

(soft) CP could not delete the VMDBK block from the VMDBK hash table for a user who issued the LOGOFF command. The hash key specified in VMDUSER does not exist in the VMDBK hash table. System execution will continue.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALL002

Explanation

While processing the cyclic list, module HCPALL required the VMDBK to be in a hold lock state and it is not. If an internal logic problem exists, HCPALLVM traverses the list. If the lock was improperly obtained, HCPALLLR releases the lock.

User response

Examine the storage dump. You can use the abend address to determine whether the failure occurred in an HCPALLVM call or an HCPALLLR call. The address of the VMDBK being examined is in R1 for HCPALLVM or R10 for HCPALLLR. Look at the system trace table for the sequence of events that led to this situation.

ALL015

Explanation

A user was completing the LOGOFF process and was no longer eligible to execute work on the system. VMDCTCRT, the count of "critical processes" in progress, was still a positive value. This indicates that some CP code has incremented the counter (generally when the user becomes a defer-lock owner) without ever decrementing it appropriately.

User response

Use the CP trace table to attempt to locate code that incremented VMDCTCRT without decrementing it appropriately. After attempting to locate the failing code, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALL020

Explanation

Subroutine RELCYCLH was called to release the cyclic list hold lock for a particular VMDBK when that lock was not held.

User response

Normally, RELCYCLH is called following GETCYCLH when dequeuing a VMDBK from the global or a local cyclic list. Examine the registers to determine the caller of RELCYCLH, and the VMDBKs involved. R10 points to the VMDBK being detached. R1 points to the corresponding origin VMDBK, which contains the cyclic list lockword, VMDCYCLH.

ALM001

Explanation

(soft) The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ALM002

Explanation

(soft) Parameters were passed in R2 to an entry point in HCPALM that does not accept parameters. The parameter register must be zeros to allow for possible future enhancements to the module.

User response

Using the trace table, determine the caller of the HCPALM entry point, and why a nonzero parameter was passed.

AMD001

Explanation

(soft) Indicates an incorrect number of extents were passed to HCPMSM.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

AMD002

Explanation

(soft) Indicates an insufficient number of DX2BKs were passed to HCPMSM.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

APJ001

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

APU001

Explanation

(soft) This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD001

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD002

Explanation

Issued by the HCPARD module. This module is distributed as object code only, therefore no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD003

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing

the problem; then contact your IBM Support Center personnel.

ARD004

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD005

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD006

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD007

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD008

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD009

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD010

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARD011

Explanation

An attempt was made to either read or write an architecture description block on the Persistent Data Record (PDR) during system initialization. The operation failed for some reason. This means there is a problem with the SSI cluster's PDR. It is likely one of the following problems:

- The SYSTEM CONFIG file statement is pointing to the wrong PDR volume.
- The PDR volume is not accessible in R/W mode.
- The PDR has not been properly created using the appropriate FORMSSI utility.
- There is a problem with the DASD device.
- The PDR lock could not be acquired after repeated attempts.

User response

Check for each of the above problems. First verify that your SSI statement in SYSTEM CONFIG is correct and that your system has R/W access to the volume. Check for possible I/O errors to that volume. Use the dump to determine if the PDR lock is held and by which SSI member.

ARD012

Explanation

Issued by the HCPARD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARR001

Explanation

(soft) An unrecoverable error occurred during DIAGNOSE code X'254' processing. R14 in the system dump contains the address of where the error occurred in module HCPARR.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ARS001

Explanation

(soft) An unrecoverable error occurred during DIAGNOSE code X'254' processing. R14 in the system dump contains the address of where the error occurred in module HCPARS.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASD001

Explanation

(soft) A newly created ASIT was found to not be valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASI002

Explanation

(soft) Issued by the HCPASI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASM002

Explanation

(soft) Parameters were passed in R2 to an entry point in HCPASM that does not accept parameters. The parameter register must be zeros to allow for possible future enhancements to the module.

User response

Using the trace table, determine the caller of the HCPASM entry point, and why a non-zero parameter was passed.

ASM012

Explanation

The count of the total size, in pages, of all private spaces owned by this user has gone negative. This value should never be less than zero.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASN001

Explanation

(soft) The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASN002

Explanation

(soft) Parameters were passed in R2 to an entry point in HCPASN that does not accept parameters. The parameter register must be zeros to allow for possible future enhancements to the module.

User response

Using the trace table, determine the caller of the HCPASN entry point, and why a non-zero parameter was passed.

ASN012

Explanation

The count of the total size, in pages, of all private spaces owned by this user has gone negative. This value should never be less than zero.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASR001

Explanation

(hard, soft) An untrue assertion has been encountered. Assertions are made by modules using the HCPASERT macro. When a false assertion is discovered, an ASR001 abend results. Whether it is a hard abend or a soft abend depends on what the invoker specified for the ABEND parameter of the HCPASERT macro. This abend does not indicate an error in HCPASR, but rather an error in the code that uses the HCPASERT macro. Note that this abend may be issued in places other than HCPASR.

This abend may be issued when CPCHECKING is OFF. This abend can also mean that CP detected the wrong TMODE (Primary Mode or Access Register mode).

User response

R13 at the time of the abend contains the address of a SAVBK which contains the contents of the invokers registers at the time of the failure. The WRKPRGOP field in the savearea contains the program old PSW at the time of the monitor event. The instruction address in that PSW points just past the Monitor Call instruction in the failing HCPASERT macro. The WRKGRPCT field in the savearea contains the number of the failing assertion within the assertion group, or 1 if the assertion is not in a group. If the abend is hard, assertion checking will not be activated during recovery, to avoid a possible abend loop. It may be reactivated with the SET CPCHECKING command.

ASR002

Explanation

(soft) An unrecognized assertion code is found in the HCPASERT parameter list.

User response

This condition indicates a mismatch between the parameter list generated by the HCPASERT macro and the parameter-list parsing in HCPASR. Either the parameter list has become corrupted, or the HCPASERT invocation and HCPASR module are at different update levels. The WRKPRGOP field in the savearea contains the program old PSW at the time

of the monitor event. The instruction address in that PSW points just past the Monitor Call instruction in the failing HCPASERT macro. The WRKGRPCT field in the savearea contains the number of the failing assertion within the assertion group, or 1 if the assertion is not in a group.

ASR003

Explanation

(soft) An illegal length was specified for the source storage operand of a VALUE assertion, made with the HCPASERT macro, and associated with the SET CPCHECKING command. Valid lengths are 1 through 4. This abend does not indicate an error in HCPASR, but rather an error in code which uses the HCPASERT macro.

User response

Examine the HCPASERT invocation and correct the length on the source value. The WRKPRGOP field in the savearea contains the program old PSW at the time of the monitor event. The instruction address in that PSW points just past the Monitor Call instruction in the failing HCPASERT macro. The WRKGRPCT field in the savearea addresses by R13 contains the number of the failing assertion within the assertion group, or 1 if the assertion is not in a group.

ASR004

Explanation

Code invoked for a CODE assertion did not return with R13 unchanged. R13 must be left unchanged, because it contains the address of the savearea used to remember information about the invoker. This abend does not indicate an error in HCPASR, but rather an error in the code that uses the HCPASERT macro.

User response

Examine the HCPASERT invocation and correct the length on the source value. If it has been overlaid since the original monitor event, the instruction address in the program old PSW points just past the Monitor Call instruction in the failing HCPASERT macro.

ASR005

Explanation

Code invoked for a CODE assertion itself caused another recursive CODE assertion to be invoked. CODE assertion code may not issue CODE assertions or call code that makes CODE assertions. This abend does not indicate an error in HCPASR, but rather an error in code that uses the HCPASERT macro.

User response

Examine the HCPASERT invocation and correct it. CODE assertion code may not issue CODE assertions or call code that makes CODE assertions. The WRKPRGOP field in the save area contains the program old PSW at the time of the monitor event. The instruction address in that PSW points just past the Monitor Call instruction in the failing HCPASERT macro.

ASR007

Explanation

Code invoked for a CODE assertion apparently lost control because it returned on a different processor than the one from which it was called. This abend does not indicate an error in HCPASR, but rather an error in code that uses the HCPASERT macro.

User response

Examine the HCPASERT invocation and correct it. Code invoked for a CODE assertion may not lose control. The WRKPRGOP field in the savearea contains the program's old PSW at the time of the monitor event. The instruction address in that PSW points just past the "monitor call" instruction in the failing HCPASERT macro.

ASR008

Explanation

An HCPASERT macro was incorrectly coded. Assertions are not supported if the invoker is in secondary-space mode or running DAT-off.

User response

Examine the HCPASERT invocation and determine if it was issued appropriately. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASY001

Explanation

(soft) A connection attempt to the Asynchronous CP Command Response (*ASYNCMD) system service has detected that the FOR control block (FORBK) is

marked as an orphan on entry to the routine that processes the connection attempt. The connection attempt is severed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASY002

Explanation

(soft) A connection attempt to the Asynchronous CP Command Response (*ASYNCMD) system service has received an error when attempting to acquire the FOR control block (FORBK) lock, indicating the lock has been destroyed. The connection attempt is severed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASY003

Explanation

(soft) A connection attempt to the Asynchronous CP Command Response (*ASYNCMD) system service has determined that the path identifier for the connection attempt is already assigned and in use. The connection attempt is severed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASY004

Explanation

(soft) An attempt to end a connection to the Asynchronous CP Command Response (*ASYNCMD) system service has detected that the user's FOR control block (FORBK) does not exist. The connection attempt is severed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASY005

Explanation

(soft) While processing the end of a FOR command, specifying a PATH to the Asynchronous CP Command Response (*ASYNCMD) system service, the FOR control block (FORBK) was expected to be marked as an orphan but was not.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASY006

Explanation

(soft) While processing the end of a FOR command, specifying a PATH to the Asynchronous CP Command Response (*ASYNCMD) system service, an error occurred while attempting to acquire the IUCV lock for the issuer of the FOR command. This abend indicates the lock has been destroyed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASY007

Explanation

(soft) While processing the end of a FOR command, specifying a PATH to the Asynchronous CP Command Response (*ASYNCMD) system service, an error occurred while attempting to acquire the FOR control block (FORBK) lock for the issuer of the FOR command. This abend indicates the lock has been destroyed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ASY008

Explanation

(soft) While processing the end of a FOR command, specifying a PATH to the Asynchronous CP Command Response (*ASYNCMD) system service, the entry in the connection table (FORTBL) could not be found for the path identifier being processed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ATL001

Explanation

(soft) HCPATLDV was entered using a VMDBK that was not a base VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the base VMDBK.

ATL002

Explanation

HCPATLDV was entered on the system VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the VMDBK of the currently dispatched user.

ATR001

Explanation

(soft) HCPATRDV was entered using a VMDBK that was not a base VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the base VMDBK.

ATR002

Explanation

HCPATRDV was erroneously entered when the system VMDBK was the current VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the VMDBK of the currently dispatched user.

B9S001

Explanation

(soft) Certain instructions with an opcode of B9*xx* are simulated by CP when executed with a function code of zero. This function code indicates a query request that can be used to determine which other functions are available with the instruction. CP should only get control to simulate them if the function code is zero. This abend occurs if the simulation code for one of these instructions is invoked when the requested function code is non-zero.

User response

Examine the dump. Look at the SIEINST field in the SIEBK in R11 to determine which instruction simulation was requested. Register 0 contains the function code that was requested. Determine why the function code is not zero.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BID001

Explanation

(soft) An unexpected return code was returned to HCPBID (the main processing routine for DIAGNOSE code X'250'). The return code is in R15; the address of the routine that returned the code is in R14.

User response

Determine the return code and routine address, and see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BID002

Explanation

(soft) The host-ART lookaside block (HALBK) is full and no more entries can be added. This condition was discovered while processing block I/O entry-list block (BELBK) entries for DIAGNOSE code X'250' and trying to add an entry to the HALBK. R7 contains the address of the HALBK.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BIE001

Explanation

(soft) Issued by the HCPBIE module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BIM001

Explanation

(soft) What should be an impossible situation occurred while processing a Block I/O SEND Request. The type of error is determined by the code stored in R1.

The following is a description of these codes:

R1 = 1
A SEND Request Block (SNDBK) is being FRETed that is not on the SEND Request Queue. The SEND Request may not have been performed.

R1 = 2
An invalid return code was found in a DVIOP Block.

R1 = 3
An invalid or unexpected return code was received from a called routine.

R1 = 4
The number of I/O operations scheduled for a single SEND Request exceeded 256.

R1 = 5
A greater number of I/O Operations occurred for a SEND Request than there was scheduled.

User response

Examine the internal trace table and storage dump to determine which routine within HCPBIM is detecting the error condition. R3 holds the address of the routine that caused the abend.

BIN001

Explanation

During system shutdown a critical ISFC lock could not be obtained in exclusive mode.

User response

Examine the dump to determine what task has been holding the ISFC lock.

BIO001

Explanation

(soft) The DASD block I/O message handler or sever handler failed to locate the block I/O connect block associated with an IUCV SEND or an IUCV SEVER request. The request was made to a device that is connected to the DASD block I/O system service.

User response

Verify the VDEVBIOA in the VDEVBK that points to the block I/O block to ensure that the device is still connected to the DASD block I/O system service.

BIR001

Explanation

(soft) An error occurred while processing a DIAGNOSE code X'250' request. The type of error can be determined by the reason code stored in register 1. The codes are:

R1 = 1
An attempt was made to dequeue a BRQBK from the request chain, but the block was not found.

R1 = 4
The count of active I/O operations for a request (BRQDBICT) is about to go negative. Either too many interrupts have come in for this request, or (more likely) someone isn't incrementing or decrementing the count properly.

R1 = 5
The BKIBK lock was found to be destroyed while attempting to process an interruption.

R1 = 6
The VDISK I/O lock was found to be destroyed while attempting to process an asynchronous request.

User response

Determine the reason code. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BIT001

Explanation

An attempted release occurred of a lock that is not held. An attempt was made to relinquish the lock for a bit map, or to switch the lock from one state to another. However, upon entry to HCPBIT, register 2 did not point to the address of a BITMP control block; register 2 pointed to a fullword of zeros.

User response

Examine the routine that called HCPBIT and determine why R2 pointed where it did.

BIT002

Explanation

A module called HCPBITRL while the BITMPLCK lock was held. A call was made to HCPBIT to release storage for the bit map, but the bit map lock was still held.

User response

Examine the dump. Determine why the lock was not previously relinquished.

BIT008

Explanation

The address of the frame is not page aligned. The address of a frame that is being processed by HCPBITRL is not a 4K boundary. R2 contains the address of the frame.

User response

Examine the dump and trace back through the system execution to the point where generation of the erroneous address occurred and determine the cause of the erroneous address. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BIU001

Explanation

An error occurred while processing a DIAGNOSE code X'250' request. The type of error can be determined by the reason code stored in register 1. The codes are:

R1 = 2
A return code that was not valid was found in a DVIOP. The return code is in register 14.

R1 = 3
An unexpected return code, or one that was not valid, was received from the routine called to build channel programs. The return code is in register 15.

User response

Determine the return code and see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BIU002

Explanation

The TCHBK lock was found to be in an invalid state during minidisk cache back-end processing.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BIU003

Explanation

While doing back-end processing for minidisk cache, the count of blocks processed went negative.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BMS001

Explanation

HCPBMS is trying to obtain a spinlock that was already obtained, but never released by HCPBMS.

User response

R1 addresses the spinlock. The second fullword of the spinlock contains the address of the code that last obtained the spinlock. If the spinlock was last obtained by HCPBMSTM, then HCPBMSTM has been called to terminate the BMSBK, and another entry point in HCPBMS was called with the address of a terminated BMSBK. In this case, the error is outside HCPBMS. Otherwise, one of the entry points in HCPBMS may be obtaining the BMSLOCK without releasing it.

BSC002

Explanation

(soft) Invalid parameters were passed to HCPBSCAA, HCPBSCAK, or HCPBSCSL.

For HCPBSCSL:

R1 contains the address of the SNTBK for which an STLBK is to be built. The address range that specifies the segments to be built is located at SNTRANGE in the SNTBK. Either no range was specified, or the flag bytes for ranges in the same segment indicate different shared/exclusive modes.

For HCPBSCAA and HCPBSCAK:

R0 and R1 contain the supplied address range. Each must refer to a page within the STLBK pointed to in R2. R3 contains the address of a list of input ASAs or KEYs and must not be zero.

User response

R1 contains the pointer to an SNTBK that contains a list of page address start-end pairs (see HCPBSCSL prologue or HCPSNTBK for the format and use of these range pairs). Determine why the ranges or flags are considered invalid. Examine the logic that builds the ranges and flags in the SNTBK to determine how the invalid data was placed in the SNTBK.

If R14 indicates the abend was from HCPBSCSL, examine the contents of R1. R1 contains a pointer to a list of page address start-end pairs on a fullword boundary.

Each pair is of the form SSSSS0GG EEEEE000 where:

SSSSS
is the start page address

EEEEE
is the end page address

GG
is a flag byte

For each pair: 0 <= Start <= End < 2047MB (x'7FEFF000') and pairs are in ascending, non-overlapping order.

The **Flag byte** is as follows:

Bit 7: x'01'
0 = > Segments are shared.

Bit 7: x'01'
1 = > Segments are exclusive.

Bit 6: x'02'
0 = > PTEs are unprotected.

Bit 6: x'02'
1 = > PTEs are protected.

Flags must not conflict for addresses in the same segment.

Negative start and end page addresses indicate the end of the address pairs list. The flag field is ignored in this case. Examples of list terminators include:

```
80000000 80000000 FFFFFFFF FFFFFFFF
```

If R14 indicates the abend was from HCPBSCAA or HCPBSCAK, examine R0 and R1. Check for the condition 0 <= R0 <= R1. If the addresses meet this condition, examine the entries in the STLBK to find the PGMBKs pointed to by the STLBK. The segment portion of the address in R0 and R1 must match the segment portion of a PGMUVIRT in one of the PGMBKs pointed to by the STLBK. Check to see if R3 is nonzero. R2 points to the STLBK.

BSC255

Explanation

An illegal request for too many or too few segment table list block table entries (STLTEs) was made while processing a system data file.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BSI003

Explanation

(soft) An attempt was made to copy information for a new shared segment into a user's segment table, but one or more of the segment table entries to be updated already points to a page table for a shared segment. HCPBSICS expects its callers to have removed any shared storage overlay conditions prior to calling them.

User response

Examine the contents of the dump. R8 has a pointer to the PGMBK that is marked as shared (that is, PGMSNTCT is nonzero). The PGMVM field contains the owner of this PGMBK, and it should be an SNTBK. The SNTBK describes the shared segment connected to this user. R14 points to the place where the need for taking the abend was detected.

BSM001

Explanation

HCPBSMRE received a return code of 4 or 8 from HCPTRANS which indicates that a guest segment could not be validated. This should not be possible.

User response

Examine the dump to determine whether the return code from the HCPTRANS STEONLY=YES invocation in HCPBSMRE indicates that the failure was caused by an incorrect input address (R15 return code = 4) or by the specified i-ASIT failing certification (R15 return code = 8). Attempt to determine the cause of the bad HCPTRANS input value. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BSM003

Explanation

A required segment table list block table entry (STLTE) was not found while processing a system data file.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BSM004

Explanation

HCPBSMSW encountered an irrecoverable Virtual Free Storage error when attempting to preserve the original contents of saved segment shared writeable storage.

User response

Examine the dump to determine whether the failure is caused by the Virtual Free Storage Address Space ALET (from SYSVFMAL) being 0 (indicated by R14 being 0) or whether a storage error occurred while accessing the Virtual Free Storage Address Space (indicated by R14, AR2 and AR4 all being non-zero). Attempt to determine the cause of the failure. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BTB001

Explanation

(soft) A request was made to deallocate an entry in an ISFC utility table, but the entry was not previously allocated. The entry is not deallocated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BTB002

Explanation

(soft) A request was made to allocate an entry in an ISFC utility table, but there were no available entries to allocate. The entry is not allocated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the

documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BTB003

Explanation

(soft) A request was made to allocate an entry in an ISFC utility table, but the table was corrupted. The entry is not allocated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BTB004

Explanation

(soft) A request was made to allocate an entry in an ISFC utility table, but that specific entry had already been allocated. The entry is not allocated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

BVM001

Explanation

Storage area assigned to a VMDBK has not been cleared to zeros.

User response

R11 should contain the address of the newly built VMDBK. Examine the dump to determine if the correct base VMDBK address was set up properly. Also examine the frame list to see who owns these frames.

BVM003

Explanation

(soft) CP attempted to insert a skeleton VMDBK into the VMDBK hash table and another VMDBK with the same user ID was already in the hash table and not pending deletion. CP will attempt to recover from this by deleting the 'old' VMDBK from the VMDBK hash table and inserting the 'new' skeleton VMDBK into the hash table.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CCF001

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CCN002

Explanation

(soft) The subchannel used for the dynamic change returned a busy condition. This condition should not happen.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CCY001

Explanation

There was an internal error in which the VM control program could not find an RDEV control block for the CHSC subchannel needed to perform a dynamic-I/O-configuration change.

User response

Contact your IBM Service Representative.

CCY002

Explanation

The CHSC subchannel used for a dynamic-I/O-configuration change was in a busy or not operational state.

User response

Contact your IBM Service Representative.

CCY003

Explanation

There was an internal error in which the VM control program could not exit configuration mode after performing dynamic-I/O-configuration changes for HCD.

User response

Contact your IBM Service Representative.

CFA001

Explanation

(soft) CP did not find the VMDBK associated with the specific trace being reset.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CFD001

Explanation

Went too far backwards (R6 < R4) when processing delete request. While deleting an entry from CP's external symbol map, register 6 was decremented and became less than register 4.

User response

Examine HCPCFD to see why register 6, which should become equal to register 4, became smaller.

CFD002

Explanation

The offset to a symbol entry was not a multiple of the symbol entry length.

User response

Examine the SYMPT control block located by register 7 to see why the difference between the contents of field SYMPTST and the contents of field SYMPTND was not a multiple of the contents of field SYMPTLN.

CFM001

Explanation

A VMDBK in a virtual MP configuration appears to be running while the total number of running VMDBKs in the configuration is zero. For each VMDBK in a virtual configuration, VMDCFDSP indicates whether or not the VMDBK is running. For the entire virtual configuration, VMDCFCNT in the base VMDBK indicates the number of running VMDBKs in the configuration. If VMDCFCNT is zero while VMDCFDSP indicates a running VMDBK in any VMDBK in the virtual configuration, this abend will result.

User response

Examine the internal trace table and storage dump and determine why VMDCFDSP and VMDCFCNT are out of synchronization.

CFM002

Explanation

(soft) HCPCFMAE was invoked to set up an abort routine, for #CPHX of a long running process, when one had already been established. Any module that invokes HCPCFMAE can cause this abend.

User response

Determine why the system is attempting to set up a new abort routine when one was already established. Use the VMDABEXA field to locate the existing abort routine. Determine where the abort exit was set in the code and why it was never removed.

CFM003

Explanation

HCPCFMRS was called to demote a previously promoted guest when a simulation routine wanted to present end of operations to the guest. The guest was previously promoted to hold console function mode. However, this abend occurred because HCPCFMRS detected that VMDCFCNT was not equal to -1. VMDCFCNT should be -1 if console function mode serialization is held.

User response

The VMDBK in question is in R11 and the origin VMDBK for this guest is in R1. Use the trace table to determine how HCPCFMRS was called without console function mode serialization being held.

CFM004

Explanation

(soft) An unexpected value was found in VMDVSTCT. HCPCFMRD was called with a host share of the IPTE interlock held. On releasing a host share of the IPTE interlock, the value in VMDVSTCT was found to be non-positive. VMDVSTCT holds the count of currently held host shares for the guest. It should never be non-positive while the guest holds the interlock. Register 4 contains the unexpected value from VMDVSTCT.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CFR001

Explanation

(soft) Invalid data passed in input CSLPL to HCPCFR.

User response

Check the trace table to determine which module called HCPCFR. Check the parameters set for HCPCFR. Save the dump and see *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CFR002

Explanation

(soft) While processing FOR command output, the address of the command GSDBK in field VMDFORGS unexpectedly had a value of zero.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CFX001

Explanation

(soft) HCPCFX has received an unsupported request from a remote system.

User response

R6 points to the request block. Determine why it contains an unsupported request. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CIO001

Explanation

(soft) Issued by the HCPCIO module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CLF001

Explanation

R0 at entry to HCPCLFGT was less than 1.

User response

Investigate why the caller to HCPCLF attempted to release 0 pages.

CLG001

Explanation

An impossible internal condition occurred. An error was returned from HCPCFDAD. A request for HCPCFDAD to add an external symbol to the CP external symbol table was rejected, even though validation by HCPCLG indicated that the add request should succeed. The return code from HCPPTVAF is in register 15.

User response

Use the return code in register 15 to determine why HCPCFDAD rejected the request.

CLG002

Explanation

Paging error. Error return from HCPCFDAD. Request for HCPCFDAD to add an external symbol to the CP external symbol table failed due to a system paging error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CLH001

Explanation

A problem was detected in an ESDBK during CPXUNLOAD processing. The fields in this ESDBK do not match what is expected. It should represent a symbol that was added to the symbol table when the CPXLOAD occurred. This abend indicates that either the expected ICLBK pointer is zero, or there is a problem deleting this external symbol from the symbol table. R14 contains the address within the module where the problem is detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CLH002

Explanation

A paging error occurred removing external symbols from the external symbol map.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CLH003

Explanation

Interference occurred updating ICLCPEBK. The ICLBK has information about external symbols that reside in dynamically loaded modules. Because you do not want to unload anything currently in use, CPXUNLOAD processing appends one CPEBK to each ICLBK in turn to wait for its usage count to reach zero. This abend indicates that some other process attempted to change ICLCPEBK when you attempted to save the address of the CPEBK there. This should never occur.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CLT001

Explanation

HCPCLTIP called HCPNSPCV to parse and validate the virtual IPL command, but an unexpected return code was received.

User response

Examine the return code in R15 of the call to HCPNSPCV to determine the error that caused the abend. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CNF001

Explanation

(soft) While processing a DIAGNOSE code X'08' instruction that requested a write to buffer, CP received a request to write to a page that is currently a read-only page. CP writes no data to the guest's storage.

User response

Examine the trace table to determine why the page was made read-only (for instance, a read-only saved segment was loaded at the page that contains the specified address). R1 contains the address.

CNF002

Explanation

(soft) While processing a DIAGNOSE code X'08' instruction that requested a write to buffer, CP received a request to write to an address detected as being invalid. CP writes no data to the guest's storage.

User response

Examine the trace table to determine why the address became invalid (for example, the address is in a saved segment that was released by the other side of a virtual MP). R1 contains the address.

CPN001

Explanation

(soft) HCPCPN, the VARY ONLINE device module, received an unrecognized return code from HCPRDI. HCPRDI is called to attempt to vary a device online. HCPRDI returns a code indicating the results of its attempt to bring the device online.

User response

Examine the return code in R15 that HCPRDI sent. See Debugging CP and CP Abend Checklist in if HCPRDI is returning an invalid return code.

CPW001

Explanation

The storage management DAT tables are in error. When using the LRAG instruction to convert the input host logical address to a host real address, a bad (nonzero) return code was returned. The DAT structures have most likely been damaged.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CPX001

Explanation

(soft) A request to create a list of multiple-exposure addresses failed because one of the nonbase device exposure's RDEV blocks did not exist.

User response

Check whether you created the I/O configuration incorrectly at system generation time. If so, recreate the I/O configuration.

CSG005

Explanation

A VDEV for a virtual card reader does not point to a valid VSPBK. All simulated virtual card readers should always have a VSPBK associated with them.

User response

Examine the VDEV pointed to by R6, and the trace table, to see why the VDEV does not point to a VSPBK. One possibility is that the device is being detached; if so, the trace table will include an entry returning the storage occupied by the VSPBK to free storage.

CTS001

Explanation

(hard) Issued by the HCPCTS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CTS002

Explanation

(soft) Issued by the HCPCTS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CTS003

Explanation

(soft) Issued by the HCPCTS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing

the problem; then contact your IBM Support Center personnel.

CTS004

Explanation

(soft) Issued by the HCPCTS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CTS005

Explanation

(soft) Issued by the HCPCTS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

CTU001

Explanation

(soft) HCPCTU could not find the CCW (channel control word) that was pointed to by the SCSW (subchannel status word). Untranslation of the host channel program was not possible.

User response

Examine the SNAPLIST data, the host channel program and HCPCTU to determine the reason for this abend. The SNAPLIST data contains the IORBK, VDEV, RDEV, and up to 10 CTRBK control blocks.

CVT001

Explanation

The time-of-day (TOD) clock is not working or is not usable. One of the following has occurred:

- The clock was found in the error or not-operational state.
- The clock was found in the not-set state after timer initialization had been completed.
- HCPCVTOC found the clock in the not-set state. This can happen due to a failure of the TOD clock, or due to a call to HCPCVTOC before timer initialization.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DBC001

Explanation

An attempt was made to release a read share of the TCHBK lock (TCHLOCK), but the lock was held in the exclusive state.

User response

General Purpose Register (GPR) 2 points to the TCHBK in question.

DBC003

Explanation

The VMDBK critical process counter (VMDCTCRT) went negative after subtracting 1. This occurred while attempting to release the exclusive BLKIO block lock (BLKLOWN).

User response

General Purpose Register (GPR) 1 points to the VMDBK in question. GPR 3 points to the BLKIO block.

DBE001

Explanation

The BKIBK lock was found to be in an invalid state while processing a DIAGNOSE code X'250' request.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DCO001

Explanation

HCPDCOOV was called to process a MODIFY COMMAND. While processing the PRIVCLASS operand, an impossible internal condition occurred.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DDG001

Explanation

Impossible internal condition occurred.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DEB001

Explanation

A debug Monitor Call was issued with an invalid function code.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DEB002

Explanation

(hard) A system counter has been found to contain an unacceptable value.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DEO001

Explanation

(soft) Entry point HCPDEOST was called to establish a timeout for start I/O instruction simulation, but the field in the VDEV used to anchor such requests was not zero.

User response

Examine the VDEVDEOT field in the VDEV pointed to by R6 to determine why it is not zero. If it points to a TRQBK in use by HCPDEO, try to determine why the caller made another DEOST request while one was already active. If it does not point to such a TRQBK, try to determine what module set the nonzero value in VDEVDEOT.

DEO002

Explanation

(soft) Entry point HCPDEOCN was called to cancel a timeout for start I/O simulation, but the field in the VDEV used to anchor such requests was zero.

User response

Examine the module that called HCPDEOCN to determine why it did so. Examine the CP trace table to determine if a DEO timeout request had been previously canceled for the current I/O instruction. Determine how the VDEVDEOT field was incorrectly set to zero.

DEO003

Explanation

(soft) Entry point HCPDEOCN was called to cancel a timeout for start I/O simulation, but the TRQBK representing the timeout request contained incorrect data. The TRQBIRA field did not contain the address of the timer exit routine within HCPDEO.

User response

Examine the storage area pointed to by the VDEVDEOT field to verify that it is a TRQBK obtained from the free storage manager by module HCPDEO. If it is, try to determine how the value in TRQBIRA was destroyed. If it is not, try to determine how the value in VDEVDEOT was destroyed.

DEO005

Explanation

(soft) The entry point HCPDEOHA was called to establish a timer for one of the following instructions:

TIO, CLRIO, HIO, or HDV. However, the timer already existed, and either the flags in the timer are were valid, or the Halt Subchannel I/O instruction interrupt handler address was not correct.

User response

Examine the timer request block in VDEVDEOT field in the VDEV pointed to by R6. Check the flags in the TRQDEOST field, and the interrupt handler address, for the Halt Subchannel I/O instruction simulation.

DFR017

Explanation

The deferred execution counter, VMDDFRWK in the VMDBK, was about to become negative.

The deferred execution counter (VMDDFRWK) is used to track suspended CP tasks for a VMDBK. While the counter is greater than zero, the VMDBK is not allowed to complete logoff processing. Therefore, CP tasks increment the counter before suspension, then decrement it upon resumption to keep the user's data accessible. This abend occurs when the counter decrement would result in a negative value.

Some, but not all, of the possible causes of a DFR017 abend are:

- The work item was queued, and thus made available to another processor for execution, before VMDDFRWK was incremented. It is possible another processor began executing the code that decrements VMDDFRWK before the creator of the work item incremented it.
- The work item was created on a different VMDBK than it was eventually executed on. In this case, VMDDFRWK was incremented in one VMDBK and decremented in another. This may often happen on task threads which switch between a user VMDBK and the system VMDBK, or switch between VMDBKs in a single virtual MP complex.
- A task thread did not properly serialize its incrementing or decrementing of VMDDFRWK (by using the Compare-and-Swap instruction).

User response

DFR017 abend is issued by a CP macro. Thus, "HCPDFR" does not identify the failing code module. Use the Supervisor-call old PSW of the failing processor to determine the address of the abend invocation. General register 15 contains the address of the VMDDFRWK that was about to become negative. Trace recent execution of the VMDBK and try to locate a CP code path that decremented the counter without insuring a previous increment. Note that the decrement process that abended may not be the incorrect one. The erroneous decrement may have occurred (without failure) after the current task incremented the counter, but before the current decrement.

Since the deferred execution counter is the general mechanism to record outstanding CP work, its mismanagement can result in:

- A hung (or "ghost") user. This can occur if VMDDFRWK is incremented and never decremented.
- This DFR017 abend (when VMDDFRWK is decremented without a prior increment).
- A STK017 abend. This can occur if VMDDFRWK is not used when CP work is deferred. If the user (or VMDBK) completes logoff, the abend occurs on resumption of the deferred work (see the STK017 abend description).

DGB001

Explanation

(soft) The number of active I/O requests (VMDIOACT) exceeded the number of defined devices (VMDDEVCT), or VMDIOACT was not a positive number while I/O was active.

System operation continues.

User response

Examine the VDEV blocks for the virtual machine to determine how many requests were active at the time of the dump. Examine the system trace table to determine when the active requests were started, and what requests became inactive during this interval. Analyze the modules that incremented and/or decremented the VMDIOACT count. If the modules that update the field VMDIOACT contain correct logic, try to determine how the data in the field was destroyed.

DGB002

Explanation

(soft) The system is unable to continue processing because of an internal CP error. The code found in R14 indicates which error was detected.

The following is a description of these codes:

R14 = 1
: An unexpected return code was received from HCPDBIGL. Either the SBILIST length passed was greater than 4KB, or an undocumented return code was passed. Examine R15 to determine what return code was returned from HCPDBIGL.

R14 = 2
An unexpected return code was received from HCPDPSRW. DVICHSIZ field has been corrupted.

R14 = 3
An unexpected return code was received from HCPDPSTB. Examine R15 to see the return code.

R14 = 4
An unexpected return code was received from HCPDBIA4. Examine R15 to see the return code.

User response

Examine R15 to see the return code, and determine why this occurred.

DGD001

Explanation

(soft) The channel programs initiated by DIAGNOSE code X'18' received a nonzero return code from the untranslation routine.

User response

Examine the host channel program, the CSW untranslation routine, and module HCPDGD to determine why this occurred.

DGD002

Explanation

(soft) The number of active I/O requests (VMDIOACT) exceeded the number of defined devices (VMDDEVCT), or VMDIOACT was not a positive number while I/O was active.

System operation continues.

User response

Examine the VDEV blocks for the virtual machine to determine how many requests were active at the time of the dump. Examine the system trace table to determine when the active requests were started, and what requests became inactive during this interval. Analyze the modules that incremented and/or decremented the VMDIOACT count. If the modules that update the field VMDIOACT contain correct logic, try to determine how the data in the field was destroyed.

DGG001

Explanation

(soft) When the device simulator was invoked using the virtual channel simulator, the device simulator signaled that it could not simulate a CCW.

User response

Examine the device simulation module to determine why it did not simulate the command. R6 points to the VDEV block that contains the address of the simulation routine in the field VDEVSIMA. R10 points to the IORBK that contains the guest absolute address of the problem CCW in the field IORCPA.

DGG002

Explanation

(soft) Module HCPDGG received an indication from the untranslation routine that the host channel program ended on a CCW corresponding to a guest CCW with the "suspend" flag validly set. The "suspend" flag can never be validly on in a channel program initiated by a DIAGNOSE code X'A8' request.

User response

Examine the guest channel program, the host channel program, the CCW translation routines, the CSW untranslation routine, and module HCPDGG to determine why this occurred.

DGG003

Explanation

(soft) The number of active I/O requests (VMDIOACT) exceeded the number of defined devices (VMDDEVCT), or VMDIOACT was not a positive number while I/O was active.

System operation continues.

User response

Examine the VDEV blocks for the virtual machine to determine how many requests were active at the time of the dump. Examine the system trace table to determine when the active requests were started, and what requests became inactive during this interval. Analyze the modules that incremented and/or decremented the VMDIOACT count. If the modules that update the field VMDIOACT contain correct logic, try to determine how the data in the field was destroyed.

DGQ001

Explanation

(soft) An internal processing error occurred while processing a DIAGNOSE code X'2A8' - Network Diagnose instruction. Register 1 contains the failing location ID of the z/VM logic in error.

User response

Refer to Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DGR001

Explanation

(soft) DGR001 can occur when a user issues a DIAGNOSE code X'98' to lock or unlock a real storage frame. HCPDGR calls HCPVMS to do its locking and unlocking functions. If HCPDGR receives an undefined return code from HCPVMS on its return of control, HCPDGR issues the soft abend.

User response

Examine the return code in R15 (HCPDGR) in the soft abend dump. It will not be one of the defined return codes for DIAGNOSE code X'98'. For these defined codes, see *z/VM: CP Programming Services*. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DGR002

Explanation

(soft) The number of active I/O requests (VMDIOACT) exceeded the number of defined devices (VMDDEVCT), or VMDIOACT was not a positive number while I/O was active.

System operation continues.

User response

Examine the VDEV blocks for the virtual machine to determine how many requests were active at the time of the dump. Examine the system trace table to determine when the active requests were started, and what requests became inactive during this interval. Analyze the modules that incremented and/or decremented the VMDIOACT count. If the modules that update the field VMDIOACT contain correct logic, try to determine how the data in the field was destroyed.

DIB001

Explanation

A transfer-in-channel (TIC) CCW was encountered where the target address pointed to a location outside the channel program.

User response

Examine the subject channel program and logic of the module that built the channel program to determine why the TIC address is invalid.

DMQ001

Explanation

(soft) HCPDMQ called an entry point that issued an unrecognized return code.

User response

Determine if the return code is valid or if HCPDMQ should be changed to recognize the return code. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DOP001

Explanation

There was an error constructing a paging block on the destination system of a live guest relocation.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DPB017

Explanation

The deferred execution counter in the VMDBK, VMDDFRWK, was about to become negative.

User response

Examine the CP trace table and storage dump to see why the VMDBK in R11 has a zero value for the VMDDFRWK field.

DPS001

Explanation

Entry point HCPDPSGP was called to obtain a BIOPG storage block with a size greater than the allowable maximum. HCPDPSGP is called by the HCPDPCUT macro with the GETSTOR keyword.

User response

General Purpose Register (GPR) 10 points to the size of the BIOPG request. GPR 13 points to the SAVBK control block. SAVER14 field in SAVBK contains the return address of the HCPDPSGP caller.

DRA001

Explanation

(soft) A page table resource manager (PTRM) address was encountered during an active page drain of a paging volume.

User response

None.

DRE005

Explanation

A VDEV for a virtual card reader does not point to a valid VSPBK. All simulated virtual card readers should always have a VSPBK associated with them.

User response

Examine the VDEV pointed to by R6, and the trace table, to see why the VDEV does not point to a VSPBK. One possibility is that the device is being detached; if so, the trace table will include an entry returning the storage occupied by the VSPBK to free storage.

DSB001

Explanation

CP detected a VMDBK whose VMDADSV field indicates that it is in a dispatch vector, but when that vector was searched, CP did not find the VMDBK.

User response

R11 points to the object VMDBK. Examine the VMDBK's VMDADSV field, the indicated dispatch vector, and the trace table entries in the dump to determine why the error occurred.

DSB003

Explanation

During a dispatch vector rebalance operation, it was determined that the remaining capacity of either a topology block (TOPBK) or a dispatch vector block (DSVBK) became negative.

User response

Examine either the DSVBK pointed to by register 2 or the TOPBK pointed to by register 3 to determine which case this is. The DSVBK has only one field that contains the remaining capacity. The TOPBK has an array of fields indexed by CPU type. Register 4 contains the index into the array that indicates the CPU type currently being assigned. After you determine whether the field in the DSVBK or TOPBK became negative, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DSB004

Explanation

The processor quiesce routine was asked to quiesce a processor that does not have a prefix page.

User response

Examine the dump and verify that HCPDSBQU was passed a CPU mask that refers to a nonexistent processor. Determine which code path called HCPDSBQU and how the CPU mask was created. Because the entire code path should hold the Vary Processor Lock, the prefix page should not just disappear.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DSB005

Explanation

The processor quiesce routine was asked to quiesce the master processor.

User response

Examine the dump and verify that HCPDSBQU was passed a CPU mask that refers to the master processor. Determine which code path called HCPDSBQU and how the CPU mask was created. That code needs to switch the master to a different processor before calling HCPDSBQU. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

DSB007

Explanation

While adding a VMDBK to or removing a VMDBK from the list of VMDBKs on a dispatch vector, a problem was found with the maintenance of the list. The possible problems are:

- A VMDBK being removed from a dispatch vector was not "ready." That is, VMDSTATE was not equal to VMDREADY. All VMDBKs on dispatch vectors should be ready.
- An attempt is being made to remove a VMDBK from a dispatch vector but VMDADSV indicates it was on a different one or on none at all.
- An attempt is being made to add a VMDBK to a dispatch vector, but VMDADSV indicates that it is already on one.
- An attempt is being made to add a VMDBK to a dispatch vector, but the VMDBK's state (VMDSTATE) is not ready (VMDREADY).

User response

At the time of the dump, register 14 contains the address within CP where the abend occurred. This should be within the module HCPDSB. Use this address along with the CPLOAD map and a listing of HCPDSB to determine the reason for this specific abend.

DSP001

Explanation

During entry to the dispatcher, the VMDBK that R11 points to is neither the previously dispatched VMDBK nor the system VMDBK.

User response

Examine the CP trace table and storage dump for possible solutions. CR12 points to the next available CP trace table entry after the failure.

DSP002

Explanation

There is an illegal VMDBK state change. On entry to the dispatcher, the VMDBK is not in dispatched, review-suspended, or review-idle state.

User response

Examine the CP trace table and storage dump for possible solutions. CR12 points to the next available CP trace table entry after the failure.

DSP004

Explanation

An entry to the dispatcher was made with DAT active. Losses of control with DAT on are not permitted.

User response

Using the trace table, determine what routine exited to the dispatcher, and why that routine was not running with DAT off at the time.

DSP005

Explanation

The value of the processing unit timer is greater than it was at user dispatch. There is probably an error in switching timers.

User response

Examine the CP trace table and storage dump for possible solutions. CR12 points to the next available CP trace table entry after the failure.

DSP006

Explanation

(soft) An attempt was made to acquire the SYSTEMMP work-dequeue lock on the master processing unit, but the master processing unit already has the lock.

User response

Examine the CP trace table and storage dump to see where the SYSTEMMP work-dequeue lock was

last acquired. R10 points to the SYSTEMMP VMDBK. VMDSYSMP is the SYSTEMMP work-dequeue lock.

DSP007

Explanation

While removing a VMDBK from the list of VMDBKs on a dispatch vector, a problem was found with the maintenance of the list. The possible problems are:

- A VMDBK being removed from a dispatch vector was not "ready." That is, VMDSTATE was not equal to VMDREADY. All VMDBKs on dispatch vectors should be ready.
- An attempt is being made to remove a VMDBK from a dispatch vector but VMDADSV indicates it was on a different one or on none at all.

User response:
At the time of the dump, register 14 contains the address within CP where the abend occurred. This should be within the module HCPDSP. Use this address along with the CPLOAD map and a listing of HCPDSP to determine the reason for this specific abend.

DSW001

Explanation

(soft) Unrecognized work bits are queued on the SYSTEMMP VMDBK, but the Master processing unit already has the lock.

User response

Examine the CP trace table and storage dump to see which modules(s) have set the SYSTEMMP work bits. R11 points to the SYSTEMMP VMDBK. VMDWRKLC contains the work bits.

DTP001

Explanation

(soft) HCPDTPSW was entered using a VMDBK that was not a base VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the base VMDBK.

DTP002

Explanation

HCPDTPSW was erroneously entered when the system VMDBK was the current VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the VMDBK of the currently dispatched user.

DTV001

Explanation

(soft) HCPDTVDV was entered using a VMDBK that was not a base VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the base VMDBK.

DTV002

Explanation

HCPDTVDV was erroneously entered when the system VMDBK was the current VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the VMDBK of the currently dispatched user.

EBS001

Explanation

(soft) Certain instructions with an opcode of EBxx are simulated by CP when executed with a function code of zero. This function code indicates a query request that can be used to determine which other functions are available with the instruction. CP should only get control to simulate them if the function code is zero. This abend occurs if the simulation code for one of these instructions is invoked when the requested function code is non-zero.

User response

Examine the dump. Look at the SIEINST field in the SIEBK in R11 to determine which instruction simulation was requested. Register 0 contains the

function code that was requested. Determine why the function code is not zero.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ENC001

Explanation

CP was not able to make a working copy of the current encryption key.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

END001

Explanation

(soft) HCPENDOP was called to perform end operation simulation, or HCPENDRY was called to perform instruction nullification, but the virtual machine is not in instruction simulation wait.

User response

Determine why the VMDSIMWT bit in VMDRSTAT of VMDBK is not set before the branch to HCPEND.

END002

Explanation

(soft) During HCPENDOP processing, an exigent machine check was indicated in the VMDBK. However, when HCPMCVRF was called to reflect the machine check, no outstanding machine checks were found for this user.

User response

Examine the dump to determine why the VMDEXMCK bit in VMDIPEND of the guest VMDBK is set, but no MCVBK can be found.

END003

Explanation

(soft) A simulation function has ended while leaving a simulation wait abort exit established for the VMDBK.

User response

R11 contains the address of the VMDBK. VMDABEXA contains the address of the established abort exit, and VMDABEXP contains the parameter for the abort exit. The abort exit needs to be cleared using the HCPCFMAE macro prior to reaching end of operation.

EQA001

Explanation

(soft) An unexpected QDIO queue format was found while processing an update to a virtual machine's QDIO queues.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation that you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EQL001

Explanation

(soft) An unexpected QDIO queue format was found while processing an update to a virtual machine's QDIO queues.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation that you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EQS001

Explanation

(soft) An unexpected QDIO queue format was found while processing an update to a virtual machine's QDIO queues.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation that you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ERM001

Explanation

(soft) HCPERM detected that it was passed invalid substitution data. This may be caused by one of the following:

- The substitution data does not contain an end of substitution indicator x'FF'.
- There are too many message substitution place holders x'01'.

User response

Examine the control program's trace table to determine the caller of HCPERMSG. Use this to determine which message is being issued and which parameters were passed. Determine what is wrong with the substitution data passed to HCPERM.

ERM002

Explanation

(soft) HCPERMES has been called for a user in the protected application environment with an option (CSLALTVM or CSLOPER) that the protected application environment does not support.

User response

Check the trace table to determine what module called HCPERMES. Check the parameters set for HCPERMES, save the dump, and see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ERM003

Explanation

(soft) Invalid data was passed in input CSLPL to HCPERM.

User response

Check the trace table to determine what module called HCPERM. Check the parameters set for HCPERM, save the dump, and see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ERM004

Explanation

(soft) The message number that was supplied to HCPERM does not contain all decimal digits. It is most likely that the error message number was built up and then passed to HCPERM by way of the HCPCONSL.

User response

Investigate how the error message number was created.

ESC001

Explanation

(soft) The return code from entry point HCPPCRRQ was not equal to 4, which is the only acceptable return code in this situation. The Read Expanded Storage Element Information SCLP Command was in error, the wrong call interface to the processor controller was used when attempting to issue the request, an unrecognized response code was received, the Processor Controller is logically disconnected or does not exist, or request processing is suspended.

User response

Check the return code in R15. R7 points to the real processor controller block (HCPPCRBK). R4 points to the local processor controller service call data block (HCPPCCBK). Look at these blocks for a possible explanation. If the data in HCPPCRBK and HCPPCCBK is valid, there is a probable hardware error.

ESS001

Explanation

(soft) Issued by the HCPESS module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the collaborative memory management assist. An unexpected return code was encountered from an internal CP routine.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ESS003

Explanation

Issued by the HCPESS module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the collaborative memory management assist. An attempt was made to discard backing storage for a guest page declared as unused, volatile, or potentially volatile and unchanged, but HCPHPCCR reported the page unexpectedly resident.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EXC001

Explanation

(soft) A return code sent back to HCPEXCSR was not a recognized return code. Register 15 contains the return code.

The CP portion of POSIX exec function processing completes with an error. The EXCBK and the POSIX **exec** function return code are returned to the invoker.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EXC002

Explanation

(soft) The host EXCBK address was found to be zero when an attempt was made to release its storage.

The CP portion of POSIX exec function processing completes. The EXCBK and the POSIX exec function return code are returned to the invoker. This situation has no effect on the completion of the CP portion of POSIX exec function processing, but might cause storage to be left unreleased.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EXD001

Explanation

(soft) During the CP portion of POSIX exec function error processing, a request block (REQBK) was not found on the request block chain when it should have been there. This condition occurs if some other part of the CP portion of POSIX exec function processing dequeued a REQBK without the proper serialization.

The CP portion of POSIX exec function processing continues with the task that discovered the problem exiting to the dispatcher. The assumption is that the task that dequeued the REQBK will complete CP's portion of POSIX exec function processing. If this is not the case, the user may wait indefinitely.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EXE001

Explanation

(soft) The reclaim address is zero. The EXCBK and the appropriate return code are returned to the invoker.

This situation has no effect on the completion of the CP portion of POSIX exec function processing, but might cause storage to be left unreleased. When the CP portion of POSIX exec function processing has completed processing information received from the CP application mailbox, it calls a storage reclaim address in the PGEBK. This address is zero.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EXE002

Explanation

(soft) Translation failed for the data buffer sent by the deliver routine. Register 1 and the PGEBK in register 4 contain the virtual address of the buffer page to be translated.

The CP portion of POSIX exec function processing completes. The EXCBK and the POSIX **exec** function return code are returned to the invoker.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EXE003

Explanation

(soft) A return code sent back to HCPEXEDL was not a recognized return code. Register 15 contains the return code.

The CP portion of POSIX exec processing completes with an error. The EXCBK and the POSIX **exec** function return code are returned to the invoker.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EXR001

Explanation

The return code from entry point HCPPCRRQ was greater than 12. The only acceptable return code is 0 or 4. The Read Expanded Storage Usability Map SCLP Command was in error, or the wrong call interface to the processor controller was used when attempting to issue the request.

User response

Check the return code in R15. R1 points to the real processor controller block (HCPPCRBK). R10 points to the data in the processor controller service call data block (HCPPCCBK). Look at these blocks for a possible explanation. If the data in HCPPCCBK and HCPPCRBK is valid, there is a probable hardware error.

EXR002

Explanation

The return code from entry point HCPPCRRQ was greater than 4. The only acceptable return code is 0 or 4. The processor controller is logically disconnected or does not exist, or request processing is suspended.

User response

Check the return code in R15. R1 points to the real processor controller block (HCPPCRBK). R10 points to the data in the processor controller service call data block (HCPPCCBK). Look at these blocks for a possible explanation. If the data in HCPPCCBK and HCPPCRBK is valid, there is a probable hardware error.

EXT001

Explanation

(soft) A real external interrupt was received that the external interrupt handler did not recognize. This is probably a hardware problem.

User response

Examine the CP trace table and storage dump for possible solutions. CR12 points to the next available CP trace table entry after the failure. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EXT002

Explanation

Something other than a malfunction alert was received during a spin-lock malfunction alert enable window. This is probably a hardware problem.

User response

Examine the CP trace table and storage dump for possible solutions. CR12 points to the next available CP trace table entry after the failure. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

EXT105

Explanation

A real processing unit timer interrupt was received, but the processing unit timer was not set to a positive value by HCPRUNXT. If the abend did not occur, CP would be in an external interrupt loop. This is probably an error in managing the processing unit timer or CP status indicators.

User response

Examine the CP trace table and storage dump for possible solutions. CR12 points to the next available CP trace table entry after the failure.

FDL001

Explanation

(soft) A possible programming error (LDVRFCTR < 0) was detected while removing an I/O device from ISFC control. The device (probably the object of a CP DEACTIVATE ISLINK command) may be left in an unpredictable state as a result.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

FMP001

Explanation

A page fault occurred on a minidisk cache page. However, the page table entry corresponding to that page is not in a valid state. (A combination of bits are on in the page table entry that should never be **all** on simultaneously.) The page fault cannot be processed.

User response

Refer to the page table entry of the page causing the page fault. Also check the other page table entries for that track to determine how the page table entry wound up in a state that was not valid.

FMP002

Explanation

A page fault occurred on a minidisk cache page for a standard track. The instruction was not MVCL or MVCSK. Therefore, the page fault could not be processed because HCPFTP cannot determine if this is a read or write operation.

User response

Determine what instruction caused the page fault to occur using the values in the TSKBK. The problem is either the:

- Code is referencing the minidisk cache pages when it should not be.
- Code must be added to HCPFTP to process the new instruction that references minidisk cache standard tracks.

FMP003

Explanation

A page fault occurred on a minidisk cache page. The access register number in the prefix page that specified the register taking the page fault does not match either one of the registers specified in the instruction causing the page fault. The page fault cannot be processed.

User response

Examine the values in the prefix page, the TSKBK, and the module causing the page fault to determine where the error occurred.

FMV001

Explanation

Frame Table Entry (FRMTE) was in an unexpected state during Steal. Either FRMFPT or FRMDCKEY was zero.

User response

General Purpose Register (GPR) 7 points to the Frame Table Entry that is not valid.

FMV002

Explanation

The minidisk cache steal function could not find the TCHBK for a track at the expected location in the hash table. R14 has the address of the location that detected the error.

User response

Examine the dump, trace table, and TCMBK in HCPTCM to determine the state of the minidisk cache at the time of the abend. The registers that contain critical data depend on the location detecting the abend. The search key is in a general register. The base hash table entry that this key hashes to is either in a general register or in the SVGBK (the location depends on the entry point detecting the error). The key should be in this TCHBK or a collision node (CNODE) chained off this base TCHBK. However, the key was not found there. General registers also contain such data as the last CNODE in the chain and the TCMBK address.

FMV003

Explanation

The minidisk cache host storage steal function could not find the PTE it was looking for in the expected PTE-set. Without this abend, the system would loop forever. R15 has the location in the code that detected the error.

User response

Examine the dump, trace table, and TCMBK in HCPTCM to determine the state of the minidisk cache at the time of the abend. The address of the first PTE in the PTE-set being scanned is saved in the SVGBK. The frame being searched for is in R2. R5 contains the address of the last PTE in the PTE-set being scanned. R7 contains the FRMTE address for the frame. The frame address is in R2.

FMV004

Explanation

Minidisk cache page steal is in progress and has just completed stealing from a particular TCHBK. The exclusive hold of the TCHBK lock is being released. During the lock release, HCPFMV determines the TCHBK lock is not in a valid state.

User response

Examine the TCHBK to determine the state of the lock. Examine the trace table to determine what other process could have changed the state of the lock. It is possible a process changed the state of the lock without holding the main cache lock (TCMBK lock).

FOR001

Explanation

(soft) While processing a FOR command that specified a PATH to the Asynchronous CP Command Response (*ASYNCMD) system service, the path identifier, as maintained by IUCV, did not match the identifier maintained by the service. The FOR command issued by the user fails.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

FRD001

Explanation

The size of the block being requested (in R0) is incorrect. The size must be greater than 0 and less than or equal to x'1FD' doublewords.

User response

Using PFXFRERE and PFXFRERC, identify the CP module requesting the storage. Check for an error in calculating the size of the block, or for a modification to the stored block size for variable size blocks. R14 points to the address in FRD where CP detected the abend.

FRD018

Explanation

An invalid SXS page management table entry (SXSTE) was encountered by the free storage manager.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

FRE001

Explanation

The size of the block being requested (in R0) is invalid. The size must be greater than 0 and less than or equal to x'1FD' doublewords.

User response

Using PFXFRERE and PFXFRERC, identify the CP module requesting the storage. Check for an error in calculating the size of the block or for a modification to the stored block size for variable size blocks. R14 points to the address in FRE where CP detected the abend.

FRE002

Explanation

An HCPGETST invocation that specified PAGES=DECIDE and CONDITIONAL=NO evaluated an unsupported LEN (greater than 1 page).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the

documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

FRE008

Explanation

The count of doublewords in use in free storage page is negative.

User response

Examine the dump for the last return of free storage in that page. R14 points to the address in HCPFRE where CP detected the abend.

FRE016

Explanation

The control block being returned to the free storage manager has had its header or trailer (or both) overlaid.

User response

HCPFRE adds one doubleword to the front and two doublewords to the end of each block requested. Examine the CP trace table to determine the module returning the control block and the address of the block being returned. This abend also occurs if a control block is returned twice. If the header or trailer is overlaid, attempt to determine the owner of the control block before it was returned. Then check to see if that module is using storage in excess of the size of the block.

Note: The CP trace table's address entries for free storage remain the same. To determine the address of the free storage extension area, you must subtract 8 decimal from the address contained in the CP trace table entry.

FRE018

Explanation

An invalid SXS page management table entry (SXSTE) was encountered by the free storage manager.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

FRF002

Explanation

A request for free storage could not be satisfied due to a lack of reserved pages, or because the system could not replenish the reserved pages list fast enough.

User response

Examine the trace tables for a possible loop condition that involves obtaining free storage or any condition involving an excessive number of free storage requests. R14 points to the address in HCPFRF where CP detected the abend. This abend might have been caused by one of the following:

- Repeated CP commands consumed free storage.
- Queued console output, accounting or EREP records, or both that were not being retrieved.

Ensure the free storage limit detection function is on for the system (SET/QUERY STGLIMIT).

FRX001

Explanation

Insufficient storage was available during system initialization to allocate the primary memory pool for SCSI device support.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

FRX002

Explanation

Insufficient storage was available during system initialization to allocate the secondary memory pool for SCSI device support.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

FRX016

Explanation

The SCSI memory pool has been compromised. Register 15 contains one of the following reason codes:

8
The address to be released has already been released.

16
The address to be released is not on a 16-byte boundary.

20
The header is not within the memory pool. (When the length of the free storage header was subtracted from the address to be released, the resulting address was not within the expected boundaries.)

24
The header eye-catcher is broken – it should be ">>>>".

28
The trailer is not within the memory pool. (The address of the free storage trailer was not within the expected boundaries.)

32
The trailer is beyond the memory pool. (When the length of the free storage trailer was added to the address of the trailer, the resulting address was not within the expected boundaries.)

36
The trailer eye-catcher is broken – it should be "CSPS".

40
The delimiter eye-catcher is broken – it should be "<<<<".

44
Internal logic error. An error was encountered in the structure of the memory pool.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

FTB001

Explanation

An attempt was made to release a share of a TCHBK lock, but the lock was not in the shared state.

User response

General Purpose Register (GPR) 2 points to the TCHBK in question.

FTH001

Explanation

An error was detected during read/exclusive request processing. The processing resumed after being unstacked from CPEBK queue or I/O completion (reads only), but found the TCHBK is gone.

User response

Examine the trace table for a possible reason for the TCHBK being deleted. General Purpose Register (GPR) 2 has the results from the hash of the key (in GPR 1) and points to a TCHBK. Examine this TCHBK and any collision nodes chained from it. GPR 9 has the address of the TCMBK. Use the TCMBK to see what state the cache is in.

FTH002

Explanation

An error was detected during exclusive request processing. The first CPEBK to be unstacked was a high priority share to an exclusive request. This situation should not be possible under the current implementation.

User response

Examine the trace table for a CPEBK that was stacked for the VMDBK in General Purpose Register (GPR) 11. GPR 3 is the TCHBK with the key (in GPR 1). GPR 4 is the CPEBK anchor for that key. The CPEBK was taken from the CPEBK chain associated with these registers.

FTH003

Explanation

An error was detected during rehash (hash table expansion). A TCHBK was in use or had deferred processes (or both) during the migration of TCHBKs from the old hash table to the new hash table. This violates the input requirements (and system integrity) of HCPFTHRH.

User response

General Purpose Register (GPR) 2 has the address of the currently being processed TCHBK in the old hash table. This is the TCHBK being moved and should not be marked as in use or marked as having CPEBKs

deferred on it. If it is not in use or deferred, then the key in this TCHBK matches the key in the CNODE chained to it (GPR 1). Try to determine why the TCHBK or TCHBK chain is in a state that is not valid. GPR 4 contains the address of the old TCMBK. GPR 9 contains the address of the new TCMBK.

FTH004

Explanation

An error was detected during the unstack of a CPEBK. Either there was no defer queue or a CPEBK was unstacked with a zero address.

User response

The error is detected in subroutine USTKCPEX. Register 15 points to the location that detected the problem. Register 3 has the address of the TCHBK.

- If the error was detected at entry to USTKCPEX, R4=0 indicates there is no defer queue. R4 should be the CNODE with the CPEBK anchor.

  In this case, examine the TCHBK to determine why it is marked as having a defer queue when no such queue exists.
- If the error was detected at CHKUDREQ, the CPEBK anchor in R1 is 0 and there was no unconditional delete to unstack. A CPEBK node in the TCHBK chain for this key has a value that is not valid.

  In this case, R8 contains the address from which R1 was loaded. R8 is an address in the middle of a TCHBK. Examine the TCHBK to determine why it was treated as having a CPEBK address.

FTH005

Explanation

An error was detected during hash table quiesce. The access count went negative.

User response

General Purpose Register (GPR) 9 has the address of the TCMBK. Examine the incrementing and decrementing of TCMAXSCT to determine why the value went negative.

FTS001

Explanation

An attempt was made to release a share of a TCHBK lock, but the lock was not in the shared state.

User response

General Purpose Register (GPR) 2 points to the TCHBK in question.

FUN001

Explanation

(soft) HCPFUN could not find the CCW pointed to by the SCSW. Untranslation of the host channel program was not possible.

One way to circumvent this abend is to avoid issuing the guest channel program that provokes the error until a circumvention or permanent solution is supplied by IBM.

User response

Examine the soft abend SNAPLIST data, the guest channel program, the host channel program, and HCPFUN to determine why this occurred. The SNAPLIST data contains the IORBK, VDEV, RDEV, and up to 10 FCTBK control blocks.

FUN002

Explanation

An attempt was made to release an exclusive share of a TCHBK lock, but the lock was not in the exclusive state.

User response

General Purpose Register (GPR) 2 points to the TCHBK in question.

FXR001

Explanation

An unrecoverable error occurred during the translation of a guest transport mode channel program.

User response

R15 contains the address within the module where the problem was detected.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

FXT001

Explanation

(soft) An invalid trace record format was detected for a transport mode channel program.

User response

R15 contains the invalid format code. Contact your IBM Support Center personnel and arrange to send the soft abend dump.

GAL001

Explanation

An entry point in HCPGAL attempted to release the write lock of a table being passed, but the write lock did not contain what HCPGAL expected it to.

User response

Find out which table the HCPGAL entry point was attempting to unlock, and determine how the lock became corrupted.

GAL002

Explanation

An entry point in HCPGAL determined that the size of the table being passed is below the minimum size acceptable to HCPGAL.

User response

Find out which table the HCPGAL entry point was attempting to perform a function on, and how the table became too small.

GAL003

Explanation

While inserting a re-hashed key into the hash table, the key was found to be already in the table.

User response

Find out which table the HCPGAL entry point was attempting to re-balance. Determine how that table came to contain two entries with the same hash key.

GCS001

Explanation

(soft) The HCPCCWGS macro was invoked during channel program translation with a size parameter greater than 24.

User response

Examine the CCW translation routines corresponding to the guest channel program to locate the incorrect HCPCCWGS invocation. The CCW translation routines are found in the device specific translator modules. These modules are found by noting the entry point name on the TRANS parameter of the HCPVIOGN macro invocation for the specific device in module HCPDCT or HCPSCT.

Note: Many of the translator modules are OCO. If the desired module is OCO, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

GDS001

Explanation

(soft) The virtual device type of the DASD being simulated was not found in the internal table of device characteristics contained in module HCPGDS.

User response

Examine the device type codes in the VDEV (R6 points to the VDEV). If the device is known to be a fully supported DASD, then module HCPGDS is in error. If the module is out of date, apply the appropriate service to bring the module up to date. If the device is not a fully supported DASD, examine the CP trace table (pointed to by CR12) and the save area (pointed to by R13) to determine the caller of HCPGDS. The caller either passed an incorrect VDEV address or incorrectly called module HCPGDS for the device to be simulated.

GDS002

Explanation

(soft) Module HCPGDS has been requested to simulate an invalid channel command.

User response

HCPGDS should not have been called to simulate the invalid channel command. Examine the CP trace table (pointed to by CR12) and the save area (pointed to by R13) to determine the caller in error. Also determine the invalid channel command that the low order byte of SAVER1 contains.

GIO001

Explanation

(soft) Module HCPGIO received an indication from the untranslation routine that the host channel program ended on a CCW that corresponded to a guest CCW with the "suspend" flag validly set. The "suspend" flag can never be validly set on in a channel program initiated by a DIAGNOSE code X'20' request.

User response

Examine the guest channel program, the host channel program, the CCW translation routines, the CSW untranslation routine, and module HCPGIO to determine why this occurred.

GIO002

Explanation

(soft) The number of active I/O requests (VMDIOACT) exceeded the number of defined devices (VMDDEVCT), or VMDIOACT was not a positive number while I/O was active.

User response

Examine the VDEV blocks for the virtual machine to determine how many requests were active at the time of the dump. Examine the system trace table to determine when the active requests were started, and what requests became inactive during this interval. Analyze the modules that incremented and/or decremented the VMDIOACT count. If the modules that update the field VMDIOACT contain correct logic, try to determine how the data in the field was destroyed.

GIR001

Explanation

(soft) (XC mode guest only) An access-list entry private bit was set and an extended-authority exception occurred. CP does not set the access-list entry private bit.

User response

Determine why the access-list entry private bit was incorrectly set.

GIR003

Explanation

(soft) An internal error has been detected while reflecting a program interruption to a guest. One of the following has occurred:

- Program interruption information passed to HCPGIR in general register 0 is invalid.
- VMDPG1LR, VMDPG1FR or VMDITDBA is invalid or inconsistent with the program interruption code to be reflected to the guest virtual machine.

Abend GIR003 may be issued by HCPGIR or a caller of HCPGIR. General register 14 at the time of the dump contains the address of the code where the abend was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

GMC001

Explanation

HCPGMCMC was called to reflect a machine check to the system VMDBK. The machine check interrupt code found in the MCVBK is invalid.

User response

Examine the internal trace table and storage dump to determine what CP module created or modified the MCVBK before the call to HCPGMC was made.

GMC002

Explanation

(soft) HCPGMC was called to reflect a machine check to a guest. The machine check interrupt code is invalid. CP does not recognize the code.

User response

Examine the internal trace table and storage dump to determine what CP module created or modified the MCVBK before the call to HCPGMC was made.

GSP001

Explanation

(soft) While simulating a SIGP SET PREFIX or SIGP STORE STATUS AT ADDRESS instruction, CP received a request to write to a page that is currently a read-only page. CP writes no data to the guest's storage.

User response

Examine the trace table to determine why the page was read-only (for instance, a read-only saved segment was loaded at the page that contains the specified address). R1 contains the address.

GSP002

Explanation

(soft) While simulating a SIGP Set Prefix or SIGP Store Status At Address instruction, CP received a request to write to an address detected as being invalid. CP writes no data to the guest's storage.

User response

Examine the trace table to determine why the address became invalid (for example, the address is in a saved segment that was released by the other side of a virtual MP). R1 contains the incorrect address.

GSP003

Explanation

(soft) An error was encountered during simulation of a SIGP Set Architecture order. The asynchronous code in HCPGSP that simulates the SIGP instruction found the guest to be in a state that is not valid. This should not have happened because the synchronous portion of the simulation processing in HCPPRV should have already detected the problem, returned the proper error, and ended the operation. There is probably a serialization problem that allowed the user's state to change between the checks in HCPPRV and the abend detection code in the asynchronous simulation processor in HCPGSP.

User response

Determine why the state of the virtual machine CPUs was allowed to change between the time that the virtual CPUs were checked in the synchronous portion of the SIGP instruction simulation and the asynchronous portion. This should not have been possible if the proper serialization existed.

HAM004

Explanation

Before deallocating a Page Table Resource Manager (PTRM) page, CP must obtain short term page serialization for that PTRM page. If this serialization attempt fails for any reason, this ABEND is issued.

If HCPHAM is called to deallocate a page from a system utility address space other than the PTRM address space, CP must obtain short term page serialization for that system utility address space's page. If this serialization attempt fails for any reason other than the page being in error (the failure was not due to PGSERROR being set), this ABEND is issued.

User response

R1 contains the address of the page table entry (PTE) for which CP could not obtain short term page serialization. Examine the dump to determine what system utility address space CP was dealing with and what caused the serialization attempt to fail.

HAM005

Explanation

The allocate segment function (HCPHAMAS) of the virtual address manager for system utility address spaces was called. This was done to allocate a new PTRM page (a PGMBK) for a SEGTE. The SEGTE was found to be in an illegal state (either null and not valid, or not valid with a paged PGMBK). Callers of HCPHAMAS must ensure that the input SEGTE is in an allowed state (either not valid and unreferenced with no PGMBK yet assigned, or valid with a resident PGMBK).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HAM006

Explanation

HCPHAMDP was called with a page that still has backing resources on DASD.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HAS001

Explanation

(soft) A nonpageable PGMBK for a shared address space is found paged out during isolate processing.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HAS002

Explanation

Either a private User Frame Owned (UFO) list or the shared UFO list is incorrectly linked.

User response

These frame owned lists are double-linked. Look at the dump and follow the chain starting at VMDFR1ST (the forward pointer anchor) to see if the elements of the list are correctly chained together.

The list should be chained so the forward pointer of each element points to the next element and the backward pointer of each element points to the previous element. VMDFRLST (the backward pointer anchor) should point to the last element on the list. The last element's forward pointer points to the anchor of the list, VMDFR1ST, as does the first element's backward pointer. A private UFO list is anchored in a guest's base VMDBK; the shared UFO list is anchored in the system VMDBK; both at VMDFR1ST.

HAS003

Explanation

An attempt was made to decrement a count of resident pages for a VMDBK or ASCBK, but the count was already negative or would go negative.

User response

Inspect the process of increasing and decreasing the count of resident pages. Examine the dump and determine the VMDBK or ASCBK for which this count is being decreased. A negative count indicates an incorrect user-owned frame list. This count increases when a frame is added to the list and decreases when a frame is taken from the list. Inspect the validity of the user-owned frame list.

HAS005

Explanation

The system encountered a zero or negative VMDBK address.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HAT001

Explanation

(soft) A nonpageable PGMBK was paged out during isolate processing.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HCD002

Explanation

There was an internal error between HCD and the VM control program regarding the control-unit protocol for a dynamic-I/O-configuration change.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HCD003

Explanation

There was an internal error between HCD and the VM control program regarding the control-unit number or message-processor number for a dynamic-I/O-configuration change.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDI001

Explanation

The input parameters to HCPHDITR are not valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDI002

Explanation

Invalid parameters were passed to entry point HCPHDITR.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDI003

Explanation

(soft) The virtual address range cannot be addressed using the current level of the address translation table.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDS001

Explanation

Issued by the HCPHDS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDS002

Explanation

Issued by the HCPHDS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDS003

Explanation

Issued by the HCPHDS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDT001

Explanation

Invalid parameters were passed to entry point HCPHDTAA.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDT002

Explanation

Invalid parameters were passed to entry point HCPHDTVE, HCPHDTMA, or HCPHDTNL.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDT003

Explanation

A table entry was found to be in the wrong state.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDT004

Explanation

A Region Table Entry changed while the Region Table Entry lock was held.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDT005

Explanation

The input address range is too large to be described by the address translation tables.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDU001

Explanation

While attempting to relocate a region or segment table, a table entry was found for which another task holds, or is deferred, waiting for table entry serialization.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HDU006

Explanation

A program error occurred that caused an unsupported internal function to be invoked.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HFB013

Explanation

Incrementing the count portion of VMDPTSOC would cause the count to exceed the maximum allowable value.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HIP001

Explanation

HCPHIPAD was called to associate a CPU with a dispatch vector (DSVBK), but the prefix area for the input CPU indicates that the CPU is already associated with a DSVBK.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HIP002

Explanation

HCPHIPRD was called to break the association between a CPU and a dispatch vector (DSVBK), but the prefix area for the input CPU indicates that the CPU is not associated with a DSVBK.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HIP003

Explanation

HCPHIPRD was called to break the association between a CPU and a dispatch vector (DSVBK), but the DSVBK or related topology block (TOPBK) indicates that the input CPU is not currently associated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HIP004

Explanation

HCPHIPAD was called to associate a CPU with a dispatch vector (DSVBK), determined that an unused DSVBK was required, but could not find an unused DSVBK to use.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HIP005

Explanation

HCPHIPRD was called to break the association between a CPU and a dispatch vector (DSVBK), but was unable to find the DSVBK on the active DSVBK list.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HIP006

Explanation

HCPHIPFD was called to identify the appropriate topology block (TOPBK) in the CPU topology tree for the input CPU, but was unable to locate that TOPBK.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HIP007

Explanation

HCPHIPAD was called to associate a CPU with a dispatch vector (DSVBK), located the appropriate topology block (TOPBK) for this CPU, but was unable to find this CPU in any of the CPU bit masks that identify the polarization and entitlement of the input CPU.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HIP008

Explanation

When the CPU topology manager used the Perform Topology Function (PTF) instruction to set the logical partition's topology to either vertical or horizontal, the instruction presented an unexpected return code. The return code is in the low-order byte of register 1 at the time of the abend.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HIP009

Explanation

(hard) HCPHIPRT was called to refresh the topology. This topology change caused a previously-parked

processor to be unparked, but the processor failed to do so and could not be recovered.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HOT001

Explanation

(soft) A logical or SNA device has received more than 50 consecutive unsolicited interruptions. This is probably a software error in the service machine for logical or SNA devices.

System operation continues.

User response

R8 points to the device RDEV. For a logical device, RDEVLSOP points to the logical subchannel object. For a SNA device, RDEVSNA points to the SNABK. Determine why the service machine is creating/passing the unsolicited interrupts.

HOT002

Explanation

Entry Point HCPIISBX returned an address of an RDEV for a base exposure of a multiexposure device, but when the address was passed to HCPCPXMX, HCPCPXMX indicated that the device was **not** a base exposure.

User response

R8 points to the RDEV. Determine whether the RDEV represents a base exposure of a multiexposure device or not. Inspect the logic in the module that produced the incorrect result to determine why the error is occurring.

HPC001

Explanation

This abend is issued if one of the following goes negative:

- The address space count of resident pages, ASCCTPRS or ASCCTPRG
- The virtual configuration wide count of private resident pages, VMDCTPVR or VMDCTSHG
- The system wide count of shared address space resident pages, VMDCTSHR or VMDCTSHG

User response

R15 points to the place that detected the cause for this abend. Examine the dump to determine which counter is negative.

HPC002

Explanation

HCPHPCKP was called to release a page for either the SYSTEM or SYSTEMMP VMDBK. This is not allowed.

User response

R11 contains the VMDBK address at the time of the abend. Examine the dump to determine which VMDBK the page is being release from.

HPC003

Explanation

HCPHPCKP was called to release a page that is not owned by the dispatched virtual configuration.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HPC004

Explanation

The frame to be released is not marked as owned, or its FRMTE is improperly chained.

User response

R15 points to the place that detected the cause for this abend.

Examine the dump to determine which reason caused this abend.

HPC006

Explanation

This abend is issued if one of the following goes negative:

- The address space count of locked pages, ASCCTPLK

- The virtual configuration wide count of private locked pages, VMDCTPVL
- The system wide count of shared locked pages, VMDCTSHL.

User response

R15 points to the place that detected the cause for this abend.

Examine the dump to determine which counter is negative.

HPC007

Explanation

The count for ASCIACCT or ASCRACCT has gone negative.

User response

R15 points to the place that detected the cause for this abend.

Examine the dump to determine which counter is negative.

HPC010

Explanation

A system-managed space page was released while still locked in absolute or logical storage or still being actively translated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HPC011

Explanation

The FRMTE describing a frame for a PGMBK of the address space being released was found to be queued incorrectly or was not marked as a CP frame.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HPC012

Explanation

STE serialization could not be obtained for an STE for the address space being released even though release processing has held PTIL exclusive since before invalidating the STE.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HPC015

Explanation

A PGMBK for the address space being released was found to be marked as being owned by an SNTBK (NSS/DCSS saved segment storage). Either the caller did not specify that the release was for a destroy or the PGMBK is still imbedded in at least one user address space.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HPC016

Explanation

The bits, inputted to HCPHPC, indicating the PTIL serialization held by the caller are not a valid or recognized combination.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HPH002

Explanation

In the HCPHPHPF routine, R0 and R1 contain the supplied address range. They must be positive and fall within the maximum possible address for this space

based on segment table size (ASCSSIZE). R0 (the start) must be less than or equal to R1 (the end). For the system's virtual storage, addresses less than 2G are valid, but the range given by R0 and R1 may not overlay part of the CP nucleus.

User response

R15 points to the place that detected the need for taking the abend.

Examine the contents of R0 and R1 passed to HCPHPHPF. Determine which value fails the test: 0 <= R0 <= R1 < ASCSSIZE (sign of address space in bytes).

When R10 is equal to PFXSYSVM (the system VMDBK), check the range 0 <= R0 <= R1 (there is no upper boundary). If the range is correct, then see if the range of addresses given by R0 and R1 includes some portion of the nucleus that runs from HCPSYS through LOADEND. The end of the nucleus (@LOADEND) is increased over a number of spool checkpoint pages as defined by SYSSFNDX.

HPH003

Explanation

HCPHPHPF found shared pages in a segment that should not contain shared pages.

User response

Examine the dump. R8 has a pointer to the PGMBK that is marked as shared; PGMSNTCT does not equal 0.

A page status entry (PGSTE) in this PGMBK is marked PGSSHARE. The PGMVM field contains the owner of the PGMBK, and it should contain the address of an SNTBK.

The SNTBK describes the shared segment that contains the shared storage. R15 points to the place that detected the need for taking the abend.

HPH004

Explanation

The iAsit for the address space being released failed certification.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HPH005

Explanation

A call to HCPHTRLF returned condition code 2. This condition should never occur.

User response

Examine the call chain and input parameters to determine the environment for the call to HCPHTRLF that led to the unexpected condition code being returned.

HPH006

Explanation

A call to HCPHTRLF returned condition code 3. This condition should never occur.

User response

Examine the call chain and input parameters to determine the environment for the call to HCPHTRLF that led to the unexpected condition code being returned.

HPK001

Explanation

The VMDCTPVR or VMDCTPVG field containing the count of private pages owned by this VMDBK is invalid. Either the value became negative, or the value is nonzero when all frames should be released.

User response

R15 points to the place that detected the need for taking the abend.

Examine the contents of the dump. R10 contains the VMDBK address of the invalid resident private page count, VMDCTPVR or VMDCTPVG. If VMDCTPVR or VMDCTPVG is negative or positive, this could mean the count was maintained incorrectly or the linkage for the frame list was destroyed. Examine VMDFR1ST and VMDFRLST, the frame list anchors. If both VMDFR1ST and VMDFRLST contain the address of VMDFR1ST, the count was maintained incorrectly. Examine the trace table to determine which previous routines might have updated the count or the linkage of the list.

HPK002

Explanation

This abend was generated for one of the following reasons:

- An HCPHPK entry point received invalid parameters, and the HCPHPKPA routine was called to release storage for the system address space.
- HCPHPKPS was called for the system address space or for an address that is not in addressable storage for that space.

User response

R15 points to the place that detected the cause for this abend. If the HCPHPKPA routine issued the abend, determine if the VMDBK in R11 is the system VMDBK (PFXSYSVM). Find the caller of HCPHPKPA and determine why the caller passed the system VMDBK.

Otherwise, examine the dump to determine which input parameter is invalid.

HPK003

Explanation

HCPHPKPS found shared pages in a segment that should not contain them.

User response

Examine the dump. R8 has a pointer to the PGMBK that is marked as shared; PGMSNTCT does not equal 0.

A page status entry (PGSTE) in this PGMBK is marked PGSSHARE. The PGMVM field contains the owner of the PGMBK, and it should contain the address of an SNTBK.

The SNTBK describes the shared segment that contains the shared storage. R15 points to the place that detected the need for taking the abend.

HPM001

Explanation

(soft) ASIT certification failed during a pin operation for a page.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HPV001

Explanation

This abend is issued by the HCPHPV module. The HCPHPV module has detected an incorrect internal condition with the HyperParallel Access Volume subsystem. Register 0 at the time of the dump will indicate a reason code for the abend.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRM002

Explanation

(soft) A guest segment table entry indicates that a guest's PGMBK is paged out to DASD, but the Page Table Resource Manager (PTRM) control information indicates that the PTRM virtual address found in the guest's segment table entry is incorrect.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRM003

Explanation

The page table resource manager (PTRM) deallocate page function (HCPHRMDP) was called to deallocate a PTRM page that was not resident and locked in storage as required. The callers of HCPHRMDP are required to ensure that the PTRM page (a pageable PGMBK) to be deallocated is resident and locked in storage.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRM004

Explanation

The PGSERROR bit was found to be on for a PTRM PTE, indicating that the contents of a pageable PGMBK representing guest pages have been lost.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRP001

Explanation

The global page table resource manager (PTRM) address space is full. HCPHRM is unable to satisfy a request to allocate virtual storage for a guest. If any PTRM address space is a 1 GB address space, HCPHRP was unsuccessful in attempting to extend the address space to 2 GB.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRP002

Explanation

The page table resource manager (HCPHRP) was either deallocating a PTRM page (a guest PGMBK), or was stealing a PTRM page. While attempting to obtain short term page serialization, HCPHRP failed because the page in error flag (PGSERROR) was set for the page.

User response

R14 contains the address in HCPHRP where CP detected the error. R1 contains the address of the page table entry (PTE) for which PGSERROR was found set. Examine the dump to determine why PGSERROR was set for this PTRM page.

HRP003

Explanation

A CP function has called an HCPHRP entry point without satisfying the input requirements of that HCPHRP.

User response

Examine the dump to determine which module invoked HCPHRP. Examine the caller to see what entry condition is not being met.

HRP004

Explanation

The request for an available global page table resource manager (PTRM) PTE returned a PTE that is already marked valid (PGSINVAL is off). Using this PTE would conflict with whoever is already using it.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRP005

Explanation

(soft) A global page table resource manager (PTRM) address space control block (ASCBK) management table entry (AMTE) was found to be invalid. The system attempts to create a new PTRM space.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRS001

Explanation

Invalid parameters were passed to entry point HCPHRSSD.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRU001

Explanation

While removing a frame from the deferred PGMBK paging list (DPPL) or the pageable PGMBK aging list (PPAL), CP determined that the frames on the list were chained improperly.

User response

Inspect the process of chaining and unchaining frames on the DPPL or PPAL. Examine the dump for previous manipulations of the DPPL or PPAL to see when and where the damage occurred. Examine the code for the module that caused the damage.

HRU002

Explanation

The PGSERROR bit was found to be on for a PTRM PTE, indicating that the contents of a pageable PGMBK representing guest pages have been lost.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRU003

Explanation

HCPHRUPA was called with an incorrect combination of input parameters.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRU004

Explanation

Either HCPHRURG was passed an unsupported block type, or HCPHRUPG encountered an unsupported block type on the Generic TLB/ALB Purge aging list.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HRU005

Explanation

HCPHRURV was called with a frame that is not the first frame of a pageable PGMBK pair.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HSU001

Explanation

The CP module HCPHSU was reorganizing a CP System Utility address space when it found a control block structure (for the address space) that was corrupted.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HSU002

Explanation

A call to HCPHTRLF returned CC=2 or CC=3. This condition should never occur.

User response

Examine the call chain and input parameters to determine the environment for the call to HCPHTRLF that led to the unexpected condition code being returned.

HSU003

Explanation

The PGSERROR bit was found to be on for a PTRM PTE, indicating that the contents of a pageable PGMBK representing guest pages have been lost.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the

documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HSU004

Explanation

The request for an available PTRM PTE returned a PTE that cannot be serialized. Using this PTE would conflict with whoever is already using it.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTK001

Explanation

A host Real Space Designator was encountered.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTK003

Explanation

A segment table could not be located.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTK004

Explanation

An attempt was made to discard backing storage for a guest page declared as unused, volatile, or potentially volatile and unchanged, but HCPHPCCR reported the page unexpectedly resident.

User response

R14 contains the address within the module where the problem was detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTR007

Explanation

While translating an address, the function attempted to change the ASCIACCT or ASCRACCT count for an address space. However,

- Increasing the count of outstanding translations would have made it wrap to zero
- Or decreasing the count of outstanding translations would have made it negative.

User response

Examine the page translation process to determine why the address space access count was incorrect. These counts are also changed by the functions in HCPPTF that lock and unlock frames. Examine the dump for improper alterations of the ASCBK.

HTR008

Explanation

When the function was translating an address, the internal ASIT passed as input failed certification. It was found to be an internal ASIT for a CP-owned address space, which should always be valid.

User response

Examine the location that contains the fixed internal ASIT for the CP address space. It is likely that the internal ASIT has been overlaid or CP has incorrectly manipulated the internal ASIT.

HTR010

Explanation

While translating an address, CP had a problem obtaining SXSTE serialization because the contents of the system execution space table entry (SXSTE) was not in the expected state. The problem is that the SXSAVAIL bit is 1 when it should be 0.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the

documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTR011

Explanation

While translating an address, CP had a problem releasing FRMTE serialization or obtaining SXSTE serialization because the contents of the frame table entry (FRMTE) or the system execution space table entry (SXSTE) was not in the expected state. Examine the dump for the following conditions:

- The current FRMTE serialization is wrong. The FRMTRANS bit should be 1 while the rest (FRMRELSE, FRMSTEAL, and FRMAVAIL) are 0.
- The current SXSTE is not in a valid state for translation. The SXSNOOWN bit should be 0 and the SXSAVAIL bit should be 0.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTR013

Explanation

Incrementing the count portion of VMDPTSOC would cause the count to exceed the maximum allowable value, or decrementing the count portion of VMDPTSOC would cause the count to be negative.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTS001

Explanation

There are no system pages available to satisfy your request for a system virtual page.

User response

Examine the dump to determine if a CP module is looping or using system pages and not returning them.

HTS002

Explanation

Deallocation of the system page being returned cannot take place because there was no allocation of the system page to begin with, or deallocation is taking place for a second time.

User response

Examine the contents of the dump. Check to see on which system virtual address deallocation took place. Trace back through system execution to determine where generation of the virtual address occurred.

HTS003

Explanation

A system virtual page is associated with an incorrect auxiliary storage address (ASA). System virtual pages should be associated only with 32-bit ASAs (CCPV/PPPV), but a non-zero value was found in the high-order bits of the 48-bit ASA.

CCPV refers to a specific page on a CP-owned volume. The CCPV format is a fullword consisting of a halfword for the cylinder (CC), a byte for the page (P), and a byte for the volume (V). On FBA/SCSI devices, PPPV represents three bytes for the page (PPP) and a byte for the volume (V).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTT001

Explanation

CP fault in primary space caused by an inappropriate reference to an address in storage. This abend is usually the result of a translation exception.

User response

Examine the dump and get the last two trace entries on the failing processor. From the second trace entry back, note the type of exception, location of the failing instruction, and the old PSW. Use BLOCK PFXPG 0 FIELD PFXTSKBK to locate the TSKBK, then issue BLOCK TSKBK on that address to find the register contents at the time of the failure. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to

assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTT002

Explanation

CP fault in home space caused by an inappropriate reference to an address in storage. This abend is usually the result of a translation exception.

User response

Examine the dump and get the last two trace entries on the failing processor. From the second trace entry back, note the type of exception, location of the failing instruction, and the old PSW. Use BLOCK PFXPG 0 FIELD PFXTSKBK to locate the TSKBK, then issue BLOCK TSKBK on that address to find the register contents at the time of the failure. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTT003

Explanation

Unexpected page or segment exception has occurred due to referencing an inappropriate address in storage. This abend is usually the result of a translation exception.

User response

Examine the dump and get the last three trace entries on the failing processor. From the third trace entry back, note the type of exception, location of the failing instruction, and the old PSW. Use GREG to find the contents of general register 10. Use BLOCK TSKBK on the R10 address to find the register contents at the time of the failure. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTT004

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTT006

Explanation

A page status table entry (PGSTE) was found in a disallowed state.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTU002

Explanation

When CP was translating a virtual address, the page containing the virtual address was indicated to be on DASD. The page was also flagged as being part of a DASD paging block. Later in the translation process the page's status changed from not being in a DASD block to residing in a frame in real storage. HCPHTU prevents this type of change.

User response

Examine the system trace table to determine what activity occurred before the ABEND.

HTU003

Explanation

When CP was translating a virtual address, the page containing the virtual address was indicated to be on DASD. The page was also flagged as being part of a DASD paging block, but the page's status flags indicate that the page is not on DASD. The page is in an inconsistent state.

User response

Examine the system trace table to determine what activity occurred before the ABEND.

HTU004

Explanation

(soft) The frame used to satisfy the translation is valid, but it is not a user frame (FRMDTSP, FRMSUTIL, FRMSVDSK, FRMSUSER, or FRMUSER frame).

User response

Examine the system trace table to determine what activity occurred before the ABEND. Look for any previous references to the frame address. It is likely two CP tasks are using the frame for different purposes.

HTU005

Explanation

The frame used to satisfy the translation is no longer coupled to the page.

User response

Examine the system trace table to determine what activity occurred before the ABEND. Look for any previous references to the frame address. It is likely two CP tasks are using the frame for different purposes.

HTU007

Explanation

While translating an address, the function attempted to change the ASCIACCT count for the address space. However:

- Increasing the count would have made it wrap to zero.
- Decreasing the count would have made it negative.

User response

Examine the process of page translation and of locking and unlocking pages. Examine the dump to determine when the count was last changed. Check for improper operations on the locked page count or alterations of the ASCBK.

HTU011

Explanation

While translating an address, CP had a problem releasing FRMTE serialization or obtaining SXSTE serialization because the contents of the frame table entry (FRMTE) or the system execution space table entry (SXSTE) was not in the expected state. Examine the dump for the following conditions:

- The current FRMTE serialization is wrong. The FRMTRANS bit should be 1 while the rest (FRMRELSE, FRMSTEAL, and FRMAVAIL) are 0.
- The current SXSTE is not in a valid state for translation. The SXSNOOWN bit should be 0 and the SXSAVAIL bit should be 0.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTU012

Explanation

While translating an address, the LASTJOB subroutine in HCPHTU was expecting a TARGET PTE as input but was passed a SOURCE PTE. This indicates a possible problem in the NSS and DCSS support.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTV002

Explanation

When the function was translating an address, the internal ASIT passed as input failed certification. It was found to be an internal ASIT for a CP address space, which should always be valid. It is likely that the internal ASIT has been overlaid or CP has incorrectly manipulated the internal ASIT

User response

Examine the location that contains the fixed internal ASIT for the CP address space. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTV003

Explanation

HCPHTVCR received an unexpected return code from the ADRVALID subroutine. It should not be possible for

R15 to equal 16 or 20 when ADRVALID is called by HCPHTVCR.

User response

Examine the call chain and input parameters to HCPHTVCR and ADRVALID to determine why HCPHTVCR is executing in an invalid environment. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTV004

Explanation

(soft) Subroutine OBTPGSER encountered a Segment Table Entry (STE) that is not valid. During an attempt to obtain page serialization, the OBTPGSER subroutine used HCPTRANS to validate the STE, but the STE is still not valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HTV005

Explanation

(soft) An unexpected update to a page state was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

HVB001

Explanation

(soft) The DGNTCALL field for the diagnose entry is not valid.

User response

The address of the diagnose entry is in R0 of the dump. If it is not valid, make an appropriate correction.

HVC001

Explanation

(soft) The DGNTCALL field for the diagnose entry is not valid.

User response

The address of diagnose entry is in R0 of the dump. If it is not valid, make an appropriate correction.

HVC002

Explanation

(soft) Invalid return code received from a diagnose code.

User response

The return code is in R15 of the dump. If the diagnose code that supplied the return code was a modification or an addition to your system as delivered by IBM, check the prolog of module HCPHVB to determine valid return code values. Then modify the module that produces the return code for this diagnose code so that the module will produce a valid return code and set registers if needed. The module in question is listed in the EP=parameter for the diagnose code in module HCPHVB.

If the diagnose code that supplied the return code was an unmodified IBM diagnose code, then contact your IBM Support Center personnel.

ICL001

Explanation

(soft) Host logical address for entry is not valid. Searching a table of addresses of the HCPMMx external symbols failed to find any HCPMM*x* external symbols with an address that was lower than the argument SYMTB entry. Register 3 points to the SYMTB entry.

User response

Examine the address in the SYMTB and determine how it became unacceptable.

ICL002

Explanation

(soft) No ICLBK located for dynamic loaded entry.

User response

Examine the chain of ICLBKs to determine why the external symbol, which was marked as having been loaded by CPXLOAD, was not in the chain of ICLBKs.

IDS001

Explanation

(soft) When receiving a message complete after a *IDENT IUCV SEND, the address to which to return is zero. Processing is ended, because there is no way to return to the issuer of the IUCV SEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IFH001

Explanation

HCPIFHIN; while processing an interrupt from a subchannel type other than type 0, it was determined the subchannel ID field contained in the RDEV (RDEVSID) did not match the interrupt parameter.

User response

Examine the I/O interrupt parameter stored by the hardware at location x'B8'. This I/O interrupt parameter consists of a subchannel ID and the associated RDEV address. Check the data that the second word of the interrupt parameter points to for the following possibilities:

- The interrupt parameter points to the RDEV associated with the interrupt subchannel, but the RDEVSID field does not match the interrupting subchannel ID. Most likely the RDEVSID field was overlaid.
- The interrupt parameter points to an RDEV that is not associated with the interrupting subchannel ID. HCPIOS may have issued Start Subchannel (SSCH) with an incorrect RDEV address specified in the Operation Request Block (ORB). Examine the CP trace table entries to see if a SSCH was issued for the interrupting subchannel ID and look at the ORB.
- The interrupt parameter does not point to an RDEV. Either the entire RDEV was overlaid, or HCPIOS may have issued a SSCH with an incorrect RDEV address specified in the ORB. Examine the CP trace table entries to see if a SSCH was issued for the interrupting subchannel ID and look at the ORB.

IFI001

Explanation

HCPIFIIN, while processing an I/O interrupt, determined that the subchannel ID field contained in the RDEV (RDEVSID) did not match the interrupt parameter.

User response

Examine the I/O interrupt parameter that the hardware stored at location x'B8'. This I/O interrupt parameter consists of a subchannel ID and the associated RDEV address. Check the data that the second word of the interrupt parameter points to for the following possibilities:

- The interrupt parameter points to the RDEV associated with the interrupt subchannel, but the RDEVSID field does not match the interrupting subchannel ID. Most likely the RDEVSID field was overlaid.
- The interrupt parameter points to an RDEV that is not associated with the interrupting subchannel ID. HCPIOS may have issued SSCH (Start Subchannel) with an incorrect RDEV address specified in the ORB (Operation Request Block). Examine the CP trace table entries to see if a SSCH was issued for the interrupting subchannel ID and look at the ORB.
- The interrupt parameter does not point to an RDEV. Either the entire RDEV was overlaid, or HCPIOS may have issued a SSCH with an incorrect RDEV address specified in the ORB. Examine the CP trace table entries to see if a SSCH was issued for the interrupting subchannel ID and look at the ORB.

IFI002

Explanation

HCPIFI attempted to initiate an I/O operation while another one was in progress for the same real device. An I/O condition code 2 was received in response to a SSCH (Start Subchannel) for a Sense operation.

User response

Examine the CP trace table to analyze other events relating to that subchannel. Look at the RDEV (pointed to by R8) HCPIFI uses to manage the real device. The active IORBK pointer (RDEVAIOR) may have been reset to zero prior to I/O completion, causing HCPIFI to prematurely initiate the Sense operation. Another possibility is that the system did not hold onto a previously initiated operation.

IFI004

Explanation

HCPIFIIN was attempting to do one of the following:

- Transfer control to the interrupt response address specified in the IORBK field IORIRA, but it contained zeros.
- Call the emergency error recovery procedure, but was unable to resolve its address.

User response

- For the first case, check R10 to see that it is pointing to a valid IORBK. If R10 contains the address of an IORBK, the interrupt response address was probably destroyed or never set when the request was initiated. Also examine the status in IORBK.
- For the second case, verify that the emergency error recovery procedure (HCPIEERP) was included in the system.

IFI005

Explanation

(soft) The test subchannel (TSCH) test function control bits (IRBFCTL) and activity control bits (IRBACTL) are zeros, indicating no valid status.

The XA architecture expects a status. This is probably a hardware malfunction.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IFI006

Explanation

HCPIFI attempted to process an IORBK with the IORXFLG.IROCPSUS bit on, but field IORSUSND was zero.

User response

Examine the IORBK, the RDEV, and the CP trace table to determine what routine obtained the IORBK. Verify that the routine that built the IORBK correctly set both the IORSUSND field and the IORCPSUS bit. If the routine did not, correct that routine. If it did, attempt to determine how IORSUSND was set to zero (or how IORCPSUS was set to one).

IFI007

Explanation

(soft) Return code 4 has been received from the error recover routine. This return code is incorrect and should not occur.

User response

This is probably a programming error. Examine the CP trace table to analyze the events relating to that subchannel which led to this incorrect return code being issued.

IFI020

Explanation

Start subchannel (SSCH) simulation for a Sense operation for a logical device resulted in one of the following:

- A return code that was greater than 12 or not a multiple of 4.
- A return code 8, which correlates to a SSCH condition code 2. An I/O operation was attempted while another one was in progress for the same logical device.

User response

Examine the CP trace table to analyze other events relating to the logical device or subchannel.

Look at the RDEV (pointed to by R8), which is used by HCPIFI to manage the logical device. The RDEV field, RDEVLSOP, points to the corresponding logical subchannel.

Verify that the SSCH simulation module for logical devices (HCPLCISS) is adhering to the interface defined in the prologue.

IFI021

Explanation

Test subchannel (TSCH) simulation for a logical device indicated one of the following:

- A return code that was greater than 12 or not a multiple of 4.
- A return code 8, which correlates to a TSCH condition code 2 which is undefined by the XA architecture.

User response

Look at the RDEV (pointed to by R8), which is used by HCPIFI to manage the logical device. The RDEV

field RDEVLSOP points to the corresponding logical subchannel.

Verify that the TSCH simulation module for logical devices (HCPLCITS) is adhering to the interface defined in the prologue.

IFT001

Explanation

The frame table entry conversion from “not in-use” to “in-use” found an unacceptable frame table entry code.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IIO001

Explanation

The subchannel for the IPL device does not exist or cannot be modified.

User response

Verify that R8 contains the address of the RDEV for the IPL device. Try moving the IPL device to an address the system knows.

IIO002

Explanation

The IPL device cannot be brought online.

User response

R15 contains the address of the error message describing the condition that prevented the IPL device from being brought online. Refer to the message description for the appropriate action.

IIS002

Explanation

The IPL device cannot be initialized. R8 should contain the address of the RDEV for the IPL device.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ILU001

Explanation

The cyclic list processing module HCPILU requires the VMDBK to be in a hold state, and it is not. The fullword, VMDCYCLH, indicates whether or not the global cyclic list is in a hold state.

User response

Examine the storage dump. R1 points to the VMDBK control block that the cyclic list processing module was examining. Look at the system trace table for the sequence of events that led to this situation.

IMS001

Explanation

(soft) HCPIMS encountered an unexplainable error while attempting to build a channel program for special intercept condition processing. The device being processed will be kept out of special intercept condition from now on.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IOA006

Explanation

(soft) When module HCPIOA attempted to remove a reason to keep a device or guest out of IOASSIST, no reasons were found.

User response

If a reason for keeping a device out of IOASSIST is already zero, it means that the reason values have not been maintained properly. Reasons are not being set, or removed appropriately.

R0 contains which reason counter was in error at the time the abend was taken. Refer to the HCPIOA module prologue to determine which counter caused the abend.

IOA007

Explanation

(soft) When module HCPIOA attempted to add a reason for keeping a device or guest out of IOASSIST, the reason was already at the maximum value allowed.

User response

The attempt to exceed the maximum value set means that the reasons were not being maintained properly. Reasons for keeping the device out of IOASSIST were being set where it wasn't necessary, or they were not being removed once set.

Register 0 contains which reason was in error at the time the abend was taken. Refer to the HCPIOA module prologue to determine which counter caused the abend.

IOA008

Explanation

HCPIOA entry point CLEARIRA has received control on an interrupt and the VDEV lock is not held by the system as required.

User response

Examine the VDEV block to determine if the VDEV lock is held by the system. If the lock is held, determine why IORRFLGE.IORIOA was not flagged to indicate when the lock was obtained. If the lock is not held, determine why the interrupt was not processed by the I/O assist first level interrupt handler (HCPIPTIN). If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IOL001

Explanation

A request was made to acquire ownership of an incorrect lock. The first lockword is zero, and the second lockword is nonzero, which indicates that requests are queued waiting for the acquisition of a lock that is not held.

User response

R4 contains the address of the 8-byte lock. Verify that the second fullword of the lock actually contains the address of a SAVBK. If not, the lock was probably overlaid. Examine the save area (PFXPTRSV) or CP trace table entries to determine the calling module. Check that the designated register contains the address of the appropriate control block containing the lock.

- Entry Point for the RDEV lock - R8 is set to address of RDEV
- Entry Point for the VDEV lock - R6 is set to address of VDEV
- Entry Point for the interrupt-queue lock - R5 is set to address of CHCBK

If the register contains the address of the control block, storage was probably overlaid, otherwise the requestor probably did not set the register correctly.

IOL002

Explanation

A request was made to release ownership of a lock that is not held. The first lockword is zero, indicating the lock is not held.

User response

R4 contains the address of the 8-byte lock. If the entry point uses BALR (call/return) linkage, examine the save area (PFXPTRSV) to determine the calling module. Check that the designated register contains the address of the control block containing the lock.

- Entry Point for the RDEV lock - R8 is set to address of RDEV
- Entry Point for the VDEV lock - R6 is set to address of VDEV
- Entry Point for the interrupt queue lock - R5 is set to address of CHCBK

If the register contains the address of the control block, storage was probably overlaid. Otherwise, the requestor probably did not set the register correctly.

IOL003

Explanation

There are two possible explanations:

- A request was made to release ownership of a lock that the requesting VMDBK does not own.
- A request was made to switch ownership of a lock that the requesting VMDBK does not own.

User response

Check that the designated register contains the address of the control block containing the lock:

- Entry point for the RDEV lock - R8 is set to address of RDEV

- Entry point for the VDEV lock - R6 is set to address of VDEV
- Entry point for the interrupt queue lock - R5 is set to address of CHCBK

If the register contains the address of the control block, storage was probably overlaid. Otherwise, the requestor probably did not set the register correctly.

It is also possible that the lock was obtained, then a VMDBK switch occurred because the running VMDBK was not switched back again before the lock release or switch was attempted.

IOL004

Explanation

There are two possibilities:

- A request was made to stack a SAVBK using GOTO linkage on a specified anchor, but the requestor did not hold the VDEV lock.
- A request was made to move a queue of stacked SAVBKs to the VDEV queue, but the requestor did not hold the VDEV lock.

User response

Examine the save area (PFXPTRSV) or CP trace table entries to determine the calling module. If R6 contains the address of the VDEV, storage was probably overlaid. Otherwise, the requestor probably did not set the register correctly.

It is also possible that the lock was obtained, then a VMDBK switch occurred because the running VMDBK was not switched back again before the lock release or switch was attempted.

IOL005

Explanation

An attempt was made to switch the VDEV lock owner without the VDEV being locked.

User response

Examine the calling routine to determine why it is calling HCPIOLSV without holding the VDEV lock.

IOL006

Explanation

An attempt was made to switch the lock owner, or destroy the lock, without the lock being held. The lock may have been free or, in the case of HCPIOLDL and HCPIOLSL, may have been held by other than the running VMDBK.

User response

Examine the calling routine to determine why it is calling HCPIOLDL, HCPIOLDX, or HCPIOLSL without holding the lock.

Examine the lockword itself to determine which VMDBK, if any, holds the lock. It is possible that a VMDBK switch was made before the lock was released.

IOL007

Explanation

The critical process count, VMDCTCRT in the base VMDBK, became negative. Usually this count represents the number of locks held by the virtual machine. (The degree of criticality is usually equal to the number of locks held.)

Some, but not all, of the possible causes of this abend are:

- The code that was to decrement VMDCTCRT was somehow allowed to execute before the code that was to do the corresponding increment. For example, if the following sequence is possible:
  1. Lock ownership is switched to another VMDBK.
  2. The other VMDBK is immediately enabled to begin running on another processor with the lock.
  3. VMDCTCRT is incremented in the VMDBK which just was granted the lock

  It is potentially possible for the second processor to execute the code that releases the lock and decrements VMDCTCRT before the first processor increments VMDCTCRT. VMDCTCRT must always be incremented before it is possible for another processor to start processing the code that will do the corresponding decrement.
- VMDCTCRT was incremented on one VMDBK, then a VMDBK switch occurred before the corresponding decrement took place. This may often happen on task threads that switch between a user VMDBK and the system VMDBK, or switch between VMDBKs in a single virtual MP complex.
- A task thread did not properly serialize its increment or decrement of VMDCTCRT, such as by using the compare-and-swap instruction.
- When attempting to increment VMDCTCRT on other than the running VMDBK, the wrong VMDBK was chosen.

User response

Examine the CP trace table and storage dump to determine why the base VMDBK changed from zero to a negative value in the VMDCTCRT field. R11 points to the dispatched VMDBK. The field VMDBASE in the dispatched VMDBK points to the VMDBK containing VMDCTCRT. If you are unable to resolve this problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IOL008

Explanation

An attempt was made to destroy a lock that still had tasks waiting on it, or an attempt was made to acquire a lock that had been destroyed, conditions which should never occur.

User response

Examine the CP trace table and storage dump to see why this event occurred.

IOL009

Explanation

A request to enqueue a task (HCPIOLGR) was made without the RDEV lock being held.

User response

Examine the calling routine to determine why it is calling HCPIOLGR without holding the RDEV lock.

IOL010

Explanation

A task was already enqueued (RDEVENQ) when another enqueue request was made.

User response

Examine why the calling routine has made an additional enqueue request (HCPIOLGR) while there is an existing enqueue.

IOL017

Explanation

The deferred execution counter, VMDDFRWK in the VMDBK, became negative.

User response

Examine the CP trace table and storage dump to see why the VMDBK in R11 has a negative value for the VMDDFRWK field. This abend can be caused by the same things that cause a DFR017 abend. See the description of DFR017 for possible reasons why the abend may have occurred.

IOS002

Explanation

HCPIOS attempted to initiate an I/O operation while another one was in progress for the same real device. An I/O condition code 2 was received in response to a SSCH (Start Subchannel), MSCH (Modify Subchannel) or HSCH (Halt Subchannel).

User response

Examine the CP trace table to analyze other events relating to that subchannel. Look at the RDEV (pointed to by R8) that HCPIOS uses to manage the real device. The active IORBK pointer (RDEVAIOR) may have been reset to zero prior to I/O completion, causing HCPIOS to prematurely initiate the next scheduled I/O operation. Another possibility is that the system did not hold onto a previously initiated operation.

IOS003

Explanation

HCPIOSRE was called to end a level of recursion on behalf of an error recovery procedure, but the recursive IORBK pointer, IORPIOR, contained zeros. IORPIOR should contain the address of the IORBK that precedes the last IORBK in the structure.

User response

Examine the save area of the CP trace table entries to determine the calling module. Check R10 to see that it is pointing to a valid IORBK. If R10 contains the address of the IORBK, storage was probably overlaid. Otherwise, the requestor probably did not set the register correctly.

IOS004

Explanation

HCPIOSBS was attempting to transfer control to the interrupt response address specified in the IORBK field (IORIRA), but it contained zeros.

User response

Check R10 to see that it is pointing to a valid IORBK. If R10 contains the address of an IORBK, the interrupt response address was probably destroyed or never set when the request was initiated. Also examine the status in IORBK.

IOS006

Explanation

HCPIOS attempted to process an IORBK with the IORXFLG.IROCPSUS bit on, but field IORSUSND was zero.

User response

Examine the IORBK, the RDEV, and the CP trace table to determine what routine obtained the IORBK. Verify that the routine that built the IORBK correctly set both the IORSUSND field and the IORCPSUS bit. If the routine did not, correct that routine. If it did, attempt to determine how IORSUSND was set to 0 (or how IORCPSUS was set to 1).

IOS010

Explanation

The I/O function code specified in the IORTYPE, used to call HCPIOSRQ, is incorrect.

User response

Examine the save area or CP trace table entries to determine the calling module. Check R10 to see that it is pointing to a valid IORBK. The valid I/O function codes are 'IORSIO' (x'00') and 'IORCUSER' (x'FE'). If R10 contains the address of the IORBK, storage was probably overlaid. Otherwise, the requestor probably did not set the register correctly.

IOS017

Explanation

The deferred execution counter, VMDDFRWK in the VMDBK, was about to become negative.

User response

Examine the CP trace table and storage dump to see why the VMDBK in R11 has a zero value for the VMDDFRWK field.

See the description of DFR017 for possible reasons why this may have occurred.

IOS020

Explanation

Start-Subchannel (SSCH) simulation for a logical device resulted in one of the following:

- A return code that was greater than 12 or not a multiple of 4.
- A return code 8, which correlates to a SSCH condition code 2. An I/O operation was attempted while another one was in progress for the same logical device.

User response

Examine the CP trace table to analyze other events relating to the logical device or subchannel.

Look at the RDEV (pointed to by R8), which is used by HCPIOS to manage the logical device. The RDEV field, RDEVLSOP, points to the corresponding logical subchannel.

Verify that the SSCH simulation module for logical devices (HCPLCISS) is adhering to the interface defined in the prolog.

IOS023

Explanation

Store-subchannel (STSCH) simulation for a logical device indicated that a return code does not correlate to a condition code defined by the XA Architecture for the STSCH instruction.

User response

Look at the RDEV (pointed to by R8), which is used by HCPIOS to manage the logical device. The RDEV field RDEVLSOP points to the corresponding logical subchannel.

Verify that the STSCH simulation module for logical devices (HCPLCIST) is adhering to the interface defined in the prologue.

IOS025

Explanation

Set-Channel-Monitor (SCHM) simulation for a logical channel subsystem indicated a return code other than zero.

User response

Verify that the SCHM simulation module for logical devices (HCPLCISC) is adhering to the interface defined in the prologue.

IOS026

Explanation

Halt-Subchannel (HSCH) simulation for a logical device indicated one of the following:

- A return code that was greater than 12 or not a multiple of 4.
- A return code 8, which correlates to a HSCH condition code 2. A HSCH was attempted while the logical subchannel was busy processing another HSCH or CSCH.

User response

Examine the trace table to analyze other events relating to that logical device / subchannel.

Look at the RDEV (pointed to by R8), which is used by HCPIOS to manage the logical device. The RDEV field RDEVLSOP points to the corresponding logical subchannel.

Verify that HSCH simulation module for logical devices (HCPLCIHS) is adhering to the interface defined in the prologue.

IOS027

Explanation

Clear-Subchannel (CSCH) simulation for a logical device indicated one of the following:

- A return code that was greater than 12 or not a multiple of 4.
- A return code 4 or 8, which correlates to a CSCH condition code 1 or 2 respectively. Both condition codes are undefined by the XA Architecture for a CSCH.

User response

Look at the RDEV (pointed to by R8), which is used by HCPIOS to manage the logical device. The RDEV field RDEVLSOP points to the corresponding logical subchannel.

Verify that CSCH simulation module for logical devices (HCPLCICS) is adhering to the interface defined in the prologue.

IOS028

Explanation

Store-Subchannel (STSCH) simulation for a logical device indicated a return code 12, which correlates to a condition code 3 as defined by the XA Architecture for the STSCH instruction. A condition code 3 indicates the subchannel is not provided in the channel subsystem.

User response

Look at the RDEV (pointed to by R8), which is used by HCPIOS to manage the logical device. The RDEV field RDEVLSOP should point to the corresponding logical subchannel that appears to be non-existent. Verify that STSCH simulation module for logical devices (HCPLCIST) is adhering to the interface defined in the prologue.

IOV001

Explanation

The simulation routine for a fully simulated device invoked HCPIOVBK to back out of channel program simulation. HCPIOVBK was called after a GOTO rather than a CALL was used to invoke HCPIOV. It is impossible to continue processing the I/O request because there is no address available to which to return control.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in this SAVBK) indicates the status of simulation for the current CCW. SAVEBPNT should be 0, indicating an entry using HCPIOVCP. CPCRTNAD, which addresses the simulation routine being used, should equal VDEVSIMA. If these values are correct, then correct the simulation routine so that it does not call HCPIOVBK. Otherwise, try to determine how the SAVBK or CPCBK was damaged.

IOV002

Explanation

HCPIOV attempted a page release for a VDISK page while processing a VDISK I/O request. The page release failed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IOV100

Explanation

(soft) A device simulation routine returned prematurely to the virtual channel simulator. HCPIOV recognizes this situation when the simulation routine

returns before presenting (ending) status for the current channel command word.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in this SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic of the simulation routine causes it to return prematurely, correct it. Otherwise, try to determine how CPCDTFLG.CPCDTEND (byte.bit) was set off incorrectly.

IOV101

Explanation

(soft) A device simulation routine presented ending status more than once for a CCW. This situation occurs in HCPIOV when the module is reentered after previously processing ending status for the current channel command word.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in this SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic of the simulation routine causes it to present status incorrectly, correct it. Otherwise try to determine how CPCDTFLG.CPCDTEND (byte.bit) was set on incorrectly.

Note: HCPIOVUS may have been entered using a CALL to HCPIOVUC.

IOV102

Explanation

(soft) A device simulation routine presented channel end more than once for a channel command word (CCW). This situation occurs when HCPIOV is reentered after previously processing channel end for the current CCW.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. CPCRTNAD addresses the simulation routine being used. If the logic of the simulation routine causes it to present channel end status more than once per CCW, correct it. Otherwise, try to determine how CPCDTFLG.CPCDTCER (byte.bit) was set on incorrectly.

Note: HCPIOVUS may have been entered using a CALL to HCPIOVUC.

IOV103

Explanation

(soft) After accepting a channel command word (CCW), a device simulation routine presented status without channel end. This situation occurs when HCPIOV is reentered after previously processing an (explicit or implied) initial status of zero for the current CCW.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in this SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic of the simulation routine causes it to present status incorrectly, correct it. Otherwise attempt to determine how CPCDTFLG.CPCDTBEG was set on incorrectly.

Note: HCPIOVUS may have been entered using a CALL to HCPIOVUC. Any call to HCPIOVMV implies an initial status of zero.

IOV104

Explanation

(soft) A device simulation routine presented initial status containing device end with neither channel end nor busy. HCPIOVUS detects this error.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in this SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic of the simulation routine causes it to present status incorrectly, correct it so that when it presents device end in initial status, either channel end or busy also appears.

Note: HCPIOVUS may have been entered using a CALL to HCPIOVUC.

IOV105

Explanation

(soft) A device simulation routine presented status that lacks device end after previously presenting channel end for the current CCW. HCPIOVUS detects this error.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in this SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic of the simulation routine causes it to present status incorrectly, correct it so that once it presents channel end for a command, the next status presented contains device end. Otherwise, try to determine how CPCDTFLG.CPCDTCER (byte.bit) was set on incorrectly.

Note: HCPIOVUS may have been entered using a CALL to HCPIOVUC.

IOV106

Explanation

(soft) A device simulation routine requested data service after presenting nonzero status for the current CCW. HCPIOVMV detects this error.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic for the simulation routine causes it to request data incorrectly, correct it so that it does not request data from the channel simulator after presenting nonzero status for a CCW. Otherwise, try to determine how CPCDTFLG.CPCDTCER or CPCDTFLG.CPCDTEND were set on incorrectly.

IOV107

Explanation

(soft) A device simulation routine requested additional data service for the current CCW after being signalled to stop data transfer. HCPIOVMV detects this error.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic for the simulation routine causes it to request data incorrectly, correct it so that it does not request data from the channel simulator after receiving a stop signal. Otherwise, try to determine how CPCDTFLG.CPCDTSTP was set on incorrectly.

IOV108

Explanation

(soft) A device simulation routine invoked HCPIOVUC, specifying sense data length zero.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in this SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic for the simulation routine causes it to present sense data incorrectly, correct it to invoke HCPIOVUC with a nonzero length for the sense data. Otherwise, try to determine how HCPIOVUC lost the correct data count.

IOV109

Explanation

(soft) A device simulation routine invoked HCPIOVUC, specifying sense data that overlaps the sense data in the IORBK.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in this SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic for the simulation routine causes it to present sense data incorrectly, correct it to invoke HCPIOVUC with a source address for the sense data so that none of the sense bytes are within the active IORBK's sense field. Otherwise, try to determine how HCPIOVUC lost the correct sense data address and/or count.

IOV110

Explanation

(soft) A device simulation routine invoked HCPIOVUC, specifying more sense data than an IORBK can contain.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in this SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic for the simulation routine causes it to present an incorrect sense count, correct it to invoke HCPIOVUC with a positive length less than or equal to the size of the IORBK's sense field. Otherwise, try to determine how HCPIOVUC lost the correct sense byte count.

IOV111

Explanation

(soft) The value specified for the count of sense bytes present in a sense IORBK is incorrect.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. VDEVSIOR addresses the IORBK containing the incorrect IORSCNT value. (IORSCNT must be a positive value not greater than the size of the IORSDATA field.) Examine the CP trace table to determine which routine allocated the sense IORBK and provided the sense data. Correct the routine to also provide a valid count of the sense bytes.

IOV112

Explanation

(soft) HCPIOVMV determined either an error exit that was not valid, which was set up by the HCPSAC macro, was taken during a virtual disk in storage data move operation, or an error exit that was not valid was taken from the HCPTRANS operation.

HCPSAC macro exit:
A virtual disk in storage space address was not valid, or the virtual disk in storage or guest-absolute space I-ASIT expired.

HCPTRANS macro exit:
A virtual disk in storage space address was not valid, or the virtual disk in storage space I-ASIT was uncertified.

User response

HCPSAC error:
R9 contains the address of the TSKBK control block that describes in detail the error that occurred.

HCPTRANS error:
R9 contains the HCPTRANS return code.

Examine the CP trace table, the TSKBK (provided on HCPSAC error only), and the module entry points HCPIOVMV and HCPQDLIO to determine the cause of the failure.

IOW001

Explanation

HCPIOWMV is presenting intermediate status while simulation is not running on the originator's VMDBK.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. Examine the CP trace table and the storage dump to determine why status was being presented on a VMDBK other than the originator's VMDBK.

IOW106

Explanation

(soft) A device simulation routine requested data service after presenting nonzero status for the current CCW. HCPIOWMV detects this error.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic for the simulation routine causes it to request data incorrectly, correct it so that it does not request data from the channel simulator after presenting nonzero status for a CCW. Otherwise, try to determine how CPCDTFLG.CPCDTCER or CPCDTFLG.CPCDTEND were set on incorrectly.

IOW107

Explanation

(soft) A device simulation routine requested additional data service for the current CCW after being signalled to stop data transfer. HCPIOWMV detects this error.

User response

The SAVBK chain, anchored in IORSAVE, indicates the environment at the time of the failure. The CPCBK (in SAVBK) indicates the status of simulation for the current CCW. CPCRTNAD addresses the simulation routine being used. If the logic for the simulation routine causes it to request data incorrectly, correct it so that it does not request data from the channel simulator after receiving a stop signal. Otherwise, try to determine how CPCDTFLG.CPCDTSTP was set on incorrectly.

IOW112

Explanation

(soft) HCPIOWMV encountered an incorrect error exit, which was set up by the HCPSAC macro, while moving data between the guest address space and the virtual CTCA. The guest-absolute space I-ASIT expired.

User response

R9 contains the address of the TSKBK control block that describes the error that occurred. Examine the CP trace table and the TSKBK to determine the cause of the error.

IOX004

Explanation

(soft) This abend is issued by the HCPIOX module. The module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IQC001

Explanation

(soft) An internal processing error occurred while processing an Enhanced QDIO (EQDIO) facility control request. Register 1 contains an internal error code that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IQE001

Explanation

(soft) CP was performing a data transfer in response to a SIGA instruction for a virtual adapter enabled for QDIO (Queued Direct I/O). The data transfer was aborted because the associated QDIO queue definition contains an unacceptable buffer number. The associated virtual device is automatically disabled from further QDIO activity.

User response

Restart the associated virtual adapter using the procedure appropriate to the software running in this virtual machine. For example, if the failing device is part of the TCPIP virtual machine configuration, see the appropriate user guide for your release of the TCP/IP Product.

IQE002

Explanation

(soft) CP was performing a data transfer in response to a SIGA instruction for a virtual adapter enabled for QDIO (Queued Direct I/O). The data transfer was aborted because the associated QDIO queue definition is incomplete (at least one required component was missing). The associated virtual device is automatically disabled from further QDIO activity.

User response

Restart the associated virtual adapter using the procedure appropriate to the software running in this virtual machine. For example, if the failing device is part of the TCPIP virtual machine configuration, see the appropriate user guide for your release of the TCP/IP Product.

IQG001

Explanation

(soft) An internal processing error occurred while processing an Enhanced QDIO (EQDIO) facility control response. Register 1 contains an internal error code that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IQH001

Explanation

(soft) An internal processing error occurred while processing an Enhanced QDIO (EQDIO) facility control function. Register 1 contains an internal error code that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IQM002

Explanation

HCPIQM attempted to initiate an I/O operation while another was in progress for the same real device. An I/O condition code 2 was issued in response to the SSCH (Start Subchannel), MSCH (Modify Subchannel) or HSCH (Halt Subchannel).

User response

Examine the CP trace table to analyze other events relating to the subchannel. Look at the RDEV (pointed to by R8) that HCPIOS uses to manage the real device. The active IORBK pointer (RDEVAIOR) may have been reset to zero prior to I/O completion, causing HCPIOS to prematurely initiate the next scheduled I/O operation. Another possibility is that the system lost a previously initiated operation.

IQM004

Explanation

(soft) HCPIQMPQ was attempting to transfer control of an I/O request that was just removed from the scheduling queue to the Interruption Response Address specified in the IORBK (IORIRA), but it contained zeros.

User response

The system takes a soft ABEND to record the error and exits. The I/O scheduling queues will not be totally cleared as requested.

Examine R10 to ensure it is pointing to a valid IORBK. If R10 contains the address of an IORBK, the Interruption Response Address was probably destroyed or never set when the request was initiated. Examine the internal trace table and storage dump to determine the origin of the I/O request to find the cause of the problem.

IQM020

Explanation

Start-Subchannel (SSCH) simulation for a logical device resulted in one of the following:

- A return code that was greater than 12 or not a multiple of 4.
- A return code of 8, which correlates to a SSCH condition code 2. An I/O operation was attempted while another was in progress for the same device.

User response

Examine the CP trace table to analyze other events relating to that logical device or subchannel.

Look at the RDEV (pointed to by R8), which is used by HCPIQM to manage the logical device. The RDEV field, RDEVLSOP, points to the corresponding subchannel.

Verify that the SSCH simulation module for logical devices (HCPLCISS) is adhering to the interface defined in the prologue.

IQM022

Explanation

Modify-Subchannel (MSCH) simulation for a logical device resulted in one of the following:

- A return code that was greater than 12 or not a multiple of 4.
- A return code of 8, which correlates to a MSCH condition code 2. A MSCH was attempted while the logical subchannel was busy.

User response

Examine the CP trace table to analyze other events relating to the logical device or subchannel.

Look at the RDEV (pointed to by R8), which is used by HCPIQM to manage the logical device. The RDEV field, RDEVLSOP, points to the corresponding subchannel.

Verify that the MSCH simulation module for logical devices (HCPLCIMS) is adhering to the interface defined in the prologue.

IQM026

Explanation

Halt-Subchannel (HSCH) simulation for a logical device resulted in one of the following:

- A return code that was greater than 12 or not a multiple of 4.
- A return code of 8, which correlates to a HSCH condition code 2. A HSCH was attempted while the logical subchannel was busy processing another HSCH or CSCH.

User response

Examine the CP trace table to analyze other events relating to the logical device or subchannel.

Look at the RDEV (pointed to by R8), which is used by HCPIQM to manage the logical device. The RDEV field, RDEVLSOP, points to the corresponding subchannel.

Verify that the HSCH simulation module for logical devices (HCPLCIHS) is adhering to the interface defined in the prologue.

IQM027

Explanation

Clear-Subchannel (CSCH) simulation for a logical device resulted in one of the following:

- A return code that was greater than 12 or not a multiple of 4.
- A return code of 4 or 8, which correlates to CSCH condition code 1 or 2 respectively. Both condition codes are undefined by the XA Architecture for a CSCH.

User response

Examine the CP trace table to analyze other events relating to the logical device or subchannel.

Look at the RDEV (pointed to by R8), which is used by HCPIQM to manage the logical device. The RDEV field, RDEVLSOP, points to the corresponding subchannel.

Verify that the CSCH simulation module for logical devices (HCPLCICS) is adhering to the interface defined in the prologue.

IQM030

Explanation

(soft) HCPIQMPQ was processing a request to purge all the I/O operations active or queued for a particular device when it detected an unexpected return code from HCPIOSFD. The only valid return code HCPIQMPQ should receive from HCPIOSFD is 8.

Return code 0 is not valid since the active I/O was already cleared and the RDEV lock was not dropped to allow another request to be de-queued.

Return code 4 is not valid because we know the request we are trying to cancel is queued.

User response

The system takes a soft ABEND to record the error and exits. The I/O scheduling queues will not be totally cleared as requested.

Examine the internal trace table and storage dump to determine why a return code other than 8 was received from HCPIOSFD.

IQN001

Explanation

(soft) An internal processing error occurred while processing an Enhanced QDIO (EQDIO) facility control function. Register 1 contains an internal error code that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IQO001

Explanation

(hard) A lock was held on entry to a routine

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IQO002

Explanation

(hard) A required lock was destroyed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IQP001

Explanation

(soft) An internal processing error occurred while emulating an Enhanced QDIO (EQDIO) facility data transfer function. Register 1 contains an internal error location ID that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IQR001

Explanation

(soft) An internal processing error occurred while performing a data transmission for a VSWITCH or GUEST LAN. Future data transmissions are

questionable and may be discarded for either VSWITCH or GUEST LANs. The target port didn't have an "Incoming Datagram Handler" assigned when it was created or it returned an unsupported return code when invoked.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM support personnel.

IQS001

Explanation

(soft) An internal processing error occurred while emulating an Enhanced QDIO (EQDIO) facility data control function. Register 1 contains an internal error location ID that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IQV001

Explanation

(soft) An internal processing error occurred while operating an Enhanced QDIO (EQDIO) facility device. Register 1 contains an internal error location ID that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ISM001

Explanation

(hard) The available zone lock is held by another process because the zone is being deleted.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ISM002

Explanation

(hard) The function code input to HCPISMUT is unknown.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ISM003

Explanation

During storage initialization, CP was unable to obtain the storage necessary to build an Available Zone control block to describe storage.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IST001

Explanation

The RDEV for the DASD on which the SYSRES volume is mounted cannot be located or is not an owned volume.

User response

Verify that the volume serial number on the SYSRES volume from which the IPL was attempted is the same as that specified in the field SYSVOL. If the volume serial number is not the same, a stand-alone utility (such as IPL DDRXA) might have altered it, or the image of the same nucleus saved on the SYSRES may have been partially destroyed and the SYSRES specification altered. Load or restore the nucleus from a backup copy to the SYSRES volume and try to IPL again.

IST002

Explanation

The RDEV block for the IPLed device is not type CLASDASD or it does not have the same device type the user specified at system generation time.

User response

Check the SYSDTYP in the SYSCM area against the SYSRES volume from which the IPL was attempted. If the RDEV does not indicate the actual device type correctly, mount the pack elsewhere and try again. If SYSDTYP does not indicate the device type correctly, load and restore the nucleus from a backup copy to the SYSRES volume and try to IPL again.

IST003

Explanation

A call to HCPPTRSA to get a PGMBK for a segment was made with an incorrect address in R1. HCPPTRSA returned a condition code of 1.

User response

Examine the contents of the dump. Check the validity of the address in R1.

IST004

Explanation

Accesses to the same storage location by Access Register mode and host real address produced different data.

User response

Determine how the Dynamic Address Translation operation has failed. Investigate the contents of the related control blocks.

ISU001

Explanation

The system time-of-day (TOD) clock is not operational.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ITM003

Explanation

The system time-of-day (TOD) clock is not operational.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IUA001

Explanation

(soft) An IUCV function was issued from CP (either by a CP system service or by IUCV itself), and CP detected a program check condition. If a virtual machine issued the IUCV function, CP would issue a program check. However, since the IUCV function was issued from within CP, this soft abend was issued instead of the exception.

User response

Determine the function executing and who invoked IUCV (a CP system service or IUCV itself) using the IUSBK pointed to by R8. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* to determine the CP system service associated with the code found in the IUSBK. If the code is 0, a virtual machine issued the function using IUCV. Examine the value in R0 to find the program interrupt code.

IUA002

Explanation

(soft) A CP system service invoked an IUCV function that required a buffer, but the CP system service did not supply one.

User response

Determine the CP system service that invoked IUCV and the function executing using the IUSBK pointed to by R8. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* to determine the CP system service associated with the code found in the IUSBK.

IUA003

Explanation

(soft) An IUCV function was issued by a system service while an IUCV RTRVBFR was in progress.

User response

Identify the system service that is behaving incorrectly. R10 holds the IUCVB of the system service. R9 holds the address of the CCTBK of the system service. Also check the contents of SAVEWRK1, pointed to by R13, which holds the unique function code of the system service.

IUB001

Explanation

(soft) The IUCV PDEBK structure is incorrect. The target's side does not correspond with the invoker's side.

User response

Determine who invoked IUCV using the IUSBK pointed to by R10. Examine the condition code:

Code
Meaning

0
The path is available, not pending.

2
The path ID is out of range.

3
The PDSEG is incorrect.

R5 contains the invoker's PDEBK address. R0 contains the target's path ID. R1 contains the target's IUCVB address.

IUB002

Explanation

(soft) A CP system service did an IUCV ACCEPT function when there was no CP connection pending.

User response

Determine the CP system service that invoked IUCV via the IUSBK pointed to by R10. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* to determine the CP system service associated with the code found in the IUSBK. The address of the PDEBK being searched for is in R1. The chain of CP pending connections starts at IUCPNDHD in the IUCVB pointed to by R8.

IUB003

Explanation

(soft) The target of the function destroyed its IUCV lock, and this path was not severed beforehand.

User response

Examine the IUSBK pointed to by R10 to determine the IUCV user that invoked IUCV. Identify the owner of the lock that HCPIUB was attempting to get by checking the PDEBK pointed to by R1.

IUB004

Explanation

(soft) The IUCV IUSBK structure does not exist. The source invoked an APPCVM CONNECT specifying WAIT=YES. However, at the time the ACCEPT response was issued, the IUSBK created for the function did not exist.

User response

Determine why the PDESADDR field of the connect PDEBK is zero. R8 contains the connect IUCVB. R6 contains the connect PDEBK. PDESADDR of the PDEBK pointed to by R6 should contain the IUSBK address.

IUB005

Explanation

(soft) The SAVBK structure does not exist. The source invoked an APPCVM CONNECT specifying WAIT=YES. However, at the time the ACCEPT response was issued, the SAVBK created for the function did not exist.

User response

Determine why the IUSSAVBK field of the connect IUSBK is zero. R8 contains the connect IUCVB. R6 contains the connect PDEBK. R4 contains the connect IUSBK. IUSSAVBK of the IUSBK pointed to by R4 should contain the SAVBK address.

IUB006

Explanation

(soft) The IUCV/APPCVM ACCEPT routine detected a pending connection that will set VMDALTID while either VMDALAPO off or either VMDALD4O or VMDALD4L on.

System operation continues after the abend. The VMDAPAPO bit is turned off, and a return of incorrect path (IPRCNPTH) is given.

User response

Examine the internal trace table and storage dump to determine how VMDALAPO, VMDALD4O, or VMDALD4L was set incorrectly.

IUC001

Explanation

(soft) The IUCV PDEBK structure is incorrect. The target side does not correspond with the invoker's side. The invoker's PDEBK is no longer valid.

User response

Determine who invoked IUCV DESCRIBE through the IUSBK pointed at by R8. Examine the PSW condition code:

Code
Meaning

1
R1 contains address of incorrect PDEBK.

2
The path ID was out of range.

3
The PDSEG was incorrect.

R0 =
Target path ID

R1 =
Possible PDEBK address or invoker IUCVB address

R2 =
Invoker CCTBK address

R3 =
IUCV address

R4 =
Previous MSGBK address

R7 =
Current MSGBK address

R8 =
Invoker IUSBK address

R10 =
Loop control (next MSGBK address).

IUC002

Explanation

(soft) An IUCV TESTCMPL function was issued, and the MSGBK being processed contained a path ID that did not exist.

User response

Examine the condition code from the PSW.

Code
Meaning

1
R1 contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
The PDSEG is incorrect.

Examine the contents of R7. It contains the address of the MSGBK that supplied the path ID (MSGTGPID). For more information, look at the contents of R8. It points to the IUSBK block. The IUSBK block contains useful information, such as the MSGBK address, CCTBK address, and IPARML address.

IUD001

Explanation

(soft) An IUCV RECEIVE function was issued and the MSGBK being received contained a path ID that did not exist.

User response

Examine the condition code from the PSW.

Code
Meaning

1
The R1 contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
The PDSEG is incorrect.

Examine the contents of R7. It contains the address of the MSGBK that supplied the pathid (MSGTGPID). For more information, look at the contents of R8. It points to the IUSBK block. The IUSBK block contains useful information, such as the MSGBK address, CCTBK address, and IPARML address.

IUE001

Explanation

(soft) The IUCV PDEBK structure is incorrect. The target side of the path being Quiesced/Resumed does not exist.

User response

Determine who invoked IUCV SEVER through the IUSBK pointed to by R9. Examine the PSW condition code:

Code
Meaning

1
R1 contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
the PDSEG is incorrect.

R0=
Target path ID

R1=
Source CCTBK

R2=
Target CCTBK

R5=
Source PDEBK

R6=
First target PDSEG

R7=
Source IUCVB

R8=
Target IUCVB

R9=
Target PDEBK obtained

IUE002

Explanation

The IUCV lock of the invoker was destroyed during IUCV RTRVBFR processing.

User response

Examine the IUSBK, which is pointed to by R10, to determine the IUCV user who invoked IUCV. Identify the owner of the lock that HCPIUE was attempting to get by checking the lock word which is pointed to by R1. R7 holds the IUCVB address of the invoker.

IUE003

Explanation

(soft) The IUCVB of the invoker was lost prematurely during IUCV RTRVBFR processing.

User response

Examine the IUSBK, which is pointed to by R10, to determine the IUCV user who invoked IUCV. R7 holds the address of the IUCVB that was lost.

IUE004

Explanation

(soft) IUCV RTRVBFR did not complete.

User response

Examine the IUSBK, which is pointed to by R10, to determine the IUCV user who invoked IUCV. R5 holds the address of the IUCVB for the user. Check IUCTOTCN to see how many paths were not cleaned up during the delay interval allowed for RTRVBFR processing.

IUF001

Explanation

(soft) The IUCV PDEBK structure is incorrect. All PDEBK's are used but the connection count is not equal to the MAXCONN value.

User response

Examine the PSW condition code:

Code
Meaning

2
The path ID was out of range.

3
The PDSEG is incorrect.

Check whether the IUCVB, pointed to by R1, is valid. If so, check that the CCTBK, pointed to by the IUCVCCT field of the IUCVB, is valid. If the IUCVB and CCTBK are valid, check the PDESEVRD bits in the PDEBK to see if the path has been severed.

IUF002

Explanation

(soft) The IUCV PDEBK structure is incorrect.

User response

Examine the PSW condition code:

Code
Meaning

2
The path ID was out of range.

3
The PDSEG is incorrect.

Check whether the IUCVB, pointed to by R1, is valid. If so, check that the CCTBK, pointed to by the IUCVCCT field of the IUCVB, is valid. If the IUCVB and CCTBK are valid, check the PDESEVRD bits in the PDEBK to see if the path has been severed.

IUF003

Explanation

(soft) The IUCV PDEBK structure is incorrect.

User response

Examine the PSW condition code:

Code
Meaning

2
The path ID was out of range.

3
The PDSEG is incorrect.

Check whether the IUCVB, pointed to by R1, is valid. If so, check that the CCTBK, pointed to by the IUCVCCT field of the IUCVB, is valid. If the IUCVB and CCTBK are valid, check the PDESEVRD bits in the PDEBK to see if the path has been severed.

IUF004

Explanation

(soft) The IUCV PDEBK structure is incorrect.

User response

Examine the PSW condition code:

Code
Meaning

2
The path ID was out of range.

3
The PDSEG is incorrect.

Check whether the IUCVB, pointed to by R1, is valid. If so, check that the CCTBK, pointed to by the IUCVCCT field of the IUCVB, is valid. If the IUCVB and CCTBK are valid, check the PDESEVRD bits in the PDEBK to see if the path has been severed.

IUF005

Explanation

(soft) The IUCV IUSBK structure does not exist. The source invoked an APPCVM function specifying WAIT=YES. However, at the time the function is completing, the IUSBK created for the function does not exist.

User response

Determine why the PDESADDR field of the PDEBK is zero. R4 contains the IUCVB. R8 contains the PDEBK. PDESADDR of the PDEBK pointed to by R8 should contain the IUSBK address.

IUF006

Explanation

(soft) The SAVBK structure does not exist. The source invoked an APPCVM function specifying WAIT=YES. However, at the time the function is completing, the SAVBK created for the function does not exist.

User response

Determine why the IUSSAVBK field of the IUSBK is zero. R4 contains the IUCVB. R8 contains the PDEBK. R6 contains the IUSBK. IUSSAVBK of the IUSBK pointed to by R6 should contain the SAVBK address.

IUJ001

Explanation

(soft) The IUCV PDEBK structure is incorrect. The PDEBK of the invoker was found to be corrupt during an IUCV QUERY with QRYTYPE=CONNECT. In this case, the IUCV QUERY function returns an indication to the invoker that the path ID is not valid (output parameter list contains IPRCODE=IPRCINVP).

User response

Examine the IUCV control structures for this path to determine what sequence of events led to this inconsistent state in the PDEBK. At the time of the abend, the following registers should contain useful information:

Code
Meaning

R4
The path ID of the invoker

R7
Invoker's IUCVB

R8
Invoker's CCTBK

R10
Invoker's IUSBK

R14
Invoker's PDSEG

IUK001

Explanation

(soft) An IUCV REJECT function was issued, and the MSGBK being rejected contained a path ID which did not exist.

User response

Examine the condition code from the PSW:

Code
Meaning

1
R1 contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
the PDSEG is incorrect.

Examine the contents of R7. It contains the address of the MSGBK that supplied the path ID (MSGTGPID).

For more information, look at the contents of R8. It points to the IUSBK block. The IUSBK block contains useful information, such as the MSGBK address, CCTBK address, and IPARML address.

IUL004

Explanation

(soft) The IUCV IUSBK structure does not exist. The source invoked an APPCVM CONNECT specifying WAIT=YES. However, at the time the SEVER response is to be posted, the IUSBK created for the function does not exist.

User response

Determine why the PDESADDR field of the connect PDEBK is zero. R8 contains the connect IUCVB. R6 contains the connect PDEBK. PDESADDR of the PDEBK pointed to by R6 should contain the IUSBK address.

IUL005

Explanation

(soft) The SAVBK structure does not exist. The source invoked an APPCVM CONNECT specifying WAIT=YES. However, at the time the SEVER response is to be posted, the SAVBK created for the function does not exist.

User response

Determine why the IUSSAVBK field of the connect IUSBK is zero. R8 contains the connect IUCVB. R6 contains the connect PDEBK. R4 contains the connect IUSBK. IUSSAVBK of the IUSBK pointed to by R4 should contain the SAVBK address.

IUL006

Explanation

The IUCV lock of the invoker was destroyed during IUCV SEVER processing.

User response

Examine the IUSBK, which is pointed to by R10, to determine the IUCV user who invoked IUCV. Identify the owner of the lock that HCPIUL was attempting to get by checking the lock word which is pointed to by SAVEWRK5. (R13 holds the SAVBK address.)

IUL007

Explanation

CP System Service structure has been corrupted. An IUCVB of the system service has been destroyed.

User response

Examine R3, which holds the system service function code, to identify which system service is in trouble. Examine R9 which holds the address of the IUSBK in use for invoking this IUCV SEVER.

IUL008

Explanation

The invoker of an IUCV SEVER has lost its base IUCVB after an audit call.

User response

R9 points to the location of the IUSBK. Examine the IUSBK to determine the IUCV user who invoked IUCV. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IUL009

Explanation

IUCV SEVER processing found a mismatch between the actual number of connections and the value stored in the IUCVB (the IUCTOTCN field).

User response

R9 points to the location of the IUSBK. Examine the IUSBK to determine the IUCV user who invoked IUCV. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to

assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IUO001

Explanation

(soft) The IUCV PDEBK structure is incorrect. The PDEBK of the invoker was corrupted during an IUCV CONNECT.

User response

Determine who invoked IUCV CONNECT through the IUSBK, which is pointed to by R10. Examine the PSW condition code:

Code
Meaning

1
R*x* contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
The PDSEG is incorrect.

R0=
The path ID of the invoker

R5=
Source PDEBK

R7=
Source IUCVB

R8=
Target IUCVB

IUO002

Explanation

The IUCV lock of the invoker was destroyed during IUCV CONNECT processing. This path was not established yet.

User response

Examine the IUSBK, which is pointed to by R10, to determine the IUCV user who invoked IUCV. Identify the owner of the lock that HCPIUO was attempting to get by checking the lock word contained in R1.

IUR001

Explanation

(soft) The IUCV PDEBK structure is incorrect. The PDEBK of the invoker was corrupted during an APPCVM CONNECT.

User response

Determine who invoked IUCV CONNECT through the IUSBK, which is pointed to by R10. Examine the PSW condition code:

Code
Meaning

1
R*x* contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
The PDSEG is incorrect.

R0=
The path ID of the invoker

R5=
Source PDEBK

R7=
Source IUCVB

IUR002

Explanation

The IUCV lock of the invoker was destroyed during APPCVM CONNECT processing. This path was not established yet.

User response

Examine the IUSBK, which is pointed to by R10, to determine the APPCVM user who invoked APPCVM. Identify the owner of the lock that HCPIUR was attempting to get by checking the lock word contained in R1.

IUU001

Explanation

(soft) The IUCV PDEBK structure is incorrect. The target's side does not correspond with the invoker's side. The invoker PDEBK is no longer valid.

User response

Determine who invoked IUCV SEVER through the IUSBK pointed to by R9. Examine the PSW condition code:

Code
Meaning

1
R1 contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
the PDSEG is incorrect.

R0=
Target path ID

R1=
Source CCTBK

R2=
Target CCTBK

R5=
Source PDEBK

R6=
First target PDSEG

R7=
Source IUCVB

R8=
Target IUCVB

R9=
Target PDEBK obtained

IUU003

Explanation

(soft) While processing an IUCV SEVER function, IUCV issued the IUCV REJECT function, which detected a specification exception. If a virtual machine issued the IUCV REJECT function, CP would issue a specification exception. However, because the IUCV REJECT function was issued from within CP, this soft abend was issued instead of the exception.

User response

R0 contains the exception code indicating a specification exception. Examine the parameter list used to invoke the function, pointed to by R10. The following are possible causes of the exception:

- You specified an incorrect path ID
- Either you specified a message identification without specifying a path identification and message class, or you incorrectly set the IPFGMID, IPFGPID, and IPFGMCL flags in the parameter list.

IUU004

Explanation

(soft) While processing an IUCV SEVER function, IUCV issued the IUCV PURGE function, which detected a specification exception. If a virtual machine issued the IUCV PURGE function, CP would issue a specification exception. However, because the IUCV PURGE function was issued from within CP, this soft abend was issued instead of the exception.

User response

R0 contains the exception code indicating a specification exception. Examine the parameter list used to invoke the function, pointed to by R10. The following are possible causes of the exception:

- You specified an incorrect path ID
- Either you specified a message identification without specifying a path identification and message class, or you incorrectly set the IPFGMID, IPFGPID, and IPFGMCL flags in the parameter list.

IUU005

Explanation

(soft) The target of the function destroyed its IUCV lock, and this path was not severed earlier.

User response

Examine the IUSBK pointed to by R10 to determine the IUCV user that invoked IUCV. Identify the owner of the lock that HCPIUE was attempting to get by checking the PDEBK pointed to by R1.

IUU006

Explanation

The IUCV lock of the invoker was destroyed during IUCV SEVER processing. This path was not severed beforehand.

User response

Examine the IUSBK, which is pointed to by R10, to determine the IUCV user who invoked IUCV. Identify the owner of the lock that HCPIUU was attempting to get by checking the lock word contained in R1.

IUV001

Explanation

(soft) The IUCV PDEBK structure is incorrect. The target's side does not correspond with the invoker's side.

User response

Determine who invoked IUCV SEVER through the IUSBK pointed to by R9. Examine the PSW condition code:

Code
Meaning

1
R1 contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
The PDSEG is incorrect.

R5 contains the invoker's PDEBK address. R7 contains the invoker' IUCVB address, and R0 contains the invoker's path ID.

R6 contains the target's PDEBK address. R8 contains the target's IUCVB address, and R0 contains the target's path ID.

IUV002

Explanation

(soft) A CP system service performed an IUCV SEVER function when there was no CP connection pending. In this case, CP initiated the CONNECT.

User response

Determine which CP system service invoked IUCV by using the IUSBK pointed to by R9. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* to determine the CP system service associated with the code found in the IUSBK. The address of the PDEBK that contains the path ID for which SEVER is searching is pointed to by R6. The chain of CP pending connections starts at IUCPNDHD in the IUCVB pointed to by R7.

IUV003

Explanation

(soft) An IUCV SEVER function was performed when there was no CP connection pending. In this case, CP was the target of the CONNECT.

User response

Determine who invoked IUCV by using the IUSBK pointed to by R9. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* to determine which CP system service is associated with the code found in the CCTBK pointed to by R1. The address of the PDEBK that contains the path ID for which SEVER is searching is pointed to by R5. The chain of CP pending connects starts at IUCPNDHD in the IUCVB pointed to by R8.

IUV006

Explanation

(soft) A SEVER function was performed for a path where a connection is pending for a delayed CONNECT, but the path was not suspended.

User response

Determine who invoked IUCV by using the IUSBK pointed to by R9. Examine the suspended connect field in the PDEBK pointed to by R5. The path ID is contained in R0.

IUV007

Explanation

(soft) A SEVER function was performed for a path where a connection is pending for a delayed CONNECT. The IUSBK does not exist.

User response

Determine who invoked IUCV by using the IUSBK pointed to by R9. Examine the suspended connect field in the PDEBK pointed to by R5. The path ID is contained in R0. PDESADDR of the PDEBK pointed to by R5 should contain the IUSBK address, but for this abend it is zero. Determine why the field is zero.

IUV008

Explanation

(soft) The IUCV IUSBK structure does not exist. The source invoked an APPCVM CONNECT specifying WAIT=YES. However, at the time the SEVER response is to be posted, the IUSBK created for the function does not exist.

User response

Determine why the PDESADDR field of the connect PDEBK is zero. R8 contains the connect IUCVB. R6 contains the connect PDEBK. PDESADDR of the PDEBK pointed to by R6 should contain the IUSBK address.

IUV009

Explanation

(soft) The SAVBK structure does not exist. The source invoked an APPCVM CONNECT specifying WAIT=YES. However, at the time the SEVER response is to be posted, the SAVBK created for the function does not exist.

User response

Determine why the IUSSAVBK field of the connect IUSBK is zero. R8 contains the connect IUCVB. R6 contains the connect PDEBK. R4 contains the connect IUSBK. IUSSAVBK of the IUSBK pointed to by R4 should contain the SAVBK address.

IUV010

Explanation

(soft) A SEVER function was performed for a path where the connection is pending for a delayed CONNECT. The DCRBK does not exist.

User response

Examine the suspended connect field in the PDEBK pointed to by R5. The path ID is contained in R0. PDESADDR of the PDEBK pointed to by R5 contains the IUSBK address. For this abend, it is zero. Determine why the field is zero.

IUV011

Explanation

(soft) The target of the function destroyed its IUCV lock, and this path was not previously severed.

User response

Determine who invoked IUCV by examining the IUSBK pointed to by R9. Identify the owner of the lock the SEVER was attempting to get by checking the PDEBK pointed to by R1. For this abend, it is zero. Determine why the field is zero.

IUX001

Explanation

(soft) The IUCV PDEBK structure is incorrect. The PDEBK of the invoker was corrupted during an APPCVM CONNECT.

User response

Determine who invoked APPCVM CONNECT through the DCRBK, which is pointed to by R10. Examine the PSW condition code:

Code
Meaning

1
R*x* contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
The PDSEG is incorrect.

R0=
The path ID of the invoker

R5=
Source PDEBK

R7=
Source IUCVB

R8=
Target IUCVB

R10=
DCRBK of the invoker

IUX002

Explanation

(soft) The IUCV lock of the invoker was destroyed during APPCVM CONNECT processing.

User response

Examine the DCRBK, which is pointed to by R10, to determine the APPCVM user who invoked APPCVM. Identify the owner of the lock that HCPIUX was attempting to get by checking the lock word contained in R1.

IUX003

Explanation

(soft) Invoker base IUCVB lost after audit call.

User response

Examine the DCRBK, which is pointed to by R10, to determine the IUCV user who invoked IUCV.

IUY002

Explanation

(soft) An IUCV IPOLL function was issued, and the MSGBK being reflected contained a path ID that did not exist.

User response

Examine the condition code from the PSW.

Code
Meaning

1
R1 contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
The PDSEG is incorrect.

Examine the contents of R7. It contains the address of the MSGBK that supplied the path ID (MSGTGPID). For more information, look at the contents of R8. It points to the IUSBK block. The IUSBK block contains useful information, such as the MSGBK address, CCTBK address, and IPARML address.

IUY003

Explanation

(soft) The IUCV PDEBK structure is incorrect. The target side does not correspond with the invoker's side. The invoker's PDEBK is no longer valid.

User response

Determine who invoked IUCV IPOLL through the IUSBK indicated by R8. Examine the PSW condition code:

Code
Meaning

1
R1 contains the address of the incorrect PDEBK.

2
The path ID was out of range.

3
The PDSEG was incorrect.

R0=
Target path ID

R1=
Possible PDEBK address or invoker IUCVB address

R2=
Invoker CCTBK address

R4=
Previous MSGBK address

R5=
Address in user's buffer for next interrupt

R6=
Number of available interrupt buffers in user's buffer

R7=
Current MSGBK address

R10=
Loop control (next MSGBK address)

IVA001

Explanation

(soft) The IVL NIC Port Driver on the IVL VSWITCH detected an unexpected condition.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IVC001

Explanation

(soft) The IVL Communications Handler detected an unexpected condition.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IVD001

Explanation

(soft) The IVL Manager detected an unexpected condition.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IVF001

Explanation

(soft) An internal processing error occurred with the IVL Global Port Group Manager.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IVG001

Explanation

(soft) The Port Group Manager detected an unexpected condition.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IVH001

Explanation

(soft) The Port Group Manager detected an unexpected condition. Register 1 will contain an internal error code for the actual reason.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

IVI001

Explanation

(soft) The IUCV PDEBK structure is incorrect.

User response

Examine the condition code from the PSW.

Code
Meaning

2
The path ID was out of range.

3
The PDSEG is incorrect.

Check whether the IUCVB, pointed to by R1, is valid. If so, check that the CCTBK, pointed to by the IUCVCCT field of the IUCVB, is valid. If the IUCVB and CCTBK are valid, check the PDSEVRD bits in the PDEBK to see if the path has been severed.

IVL001

Explanation

(soft) The IVL Manager detected an internal error while processing this system's IVL member table or in its system communications.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

If a message HCP3202E was presented stating that this system has been fenced, then the IVL VSwitch for this system must be DETACHed, DEFINED and CONNECTed for the system to rejoin the IVL domain.

IVQ001

Explanation

(soft) The IUCV PDEBK structure is incorrect. An error was detected on the connect causing CP to SEVER the connection. However, the source PDEBK could not be located.

User response

Examine the PSW condition code:

Code
Meaning

2
The path ID was out of range.

3
The PDSEG is incorrect.

Check whether the IUCVB, pointed to by R1, is valid. If so, check that the CCTBK, pointed to by the IUCVCCT field of the IUCVB, is valid. If the IUCVB and CCTBK are valid, check the PDESEVRD bits in the PDEBK (the address is located in R5) to see if the path has been severed.

IVQ002

Explanation

(soft) The IUCV IUSBK structure does not exist. The source invoked an APPCVM CONNECT specifying WAIT=YES. The path is being severed by CP because of an error. However, at the time the SEVER response is to be posted, the IUSBK created for the function does not exist.

User response

Determine why the PDESADDR field of the connect PDEBK is zero. R7 contains the connect IUCVB. R5 contains the connect PDEBK. PDESADDR of the PDEBK pointed to by R6 should contain the IUSBK address.

IVQ003

Explanation

(soft) The SAVBK structure does not exist. The source invoked an APPCVM CONNECT specifying WAIT=YES. The path is being severed by CP because of an error. However, at the time the SEVER response is to be posted, the SAVBK created for the function does not exist.

User response

Determine why the IUSSAVBK field of the connect IUSBK is zero. R7 contains the connect IUCVB. R5 contains the connect PDEBK. R4 contains the connect IUSBK. IUSSAVBK of the IUSBK pointed to by R4 should contain the SAVBK address.

IVQ004

Explanation

(soft) The IUCV lock of the invoker was destroyed during APPCVM CONNECT processing.

User response

Examine the DCRBK, which is pointed to by R3, to determine the APPCVM user who invoked APPCVM. Identify the involved lock word by checking the lock word contained in R1.

IVR002

Explanation

The IUCV lock of the invoker was destroyed during APPCVM CONNECT processing.

User response

Examine the IUSBK, which is pointed to by R10, to determine the APPCVM user who invoked APPCVM. Identify the owner of the lock that HCPIVR was attempting to get by checking the lock word contained in R1.

IVS001

Explanation

(soft) The Global Virtual Switch Manager operations detected an unexpected condition.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAE001

Explanation

(soft) Issued by the HCPKAE module. This module is distributed as object code only; therefore no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAE003

Explanation

(soft) Issued by the HCPKAE module. This module is distributed as object code only; therefore no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAE004

Explanation

(hard) Issued by the HCPKAE module. This module is distributed as object code only; therefore no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAQ001

Explanation

(soft) Issued by the HCPKAQ module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAQ002

Explanation

(soft) Issued by the HCPKAQ module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAT001

Explanation

(hard) Issued by the HCPKAT module. This module is distributed as object code only; therefore no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAU001

Explanation

Issued by the HCPKAU module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAU002

Explanation

(soft) Issued by the HCPKAU module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAU003

Explanation

Issued by the HCPKAU module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAU004

Explanation

Issued by the HCPKAU module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAU005

Explanation

(soft) Issued by the HCPKAU module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAU006

Explanation

(soft) Issued by the HCPKAU module. This module is distributed as object code only; therefore no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KAU007

Explanation

Issued by the HCPKAU module. This module is distributed as object code only; therefore no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KCC001

Explanation

An internal processing error occurred while processing an ISFC communication request. The system was unable to forward a message to a connected SSI member.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KCD001

Explanation

(soft) An internal processing error occurred while processing an ISFC communication request.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KEY001

Explanation

(soft) An instruction passed to HCPKEY for simulation should have been executed by the hardware.

User response

Determine the caller of HCPKEY and see why it was called when this module could not execute the instruction.

KRY001

Explanation

An invalid or corrupted encryption key was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

KYM001

Explanation

An unexpected and unrecoverable verification pattern mismatch was detected. This problem can occur when a second level VM system with encrypted paging enabled is relocated in an SSI environment.

User response

Do not attempt to relocate a second level VM system which has encrypted paging enabled. If this situation was not the cause of the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LAL002

Explanation

The PTE is not valid.

User response

The PTE invalid bit is on, or the address of the PTE that was obtained from the SXSTE was in error. Examine the dump to determine which is the case.

LAL003

Explanation

An attempt to lock the page associated with the address specified by R2 failed. The locking of this page would cause an overflow of the ASAOVFLW field in the ASA associated with the page.

User response

Examine the dump to determine which module attempted to lock the page. Examine the code to determine if there is a code loop which is causing a page to be locked repeatedly, or if pages are being locked without a corresponding unlock.

LAL004

Explanation

CP cannot unlock the page associated with the address specified by R2. The contents of the page status table entry (PGSTE) and the auxiliary storage address table entry (ASATE) indicate that the page is not currently locked.

User response

Inspect the code to see which module or entry point was responsible for locking the page and why the page was left unlocked. Inspect the code and the trace table to determine why the page lock count is incorrect.

LAL006

Explanation

CP cannot lock the SXS page specified by R2 because the associated SXSTE does not contain the last translated page for the processor on which the lock request is issued.

User response

Examine the dump to determine which module attempted to lock the page without first translating it.

LAL007

Explanation

While locking or unlocking a page, the function attempted to change the ASCIACCT count for the address space. However:

- Increasing the count would have made it wrap to zero.
- Decreasing the count would have made it negative.

User response

Inspect the process of page translation and of locking and unlocking pages. Examine the dump to determine when the count was last changed. Check for improper operations on the locked page count or alteration of the ASCBK.

LAL008

Explanation

CP cannot lock or unlock the SXS page specified in R2. The contents of that page's SXSTE are such that the page cannot be locked or unlocked. Examine the dump for the following conditions:

- For a lock request:
  - A serialization bit other than SXSTRANS is set in the SXSTE, indicating that another task has obtained serialization for the page being locked.
  - The lock count has changed while this task holds SXSTE serialization.
- For an unlock request:
  - The page was not locked to begin with. This would occur if the SXSLOCKD bit was already 0.
  - SXSUSER is 0 or SXSAVAIL is 1. This would indicate that the SXS page either is not associated with a pageable frame or is currently available.
  - The SXS page lock count was already zero but the page was still locked.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LAL009

Explanation

An attempt to unlock the page associated with the address specified by R2 did not take place because the page was either offline or on the available list at the time of the unlock attempt.

User response

Examine the dump to determine which module attempted to unlock the page. Trace through CP execution to see when and where the page went offline or on the available list.

LAL013

Explanation

While locking or unlocking the page associated with the address specified by R2, CP determined that the internal i-Asit is not valid. (The internal i-Asit describes the space that the page belongs to.)

User response

Examine the dump to determine which module invoked HCPLAL. Examine the caller to see why the internal i-Asit is not valid. The same internal i-Asit that was used to translate the page should be used to lock it and then unlock it. Once translated, the i-Asit is supposed to remain certified and valid until a loss of control.

LAL014

Explanation

(soft) A long-term first pin request was processed for a page which could potentially prevent a successful memory reclamation.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LCK001

Explanation

HCPLCK was called to release ownership of a lock, but failed for one of the following reasons:

- The lock was not held.
- The lock was not held by the calling VMDBK.
- An attempt was made to do a shared release of a lock held exclusively.
- An attempt was made to do an exclusive release of a lock held shared.
- The contents of a lock were overlaid.

User response

Examine the dump and the trace table to determine what went wrong. R4 points to the lock (a LKWRD, described by HCPLKWRD COPY). Examine the save area to determine the calling module. Check that the caller invoked the appropriate HCPLCK entry point according to the holding of the lock (shared or exclusive).

If an exclusive release is being performed, check the LKWSTATE field of the lock. It should contain the address of the owning VMDBK, OR'ed with x'80000001'. This VMDBK address should be the same as the dispatched VMDBK (R11) which is attempting to do the exclusive release.

If these addresses don't match, one possibility is that the control was switched from one VMDBK to another (usually by calling HCPDSBSW), and that ownership of the lock should have been transferred beforehand (by calling HCPDSBPX), but wasn't.

If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LCK002

Explanation

Entry point HCPLCKAD was called with the same lockword address in R1 and R2. HCPLCKAD requires R1 to address a lock already held exclusive, and requires R2 to address a lock to be obtained exclusive concurrently.

User response

Examine the storage dump. R13 points to a save area. Identify the caller by the module base address (R12) and return address (R14) in the save area. Look at the system trace table for the sequence of events that led to the caller's invoking HCPLCKAD with two copies of the same lock-word address.

LCK003

Explanation

A lock (or LKWRD, described by HCPLKWRD COPY) was found to be in an incorrect state. The first fullword of the LKWRD contains an incorrect code.

User response

Examine the dump to determine how the incorrect value came to be stored in the LKWRD. R4 points to the LKWRD. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LCK004

Explanation

The count of requests enqueued and waiting to obtain a lock (or LKWRD, described by HCPLKWRD COPY) became negative.

User response

Examine the dump and the trace table to determine why the count went negative. R4 points to the LKWRD, and LKWDQLEN is the count field within the LKWRD. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LCK005

Explanation

The critical process count, VMDCTCRT in the base VMDBK, became negative. Usually this count represents the number of locks held by the virtual machine. (The degree of criticality is usually equal to the number of locks held.)

Some, but not all, of the possible causes of this abend are:

- The code that was to decrement VMDCTCRT was somehow allowed to execute before the code that was to do the corresponding increment. For example, if the following sequence is possible:
  1. Lock ownership is switched to another VMDBK
  2. The other VMDBK is immediately enabled to begin running on another processor with the lock
  3. VMDCTCRT is incremented in the VMDBK that just was granted the lock.

  It is potentially possible for the second processor to execute the code that releases the lock and decrements VMDCTCRT before the first processor increments VMDCTCRT. VMDCTCRT must always be incremented before it is possible for another processor to start processing the code that will do the corresponding decrement.
- VMDCTCRT was incremented on one VMDBK, then a VMDBK switch occurred before the corresponding decrement took place. This may often happen on task threads that switch between a user VMDBK and the system VMDBK, or switch between VMDBKs in a single virtual MP complex.
- A task thread did not properly serialize its increment or decrement of VMDCTCRT, such as by using the compare-and-swap instruction.
- When attempting to increment VMDCTCRT on other than the running VMDBK, the wrong VMDBK was chosen.

User response

Examine the CP trace table and storage dump to determine why the base VMDBK changed from zero to a negative value in the VMDCTCRT field. R11 points to the dispatched VMDBK. The field VMDBASE in the dispatched VMDBK points to the VMDBK containing VMDCTCRT. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LCK006

Explanation

The count of requests enqueued and waiting to obtain a lock (or LKWRD, DESCRIBED BY HCPLKWRD COPY) would have exceeded the maximum.

User response

Examine the dump and the trace table to determine why the count would have exceeded the maximum. R4 point to the LKWRD and LKWDQLEN is the count field within the LKWRD. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LCK010

Explanation

An attempt to release a host share of the IPTE interlock failed for one of the following reasons:

- The lock was not held.
- The lock was not held by the host.

User response

Examine the dump and the trace table to determine what happened. R4 points to the IPTE-interlock doubleword. Bit 0 indicates whether the lock is held or not, bits 1–31 contain the host share count, and bits 32–63 contain the guest share count. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need

to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LCK011

Explanation

The IPTE interlock was found to be in an incorrect state. The lock may be invalid for one of the following reasons:

- The lock was not held, but the host and/or guest share count was nonzero.
- The lock was held and both the host and guest share count were nonzero.

User response

Examine the dump to determine how the incorrect value was stored in the IPTE-interlock doubleword pointed to by R4. Bit 0 indicates whether the lock is held or not, bits 1–31 contain the host share count, and bits 32–63 contain the guest share count. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LCK012

Explanation

A request to obtain a host share of the IPTE interlock exceeded the maximum.

User response

Examine the dump and the trace table to determine why the count exceeded the maximum. R4 points to the IPTE-interlock doubleword. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LCK017

Explanation

The deferred execution counter, VMDDFRWK in the VMDBK, was about to become negative.

User response

Examine the CP trace table and storage dump to see why the VMDBK in R11 has a zero value for the VMDDFRWK field.

See the description of DFR017 for possible reasons why this may have occurred.

LCK018

Explanation

An attempt was made to change exclusive lock ownership from the machine (CP millicode) to z/VM, but the machine did not own the lock exclusively.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LDA001

Explanation

(soft) CP is unable to return the LDDBK; HCPLDARE input error. At least one of the following was specified incorrectly:

- The LDDBK had an incorrect value in the LDDLDNUM field
- The specified logical device (LDDLDNUM) does not exist
- The LDDBK passed on input is not the LDDBK that is in the logical display device data structure (HVMTABLE-located in module HCPLDA).

User response

R1 points to the LDDBK passed on input.
Determine the condition that caused the abend. (See "Explanation" for a list of conditions.) Locate the caller of HCPLDARE and determine how this condition occurred. Check to make sure the preceding call to HCPLDAFE was successful (a return code of zero in R15) for this device, or that two successive calls to HCPLDARE for the same device were not made.

LDA005

Explanation

(soft) HCPLSODD output error during termination of a logical device; incorrect return code from HCPLSODD. During the destruction of a logical device (started, for example, by a DIAGNOSE code X'7C' LOGOFF command, or system reset), HCPLSODD returned an incorrect value in R15.

User response

Examine the value in R15 (using the trace table) and determine how HCPLSODD arrived at that value.

LDA006

Explanation

(soft) HCPLSOCR output error. During the creation of a logical device, the logical channel attempted to create a logical device where one already existed. The original logical device is retained; the creation procedure for the new logical device is abended.

User response

Determine how HCPLSOCR created a device where one already existed.

LDA007

Explanation

(soft) The logical device (LDDBK) lock was not obtained; the lock was destroyed. When trying to access a logical device, the LDDBK lock could not be obtained. The logical device is not useable.

User response

Determine how the LDDBK lock was destroyed.

LDA008

Explanation

(soft) The logical device host virtual machine slot lock was not obtained; it was destroyed. When trying to create, access, or destroy a logical device, the host virtual machine slot lock could not be obtained. All logical devices created by the virtual machine controlling this logical device are not useable.

User response

Determine how the host virtual machine lock slot was destroyed.

LDA009

Explanation

(soft) This is an HCPLSMUU output error; incorrect return code from HCPLSMUU.

User response

Examine the value in R15 (through the trace table). Determine how HCPLSMUU arrived at that value.

LDA017

Explanation

The deferred execution counter, VMDDFRWK in the VMDBK, was about to become negative.

User response

Examine the CP trace table and storage dump to see why the VMDBK pointed to by R11 has a zero value for the VMDDFRWK field.

See the description of DFR017 for possible reasons why this may have occurred.

LDB001

Explanation

(soft) RDEV is a logical device, but no LDDBK exists. The logical channel support and the logical device support indicate that the specified logical device does not exist.

User response

Determine if a logical device does exist (LDDBK, RDEV, and LSO are present). Determine how HCPLSORN and HCPLDAFE arrived at their results.

LDB003

Explanation

(soft) The system will soft abend if HCPLSMUS returns with a return code that is not 0, as this is the only valid return code.

User response

Examine the return code given by HCPLSMUS and determine why it issued that return code.

LDC001

Explanation

(soft) This is an HCPLDCES input error, with an incorrect external interrupt function code. An external interrupt code (in R3) was passed to HCPLDCES which is not in the appropriate range (1 through 5 inclusive).

User response

Examine the value in R3 (using the trace table). Locate the module that passed control to HCPLDCES and determine how this module arrived at the value in R3.

LDC004

Explanation

(soft) This is an HCPLDCEF process error; guest page zero cannot be acquired. A call to HCPPZERO to acquire a specified virtual machine's guest page zero was not successful.

User response

Determine the virtual machine executing at this time and why the virtual machine's guest page zero could not be fetched.

LDD003

Explanation

(soft) This is an HCPLSMUU output error; incorrect return code from HCPLSMUU. During logical device present processing, HCPLSMUU returned an incorrect value in R15.

User response

Examine the value in R15 (through the trace table) and determine how HCPLSMUU arrived at that value.

LDD007

Explanation

(soft) This is an HCPLSMUS output error. During logical device status processing, HCPLSMUS returned an incorrect value in R15.

User response

Examine the value in R15 (using the trace table) and determine how HCPLSMUS arrived at that value.

LDD008

Explanation

(soft) This is an LDDBK information error. Waiting for Read-Buffer and waiting for Read-modified are both set. During logical device present processing, the logical device was waiting for both a read-buffer and a read-modified (LDDWTNG). Present processing proceeded with read-buffer processing if the present was for a read-buffer; present processing proceeded with read-modified processing if the present was for a read-modified. At completion of this logical device present processing, the logical device is not waiting for a read (buffer or modified).

User response

Determine if a read-buffer or a read-modified was attempted and if it was successful (data was moved). Determine how both waiting for read-buffer and waiting for read-modified were set. Check for previous presents and/or reads to this device which may have failed.

LDE002

Explanation

(soft) The system will soft abend if HCPLSMUS returns with a return code that is not 0, as this is the only valid return code.

User response

Examine the return code given by HCPLSMUS and determine why it issued that return code.

LDE017

Explanation

The deferred execution counter, VMDDFRWK in the VMDBK, was about to become negative.

User response

Examine the CP trace table and storage dump to see why the VMDBK pointed to by R11 has a zero value for the VMDDFRWK field.

See the description of DFR017 for possible reasons why this may have occurred.

LDF001

Explanation

Issued during a DIAGNOSE code X'2C0' if the requested file size exceeds the caller-specified buffer size.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LDI001

Explanation

(soft) Issued by the HCPLDI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LDI002

Explanation

(soft) Issued by the HCPLDI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LFC001

Explanation

HCPLFCRL is called to remove a Multi-Path Lock Facility (MPLF) RPQ simulation configuration. The guest is the last user attached to the configuration. The configuration name must be removed from the configuration name table that contains a list of active configurations. However, the configuration name cannot be found in the table.

User response

This is most likely a software error. Possible causes are:

- The configuration name table was corrupted.
- Another process removed the configuration name without properly locking access to the table.

LFP001

Explanation

Issued by the HCPLFP module. This module is distributed as object code only; therefore, no source program materials are available.

HCPLFPSF found a zero VMDBK address when attempting to identify a connected Multi-Path Lock Facility (MPLF) RPQ user. This is most likely a software error. Possible causes are:

- The subsystem connect table was corrupted.
- Another process removed the user from the configuration without properly locking access to the user's configuration block.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LFS001

Explanation

Issued by the HCPLFS module. This module is distributed as object code only; therefore, no source program materials are available.

HCPLFSIM was called to simulate a CCW opcode for a Multi-Path Lock Facility (MPLF) RPQ user, but the CCW opcode is not one supported for MPLF simulation. This is most likely a software error.

User response

Determine why entry point HCPGDSIM called HCPLFSIM for MPLF simulation with an incorrect CCW opcode. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LFS002

Explanation

Issued by the HCPLFS module. This module is distributed as object code only; therefore, no source program materials are available.

HCPLFS is called to simulate a Read Subsystem Data CCW for a Multi-Path Lock Facility (MPLF) RPQ simulation user. This call follows a Perform Subsystem Function command with a Prepare to Read Subsystem Data order. The expected message buffer was not built and queued for the user. This is a software error.

User response

Determine why entry point HCPLFPSF did not properly build the message buffer. Queue it for the user's subsequent Read Subsystem Data CCW request. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LGA001

Explanation

(soft) The value of LGNCMD in the LGNBK is zero.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LGB001

Explanation

(soft) The value of LGNCMD in the LGNBK is zero.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LMM001

Explanation

(soft) The LOCATE subcommand is not supported. The CP LOCATE processor detected a command other than LOCATE CPREAL or LOCATEVM. This soft abend should never occur. The command parser should detect a subcommand that was not valid and issue the appropriate error message.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LMM002

Explanation

(soft) LOCATE command operand not supported. The CP LOCATE processor has detected a search date format identifier other than DATA, HEX, or PROMPT. This soft abend should never occur. The command parser should detect a subcommand that was not valid and issue the appropriate error message.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LOC001

Explanation

The enqueued request count for a lock has become negative.

User response

Examine the dump and the trace table to determine why the count went negative. R4 contains the address of the LCKBK. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LOC002

Explanation

An attempt was made to release a lock obtained while dispatched on another VMDBK.

User response

Examine the CP trace table and storage dump to determine why the attempt to release the lock was made on a VMDBK other than the one it was obtained on without transferring the lock over to that VMDBK. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LOC003

Explanation

The critical process count, VMDCTCRT in the base VMDBK, became negative. Usually, this count represents the number of locks held by the virtual machine. (The degree of criticality is usually equal to the number of locks held.)

Some, but not all, of the possible causes of this abend are:

- The code that was to decrement VMDCTCRT was somehow allowed to execute before the code which was to do the corresponding increment. For example, if the following sequence is possible:
  - Lock ownership is switched to another VMDBK
  - The other VMDBK is immediately enabled to begin running on another processor with the lock
  - VMDCTCRT is incremented in the VMDBK that just was granted the lock

  It is possible for the second processor to run the code that releases the lock and decrements VMDCTCRT before the first processor increments VMDCTCRT. VMDCTCRT must always be incremented before another processor can start processing the code that will do the corresponding decrement.
- VMDCTCRT was incremented on one VMDBK, then a VMDBK switch occurred before the corresponding decrement took place. This may often happen on task threads that switch between a user VMDBK and the system VMDBK, or switch between VMDBKs in a single virtual MP complex.
- A task thread did not properly serialize its incrementing or decrementing of VMDCTCRT, such as by using the compare-and-swap instruction.
- When attempting to increment VMDCTCRT on other than the running VMDBK, the wrong VMDBK was chosen.

User response

Examine the CP trace table and storage dump to determine why the base VMDBK changed from zero to a negative value in the VMDCTCRT field. R11 points to the dispatched VMDBK. The field VMDBASE in the dispatched VMDBK points to the VMDBK containing VMDCTCRT. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LOC017

Explanation

The deferred execution counter, VMDDFRWK in the VMDBK, was about to become negative.

User response

Examine the CP trace table and storage dump to see why the VMDBK pointed to by R11 has a zero value for the VMDDFRWK field.

See the description of DFR017 for possible reasons why this may have occurred.

LOG002

Explanation

CP attempted to rename a skeleton VMDBK's user ID in the VMDBK hash table to the system operator's user ID. The rename failed because LOGON processing of the system operator at system initialization occurred when either the NODIRECT option was specified or no valid system directory existed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LSM001

Explanation

(soft) HCPLSMDF should only be called for local users, but the user is in the hash table as a remote user.

User response

R6 points to the user ID. Determine why it is not a local user. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

LTR001

Explanation

While processing the Frame Last-Translated Count (FRMLTRCT) for a frame table entry (FRMTE), the function attempted to decrement or zero the FRMLTRCT count value. However, one of the following occurred:

- The count was found to already be negative.

- The function was decrementing the count, which would have made it negative.
- The function was zeroing the count, which would have caused it to become negative later.

User response

Inspect the page translation and frame table available list processing code. Examine the dump to determine when the count was last changed, and why the count was being decremented or zeroed incorrectly.

LTR002

Explanation

The last-translated count for a frame exceeds the maximum value allowed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MBS001

Explanation

One of the following conditions was detected by the Buffer Set Manager:

- An attempt to close an already closed buffer set (MBBK).
- Tasks are on the wait queue, the MBBK is being closed, and there are no more buffers out to give to the waiting tasks. This abend condition only occurs if the values of the home count and/or the out count have been corrupted.
- A caller specified "no buffers out while closing" and there were buffers out.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MBS002

Explanation

One of the following conditions was detected by the Buffer Set Manager:

- An attempt to obtain a buffer from a closed buffer set (MBBK).
- FRMTE serialization could not be obtained on a newly acquired frame. SVGR15 indicates the path within the module that detected the error:
  - If SVGR15 = 0, the failure occurred after a HCPGETFR CONDITIONAL=YES invocation.
  - If SVGR15 = 4, the failure occurred after a HCPGETFR CONDITIONAL=NO invocation. The maximum size of the home list was not reached.
  - If SVGR15 = 8, the failure occurred in the resume routine (MBSGBRES) after a HCPGETFR CONDITIONAL=NO invocation. The maximum size of the home list was reached.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MBS003

Explanation

A caller of the Buffer Set Manager attempted to consume more buffers than it actually had in use.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MCH001

Explanation

Control was passed to HCPMCHCS (the check-stop handler). HCPMCHCS expected R1 to contain the address of the prefix page of the check-stopped processor, but the address was not valid.

User response

Examine the storage dump and determine how the incorrect address got to be in R1.

MCH002

Explanation

Control was passed to HCPMCHCS (the check-stop handler), and one of the following problems was detected:

- The field PFXMCVBK in the prefix page contained a zero when it should have pointed to the permanently allocated processing unit MCVBK.
- The field PFXMCHA in the prefix page contained a zero when it should have pointed to the permanently allocated machine check work area (MCKBK).
- The field MCKREC in the MCKBK contained a zero when it should have pointed to the permanently allocated machine check error record (MCHREC).

User response

Examine the storage dump to determine the cause of the problem. One possibility is that the address of the prefix page of the check-stopped processor was not valid. HCPMCHCS should have received a valid address in R1. The address that HCPMCHCS received in R1 is now in R9. Check to see that R9 does point to the prefix page of the check-stopped processor. If it does, then check to see if parts of that prefix page (around PFXMCVBK and PFXMCHA) may have been set to zero inadvertently.

MCH003

Explanation

When control was passed to HCPMCHCS (the check-stop handler), the processing unit MCVBK should have been empty (all zeros), but it was not.

User response

Examine the storage dump. Verify that the value in R9 is the address of the prefix page of the check-stopped processor. Try to verify that the register pointing to the processing unit MCVBK does point to a MCVBK. Examine the data in the MCVBK to see if it is correct. Compare that data to the machine check local trace entry corresponding to the prior event. If there is a correspondence, suspect an error in HCPMCH.

MCH005

Explanation

A terminating machine check condition occurred, and the system was re-IPLed with a dump being taken. This termination code might also indicate that a malfunction alert occurred and no primary thread 0 processors were available to perform recovery of the check-stopped processor. This is a hardware condition.

Note: MCH005 is a termination code, as opposed to an abend code.

User response

Examine any messages issued by the machine check handler prior to the re-IPL for more information. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MCI004

Explanation

When the processing of a check-stop reaches a point where the critical processing has been completed, the code PFXCSTOP is stored in the PFXSTATE byte. When that point was reached, however, it was found that the PFXCSTOP code was already stored in PFXSTATE. This should not have happened.

User response

Examine a cross reference table of all modules to see which ones reference PFXCSTOP. Then examine the CP trace table and see if any of these routines were recently executed.

MCI021

Explanation

After calling HCPRFC, HCPMCI received an unexpected return code from HCPRFC.

User response

Examine the part of HCPMCI where the call is made to determine what return codes are expected from HCPRFC. Then examine HCPRFC to see why it issued a return code that HCPMCI did not expect.

MCS001

Explanation

While trying to take a damaged frame from a guest's user-owned frame list, the machine check first-level interrupt handler determined that the list was damaged. Either the frame table entries on the list were chained improperly, or the guest's count of resident pages became negative.

User response

Inspect the process of chaining and unchaining frames on the user-owned frame list. Examine the dump and determine which VMDBK or SNTBK control block owns the user-owned frame list. VMDFR1ST should point to the first frame on the list, and VMDFRLST should point to the last frame on the list. FRMFPNT is the forward pointer to the next frame on the list, and FRMBPNT is the backward pointer to the previous frame on the list. The frame being unchained at the time of the abend may not have been chained properly when it was put on the user-owned frame list. Check the counter ASCCTPRS. If it is less than zero, either the counter has been altered or the frame that is being removed was on this guest's user-owned frame list erroneously.

MCS002

Explanation

An attempt was made to decrement a count of resident pages for a VMDBK or ASCBK, but the count was already negative or would go negative.

User response

Inspect the process of increasing and decreasing the count of resident pages. Examine the dump and determine the VMDBK or ASCBK for which this count is being decreased. A negative count indicates an incorrect user-owned frame list. This count increases when a frame is added to the list and decreases when a frame is taken from the list. Inspect the validity of the user-owned frame list.

MCV001

Explanation

(soft) The virtual machine check block (MCVBK) passed to HCPMCVMC has the channel report word (CRW) bit on, but no pointer to CRWBKS.

User response

Examine the internal trace table and storage dump to determine why the MCVBK and CRWBKS are not linked up correctly.

MCV002

Explanation

(soft) The virtual machine check block (MCVBK) passed to HCPMCVMC has a pointer to CRWBKS, but the channel report word (CRW) bit in the MCVBK is off.

User response

Examine the internal trace table and storage dump to determine if the MCICCRW bit in MCVMCIC1 of the MCVBK is set incorrectly, or if the MCVCRWS pointer is incorrect.

MCV003

Explanation

(soft) An ill-formed e-ASIT was detected. The address space for the failing storage address cannot be identified.

User response

Examine the internal trace table and storage dump to see if undefined bits are set in HCPEASIT.

MCW001

Explanation

Control was passed to HCPMCWRS (as notification that a processor had been reset), and R1 should have contained the address of the prefix page of the reset processor, but the address in R1 was not a valid prefix page.

User response

Examine the dump and determine how the incorrect address got into R1.

MCW002

Explanation

Either the master processor or an alternate processor was unresponsive. In the case where the master processor was unresponsive, no recovery could be attempted and system operation was terminated. In the case of an unresponsive alternate processor, a reset was done but the processor was doing system work when it was reset, and therefore recovery was not possible. This abend can occur if running first level, or if running second level and unresponsive processor detection is enabled.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MDT001

Explanation

(soft) HCPMDTFR was attempting either to reload the IORBK with the original interrupt response address by calling HCPMHLRO, or to obtain the original interrupt response address value by calling HCPMHLFO. In both cases, CP extracts the original interrupt response address from the MIORGIRA field of the MIHDR. The IORMIPTR field of the IORBK points to the MIHDR that contains the interrupt response address.

User response

Make sure R10 is pointing to a valid IORBK. If R10 contains the address of an IORBK, verify that IORMIPTR points to a MIHDR. If IORMIPTR does not point to a MIHDR, examine the save area or CP trace table entries to determine why no MIHDR exists. If IORMIPTR points to a MIHDR, examine the save area or CP trace table entries to determine why the MIORGIRA field of the MIHDR does not contain an interrupt response address. MIORGIRA was copied from IORIRA when the MIHDR was built. The interrupt response address may have been destroyed or never set when the original I/O request was initiated.

MDT002

Explanation

(soft) HCPMDTSS was processing a supersede system MITIME when it detected the number of device supersede requests has exceeded the limit (MIHUSERS > x'FFFF'). This condition occurs when a CP task wants to temporarily override the default or operator-specified (SET MITIME command) system MITIME to perform its task, but fails to restore the system MITIME when completed.

The device supersede active request counter (MIHUSERS in MIHBK) is set to 1. This will clean up the counter for the CP task in error and honor the current request that detected the error. A flag will be set to prevent future detected MDT002 abends from being issued until the next system IPL take place.

User response

Examine the internal trace table and storage dump to determine what CP task is calling HCPMDTSS without a corresponding call to HCPMDTRS (Restore System MITIME).

MDT003

Explanation

The RDEV scan initiated by HCPMDTXM is expected to return the address of the next RDEV, but it is returning the same RDEV or previous RDEV with respect to the input RDEV. This abend prevents the multiple missing interrupt recovery task from being stacked for a single device.

User response

Register 2 contains the input RDEV. Verify that it is a valid RDEV. Examine the dump and determine why the RDEV scan returned an incorrect RDEV in R1.

MEO001

Explanation

(soft) HCPMEO received an unexpected return code from the channel subsystem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MEP001

Explanation

(soft) HCPMEP received an unexpected return code from the channel subsystem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MEP002

Explanation

(soft) An internal processing error occurred while registering a fabric owner for a network device. As a result, it may not be possible to establish a network connection on the system until the problem is resolved. Register 1 contains the location ID of logic that detected the problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MFC002

Explanation

(soft) Issued by the HCPMFC module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MFH001

Explanation

CP was in the process of formatting a response to a user's console when it detected that the output buffer it was using to hold the response has overflowed. An overlay of host storage has occurred.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MFJ001

Explanation

(soft) A data transfer was requested to expanded storage on behalf of the Coupling Facility (CF) Service Machine. The z/VM CF Service Machine does not support expanded storage data transfers.

User response

Remove expanded storage from the CF Service Machine virtual configuration.

MFN001

Explanation

(soft) CP has detected an internal error while loading a file from the processor controller into host storage. In the dump, register 0 will contain a unique ID of the failing code and register 1 will contain the reason code for the failure.

A MFN001 ABEND is most likely to occur when logging on with (X)AUTOLOG or restarting a CF Service Machine with the RESTART MSGPROC commands. During the start up of a CF Service Machine, the Coupling Facility Control Code (Licensed Internal Code) is loaded from the processor controller into the CF Service Machine's virtual storage. The logic within CP that performs the load function encountered an unexpected condition and has terminated the load process.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MFN002

Explanation

ECB processing logic detected an internal error while handling a post and wait operation. Register 1 in the system dump contains an internal error code for the problem location.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MFP001

Explanation

(soft) Issued by the HCPMFP module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MFR001

Explanation

Unable to terminate an active file load from the processor controller. Host storage may be compromised.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MNI001

Explanation

(soft) An error has been detected by the *MONITOR CP system service in response to an IUCV function that *MONITOR initiated.

All Monitor-related activities are terminated and the IUCV path between any connected virtual machine, and the *MONITOR CP System Service has been severed.

User response

The monitor may be restarted by following normal startup procedures. To debug the problem: R1 points to the IPARML control block. and the IPRCODE field contains the return code from IUCV indicating the nature of the problem. For the meaning of this return code, see IUCV Functions in *z/VM: CP Programming Services*. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MNI002

Explanation

(soft) An unexpected return code was received from a call to either HCPNSMRN or HCPNSMSN.

All monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

The monitor may be restarted by following normal startup procedures. Examine the return code in R15 to determine the problem. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MNL001

Explanation

(soft) An unexpected return code was received from HCPPTZSC indicating that an input guest real address is an incorrect address.

All Monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

Determine why the input guest real address is incorrect. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MNN001

Explanation

(soft) An unexpected return code was received from HCPPTZSC indicating that an input guest real address is an incorrect address.

All Monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

Determine why the input guest real address is incorrect. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MNS001

Explanation

(soft) HCPMNSDD tried to get a defer lock, but HCPLCK reported that the lock was destroyed (Register 15 = 12).

User response

Determine how the lock was destroyed. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MNZ001

Explanation

(soft) An unexpected return code was received from HCPPTZSC indicating that an input guest real address is an incorrect address.

All Monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

Determine why the input guest real address is incorrect. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MOI001

Explanation

(soft) An error has been detected by the *MONITOR CP system service in response to an IUCV function that *MONITOR initiated.

All monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

The monitor may be restarted by following normal startup procedures. To debug the problem, R1 points to the IPARML control block and the IPRCODE field contains the return code from IUCV indicating the nature of the problem. For the meaning of this return code, see IUCV Functions in *z/VM: CP Programming Services*. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MOI003

Explanation

(soft) An unexpected return code was received from HCPPTZSC indicating an input address is an incorrect address.

All Monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

Determine why the input address is incorrect. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MOL001

Explanation

(soft) HCPMOLGL tried to get a defer lock, but HCPLCK reported that the lock was destroyed (Register 15 = 12).

User response

Determine how the lock was destroyed. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MON001

Explanation

(soft) An unexpected return code was received from HCPPTZSC indicating that an input guest real address is an incorrect address.

All monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

The monitor may be restarted by following normal startup procedures. Determine why the input guest real address is incorrect. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MOT001

Explanation

(soft) HCPMOTDM tried to get a defer lock, but HCPLCK reported that the lock was destroyed (Register 15 = 12).

User response

Determine how the lock was destroyed. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MOX001

Explanation

(soft) An unexpected return code was received from either HCPPTZSC indicating that an input guest real address is an incorrect address.

All monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

The monitor may be restarted by following normal startup procedures. Determine why the input guest real address is incorrect. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MOZ001

Explanation

(soft) An unexpected return code was received from HCPPTZSC indicating an input guest real address is an incorrect address.

All monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

The monitor may be restarted by following normal startup procedures. Determine why the input guest real address is incorrect. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPC001

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPC002

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPC003

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPC005

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPC006

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPC007

Explanation

(soft) This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPC008

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPC009

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPD001

Explanation

(soft) A defer type was encountered that was not valid while stacking MP defer work.

User response

Examine the dump. R13 points to the SAVBK. Determine why R0 in the SAVBK did not point to either the address of MPDCPLOC ("CP loss of control" queue) or the address of MPDLOC ("loss of control" queue). Use the CP trace table to determine which module caused the error. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPF001

Explanation

During the switch master routine (HCPMPFSW), CP could not locate the current master processor prefix page. The system cannot operate without a master, therefore the system must be terminated.

User response

Examine the dump to determine what happened to the master processor prefix page. Pay particular attention to any function that may have manipulated the prefix page cyclic list. Also, examine all the prefix pages to determine if the PFXTYPE field has been disturbed inadvertently (this would prevent the system from identifying which prefix page belonged to the master processor).

MPR001

Explanation

A processor was selected for recovery from a malfunction alert, but CP could not find the prefix page that owns the logical processing unit address (LCPUA) of the failing processor. The maintenance of the PFXMALFM or SYSMALFM field is in error.

User response

Study the dump to determine what happened to the prefix page of the processor that signalled malfunction alert. Module HCPMPS is responsible for maintaining the two fields; module HCPMPR is responsible for assuring that recovery is performed by only one processor in the configuration, even though the malfunction alert is broadcast to all processors.

MPR002

Explanation

The processor that broadcast a malfunction alert was the master processor, but this processor (the recovery processor) was unable to become the master for some reason (condition code 1 returned from a call to HCPMPFSW). This processor should be the only one that has the authority to recover for the failed master processor. If the recovery processor cannot take over for the failed master processor, this means there is no master processor. The system cannot operate without a master processor, so the system terminates.

User response

Study the dump to determine why the switch master function failed.

MPR003

Explanation

A malfunction alert or machine check occurred and entry point HCPMPRVP was found executing on a secondary processor. This situation should not be possible under the current implementation.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPR004

Explanation

A malfunction alert or machine check occurred and entry point HCPMPRVP was found not executing on a primary processor with thread ID 0 when multithreading was enabled. This situation should not be possible under the current implementation.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MPS001

Explanation

In attempting to VARY ON a processor, HCPMPSON has run out of logical processing unit addresses (LCPUAs) to assign to the new processor. The LCPUA is a 4-byte field with a distinct bit for each online processor in the configuration. There are 31 bits available to be assigned. Therefore, if there are no more LCPUAs to assign, the manipulation of the field is in error.

User response

The most likely function to mishandle the LCPUA field is the VARY OFFLINE/ONLINE PROCESSOR *xx* command. The map of all used LCPUAs is in the SYSLCPUA field of the system common area. There should be a prefix page for each LCPUA mapped in SYSLCPUA. HCPMPS is the module that assigns and deallocates LCPUAs when a processor is varied online or offline respectively.

MTC001

Explanation

(soft) This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MTC002

Explanation

(soft) This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MTC003

Explanation

This module is distributed as object code only'; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MTC004

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MTF001

Explanation

An attempt was made to increment RCCSMTSQ but it was found to be in an invalid state.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXA001

Explanation

(soft) An error has been detected by the *MONITOR CP system service in response to an IUCV function that *MONITOR initiated.

All monitor-related activities are terminated, and the IUCV path between the receiving virtual machine and the *MONITOR CP System Service has been severed.

User response

The monitor may be restarted by following normal startup procedures. To debug the problem, R1 points to the IPARML control block and the IPRCODE field contains the return code from IUCV indicating the nature of the problem. For the meaning of this return code, see IUCV Functions in *z/VM: CP Programming Services*. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXD001

Explanation

(soft) The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXK001

Explanation

(soft) An error has been detected by the *MONITOR CP system service in response to an IUCV function that *MONITOR initiated.

All Monitor-related activities are terminated, and the IUCV path between the receiving virtual machine and the *MONITOR CP System Service has been severed.

User response

The monitor may be restarted by following normal startup procedures. To debug the problem, R1 points to the IPARML control block and the IPRCODE field contains the return code from IUCV indicating the nature of the problem. For the meaning of this return code, see IUCV Functions in *z/VM: CP Programming Services*. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXN001

Explanation

(soft) An unexpected return code was received from HCPPTZSC indicating an input guest real address is an incorrect address.

All monitor-related activities are terminated, and the IUCV path between any connected virtual machine and the *MONITOR CP System Service has been severed.

User response

In some cases, an MXN001 may occur when the monitor configuration is improperly sized. If this is the case, increasing the monitor event/sample configuration size will resolve the problem. Otherwise, examine the dump and determine why the input guest real address is incorrect. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXP001

Explanation

(soft) An error occurred during DIAGNOSE code X'DC' START processing and the START request is rejected.

User response

R15 contains the return code received. Examine the return code and determine the problem. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXP002

Explanation

(soft) HCPMXPDC tried to get a defer lock, but HCPLCK reported that the lock was destroyed (R 15 = 12). The DIAGNOSE code X'DC' request is rejected.

User response

Determine how the lock was destroyed. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXS001

Explanation

(soft) An error occurred during DIAGNOSE code X'DC' STOP processing; however, the STOP request is completed

User response

R15 contains the return code received. Examine the return code and determine the problem. If you are unable to resolve the problem, see *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXS002

Explanation

(soft) HCPMXSSP tried to get a defer lock, but HCPLCK reported that the lock was destroyed (R 15 = 12).

User response

Determine how the lock was destroyed. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXW001

Explanation

(soft) The Channel-Path-Measurement Facility failed with internal error code 01. This error may be caused if the Global Data Performance setting is disabled for this partition.

User response

Ensure, via the HMC Security tab setting, that Global Data Performance setting is enabled. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXW002

Explanation

(soft) The Channel-Path-Measurement Facility failed with internal error code 02.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXW003

Explanation

(soft) The Channel-Path-Measurement Facility failed with internal error code 03.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXW004

Explanation

(soft) The Channel-Path-Measurement Facility encountered an error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

MXX001

Explanation

(soft) The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NDM001

Explanation

An internal processing error occurred while acquiring or releasing a buffer for a network I/O operation.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NET001

Explanation

(soft) An internal processing error occurred while processing a *NETWORK communication request. Register 1 will contain an internal error code for the actual reason.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NIC001

Explanation

(soft) An internal processing error occurred while managing a simulated network interface card (NIC) on this z/VM system. Register 1 contains an internal error code for the actual reason.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NID001

Explanation

(soft) An internal processing error occurred while managing a network operation on this z/VM system. Register 1 will contain an internal error code for the actual reason.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NLT001

Explanation

Issued by the HCPNLT module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the National Language Support function, where an error has occurred due to the

absence of a HCPMES TEXT file when the system was built.

You can circumvent this problem by rebuilding the system and insuring that HCPMES is in the load list, and that an HCPMES TEXT file is available to the loader.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NLT002

Explanation

Issued by the HCPNLT module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the National Language Support function, where an error has occurred because the first six characters in the HCPMES TEXT file loaded on the system are not "MSGREP".

You can circumvent this problem by rebuilding the system, using the HCPMES TEXT file that was included on your product tape.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NLT003

Explanation

Issued by the HCPNLT module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the National Language Support function. An error has occurred in this module because entry point HCPNLTFI detected an error while attempting to fill in LNGBK for the message repository.

User response:
hcpw023.dita

NOO001

Explanation

While module HCPNOO was doing no owned processing, it found a SXSTE or PGSTE in an improper state.

User response:
hcpw023.dita

NSC001

Explanation

(soft) HCPNSC specified an incorrect SNTBK queue.

User response

R2 contains the incorrect parameter. Determine why HCPNSC passed an incorrect parameter. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSC002

Explanation

(soft) HCPNSC called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in register 15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSD001

Explanation

(soft) HCPNSD called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in register 15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSE001

Explanation

(soft) HCPNSE called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in register 15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSG001

Explanation

(soft) HCPNSG called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in register 15, or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSI001

Explanation

(soft) HCPNSI called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in register 15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSJ001

Explanation

(soft) HCPNSJ encountered an error while trying to open or read an SDF file. R9 will contain the address of the SDF block that HCPNSJ was trying to open or read.

User response

Examine the failing address to determine the problem. If you are unable to resolve the problem, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSK001

Explanation

(soft) HCPNSK called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSM001

Explanation

(soft) Module HCPNSM was called to either set or clear one of the CP notification addresses in the SNTBK (SNTCPNTE or SNTCPNTL).

If a request to set the CP notification address was being processed by entry point HCPNSMSN, there was already a nonzero address in the field that did not match the address passed to the routine.

If a request to reset the CP notification address was being processed by entry point HCPNSMRN, an address (zero or nonzero) already in the field did not match the address passed to the routine.

User response

Register 13 points to the SAVBK. SAVER1 contains the address passed by the caller. SAVER2 contains the parameter that specifies which notification address was being set or reset. Register 7 points to the SNTBK. The conflicting address is located in the SNTBK field SNTCPNTE or SNTCPNTL.

If the conflicting address is that of a valid CP nucleus resident entry point, the probable cause is two CP functions attempting to use the same system data file. Otherwise (and more likely), the probable cause is a programming error in the calling routine, or a storage overlay in the SNTBK.

NSN001

Explanation

(soft) HCPNSN called another module and received an unexpected return code or condition code.

If the error resulted from the closing of a system data file for which a purge was pending, the file is purged and command processing continues. For all other error conditions, the command terminates.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSO001

Explanation

(soft) HCPNSO called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSP001

Explanation

(soft) HCPNSP called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSP002

Explanation

(soft) HCPNSPCV encountered an unexpected value for the number of increments an NSS spans. The calculation is done only when the guest is enabled for use of dynamic storage reconfiguration. The soft abend occurs when the calculation result shows that the NSS spans more than 1024 increments, which is more than can be represented in the bitmap indicating which memory increments are assigned.

After the soft abend processing completes, the caller receives a return code indicating that there are unassigned memory increments below the end of the NSS because the check for unassigned memory increments cannot be performed.

The user issuing the IPL command is notified with the following message:

```
HCPCLT235E - IPL with NSSDATA failed
because the NSS extends into unassigned
increments.
```

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSQ001

Explanation

(soft) HCPNSQ called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSR001

Explanation

(soft) HCPNSR called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSS001

Explanation

(soft) HCPNSS called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NST001

Explanation

(soft) HCPNST called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NSV001

Explanation

(soft) HCPNSV called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NTF001

Explanation

(soft) HCPNTF called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NTL001

Explanation

(soft) HCPNTL called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NTQ001

Explanation

(soft) HCPNTQ called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to

resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NTV001

Explanation

(soft) HCPNTV called another module and received an unexpected return code or condition code.

User response

Determine the error that caused the abend by examining the return code in R15 or the condition code of the last entry point called. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

NVM006

Explanation

This abend is generated when an unexpected PCIe adapter error occurs.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem. Then contact your IBM Support Center personnel.

NVM008

Explanation

This abend is generated when an unexpected error occurs during NVMe EDEVICE error recovery.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem. Then contact your IBM Support Center personnel.

NVM009

Explanation

(soft) This abend is generated when an NVMe controller fatal status condition is detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem. Then contact your IBM Support Center personnel.

PAE001

Explanation

An ASATE containing the auxiliary storage address that is to be used for a paging operation is incorrect because the PGSINVAL flag is set.

User response

Determine why PGSINVAL was on by examining the calling module. Also, examine the other entries in the ASA table to determine whether overlay of storage occurred.

PAE002

Explanation

The frame table entry passed contains incorrect data.

User response

Examine the frame table entry addressed by R1 to determine if an overlay of storage occurred. Attempt to locate an incorrect page table entry that also contains the address of the frame. Determine which function was manipulating the page last and attempt to determine why the frame table entry pointer to the page table entry has been zeroed.

PAE003

Explanation

When redriving a paging channel program, CP detected a different exposure block than previously associated with the channel program.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PAF001

Explanation

While chaining a frame table entry onto the user-owned frame list, CP determined that the existing chain was chained improperly.

User response

The user-owned frame list is a double-linked list. Look at the dump and follow the chain starting at VMDFR1ST (the forward pointer anchor) to see if the elements of the list are correctly chained together. The list should be chained so that the forward pointer of each element points to the next element and the backward pointer of each element points to the previous element. VMDFRLST (the backward pointer anchor) should point to the last element on the list.

PAF002

Explanation

HCPPAF encountered a PTRM page (representing a pageable PGMBK) which is marked in error (a disallowed state).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PAG001

Explanation

An ASATE containing the auxiliary storage address that is to be used for a paging operation is incorrect because the PGSINVAL flag is set.

User response

Determine why PGSINVAL was on by examining the calling module. Also, examine the other entries in the ASA table to determine if an overlay of storage occurred.

PAG002

Explanation

The frame table entry passed contains incorrect data.

User response

Examine the frame table entry addressed by R1 to determine if an overlay of storage occurred. Examine R14 to determine where and why the abend was invoked. If the frame backward pointer (bit 0) is off, examine the caller to determine why the target page is not marked in the frame table entry. Otherwise the frame table entry pointer to the page table entry is zero. Attempt to locate an incorrect page table entry that also contains the address of the frame. Determine which function was manipulating the page last and attempt to determine why the frame table entry pointer to the page table entry has been zeroed.

PAG003

Explanation

A page table entry (PTE), in a not valid state, prevented PTE serialization from being obtained.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PAG004

Explanation

HCPPAG encountered a problem while doing work for a live guest relocation. R14 contains the address in the module where the error was discovered.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PAG005

Explanation

A problem was encountered that requires system termination. The address in R14 shows where the problem was discovered.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PAH003

Explanation

The RSCH instruction returned condition code 3.

User response

Check the device to see why it is not operating.

PAH005

Explanation

The CP volume indicated in R5 for this CP I/O received an unexpected suspend interrupt. This may be a hardware error.

User response

Check the IORBK to determine why the suspend interrupt occurred. Check output from the dump to determine what caused the error.

PAH006

Explanation

The count of outstanding I/O requests for an Exposure Block (EXPCURQC) is continually going negative.

CP is either forgetting to increment EXPCURQC when scheduling I/O operations for a given device or it is decrementing EXPCURQC twice when an I/O operation completes.

User response

Examine the dump to determine the cause of the problem. Useful information should be found in the Exposure Block and CP Trace Table.

PAI002

Explanation

A paging command mode I/O error occurred, and an invalid TIC was found. This is likely a logic error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel. In addition to collecting the dump, the operator console log and information about the DASD configuration should be collected.

PAI003

Explanation

A paging command mode I/O error occurred, and the failing CCW was not found in the channel program. This is likely a logic error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel. In addition to collecting the dump, the operator console log and information about the DASD configuration should be collected.

PAI004

Explanation

A paging command mode I/O error occurred, and the input SVGBK or FRMTE was not found. This is likely a logic error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel. In addition to collecting the dump, the operator console log and information about the DASD configuration should be collected.

PAU001

Explanation

An ASATE containing the auxiliary storage address that is to be used for a paging operation is incorrect because the volume number contained within exceeds the count of CP-owned volumes.

User response

Attempt to determine which function last manipulated the ASATE and determine why the volume number in the ASATE has been destroyed. Also, examine the other entries in the ASA table to determine if an overlay of storage occurred.

PAU003

Explanation

The RSCH instruction returned condition code 3.

User response

Check the device to see why it is not operating.

PAU004

Explanation

The volume indicated for this paging or spooling operation does not have an exposure block associated with it.

User response

Check to see if the device is supported for paging or spooling. If it is, the pointer in the CPVOL block has either been altered to 0, or it was not filled in at system initialization or ATTACH time.

PAU005

Explanation

An internal error was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem. Then contact your IBM Support Center personnel.

PAV001

Explanation

Issued by the HCPPAV module. The HCPPAV module has detected an incorrect internal condition within the Parallel Access Volume subsystem. Register 14 at the time of the dump will indicate the location within HCPPAV where the problem was detected. There are nine possible causes:

- HCPPAVRL - During a call to RLFUNC, Register 15 contained an invalid operation code.
- HCPPAVVL - During a call to VLFUNC, Register 15 contained an invalid operation code.
- HCPPAVML - During a call to MLFUNC, Register 15 contained an invalid operation code.
- HCPPAVRK - During an attempt to obtain an RDEV Lock, the PAV Alias RDEV did not point to any RDEV.
- HCPPAVRK - During an attempt to obtain an RDEV Lock, the PAV Alias RDEV did point to an RDEV, but it was not a PAV Base RDEV.
- HCPPAVVK - During an attempt to obtain a VDEV Lock, the PAV Alias VDEV did not point to any VDEV.
- HCPPAVVK - During an attempt to obtain a VDEV Lock, the PAV Alias VDEV did point to a VDEV, but it was not a PAV Base VDEV.
- HCPPAVSW - During PAV real I/O post-processing, the IRA control block no longer points to a PAV Alias RDEV.
- HCPPAVSW - During PAV real I/O post-processing, the IRA control block points to a PAV Alias RDEV, but the PAV Alias RDEV no longer points to a PAV Base RDEV.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCC005

Explanation

At the onset of SET STORAGE processing, a previous SET STORAGE operation was found to be incomplete.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCC006

Explanation

While the system was attempting to remove system storage, a frame table entry was found to be in an invalid state.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCC007

Explanation

While the system was attempting to remove system storage, the contents of a frame table entry pointed to an invalid location.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCC008

Explanation

During system initialization, an invalid code was encountered for the type of IPL.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCH001

Explanation

(soft) CP received a machine check that indicates that a PCI function has entered an error state and the cause of the error state is due to internal CP processing.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCH002

Explanation

CP received an error while accessing guest storage and the proper internal error recovery address was not found.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCQ002

Explanation

(soft) This module is distributed as object code only; therefore, no source program materials are available.

This soft abend is generated when an error is encountered attaching a storage element, assigning a storage increment, adding storage, or removing storage.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCQ012

Explanation

(hard) This module is distributed as object code only; therefore, no source program materials are available. An invalid address-increment number was encountered.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCR001

Explanation

(soft) Issued by the HCPPCR module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the real processor controller request processing facility function, where an error has occurred due to an unsolicited interrupt, when status shows no indication of an active request. This may be a hardware error.

You cannot directly circumvent this problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCR002

Explanation

(soft) Issued by the HCPPCR module. This module is distributed as object code only; therefore, no source program materials are available.

This module supports the real processor controller request processing facility function, where an error has occurred due an address mismatch. The processor controller will be logically disconnected. The system will continue to run. This may be a hardware error.

You cannot directly circumvent this problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCS001

Explanation

(soft) CP has detected an internal error while loading a file from the processor controller into host storage. In the dump, register 0 will contain a unique ID of the failing code and register 1 will contain the reason code for the failure. A PCS001 abend is most likely to occur when logging on with (X)AUTOLOG or restarting a CF Service Machine with the RESTART MSGPROC commands from a second-level guest. During the start up of a CF Service Machine, the Coupling Facility Control Code (licensed internal code) is loaded from the processor controller into the CF Service Machine's virtual storage. The logic within CP that performs the load function encountered an unexpected condition and has terminated the load process.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCU003

Explanation

An error occurred when attempting to unassign a storage increment that was already unaddressable. It is possible for an unassigned storage increment to be addressable due to a load of a DCSS. However, it is not possible for an assigned storage increment to be unaddressable.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCU012

Explanation

This module is distributed as object code only; therefore, no source program materials are available.

This abend is generated when an error is encountered during a Dynamic Storage Reconfiguration operation.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCV001

Explanation

(soft) Issued by the HCPPCV module. This module is distributed as object code only; therefore, no source program materials are available.

There is an internal error where the user's virtual configuration mode setting is not valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PCV002

Explanation

(soft) Issued by the HCPPCV module. This module is distributed as object code only; therefore, no source program materials are available.

There is an internal error where system service returns an error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the

documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PES001

Explanation

(soft) The SET PRODUCT command is not supported. The SET PRODUCT command processor detected an error after successfully parsing the input command. The incoming transaction was NOT an ENABLE, DISABLE, or DELETE request. The command parser should detect a subcommand that was not valid and issue the appropriate error message.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PFC001

Explanation

Issued by the HCPPFC module (Perform FlashCopy). This module is distributed as object code only; therefore, no source program materials are available.

This module supports the FlashCopy operations of the DEFINE MDISK, FLASHCOPY, LINK, QUERY CU DASD SELC, and QUERY FLASHCOPY commands. An unexpected condition was encountered from an internal error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PFE001

Explanation

While processing a paging error an incorrect frame was passed to the frame error routine.

User response

The frame passed to the frame error routine has one of three problems:

- It did not contain a valid frame type of user, system virtual, or system virtual free storage.
- The frame forward pointer is not X'FFFFFFFF'.
- The frame table entry does not have a valid page table entry.

Examine the frame table entry content, using the frame table entry address, contained in R9. R2 contains the address of the branch instruction that detected the problem.

PFE003

Explanation

An I/O error occurred while writing a frame to a fixed DASD slot, but the frame was part of a pageable PGMBK.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PFR001

Explanation

A private User Frame Owned (UFO) list, the private virtual disk (VDISK) UFO list, or the shared UFO list is incorrectly linked.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PFR002

Explanation

This abend is issued if one of the following goes negative:

- The address space count of resident pages, ASCCTPRS or ASCCTPRG.
- The virtual configuration wide count of private resident pages, VMDCTPVR or VMTCTPVG.
- The system wide count of shared address space resident pages, VMDCTSHR or VMDCTSHG.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the

documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PFR003

Explanation

An error was detected in releasing the backing resources associated with a page about to become logically-zero.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PGC001

Explanation

(soft) The DASD cluster being released was not previously allocated, or the cluster address is incorrect.

User response

Identify the module attempting to release the cluster by determining the caller's return address and base register, which are stored in PFXBALRE and PFXBALRC in the PFXBALSV save area in PFXPG.

Locate the source (CALBK) of the address of the DASD being released, to verify that it has not been destroyed.

PGC002

Explanation

(soft) The DASD cluster being allocated was already allocated, the cluster address is incorrect, or the information passed to HCPPGTMS is incorrect.

User response

Locate the source (CALBK) of the address of the DASD being allocated to verify it has not been destroyed.

Find the EXTBK and MSABK associated with the ASA in R0, and ensure it corresponds to a spool slot on the volume with a CPVOL specified in R4. Also verify in the EXTBK and MSABK the number of slots in R1 starting at that ASA are spool slots. If not, HCPPGC probably passed incorrect information ot HCPPGTMS.

PGT003

Explanation

The DASD page slot being released was not previously allocated, or the slot address is incorrect.

User response

By means of the caller's return address and base register stored in SAVER14 and SAVER12 in the SAVBK located by R13, identify the module attempting to release the page. Locate the source (control block or ASATE) of the address of the DASD being released to verify that it has not been destroyed. If the DASD page is in a spool file, it is possible that the file has been incorrectly checkpointed and warm-started after a system shutdown or a system crash.

PGT004

Explanation

CP received request for a DASD slot when none was available. This abend is generated from HCPPGT when trying to allocate a new DASD slot, and from HCPSMOPG when it determines no more slots are available during its paging bandwidth estimation.

User response

The problem might be solved by adding more spooling and/or paging cylinders to system allocated space. Verify that CPVOL, VEXBK, EXTBK, and MSABK are valid. Also, check for a system loop condition involving DASD slot allocation requests.

PGT005

Explanation

Incorrect parameters were passed in the caller's R2.

User response

Refer to SAVER12 and SAVER14 for address of caller.

PGT009

Explanation

An incorrect spool auxiliary storage address (ASA) was discovered. Spool allocations should be restricted to cylinders/pages that can be represented with 32-bit ASAs (CCPV/PPPV), but a non-zero value was found in the high-order bits of the 48-bit ASA.

CCPV refers to a specific page on a CP-owned volume. The CCPV format is a fullword consisting of a halfword for the cylinder (CC), a byte for the page (P), and a byte for the volume (V). On FBA/SCSI devices, PPPV

represents three bytes for the page (PPP) and a byte for the volume (V).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PGU001

Explanation

Incorrect parameters were passed in the caller's R2.

User response

Examine the value in R2 and the caller's registers in the SAVER2, SAVER12, and SAVER14 fields of the SAVBK located by R13. Locate the caller by referring to SAVER12 and SAVER14. If you are unable to resolve the problem, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PGV006

Explanation

The DASD slot being allocated is already allocated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PID001

Explanation

(snap) HCPPIDDL was called to deallocate a POSIX process ID (PID) that is not currently allocated.

User response

R0 contains the PID to be deallocated. Examine the trace table or SAVBK to determine which entry point called HCPPIDDL to deallocate the PID. Examine the owning virtual configuration's PXIBK chain to verify that the PID passed to HCPPIDDL had been allocated to that virtual configuration. Examine the trace table to determine if another task had erroneously deallocated the PID or neglected to delete the PXIBK associated with the PID.

PID002

Explanation

(snap) HCPPID was processing an allocate or deallocate request and found that the PID First Table count of allocated PIDs (PFTCNT) was not valid.

User response

Examine the dump to determine what has caused the corrupted count.

PID003

Explanation

HCPPIDIN was called during system initialization to allocate storage for the PID First Table and was not able to get the request amount.

User response

The machine does not have enough storage to IPL VM. The PID First Table is 2 pages in size, and obtaining this amount of storage during initialization should not be a problem. If you are IPLing a second-level system, increase the size of the guest to alleviate this problem.

PLM001

Explanation

The local system initiated a synchronization request to a remote system or systems, but the synchronization lock did not contain the correct value.

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM004

Explanation

The local system attempted to confer or release the synchronization lock, but it did not contain the correct value.

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see

Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM005

Explanation

A heartbeat message was received from a remote system. Either the slot number of the remote system is not valid, or the slot number and remote system names that were sent in the message do not match the SSI cluster configuration.

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM006

Explanation

An error occurred while attempting to update the heartbeat timestamp of the local system in the Persistent Data Record (PDR).

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM007

Explanation

Unexpected deferred response(s) were received from a service call.

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM009

Explanation

The system failed to successfully join the SSI cluster after restoration of connectivity while in Suspended state.

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM010

Explanation

The system's name and slot number in HCPSYSCM do not match associated information in the SSI cluster configuration (HCPPMSBK).

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM011

Explanation

A return code that was not defined as part of a service call interface was received.

User response

R14 contains the address within the module where the problem is detected. Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM012

Explanation

An I/O error was received when updating the Persistent Data Record (PDR), or an unexpected return code was received hen attempting to update the PDR.

User response

R14 contains the address within the module where the problem is detected. Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM013

Explanation

(soft) HCPSOCK RECV failure - a non-zero return code was received on an HCPSOCK RECV.

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM014

Explanation

(soft) An incorrect synchronization request was received from a remote system.

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM015

Explanation

The SSI Manager called a service and it returned a defer response. For this type of a call, a defer response is not allowed.

User response

R5 points to the PSTBK which contains the name of the service that deferred. Input R0 to HCPPLMCL (SVGR0 at time of dump) points to a string containing the call type descriptor. Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM017

Explanation

An unexpected return code was received from a called routine.

User response

R15 contains the return code and R14 contains the address of the module in which the problem was detected. Gather information you need to assist IBM in diagnosing the problem. For more information, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then contact your IBM Support Center personnel.

PLM018

Explanation

The local system is a member of a single system image cluster and was marked Down in the Persistent Data Record (PDR) by a remote system while the local system was up and running.

The local system was marked Down by a remote system when:

- The operator on the remote system entered the CP SET SSI command with either the MEMBER DOWN or FORCE DOWN operands
- The operator on the remote system entered GO to the HCP1696A prompt during system IPL.

The abend occurs when the local system discovers it was marked Down in the PDR when actually the local system was not Down, but was in the `Joined`, `Joining`, `Suspended`, or `Isolated` state. (This abend does not occur when the local system was in `Leaving` state.)

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PLM019

Explanation

An SSI service supplied a feature bitmap that is too short or too long. R5 contains the address of the PSTBK that describes the service. R6 contains the address of the bitmap and R7 contains the bitmap's length. SSI feature bitmaps must be 8 - 16 bytes long. SSI services should use the HCPFEATS macro to define a usable bitmap.

User response

Gather information you need to assist IBM in diagnosing the problem. For more information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide*. Then, contact your IBM Support Center personnel.

PLP003

Explanation

HCPPLP is unable to obtain short term serialization on a page table entry (PTE) that is on the processed list.

User response

Examine the dump to find the PTE and the corresponding page table status entry (PGSTE) and determine the PTE's serialization state, which is indicated by the PGSPCL, PGSPCL2, PGSLTSER, and PGSERROR bits in the PGSTE. Attempt to determine where serialization was last obtained on the PTE.

PLP004

Explanation

HCPPLP is unable to remove the input frame from any Processed List in the system. HCPPLP attempts three loops through each processor's Processed List to remove the input frame. This condition can occur during periods of extreme page stealing, where it is possible that once serialization is released on the PTE after it is removed from a Processed List, it is made nonresident and then resident again. This would put the PTE back on a Processed List before HCPPLP has examined the PGSPROCL bit after having removed it from a Processed List.

User response

Examine the dump to find what list the PTE is on and when it was put there. If the page has recently been made nonresident and resident again, and is on a Processed List, then the condition explained above is the cause. Otherwise, attempt to determine which list the frame is on and when it was placed there.

PLP005

Explanation

HCPPLP is unable to move a frame from a Processed List onto a UFO list because the frame state is incorrect.

User response

Examine FRMCSWRD in the frame table entry to determine the state of the frame. Only FRMUSER, FRMLAVL, and FRMAVAIL should be on.

PLP006

Explanation

This abend is issued if one of the following goes negative:

- The address space count of resident pages, ASCCTPRS or ASCCTPRG.
- The virtual configuration wide count of private resident pages, VMDCTPVR or VMTCTPVG.
- The system wide count of shared address space resident pages, VMDCTSHR or VMDCTSHG.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PMR001

Explanation

An I/O error occurred while trying to migrate a Pageable Page Management Block (PGMBK) to DASD. An I/O error on a Pageable PGMBK would normally be handled by the lower-level routines, so it should not be possible for a failure to be reported to entry point HCPPMREX. This abend is generated to collect problem determination data.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

POD001

Explanation

During relocation memory move on the source system, a negative value was detected for the count of page table entries waiting for asynchronous processing to complete.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem, then contact your IBM Support Center personnel.

PPD001

Explanation

(hard) CP has detected an internal error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PPI001

Explanation

Incorrect parameters were passed to an entry point.

User response

Examine the call chain and input parameters to determine who passed the parameters and why.

PPI002

Explanation

Incorrect input was passed to entry point HCPPPIRI or HCPPPWI.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PPI004

Explanation

A non-zero paging I/O return code was passed to HCPPPIWI.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PPI005

Explanation

A PGMBK that is formed incorrectly or is in the wrong state cannot be paged in or out.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PPR001

Explanation

An attempt was made to decrement a count of resident pages for a VMDBK or ASCBK, but the count was already negative or would go negative.

User response

Inspect the process of increasing and decreasing the count of resident pages. Examine the dump and determine the VMDBK or ASCBK for which this count is being decreased. A negative count indicates an incorrect user-owned frame list. This count increases when a frame is added to the list and decreases when a frame is taken from the list. Inspect the validity of the user-owned frame list.

PPR002

Explanation

HCPPLP is unable to page in a paged-out PGMBK to perform release processing on the frames within it.

User response

Determine why the call from HCPPPR to HCPHTR via the HCPTRANS macro failed. Ensure that the input conditions for the call are valid.

PRG001

Explanation

An operation exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG002

Explanation

A privileged operation exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG003

Explanation

An execute exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG004

Explanation

A protection exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG005

Explanation

An addressing exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG006

Explanation

A specification exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG007

Explanation

A data exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG008

Explanation

A fixed-point overflow exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG009

Explanation

A fixed-point divide exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG010

Explanation

A decimal overflow exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG011

Explanation

A decimal divide exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG012

Explanation

An exponent overflow exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG013

Explanation

An exponent underflow exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG014

Explanation

A significance exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG015

Explanation

A floating-point divide exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG018

Explanation

A translation specification exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG019

Explanation

A special operation exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG021

Explanation

An operand exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG023

Explanation

An ASN-translation specification exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG028

Explanation

A space-switch event occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG029

Explanation

A hexadecimal-floating-point square-root exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG030

Explanation

An unnormalized operand exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG031

Explanation

A PC-translation specification exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG032

Explanation

An AFX-translation exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG033

Explanation

An ASX-translation exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG034

Explanation

A LX-translation exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG035

Explanation

An EX-translation exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG036

Explanation

A primary-authority exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG037

Explanation

A secondary-authority exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG040

Explanation

An ALET-specification exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG041

Explanation

An ALEN-translation exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception.

If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG042

Explanation

An ALE-sequence exception occurred while CP was in control.

User response

Study the dump to determine why the particular program exception occurred. The program old PSW points to where the program exception occurred. If an unidentified program interrupt code occurs, you may have to contact your IBM Support Center personnel.

PRG043

Explanation

An ASTE-validity exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG044

Explanation

An ASTE-sequence exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG045

Explanation

An extended-authority exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG046

Explanation

A LSTE-sequence exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG047

Explanation

An ASTE-instance-number exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG048

Explanation

A stack-full exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program

interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG049

Explanation

A stack-empty exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG050

Explanation

A stack-specification exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG051

Explanation

A stack-type exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG052

Explanation

A stack-operation exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG054

Explanation

An addressing-capability exception occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG128

Explanation

A PER (program event recording) event occurred while CP was in control.

User response

Examine the dump to determine why the particular program exception occurred. The program old PSW points to the exception. If an unidentified program interrupt code occurs, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG253

Explanation

A program check occurred in CP code after running a guest, but before CP was able to save the guest state (including general registers).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG254

Explanation

A page, segment or region fault, ASCE-type exception, or ASTE-sequence exception was recognized while running CP code, but PFXHSTAT indicates the control registers and access registers contain values suitable for running the guest.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PRG255

Explanation

Abend PRG255 occurs during the trace page switch routine, if the processing unit address in the new trace table page does not match the address of the processing unit currently running.

User response

Study the dump to determine what happened to the chain of trace table pages belonging to this processing unit.

PSS001

Explanation

During a relocation an unexpected error occurred when acquiring PTE serialization in HCPPSSPR or HCPPSSAS on the destination system.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PSS002

Explanation

During a relocation the HCPPSSCC service routine was invoked to suspend the current task to await an event, only to find a task was already suspended for the same event.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTA001

Explanation

The available list replenishment function was attempting to take a frame from a user-owned frame list, but the frames on the list were chained improperly.

User response

Inspect the process of chaining and unchaining frames from the user-owned frame list. Examine the dump and determine which VMDBK or SNTBK owns this user-owned frame list. VMDFR1ST should point to the first frame on the list, and VMDFRLST should point to the last frame on the list. The frame being unchained at the time of the ABEND may not have been chained properly when it was put on the user-owned frame list. R14 points to the address in HCPPTA where CP detected the abend.

PTA002

Explanation

An attempt was made to reclaim a real storage frame currently containing a pageable page, but the required serialization (the owning virtual configuration's base VMDBK VMDPTIL Page Table Invalidation Lock) is not held shared or exclusive.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing

the problem; then contact your IBM Support Center personnel.

PTA003

Explanation

This abend is issued if one of the following goes negative:

- The address space count of resident pages, ASCCTPRS or ASCCTPRG.
- The virtual configuration wide count of private resident pages, VMDCTPVR or VMTCTPVG.
- The system wide count of shared address space resident pages, VMDCTSHR or VMDCTSHG.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTC001

Explanation

An error was detected while trying to add a frame to the User Frame Owned List.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTC013

Explanation

Decrementing the count portion of VMDPTSOC would cause the count to be negative.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTE002

Explanation

CP cannot return the frame specified by R2 to the list of available frames, due to one of the following conditions:

- The frame is locked.
- The frame is already chained on the available list.
- The frame is chained on a user-owned frame list.

User response

Examine the dump to determine why the abend was issued. Once you determine the reason, trace back through system execution to determine which module caused the error. Then examine the code to see what caused the error to occur.

PTE003

Explanation

Contiguous returned frames have PTEs still associated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTE006

Explanation

CP cannot return the frame specified by R2 to the available list because, in its FRMTE, the FRMPTE was pointing to a PAGTE that is still valid and still pointed to this frame.

User response

Examine the dump to determine which module attempted to return the frame. Examine the code to determine why validation of the PAGTE did not take place.

PTE008

Explanation

The frame usage codes specified in R2 are not in a valid combination. CP cannot determine the required usage.

User response

Examine the dump to determine which module was requesting a frame. Examine the code in that module to determine why there was no specification of a valid code.

PTE010

Explanation

While adding a frame to the available list or taking a frame from the available list, CP determined that the frames on the list were chained improperly. Or, the count of available frames became negative.

User response

Inspect the process of chaining and unchaining frames on the available list. Examine the dump for previous manipulations of the available list to see when and where the error occurred. Then determine the reason for the error by examining the code for the module that caused the error.

PTE011

Explanation

While taking a pair of frames from the front of the contiguous frames available list, CP determined that the frames were noncontiguous.

User response

Inspect the process of chaining and unchaining frames on the available list. Examine the dump for previous manipulations of the available list to see when and where the error occurred. Then determine the reason for the error by examining the code for the module that caused the error.

PTF006

Explanation

CP cannot return the frame specified by R2 to the available list because, in its FRMTE, the FRMPTE was pointing to a PAGTE that is still valid and still pointed to this frame.

User response

Examine the dump to determine which module attempted to return the frame. Examine the code to determine why validation of the PAGTE did not take place.

PTG001

Explanation

(soft) During processing of a list with a count that should have been accurate, it was discovered that the list terminated prematurely. The list in question is either the cleared local available list, the uncleared local available list, or the cleared global available list.

User response

There is no action to correct this abend. Collect the dump and contact your IBM Support Center personnel.

PTG002

Explanation

(hard) The required input to an HCPPTG entry point is invalid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTM001

Explanation

The attempt to un-last translate the page failed. The page cannot be moved.

User response

Examine the dump to determine which processors still have the page last translated. Check the trace table to determine if the un-last translate task was stacked on the target processor. If it was stacked, check to see why it failed to un-last translate the page. If it was not stacked, determine why it was not stacked.

PTM002

Explanation

An attempt to move a page from above 2 GB to below 2 GB failed for one of the following reasons:

- The no-owned bit in the SXSTE is on (SXSNOOWN).
- The no-owned bit in the FRMTE is on (FRMNOOWN).
- A state bit in the FRMTE has been turned on while this task holds serialization.

User response

Determine which of the above conditions caused the abend. Inspect the code and the trace table to see which module or entry point set the appropriate no-owned bit or state bit without holding the proper serialization.

PTM003

Explanation

The PGSPINCT count has gone negative.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTM004

Explanation

While decreasing the counts of resident pages above 2 GB for the address space and the owner, one of the counts (either ASCCTPRQ or VMDCTPVG) went negative.

User response

Examine the dump to determine which count is about to go negative. Check for improper operations on that count or alteration of the ASCBK or VMDBK.

PTY001

Explanation

The invoker did not hold the specified serialization. R14 contains the address of the instructions where the error was detected. R15 contains the current serialization bits. For the HCPPGSER MACRO, the invoker did not hold the serialization as stated by the HAVE parameter. For the HCPTPGSR MACRO, the invoker did not hold any of the possible PTE serialization states specified by the WHICH parameter.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTY002

Explanation

PTE serialization transition requires a valid PTE (PAGGINVA should be off but is on). R14 contains the address of the instructions where the error was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTY003

Explanation

PTE serialization transition requires an incorrect PTE (PAGGINVA should be on but is off). R14 contains the address of the instructions where the error was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTY004

Explanation

An unserialized state change to PGSTE has been detected. R14 contains the address of the instructions where the error was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTY005

Explanation

Long-term serialization is held on a page that is in error. R14 contains the address of the instructions where the error was detected. R15 contains the current serialization bits.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTY006

Explanation

Long-term serialization is not allowed when PGSPROCL is on. R14 contains the address of the instructions where the error was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTY007

Explanation

The TRACKING value conflicts with the stated HAVE value. R14 contains the address of the instructions where the error was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTY010

Explanation

A bump share of VMDPTIL was requested but a dispatch share is not held. This abend is issued by the HCPLKPTL macro. Refer to the HCPLKPTL prolog for details.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTY011

Explanation

A request was made to release a bump share of VMDPTIL but a bump share is not held. This abend is issued by the HCPULPTL macro. Refer to the HCPULPTL prolog for details.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTY012

Explanation

Incrementing the count portion of VMDPTXMC would cause the count to exceed the maximum allowable value, or decrementing the count portion of VMDPTXMC would cause the count to be negative.

This abend is issued by the HCPLKPTL macro.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PTZ001

Explanation

(soft) HCPPTZMS is called to issue a message or a soft abend, but the number passed to it is not 410.

User response

Examine the caller. The only message number that entry points HCPPTRAN, HCPPTRAB and HCPPTRHA pass to their callers in register 15 is 410. This is the only message number that should subsequently be passed to the HCPPTZMS entry point.

PTZ002

Explanation

(soft) HCPPTZMS is called to issue a message to a guest, but the system VMDBK is passed. A message cannot be issued to the system.

User response

Examine the caller. The system VMDBK should not have been passed to this routine.

PTZ003

Explanation

The PGMBK address obtained at the beginning of the long path in HCPPTZ does not match the PGMBK obtained from the SXSTE.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PXC001

Explanation

(snap) On return from HCPPIDDL, the PID count (VMDPIDCT) is about to become negative.

User response

Examine the PID count for the base VMDBK pointed to by R11. Look at the chain of PXIBKs that is anchored in the base VMDBK pointed to by R11. Look in the trace table at the most recent call to and return from HCPPIDDL and any other PXIBK and PID manager activity for this virtual configuration.

PXC002

Explanation

(snap) There is a PXIBK structure error. Possible problems include the following: there are no PXIBKs when there should be, the last PXIBK is not the creation PXIBK, or the PXIBK being searched for is not on the chain when it should be.

User response

Examine R9 to determine where the error has been detected. Determine which reason the ABEND is being issued for, and why. Review the trace table to determine what led up to the failure.

PXC003

Explanation

(snap) On return from HCPPIDDL, the PID count (VMDPIDCT) is not zero (and it should be).

User response

Examine the PID count for the base VMDBK pointed to by R11. The count is not 0 when it must be. Look in the trace table at the most recent call to and return from HCPPIDDL and any other PXIBK and PID manager activity for this virtual configuration.

PXC004

Explanation

(snap) The PSGPXICT field of a PSGBK was about to become negative.

User response

Examine the PXIBK chain (anchored in the VMDPXIBK field of the base VMDBK) to determine how many PXIBKs' PXIPSGBK field point to the PSGBK. Examine the trace table to determine if other PXIBKs that pointed to this PSGBK have recently been released. Possible explanations include: PSGPXICT was not incremented when an additional PXIBK was created or changed to point to the PSGBK, or the wrong PSGBK's PSGPXICT field was decremented when a PXIBK was deleted or changed to no longer point to the PSGBK.

PXI003

Explanation

(soft) The buffer address (contained within register 8) is zero and cannot be released. The address should be that of a QPXBK or SPXBK. DIAGNOSE code X'29C' or X'2A0' completes with an error.

User response

Examine the code to determine why register 8 changed from a valid address to zero.

PXJ001

Explanation

(soft) An unexpected error or return code was encountered while processing a request to change the effective or saved-set IDs for the POSIX `exec` function. Register 15 contains the unexpected return code from the call to HCPPXCAC.

The CP portion of POSIX `exec` function processing completes with an error. The POSIX **exec** function return code is returned to the invoker.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering a soft

abend dump and additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

PXQ001

Explanation

(snap) An attempt to search the POSIX group database (CP directory or ESM repository) for a target GID or GNAME, returned an inconsistent count. The number of group members that are listed in the DGRPM chain was greater than the group member count returned by module HCPPXDQG in register 0.

The inconsistent count indicates an error in the POSIX group database. DIAGNOSE code X'2A0' completes with an error.

User response

Determine why HCPPXDQG reported a different value than the number of group members contained within the DGRPM chain.

When the SNAP dump was taken, register 7 contained the length of the DGRPM chain and register 0 contained the needed length (that is, eight times the group member count returned by HCPPXDQG).

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering a snap dump and additional documentation you need to assist your POSIX group database provider in diagnosing the problem.

If your POSIX group database is the CP directory, contact your IBM Support Center personnel. If your POSIX group database is an ESM repository, contact the ESM provider's Support Center personnel.

PXQ002

Explanation

(snap) An attempt to search the POSIX group database (CP directory or ESM repository) for a target GID or GNAME, returned an inconsistent count. The number of group members that are listed in the DGRPM chain was less than the group member count returned by module HCPPXDQG in register 0.

The inconsistent count indicates an error in the POSIX group database. DIAGNOSE code X'2A0' completes with an error.

User response

Determine why HCPPXDQG reported a different value than the number of group members contained within the DGRPM chain.

When the SNAP dump was taken, register 0 contained the difference between the needed length (that is, eight times the group member count returned by HCPPXDQG) and the length of the DGRPM chain.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering a snap dump and additional documentation you need to assist your POSIX group database provider in diagnosing the problem.

If your POSIX group database is the CP directory, contact your IBM Support Center personnel. If your POSIX group database is an ESM repository, contact the ESM provider's Support Center personnel.

PXQ003

Explanation

(soft) The buffer address (contained within register 8) is zero and cannot be released. The address should be that of a QPXBK or SPXBK. DIAGNOSE code X'29C' or X'2A0' completes with an error.

User response

Examine the code to determine why register 8 changed from a valid address to zero.

PZE001

Explanation

The virtual machine was not in instruction simulation wait when HCPPZE was called to locate the prefix page address of the virtual machine.

User response

Examine the internal trace table and storage dump to determine why VMDSIMWT in the VMDBK is not set before the call to HCPPZE.

QDA001

Explanation

(soft) An RDEV value is not found in R8, and a CPVOL value is not found in R4 when formatting a response to the Class B command QUERY DASD DRAINING.

User response

Examine the dump and determine why both registers representing RDEV and CPVOL hold zero values.

QDL001

Explanation

(soft) HCPQDLDG determined an error exit that was not valid, which was setup by the HCPSAC macro, was taken during a virtual disk in storage data move operation. The error exit was driven by one of the following:

- A protection exception in guest storage
- A virtual disk in storage space address that was not valid
- An expired virtual disk in storage space I-ASIT.

These errors are believed to be impossible due to move instruction usage, virtual disk in storage block address checking, and I/O serialization.

User response

R15 contains the return code that HCPQDLDG will present to its caller. The dump snap data contains the TSKBK control block that describes in detail the error that occurred. Examine the CP trace table, the TSKBK, module entry point HCPQDLDG, and its callers to determine the cause of the failure.

QPR001

Explanation

(soft) The PFXTYPE field does not contain a valid type code. This abend occurred during the execution of the QUERY PROCESSORS command. The PFXTYPE field indicates what the real processing unit is being used for in the system.

User response

Examine the dump and determine why there is incorrect information in the PFXTYPE field.

QPR002

Explanation

(soft) The PFXCPUTY field does not contain a valid CPU type code. This abend occurred during the execution of the QUERY PROCESSORS command.

User response

Examine the dump and determine what value PFXCPUTY contained for the failing processor. With this information, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

QPR003

Explanation

(soft) The processor configuration mode indicated by SYSCMODE was found to not be valid when executing the QUERY PROCESSORS command.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

QUE001

Explanation

(soft) Occurs when HCPQUEEP finds a queue that is currently in End Processing state that has already ended processing.

User response

End Processing completes for the queue and ISFC processing continues.

RCP001

Explanation

An attempt was made to turn off the interlock bit in RCPBYTE but the interlock bit is not set.

User response

Examine the SVC old PSW in the prefix page of the abending processor to determine the invoker of the HCPRCPOF macro.

RDM001

Explanation

HCPRDMDW has received a condition code from its call to HCPARDCA that is not valid in these circumstances. A new architecture description (ARD) has been calculated by HCPRDMDW. The calculated architecture description should not have lost any features over the previous one; that is, the new variant ARD should have at least all the facilities of the old variant ARD it is replacing. HCPARDCA is called to verify this and returns CC=1 if the verification failed.

User response

Registers 0 and 1 point to the two architecture description blocks (ARDBKs) that were compared. R0 points to the new ARD, and R1 points to the old ARD.

Examine those ARDBKs to determine if the compare routine is in error or if the code in HCPRDMRW that calculated the new ARDBK is the problem. If all facilities identified as installed in the old ARD exist in the new ARD, then there is a problem in the comparison routine HCPARDCA. Otherwise the problem is likely in HCPRDMDW.

RDM002

Explanation

HCPRDMDW has called HCPRDMFS to find a singleton domain (RDMBK) based on an input member mask. Either the mask is incorrect or the existing relocation domain structures are not correct.

User response

The input mask is in register 0. Look at this mask and use it to determine if the mask is incorrect or the RDMBK structures are incorrect. The relocation domain structure (RDMBKs) are anchored in the VAABK which is located at label HCPARDVA.

RDM003

Explanation

HCPRDMFS is searching the VAASRDP (singleton domain) chain for a domain whose member mask equals the input member mask. During this search an RDMBK was found whose member mask is all zeroes.

User response

At the time of the abend, register 1 points to the RDMBK. Verify that this is actually an RDMBK. If it is, determine which relocation domain it represents and therefore which member's bit should be on in the mask. There are several possible problems. Either the VAASRDP chain has been corrupted, the member mask was calculated incorrectly or overlaid, or the code in HCPRDMFS has an error. The VAABK is located at label HCPARDVA.

RDM004

Explanation

HCPRDMFS is searching the VAASRDP (singleton domain) chain for a domain whose member mask equals the input member mask. During this search an RDMBK was found on the singleton domain chain which has more than one bit on in its member mask. This should never happen for a singleton domain RDMBK.

User response

At the time of the abend, register 1 points to the RDMBK. Verify that this is actually an RDMBK. If it is, determine which relocation domain it represents and therefore which member's bit should be on in the mask. There are several possible problems. Either the VAASRDP chain has been corrupted, the member mask was calculated incorrectly or overlaid, or the code in HCPRDMFS has an error. The VAABK is located at label HCPARDVA.

RDM005

Explanation

This abend occurs in the routine that is called when the other members of the SSI cluster are asked to process a particular member's Persistent Data record (PDR) ARDBK because that member has been upgraded. The problem is that the singleton domain block (RDMBK) for the requesting member cannot be found on the singleton chain (VAASRDP). The MTPBK pointed to by register 8 contains the SSI slot number of the requesting member. This slot number is converted to a member mask and the VAASRDP chain is searched for an RDMBK with a matching member mask (RDMMMASK). If one is not found, the abend is taken.

User response

Verify the SSI slot number in the MTPBK pointed to by register 8 is valid. If this is valid, check the chain of RDMBKs anchored in VAASRDP for correctness. The VAABK is located at label HCPARDVA.

RDM006

Explanation

This abend occurs in the routine that is called when the other members of the SSI cluster are asked to process a particular member's Persistent Data Record (PDR) ARD because that member has been upgraded. The problem is that the PDR could not be read even after numerous attempts.

User response

Check the operator's console log for I/O errors on the PDR disk. Determine if the SSI's PDR has been set up correctly and that the SYSTEM CONFIG file points to it properly.

RDM007

Explanation

This abend occurs in HCPRDMSP. HCPRDMSP is called to reprocess this member's Persistent Data Record (PDR) ARD (architecture description) when the member is rejoining and the SSI cluster is coming out of SAFE mode. The could not be read even after numerous attempts.

User response

Check the operator's console log for I/O errors on the PDR disk. Determine if the SSI's PDR has been set up correctly and that the SYSTEM CONFIG file points to it properly.

RDM008

Explanation

This abend occurs in HCPRDMLU which is called to reprocess this member's Persistent Data Record (PDR) ARD (architecture description) when the member's architecture is upgraded due to a Concurrent Driver Upgrade (CDU). The problem is that the new PDR ARD could not be written even after numerous attempts.

User response

Check the operator's console log for I/O errors on the PDR disk. Determine if the SSI's PDR has been set up correctly and that the SYSTEM CONFIG file points to it properly.

RDM009

Explanation

HCPRDMLU was called to process a configuration change for this member of the SSI cluster. It was determined that the change must be propagated to the other members of the cluster. HCPRDMLU called the socket routine to create a buffer to be used for the propagation request. The socket routine could not satisfy the request.

User response

Examine register 0 at the time of the dump. This register contains the size of the message for which the request is being made. It is likely that this value is in error. If this register contains the correct length, determine why HCPKCDCB could not satisfy the request.

RDM010

Explanation

HCPRDMFU could not find a relocation domain on the VAASRDP chain that matches the input member system name. This means there is not a singleton domain for an SSI cluster member in the Persistent Data Record (PDR).

User response

Determine why the PDR definition of the SSI cluster does not match this member's view of the cluster. Ensure the member name returned to HCPRDMFU in register 2 matches one on the SSI statement in the SYSTEM CONFIG file. Check the VAASRDP chain of RDMBKs to verify that the chain has not been corrupted.

RDM011

Explanation

HCPRDMDR was called to process a DEFINE RELODOMAIN command. It was determined that the change must be propagated to the other members of the cluster. HCPRDMDR called the socket routine to create a buffer to be used for the propagation request. The socket routine could not satisfy the request.

User response

Examine register 0 at the time of the dump. This register contains the size of the message for which the request is being made. It is likely that this value is in error. If this register contains the correct length, determine why HCPKCDCB could not satisfy the request.

RDM012

Explanation

HCPRDMLU was called to process a configuration change for this member of the SSI cluster. After the VAAXLK global lock was acquired, it was determined that no changes needed to be propagated to the other members of the SSI cluster. HCPRDMLU must request that the other members which hold the lock on its behalf, now release it. HCPRDMLU called the socket routine to create a buffer to be used for the release request. The socket routine could not satisfy the request.

User response

Examine register 0 at the time of the dump. This register contains the size of the message for which the request is being made. It is likely that this value is in error. If this register contains the correct

length, determine why HCPKCDCB could not satisfy the request.

RDM013

Explanation

HCPRDMJN was called to process a join request for this member of the SSI cluster. A message must be sent to the other joined members requesting that they process the joining member's Persistent Data Record (PDR) ARD as it may have changed. HCPRDMJN called the socket routine to create a buffer to be used for the propagation request. The socket routine could not satisfy the request.

User response

Examine register 0 at the time of the dump. This register contains the size of the message for which the request is being made. It is likely that this value is in error. If this register contains the correct length, determine why HCPKCDCB could not satisfy the request.

RDM014

Explanation

A configuration change event caused by a Concurrent Driver Upgrade has resulted in a call to HCPRDMLU to process any architecture changes and reflect them in the SSI cluster's relocation domain structures. The VAAXLK lock is required for these changes, but calls to HCPXLKAX and HCPXLKAL resulted in return codes indicating the lock could not be acquired either globally or locally. This should never happen as the VAAXLK lock is never destroyed and any requests should be deferred on the lock.

User response

The lock is located in the system's VAABK which is located at label HCPARDVA. Examine the lock to determine its state. Also, examine the trace table in the dump to determine what return codes were given to HCPRDMLU by HCPXLKAX and HCPXLKAL.

RDM015

Explanation

(hard, soft) HCPRDMQC was called to check and update the member's VAA state; that is, the sequence number used to serialize changes to the relocation domain topology on all the members of an SSI cluster. The abend occurs when the message sequence number (MTPSEQ) is not compatible with this member's new sequence number (VAASEQN). The abend is either a hard or a soft abend depending on the register 0 parameter passed in by the caller of HCPRDMQC.

User response

Determine how the members of the SSI cluster got out of step with each other with respect to their relocation domain structures.

RDM016

Explanation

At join time HCPRDMPQ was called to process the queue of pending relocation domains; that is, those defined in the SYSTEM CONFIG file. If there is a mismatch between those defined by this member and those defined in the already joined members, a synchronization request must be sent to the other members. HCPRDMPQ called the socket routine to create a buffer to be used for the synchronization request. The socket routine could not satisfy the request.

User response

Examine register 0 at the time of the dump. This register contains the size of the message for which the request is being made. It is likely that this value is in error. If this register contains the correct length, determine why HCPKCDCB could not satisfy the request.

RDM017

Explanation

An attempt was made to obtain the RDMLOCK for a relocation domain but the lock is already held by this process.

User response

Use the trace table in the dump to determine where the lock was previously obtained. Then examine the logic to determine why a second attempt is being made to acquire it. Register 1 contains the address of the RDMLOCK that is being requested.

RDM018

Explanation

An attempt was made to acquire the RDMLOCK for a particular relocation domain, but that lock has been destroyed.

User response

Determine from the trace table in the dump why the RDMLOCK was destroyed. This should never happen while a process such as the one running during the abend is accessing the RDMBK. Register 1 contains the address of the RDMLOCK that is being requested.

RDM019

Explanation

An attempt has been made to release an RDMLOCK for a relocation domain but the lock was not held.

User response

Register 1 contains the address of the RDMLOCK that is being released. Use the trace table and examine the logic to determine why the lock is being released twice or was never obtained when it should have been.

RDM020

Explanation

A request was made to replace an existing ARDBK on the RDMARDP by a call to HCPRDMRA. The address of the ARDBK to be replaced is passed into HCPRDMRA in register 1. However, that ARDBK is not on the chain of ARDBKs anchored by RDMARDP.

User response

Determine the caller of HCPRDMRA by examining the trace table or the current save area. Examine the code in the caller's routine to determine why it passed in the wrong address to the replace-ARD routine (HCPRDMRA).

RDM021

Explanation

A SET SSI SLOT command resulted in a call to HCPRDMND to create a new singleton relocation domain. The VAAXLK lock is required for this change, but a call to HCPXLKAX resulted in a return code indicating the lock could not be acquired globally. This should never happen as the VAAXLK lock is never destroyed and any requests should be deferred on the lock.

User response

The lock is located in the system's VAABK, which is located at label HCPARDVA. Examine the lock to determine its state. Also, examine the trace table in the dump to determine what return code was given to HCPRDMND HCPXLKAX.

RDM022

Explanation

HCPRDMND was called to process a new relocation domain, or HCPRDMUR was called to notify other members of the cluster to release the VAAXLK lock. It was determined that the change must be propagated to the other members of the cluster. HCPKCDCB was called by the socket routine to create a buffer to be used for the propagation request. The socket routine could not satisfy the request.

User response

Examine register 0 at the time of the dump. This register contains the size of the message for which the request is being made. It is likely that this value is in error. If this register contains the correct length, determine why HCPKCDCB could not satisfy the request.

RDM023

Explanation

HCPRDMNR was called by HCPRLARD through a remote request to create a new singleton relocation domain. This occurred as the result of a SET SSI SLOT command. This routine found that there is already an existing domain with the same name, which is in a state where it cannot be reused. This should not occur because the SET SSI processing did earlier checks to determine that such a state would not exist when HCPRDMNR is called.

User response

Examine R1, which points to the RDMBK of the domain that conflicts with the new member name. Determine what state this RDMBK is in and try to determine how it got into this state.

RDM024

Explanation

An SSI member slot that formerly had a named member is being made available. That is, the member is being removed from the SSI cluster configuration via the SET SSI SLOT command. During this process, the canonical ARD of any relocation domain that includes this member may be replaced with a new canonical ARD. The new canonical ARD should be equal to or upwardly compatible with the old one. This abend occurs if that is not the case.

User response

At the time of the abend, register 0 and register 1 contain the addresses of the new and old architecture description blocks (ARDBKs), respectively. Examine these two blocks to determine what facilities are causing the incompatibility of the new ARD.

REP001

Explanation

The error recovery procedure called HCPREP to either end a level of recursion or to obtain the address of the previous IORBK. The recursive IORBK pointer (IORPIOR) contained zeros, which produced the abend. IORPIOR should contain the address of the IORBK that is one less in the recursive structure.

User response

Examine the save area or trace table entries to determine the calling module. Check R10 to find out if it is pointing to a valid IORBK. If R10 does contain the address of the IORBK, and a valid IORBK does not exist at that address in storage, storage was probably overlaid. If R10 is not pointing to a valid IORBK, R10 was probably not set by the requestor.

RER005

Explanation

A VDEV for a virtual card reader does not point to a valid VSPBK. All simulated virtual card readers should always have a VSPBK associated with them.

User response

Examine the VDEV pointed to by R6, and the trace table, to see why the VDEV does not point to a VSPBK. One possibility is that the device is being detached; if so, the trace table will include an entry returning the storage occupied by the VSPBK to free storage.

RES001

Explanation

(soft) A virtual reset was done for a particular active I/O. However, when the reset was initiated the I/O request was not found to be active for the virtual device.

User response

R10 contains the address of the IORBK that represents the I/O for which the reset has been requested. In addition, the VDEV is pointed to by R6, the RDEV by R8, and the VMDBK by R11.

RES002

Explanation

Virtual device reset processing is unable to delete or halt a QDIO subchannel. Prior to deleting the QDIO queues, reset processing should have terminated all active I/O on the subchannel. Terminating an Activate-QDIO-Queue channel program should make a QDIO subchannel inactive.

If reset processing has detected that the QDIO subchannel is still active, the system cannot be allowed to continue. As long as the QDIO queue is active, the channel subsystem has free rein of all storage assigned previously by an Establish-QDIO-Queues channel program.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RFC002

Explanation

(soft) The system entered module HCPRFCET, and there was no DIOBK for the given RDEV. One possible cause is that there are more outstanding CRW tasks than accounted for in DIOCOUNT. If an outstanding task calls HCPRFCET and if DIOCOUNT decrements to zero, then the DIOBK is fretted. This assumes there are no more CPEBKs (CRW tasks) on DIOQUEUE.

Entering HCPRFCET without a DIOBK implies the counter was previously zero, and therefore, one or more outstanding tasks is unaccounted for; possibly the one that made this call to HCPRFCET.

User response

None.

RLA001

Explanation

(soft) The new LGR-connected Socket went down for an unexpected reason. The system received an error on the first receive of this new *LGR socket, it takes a soft abend, and then closes the problem socket.

User response

See the HCPSOCK RECV return code in R15 for an explanation of what happened. Only 0 (ok) and 12 (source closed socket) are expected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLA002

Explanation

(soft) The system receives a socket message it does not understand, takes a soft abend, cleans up storage for the socket message in error, and cancels the relocation. There are three possibilities for a request that is not valid:

- Router = RDP. The Relocation Data Package router never opens a *LGR socket so it is not valid.
- Router is not valid. The router in the message is not a valid *LGR subsystem or router value.
- Request Type is not valid for the Router Type. The Router Type and Request Type in the message is not a valid combination for a socket request.

User response

See the RLHSUBSY and RLHREQT fields to learn what the incorrect request was. Then determine why it occurred. For additional help, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLA003

Explanation

(soft) HCPRLARD is a non-ending receive loop on the relocation domain synchronization (*RELODOM) socket which should never close. This abend occurs when an unexpected return code (either 12 or 16) is returned from the HCPSOCK RECV invocation. The system takes a soft abend, attempts the appropriate recovery actions, and starts another receive on the socket.

User response

At the time of the dump register 5 contains the socket ID of the failing socket. Register 15 contains the return code received. Determine why the socket received this unexpected return code. For additional help, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLA004

Explanation

(soft) HCPRLARD is a non-ending receive loop on the relocation domain synchronization (*RELODOM) socket which should never close. This abend occurs when an unexpected return code (such as 4, 8, 20, 24, 28, or 32) is returned from the HCPSOCK RECV invocation. The system takes a soft abend and attempts another receive on the socket.

User response

At the time of the dump register 5 contains the socket ID of the failing socket. Register 15 contains the return code received. Determine why the socket received this unexpected return code. For additional help, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLA005

Explanation

HCPRLARD was called to process a request for this member of the SSI cluster. After the processing is complete, a reply message must be sent to the requestor. HCPRLARD called the socket routine to create a buffer to be used for the propagation request. The socket routine could not satisfy the request.

User response

Examine register 0 at the time of the dump. This register contains the size of the message for which the request is being made. It is likely that this value is in error. If this register contains the correct length, determine why HCPKCDCB could not satisfy the request. For additional help, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLB001

Explanation

When setting up a relocating guest's address space on the destination system, one of the following counters became negative:

- The address space count of resident pages, ASCCTPRS or ASCCTPRG
- The virtual configuration wide count of private resident pages, VMDCTPVR or VMDCTPVG
- The frames-in-use count in a PGMBK, PGMGFRMC

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLB002

Explanation

During a relocation a failure occurred on the destination system when releasing a single page or a range of pages belonging to the relocating guest.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLB003

Explanation

During a relocation one of the following failures occurred on the destination system when constructing the guest's address space:

- FRMTE serialization could not be obtained for a frame containing guest contents.
- A translation error occurred for a page that had previously been translated.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLB005

Explanation

(soft) When constructing an address space for a relocating guest on the destination system, CP access to a guest page was detected. Either:

- An SXS alias exists for the page B
- The page was pinned

The relocation is terminated.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLB006

Explanation

(soft) When constructing an address space for a relocating guest on the destination system, CP detected a page in error (PGSERROR was set in the PGSTE) that cannot be corrected because new page content was not sent from the source system. The relocation has been terminated.

User response

Retry the relocation.

RLL001

Explanation

(soft) During relocation memory move eligibility checking, the number of error messages accrued on the destination system exceeds the size of one ISFC message.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLM001

Explanation

During relocation memory move on the source system, an incorrect number of entries was requested for a Guest Storage Relocation Buffer Block (GSBBK). A

GSBBK is used when constructing the ISFC message to be sent to the destination system.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLM002

Explanation

During relocation memory move on the source system, the requested size of a Guest Storage Relocation Buffer Block (GSBBK) resulted in an error when allocating the ISFC Message Block (MBHBK).

User response

R14 contains the address within the module where the problem is detected. See Debugging CP CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLM003

Explanation

During relocation memory move on the source system, the ISFC connection to the destination system was closed before all outstanding memory move messages were recovered.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLM004

Explanation

During relocation memory move on the source system, a recovered ISFC message had an incorrect format (zero buffer fragments). This prevented the recover message task from locating the system resources that needed to be released.

User response

R1 points to the recovered ISFC message (MBHBK). R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLM005

Explanation

During relocation memory move on the source system, the recover message task received an undefined return code when cleaning up an ISFC message.

User response

R1 points to the recovered ISFC message (MBHBK). R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLM006

Explanation

During relocation memory move on the source system, an empty Virtual Page Array (VPABK) was detected, or the count of page table entries waiting for asynchronous processing to complete has become negative.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLR001

Explanation

(soft) The Memory Move Control Socket Router for a live guest relocation detected an unrecognized message type. The relocation is terminated with message HCP1935E and reason code 16.

User response

This is an unexpected condition. Retrying the relocation will likely result in the same failure. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLS001

Explanation

During relocation memory move on the source system, incorrect input parameters were passed to HCPRLSCM. This most likely indicates a problem in the caller of HCPRLSCM.

User response

R15 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLS002

Explanation

During relocation memory move on the source system, a processing error occurred in HCPRLSCM. In taking the error exit path in HCPRLSCM, no return code is found indicating what the error is.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel. The virtual machine that was being relocated may now simply be logged on to the system to which it was relocating.

RLT002

Explanation

(soft) During the last pass of a relocation memory move on the source system, a page was found locked in host real storage by CP or a page could not be un-last translated. The relocation has been terminated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLT003

Explanation

During relocation memory move on the source system, one of the following conditions was detected:

- The Guest Storage Relocation Buffer Block (GSBBK) was already full at the start of the PGMBK walk or when building a Virtual Page Array entry (VPALE)
- The count of page table entries waiting for asynchronous processing to complete has become negative
- Processing page-in-error prior to last pass
- PGSERROR flag not set during page-in-error processing

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLT005

Explanation

During relocation memory move processing on the source system, one of the following counters became negative:

- The address space count of resident pages, ASCCTPRS or ASCCTPRG
- The virtual configuration wide count of private resident pages, VMDCTPVR or VMDCTPVG

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLT006

Explanation

During relocation memory move processing on the source system, an error occurred releasing DASD resources (a non-zero return code was received from HCPHPCCR).

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RLT007

Explanation

During relocation memory move processing on the source system, a SXSTE was locked when attempting to remove the alias.

User response

R14 contains the address within the module where the problem is detected. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RMP001

Explanation

(hard) HCPRMP was called to release ownership of a lock, but failed for one of the following reasons:

- The lock was not held.
- The lock was not held by the calling VMDBK.
- An attempt was made to perform a shared release of a lock that is held exclusively.
- An attempt was made to perform an exclusive release of a lock that is held shared.
- The contents of a lock were overlaid.

User response

Examine the dump and the trace table to determine what went wrong. R4 points to the lock (a LKWRD, described by HCPLKWRD COPY). Examine the savearea to determine the calling module. Check that the caller invoked the appropriate HCPRMP entry point according to the holding of the lock (shared or exclusive). If an exclusive release is being performed, check the LKWSTATE field of the lock. It should contain the address of the owning VMDBK, ORed with x'80000001'. This VMDBK address should be the same as the dispatched VMDBK (R11) that is attempting to perform the exclusive release. If these addresses don't match, one possibility is that the control was switched from one VMDBK to another (usually by calling HCPDSBSW), and that ownership of the lock should have been transferred beforehand (by calling HCPDSBPX), but wasn't. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RMP003

Explanation

(hard) A lock (or LKWRD, described by HCPLKWRD COPY) was found to be in an incorrect state. The first fullword of the LKWRD contains an incorrect code.

User response

Examine the dump to determine how the incorrect value came to be stored in the LKWRD. R4 points to the LKWRD. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RMP004

Explanation

(hard) The count of requests enqueued and waiting to obtain a lock (or LKWRD, described by HCPLKWRD COPY) became negative.

User response

Examine the dump and the trace table to determine why the count became negative. R4 points to the LKWRD, and LKWDQLEN is the count field within the LKWRD. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RMP005

Explanation

(hard) The critical process count, VMDCTCRT in the base VMDBK, became negative. Usually this count represents the number of locks held by the virtual machine. (The degree of criticality is usually equal to the number of locks held.) Some possible causes of this abend follow:

- The code that was to decrement VMDCTCRT was somehow allowed to run before the code that was to do the corresponding increment. For example, if the following sequence is possible:
  1. Lock ownership is switched to another VMDBK.
  2. The other VMDBK is immediately enabled to begin running on another processor with the lock.
  3. VMDCTCRT is incremented in the VMDBK that just was granted the lock. It is potentially possible for the second processor to run the code that releases the lock and decrements VMDCTCRT before the first processor increments VMDCTCRT.

  VMDCTCRT must always be incremented before it is possible for another processor to start processing the code that will do the corresponding decrement.
- VMDCTCRT was incremented on one VMDBK, then a VMDBK switch occurred before the corresponding decrement took place. This could often happen on task threads that switch between a user VMDBK and the system VMDBK, or switch between VMDBKs in a single virtual MP complex.
- A task thread did not properly serialize its increment or decrement of VMDCTCRT, such as by using the compare-and-swap instruction.
- When attempting to increment VMDCTCRT on other than the running VMDBK, the wrong VMDBK was chosen.

User response

Examine the CP trace table and storage dump to determine why the base VMDBK changed from zero to a negative value in the VMDCTCRT field. R11 points to the dispatched VMDBK. The field VMDBASE in the dispatched VMDBK points to the VMDBK containing VMDCTCRT. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RMP006

Explanation

(hard) The count of requests enqueued and waiting to obtain a lock (or LKWRD, described by HCPLKWRD COPY) would have exceeded the maximum.

User response

Examine the dump and the trace table to determine why the count would have exceeded the maximum. R4 points to the LKWRD and LKWDQLEN is the count field within the LKWRD. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RMP017

Explanation

(hard) The deferred execution counter, VMDDFRWK in the VMDBK, was about to become negative.

User response

Examine the CP trace table and storage dump to see why the VMDBK in R11 has a zero value for the VMDDFRWK field. See the description of DFR017 for possible reasons why this might have occurred.

RPI004

Explanation

A logon relocate request was made to HCPRPI with the relocate inbound flag still set.

User response

See Debugging CP and CP Abend Checklist CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RPI005

Explanation

An authorization request was made to HCPRPI while the security context was still in a pending state.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing

the problem; then contact your IBM Support Center personnel.

RRM001

Explanation

(soft) HCPGDSIM requested that CP obtain the real reserve, when CP already holds the real reserve or has a pending reserve request.

User response

Determine why HCPGDSIM is not aware that CP has already obtained or is in the process of obtaining the real reserve. Verify that the virtual I/O configuration is correct. It is possible that multiple minidisk blocks exist.

RRM002

Explanation

(soft) HCPGDSIM requested that CP release the real reserve to a device when CP does not hold that reserve and is not in the process of obtaining that reserve.

User response

Determine why HCPGDSIM is not aware that CP is not holding or in the process of obtaining the real reserve.

RRM003

Explanation

(soft) HCPGDSIM requested that CP release the real reserve; however, HCPGDSIM believes the reserve is held by a VDEV other than the one that actually holds it.

User response

Determine why HCPGDSIM is not requesting that CP release the reserve with the proper VDEV address.

RSD001

Explanation

(soft) An unexpected logic error occurred during processing of the SET RESERVED command. For example:

- Unexpected parsing results.
- A Set Reserved Data Block (RSDBK) could not be found.

Command processing is terminated, and the system remains operational.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RSD002

Explanation

(soft) A buffer overflow occurred when generating the response to a SET or QUERY RESERVED command. Data will be truncated in the command response.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RTV001

Explanation

(soft) The pointer at RTVGSDBK-4(R6), which should point to a GSDBK, was not valid.

User response

Determine how the pointer at RTVGSDBK-4(R6) was destroyed.

RUN002

Explanation

The host CP running status is unknown after an interrupt.

User response

Examine the internal trace table and storage dump to determine what routine sets PFXHSTAT with an unknown value.

RUN003

Explanation

(soft) An incorrect or unsupported interception code was found in the start interpretive execution state descriptor.

User response

Examine the internal trace table and storage dump to determine why the interception event code (VMDICODE) is set with an incorrect code.

RUN004

Explanation

The time-of-day (TOD) clock is not working, damaged, or not set, and the timer initialization has been completed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

RUN005

Explanation

The state of the Guest PSW does not match VMDTIMER flags. The guest's timers are being track, but the PSW does not indicate a 'wait state'.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SAD001

Explanation

The system operator invoked the stand-alone dump program. The stand-alone dump program created a dump in hard abend dump format.

User response

Use the DUMPLD2 utility to load the dump to CMS file space and the VM Dump Tool to inspect the dump. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SAD002

Explanation

The system operator invoked the stand-alone dump program. The stand-alone dump program encountered a problem and was not able to create a dump in hard abend dump format. A dump in large storage format has been created.

User response

Use the DUMPLD2 utility to load the dump to CMS file space and the VM Dump Tool to inspect the dump. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SAM001

Explanation

A frame of SAVBKs was not found on the SAVE frame queue. SAVBK management integrity has been lost. All SAVBKs should be in SAVE frames on the SAVE frame queue.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SAM002

Explanation

The save area page queue contains a page address that is not on a page boundary. The save area page queue is corrupted.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SAS001

Explanation

(soft) Issued by the HCPSAS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SAS002

Explanation

Issued by the HCPSAS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SAS003

Explanation

Issued by the HCPSAS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SCH001

Explanation

(soft) HCPSCHEP attempted to compute the elapsed timeslice and eligible list priority while working on a virtual-MP adjunct VMDBK.

User response

Examine the logic in HCPSCHEP that preceded the abend to determine if it was faulty logic in HCPSCHEP, or faulty data in the VMDBK, that led to the abend.

SCH002

Explanation

In the process of maintaining the counts of users in the eligible list, one of them went negative, or there was an overflow of the halfword count fields.

User response

Check R14 to determine whether the SRMCELIG or SRMCELDG fields in the SRMBK went negative or had an overflow. Examine the CP trace table and storage dump for the possible cause of the problem. Control register 12 points to the next available CP trace table entry after the failure. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SCI001

Explanation

CP detected an incorrect share in the VMDBK control block.

User response

R11 points to the VMDBK that contains the incorrect share. Examine this VMDBK share fields (VMDRELSH, VMDCPUSH, VMDABSSH) and determine how to make the share valid. Examine the dump and trace table entries to determine the cause of the incorrect share.

SCI002

Explanation

The SRMBK contains several halfword counts of users in a particular state, by class (such as E0, E1, E2 ...). One of these counts became negative, or there was an overflow of the halfword count fields.

User response

Examine the SRMBK (located through SYSSCH in HCPSYSCM) to see which of the following fields was negative or had an overflow. Examine the dump and trace table entries to determine what caused the count to become negative.

SRMBK Fields:

SRMCDISP
VMDBKs in the dispatch list (Q0, Q1, Q2, Q3)

SRMC1DSP
VMDBKs in Q1, Q2, and Q3

SRMC2DSP
VMDBKS in Q2 and Q3

SRMC3DSP
VMDBKS in Q3

SRMCDLDG
loading VMDBKs in the dispatch list

SRMC1DLD
loading VMDBKs in Q1, Q2, and Q3

SRMC2DLD
loading VMDBKs in Q2 and Q3

SRMC3DLD
loading VMDBKs in Q3

SRMCELIG
VMDBKs in the eligible list (E0, E1, E2, E3)

SRMC1ELG
VMDBKs in E1, E2, E3

SRMC2ELG
VMDBKs in E2 and E3

SRMC3ELG
VMDBKs in E3

SRMCELDG
loading VMDBKs in the eligible list

SRMC1ELD
loading VMDBKs in E1, E2, and E3

SRMC2ELD
loading VMDBKs in E2 and E3

SRMC3ELD
loading VMDBKs in E3

SCI003

Explanation

The static save area in HCPSSA called SCI was marked in use (SVHOPEN=ON) when it was requested by HCPSCI. This save area is designated specifically for use by HCPSCI, and therefore it should never be in use when it is requested by HCPSCI.

User response

At the time of the abend, R9 should point to the static save area returned by the HCPSSAGB macro. Using the dump, try to determine whether the save area was used somewhere else, or perhaps whether it was overlaid.

SCJ001

Explanation

(soft) The count of processing units that are in "Tracked-Wait" mode (SRMTRKCT) went negative.

User response

Examine the logic that maintains the count to determine the cause of the failure.

R0 Contains the negative count.

SCK001

Explanation

One of the SRMBK dispatch list share totals became negative (either SRMRELSH or SRMABSSH).

User response

Examine the SRMBK dispatch list share totals (SRMRELSH or SRMABSSH) to determine which field is negative. Examine the dump and trace table entries to determine what caused the share total to become negative.

SCK003

Explanation

The SRMBK contains several halfword counts of users in a particular state, by class (for example: E0, E1, E2 ...). Either one of these counts became negative, or there was an overflow of a halfword count (greater than 65K).

User response

Examine the SRMBK (located through SYSSCH in HCPSYSSCM) to see which of the following fields became negative or had an overflow of a halfword count. Examine the dump and trace table entries to determine the cause of the problem.

SRMBK Fields

SRMCDISP
VMDBKs in the dispatch list (Q0, Q1, Q2, Q3)

SRMC1DSP
VMDBKs in Q1, Q2, and Q3

SRMC2DSP
VMDBKs in Q2 and Q3

SRMC3DSP
VMDBKs in Q3

SRMCDLDG
loading VMDBKs in the dispatch list

SRMC1DLD
loading VMDBKs in Q1, Q2, and Q3

SRMC2DLD
loading VMDBKs in Q2 and Q3

SRMC3DLD
loading VMDBKs in Q3

SRMCELIG
VMDBKs in the eligible list (E0, E1, E2, E3)

SRMC1ELG
VMDBKs in E1, E2, E3

SRMC2ELG
VMDBKs in E2 AND E3

SRMC3ELG
VMDBKs in E3

SRMCELDG
loading VMDBKs in the eligible list

SRMC1ELD
loading VMDBKs in E1, E2, and E3

SRMC2ELD
loading VMDBKs in E2 and E3

SRMC3ELD
loading VMDBKs in E3

SCK004

Explanation

(soft) One of the totals in the SRXRTHRU table went negative.

User response

Examine the logic that computed the negative total to determine the cause of the failure.

Code
Meaning

R1:
Contains an index pointing to the failing element of the table.

R14:
Points back to the failing code

R15:
Contains the negative total.

SCN001

Explanation

The critical process count, VMDCTCRT in the base VMDBK, became negative. Usually this count represents the number of locks held by the virtual machine. (The degree of criticality is usually equal to the number of locks held.)

Some, but not all, of the possible causes of this abend are:

- The code that was to decrement VMDCTCRT was somehow allowed to execute before the code that was to do the corresponding increment. For example, if the following sequence is possible:
  1. Lock ownership is switched to another VMDBK
  2. The other VMDBK is immediately enabled to begin running on another processor with the lock
  3. VMDCTCRT is incremented in the VMDBK that just was granted the lock.

  then it is potentially possible for the second processor to execute the code that releases the lock and decrements VMDCTCRT before the first processor increments VMDCTCRT. VMDCTCRT must always be incremented before it is possible for another processor to start processing the code that will do the corresponding decrement.
- VMDCTCRT was incremented on one VMDBK, then a VMDBK switch occurred before the corresponding decrement took place. This may often happen on task threads that switch between a user VMDBK and the system VMDBK, or switch between VMDBKs in a single virtual MP complex.
- A task thread did not properly serialize its increment or decrement of VMDCTCRT, such as by using the compare-and-swap instruction.
- When attempting to increment VMDCTCRT on other than the running VMDBK, the wrong VMDBK was chosen.

User response

Examine the CP trace table and storage dump to determine why the base VMDBK changed from zero to a negative value in the VMDCTCRT field. R11 points to the dispatched VMDBK. The VMDBASE field in the dispatched VMDBK points to the VMDBK containing VMDCTCRT. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SDQ001

Explanation

(soft) Issued by the HCPSDQ module. This module is distributed as object code only; therefore, no source program materials are available.

HCPSDQ was called to validate a guest's virtual processor configuration while processing the SET VCONFIG MODE command. There is an internal error in which the proposed virtual configuration mode value passed to HCPSDQ is not valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SDV001

Explanation

(soft) Unexpected results occurred in Summary Unit Check Recovery processing.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SDV002

Explanation

(soft) Unexpected results occurred in Summary Unit Check Recovery processing.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SFI001

Explanation

(soft) An error occurred during the presentation of a software-generated external interrupt. This indicates a programming error.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SFP002

Explanation

An irrecoverable I/O error occurred while CP was reading or writing a spool file id checkpoint page map (SFNDX).

User response

Examine the DASD to determine the cause of the error.

SFR001

Explanation

(soft) The spool file being processed is not on the queue indicated by the SPFQUEUE byte in the SPFBK.

User response

Determine the caller of HCPSFR and the reason for the call.

SFR002

Explanation

A irrecoverable I/O error occurred while CP was reading or writing a spool file ID checkpoint page map (SFNDX).

User response

Examine the DASD to determine the cause of the error.

SFR003

Explanation

(soft) The SPFBK of the spool file being deleted was not found on the delayed purge queue. After releasing all of the DASD pages for the spool file, the delayed purge queue must be searched for the SPFBK of the spool file being deleted. If the SPFBK is not found on the queue, this ABEND will occur.

User response

Examine the delayed purge queue to determine the cause of the problem.

SFR004

Explanation

The control program expected to find a File ID Table entry corresponding to a given user id. In this case, one was not found. This probably indicates an overlay condition or corrupted spool file information. An automatic restart is initiated by the system to rebuild the spool information held in storage.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SFR005

Explanation

A VDEV for a virtual card reader does not point to a valid VSPBK. All simulated virtual card readers should always have a VSPBK associated with them.

User response

Examine the VDEV pointed to by R6, and the trace table, to see why the VDEV doesn't point to a VSPBK. One possibility is that the device is being detached; if so, the trace table will include an entry returning the storage occupied by the VSPBK to free storage.

SFR006

Explanation

(soft) A call to HCPSFRRL has been made to release a reserved SPOOL file. Upon entry it was determined that either the reserve count (SPFRESVC) was already zero or the storage for the SPFBK had already been released.

User response

Examine the CP trace table to determine the caller of HCPSFRRL. Use this information to determine why this call is being made for a SPOOL file that is not reserved.

SFS001

Explanation

An irrecoverable I/O error occurred while CP was reading or writing a spool file ID checkpoint page map (SFNDX).

User response

Examine the DASD to determine the cause of the error.

SFV001

Explanation

The spool file being processed is not on the queue indicated by the SPFQUEUE byte in the SPFBK.

User response

Determine the caller of HCPSFV and the reason for the call.

SGP001

Explanation

The Switch Master function was not running on the master processor when it was called.

User response

Examine the CP trace table to determine the sequence of events that led to HCPSGPSM being called on a processor other than the master processor. PFXTYPE might have been incorrectly altered.

SGP003

Explanation

The master processor stacked an EMSBK for an alternate processor to take over for the master, but either the master is unable to determine whether the alternate has received the SIGP emergency signal to invoke the function, or the SIGP emergency signal failed.

User response

Examine the CP trace table for both the master processing unit and the SIGP target processing unit within the dump to determine if the SIGP emergency signal was issued successfully and if the target processing unit received the external interrupt successfully. If this is not the case, a hardware failure may be the cause. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SGP004

Explanation

A processor has been signaled to take over for the master processor during VARY OFF of the master processor. However, the signaled processor is not an alternate processor. This occurred during a VARY OFF command or during alternate processor recovery.

User response

Examine the CP trace table to determine the sequence of events that led to a processor of the wrong type

being signaled to take over the master processor. PFXTYPE may have been incorrectly altered.

SGP005

Explanation

The processor that has been signaled to take over for the master processor during VARY OFF of the master processor is unable to locate the prefix page of the master processor.

User response

One of the following is true:

- The prefix page cyclic list is broken
- The master processor's prefix page has been deallocated
- The PFXTYPE field of the master processor's prefix page has been incorrectly altered

Examine the CP trace table and storage dump to determine which is the cause and the sequence of events that led up to the error.

SGP006

Explanation

The processor that has been signaled to take over for the master processor during VARY OFF of the master processor located a prefix page with a PFXTYPE field of the master. However, the master processor processing unit address in the prefix page does not match the processing unit address of the signaller.

User response

Examine the CP trace table and storage dump to determine the sequence of events that led to the mismatch of the signaller and master processor processing unit addresses. R1 should contain the signaller address picked up from EMSCPUFR. PFXTYPE, PFXCPUAD, or EMSCPUFR may have been incorrectly altered.

SGP007

Explanation

The processor that has been signaled to take over for the master a processor during VARY OFF of the master processor was unable to change itself into a master processor.

User response

Examine the CP trace table and storage dump to determine why the switch was unsuccessful.

SGP008

Explanation

The selected processor that was passed to the Switch Master Processor function was not a primary thread 0 processor.

User response

Examine the CP trace table to determine the caller of HCPSGPSM. Examine the code to determine why a non-primary non-thread 0 processor was selected to be the new master processor.

SGP009

Explanation

A processor has found an EMSBK on its EMSBK chain that has a processing unit address in the EMSCPUTO field that does not match the address of the host processor.

User response

Examine the CP trace table and storage dump to determine why the EMSBK was placed on the incorrect chain.

SGP011

Explanation

Parameters passed in R2 to HCPSGPXF included one or more bits that are not valid.

User response

Using the trace table, determine the caller of the HCPSGPXF entry point, and why the input parameter was not valid.

SIT001

Explanation

Parameters were passed in R2 to an entry point in HCPSIT that does not accept parameters. The parameter register must be zeros to allow for possible future enhancements to the module.

User response

Using the trace table, determine the caller of the HCPSIT entry point, and why a nonzero parameter was passed.

SIT002

Explanation

Unexpected page or segment exception has occurred due to referencing an inappropriate address in storage. This abend is usually the result of a translation exception.

User response

Examine the dump and get the last three trace entries on the failing processor. From the third trace entry back, note the type of exception, location of the failing instruction, and the old PSW. Use GREG to find the contents of R10. Use BLOCK TSKBK on the R10 address to find the register contents at the time of the failure. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SNP001

Explanation

(snap) A SNAPDUMP command was entered that resulted in a dump.

User response

None.

SPM001

Explanation

(soft) The parameters passed in R2 to HCPSPMGP were not valid.

User response

Examine the trace table to determine the caller of HCPSPMGP and why the parameters passed were not valid. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SPM002

Explanation

(soft) The access list has conflicting permissions to access the address space. R5 points to the SPIBK.

User response

Determine if neither or both of the read-only and read-write permission bits are on in the SPIBK. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SPO002

Explanation

(soft) A TKTBK being released is locked when it should not be.

User response

R6 points to the TKTBK. The TKTLKTRA field in the TKTBK contains the address of the module that obtained the lock. Use this address to help determine where the lock should have been released and why it was not.

SPY001

Explanation

(soft) End-of-volume processing for a particular tape volume being dumped should be complete, but the TAPPRGCT counter that monitors end-of-volume processing is not zero.

User response

Check the end-of-volume processing code. End-of-volume processing for all files (represented by a TKTBK) occurs on a file-by-file basis with a loss of control between each file. When the processing is started, TAPPRGCT is incremented. When end-of-volume processing for all the files on that volume has completed, TAPPRGCT is decremented. A share of the TAPBK lock should be held during all of this end-of-volume processing. The code where the abend occurred obtains the TAPBK lock exclusive before checking TAPPRGCT. This field should be zero before the exclusive lock is obtained. If it is not, there may be a problem with the locking of the TAPBK in the end-of-volume processing code.

SPY002

Explanation

(soft) More XAB data exists for the file being dumped than will fit in the first segment (TKTSEGDU=0). The XAB data in the first segment should have been dumped in full page increments. Either this has not occurred, or there is a calculation error in the loop that is dumping the XAB data.

User response

R6 points to the TKTBK. Use the current values of the registers and the appropriate fields in the TKTBK to determine what is wrong with the loop in HCPSPY that dumps the XAB data.

SRN001

Explanation

The available processing unit count (SRMNCPUA) became negative.

User response

Examine the dump and trace table entries to determine what caused the count to become negative.

SRN002

Explanation

CP determined that the directory entry for a user ID contains an incorrect share.

User response

R2 points to the DVMD of the user ID whose directory entry is incorrect. Examine the directory space on DASD to determine how the entry became incorrect.

SRN003

Explanation

(soft) One of the totals in the SRXRTHRU table went negative.

User response

Examine the logic that computed the negative value to determine the cause of the failure.

Code
Meaning

R0:
Contains the negative value

R1:
Contains an index pointing to the failing element of the table

R15:
Points to the failing code.

SRN004

Explanation

(soft) The logical processing unit identifier mask that was passed to HCPSRNAD is not valid.

User response

Determine why the caller of HCPSRNAD passed a processing unit identifier that was not valid.

SRN005

Explanation

The logical processing unit identifier mask passed to HCPSRNDR is not valid.

User response

Determine why the caller of HCPSRNDR passed a processing unit identifier that was not valid.

SRN006

Explanation

(soft) One of the totals in the SRXTOTLS or SRXTOTDE table went negative.

User response

Examine the logic that computed the negative value to determine the cause of the failure.

Code
Meaning

R0:
Contains the negative value

R1:
Contains an index pointing to the failing element of the table

R15:
Points to the failing code.

STK003

Explanation

The interrupt address or the execution address of a TRQBK, IORBK, or CPEBK is zero. This probably indicates a missing or misspelled entry point name.

User response

Make sure that all required modules are included in the CP load list and are spelled correctly. Then reload the system.

STK011

Explanation

A TRQBK, IORBK or CPEBK was being stacked, but the pointer was zero.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STK014

Explanation

A call has been made to queue an IORBK or to queue a TRQBK that is already scheduled, is already active, or is already queued.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STK017

Explanation

There is an unrecognizable value for the VMDBK scheduler list identifier. The probable cause is that the VMDBK has logged off.

Before allowing the VMDBK to log off, the system waited for the count of deferred work (VMDDFRWK) to go to 0. Often an STK017 abend occurs because some task in the system deferred a work item (for example, saved a CPEBK on a private queue unknown to HCPSTK) and did not increment VMDDFRWK. Thus, when the work (CPEBK) was finally presented to HCPSTK for processing, the VMDBK may have already logged off.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

The unit of work (CPEBK) that HCPSTK is handling for this VMDBK may itself be examined to try to identify which task in the system created it and whether or not the CPEBK was privately queued without incrementing VMDDFRWK. If it was, there must be some other mechanism in place to ensure that the VMDBK will not be able to log off before this CPEBK is processed, or presented to HCPSTK for processing.

STK018

Explanation

Unidentified work bits were passed to HCPSTKWB.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STL002

Explanation

HCPSTLDL was called for a user that was not in the dispatch list. HCPSTLDL can be called only from HCPDSP.

User response

Examine the CP trace table and system dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STL003

Explanation

A sum of the relative shares of all the logged on users of each particular CPU type is maintained in each CPU type's SRXBK. Also maintained is a sum of the absolute shares of all the logged on users of each type. This abend occurs if one of these two values goes negative during calculation of a new sum.

User response

The totals for a particular CPU type are kept in a two-entry array of fullwords called SRXTOTLG. At the time of the abend, R6 points to the SRXBK with the sum that was about to go negative. R1 is an index into the array of fullwords in SRXTOTLG. Determine why this sum is going negative by investigating all the places where calculations are done to change this sum.

STL019

Explanation

There was an attempt to drop the system VMDBK from the dispatch list.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STL020

Explanation

The VMDCYCLH field was not a negative one when the hold state was checked for an exclusive hold on the cyclic-list.

User response

Examine the CP trace table and storage dump for the possible cause of the problem. R12 points to the next available CP trace table entry after the failure. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

STL022

Explanation

One of the following occurred:

- The VMDBK was already in a secondary list (such as the limit list) when it was added to the dispatch list.
- An attempt was made to remove the VMDBK from the dispatch list while the VMDBK was in a secondary list.
- An attempt was made to put the VMDBK in a secondary list when it is not in the dispatch list.

User response

R3:
Points to the specific place in the code that the error was detected

R8:
Points just past the call to the subroutine that discovered the error.

STL023

Explanation

A VMDBK was found to contain an unexpected (possibly defined) value in the state field (VMDSTATE).

User response

R3 points to the specific place in the code where the error was detected.

STM001

Explanation

A negative number of users was found on the dormant list.

User response

Examine the CP trace table and storage dump for possible causes. CR12 points to the next available CP trace table entry after the failure.

STM002

Explanation

CP detected an invalid state in the VMDBK control block where the VMDBK is being limited by a resource pool (VMDLIMGR=ON) but the pointer to the resource pool's LIMBK (VMDLIMBK) is 0.

User response

R11 points to the VMDBK and R2 contains the VMDLIMBK value (0) that caused the abend. Examine the VMDBK fields that deal with resource pooling and the LIMBKs on the system to find the inconsistent data (VMDLIMBK, VMDLIMGR, LIMCTLL fields). Examine the dump and trace table entries to determine the cause of the incorrect state.

STM004

Explanation

A user is being added to the dispatch list, but the user is already in another list.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STM005

Explanation

CP is attempting to drop a user from the dispatch list, but the user is not in the dispatch list.

User response

Examine the CP trace table and storage table for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STM006

Explanation

A user being added to the eligible list is already in another list.

User response

Examine the trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STM009

Explanation

A user being added to the dormant list is already in another list.

User response

Examine the trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STM010

Explanation

A user being dropped from the dormant list was not in the dormant list. This may be due to an attempt to stack a CPEBK, IORBK, or TRQBK on a nonexistent user's system.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STM012

Explanation

An attempt is being made to remove a user from the eligible list who is not on the eligible list.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STM016

Explanation

There is an unidentified VMDBK state field value.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STM019

Explanation

There was an attempt to drop the system VMDBK from the dispatch list.

User response

Examine the CP trace table and storage dump for a possible cause. CR12 points to the next available CP trace table entry after the failure.

STM022

Explanation

One of the following occurred:

- A VMDBK was already in a secondary list (such as the limit list) when it was added to the dispatch list.
- An attempt was made to remove a VMDBK from the dispatch list while the VMDBK was in a secondary list.
- An attempt was made to put the VMDBK in a secondary list when it is not in the dispatch list.

User response

R3:
Points to the specific place in the code that the error was detected

R8:
Points just past the call to the subroutine that discovered the error.

SVC002

Explanation

A restart interrupt occurred. For a first level system, a restart interrupt occurs when the primary system operator selects the restart function on the hardware console. For a second level system, a restart interrupt occurs when the "SYSTEM RESTART" command is entered on the first level console.

User response

The operator who initiated this abend is trying to gather data (a dump) in order to diagnose a severe system problem. Because the system is restarted after the abend, usually the original problem is fixed.

Examine the CP trace table and storage dump for a possible cause of the problem. CR12 is the pointer to the next available CP trace table entry.

An alternative way to generate a system dump is the CP SNAPDUMP command. SNAPDUMP will generate a dump but will not restart the system. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on the SNAPDUMP command.

SVC003

Explanation

A CP module is attempting to call a module at location zero. This probably indicates a missing or misspelled entry point name.

User response

R13 points to the save area. SAVER12 contains the address of the module making the bad call. SAVER14 contains the address of the module that received the bad call. Make sure that all required modules are included in the CP load list, then reload the system.

SVC004

Explanation

A CP module is attempting to use a savearea block to call a subroutine, but status within the savearea block does not indicate that the savearea block is currently available for calling linkage.

User response

R15 points to the savearea block. Examine the CP trace table and storage dump for possible causes. CR12 is the pointer to the next available CP trace table entry after the failure.

SVC009

Explanation

A dynamically called entry point used the input value of register 14 as a return linkage address, rather than a SAVERETN.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SVC010

Explanation

A recursive call has been made to subroutine MORE in module HCPSVC.

User response

Examine the CP trace table and storage dump for possible causes. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SVC011

Explanation

When a return from indirect call occurred, the count of outstanding calls went negative.

User response

Investigate the logic in HCPSVC and HCPSVF that maintains the count of outstanding calls. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SVC015

Explanation

During HCPCALL processing, a processor switch is required but the subroutine's "translation mode" attribute disallows it.

User response

R15 contains the address of the subroutine.

SVC016

Explanation

During HCPCALL call-by-register processing, the caller's linkage attributes and the subroutine's linkage attributes formed an illegal combination.

User response

R14 contains the address of the caller. R15 contains the address of the subroutine. Examine their attributes for legality.

SVC017

Explanation

During HCPCALL processing, the caller's PSW translation mode (bits 16-17) did not match the required value.

User response

R13 contains the address of the savearea block in use. Field SVHIACA contains the caller's actual PSW bits 16-17, and field SVHIACR contains the caller's required PSW bits 16-17. Field PFXLNKSG contains the address of the HCPCALL request. Determine how the caller's PSW bits 16-17 came to differ from their required value.

SVF006

Explanation

A supervisor SVC code was used that is not currently defined.

User response

Examine the CP trace table and storage dump for possible causes. CR12 points to the next available CP trace table entry after the failure.

SVG003

Explanation

A CP module is attempting to goto a module at location zero. This probably indicates a missing or misspelled entry point name.

User response

R14 contains the address of the caller. Ensure that all required modules are included in the CP load list, and then reload the system.

SVG016

Explanation

During HCPGOTO goto-by-register processing, the caller's linkage attributes and the subroutine's linkage attributes formed an illegal combination.

User response

R14 contains the address of the caller. R15 contains the address of the subroutine. Examine their attributes for legality.

SVR001

Explanation

During HCPEXIT processing a save area block is being returned improperly. The SVHCPRQ field is zero and the SVHSVA bit is zero.

User response

The SVHCPRQ field has probably been cleared to zero improperly. Register 13 points to the save area block. The save area block contains the caller's registers at the time of the HCPCALL. The saved value for register 12 contains the address of the calling module. The saved value for register 14 contains the address of the HCPCALL request. Determine how the SVHCPRQ field was cleared to zero.

SVU001

Explanation

A page in use for save area management is not a valid save area page.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SVU014

Explanation

A save area switch request to HCPSVUSD requires a processor switch.

User response

Register 12 contains the address of the requesting caller. Determine why the caller and its target subroutine lost control of the processor where they were running and were dispatched on a different processor.

SWA001

Explanation

(soft) An internal processing error occurred while changing the state of a virtual switch UPLINK port. The state of the UPLINK port is undetermined. Register 1 contains the location ID of logic that detected the problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SWF001

Explanation

(soft) An internal processing error occurred while managing a HiperSockets CHPID associated with a VSWITCH Bridge Port connection. Register 1 will contain an internal error code for the actual reason.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SWG001

Explanation

(soft) An internal processing error occurred while managing the configuration of a VSWITCH Bridge Port connection. Register 1 will contain an internal error code for the actual reason.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SWH001

Explanation

(soft) An internal processing error occurred while processing a data transfer on a VSWITCH Bridge Port connection. Register 1 will contain an internal error code for the actual reason.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SWI001

Explanation

HCPSWIAD was entered using a VMDBK that was not a base VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the VMDBK of the currently dispatched user.

SWI002

Explanation

HCPSWIAD was erroneously entered when the system VMDBK was the current VMDBK.

User response

R13 points to a save area. Identify the caller by the return address and base register in the save area pointed to by R13. The caller did not provide the VMDBK of the currently dispatched user.

SWK001

Explanation

(soft) The Link Aggregation Load Balance manager detected an unexpected condition. Register 1 will contain an internal error code for the actual reason.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SWL001

Explanation

(soft) An internal processing error occurred while controlling a Link Aggregated Group on this z/VM system. Register 1 will contain an internal error code for the actual reason. Refer to the PROLOG of local subroutine SWL001 to determine the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing

the problem; then contact your IBM Support Center personnel.

SWP001

Explanation

(soft) An internal processing error occurred while processing a port group function. Register 1 will contain an internal error code for the actual reason.

User response

Contact your IBM Support Center personnel.

SWR001

Explanation

(soft) An internal processing error occurred while disconnecting a VSWITCH controller from a virtual switch Bridge or UPLINK Port. Depending on the redundancy configured for the virtual switch, the switch may still be functional. However, you should not detach the virtual switch. Doing so could prevent another virtual switch with the same name from being defined until z/VM is IPLed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SWU001

Explanation

HCPSWUMS received a condition code 2 on an IUCV SEND request.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SXA003

Explanation

Queue pointers used internal to HCPSXA during a search for contiguous pages were corrupted.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SXA004

Explanation

SXS pages have been exhausted. Repeated attempts to redrive deferred SXS page requests have failed because no SXS pages have become available.

User response

This condition occurs when there have been excessive requests for host logical storage. Evaluate host logical storage usage for a possible cause, such as:

- Excessive use of the CP LOCK command to lock guest pages in host logical storage. If the guest pages must be locked, and host real storage is large enough to contain all locked pages, then determine whether the CP LOCK command can be used to lock them only in host real storage as an alternative.
- Excessive requests for free storage or pages of host logical storage. Free storage trailers and SXSTEs provide information regarding free storage and host logical storage requestors.
- Large amounts of free storage or pages of host logical storage are not being returned. This may be due to an error in logic, but may also be due to a task being blocked from completion. Blocked tasks can be identified by inspecting outstanding CPEBKs.

SXD005

Explanation

(hard) There are not enough frames to build the initial system configuration.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SXL001

Explanation

The abending processor requested a share of the spin lock which it already holds as exclusive or as shared, or for which it has a pending exclusive request or a pending share request.

User response

Examine the dump to determine why the processor requested the same lock twice without releasing it. A new request cannot be made for the same lock until the prior hold is released. Examine the SXLXL control block pointed to by R1 at the time of the dump to determine which lock is the problem and what its current state is. The SKLEN of the abending processor, which describes its view of the lock state, can be located using PFXSXLEN plus the offset value in SXLXLENO of the SXLXL control block pointed to by R1.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SXL002

Explanation

The abending processor attempted the release of a share of a spin lock, but the processor does not hold a share of the spin lock.

User response

Examine the dump to determine how the processor got into the function covered by the spin lock without first obtaining the spin lock for that function. It may also be possible that the lock was released prematurely, and thus was not held later in the function when the abend occurred. Examine the SXLXL control block pointed to by R1 at the time of the dump to determine which lock is the problem and what its current state is. The SXLEN of the abending processor, which describes its view of the lock state, can be located using PFXSXLEN plus the offset value in SXLXLENO of the SXLXL control bock pointed to by R1.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SXL003

Explanation

The abending processor requested a spin lock as exclusive which it already holds as exclusive or shared, or has a pending exclusive request or a pending share request.

User response

Examine the dump to determine why the processor requested the same lock twice without releasing it. A new request cannot be made for the same lock until the prior hold is released. Examine the SXLXL control block pointed to by R1 at the time of the dump to determine which lock is the problem and what its current state is. The SXLEN of the abending processor, which describes its view of the lock state, can be located using PFXSXLEN plus the offset value in SXLXLENO of the SXLXL control block pointed to by R1.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SXL004

Explanation

The abending processor attempted release of an exclusive hold of a spin lock, but the processor does not hold the spin lock as exclusive.

User response

Examine the dump to determine how the processor got into the function covered by the spin lock without first obtaining the spin lock for that function. It may also be possible that the lock was released prematurely, and thus was not held later in the function when the abend occurred. Examine the SXLXL control block pointed to by R1 at the time of the dump to determine which lock is the problem and what its current state is. The SXLEN of the abending processor, which describes its view of the lock state, can be located using PFXSXLEN plus the offset value in SXLXLENO of the SXLXL control block pointed to by R1.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SXL005

Explanation

The internal control structures for the spin lock are in an invalid state.

User response

Examine the dump to identify the details of the invalid lock state. The abend points to the specific condition

that was detected. Examine the SXLXL control block pointed to by R1 at the time of the dump to determine which lock is the problem and what its current state is. The SXLEN of the abending processor, which describes its view of the lock state, can be located using PFXSXLEN plus the offset value in SXLXLENO of the SXLXL control block pointed to by R1.

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SXP001

Explanation

A SXSTE was found to be in an unexpected state for a page being returned. Some possible causes of this problem are:

- The address of the SXS page being returned was incorrect.
- The SXS page had already been returned.
- The state of the SXSTE was damaged.

User response

Examine the dump to determine the address of the returned page and the caller, and verify that the address was correct.

SXP002

Explanation

The address of an SXS page being returned is not a valid SXS page address.

User response

Examine the dump to determine the address of the returned page and the caller, and determine why the address was incorrect.

SXP003

Explanation

The initial real frame available list was not large enough to populate the Reserved Page List or the SXS Available Backed Page queues during IPL.

User response

Verify that there is sufficient real storage available to run z/VM.

SXP004

Explanation

An unsupported SXS page type was specified when requesting CP SXS pages.

User response

Examine the dump to determine the caller and the caller specified usage code. The usage code value may have been generated by the HCPGETST MACRO based on the USAGE parameter.

SXP005

Explanation

Internal chain pointers are corrupted. While processing a request for multiple pages, queue pointers internal to HCPSXA or a called routine were corrupted.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SXS001

Explanation

(soft) Module HCPSXS called module HCPVSR with an incorrect interface. Either a closed spool file was passed, or the buffer counts in the SDLBK were incorrect.

User response

Examine the HCPSXS and HCPVSR modules to determine why the interface was incorrect.

SXU001

Explanation

The input host absolute address is either outside of the configured real storage or not associated with an SXS page. This problem could occur when:

- The address was incorrectly specified when passed to HCPSXU.
- The wrong address was specified.
- The address was valid at one time, but the page was already released, so the frame is no longer associated with an SXS page.

User response

Examine the dump to determine the caller and the caller specified address. Determine whether the address is indeed within the configured real storage. If so, determine why the caller expected the address to be associated with an SXS page when it is not.

SXU002

Explanation

The input host absolute address is not currently allocated as a CP frame. This problem could occur when:

- The address was incorrectly specified when passed to HCPSXU.
- The wrong address was specified.
- The address was valid at one time, but the page was already released, so the frame is no longer associated with an SXS page.

User response

Examine the dump to determine the caller and the caller specified address. Determine why the caller expected the address to be associated with an SXS page when it is not.

SXU003

Explanation

The SXS DAT tables are in error. The SXS DAT table entries associated with a specific host logical address are in a state that is never used, so the DAT structures have most likely been damaged.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SYN001

Explanation

A processor has requested a spin-lock that it already owns.

User response

Examine the dump to determine why the processor requested the same lock twice without releasing it. The processor might already hold a share of the lock, or it might already hold the lock in exclusive mode. In either case, a new request cannot be made for the same lock. Examine the lock area pointed to by R1 at the time of the dump to determine which lock is the problem and what its current state is.

SYN002

Explanation

A processor tried to release a spin-lock that it did not own.

User response

Examine the dump to determine how the processor got into the function covered by the spin-lock without first obtaining the spin-lock for that function. This abend can occur if the processor is attempting to release the lock from exclusive mode and it either does not hold the lock at all or holds only a share of the lock. Examine the lock area pointed to by R1 at the time of the dump to determine which lock is the problem and what its current state is.

SZC001

Explanation

(soft) An error was detected within the FBA emulation support. R0 contains a unique checkpoint code which identifies the origin of the error. Checkpoint codes are defined in HCPEDEV COPY.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZD001

Explanation

Issued by the HCPSZD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZD002

Explanation

(soft) Issued by the HCPSZD module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZE001

Explanation

An attempt was made to deallocate an event which has tasks waiting.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZE002

Explanation

An attempt was made to wait on an event using latch serialization when a spin lock was already held on the system.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZE003

Explanation

An attempt was made to wait on an event using lock serialization when the lock was not held.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZK001

Explanation

An attempt was made to deallocate a lock when the lock was held.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZK002

Explanation

An attempt was made to unlock a lock which has not been allocated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZK003

Explanation

An attempt was made to unlock a lock which was not held by the current task.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZL001

Explanation

An attempt was made to deallocate a latch which was held.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZL002

Explanation

A request was made for a latch when a spin lock was already held.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZT001

Explanation

The container issued a hard abend. See R2 for abend code, R3 for reason code.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

SZV001

Explanation

An invalid EDEV was encountered in a code path expecting an RDEV or an EDEV of a certain type (for example, type 9336).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TCM001

Explanation

A release of the minidisk cache main cache lock (TCMTSLK) was attempted, but the lock was not held. The lock is held when the left-most byte is x'FF'. This is a generic abend code.

User response

Examine the trace table and the TCMBK in HCPTCM to determine the state of the minidisk cache and what was executing in the system before the failure.

Examine the code path taken prior to the abending location to locate a previous unlock or to locate a place that should have obtained the lock but did not.

R15 contains the address of the place that detected the error. The lock is obtained using the HCPLKTCL macro and unlocked using the HCPULTCL macro.

TDK001

Explanation

A program is attempting to deallocate cylinders of T-disk space for which no cylinder allocation block (ALOCBLOK) exists. The pointer to either the ALOCBK or the CPVBK is incorrect or zero.

User response

Examine the CP trace table and storage dump to see if the block in error has been released. CR12 points to the next available CP trace table entry after the failure.

TGR004

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TGR009

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TGR010

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

THL001

Explanation

(soft) The VMDASCBK field was either zero or it did not point to a valid ASCBK for a VMDBK in the global cyclic list, and the user was not in logon or logoff processing.

User response

Check the snap data parameter list for any ASCBKs that may have been dumped to determine if the VMDASCBK field may have been pointing to the wrong ASCBK. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TKM001

Explanation

An incorrect event code was passed to HCPTKMDX in R2. The event code must be one of the codes defined for TSKEVENT in the TSKBK.

User response

Examine the CP trace table and storage dump to determine what module did the GOTO to HCPTKMDX. R2 contains the incorrect event code.

TKM002

Explanation

A module made a reference to an address space in access-register mode using an i-ASIT which has expired, and chose not to handle this situation in an exit routine.

User response

Examine the CP trace table and storage dump to determine what module made the reference.

TKM003

Explanation

A module made a reference to an address space using an incorrect virtual address, and chose not to handle this situation in an exit routine.

User response

Examine the CP trace table and storage dump to determine what module made the reference.

TKM004

Explanation

A module made a reference to an address in an address space which has been damaged because of a paging or storage error, and chose not to handle this situation in an exit routine.

User response

Examine the CP trace table and storage dump to determine what module made the reference.

TKM005

Explanation

A task has resumed execution dispatched on a different VMDBK than was dispatched when the task was suspended.

User response

Examine the CP trace table and storage dump to determine what processing occurred between the time the task was suspended (call to HCPTKMSU) and the time the task was resumed (call to HCPTKMRS). R9 points to the TSKBK. TSKRNUSR contains the VMDBK dispatched at the time the task was suspended. R0 points to the PFXPG. PFXRNUSR contains the VMDBK dispatched at the time the task was resumed.

TKM006

Explanation

The deferred work counter has been mismanaged. It would have become negative if decremented.

User response

Examine the CP trace table and storage dump to determine which module(s) most recently changed the deferred work counter. The deferred work counter was decremented once more than it should have been. Check to see if processing decremented it twice or if it was decremented without having first been incremented. R11 points to the VMDBK. VMDDFRWK is the deferred work counter.

TKM007

Explanation

HCPTKMDX was called to drive an exception-handling exit established by an HCPSPIE or HCPSAC macro. The routine in which the exception occurred was running in 64-bit addressing mode. However, the TSKBK containing the state at the time of the exception did not include 64-bit register contents; it was not marked "long-reg."

This is probably an error in either the caller of HCPTKMDX (passing an improper TSKBK) or in the first level exception handler that filled in the TSKBK (HCPPRGIN for program interruptions).

User response

Examine the TSKBK passed to HCPTKMDX in R1. Determine whether it is well-formed, and whether TSKGPSW, including the extended-addressing mode bit, is correct. If so, determine which module was responsible for setting TSKLONGR (based on the value of TSKEVENT) and why it was not set.

TKM008

Explanation

A module made a reference to an address in a guest page in the volatile, logically zero state (a block-volatility exception condition), and chose not to handle this situation in an exit routine.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TMR080

Explanation

(soft) The interval timer residue counter has a negative value.

User response

Look at the modules that manipulate the field VMDHIRES to determine why the residue counter has a negative value. The fields in the TRQBK at entry to HCPTMR are used to update VMDHIRES; they may be incorrect.

TPY010

Explanation

An incorrect PER trap code was received.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRD007

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRD010

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRI007

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRI010

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRQ001

Explanation

A TRQBK is being queued, when it is already on the queue.

User response

Examine the CP trace table and storage dump to see if the block in error has been placed on the queue already. CR12 points to the next available CP trace table entry after the failure.

TRQ003

Explanation

The queue of TRQBKs appears to be empty.

User response

Examine the CP trace table and storage dump to determine why the queue is empty. There should always be at least a dummy TRQBK that acts as a placeholder in the queue.

TRQ004

Explanation

(soft) A TRQBK was dequeued out of order.

User response

Examine the CP trace table and storage dump to determine why the TRQBK was queued out of order. The most likely cause is that some module other than HCPTRQ changed the timer expiration value in this TRQBK (or another one in the same section of the TRQBK hash table) after it was already in the TRQBK queue. Since HCPTRQ manages the queue based entirely upon this expiration value, it should not be changed while the TRQBK is enqueued.

TRQ005

Explanation

A failure was recognized while reorganizing the TRQBK hash table.

User response

Examine the CP trace table, storage dump, and a listing of module HCPTRQ to determine what the failure was. R0 points to the location in HCPTRQ at which the failure was recognized.

TRR001

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRR004

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing

the problem; then contact your IBM Support Center personnel.

TRR005

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRR006

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRR007

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRR009

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRR010

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRV001

Explanation

(soft) HCPTRV has encountered an erroneous flag byte in the trace record being processed. This would cause problems during translation of the trace record to formatted output.

User response

Examine the creation of the trace information to find the misleading flag byte.

TRX001

Explanation

(soft) Issued by the HCPTRX module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TRY007

Explanation

The TRPBK address is incorrect.

User response

Examine the CP trace table and storage dump and determine why TRSANCHR in TRSBK (address of TRPBK) is not on a doubleword boundary.

TRY010

Explanation

The trap type is incorrect.

User response

Examine the CP trace table and storage dump to determine what routine sets an unknown TRPTYPE in TRPBK.

TSA001

Explanation

(soft) HCPTSA was processing a TRSAVE command. HCPTSA called HCPTSP to parse this TRSAVE command and received an unexpected return code.

User response

R15 contains the return code from HCPTSP. It should be a message number that would be valid for the command that was entered. If it is, then HCPTSA is in error for not handling this return code. If R15 does not contain a valid message number, HCPTSP is in error.

TSC001

Explanation

(soft) HCPTSC called HCPLCKAS which reported that the lock was destroyed (R15 = 12). HCPTSC expects the lock to be unlocked immediately or after a delay, but not destroyed.

User response

Examine the HCPTXCCM to determine if it is valid, or determine why HCPLCKAS responded that the lock was destroyed.

TSC098

Explanation

(soft) HCPTSC called an entry point, and the entry point returned a condition code that HCPTSC did not recognize.

User response

Determine if the condition code is a valid one to be returned from the entry point or whether HCPTSC should be changed to recognize the return code.

TSC099

Explanation

(soft) HCPTSC called an entry point, and the entry point returned a return code that HCPTSC did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point, or whether HCPTSC should be changed to recognize the return code.

TSD099

Explanation

(soft) HCPTSD called an entry point, and the entry point returned a return code that HCPTSD did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point, or whether HCPTSD should be changed to recognize the return code.

TSE001

Explanation

(soft) HCPTSEND called HCPBMSTM to return all buffers to the system, but some of the allocated buffers are not on either the pending queue or the available stack.

User response

Before trace service termination is invoked, HCPTSM should have ensured that all allocated buffers were returned to either the pending queue or the available stack. R8 should contain the BMSBK address. Check the buffer counts and review the HCPTSM code associated with returning buffers to determine why the buffers were lost.

TSE002

Explanation

(soft) HCPTSEND called HCPSDFCL to close a system trace file for CP tracing. However, the originator of the file is not the VMDBK that is currently running.

User response

Both the originator of the file and the current VMDBK should be the system VMDBK. Register 11 addresses the current VMDBK. The snap data parameter list contains the TSDBK that describes the DASA-related information for this invocation of TRSAVE. The field TSDORIG contains the originator of the file and should have the value "SYSTEM". The snap data parameter list also contains the SDFBK, which describes the system trace file that CP was attempting to close. The field SDFORIG contains the originator of the file and should have the value "SYSTEM". Examine the VMDBK, TSDBK and SDFBK and determine whether the contents of those control blocks are valid.

TSE004

Explanation

(soft) HCPTSEND called HCPSDFCH to change the class of the system trace file for CP tracing. However, HCPSDFCH issued a return code indicating an error as found in input.

User response

R15 contains the return code. A return code of 16 indicates a parameter error. Possible causes are an incorrect type in SDFTYPE, an incorrect spool ID in SDFIDNUM, or an incorrect class in SDFCLASS. The snap data parameter list contains the SDFBK of the system trace file in error. A return code of 24 indicates the file not found. The snap data parameter list also contains the TSDBK that describes the DASD related information for this invocation of TRSAVE. Examine the TSDBK and SDFBK and determine whether the contents of those control blocks are valid. If they are not, the code in HCPTSW and HCPTSE that maintains and uses the addresses of the SDFBK's for the files associated with this trace may be in error.

TSE005

Explanation

(soft) HCPTSE picked up 0 as the address of the SDFBK describing an open system trace file for CP tracing.

User response

TSDSDFP is an array of addresses of SDFBKs. TSDSDFPI is the index in TSDSDFP of the SDFBK currently in use. For example, if TSDSDFPI is 2, the second address in TSDSDFP should contain the address of the SDFBK describing the system trace file currently being written to. Examine the values of TSDSDFP and TSDSDFPI. The code in HCPTSW and HCPTSE that maintains and uses the addresses of the SDFBKs for the files associated with this trace may be in error.

TSF001

Explanation

(soft) HCPTSF called HCPLCKAX to acquire the TSDWRTLK lock. HCPLCKAX reported that the TSDWRTLK lock was already destroyed (R15 = 12).

User response

Examine the TSDBK and determine if it is valid, or determine how the TSDWRTLK could have been destroyed already.

TSF099

Explanation

(soft) HCPTSF called an entry point and the entry point, returned a return code that HCPTSF did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point or whether HCPTSF should be changed to recognize the return code.

TSG001

Explanation

(soft) HCPTSG was called at system reset or at logoff to close any TRFILES that a virtual machine may have opened for reading. However, it received a bad return code from HCPSDFCL.

User response

R15 contains the return code. Return code 16 indicates HCPSDFCL found an error in the SDFBK addressed by Register 1. Return code 24 indicates HCPSDFCL describes the file as empty. However, since this file was opened for reading, it should not have been empty. If the SDFBK appears to be incorrect for either return code, examine the code in HCPTSO, HCPTSN, and HCPTSX which sets the fields in the TDRBK and maintains the TDRBK chain.

TSH001

Explanation

(soft) HCPTSH called HCPBMSBP, which reported that it was passed an incorrect parameter (R15 = 8).

User response

Determine why HCPBMSBP reported an incorrect parameter, and report the entry point which is interfacing incorrectly.

TSH002

Explanation

(soft) The originator of the trace, either by default or specified as the "FOR" user, must be logged on. HCPTSHDI requires the caller to ensure that the user is logged on.

User response

Examine the TSDBK and determine if it is valid or determine how the originator got logged off while a trace was still active for it.

TSH003

Explanation

(soft) HCPTSH called HCPSDFCL or HCPSDFCH while dispatched on a user ID other than the originator.

User response

Examine the TSDBK and determine if it is valid or determine why HCPTSH did not switch itself to be dispatched on the originator's user ID.

TSH004

Explanation

(soft) HCPTSH called HCPSDFCH, which reported that the file was empty and that it became closed. If the file became closed because it was empty, it should have been purged when HCPTSH called HCPSDFCL.

User response

Examine the TSDBK and determine if it is valid or determine how all records in the SDF were deleted after it was closed.

TSH005

Explanation

(soft) HCPTSH detected HCPTSR reported an abend situation. HCPTSR detected that the TSDRECLK was already locked by the processing unit that HCPTSR is dispatched on. HCPTSR did not issue an abend at the time of the error because the environment under which it was running did not allow a soft abend to be issued.

User response

Determine how the lock was left locked by the CPUID.

TSH006

Explanation

(soft) HCPTSH determined that HCPTSR previously received a return code (R15 = 8) from HCPBMSBP indicating that HCPTSR returned too many buffers. HCPTSR did not issue an abend at the time of the error because the environment under which it was running did not allow a soft abend to be issued.

User response

Determine how HCPTSR could have put more buffers on the pending buffer queue than it got using HCPBMSGA.

TSH007

Explanation

(soft) HCPTSH determined that HCPTSR previously received an incorrect TRCTYPE value within a TRCBK. HCPTSR did not issue an abend at the time of the error because the environment under which it was running did not allow a soft abend to be issued.

User response

Determine if the TRCBK is valid, or how the TRCTYPE field was destroyed.

TSH008

Explanation

(soft) HCPTSH determined that HCPTSR previously received an incorrect return code from a module which HCPTSR called. HCPTSR did not issue an abend at the time of the error because the environment under which it was running did not allow a soft abend to be issued.

User response

Determine if the return code is a valid one to be recognized from the entry point, or whether HCPTSH should be changed to recognize the return code. See the TSDTDRRC and TSDTDREP fields for more information about which entry point HCPTSH received the unexpected return code from.

TSH009

Explanation

(soft) The TSDTSRCD contained an incorrect code.

User response

Determine if the TSDBK is valid, or why the TSDTSRCD field contains the incorrect code.

TSH010

Explanation

(soft) HCPTSH was about to call HCPLCKAX to destroy the TSDWRTLK, and HCPCLKAX returned a lock destroyed (R15 = 12). HCPTSH expects the lock to exist until it is dropped.

User response

Examine the HCPTSDBK to determine if it is valid or not, or determine how the lock could have been destroyed before the trace ID was dropped.

TSH011

Explanation

(soft) HCPTSHDI was passed an origin ID to use in searching for a TSDBK in the TSDBK chain. Unexpectedly, no TSDBK with a matching origin ID was found.

User response

Determine if the caller passed a bad origin ID, or if the TSDBK chain has been corrupted.

TSH098

Explanation

(soft) HCPTSH called an entry point, and the routine at the entry point returned a condition code that HCPTSH did not recognize.

User response

Determine if the condition code is a valid one to be returned from the entry point, or whether HCPTSH should be changed to recognize the return code.

TSH099

Explanation

(soft) HCPTSH called an entry point, and the routine at the entry point returned a return code that HCPTSH did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point or whether HCPTSH should be changed to recognize the return code.

TSI002

Explanation

(soft) HCPTSINT called HCPBMSIN with an incorrect buffer count.

User response

Check the code in HCPTSINT that calculates and passes the buffer count to HCPBMSIN to determine why an incorrect buffer count was set and/or passed.

TSJ001

Explanation

(soft) HCPTSJ called HCPBMSAA, HCPBMSIN, or HCPTSVAD with an incorrect number.

User response

Examine the parameter to determine whether:

- The parameter is really incorrect
- The entry point is incorrectly reporting that it is incorrect
- HCPTSJ is calling the entry point incorrectly.

TSJ002

Explanation

(soft) The TRCBK passed to HCPTSJ contained an incorrect value in the TRCTYPE field.

User response

The TRCTYPE field must be either DATA, IO, or GT. Examine the TRCBK to determine if it is valid, or determine why the TRCBK field is incorrect.

TSJ003

Explanation

(soft) HCPTSJ called HCPSDFON, which returned an input parameter error (R15 = 16).

User response

Examine the SDFBK to determine if it is valid, or determine why HCPSDFON reports there is a problem.

TSJ004

Explanation

(soft) HCPTSJ called HCPSDFCL to recover from an error, and the entry point returned a successful return code (R15 = 0) or an already closed return code (R15 = 4). HCPTSJ expects to receive an empty file purged return code (R15 = 24).

User response

Determine why the SDF became closed or written to before the file was closed in recovery.

TSJ005

Explanation

(soft) HCPTSJ called HCPSDFCL to recover from an error, and the entry point returned an input parameter return code (R15 = 16). The system data file (SDF) was closed for a user other than the SDF owner.

User response

Examine the SDFBK to determine if it is valid, or determine why the SDF is being closed for other than the SDF owner.

TSJ006

Explanation

(soft) HCPTSJ called HCPSCVMD to locate a VMDBK. The entry point returned a VMDBK-not-found return code. The FOR user should not be able to log off while a trace is enabled.

User response

Determine how the FOR user became logged off while the TXCLOCKC was being held.

TSJ098

Explanation

(soft) HCPTSJ called an entry point, and the entry point returned a condition code that HCPTSJ did not recognize.

User response

Determine if the condition code is a valid one to be returned from the entry point, or whether HCPTSJ should be changed to recognize the return code.

TSJ099

Explanation

(soft) HCPTSJ called an entry point, and the entry point returned a return code that HCPTSJ did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point, or whether HCPTSJ should be changed to recognize the return code.

TSL001

Explanation

(soft) HCPTSL called HCPLCKAX, which reported that the TXCLOCKC lock was destroyed (R15 = 12). HCPTSL expects the lock to be unlocked immediately or after a delay, but not destroyed.

User response

Determine why HCPLCKAX reported that the lock was destroyed. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TSL002

Explanation

(soft) HCPTSLTM searched the TSDBK chain for the originator's TSDBK, but did not find the TSDBK.

User response

Determine if the TSDBK chain anchor (TRCTSDBK) is in error, or if the TSDBK chain is corrupted. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TSL098

Explanation

(soft) HCPTSL called an entry point, and the routine at the entry point returned a condition code that HCPTSL did not recognize.

User response

Determine if the condition code is a valid one to be returned from the entry point, or whether HCPTSL should be changed to recognize the return code.

TSL099

Explanation

(soft) HCPTSL called an entry point, and the routine at the entry point returned a return code that HCPTSL did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point or whether HCPTSL should be changed to recognize the return code.

TSM001

Explanation

(soft) HCPTSM called HCPBMSOP to obtain buffers from the pending queue, but HCPBMSOP did not satisfy the request for one of the following reasons:

- The number of buffers requested was not positive.
- The number of buffers requested exceeds the number of buffers on the pending queue.

User response

Check the return code from HCPBMSOP in R15 to determine why HCPBMSOP did not satisfy the request. (R1 should contain a pointer to a page where the first word is the number of buffers and the remaining words are a list of buffer addresses.) If the number of buffers requested was not positive (R15 contains 8), determine why HCPTSM passed a nonpositive buffer count to HCPBMSOP. If the number of buffers requested exceeds the number of buffers on the pending queue (R15 contains 4), buffers may be lost or counts maintained incorrectly. Check the TSTBK (address in R9) and BMSBK (address in R8) count fields.

TSM002

Explanation

(soft) HCPTSM called HCPBMSRA to return a list of buffers to the available stack, but HCPBMSRA did not satisfy the request for one of the following reasons:

- The number of buffers requested was not positive.
- The number of buffers requested exceeds the number of buffers on the pending queue.

User response

Check the return code from HCPBMSRA in R15 to determine why HCPBMSRA did not satisfy the request. (R15 should contain a pointer to a page where the first word is the number of buffers and the remaining words are a list of buffer addresses.) If the number of buffers passed was not positive (R15 contains 8), determine why HCPTSM passed a nonpositive buffer count to HCPBMSRA. If the number of buffers to be returned exceeds the number of buffers defined (R15 contains 4), determine why the buffer count passed to HCPBMSRA by HCPTSM exceeds the number of buffers defined at initialization.

TSM003

Explanation

(soft) HCPTSM called HCPBMSPP to place a buffer on the pending queue, but HCPBMSPP did not satisfy the request because the pending queue is full.

User response

HCPTSM should be monitoring its use of the pending queue. Check the code in HCPTSM to ensure that it is monitoring its use of the pending queue. Also, check the BMSBK (pointer in R8) count fields for correctness.

TSN001

Explanation

(soft) HCPTSN called HCPSDFRD, which reported that there was no pointer to a read buffer (R15 = 16).

User response

Examine the SDFBK to determine if it is valid, or determine how the SDFRDBUF field became zero.

TSN002

Explanation

(soft) The length of the system trace file (TRF) block specified in the block's header being read was longer than the actual block, causing HCPTSN to try to read past the end of the TRF.

User response

R15 will contain the return code. Examine the SDFBK to determine if it looks valid or determine why the DBFBLNG is incorrect.

TSN003

Explanation

(soft) HCPTSN called HCPSDFPS to position the read pointer, but the entry point reported that the position requested is either negative or greater than the size of the file (R15 = 16).

User response

Examine the SDFBK to determine if it is valid or determine why the SDFPOS field is incorrect.

TSN004

Explanation

(soft) HCPTSN called HCPSDFPS, which could not reposition the read pointer because it reported the system trace file (TRF) was closed (R15 = 28).

User response

Examine the SDFBK to determine if it is valid or determine why the file is already closed.

TSN099

Explanation

(soft) HCPTSN called an entry point, and the routine at the entry point returned a return code that HCPTSN did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point, or whether HCPTSN should be changed to recognize the return code.

TSO001

Explanation

(soft) The system trace file (TRF) that HCPTSO tried to open was considered by HCPSDF to be in pending purge state. Pending purge state is applicable to other types of system data files (SDF), but not to TRFs.

User response

The SDFCLASS field of the SDFBK should contain an "A" for available, rather than a "P" for pending purge. Examine the SDFBK to determine if it is valid, or determine how the class became "P."

TSO002

Explanation

(soft) HCPTSO tried to get a lock for a brand new lock, and HCPLCK reported that the lock was locked after a delay (R15 =4), or the lock was destroyed (R15 = 12), meaning that the lock had previously been used.

User response

Examine the TDHBK to determine if it is valid, or determine why the TDHLCK was not full of zeros before the call to HCPLCK was made.

TSO003

Explanation

(soft) HCPTSO called HCPSDFOR with a validated spool ID, and HCPSDFOR reported that the parameter was incorrect (R15 = 16).

User response

Examine how the spool ID was verified and why HCPSDFOR verification was different.

TSO004

Explanation

(soft) HCPTSO called HCPSDFCL to recover from an error, and HCPSDFCL reported that the file was already closed (R15 = 04).

User response

Examine how the SDF became closed when HCPTSO expected it to be open.

TSO005

Explanation

(soft) HCPTSO called HCPSDFCL to recover from an error, and HCPSDFCL reported that the file was purged because it was empty (R15 = 24). An SDF cannot be closed while being empty.

User response

Examine how the SDF was created and closed while being empty.

TSO099

Explanation

(soft) HCPTSO called an entry point, and the entry point returned a return code that HCPTSO did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point, or whether HCPTSO should be changed to recognize the return code.

TSQ001

Explanation

(soft) HCPTSQ was processing a TRSAVE command. HCPTSQ called HCPTSP to parse this TRSAVE command and received an unexpected return code.

User response

R15 contains the return code from HCPTSP. It should be a message number that would be valid for the command that was entered. If it is, HCPTSQ is in error for not handling this return code. If R15 does not contain a valid message number, HCPTSP is in error.

TSW001

Explanation

(soft) HCPTSW called HCPSCVMD, which reported that the originator of the trace was not logged on (CC = 01).

User response

Determine if it is valid or determine how the originator became logged off without the trace ID being disabled first.

TSW002

Explanation

(soft) HCPTSW called HCPTSVAD or HCPBMSRA with an incorrect number.

User response

Examine the parameter to determine if:

- The parameter is really incorrect
- The entry point is incorrectly reporting that it is incorrect
- HCPTSW is calling the entry point incorrectly.

TSW004

Explanation

(soft) HCPTSW called HCPBMSRA, which reported that more BMSBKs were returned than were gotten (R1 = 04).

User response

Examine the parameter to determine if:

- The parameter is really too big
- The entry point is incorrectly reporting that it is too big
- HCPTSW is calling the entry point incorrectly.

TSW005

Explanation

(soft) HCPTSW called HCPLCKAX, which reported that the lock was destroyed (R15 = 12). HCPTSW expects the lock to be unlocked immediately or after a delay, but not destroyed.

User response

Examine to determine if it is valid, or determine why HCPLCKAX is reporting TXCLOCKC was destroyed.

TSW006

Explanation

(soft) The TSDBK passed to HCPTSW contained an incorrect value in the TSDFT field.

User response

The TSDFT field must be DATA, IO, VMG, or CP. Examine the TSDBK to determine if it is valid or determine why the TSDFT field is incorrect.

TSW098

Explanation

(soft) HCPTSW called an entry point, and the entry point returned a condition code that HCPTSW did not recognize.

User response

Determine if the condition code is a valid one to be returned from the entry point, or whether HCPTSW should be changed to recognize the return code.

TSW099

Explanation

(soft) HCPTSW called an entry point, and the entry point returned a return code that HCPTSW did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point, or whether HCPTSW should be changed to recognize the return code.

TSX001

Explanation

(soft) HCPTSX expected that the system trace file (TRF) was opened for read, but HCPSDFCL reported the file was closed.

User response

Examine the SDFBK to determine if it is valid or determine how the SDF became closed.

TSX002

Explanation

(soft) HCPTSX does not expect HCPSDFCL to return an input parameter error (R15 = 16) when closing a system trace file (TRF) opened for reading. The input parameter error implies the SDF entry point thinks the file is being closed by a user different from the one who opened it.

User response

Examine the SDFBK to determine if it is valid, or determine how HCPTSX could be trying to close a file opened by another user.

TSX099

Explanation

(soft) HCPTSX called an entry point, and the entry point returned a return code that HCPTSX did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point, or whether HCPTSX should be changed to recognize the return code.

TSY001

Explanation

(soft) HCPTSY called HCPSDFON, HCPSDFWR, HCPSDFCL or HCPSDFPU, which returned an incorrect parameter error (R15 = 16).

User response

Examine the SDFBK to determine if it is valid, or determine why the entry point reports there is a problem.

TSY002

Explanation

(soft) HCPTSY called HCPSDFWR, which returned a file-not-opened error code (R15 = 28).

User response

Examine the SDFBK to determine if it is valid or determine why the SDF became closed.

TSY003

Explanation

(soft) HCPTSY called HCPSDFCL, which returned a file-already-closed error code (R15 = 04).

User response

Examine the SDFBK to determine if it is valid or determine why the SDF became closed.

TSY004

Explanation

(soft) HCPTSY called HCPSDFCL, and the entry point returned a file-purged code (R15 = 24).

User response

Examine the SDFBK to determine if it is valid or determine why the SDF was empty.

TSY005

Explanation

(soft) HCPTSY called HCPSDFPU, which returned a file-not-found (R15 = 24) or a file-is-open (R15 = 28) error code.

User response

Examine the SDFBK to determine if it is valid, or determine what happened to the SDF or how it became open.

TSY006

Explanation

(soft) A caller passed HCPTSYWB a parameter containing the number of pages to be written to a trace file. The number of pages was too large.

User response

Examine the caller of HCPTSYWB and determine why the parameter containing the number of pages to be written is too large. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TSY098

Explanation

(soft) HCPTSY called an entry point, and the entry point returned a condition code that HCPTSY did not recognize.

User response

Determine if the condition code is a valid one to be returned from the entry point, or whether HCPTSY should be changed to recognize the return code.

TSY099

Explanation

(soft) HCPTSY called an entry point, and the entry point returned a return code that HCPTSY did not recognize.

User response

Determine if the return code is a valid one to be returned from the entry point, or whether HCPTSY should be changed to recognize the return code.

TSZ001

Explanation

(soft) HCPTSZ called an HCPLCK entry point to get a lock, and the entry point returned information that the lock is destroyed (R15 = 12). HCPTSZ does not expect the lock to be destroyed.

User response

Determine which instance of the call to HCPLCKAS or HCPLCKAX returned the unexpected return code. Then determine if the entry points are interfacing correctly, or determine how the lock was destroyed.

TSZ002

Explanation

(soft) HCPTSZ determined that the VMDBK it was trying to get dispatched was not logged on. HCPTSZ does not expect the virtual machine to be able to log off before the trace ID has been disabled.

User response

Determine which instance of the call to HCPDSPSW returned the unexpected return code. Then determine if the entry points are interfacing correctly, or determine how the user logged off while the trace was enabled.

TSZ003

Explanation

(soft) HCPTSZDI was passed an origin ID to use in searching for a TSDBK in the TSDBK chain. Unexpectedly, no TSDBK with a matching origin ID was found.

User response

Determine if the caller passed a bad origin ID, or if the TSDBK chain has been corrupted.

TSZ098

Explanation

(soft) HCPTSZ called an entry point, and the entry point returned a condition code that HCPTSZ did not recognize.

User response

Determine which instance of a call returned the unexpected condition code. Then determine if the condition code is a valid one to be recognized from the called entry point, or whether HCPTSZ should be changed to recognize the condition code.

TSZ099

Explanation

(soft) HCPTSZ called an entry point, and the entry point returned a return code that HCPTSZ did not recognize.

User response

Determine which instance of a call returned the unexpected return code. Then determine if the return code is a valid one to be recognized from the called entry point, or whether HCPTSZ should be changed to recognize the return code.

TXE001

Explanation

An SVC 28 or SVC 32 interrupt occurred at a location in the CP nucleus for which there is not an enabled data trace.

User response

Registers 2 and 3 contain the SVC old PSW of the interrupt. R4 contains the interrupt code. The registers at the time of the interrupt are saved in the SSADTR of the abending processor. Examine the PSW in registers 2 and 3 to determine why the SVC call was made. SVC 28 is allowed only at trace points that are defined and enabled through the TRSOURCE command. SVC 32 is the data trace mechanism for returning control to the interrupted trace point.

TXE002

Explanation

A dynamic exit was invoked at a point where no dynamic exit is defined.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TXE005

Explanation

A TRSOURCE or Dynamic Exit SVC (28, 32 or 40) occurred while a TRSOURCE or Dynamic Exit was already running.

User response

Register 4 contains the address immediately following the SVC instruction that caused the most recent SVC interrupt. That code path should be restricted from containing TRSOURCE or Dynamic Exits. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

TXW001

Explanation

(soft) HCPTSEND called HCPBMSTM to return all buffers to the system, but some of the allocated buffers are not on either the pending queue or the available stack.

User response

Before trace service termination is invoked, HCPTSM should have ensured that all allocated buffers were returned to either the pending queue or the available stack. R8 should contain the BMSBK address. Check the buffer counts and review the HCPTSM code associated with returning buffers to determine why the buffers were lost.

UDM001

Explanation

(soft) Module HCPUDM detected that the in-storage portion of the CP object directory has been corrupted or that a control block read from the CP object directory is not valid. Register 7 identifies the location within HCPUDM where the error was detected.

User response

Determine which portion of the object directory HCPUDM found to be not valid and why the object directory was not valid. Use DDR to examine the object directory on DASD.

There could be a mismatch between the service levels of directory write routines and read routines. Ensure that the DIRECTXA module is at the same service level as the CP nucleus. Then issue the DIRECTXA command to create a new object directory.

UDP001

Explanation

(soft) Module HCPUDP detected that the in-storage portion of the CP object directory has been corrupted or that a control block read from the CP object directory is not valid. Register 7 identifies the location within HCPUDP where the error was detected.

User response

Determine which portion of the object directory HCPUDP found to be not valid and why the object

directory was not valid. Use DDR to examine the object directory on DASD.

There could be a mismatch between the service levels of directory write routines and read routines. Ensure that the DIRECTXA module is at the same service level as the CP nucleus. Then issue the DIRECTXA command to create a new object directory.

UDQ001

Explanation

(soft) Module HCPUDQ detected that it did not read a valid HCPDUNDX, HCPDVMD, or HCPDDEV from the CP directory.

If the directory page that was read appears to be correct, it is likely that the HCPDUNDX pointer fields are not pointing to the beginning of the HCPDVMD or HCPDDEV block.

If the directory page that was read appears to be incorrect, either the page is not a directory page, or the page has been altered on the DASD device.

User response

Ensure that DIRECTXA is at the same service level as the installed CP nucleus. Then issue DIRECTXA to install a new CP directory.

Examine the HCPDUNDX pointer fields to ensure that they contain a valid address of a directory page. Issue the DDR command to examine the entire CP directory, and issue the DIRECTXA command to correct the incorrect CP directory.

UDR001

Explanation

(soft) Module HCPUDR detected that it did not read a valid HCPDUNDX, HCPDVMD, or HCPDDEV from the CP directory.

If the directory page that was read appears to be correct, it is likely that the HCPDUNDX pointer fields are not pointing to the beginning of the HCPDVMD or HCPDDEV block.

If the directory page that was read appears to be incorrect, either the page is not a directory page, or the page has been altered on the DASD device.

User response

Ensure that DIRECTXA is at the same service level as the installed CP nucleus. Then issue DIRECTXA to install a new CP directory.

Examine the HCPDUNDX pointer fields to ensure that they contain a valid address of a directory page. Issue the DDR command to examine the entire CP directory, and issue the DIRECTXA command to correct the incorrect CP directory.

UDS001

Explanation

(soft) The number of DCPU blocks for this user as specified in DVMDCPUC does not match the number of DCPU blocks for this user as chained together in the directory.

User response

Ensure that the DIRECTXA module is at the same service level as the CP nucleus and then issue the DIRECTXA command to create a new directory.

UDU001

Explanation

(soft) Module HCPUDU detected that it did not read a valid HCPDDEV from the CP directory.

If the directory page that was read appears to be correct, it is likely that the HCPDUNDX pointer fields are not pointing to the beginning of HCPDDEV block.

If the directory page that was read appears to be incorrect, either the page is not a directory page or the page has been altered on the DASD device.

User response

Examine the HCPDUNDX pointer fields to ensure that they contain a valid address of a directory page. Issue the DDR command to examine the entire CP directory, and issue the DIRECTXA command to correct the incorrect CP directory.

UIM001

Explanation

The PGMBK's count of shared users (PGMSNTCT) is less than zero.

User response

Register 2 points to the STLBK. Register 8 points to the PGMBK that has a negative PGMSNTCT count. The PGMVM field points to the VMDBK or SNTBK control block that owns the PGMBK. Register 15 points to the place that detected the need for taking the abend.

UIM002

Explanation

HCPUIMSL cannot release all the storage for this segment, because non-shared storage is connected to a shared PGMBK. Only shared storage should be associated with a shared PGMBK.

User response

Examine the contents of the dump. Register 8 points to the PGMBK. At least one of the page status table entries (PGSTEs) in the PGMBK is not marked PGSSHARE. The PGMVM field contains the owner of this PGMBK, and it should describe an SNTBK. Register 15 points to the place that detected the need for taking the abend.

UIM003

Explanation

An HCPUIM entry point received incorrect parameters, and one of the following has occurred:

- The HCPUIMPA routine was called to release storage for the system address space.
- In the HCPUIMSC routine register 0 and register 1 contain an incorrect address range.
- In the HCPUIMSN routine register 0 and register 1 contain an incorrect address range, or the system VMDBK was passed in register 11.

User response

Register 15 points to the place that detected the need for taking the abend.

- If the HCPUIMPA routine issued the abend, determine if the VMDBK in register 11 is the system VMDBK (PFXSYSVM). Find the caller of HCPUIMPA and determine why the caller passed the system VMDBK.
- If the HCPUIMSC routine issued the abend, the input range in register 0 and register 1 is incorrect. Determine which range value fails the test:

```
 0
< = R0 < = R1.
```

- If the HCPUIMSN routine issued the abend, either register 11 equals PFXSYSVM, or the range in register 0 and register 1 is incorrect. Determine why the system VMDBK was passed or which range value fails the test:

```
 0
<= R0 <= R1 < ASCSSIZE
```

UIM012

Explanation

Segment unimbed processing attempted to decrease the count of guest address space pages, but the count was smaller than the number of pages to be subtracted.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ULP001

Explanation

The count for PGMGFRMC has gone negative. The PGMBK is either not locked or is in a disallowed state.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

UNT001

Explanation

(soft) The HCPUNT module cannot locate a host CCW in one of the RCWBK control blocks. Channel program untranslation is not performed.

User response

Examine the soft abend SNAPLIST data, the host channel program, the guest channel program, and HCPUNT to determine why this occurred. The SNAPLIST data contains the VDEV, RDEV, and CPTCA control blocks. It also contains the RCWBK control block chain and the failing host CCW.

UNT002

Explanation

(soft) The HCPUNT module determined the start address of the host channel program is not valid. The address is either negative, or it indicates the first CCW falls below the RCWBK header in storage. Channel program untranslation is not performed.

User response

Examine the soft abend SNAPLIST data, the host channel program, the guest channel program, and HCPUNT to determine why this occurred. The SNAPLIST data contains the VDEV, RDEV, and CPTCA control blocks. It also contains the RCWBK control block chain and the failing host CCW.

UNT003

Explanation

(soft) The HCPUNT module determined the SCSW CCW interrupt address is not valid, because it points to the first CCW in a RCWBK. Channel program untranslation is not performed, because this should not have occurred.

User response

Examine the soft abend SNAPLIST data, the host channel program, the guest channel program, and HCPUNT to determine why this occurred. The SNAPLIST data contains the VDEV, RDEV, and CPTCA control blocks. It also contains the RCWBK control block chain and the failing host CCW.

UNT004

Explanation

(soft) The HCPUNT module determines the channel program translation is not performed, or the CPTCA control block address is zero. Channel program untranslation is not performed.

User response

Examine the soft abend dump, the host channel program, and the guest channel program to determine why IORCCWTR or IORCPTCA is zero. The flag IORCCWTR and field IORCPTCA are located in the IORBK control block.

USP001

Explanation

(soft) The LGFTRMLK lock was destroyed while the logoff process was waiting to acquire it.

User response

Use the information in the trace table and storage dump to determine why the lock was destroyed.

USR001

Explanation

(soft) HCPUSRQR has received an unsupported request from a remote system.

User response

R7 points to the request block. Determine why it contains an unsupported request. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR003

Explanation

(hard, soft) While deleting a USRBK for a remote user, the user ID for the remote user was not found in the hash table.

User response

R5 points to the USRBK. Determine why the user ID was not in the hash table. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR004

Explanation

During USRBK maintenance, a user ID without an associated USRBK was in the hash table.

User response

Determine why no USRBK exists. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR005

Explanation

Hash table conflict; lookup found user in the hash table but delete did not.

User response

Determine why lookup finds the user in the hash table but delete does not. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR007

Explanation

Hash table conflict; insert found user in the hash table but lookup did not.

User response

Determine why lookup does not find the user in the hash table. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR008

Explanation

Hash table conflict; two different systems claim the user as a local user.

User response

Determine why two different systems claim the user as a local user in the hash table. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR009

Explanation

During live guest relocation, no USRBK representing the remote user on the local system was found.

User response

Determine why the USRBKs are not in synch between the source and destination systems. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR010

Explanation

During live guest relocation, deleting the skeleton user from the hash table failed.

User response

Determine why the hash table could not be updated. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR011

Explanation

Swapping a hash table entry failed.

User response

Determine why the hash table could not be updated. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR012

Explanation

(soft) An unexpected error was received from HCPSOCK while broadcasting USRBK changes after a successful relocation.

User response

Determine the error that caused the abend by examining the return code in R15. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR014

Explanation

During backing out of live guest relocation, reinserting the skeleton user into the hash table failed.

User response

Determine why the hash table could not be updated. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR015

Explanation

The address of a remote system's SHPBK has been incorrectly calculated.

User response

R9 contains the computed SHPBK address. Determine why it is not pointing at the correct SHPBK. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR016

Explanation

(soft) Hash table conflict because the skeleton was not found in the hash table.

User response

R1 points to the user ID CP attempted to rename. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

USR017

Explanation

Hash table conflict; unable to rename an entry in the hash table.

User response

R1 points to the user ID CP attempted to rename. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

UTR001

Explanation

When the function was reverse translating an address, the internal ASIT passed as input failed certification. It was found to be an internal ASIT for a CP address space, which should always be valid.

User response

Examine the location that contains the fixed internal ASIT for the CP address space. It is likely that the internal ASIT has been overlaid or CP has incorrectly manipulated the internal ASIT.

VAC001

Explanation

After a successful viability check, memory reclamation could not find a viable memory zone to process.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAC003

Explanation

(soft) Due to an internal error, a memory reclamation will continue indefinitely and will never complete.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAI001

Explanation

(soft) Issued by the HCPVAI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAI002

Explanation

(soft) Issued by the HCPVAI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAI003

Explanation

(soft) Issued by the HCPVAI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAI004

Explanation

Issued by the HCPVAI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAI005

Explanation

Issued by the HCPVAI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAI006

Explanation

(soft) Issued by the HCPVAI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAI007

Explanation

Issued by the HCPVAI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAI008

Explanation

Issued by the HCPVAI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAI009

Explanation

(soft) Issued by the HCPVAI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAP001

Explanation

(soft) A failure occurred while processing an adapter interruption with the queue I/O assist. CP encountered an error from the hardware when processing an adapter interruption for a virtual machine. The system will recover, but virtual machines with QDIO subchannels may experience problems.

User response

Turn off the hardware assist with the CP command, SET QIOAssist OFF ALL.

VAP002

Explanation

(snap) An unrecoverable missing adapter interruption was detected and a SNAPDUMP has been issued. This condition results in severe degradation of OSA, Hipersockets, and FCP device performance until z/VM is reIPLed.

User response

ReIPL z/VM to recover from this condition. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VAT001

Explanation

The guest translation format is incorrect or not supported.

User response

Examine the CP trace table and storage dump to determine why the guest CR0, which contains the guest translation format control bits, is set with an incorrect value before the call to HCPVAT.

VAT002

Explanation

(soft) HCPVATRN was called to translate a guest address without specifying a segment table designation, and the guest PSW was in access register mode. HCPVATRN supports translating guest addresses while in access register mode only when a segment table designation is specified.

User response

Determine why the caller (R14) of HCPVATRN requested a translation of an address, and the guest PSW indicated the guest is in access register mode. Also, determine why a segment table designation for translation was not provided.

VAT003

Explanation

(soft) Dynamic Address Translation (DAT) does not exist in XC mode virtual machines.

User response

Examine the dump to see if VMDPSW in the VMDBK of the failing user to see if PSWTRAN is set incorrectly.

VCB001

Explanation

A VCB code passed to the verifiable control block free storage manager was not valid (detected on obtain function only).

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VCB002

Explanation

The address passed to the verifiable control block free storage manager was not valid (detected on release function only) because of one of these reasons:

- The block address exceeds the size of the system execution space.
- The block is not contained in a verifiable control block free storage page.
- The address of the block is not properly aligned.
- The block already resides on a verifiable control block free storage available block list.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VCB003

Explanation

Verifiable control block free storage internal damage occurred (detected on release function only) because of one of these reasons:

- The SXSTE was damaged; the VCB code in the SXSTE was destroyed.
- The SXSTE should be on the SUBBK SXSTE list, but it is not.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VCH001

Explanation

(soft) A nonzero return code was received from HCPPTZMT. An internal programming error caused HCPVCH to pass data in the PTTBK to HCPPTZMT. That module rejected the data as incorrect.

User response

Examine the SNAPDATA in the soft abend. The SNAPDATA parameter list contains the address of the HCPPTTBK that was passed to HCPPTZMT. It also contains the address of the DSLBK that HCPVCH was processing when it called HCPPTTBK. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VCR001

Explanation

HCPVCR issues this abend if the console task chain (RDEVCON) has been corrupted after translating a read for a SNA CCS TTY user.

User response

A trace table entry (code x'160C') has been written that lists the VMDBK executing at the time of the ABEND. R1 contains the address of the head of the console task chain (RDEVCON). R6 contains the address of the console task (COMBK) that was built to initiate a read. If the read had not completed successfully, R1 and R6 would be equal. If the read had completed successfully, the COMCNTL bit would have been set in the console task pointed to by R1. Since neither of these conditions are true, the head of the console task chain has been corrupted. Examine the storage pointed to by R1 and ensure this is a valid COMBK address. Examine the contents of these registers and the information contained in the trace table entry to determine why the console task chain has been corrupted.

VCS001

Explanation

HCPVCS issues this abend if the console task (COMBK) address it is processing does not represent a write operation for a SNA CCS TTY user.

User response

R5 contains the address of the console task that was found to not be a console write. R8 contains the RDEV address for the console that is to be written to. Examine these registers to determine what type of console task was being processed.

VCS002

Explanation

HCPVCS issues this abend if there are more than two console read tasks active or queued for a SNA CCS TTY user.

User response

R8 contains the address of the RDEV for the SNA CCS TTY console. The RDEV in turn points to the address of the SNABK that also represents the console. Examine the SNABK to determine what reads were queued. A maximum of two reads should exist; one representing a CP read and the other representing a virtual machine read.

VCX001

Explanation

(soft) HCPVCX issues this abend if an inter-user communication vehicle (IUCV) path for SNA console communication services (SNA CCS) is found to be incorrect. A path is found to be incorrect if HCPVCX receives a IUCV return code indicating an incorrect IUCV path ID when issuing an IUCV function specifying this path.

User response

R1 contains the address of the IPARML/IXBLK. The return code is contained in the IPRCODE field of the IPARML. The path ID of the incorrect path is contained in the IPPATHID field of the IPARML. Determine why this path is incorrect. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for more information on IUCV.

VCX002

Explanation

(soft) HCPVCX issues this abend if the SNA console communication services (SNA CCS) control block structure is found to be incorrect.

User response

A trace table entry (code x'1615') has been written that lists the VMDBK executing at the time of the abend, and the address of the last instruction executed before calling the abend routine. This abend indicates that either the VSMBK chain is incorrect, or the SNABK or RDEV addresses could not be found (that is, either the VSMNEXT pointer was found to be zero unexpectedly, or the SNABK or RDEV addresses were found to be zero).

Examine the contents of these registers, and the information contained in the trace table entry, to determine where in the code the control block structure was found to be incorrect and why the control block structure is incorrect.

VDB001

Explanation

HCPVDB was entered with an incorrect base VMDBK address.

User response

Check the value of R11 at the entry to the module. If it is a valid VMDBK, see if the VMDBASE pointer is valid. Check the caller to see why it called with a nonbase VMDBK.

VDB002

Explanation

The RDEV lock was not held at entry to HCPVDB.

User response

Check for a valid RDEV address in R8. Validate the contents of the RDEVLOCK. Insure that the caller does obtain the RDEV lock prior to calling HCPVDB.

VDB003

Explanation

HCPVDB was entered with the CHCBK lock not held.

User response

Make sure the VMDCHC pointer is valid and the lock word contents are valid. If these are valid, check the calling module to see if it is acquiring the CHCBK lock.

VDB004

Explanation

During a DETACH or LOGOFF process, HCPVDBDL was entered with the VDEV lock not held.

User response

Check R6 to see if it is pointing to a valid VDEV. See if VDEVLOCK has valid lock word contents. If these are valid, check the calling module to see if it is acquiring the VDEV lock.

VDB005

Explanation

During a DETACH or LOGOFF process, HCPVDBDL was entered while the virtual device was still active or was in a suspended state.

User response

Check to see that R6 points to a valid VDEV. Then check to see if the VDEVSTAT bits indicating activity are on. The RESET path in HCPRESDD should have quiesced activity on the device before allowing it to be detached. Check this path to see why activity was not quiesced.

VDB006

Explanation

During an ATTACH, DEFINE, LOGON or LINK process, the module HCPVDB was entered through a request to define a duplicate device number.

User response

Check R1 to see what device number the caller requested. The previous modules in the ATTACH, LINK, DEFINE path should have checked this condition. Verify that the modules prior to HCPVDB in the ATTACH, LINK, DEFINE command processing paths do not have existing devices with the same numbers.

VDB007

Explanation

During ATTACH, DEFINE, LOGON or LINK command processing the module HCPVDB was entered through a request to define a duplicate subchannel number.

User response

Check R0 to see which subchannel number the caller requested. The previous modules in the ATTACH, LINK, DEFINE command processing paths should have checked to insure that this condition would not occur.

VDB008

Explanation

CP attempted to delete an adapter facility VDEV with an incorrect input VDEV type.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VDB009

Explanation

CP attempted to delete an adapter facility VDEV, but was unable to quiesce the device prior to its deletion.

User response

User response: See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VDE001

Explanation

(soft) An incorrect internal error code was received by HCPVDERR while processing a DIAGNOSE code X'94'.

The error code was incorrect for one of the following reasons: the value of the error code was 0, or the value was larger than the maximum allowed, or the error code was unexpected while processing a diagnose code.

User response

Examine the SNAPDATA in the soft abend. The SNAPDATA parameter list contains the input error value and the maximum allowable value. Determine which module called HCPVDERR; this is recorded in the soft abend dump. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VDE002

Explanation

(soft) An incorrect internal error code was received by HCPVDERR while processing a VMDUMP command.

The error code was incorrect for one of the following reasons:

- The value of the error code was 0
- The value was larger than the maximum allowed
- The error code was unexpected while processing a VMDUMP command (as opposed to while processing DIAGNOSE code X'94').

User response

Examine the SNAPDATA in the soft abend. The SNAPDATA parameter list contains the input error value and the maximum allowable value. Determine

which module called HCPVDERR; this is recorded in the soft abend dump. With this information, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VDG001

Explanation

(soft) While processing a DIAGNOSE code X'0D4' instruction requesting an alternate ID to be set, CP found the alternate ID synchronization bits (field VMDALSYN in HCPVMDBK) in an incorrect state.

System action continues after the abend, and a return code of 16 is passed back to the issuer of the diagnose code in the RX register.

User response

Examine the internal trace table and storage dump to determine how the VMDALSYN was set incorrectly. The two incorrect states are:

- VMDALD4O off and VMDALD4L on
- VMDALD4O on and VMDALAPO on

VDI001

Explanation

(soft) When the module HCPVDI calculated the count of I/O requests active for a virtual machine, the new value would have exceeded the number of devices defined for that machine.

User response

If VMDIOACT contains a value equal to VMDDEVCT, it is likely that the routines that maintain the active I/O count are defective. Either the field was not decreased when appropriate, or it was increased more than once per I/O request. If VMDIOACT exceeds VMDDEVCT, it is likely that the correct value was accidentally overlaid. Examine the VDEV blocks for the virtual machine to determine how many requests were active at the time of the dump. Examine the system trace table to determine when the active requests were started, and what other requests became inactive during the interval. Analyze the modules that initiated the requests to insure that the field VMDIOACT was properly increased. (Module HCPVDI is among these modules.) Analyze the modules that received control from the real I/O supervisor when the system terminated (as the field IORIRA indicated in the appropriate IORBK) to ensure that VMDIOACT was properly decreased. If the modules that update the field VMDIOACT contain correct logic, try to determine how the data in the field was destroyed.

VFM001

Explanation

The conditions that cause this abend to occur are:

- The number of doublewords of virtual free storage requested exceeded the maximum allowable request size.
- A control block of an incorrect length was returned to CP's Virtual Free Storage Manager.

User response

Depending upon the reason for this abend, take one of the following respective actions:

- Examine the SAVBK to determine the CP module obtaining the storage. Check for an error in calculating the size of the block, or for a modification to a stored block size for variable size blocks.
- At the time of the abend, General Purpose Register (GPR) 0 contains what should be a valid request size in doublewords. It (GPR0) was obtained from the returned control block's header record. The control block header is addressed by AR5/GPR5. Examine the control block header to determine why the length is incorrect. It may be that the header has been overlaid. If this is the case, the user of the control block immediately in front of the control block being returned probably caused the error.

GPR14 points to the address (in HCPVFM) where CP detected the error.

VFM002

Explanation

The conditions that cause this abend to occur are:

- The count of doublewords in use (PCTDWUSE) for the PCTE of the control block being returned has gone negative.
- The PCTE of the control block being returned was not chained on the SUBBK queue and CP expected it to be chained there.

User response

Depending upon the reason for this abend, take one of the following respective actions:

- At the time of the abend the PCTE is addressed by AR9/GPR9. Examine the PCTE to determine why the count of doublewords went negative.

- At the time of the abend the PCTE is addressed by AR9/GPR9, and the SUBBK is addressed by AR5/GPR5. Examine the SUBBK, PCTE, and the PCTE queue (anchored at SUBANCH) to determine why the queue has become damaged.

GPR14 points to the address (in HCPVFM) where CP detected the error.

VFM003

Explanation

The control block being returned to the Virtual Free Storage Manager has had its header or trailer (or both) overlaid.

User response

If CP detected the storage overlay in the control block header, the header is addressed by AR5/GPR5. If the overlay was in the trailer, the trailer is addressed by AR9/GPR9. Examine the header and trailer to determine which was overlaid. If the header was overlaid, the user of the free storage immediately in front of the control block being returned probably caused the error. If the trailer was overlaid, the user of the control block being returned probably caused the error. Examine the virtual free storage trace entries and SAVBKs to determine the users of these control blocks. Then check to see if that module is using virtual free storage in excess of the size of the block.

GPR14 points to the address (in HCPVFM) where CP detected the error.

VFM004

Explanation

The conditions that cause this abend to occur are:

- Virtual Free Storage address space is exhausted.
- Virtual Free Storage address space was never initialized.

User response

Depending upon the reason for this abend, take one of the following respective actions:

- Examine the trace table for a possible loop condition that involves obtaining virtual free storage or any condition involving an excessive number of virtual free storage requests.
- Examine the SAVBK to determine which CP task is attempting to obtain virtual free storage before the Virtual Free Storage address space is initialized.

GPR14 points to the address (in HCPVFM) where CP detected the error.

VII001

Explanation

(soft) HCPVIID3 or HCPVIIDB was called to remove a VDEV block from the I/O interrupt queue for a 370 virtual machine. However, no action was performed because the VDEV was not found on the interrupt queue.

User response

A previous call to remove the same VDEV block from the interrupt queue may have caused this problem. Prior to this call the caller may not have set to zero the pending I/O interrupt field in the VDEV block (VDEVPIOR) to indicate that the device is no longer interrupt pending. A subsequent test of field (VDEVPIOR) will yield a nonzero value and cause a call to be made again to either HCPVIID3 or HCPVIIDB to remove the same VDEV block from the queue. The virtual machine continues to run.

VII002

Explanation

(soft) HCPVIIQ3 was called to add a VDEV block to the I/O interrupt queue on a 370 virtual machine. However, no action was performed because the VDEV was already found to be on the interrupt queue.

User response

The caller may not have checked the pending I/O interrupt field in the VDEV block (VDEVPIOR) prior to calling HCPVIIQ3. A nonzero value indicates the device is interrupt-pending and already on the I/O interrupt queue. The virtual machine continues to run.

VIP004

Explanation

(soft) A bad page was discovered during pseudo page fault processing. This condition was discovered when returning from an HCPTRANS macro invocation.

User response

Check the storage dump to see why the VMDPPFCT field became nagative.

VIP005

Explanation

(soft) A pseudo page fault was being processed for a guest when CP discovered the control block representing that event was missing. The control block is HCPPPFBK.

User response

Check the storage dump and determine why the addressing exception occurred on the second translation and not the first.

VIR011

Explanation

The I/O request/response block for an interrupt contains an incorrect virtual device block address. HCPVIRPT recognizes this situation while the field IORVDEV is zero. It cannot notify the virtual machine of the interrupt because it cannot generate the correct interrupt data.

User response

Examine the storage management prefix to the IORBK to determine what routine allocated the IORBK. Examine the system trace table to determine when and where the IORBK was allocated and what operation was in progress. If the routine that allocated the IORBK did not store the VDEV address, correct that module. Otherwise, try to determine how the IORVDEV field was set to zeros.

VIR013

Explanation

The I/O request/response block for a simulated unsolicited interrupt does not own the lock for its virtual device. HCPVIRPT recognizes this situation while all of the following are true:

- The flag IORCFLG.IORUNSL is on
- The field IORRDEV is zero
- The VDEV field VDEVLOCK does not equal the value in R11 when HCPVIRPT is entered.

User response

Examine the storage management prefix to the IORBK to determine what routine allocated the IORBK. Examine the system trace table to determine when and where the IORBK was allocated and what operation was in progress. If the IORBK was allocated as the result of a real unsolicited interrupt, correct the module to store the RDEV address. If the IORBK was allocated when the VDEV lock was not owned, correct the module to acquire the VDEV lock. Otherwise, try to determine how the IORRDEV or VDEVLOCK fields were modified.

VIR014

Explanation

Module HCPVIRPT was entered to process a simulated solicited interrupt, but the virtual device was not busy, clear function active, or halt function active. It is impossible for a solicited interrupt to occur on a real device in these circumstances. HCPVIRPT recognizes this situation when the flag IORCFLG.IORUNSL is off, the field IORRDEV is zero, and the VDEVSTAT flags VDEVCLRF, VDEVBUSY, and VDEVHLTF are all off.

User response

Examine the storage management prefix to the IORBK to determine what routine allocated the IORBK. Examine the system trace table to determine when and where the IORBK was allocated and what operation was in progress. If the IORBK was allocated as the result of a real solicited interrupt, correct the module to store the RDEV address. If the module is erroneously turning off bits in the field VDEVSTAT, correct the error. Otherwise, try to determine how the IORRDEV or VDEVSTAT fields were modified.

VIR015

Explanation

(soft) When module HCPVIR examined the count of I/O requests active for a virtual machine, it was not greater than zero, even though an I/O request was just ending.

User response

If VMDIOACT contains zero, it is probable that the routines that maintain the active I/O count are defective. Either they are not increasing the field when appropriate, or they are decreasing it more than once per I/O request.

If VMDIOACT contains a negative number, it is likely that the correct value was accidentally overlaid. Examine the VDEV blocks for the virtual machine to determine how many had requests active at the time of the dump. Examine the system trace table to determine when the active requests were started, and what other requests became inactive during the interval. Analyze the modules that initiated the requests to ensure that the field VMDIOACT was properly decreased (module HCPVIR is among these modules). If the modules that update field VMDIOACT

contain correct logic, try to determine how the data in the field was destroyed.

VIT001

Explanation

A computation to subtract one from field RDEVPGCT in the RDEV block has resulted in a negative value.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VIT016

Explanation

(soft) Field VDEVPIOR in the VDEV block is non-zero, indicating a pending I/O interrupt IORBK is waiting to be processed when module HCPVIT is reflecting an unsolicited interrupt to a guest. VDEVPIOR should be zero because CP has just given the guest a CC 1 on diagnose I/O that the guest issued in response to a unit check on previous I/O. CP reflected the CC 1 because of the unsolicited interrupt that HCPVIT is now handling.

User response

R6 should point to the VDEV where the unit check occurred. VDEVUIOR points to the unsolicited IORBK after the unit check. VDEVPIOR points to the status pending IORBK.

VIT111

Explanation

(soft) Field IORSCNT (sense byte count) in the IORBK is determined not to be valid when HCPVIT is extracting unsolicited interrupt data from a merged status IORBK. IORSCNT is not valid when it contains a negative value or a value greater than the maximum amount of sense data that can be held in field IORSDATA.

User response

The SAVBK chain anchored in IORSAVE indicates the environment at the time of the failure. VDEVSIOR addresses the IORBK containing the incorrect IORSCNT value. (IORSCNT must be a positive value not greater than the size of the IORSDATA field.) Examine the CP trace table to determine which routine allocated the sense IORBK and provided the sense data. Correct the routine to also provide a valid count of the sense bytes.

VIX001

Explanation

(soft) HCPVIXCL was called on a virtual configuration that has no SCABK.

User response

The System Control Area (SCA) should exist for external interrupt processing. The register normally contains the address of the SCABK, but has been overlaid in this case. The dump may reveal how SCABK addressability was lost. Examine the VMDBK to see if VMDISCAA (the the pointer to the SCABK) was overlaid.

VLC001

Explanation

(soft) An internal processing error occurred while assigning or removing a virtual switch controller. An incorrect port number was specified by z/VM for a virtual switch UPLINK port.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VLC002

Explanation

(soft) An internal processing error occurred while managing the configuration of a VSWITCH UPLINK port connection. Register 1 contains an internal error code associated with the reason for the error. Due to this abend, the functionally of the virtual switch is uncertain.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VLE001

Explanation

(soft) An internal processing error occurred while managing a network device for a virtual switch uplink port. Register 1 contains an internal error location ID that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VLG001

Explanation

(soft) An internal processing error occurred while managing a network device for a virtual switch uplink port. Register 1 contains an internal error location ID that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VLI001

Explanation

(soft) An internal processing error occurred while activating or deactivating a network device for a virtual switch uplink port. Register 1 contains an internal error location ID that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VLM001

Explanation

(soft) An internal processing error occurred while activating or deactivating an Enhanced QDIO Facility device for a virtual switch uplink port. Register 1 contains an internal error location ID that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VMC001

Explanation

(soft) The dispatched user cannot obtain the VMCF lock because it was destroyed.

User response

This abend indicates a software error. In VMCF processing, the dispatched user should always be able to obtain his own VMCF lock. Only logoff processing can destroy this lock. Examine the status of the user, and examine VMCF usage prior to the abend.

VMC002

Explanation

(soft) A VMCF target counter for inbound messages has been corrupted.

User response

This abend indicates a software error. In VMCF processing, the counter reflects how many IDENTIFY, SMSG, and send transactions are currently queued for processing in a target virtual machine. Examine VMCF data contained in the soft abend dump and prior VMCF usage.

VME001

Explanation

(soft) An attempt was made to present an unrecognized VM event class or type for delivery via the *VMEVENT IUCV system service. System execution will continue.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VMN003

Explanation

Module HCPVMN was entered when the CHCBK lock was not active.

User response

R5 points to a CHCBK. Field CHCLOWNR has the address of the current owner of the CHCBK lock.

VMN004

Explanation

Module HCPVMN was entered while the virtual device lock was not held.

User response

R6 points to the VDEV. Field VDEVLOWN has the address of the current owner of the VDEV lock.

VMN005

Explanation

Module HCPVMN was entered while the virtual device was either active or suspended.

User response

Verify register 6 contains the address of a valid VDEV. Check the activity bits in VDEVSTAT. The RESET path in HCPRESDD should have quiesced before allowing the device to DETACH. Check this path to see why it was not quiesced.

VMS001

Explanation

HCPHPCCR has found the PTE to be valid after it was previously found to be incorrect.

User response

Examine the dump to determine the state of the PTE. Examine the code to determine why the state has changed or if the state is not being tested correctly.

VMS003

Explanation

An attempt to decrease the lock count in the PTE has caused it to go negative.

User response

Inspect the code and the trace table to determine why the PTE page lock count is incorrect.

VMS007

Explanation

While locking or unlocking a page, the function attempted to change the ASCIACCT count for the address space. However:

- Increasing the count would have made it wrap to zero.
- Decreasing the count would have made it negative.

User response

Inspect the process of page translation and of locking and unlocking pages. Examine the dump to determine when the count was last changed. Check for improper operations on the locked page count or alteration of the ASCBK.

VMU001

Explanation

The input buffer used to call HCPHLPAS (the HLPBK) for predicting a guest's total CPU usage for the next 2-second interval has been corrupted. This control block is obtained at logon time by HCPBVMBK and initialized there. After it is initialized, the HLPBK is maintained by the calls to HCPHLPAS.

User response

The guest's origin VMUBK points at its HLPBK. Determine what in the HLPBK is corrupted by examining the HLPBK, which register 1 should point to at the time of the abend.

VMU002

Explanation

Storage is allocated at system initialization time to hold two arrays of pointers to guest origin VMUBKs. These arrays are built periodically just before dispatch vector rebalancing occurs. The two arrays are in contiguous storage and are filled in opposite directions. That is, the ordered array starts at the low address end of the allocated storage (RCCVMUOA) and is filled downward. The unordered array is filled starting at the high address end of the storage (RCCVMU0A) and is filled upward. Because of the limit on the number of guests (MAXUDFLT), these arrays

should never be too large to meet. If they do, this abend occurs.

User response

First, determine how many users are logged on. Determine this by chaining through the global cyclic list and/or by looking at the value in the SYSUSRS field in SYSCM. If this system is a member of an SSI cluster, it is possible there is an inordinate number of VMDBKs for AT commands from other members of the SSI cluster. The VMUBKs of AT command VMDBKs are also included in the arrays and large numbers of those could cause this problem. If that is the case, determine why there are so many unprocessed AT commands. Finally, if too many VMDBKs do not seem to be the problem, examine the CPU usage prediction code in HCPVMU for logic or coding errors.

VNS001

Explanation

(soft) An internal error occurred while processing datagrams on a Virtual Switch network. Register 1 contains an internal error location ID that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VOD001

Explanation

(soft) When module HCPVOD calculated the count of I/O requests active for a virtual machine, the new value would have exceeded the number of devices defined for that machine.

User response

Examine the dump. If VMDIOACT contains a value equal to VMDDEVCT, it is likely that the routines that maintain the active I/O count are defective: either they are not decreasing the field when appropriate, or they are increasing it more than once per I/O request. If VMDIOACT exceeds VMDDEVCT, it is likely that the correct value was accidentally overlaid. Examine the VDEV blocks for the virtual machine to determine how many had requests active at the time of the dump. Examine the system trace table to determine when the active requests were started, and what other requests became inactive during the interval. Analyze the modules that received control from the real I/O supervisor on request termination (as indicated by field IORIRA in the appropriate IORBK) to ensure that VMDIOACT was properly decreased. If the modules that update field VMDIOACT contain correct logic, attempt to determine how the data in the field was destroyed.

VOP001

Explanation

(soft) HCPVINOP called HCPVOPFM or HCPVOPSM to fetch or store an address. This address is translated based on the guest PSW. The guest PSW was a BC-mode PSW, or indicated access register mode, which HCPVOPFM and HCPVOPSM do not support.

User response

Determine why the invoker (R14) of HCPVINOP requested fetching or storing from an address while the guest PSW is a BC-mode PSW, or indicates the guest is in access register mode.

VOP002

Explanation

(soft) The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VOP003

Explanation

The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VOP004

Explanation

(soft) VOP was called for FETCH/STORE with EXIT and the EXIT returns to VOP with something other than 0 or 1 in register 15. A 0 indicates to VOP to store data from the CP buffer back into guest storage. A 1 indicates not to store data back into storage. Any other value causes this abend.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VOP005

Explanation

(soft) The SAC/SPIE exit is invoked for a storage reference made by the EXIT.

User response

Determine what storage reference the invoker (R14) of HCPVINOP made that caused an exception to occur.

VOU001

Explanation

(soft) This abend is issued by the HCPVOU module. The module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VPD001

Explanation

(soft) The module that issued this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VPT001

Explanation

(soft) The target of a simulated guest IPTE or IESBE instruction was located in a host-protected page.

User response

Examine the SIEINST to determine whether an IPTE or IESBE instruction was being simulated. Then investigate why the simulation routine determined that a host-protected page was the target of the instruction.

VQA001

Explanation

(soft) While attempting to extract data from a QDIO output queue, an incorrect buffer index (QIONXTRY) was found, or the guest SLSB was not locked in host storage.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQA002

Explanation

(soft) It was not possible to lock the guest SLSB for the output queue in host storage.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQA003

Explanation

(soft) While attempting to install data into a QDIO input queue, an incorrect buffer index (QIONXTRY) was found, or the guest SLSB was not locked in host storage.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQA004

Explanation

(soft) It was not possible to lock the guest SLSB for the input queue in host storage.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQE001

Explanation

(soft) A QEBSM request was made to set the state of an OSA or HiperSockets (format 1 or 2) QDIO buffer, but the request failed due to an error with z/VM's internal representation of the QDIO queues. Register 1 contains the location ID of logic that detected the problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQE002

Explanation

(soft) A QEBSM request was made to set the state of an FCP (format 1) QDIO buffer, but the request failed due to an error with z/VM's internal representation of the QDIO queues. Register 1 contains the location ID of logic that detected the problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQE003

Explanation

(soft) A QEBSM request was made to extract or set a QDIO buffer, but the request failed due to an incorrect queue format. This may be due to an incorrect or corrupted internal control block used to map a QDIO queue.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQE004

Explanation

(soft) A partial execution interception occurred for an SQBS instruction with an incorrect reason code.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQF001

Explanation

(soft) A QEBSM request was made to extract the state of a QDIO OSA or HiperSockets (format 0 and 2) buffer, but the request failed due to an error with z/VM's internal representation of the QDIO queues. Register 1 contains the location ID of logic that detected the problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQF002

Explanation

(soft) A QEBSM request was made to extract the state of a QDIO FCP (format 1) buffer, but the request failed due to an error with z/VM's internal representation of

the QDIO queues. Register 1 contains the location ID of logic that detected the problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQF003

Explanation

(soft) A QEBSM request was made to extract or set a QDIO buffer, but the request failed due to an incorrect queue format. This may be due to an incorrect or corrupted internal control block used to map a QDIO queue.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQF004

Explanation

(soft) A partial execution interception occurred for an EQBS instruction with an incorrect reason code.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQF005

Explanation

(soft) An internal processing error occurred. Register 1 contains the failing location ID where the problem was detected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQG001

Explanation

(soft) A failure occurred while enabling a subchannel for QDIO Enhanced Buffer State Management (QEBSM). Register 1 contains the hardware failure code and register 2 contains the subchannel token being registered. Once this abend occurs, QEBSM is disabled for all future QDIO connections until z/VM is IPLed.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQG002

Explanation

(soft) A QEBSM request was made to set the state of a QDIO buffer, but the request failed due to an error with z/VM's internal representation of the QDIO queues. Register 1 contains the location ID of logic that detected the problem.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQG003

Explanation

(soft) An unexpected QDIO queue state was encountered while processing asynchronous QDIO completion events. The unexpected state is stored in R1.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQG004

Explanation

(soft) A partial execution interception occurred for a SIGA instruction with an invalid reason code.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQH001

Explanation

(soft) An internal processing error occurred while sending (or receiving) data through an Enhanced QDIO Facility device. Register 1 contains an internal error location ID that indicates the reason for the ABEND.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQO001

Explanation

(soft) CP has detected an internal error while processing a request to synchronize a virtual machine's Queued Direct I/O (QDIO) queues with CP's internal copy for a specific subchannel. The Signal Adapter (SIGA) Instruction Function Code specified in register zero is not valid or supported.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQP001

Explanation

(soft) A problem was encountered when trying to synchronize a virtual machine's QDIO data queues with CP's version of the queues. The SIGA accumulator logic detected that the pending request counter has become negative or overflowed while processing a SIGA request to synchronize the queues. It is possible that a few SIGA requests issued by the virtual machine have been lost.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQP002

Explanation

(soft) CP has detected an internal error while synchronizing a specific virtual machine's QDIO data queue. The synchronization request failed due to an error with CP's internal representation of the virtual machine's QDIO data queue.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQP003

Explanation

(soft) The hardware adapter returned a QDIO request ID which CP no longer has any knowledge of its existence. Either the hardware is broken and it returned an erroneous ID, or CP somehow lost track of an active I/O request.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQP004

Explanation

(soft) The hardware adapter or CP posted completion status for a multiple Storage Block Address List (SBAL) I/O request prior to CP giving the adapter all the SBALs associated with the request. Either the adapter or CP was premature in its attempt to remove the multiple SBAL request from the active I/O request queue.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQQ002

Explanation

(soft) Issued by the HCPVQQ module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQQ003

Explanation

(soft) Issued by the HCPVQQ module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQQ004

Explanation

(soft) An internal processing error occurred. Register 1 will contain an internal error code for the actual reason.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQQ005

Explanation

(soft) An unexpected QDIO queue entry format was found while processing an update to a virtual machine's QDIO queues.

User response

t001

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation that you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQS001

Explanation

(soft) An internal processing error occurred during a data transfer of a VSWITCH UPLINK port connection. Register 1 will contain an internal error code for the actual reason. The UPLINK port's network connection is terminated to allow either another configured backup port to take over or the failing device be restarted.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQT002

Explanation

(soft) A request was made by a virtual machine to create Enhanced QDIO queues for a specific subchannel, but the subchannel is not an Enhanced QDIO capable device.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation that you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQT003

Explanation

(soft) CP detected an error while trying to delete a Storage Block Address List for a QDIO data queue.

Either the QDIO buffer number to be deleted or the state in the SLSB entry was not valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQT004

Explanation

(soft) CP was attempting to create or delete a guest shadow queue and discovered a negative subchannel counter value. The subchannel counter value cannot be negative. The integrity of the counter is essential because it is used by CP to enable SIGA assist for a guest.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQT005

Explanation

(soft) CP was initializing QDIO queue structures for a virtual network adapter, and discovered an improperly formed virtual OSA device. After recording ABEND information in a system dump, CP terminates the queue initialization with a reason code 004 (unsupported queue format).

User response

Restart the associated virtual adapter using the procedure appropriate to the software running in this virtual machine. For example, if the failing device is part of the TCPIP virtual machine configuration, see the appropriate user guide for your release of the TCP/IP Product.

VQU002

Explanation

(soft) Issued by the HCPVQU module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VQU004

Explanation

(soft) Issued by the HCPVQU module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

VTX001

Explanation

(soft) The module (HCPVTX) that issues this abend is distributed as object code only; therefore, no source program materials are available.

This module supports virtual machine use of transactional execution. An inconsistency was detected between VMDITDBA and SIEITDBA. General registers 3 and 4, respectively, contain the values of those fields when the error was detected. The system attempts to circumvent the error and continue execution.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WAT001

Explanation

Issued by the HCPWAT module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the

documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WAT002

Explanation

Issued by the HCPWAT module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WAT003

Explanation

(soft) Issued by the HCPWAT module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WHI001

Explanation

Issued by the HCPWHI module. This module is distributed as object code only; therefore, no source program materials are available.

HCPHLPPA was called to predict either CPU consumption or excess capacity by HCPWHITE, but the prediction was unsuccessful.

User response

Examine the HLPBK, to which Register 1 points at the time of the abend. The HLPBK contains the set of samples used to make the prediction. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WLB001

Explanation

The module (HCPWLB) that issues this abend is distributed as object code only; therefore, no source program materials are available.

This module supports the virtual SIE function. A vSIE VMDBK was expected for the dispatched guest but was not found.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem.

WLB002

Explanation

The module (HCPWLB) that issues this abend is distributed as object code only; therefore, no source program materials are available.

This module supports the virtual SIE function. Incorrect parameters were presented to an entry point in HCPWLB.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem.

WLB003

Explanation

(soft) The module (HCPWLB) that issues this abend is distributed as object code only; therefore, no source program materials are available.

This module supports the virtual SIE function. An inverse lookup for a shadow table failed to find the table in the shadow-table directory.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem.

WLB004

Explanation

The module (HCPWLB) that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem.

WLG001

Explanation

The module (HCPWLG) that issues this abend is distributed as object code only; therefore, no source program materials are available.

This module supports the virtual SIE function. A vSIE VMDBK was expected for the dispatched guest but was not found.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem.

WLG002

Explanation

The module (HCPWLG) that issues this abend is distributed as object code only; therefore, no source program materials are available.

This module supports the virtual SIE function. Incorrect parameters were presented to an entry point in HCPWLG.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem.

WLG003

Explanation

(soft) The module (HCPWLG) that issues this abend is distributed as object code only; therefore, no source program materials are available.

This module supports the virtual SIE function. The count of entries in use in a shadow-table directory is inconsistent with the states of the entries.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem.

WLG004

Explanation

(soft) The module (HCPWLG) that issues this abend is distributed as object code only; therefore, no source program materials are available.

This module supports the virtual SIE function. The attachment count in a shadow-table directory entry does not match the actual number of attachments found.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem.

WRP002

Explanation

After the system terminated and entered a wait state without taking a dump, the operator's console restart key forced a CP dump to be taken.

User response

None.

WRP003

Explanation

The machine check analysis routine issued a return code indicating unexpected values were found. The automatic system restart fails and the system enters a disabled wait state (wait state code = 961).

User response

Perform a load-clear or load-normal from the hardware console to IPL the system. Examine the dump to determine the cause of the problem.

WRS001

Explanation

HCPWRSST was processing the HCPSFNDX table when an error occurred. Possible causes for the error include:

- The system cannot get enough contiguous free storage to build the HCPSFNDX table.
- Problems occurred when associating the HCPSFNDX page with its system cirutal address.
- Problems occurred when disassociating the HCPSFNDX page from its system virtual address.

User response

If the first condition occurred, examine the frame table to determine the reason for storage fragmentation.

For the other conditions, examing the DASD to determine the cause of the error.

WRU001

Explanation

(soft) The module (HCPWRU) that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem.

WRU010

Explanation

Issued by the HCPWRU module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WRU020

Explanation

(soft) Issued by the HCPWRU module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WRW002

Explanation

(soft) HCPWRW, the module that issues this abend, is distributed object-code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WSA001

Explanation

(soft) Issued by the HCPWSA module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WSI001

Explanation

Issued by the HCPWSI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WSI002

Explanation

(soft) Issued by the HCPWSI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WSI004

Explanation

Issued by the HCPWSI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WSI010

Explanation

Issued by the HCPWSI module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WVS002

Explanation

(soft) Issued by the HCPWVS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WVS003

Explanation

(soft) Issued by the HCPWVS module. This module is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WZD001

Explanation

(soft) The module (HCPWZD) that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WZD002

Explanation

(soft) The module (HCPWZD) that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WZD003

Explanation

(soft) The module (HCPWZD) that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

WZD004

Explanation

(soft) The module (HCPWZD) that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XAI001

Explanation

A subchannel became active or suspended while CP was draining status.

User response

Examine the RDEV in R8, the VDEV in R6, and see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the additional documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XAT001

Explanation

An unrecoverable error occurred during processing of the CP AT command. Either the command data cannot be found or an unrecognized command return code was returned to the source system by the target system.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XAT002

Explanation

An unexpected return code or condition code was received while trying to connect an ARDBK with an AT command VMDBK.

User response

Register 14 can be used to determine the location in HCPXAT where the abend occurred. See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XDL001

Explanation

(soft) HCPXDL received an unexpected request from another member in the SSI cluster.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XDS001

Explanation

(soft) The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XDS002

Explanation

(soft) The module that issues this abend is distributed as object code only; therefore, no source program materials are available.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing

the problem; then contact your IBM Support Center personnel.

XHC001

Explanation

Unable to locate SHPBK.

User response

R1 points to the system name. R14 contains the address where the error was detected. Confirm R1 points to a valid SSI member's system name. If the problem persists, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XHC002

Explanation

Socket error while listening for remote connections.

User response

R15 contains the error code and R14 contains the address where the error was detected. Determine why the socket error occurred. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XHC003

Explanation

Socket error while receiving a remote request.

User response

R15 contains the error code. Determine why the socket error occurred. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XHC004

Explanation

(soft) Request has excess data associated with it.

User response

R7 points to the request QITEM. Determine why this request had additional data sent with it. If the problem persists, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XHC007

Explanation

Error during spool synchronization.

User response

R6 contains the address where the error was detected. Determine what is preventing synchronization. If the problem persists, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XHE004

Explanation

(soft) An unknown function or unexpected response was received.

User response

R1 points to the QITEM with anomalous data. Determine why the QITEM is out of the ordinary. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XLE001

Explanation

The HCPXLE module received control from HCPXLF when it discovered an ECKD™ device. When HCPXLELI received control, the link mode indexer, passed from HCPLND, had a value that was not a multiple of four or that was larger than the largest value expected.

User response

If you have local modifications to HCPLND, examine them carefully. Otherwise, note all recent updates to HCPLND and see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on

gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XLF001

Explanation

The HCPXLF module received control from HCPLND with an incorrect link mode indexer. When HCPXLFLI received control, the indexer had a value that was not a multiple of four or that was larger than the largest value expected.

User response

If you have local modifications to HCPLND, examine them carefully. Otherwise, note all recent updates to HCPLND and see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XLG004

Explanation

The HCPXLG module received control and could not locate the CSE system table, HCPSYSTB.

User response

Make sure that the HCPSYS module (which contains the CSE system table) is properly assembled and included in the CP load list when your CP nucleus is generated.

When this is true, rebuild the CP nucleus and restart the system.

XLK001

Explanation

A call to HCPXLK was made to release or destroy a lock and failed for one of the following reasons:

- The lock was not held.
- The lock was not held by the calling VMDBK.
- The lock had been previously destroyed.

User response

R2 contains the XLKBK address. Examine the save area to determine the calling module. Examine the dump and the trace table to determine what went wrong. If you are unable to resolve the problem, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XLK002

Explanation

A call was made to HCPXLK that referred to an unknown lock type.

User response

R2 contains the XLKBK address. Examine the save area to determine the calling module. Examine the dump and the trace table to determine what went wrong. If you are unable to resolve the problem, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XLK003

Explanation

A call was made to HCPXLK that referred to an unknown lock request.

User response

R2 contains the XLKBK address. Examine the save area to determine the calling module. Examine the dump and the trace table to determine what went wrong. If you are unable to resolve the problem, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XLK004

Explanation

An attempt was made to initialize an XLKBK that has already been initialized.

User response

R2 contains the XLKBK address. Examine the save area to determine the calling module. Examine the dump and the trace table to determine what went wrong. If you are unable to resolve the problem, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing

the problem; then contact your IBM Support Center personnel.

XQY001

Explanation

The address of a remote system's SHPBK has been incorrectly calculated.

User response

R9 contains the computed SHPBK address. Determine why it is not pointing at the correct SHPBK. If the problem persists, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XRC001

Explanation

HCPXRCFN was called to lock or unlock an SPFBK that is not locked or unlocked by this system. The spool file block chains have been destroyed. This was probably caused by an incorrect modification to one of the CP modules that manipulates these queues.

User response

None

XRF005

Explanation

A VDEV for a virtual card reader does not point to a valid VSPBK. All simulated virtual card readers should always have a VSPBK associated with them.

User response

Examine the VDEV pointed to by R6, and the trace table, to see why the VDEV doesn't point to a VSPBK. One possibility is that the device is being detached; if so, the trace table will include an entry returning the storage occupied by the VSPBK to free storage.

XSS001

Explanation

(soft) HCPXSSQR has received an unsupported request from a remote system.

User response

R6 points to the request block. Determine why it contains an unsupported request. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XSS002

Explanation

(soft) HCPXSS has received an unexpected return code from an HCPSOCK call.

User response

R15 contains the return code. Determine what corrective action needs to be taken. If the problem persists, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XSS004

Explanation

(soft) Unexpected error during AT command processing.

User response

Either the user executing AT has logged off or a remote response is not valid. Determine which situation occurred and correct it. If the problem persists, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

XTF001

Explanation

The HCPXTF module or the HCPXTP module has been called to process a spool file block, but it cannot do so. HCPXTFLK could not locate a system in the shared system tables with the same index as the system that originated the spool file block.

User response

None.

XTF002

Explanation

The HCPXTF module or the HCPXTP module has been called to process an spool file block, but it cannot do so. HCPXTFUL was called with the address of an spool file block that was not locked.

User response

None.

XTF003

Explanation

The HCPXTF module or the HCPXTP module has been called to process a spool file block, but it cannot do so. HCPXTFUL was called with the address of a spool file block that was locked by another system.

User response

None.

XTP003

Explanation

The HCPXTF module or the HCPXTP module has been called to process a spool file block, but it cannot do so. HCPXTPCK was called to checkpoint a copy spool file block that is not locked by this system.

User response

None.

XTP004

Explanation

The HCPXTF module or the HCPXTP module has been called to process a spool file block, but it cannot do so. HCPXTPCK could not locate a system in the shared system tables with the same index as the system that originated the spool file block.

User response

None.

XTP005

Explanation

The HCPXTF module or the HCPXTP module has been called to process a spool file block, but it cannot do so. HCPXTPDL was called with the address of a spool file block that was not locked by this system.

User response

None.

XTP006

Explanation

The HCPXTF module or the HCPXTP module has been called to process a spool file block, but it cannot do so. HCPXTPDL could not locate a system in the shared system tables with the same index as the system that originated the spool file block.

User response

None.

XUT001

Explanation

The address of a remote system's SHPBK has been incorrectly calculated.

User response

R9 contains the computed SHPBK address. Determine why it is not pointing at the correct SHPBK. If the problem persists, See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZAC001

Explanation

(soft) Internal CP file system error occurred; the slot number from HCPZIA or HCPZIR was either not valid or unexpected.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZIA001

Explanation

(soft) The return code from HCPZIW indicates that there is a problem with the control block structure for the accessed disk, or the device type is not acceptable.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZIA002

Explanation

Address could not be translated.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZIA003

Explanation

(soft) Lost VDEV block.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZIC001

Explanation

HCPZICLS was called with a parameter that was not valid:

- Disk mode not valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZIC002

Explanation

HCPZICLS was called with one of the following corrupted OFBK data structures:

- Chain of DRBKs from OFBK does not include this one.
- Chain of OFBKs from ACSBK does not include this one.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZIC003

Explanation

DRBSIOPC is a count of pseudo-open requests that has gone negative.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZIO002

Explanation

An FSBK address was encountered that was not valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZIR001

Explanation

A VDEV pointer was encountered that was not valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZIS002

Explanation

Virtual address for FSBK is not valid.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZNL001

Explanation

(soft) HCPZNLBU was called to build a list of numbers. While processing, HCPZNLBU detected an unexpected value in the number list anchor field (CONDVLA). This is an error to HCPZNLBU because two number lists were built, but there was only one field to store the anchor to those lists.

User response

See Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZPP001

Explanation

During system initialization, there was insufficient storage for CP to allocate the CP owned volume list.

User response

Increase the amount of storage on the system. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZSF001

Explanation

During system initialization, there was insufficient storage for CP to allocate the CP owned volume list.

User response

Increase the amount of storage on the system. If you are unable to resolve the problem, see Debugging CP and CP Abend Checklist in *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel.

ZXU001

Explanation

(soft) CP detected an unsupported exit control code in the high order 2 bytes of a return code returned from an exit routine.

User response

Check the trace table to determine which exit and entry point was called. Review the code associated with this entry point to determine the reason for returning an unsupported return code and correct the error. This is an error in customer or vendor written code; contact the author for additional assistance.

Wait States

CP Enabled and Disabled

CP enters both enabled and disabled wait states. CP enters an enabled wait state when it is waiting for work and a disabled wait state when system operation is terminated due to an error or when system shutdown is complete. z/VM service programs, such as HCPLDR, enter a disabled wait state when they terminate.

When CP or one of its service programs enters a disabled wait state, it loads a wait state code into the program status word (PSW). The PSW is either 16 or 32 hexadecimal digits long depending on the architecture mode CP was executing at the time. The PSW will appear on the operator's console, at the end of the wait state message you receive.

For a description of what the disabled wait state code means and suggested actions to take, look up the CP message that has the same number as the wait state code. The format of the disabled wait state PSW is shown below:

000A0000 0000**wwww** (ESA/390)
00020000 00000000 00000000 0000**wwww** (z/Architecture®)

where:

wwww
The disabled wait state code. This disabled wait state code is a CP message number except in the following situations:

1. If the system shutdown was caused by receiving a shutdown signal from the hardware, the hypervisor, or a signaling user, CP loads disabled wait state 0FFF.
2. The operator specifies the wait state code by using the WAIT operand on the SHUTDOWN command. The WAIT operand allows any hex value from 0000 to FFFF.

Common Hardware Wait States

The following are hardware wait states that you might encounter in a z/VM environment. For more information about these wait states, see *z/OS MVS System Codes*.

003
Initial program load (IPL) cannot continue processing because the subchannel for the IPL device is not operational.

00F
For initial program load (IPL), a volume has been loaded that does not contain IPL text.

070
During initial program load (IPL) processing, IPL did not find enough contiguous central storage to satisfy a request for contiguous storage. This is probably a hardware error.

FFx
Non-IBM programs can use wait state codes X'FF0' through X'FFE'.

DDR Automatic Restore

DDR Automatic Restore loads a wait state of zero after a successful restore, otherwise a coded disabled wait state PSW is loaded. The format and description for these codes are as follows:

Table 5. PSW code format

Byte	Description
0	DDRFLAG error indicator, either 00 or 90

Table 5. PSW code format (continued)	
Byte	**Description**
1	DDRFLAG3 error indicators
2 & 3	DDR return code

Note: If the DDRFLAG is nonzero, return the restore without the LOADPARM AUTOxxxx for the error message.

Table 6. DDRFLAG3 Error Indicators	
Indicator	**Description**
X'80'	INPUT definition error
X'40'	OUTPUT definition error
X'20'	SYSPRINT definition error
X'10'	READER error
X'08'	Progress active
X'04'	Indicate small real storage
X'02'	Dumped DASD was larger than target
X'01'	No console device

Table 7. Return code meanings	
Code	**Description**
1	Invalid file name or file not found
2	Error running the program
3	Flagged DASD track
4	Permanent tape or DASD I/O error
20	Error in the decoding routine

Stand-Alone Dump Utility

The stand-alone dump utility communicates to the user through wait state codes in the PSW. For an appropriate response to any particular wait state code and a more detailed explanation of that code, refer to its corresponding message description among the CP messages. The message number is the same as the wait state code.

Return Codes

Refer to *z/VM: CMS and REXX/VM Messages and Codes* for information about return codes produced by APPC/VM VTAM, CMS, CP, and VMSES/E.

Chapter 3. System Messages

Messages are generated by the system in response to either an action or lack of action that has been detected. This section provides complete descriptions of the various z/VM messages a user might receive.

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HCP001E Unknown CP command: *command*.

Explanation:
The command specified is not a valid CP command.

System action:
The command is not executed; system operation continues.

User response:
Reissue the command in full or in the proper abbreviated form.

HCP002E Invalid operand - *operand*

Explanation

One of the command's operands was specified incorrectly.

System action

The command is not executed; system operation continues.

User response

Issue the command again with a valid operand.

Note: The TERMINAL command might return HCP002E related to double-byte character set errors. See the TERMINAL command in the *z/VM: CP Commands and Utilities Reference* for additional information.

HCP003E The variations of this message are explained below.

Explanation

- Invalid option - *option*.
- Invalid option - {command|statement} contains extra option(s) starting with *option*.

You did not correctly specify one of the command's or statement's options, or no option was specified causing the default option of this command, which is not valid, to be assumed. If you specified an option, it was probably:

- Not valid with this particular variation of the command or statement
- A shorter abbreviation than is allowed
- An extra token specified on the command or the statement line
- Rejected by an external security manager (ESM) if you are not authorized to enter the command.

If you see the second version of this message (`{command|statement} contains extra option(s) starting with` *`option`*), you specified more options than a command or statement allows. CP displays the first extra option you specified.

System action

CP does not execute the command or process the statement; system operation continues.

User response

Issue the command again or correct the configuration file and do one of the following:

1. Specify a valid option.
2. Specify the option only once.
3. Do not specify extra options.
4. Contact your system administrator to obtain authorization to use this command.

HCP004E Invalid hexloc - *hexloc*

Explanation

The hexadecimal location data you have supplied is incorrect for one of the following reasons:

- The operand contains nonhexadecimal data.
- The operand is longer than eight characters.
- The hexadecimal location was not aligned to a machine address boundary that the operation requires.

If the operand was not a hexadecimal location, it was misspelled.

System action

The command is not executed; system operation continues.

User response

Reissue the command; correctly specify the operand.

HCP005E Invalid hexdata - *hexdata*

Explanation

The hexadecimal data you have supplied contains one or more of the following:

- Nonhexadecimal characters
- More than eight characters.

System action

The command is not executed; system operation continues.

User response

Reissue the command; specify eight hexadecimal characters or fewer.

HCP006E Invalid device type - {*rdev*|*vdev*|*ldev*}

Explanation

You specified a device type that CP does not recognize as valid or the device type is not valid for the command you entered because of one of these conditions:

COUPLE
You specified a device that is not a CTCA or a part of a virtual HiperSockets adapter (a virtual OSA device type).

CPFMTXA
You specified a device that is not a DASD or a valid DASD type.

DETACH NIC
You specified a device that is not part of a HiperSockets adapter (a virtual OSA device type).

DISABLE
You specified a logical device that is not a display printer or a device that is not a display device.

ENABLE
You specified a device that is not a display device.

FLASHCOPY
You specified a device that is not a DASD.

GIVE
You specified a device that is not a tape.

IPL
You specified a device that is not a DASD, tape, card reader, or CTCA.

ITASK
You specified a device that is not a DASD or tape.

NOTREADY
You specified a device other than a spooled unit record or console device.

QUERY LINKS
You specified a virtual device number that is not a DASD.

QUERY *rdev* STATUS
You specified a device that is not a DASD.

QUERY | SET DASDFW, QUERY | SET NVS (and others)
You specified one of several CP commands which are unsupported for HYPERPAV alias devices.

READY
You specified a virtual channel-to-channel adapter (CTCA) that had not yet been attached to another device using the COUPLE command. You can make the virtual CTCA ready only by entering the COUPLE command.

RESET RESERVE MDISK
You specified a device that is not a minidisk.

REWIND
You specified a device that is not a tape.

SALIPL
You specified a device that is not a DASD.

SET NIC
You specified a device that is not a virtual QDIO data device.

SET DUMP
You specified an invalid device. You must specify a CP-owned DASD. You must not specify an NVMe EDEVICE.

SHUTDOWN REIPL
You specified a device that is not a DASD.

TERMINAL
You specified one of these subcommands:

- An ATTN, TYPE, PROMPT, or SCROLL operand from a non-TTY type terminal
- A HOLD value of OFF on a SNA terminal controlled by a VTAM Service Machine that does not support the TERMINAL HOLD command
- A MORE value other than 50 10 on a SNA terminal controlled by a VTAM Service Machine that does not support the TERMINAL MORE command.

TRSAVE
You specified a device that is not a supported tape device.

XAUTOLOG
You specified a device that is not a graphics device or a graphics device that is not initialized.

System action

Command processing terminates. System operation continues.

User response

Enter the command again and specify a valid, initialized device address.

HCP006W Invalid device type

Explanation

The Stand-Alone Program Loader (SAPL) expected a DASD device but instead detected an invalid device type.

System action

The system enters a wait state (wait state code = 006). The registers will contain the following information:

R0
Device number

R1
Subchannel ID of the device

R2
Control unit ID and model number (low order 3 bytes)

R3
Device ID and model number (low order 3 bytes)

R12
Base register

R13
Work page address

User response

Specify a valid DASD address in the **Device Number** field on the SAPL screen. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

HCP007E Invalid userid - *userid*.

Explanation

The user ID contains more than eight characters, or the user ID is not in the CP directory. If an external security manager (ESM) is installed on your system, you may receive this message if you are not authorized to use this command.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid user ID that is in the directory or contact your system administrator to obtain the necessary authorization.

HCP008E Invalid spoolid - *spoolid*

Explanation

The spool ID specified is not a valid decimal number, is larger than four digits, or is 0.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid spool ID number.

HCP009E The variations of this message are explained below.

Explanation

- Invalid range - *range*
- An invalid address range was specified.
- No disks found among the input virtual device numbers

You did not specify the range of addresses or registers correctly. For example: the ending address you specified is lower than the starting address, you specified too many ranges, there were no devices in a range that met the selection criteria, or a range spans subchannel sets.

System action

CP does not execute the command; system operation continues.

User response

Issue the command again and specify a valid range.

HCP010E The variations of this message are explained below.

— Variation 1 Invalid register - *register*

Explanation

The register you specified is:

- Outside the decimal range of 0 through 15
- Outside the hexadecimal range of 0 through F

System action

The command is not executed. System operation continues.

User response

Specify a valid register and reissue the command.

— Variation 2 Invalid register - not specified

Explanation

The register prefix value was specified (G, for example), but a register number was not specified.

System action

The command is not executed. System operation continues.

User response

Specify a valid register and reissue the command.

HCP011E Invalid device type - *userid vdev*

Explanation

The device type is invalid.

If this is the COUPLE command, the device that was specified is not a virtual channel-to-channel adapter.

If this is a DIAL command, the device specified is not a virtual line.

System action

The command is not executed; system operation continues.

User response

Make sure that the device is the correct type for the function and reissue the command.

HCP012E Invalid PSW - *psw*

Explanation

The program status word (PSW) specified by the STORE command is invalid. For instance, a valid PSW for an XA virtual machine is defined by the architecture to have certain bits off.

System action

System continues operation.

User response

Change the PSW to a valid format for the mode of the virtual machine. If you do not do this, attempting to run the virtual machine with an invalid PSW causes the CP dispatcher to issue an invalid PSW message.

HCP013E Conflicting option - *option*

Explanation

The function required by the given option is incompatible with a previously specified option. This may occur if the same option is specified twice in the same command.

This message is issued if the DCSS parameter is specified on the VMDUMP command for an address space that does not have a saved system associated with it.

System action

The command is not executed; system operation continues.

User response

Reissue the command with valid options.

HCP014E Conflicting operands - *operand1*, *operand2*

Explanation:
The operands indicated in the message are incompatible and cannot be specified together.

System action:
The command is not executed; system operation continues.

User response:
Reissue the command with valid operands.

HCP015E Command not valid before LOGON: *command*

Explanation

A user has attempted to issue either the DIAL or MESSAGE command. During system installation the customer can flag these commands so that they cannot be issued prior to logging on the system. The *command* was the CP command that was issued by the user.

System action

System operation continues.

User response

If the MESSAGE command was issued, the user should logon the system and then reissue the command. There is no alternative action a user can take for the DIAL command.

HCP016E TAG invalid for specified file type

Explanation

The spool file cannot be tagged. The splink (the data buffer) does not leave space for tag information (accounting, dump, and monitor files).

System action

System operation continues.

User response

This is an invalid command. No action is possible.

HCP017E The variations of this message are explained below.

Explanation

- User *userid* has a SECUSER and cannot be observed
- User *userid* is being observed and cannot have a SECUSER

CP issues these messages in response to a CP SET SECUSER or SET OBSERVER command:

- The *userid* designated for observation by a SET OBSERVER command cannot be observed because the user has a secondary user defined.
- The *userid* designated as a primary user by a SET SECUSER command cannot have a secondary user because the user has an observer defined.

System action

The designated observer relationship is not established.

User response

Determine whether the secondary user can relinquish control of the user or can provide the information that direct observation of the user would produce.

Determine whether the observer can relinquish control of the user or can provide the information that being the user's secondary user would produce.

HCP018E Spoolid missing

Explanation

The option or command specified requires that you supply a spool ID, but you did not.

System action

The command is not executed; system operation continues.

User response

Reissue the command with the missing spool ID.

HCP020E Userid missing or invalid

Explanation

You have not supplied a user ID, or the one you specified is invalid.

System action

The command is not executed; system operation continues.

User response

Reissue the command, specifying a valid user ID.

HCP021E The variations of this message are explained below.

Explanation

- A [real] device number was not supplied or it is invalid.
- A Diagnose code was not supplied or it is not valid
- A real PCI function ID was not supplied or it is invalid.

A real device number (*rdev*), a real PCI function ID (*rpfid*), a virtual device number (*vdev*), or a DIAGNOSE code needs to be specified, but was not supplied or is not valid. Valid (real or virtual) device numbers are 1- to 4-digit hexadecimal numbers, although for some commands and utilities a real device number can be a 5-digit hexadecimal value. Valid PCI function IDs are 1- to 8-digit hexadecimal numbers. Valid DIAGNOSE codes are hexadecimal numbers divisible by 4.

System action

The command is not executed; system operation continues.

User response

Enter the command again and specify a valid real or virtual device number, real PCI function ID, or DIAGNOSE code.

HCP022E The variations of this message are explained below.

Explanation

- A virtual device number was not supplied or it was invalid.

- A virtual PCI function ID was not supplied or it is invalid.

The virtual device number (*vdev*) or virtual PCI function ID (*vpfid*) is not present or is not valid. A valid virtual device number has all of the following characteristics:

- Contains no more than four characters
- Is a 1- to 8-digit hexadecimal number
- Is less than or equal to X'FFFF'

A valid virtual PCI function ID contains 1- to 8-digit hexadecimal numbers.

Note: If a previous IPL was successful, but an abbreviation is used for a subsequent invocation of another IPL instead of issuing the entire command, this error message is issued.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid virtual device number or virtual PCI function ID. If you need to re-IPL, do not enter an abbreviation of the IPL command; enter the IPL command in its entirety.

HCP023E VOLID missing or invalid

Explanation

The volume identification (*volid*) is either missing or invalid. A valid volume ID is six characters or less.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid volume identification.

HCP024E The variations of this message are explained below.

Explanation

- {CYLINDERS|PAGES} MISSING OR INVALID
- {Block number|Cylinder|Cylinder or block numbers} missing or invalid

The command requires that the number of blocks, cylinders, or pages be supplied, but this number is missing or is not valid.

- A valid block specification is one that is not larger than the maximum number of blocks available on the device type specified.
- A valid cylinder specification is one that is not larger than the maximum number of cylinders available on the device type specified.
- A valid page specification is one that is not larger than the maximum number of pages available on the device type specified.

System action

The command is not executed. System operation continues.

User response

Reissue the command, specifying the correct number of blocks, cylinders, or pages.

HCP025E Storage missing or invalid

Explanation

There was a syntax error in the storage specification of the SET STORAGE command, the storage specification value for permanent storage is smaller than what is currently in use, or the storage specification value is larger than what is available to the LPAR.

System action

The command or configuration statement is rejected.

User response

If this message is issued as a command response, issue the SET STORAGE command again, using the correct syntax and a storage specification value that is valid for the LPAR's storage configuration. If this message is issued during IPL, see the QUERY STORAGE command to determine the current z/VM real storage configuration. You can also issue a SET STORAGE command to bring STANDBY storage online, up to the STORAGE maximum amount. For more information about using SET STORAGE, see *z/VM: CP Commands and Utilities Reference*.

HCP026E Operand missing or invalid

Explanation

A required operand is missing or invalid. If an external security manager (ESM) is installed on your system,

you may receive this message if you are not authorized to issue the specified operand.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid operand or contact your system administrator to obtain authorization to use this operand.

HCP028E Class missing or invalid

Explanation

The class value is either missing or invalid. A valid class is in the range A through Z or 0 through 9, and one character in length.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid class.

HCP030E Copies missing or invalid

Explanation

The operand that specifies the number of copies is either missing or invalid. An invalid copy specification is a nondecimal number or greater than 255.

System action

The command is not executed; system operation continues.

User response

Reissue the command specifying the required number of copies.

HCP031E Buffer missing or invalid; {FCB too long|extended FCB not supported}

Explanation

One of the following occurred:

- The FCB is too long for the type of printer; it could not be loaded.
- An attempt is made to send an extended FCB (forms control buffer) image to a printer that does not support the extended FCB format.

System action

The system does not load the buffer into the device.

User response

Enter the command again using either a valid buffer name or a buffer that is compatible with the device.

HCP033E Hexloc missing or invalid

Explanation

The hexadecimal location either has been omitted or incorrectly specified. A valid hexadecimal location is one that contains hexadecimal characters, is eight characters or less, and is aligned to a machine address boundary if required by the operation.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid hexadecimal location.

HCP035E Device type missing or invalid

Explanation

The command requires that you enter a valid CP spool device type as an operand, but it is either missing or invalid. Valid device types are READER (Reader, RDR), PRINTER (Printer, PRT), and PUNCH (PU, PCH).

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid spool device type.

HCP036E Index missing or invalid

Explanation

You specified the INDEX option on the LOADBUF, LOADVFCB or START command with an operand that was not in the range 1 to 31.

System action

The command is not executed; system operation continues.

User response

Reissue the command with the INDEX option in the range 1 to 31, or allow the INDEX to default to the value coded in the specified FCB (forms control buffer) image.

HCP038E **Parameter for *option* option missing or invalid - *parameter***

Explanation

The virtual machine format operand is not present, or the parameter specified for the FORMAT option is not valid. A valid format operand is one to eight characters, and it specifies the system that was running in the virtual machine (for example, CMS or RSCSNET).

This message can also be issued by HCPLDR for various missing options or options that are not valid.

System action

The command is rejected. System operation continues.

User response

Enter the command again with a valid virtual machine format. For HCPLDR, remedy the condition and enter the command again.

HCP039E **{Processor address|Core ID} missing or invalid**

Explanation

A processor address or core ID either has not been supplied or is not valid. If multithreading is not enabled, a CP-supported processor address is a hexadecimal value 0000 through 004F. If multithreading is enabled, a CP-supported core ID is a hexadecimal value 0000 through 0027 (if MAX_THREADS is 2).

System action

The command is not executed; system operation continues.

User response

Reissue the command specifying a valid processor address or core ID.

HCP040E **The variations of this message are explained below.**

— Variation 1 **Device {*rdev*|*vdev*|*ldev*} does not exist**

Explanation

The specified device is not accepted because one of the following conditions is true:

- The device does not exist or is not operational.
- If the device is a real device (*rdev*), then the device is not configured in the CP system.
- If the device is configured in CP, a key test subchannel (TSCH) resulted in condition code 3, which indicates that the device is not operational.
- If the device is a logical device (*ldev*), then that logical device was not created.
- If the device is a virtual device (*vdev*), then the virtual device is not configured in the virtual machine.

System action

The command does not run; system operation continues.

User response

Issue the command and specify the required real, logical, or virtual device.

— Variation 2 **PCI function {*rpfid*|*vpfid*} does not exist**

Explanation

The specified PCI function is not accepted because one of the following conditions is true:

- The PCI function does not exist or is not operational.
- If the function is a real PCI function (*rpfid*), then it is not configured in the CP system.
- If the function is a virtual PCI function (*vpfid*), then it is not configured in the virtual machine.

System action

The command does not run; system operation continues.

User response

Issue the command and specify the required real or virtual PCI function ID.

— Variation 3 **PCI function *rpfid* does not exist**

Explanation

The specified real PCI function does not exist.

System action

The EDEVICE is not defined.

User response

Issue the command again and specify an available NVMe PCI function.

HCP041E Logmsg *nn* does not exist.

Explanation

You issued the SET LOGMSG command requesting a specific log message line, but the log message line does not exist.

System action

The command is not executed. System operation continues.

User response

Reissue the command; specify the required log message line.

HCP042E User *userid* spoolid *nnnn* does not exist

Explanation

The spool ID is either open or does not exist for the user on the specified device queue.

If the spool ID specified is an open reader file (in use by the virtual machine), it cannot be changed or purged. A CLOSE command purges an open reader file unless the HOLD option is in effect, either from the current CLOSE command or from a prior SPOOL command.

System action

The command is not executed; system operation continues.

User response

Reissue the command specifying only known and valid spool IDs.

HCP043E Buffer *buffer* does not exist

Explanation

The CP system does not know the buffer name supplied with the command. The buffer does not exist if it cannot be found in any image library.

System action

The command is not executed; system operation continues.

User response

Reissue the command, specifying a valid buffer name.

HCP044E System *name* does not exist

Explanation

The NSS or saved segment specified does not exist.

System action

The command is not executed; system operation continues.

Programmer response

Reissue the command specifying a valid NSS or saved segment name.

HCP045E *userid* not logged on

Explanation

The specified user ID is not logged on. The command cannot execute properly unless the user specified is logged on. This message may be received if the user is in the process of logging on, logging off or being relocated.

System action

The command is not executed; system operation continues.

User response

Reissue the command; specify only users who are currently logged on. The status of a particular user may be determined by issuing QUERY USER or VMRELOCATE QUERY.

HCP046E *type* {*rdev* | *rpfid*} offline

Explanation

The specified device (*rdev*) or PCI function (*rpfid*) is offline and is considered not available to the CP

system. *type* is the type of device that is offline, such as PRT or CTLR.

System action

The command is not executed; system operation continues.

User response

Issue the VARY command to vary the device or PCI function online and reissue the command.

HCP047E	**The variations of this message are explained below.**
— Variation 1	***userid vdev* does not exist**

Explanation

The device (*vdev*) specified for the particular user ID does not exist in that user's virtual machine configuration. If the message is issued for the DIAL or COUPLE command, the particular device specified with those commands is not defined in the receiving user's virtual machine configuration.

System action

The command is not executed; system operation continues.

User response

Reissue the command; specify only existing virtual device addresses for the receiving virtual machine.

— Variation 2	**CFLINK in {CF1|CF2} does not exist**

Explanation

You tried to detach or set a CFLINK that does not exist.

System action

No configuration change occurs.

User response

Retry the command with a CFLINK specified that does exist.

— Variation 3	**CFLINK with this CHPID does not exist**

Explanation

You tried to detach or set a CFLINK that does not exist.

System action

No configuration change occurs.

User response

Retry the command with a CFLINK specified that does exist.

— Variation 4	**CFLINK for CF1 to CF2 does not exist**

Explanation

You tried to detach or set a CFLINK that does not exist.

System action

No configuration change occurs.

User response

Retry the command with a CFLINK specified that does exist.

HCP048E	**The variations of this message are explained below.**
— Variation 1	**A unique EQID cannot be generated for EDEV *edev* based upon the hardware information provided.**

Explanation

The system cannot generate a unique EQID for this device, so none will be provided.

System action

The EDEVICE is brought online without a system-generated EQID.

User response

Assign an EQID to the device using the SET EDEVICE command or the EDEVICE configuration statement. Contact your IBM service representative and inform your representative of the error.

— Variation 2	**EQID must be unique for the specified device class.**

Explanation

The issued command is attempting to assign an EQID to multiple devices, but the input device type requires that each device have its own unique EQID.

System action

The command is not executed. System operation continues.

User response

Issue the command individually for each device.

— Variation 3 No device with EQID *eqid* attached.

Explanation

No device with the input EQID is attached to the specified target.

System action

The command is not executed. System operation continues.

User response

Try the command again with the correct EQID, username, or both.

— Variation 4 No device with EQID *eqid* exists.

Explanation

No device with the specified EQID exists on this system.

System action

The command is not executed. System operation continues.

User response

Try the command again with a valid, existing EQID.

— Variation 5 No EQID exists for *rdev*

Explanation

The specified real device does not have an EQID associated with it.

System action

The command is not executed. System operation continues.

User response

Assign an EQID to the device using the SET RDEVICE command or the RDEVICE configuration statement. If the device is offline, issuing VARY ON for the device will cause a system-generated EQID to be associated with the device.

— Variation 6 Specified EQID already assigned to a different class of devices.

Explanation

The specified EQID cannot be assigned to this device because the EQID is already associated with devices of a different device class. For example, an EQID that is associated with FCP devices cannot be associated with OSA devices.

System action

The command is not executed. System operation continues.

User response

Try the command again with a different EQID.

— Variation 7 Specified EQID already assigned to a different device.

Explanation

The specified EQID has already been assigned to one or more other devices, and the input device requires that its EQID be unique across the system.

System action

The command is not executed. System operation continues.

User response

Try the command again with a different EQID that has not been assigned to another device.

HCP049E *type vdev* in use

Explanation

A CP command was entered to an enabled display device that requires the device to be disabled. The DISABLE command operates asynchronously; there should be a time delay before entering other commands (such as ATTACH) that affect the device.

System action

The command is not processed. System operation continues.

User response

Use the DISABLE command to change the status of the line. Enter the command again.

HCP050E LOGON unsuccessful--incorrect userid and/or password

Explanation

You entered a LOGON, AUTOLOG, or XAUTOLOG command with an incorrect userid and/or incorrect password.

System action

You are not logged on.

User response

Reissue the LOGON command specifying a correct userid and password.

HCP051E GRAF *{ldev|rdev}* in not enabled

Explanation

The XAUTOLOG command was issued with the ON operand designating a display device that is not enabled.

System action

The command is not processed. System operation continues.

User response

Use the ENABLE command to enable the display device or specify a display device that is already enabled. Reissue the XAUTOLOG command with an enabled display device.

HCP052E [XAUTOLOG failed for *userid*:] Error in CP directory

Explanation

Command processing cannot be completed because of a permanent I/O error condition encountered while z/VM was reading the z/VM CP directory. If the command is an asynchronous XAUTOLOG, the message indicates which user ID did not get logged on.

System action

The command is not executed; system operation continues.

User response

Send a message to the system operator stating there were I/O errors that z/VM detected while reading the CP directory.

HCP053E [XAUTOLOG failed for *userid*:] {*userid* | *value*} not in CP directory

Explanation

The user ID supplied was not found in the z/VM directory. If the command was an asynchronous XAUTOLOG, the message indicates which user ID did not get logged on.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid user ID.

HCP054E The variations of this message are explained below.

— Variation 1 [XAUTOLOG failed for *userid:*] Already logged on {LINE *vdev* | GRAF *vdev* | LUNAME *vdev* | DEVICE *vdev* | LDEV *vdev* | disconnected | SYSTEM *sysname* | SYSC | SYSG}

Explanation

The user ID supplied on the LOGON, AUTOLOG, or XAUTOLOG command is already logged on to the given line or device, or is in a disconnected state. (LUNAME indicates a SNA/CCS terminal, SYSC indicates the system console, and SYSG indicates the integrated 3270 console.) If the user ID is defined in the directory for an SSI cluster, *sysname* is the name of the system in the SSI cluster where the user ID is already logged on or is in a disconnected state. If the command was an asynchronous XAUTOLOG, the message indicates which user ID did not get logged on.

System action

The command is not executed; system operation continues.

User response

Enter the command again specifying a different user ID.

— Variation 2 **LOGON not permitted because the SSI cluster is not in STABLE mode.**

Explanation

The system you are trying to log on to is not a joined member of a stable SSI cluster. Single-configuration virtual machine users are only allowed to log on when the SSI cluster is stable. A logon cross-check can only be performed when the SSI cluster is stable, and this needs to be done to prevent single-configuration virtual machine users from logging on to multiple systems concurrently. Multiconfiguration virtual machines can log on at any time regardless of the SSI cluster's current state.

System action

System operation continues.

User response

Contact your system support personnel to get the SSI cluster back to a stable mode. Try to log on again after the SSI cluster is stable and communication among members has been reestablished. If the problem persists, contact your IBM Support Center personnel.

— Variation 3 **LOGON not permitted because the system has not completed initialization.**

Explanation

The system is still initializing, so logons are not permitted yet.

System action

System operation continues.

User response

Try to log on again after the system has completed initialization. If the problem persists, contact your IBM Support Center personnel.

HCP055E **Line(s) not available on *userid***

Explanation

The DIAL command has been issued to a user ID, and one of the following conditions exists:

- The specified user ID has no virtual 327X lines
- The virtual lines are not enabled
- The virtual lines are all busy.

System action

The command is not executed; system operation continues.

User response

Reissue the DIAL command specifying a user ID that has enabled virtual 327X lines are not already servicing a user.

HCP056E **Line *vdev* busy on *userid***

Explanation

The virtual 327X line specified in the DIAL command is busy.

System action

The command is not executed; system operation continues.

User response

Reissue the DIAL command when the line becomes available.

HCP057I ***userid* not receiving; *text***

Explanation

The user ID specified in the MESSAGE, WARNING, MSGNOH, or SMSG command is not receiving.

text in this message identifies the reason why the user ID is not receiving.

Text
Explanation of *text*

disconnected
The user is disconnected.

MSG off
All messages have been set to OFF by the SET command.

WNG off
Warning messages have been set to OFF by the SET command.

SMSG off
Special messages have been set to OFF by the SET command.

not authorized
The user is not authorized.

quiesced
The user was quiesced.

message too large
The buffer of the receiving user is not large enough to receive the message sent by the SMSG command.

VMCF error *nnnn*
The user has not established the proper VMCF connection.

IUCV error *nnnn*
The user has not established the proper IUCV connection.

If a VMCF or IUCV return code is returned, see IUCV Functions in *z/VM: CP Programming Services* for more information.

System action

System operation continues.

User response

No further action is required.

HCP058E CTCA *vdev* busy on *userid*

Explanation

The virtual channel-to-channel adapter (CTCA) specified in the COUPLE command is busy on the virtual machine for the receiving user ID.

System action

The command is not executed; system operation continues.

User response

Reissue the command; specify an available virtual CTCA.

HCP059E {XAUTOLOG | AUTOLOG} failed for *userid* - {IPL missing | IPL failed | accounting errors | ncorrect password}

Explanation

An AUTOLOG or XAUTOLOG command was issued for a user, but the command could not be executed for one of the following reasons.

System action

The user ID is not logged onto the system; system operation continues.

User response

In each case, the appropriate user response is indicated:.

Reason	Description	User Response
IPL missing	There was no IPL statement in the user's directory entry.	Have your system administrator place an appropriate IPL statement in the specified user's directory.
IPL failed	The IPL could not complete successfully.	Log on to the user ID in the usual manner to determine the cause of the IPL failure.
Accounting errors	The LOGON accounting routine returned a nonzero return code.	Contact your system administrator for specific requirements of your local accounting procedures.
Incorrect password	The password supplied with the XAUTOLOG or AUTOLOG command does not match the password in the directory.	Contact your system administrator to verify the correct password, or to reissue the AUTOLOG or XAUTOLOG command with a correct password.

If an external security manager (ESM) is installed on your system, you may receive this message if you are not authorized to issue this command.

User Response: Contact your system administrator to obtain the necessary authorization.

HCP060E {Dump failed | Printer output terminated}; virtual printer unavailable

Explanation

No virtual printer could be found.

System action

System operation continues.

User response

Use the DEFINE command to create a virtual printer and reissue the command.

HCP061E	Dump failed; virtual printer error

Explanation

The virtual printer failed because an I/O error occurred while the dump was being spooled to DASD.

System action

System operation continues.

User response

Notify the system programmer.

HCP067E	The variations of this message are explained below.
— Variation 1	Command format not valid

Explanation

An option was misspelled, a password was specified while the password suppression facility was active, or the SECLABEL operand was specified on the LOGON command when mandatory access controls (MAC) checking was not enabled through an external security manager (ESM).

System action

The command is not executed; system operation continues.

User response

Correct the spelling error or remove the SECLABEL operand and reenter the command. If the password suppression facility is active, enter the password at the password prompt. The password suppression facility is controlled by the PASSWORDS ON CMDS operand of the FEATURES system configuration statement and by the SET PASSWORD command.

— Variation 2	Command format not valid. SECLABEL operand is not allowed for this user.

Explanation

The LOGON command failed because the SECLABEL operand was disabled for this virtual machine. If an external security manager (ESM) was installed on a system that is a member of a single system image (SSI) cluster, you can receive this message if you try to log on to a virtual machine defined by the IDENTITY statement in the user directory.

System action

The LOGON command fails. System operation continues.

User response

Log on without specifying the SECLABEL operand.

HCP068E	The variations of this message are explained below.
— Variation 1	SEND command failed; receiver has no virtual console

Explanation

The SEND command has failed.

System action

No text is sent to the receiver.

User response

Define a virtual console for the receiver.

— Variation 2	SEND command failed; receiver is executing a console function

Explanation

The SEND command has failed.

System action

No text is sent to the receiver.

User response

The receiving machine must complete the console function before another CP command can be sent. Send the command at a later time.

— Variation 3	SEND command failed; receiver has console input waiting

Explanation

The SEND command has failed.

System action

No text is sent to the receiver.

User response

The receiving virtual machine must do a console read operation for input that is already waiting. Then, you can reissue the SEND command.

— Variation 4 **SEND command failed; receiver has not authorized sender**

Explanation

The SEND command has failed.

System action

No text is sent to the receiver.

User response

The sender must be specified as a secondary user of the receiver on the CONSOLE directory statement.

— Variation 5 **SEND command failed; receiver is not disconnected**

Explanation

The SEND command has failed.

System action

No text is sent to the receiver.

User response

The SEND command cannot be used because the receiver is logged on at a terminal and is controlling her own virtual machine.

— Variation 6 **SEND command failed; user's security labels failed MAC check**

Explanation

The SEND command has failed.

System action

No text is sent to the receiver.

User response

Log on again with a security label that is equivalent to or is dominated by the security label of the target.

HCP069I **Command Complete. CP return code = *nnnn*.**

Explanation

The CP command issued through the FOR command has completed on the target virtual machine with the specified return code. The responses associated with the CP command precede this message.

System action

System operation continues.

User response

None, except in the following case.

For the CP LINK command: if the target virtual machine assumes responsibility for prompting and a password is not provided on a CP LINK command, and the rest of the command is valid, the return code can be one of the following:

- 8015 ('READ' password required)
- 8016 ('WRITE' password required)
- 8017 ('MULTI' password required).

The CP LINK command should be reissued with another FOR command specifying the required password.

HCP070E **You are not authorized to act FOR *userid***

Explanation

If an external security manager (ESM) is installed, you must be authorized by the ESM to use the FOR command. If an ESM is not installed, you must be authorized as the secondary user on the CONSOLE statement in the directory entry of the target virtual machine. You may also be authorized as a result of the target virtual machine's use of the CP SET SECUSER command.

System action

The FOR command is not executed. System operation continues.

User response

Acquire the necessary authorization or privilege level in order to issue the FOR command.

HCP071E **The FOR command may not be issued recursively**

Explanation

The CP command to be executed on the target user ID cannot be the FOR command.

System action

The command is not executed. System operation continues.

User response

Correct the CP command to be executed.

HCP072E Path identifier missing or invalid

Explanation

The specified path ID is either missing or incorrect. A valid path ID is between 1 and 4 hexadecimal digits, or an asterisk (*), and must be a valid connection to the Asynchronous CP Command Response (*ASYNCMD) system service.

System action

The command is not executed. System operation continues.

User response

Specify a valid path ID.

HCP088E An invalid number was supplied for {COPY|FLASH} - *operand*.

Explanation

The option specified requires that a count be supplied. The operand given is either not a decimal numeral, or is not in the range required by the option.

System action

The command is not executed. System operation continues.

User response

Reissue the command with a valid count as specified by the command reference.

HCP090I Device *vdev* not defined; {*rdev*|*volser*} not available

Explanation

The valid virtual device (*vdev*) has not been defined in the virtual machine's configuration because the real device described in the directory DEDICATE card is not available. A real device is considered not available if it is in one of the following situations:

- Already attached to another user
- In use by the CP system
- Offline.

System action

System operation continues.

User response

Ask the system operator about the status and availability of the real device. The operator can attach the required device or an alternate device to the virtual machine.

HCP091E The variations of this message are explained below.

— Variation 1 DASD *vdev* not defined; temp space not available

Explanation

The virtual device has not been defined in the virtual machine configuration because space is not available.

The amount of temporary space requested cannot be satisfied from the available space remaining on the system. If you specified device T2314, T2319, or T3310, the temporary space requested is not available because these devices are not supported in z/VM.

System action

System operation continues. If temporary space was just released, it might not be available until it is cleared if the CLEAR_TDISK option was specified on the FEATURES statement in the system configuration file or if the SYSCLR = YES option was specified in HCPSYS.

Operator response

If additional preformatted CP packs are available, and the packs' volume serial numbers are defined in the CP-owned volume list, the following command can be entered to provide more CP temporary disk space.

```
ATTach dev [TO] SYSTEM [[AS] volid]
```

User response

Enter the DEFINE command, requesting fewer cylinders or blocks, and requesting temporary space on devices other than T2314, T2319, or T3310.

— Variation 2 **DASD *vdev* not defined; vdisk space not available**

Explanation

The virtual device has not been defined in the virtual machine configuration because space is not available.

A virtual disk in storage cannot be created without exceeding the system limit or the user limit on the amount of storage available for allocating virtual disks in storage.

- If you receive this message when logging on, a virtual disk in storage that is defined by an MDISK statement or is the target of a LINK statement in your directory does not currently exist and cannot be created without exceeding the system limit.

  Note: A virtual disk in storage defined by an MDISK statement might already exist if another user has a link to it.
- If you receive this message when using the LINK command, the target virtual disk in storage does not currently exist and cannot be created without exceeding the system limit.
- If you receive this message when using the DEFINE (Virtual Disk in Storage) command, there is not enough space to create the virtual disk in storage without exceeding one of the following limits:
  - The system limit
  - The user limit on the amount of space that can be allocated for virtual disks in storage created by a single user with the DEFINE command.

  You might have too many virtual disks in storage already defined, the virtual disk in storage you are trying to define might be too large, or all of the system virtual disks in storage space might be in use.

System action

System operation continues.

User response

- If you are logging on or using the LINK command, contact your system administrator and request that the user or system limit on virtual disk in storage space be increased.
- If you are using the DEFINE command, reenter the command for a smaller size virtual disk in storage. You may need to free some space first by detaching virtual disks in storage created earlier with the DEFINE command that you are no longer using.

Attention: Any virtual disk in storage created with the DEFINE command is immediately destroyed when detached.

If the DEFINE command still fails, contact your system administrator and request that the user or system limit on virtual disks in storage space be increased.

— Variation 3 **DASD *vdev* not defined; requested vdisk exceeds DEFINE VFB-512 maximum permitted blocks: 4194296.**

Explanation

The BLK parameter value for the DEFINE VFB-512 command specifies the size in 512-byte blocks of the virtual disks in storage to be created. You specified a value greater than the maximum allowable value of 4194296 blocks.

Note that this message is not related to storage availability when allocating virtual disks in storage with respect to the system limit or user limit.

System action

System operation continues.

User response

Reenter the command with a smaller virtual disk size.

HCP092E **Device *vdev* not defined; *device vdev* already defined**

Explanation

The virtual device specified is already defined within the virtual machine's configuration. If the type is CONSOLE, your console was not defined because only one virtual CONSOLE is allowed on each virtual machine configuration.

System action

System operation continues.

User response

Reissue the command; specify a virtual device that is not already defined within the virtual machine configuration, or detach the conflicting virtual device before reissuing the command.

If you want to redefine your console to some other device type, you must first detach your current console and then define the new one.

HCP093E	The variations of this message are explained below.
— Variation 1	**Storage size requested (*reqsize*) exceeds maximum allowed on this processor (*maxsize*). Size set to maximum allowed.**

Explanation

The size requested for the primary (BASE) address space in your virtual machine is larger than the real processor permits. The size you requested (*reqsize*) has been lowered to the maximum that this processor supports (*maxsize*).

System action

The base address space for the virtual machine is created using the maximum size for the real processor.

User response

Ensure that your operating system and applications can execute successfully in a virtual machine with the lower storage size.

— Variation 2	**The additional variations of this message are explained below.**

Explanation

- RESERVED (*ressize*) exceeds hardware maximum (*maxsize*)
- STANDBY (*stbysize*) exceeds hardware maximum (*maxsize*)
- STANDBY (*stbysize*) plus RESERVED (*ressize*) exceeds hardware maximum (*maxsize*)
- Storage size (*storsize*) exceeds hardware maximum (*maxsize*)
- Storage size (*storsize*) plus RESERVED (*ressize*) exceeds hardware maximum (*maxsize*)
- Storage size (*storsize*) plus STANDBY (*stbysize*) exceeds hardware maximum (*maxsize*)
- Storage size (*storsize*) plus STANDBY (*stbysize*) plus RESERVED (*ressize*) exceeds hardware maximum (*maxsize*)

You issued a DEFINE STORAGE command that would result in a total virtual machine storage size (online plus reserved plus standby) that exceeds the maximum size for the real processor.

System action

The command fails and the virtual machine storage size is unchanged; system operation continues.

User response

Reissue the DEFINE STORAGE command with a storage value that does not cause the total virtual machine storage size to exceed the maximum size for the real processor.

HCP094E	The variations of this message are explained below.
— Variation 1	**Storage exceeds allowed maximum of *maximum* {M|K}**

Explanation

You issued a CP LOCATE FRAMETBL command specifying a storage address larger than the size of host real storage, or you issued a CP LOCATE SXSTE command specifying a storage address larger than the size of host logical storage.

System action

CP does not execute the command; system operation continues.

User response

Issue the command again and specify a storage size that is less than or equal to the maximum storage size mentioned in the message.

— Variation 2	**Storage size (*storsize*) plus STANDBY (*stbysize*) plus RESERVED (*ressize*) exceeds directory maximum (*maxsize*).**

Explanation

You issued a DEFINE STORAGE command that would result in a total virtual machine storage size (online storage plus reserved storage plus standby storage) that exceeds the maximum size specified in the CP user directory entry for your virtual machine. This might be because of the actual storage sizes specified, or because of adjustments necessary to the sizes. For more information, see the Usage Notes section of the of the DEFINE STORAGE command in *z/VM: CP Commands and Utilities Reference*.

System action

The command fails and the virtual machine storage size is unchanged; system operation continues.

User response

Reissue the DEFINE STORAGE command with a storage value that does not cause the total virtual

machine storage size to exceed the maximum size specified in the CP directory, or have the maximum storage size in the CP directory increased for your virtual machine.

HCP095I Device *vdev* is not defined because the maximum number of devices is already defined.

Explanation

During LOGON processing the number of devices requested to be defined for a z/VM guest has exceeded the limit of 4096.

System action

The device is not defined.

User response

Inform system support personnel so that the directory entry may be corrected.

HCP096E Configuration extent (*extent*) exceeds maximum allowed on this processor (*maxsize*). Storage configuration remains unchanged.

Explanation

The configuration extent identified in the message has a larger ending address than the real processor permits.

System action

Storage configuration remains unchanged.

User response

Change the configuration specification so all extents are within the processor limit and enter the command again.

HCP097E STANDBY storage of *stbysize* is insufficient to satisfy request

Explanation

You issued a SET STORAGE command to increase the amount of real storage z/VM has available to use, but there is not enough standby storage available in the logical partition to satisfy the request.

System action

The command fails; system operation continues.

User response

Reissue the SET STORAGE command with a storage value that is within the available amount of standby storage.

HCP098E Insufficient storage available to satisfy STANDBY request

Explanation

You issued a DEFINE STORAGE STANDBY command to increase the standby storage to an amount greater than the reserved storage.

System action

The command fails and the virtual machine storage size is unchanged; system operation continues.

User response

Reissue the DEFINE STORAGE STANDBY command with a value that does not exceed the sum of the current standby storage plus the reserved storage.

HCP099E {STANDBY|RESERVED|INCREMENT} option conflicts with current storage configuration

Explanation

You issued a DEFINE STORAGE command with the STANDBY, RESERVED, or INCREMENT option after using the DEFINE STORAGE CONFIGURATION command to set up storage extents for your virtual machine.

System action

The command fails and the virtual machine storage size is unchanged; system operation continues.

User response

If you want to have standby or reserved storage, or you want to specify the storage-increment size, you must set up your virtual machine's online storage size using the DEFINE STORAGE command without the CONFIGURATION option.

HCP100E Storage reconfiguration is active. You cannot change storage at this time.

Explanation

One of the following is true:

1. You issued a SET STORAGE command prior to the completion of the background task that is reconfiguring storage from a previous SET STORAGE command.
2. The system is initializing and must add or remove storage defined to the LPAR or virtual machine to match the requested configuration.

System action

The new SET STORAGE command fails; system operation continues.

User response

Wait a few minutes to give the background task time to complete, then issue the SET STORAGE command again. For assistance, issue CP QUERY STORAGE. Storage reconfiguration will continue until the values that are displayed stabilize.

HCP101E **DASD *vdev* forced R/O; R/O by {*nnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}[; stable by {*nnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}]**

Explanation

The virtual device (*vdev*) specified has been forced into read-only status because other users on the system already are linked to the same device with read-only access. If any one of the users holds a stable access, it is so indicated. If only one user has read-only access, that user's user ID is displayed. The ADJUNCT keyword indicates that the requested link is in conflict with the named user's adjunct configuration. The system name is included when the user ID is an instance of a multi-configuration virtual machine on another system in the SSI cluster. To see all links that exist for the minidisk, issue the QUERY LINKS command.

System action

System operation continues.

User response

No further action is required if read-only access is acceptable. The MDISK directory statement for the fullpack minidisk might not be correctly defined under either of the following conditions:

- If you are attempting to link to a fullpack minidisk and another user has a non-fullpack minidisk linked on the same real device.
- If you are attempting to link to a non-fullpack minidisk and another user has what might be a fullpack minidisk linked on the same real device.

Have your system administrator verify the fullpack minidisk is correctly defined in the user directory. The system administrator should refer to the statement MDISK Directory Statement in *z/VM: CP Planning and Administration* for assistance in defining a fullpack minidisk. Otherwise, issue the command again when the device is available to you.

HCP102E **DASD *vdev* forced R/O; R/W by {*nnnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}[; stable by {*userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}]**

Explanation

The virtual device (*vdev*) specified has been forced into read-only status because other users on the system already have access to the same disk area in read/write mode, which might also be a stable write access. If only one user has read/write or stable access, that user's user ID is displayed. The ADJUNCT keyword indicates that the requested link is in conflict with the named user's adjunct configuration. The system name is included when the user ID is an instance of a multi-configuration virtual machine on another system in the SSI cluster. To see all links that exist for the minidisk, issue the QUERY LINKS command.

System action

System operation continues.

User response

No further action is required if read-only access is acceptable. The MDISK directory statement for the fullpack minidisk might not be correctly defined under either of the following conditions:

- If you are attempting to link to a fullpack minidisk and another user has a non-fullpack minidisk linked on the same real device.
- If you are attempting to link to a non-fullpack minidisk and another user has what might be a fullpack minidisk linked on the same real device.

Have your system administrator verify the fullpack minidisk is correctly defined in the user directory. The system administrator should refer to the statement

MDISK Directory Statement in *z/VM: CP Planning and Administration* for assistance in defining a fullpack minidisk. Otherwise, issue the command again when the device is available to you.

HCP103E **DASD *vdev* forced R/O; R/W by {*nnnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}, R/O by {*nnnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}[; stable by {*userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}]**

Explanation

The given virtual device (*vdev*) has been forced into read-only status because the disk is in read/write use by some users and read-only use by other users linked to the same disk area. If any of the users holds a stable access, it is so indicated. If the number of read/write or read-only users is one, the single userid is displayed. The ADJUNCT keyword indicates that the requested link is in conflict with the named user's adjunct configuration. The system name is included when the user ID is an instance of a multi-configuration virtual machine on another system in the SSI cluster. To see all links that exist for the minidisk, issue the QUERY LINKS command.

System action

System operation continues.

User response

No further action is required if read-only access is acceptable. The MDISK directory statement for the fullpack minidisk might not be correctly defined under either of the following conditions:

- If you are attempting to link to a fullpack minidisk and another user has a non-fullpack minidisk linked on the same real device.
- If you are attempting to link to a non-fullpack minidisk and another user has what might be a fullpack minidisk linked on the same real device.

Have your system administrator verify the fullpack minidisk is correctly defined in the user directory. The system administrator should refer to the statement MDISK Directory Statement in *z/VM: CP Planning and Administration* for assistance in defining a fullpack minidisk. Otherwise, issue the command again when the device is available to you.

HCP104E ***userid vdev* not linked; R/O by {*nnnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}[; stable by {*nnnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*} | exclusive by {*userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}]**

Explanation

The link to the user's virtual device (*vdev*) has not been established because that disk area is already in read-only use by one or more users. If any one of the users holds a stable or exclusive access, it is so indicated. If the number of users is one, the single user ID is displayed. The ADJUNCT keyword indicates that the requested link is in conflict with the named user's adjunct configuration. The system name is included when the user ID is an instance of a multi-configuration virtual machine on another system in the SSI cluster. To see all links that exist for the minidisk, issue the QUERY LINKS command.

System action

System operation continues.

User response

The MDISK directory statement for the fullpack minidisk might not be correctly defined under either of the following conditions:

- If you are attempting to link to a fullpack minidisk and another user has a non-fullpack minidisk linked on the same real device.
- If you are attempting to link to a non-fullpack minidisk and another user has what might be a fullpack minidisk linked on the same real device.

Have your system administrator verify the fullpack minidisk is correctly defined in the user directory. The system administrator should refer to the statement MDISK Directory Statement in *z/VM: CP Planning and Administration* for assistance in defining a fullpack minidisk. Otherwise, issue the command again when the device is available to you.

HCP105E ***userid vdev* not linked; R/W by {*nnnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}[; stable by {*userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*} | exclusive by {*userid* | *userid* at *sysname* | *userid***

ADJUNCT | *userid* ADJUNCT at *sysname*}]

Explanation

The link to the user's virtual device (*vdev*) has not been established because that disk area is already in read/write use by one or more users. If any one of the users holds a stable or exclusive access, it is so indicated. If the number of users is one, the single userid is displayed. The ADJUNCT keyword indicates that the requested link is in conflict with the named user's adjunct configuration. The system name is included when the user ID is an instance of a multi-configuration virtual machine on another system in the SSI cluster. To see all links that exist for the minidisk, issue the QUERY LINKS command.

System action

System operation continues.

User response

The MDISK directory statement for the fullpack minidisk might not be correctly defined under either of the following conditions:

- If you are attempting to link to a fullpack minidisk and another user has a non-fullpack minidisk linked on the same real device.
- If you are attempting to link to a non-fullpack minidisk and another user has what might be a fullpack minidisk linked on the same real device.

Have your system administrator verify the fullpack minidisk is correctly defined in the user directory. The system administrator should refer to the statement MDISK Directory Statement in *z/VM: CP Planning and Administration* for assistance in defining a fullpack minidisk. Otherwise, issue the command again when the device is available to you.

HCP106E ***userid vdev* not linked; R/W by {*nnnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}, R/O by {*nnnnn* users | *userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}[; stable by {*userid* | *userid* at *sysname* | *userid* ADJUNCT | *userid* ADJUNCT at *sysname*}]**

Explanation

The link to the user's virtual device (*vdev*) has not been established because the disk is in read/write use by some users and read-only use by other users. If any of the users holds a stable access, it is so indicated. If the number of users is one, the single user ID is displayed. The ADJUNCT keyword indicates that the requested link is in conflict with the named user's adjunct configuration. The system name is included when the user ID is an instance of a multi-configuration virtual machine on another system in the SSI cluster. To see all links that exist for the minidisk, issue the QUERY LINKS command.

System action

System operation continues.

User response

The MDISK directory statement for the fullpack minidisk might not be correctly defined under either of the following conditions:

- If you are attempting to link to a fullpack minidisk and another user has a non-fullpack minidisk linked on the same real device.
- If you are attempting to link to a non-fullpack minidisk and another user has what might be a fullpack minidisk linked on the same real device.

Have your system administrator verify the fullpack minidisk is correctly defined in the user directory. The system administrator should refer to the statement MDISK Directory Statement in *z/VM: CP Planning and Administration* for assistance in defining a fullpack minidisk. Otherwise, issue the command again when the device is available to you.

HCP107E ***userid vdev* not linked; not in CP directory**

Explanation

The link to the user's virtual device (*vdev*) has not been established because that virtual device address is not defined in the z/VM CP directory for the specified user ID.

System action

The command is not executed; system operation continues.

User response

Reissue the LINK command, specifying the correct virtual device or the correct user ID.

HCP108E ***userid vdev* not linked; volid *volid* not mounted**

Explanation

The link to the user's virtual device (*vdev*) has not been accomplished because the virtual device is defined on a volume that is not currently mounted on the CP system. This might also occur when the USER_VOLUME_LIST statement in the system configuration file is coded incorrectly.

System action

System operation continues.

User response

Have your system support personnel check to make sure that the USER_VOLUME_LIST statement is coded correctly. If it is, send a message to your system operator asking that the specified volume be mounted and attached to the CP system. Reissue the LINK command when the operator confirms that the correct volume has been mounted.

Programmer response

Refer to *z/VM: CP Planning and Administration* to ensure that the USER_VOLUME_LIST statement is coded correctly. Update the USER_VOLUME_LIST statement as appropriate.

HCP109E ***userid vdev*** **not linked; {Excessive link indirections|invalid link device}**

Explanation

The link to the user's virtual device (*vdev*) has not been accomplished because the virtual device defined in the user's CP directory entry is not a minidisk you can link to.

If this message occurred from a CPACCESS command being entered, the indicated *vdev* cannot be used with CPACCESS (either TDISK or VDISK).

System action

System operation continues.

User response

Enter the LINK command again to a virtual device that has been defined in the user's CP directory as a minidisk you can link to.

HCP110E ***userid vdev*** **not linked;** ***type vdev*** **already defined**

Explanation

The link to the user's virtual device (*vdev*) has not been accomplished because this virtual machine already has a device with the same number defined in its configuration.

System action

System operation continues.

User response

Reissue the LINK command requesting a different virtual device number, or detach the device that has the conflicting virtual number from the virtual machine, and then reissue the LINK command.

HCP111E ***userid vdev*** **not linked; no read password**

Explanation

The link to the user's virtual device (*vdev*) has not been accomplished because no read access to it is allowed.

System action

System operation continues.

User response

Contact your system programmer to request a directory change.

HCP112E ***userid vdev*** **not linked; no write password**

Explanation

The link to the user's virtual device (*vdev*) has not been accomplished because no write access to it is allowed.

System action

System operation continues.

User response

Contact your system programmer to request a directory change.

HCP113E ***userid vdev*** **not linked; no multiple password**

Explanation

The link to the user's virtual device (*vdev*) has not been accomplished because no multiple-access password is specified for the user's minidisk.

System action

System operation continues.

User response

Contact your system programmer to request a directory change.

HCP114E ***userid vdev*** **not linked; mode or password incorrect**

Explanation

The link to the user's virtual device (*vdev*) has not been accomplished because an incorrect mode or password was entered.

System action

The command is not executed; system operation continues.

User response

Enter the command again, specifying the correct mode or password, or ask your system programmer for a directory change if this error occurs during logon.

HCP115E **{LINK|AUTOLOG|XAUTOLOG} invalid; excessive incorrect passwords**

Explanation

A command was entered that requires a password, but the command has already been entered an excessive number of times using incorrect passwords. Any command of this type that requires a password is not processed for the remainder of the logon session.

System action

The command is not executed; system operation continues.

User response

For LINK:

You must log off and log on again to allow you to LINK to any minidisk not owned by you or with a password not equal to ALL.

For AUTOLOG:

If journaling is enabled for LOGON, you must log off and then on again to perform any class A or B AUTOLOGs. If journaling is not enabled for LOGON, you can either increase the CMDLIMIT for AUTOLOG, or log off and then on again.

For both:

This error condition from the AUTOLOG or LINK command is designed to prohibit password guessing by repetitive calls to the command from within the virtual machine.

HCP116I **WARNING: User** ***userid1*** **linked** ***userid2 vdev1*** **as** ***vdev2*****. Cylinders** ***m*** **through** ***n*** **of minidisk** ***vdev2*** **are the target of FlashCopy relationship** ***hhhhhhhh*****.**

Explanation

Some or all of the cylinders of the minidisk *vdev2* are currently the target of a persistent FlashCopy relationship. The data might be replaced by actions occurring outside this virtual machine, and therefore data security might be at risk.

System action

The DEFINE MDISK or LINK command is executed. System operation continues.

User response

Use the QUERY FLASHCOPY command to learn more detailed information about existing FlashCopy relationships. No further action is required if you are satisfied that there are no significant security issues present. Use the FLASHCOPY WITHDRAW command to remove unwanted relationships.

Note: Relationships survive logoffs, system IPLs, and power-offs.

HCP117E **Userid** ***userid*** **not linked; volid** ***volid*** **conflict**

Explanation

The class and type in the virtual device definition do not match the class and type of the real device on which the volume is mounted.

System action

The command is not executed.

User response

Inform your system programmer of the problem; the directory entry for the device you have specified in the LINK command is incorrect.

HCP118E ***userid vdev*** **not linked; command format not valid**

Explanation

The LINK password was entered on the same line as the LINK command, when the installation requires LINK passwords to be entered on a separate line.

System action

The command is not executed.

User response

Reenter the LINK command. Then on a separate line enter the password.

Note: When the installation requires that the LINK password be entered separately, the password may not be entered on the same line as the LINK command. Enter the password in response to the ENTER PASSWORD: prompt.

HCP120E ***type*** **{*rdev*|*ldev*|*rpfid*} not {attached|given}; *userid* {*vdev*|*vpfid*} already defined**

Explanation

For the GIVE command or the ATTACH command, the device (*vdev*) or PCI function (*vpfid*) has not been given or attached to the specified user ID because that user ID has already defined that virtual device or PCI function.

System action

System operation continues.

Operator response

Verify that the correct user ID was specified. If not, reissue the command using the correct user ID. If the user ID is correct then use the MESSAGE command to send a message to the user asking if the correct *vdev* or *vpfid* was specified. If the *vdev* or *vpfid* is not correct, reissue the command using the correct value. If the *vdev* or *vpfid* is correct, then the user must perform the action in the user response.

User response

Make sure that you do not already have a device at the specified *vdev* or *vpfid*. If you want the specified *vdev* or *vpfid*, you must detach or redefine the device before the operator can repeat the command.

HCP121E ***type*** **{*rdev*|*ldev*|*rpfid*} not attached to {*userid*|system}**

Explanation

The device or PCI function has not been detached from the specified user ID because it was not attached to that user. Either the device number, PCI function ID or the user ID has been incorrectly specified.

System action

System operation continues.

User response

Reissue the DETACH command specifying the correct device number or PCI function ID for the user ID.

HCP122E ***type*** **{*rdev*|*ldev*|*rpfid*} already attached to *userid***

Explanation

The requested device (*rdev* or *ldev*) or PCI function (*rpfid*) is already attached to another user ID (*userid*). You may have specified an incorrect device number or PCI function ID.

System action

System operation continues.

User response

Reissue the ATTACH command, specifying the correct real or logical device or PCI function ID. Or detach the device from the user that it is currently attached to.

HCP123E **DASD *rdev* CP-owned**

Explanation

The command has not been processed for the requested user ID because the CP system owns that device. A CP-owned device is one that is defined in the system-owned list and is in use for paging and/or spooling space.

System action

System operation continues

User response

The command cannot be specified for the real device because CP system must own and use that device.

HCP124E **DASD *rdev* in use by *nnnnn* users**

Explanation

Processing of the DETACH command does not take place because the specified device is in use by the specified number of users.

System action

The command is not executed; system operation continues.

User response

The command cannot be executed for the specified real device until all users who have minidisks in use on that device detach them.

HCP125E	The variations of this message are explained below.
— Variation 1	DASD *rdev* volid *volid* already attached to system

Explanation

The volume identification number (*volid*) is already mounted and attached to the system.

System action

The command is not executed; system operation continues.

User response

Specify the correct device and then issue the ATTACH command again. Before re-trying the ATTACH command, you might need to detach the real device that contains the duplicate volume ID from the system.

— Variation 2	DASD *rdev* EQID *eqid* already attached to system

Explanation

A volume with the same EQID as the specified device is already mounted and attached to the system.

System action

The command is not executed; system operation continues.

User response

Specify the correct device, EQID, or both, and then issue the ATTACH command again.

HCP126E	DASD *rdev* error reading volid

Explanation

The specified device could not be attached to the system because there was an error while reading the volume label.

System action

The command is not executed; system operation continues.

User response

Check for equipment failures. If there are none, reissue the ATTACH command.

HCP127E	DASD *rdev* volid *volid* does not match

Explanation

The real device has not been attached to the system because the volume ID read from the label does not match the one specified with the command.

System action

The command is not executed; system operation continues.

User response

Reissue the ATTACH command specifying the correct volume ID.

HCP128E	DASD *rdev* error reading allocation record

Explanation

The volume, which is a CP-owned volume, has not been attached to the system because the allocation record could not be read.

System action

The command is not executed.

User response

Check for equipment failures. If there are none, reallocate space on the pack using ICKDSF or the CPFMTXA utility, and reissue the ATTACH command.

HCP130E	No devices with EQID *eqid* are available to attach with the parameters provided.

Explanation

Devices with the specified EQID exist but cannot be attached to the specified target. The reasons for this include:

- The devices are already attached (to this virtual machine, another virtual machine, or the SYSTEM).
- The devices are offline.
- The devices failed ATTACH processing due to other errors.

System action

The command is not executed. System operation continues.

User response

Specify a different EQID, or make available a device with this EQID so that it can be attached.

HCP135E	**The variations of this message are explained below.**
— Variation 1	**Multiple devices with EQID *eqid* attached.**

Explanation

The requested action cannot take place because more than one device with the specified EQID is attached to the target.

System action

The command is not executed. System operation continues.

User response

Specify the appropriate real device number, EQID, or both, and then issue the command again.

— Variation 2	**Multiple devices with EQID *eqid* exist.**

Explanation

The requested action cannot take place because more than one device exists that is associated with the specified EQID.

System action

The command is not executed. System operation continues.

User response

Specify the appropriate EQID and then issue the command again.

HCP138E	**CP Volume *volume*: only extent *extent1-extent2* of *voltype* extent *extent1-extent3* is being used.**

Explanation

While processing a SYSTEM CONFIG file, or during execution of an ATTACH *rdev* to SYSTEM command, an extent with the *voltype* of SPOL or DRCT was defined partially above cylinder 65519, or an extent with the *voltype* of PAGE was defined partially above cylinder 1182005. The area above this line will be truncated, and only cylinders *extent1* to the limit for the allocation type will be defined. PARM disks can reside anywhere on the volume, but the disk size is limited to 65520 cylinders.

System action

The extent is partially defined. System operation continues.

User response

If necessary, either change the entry in the SYSTEM CONFIG file, or else reissue the ATTACH *rdev* to SYSTEM command, with all SPOL and DRCT extents below cylinder 65520 and PAGE extents below cylinder 1182006.

HCP139E	**CP Volume *volume*: *voltype* extent *extent1-extent2* is being ignored.**

Explanation

While processing a SYSTEM CONFIG file, or during execution of an ATTACH *rdev* to SYSTEM command, an extent with the *voltype* of SPOL or DRCT was defined entirely above cylinder 65519, or an extent with the *voltype* of PAGE was defined entirely above cylinder 1182005.

System action

The extent is not defined. System operation continues.

User response

Either change the entry in the SYSTEM CONFIG file, or else reissue the ATTACH *rdev* to SYSTEM command, with all SPOL and DRCT extents below cylinder 65520 and PAGE extents below cylinder 1182006.

HCP140E ***type*** **{*rdev*|*ldev*|*rpfid*} attached to** ***user id***

Explanation

The device or PCI function specified is not under CP control but is attached to the specified user ID for the user's exclusive control.

System action

The command is not executed; system operation continues.

User response

Reissue the command; specify only devices under CP control. If possible, the operator must detach the device or PCI function from the specified user in order to make it available to another user.

HCP141E ***type rdev*** **not active**

Explanation

The device specified was not actively processing a file when you issued the command.

System action

The command is not executed; system operation continues.

User response

If necessary, reissue the command when the device starts processing the next file.

HCP142E ***type rdev*** **not drained**

Explanation

The device specified was not in a drained status.

System action

The command is not executed; system operation continues.

User response

Drain the specified device using the DRAIN command, and reissue the command.

HCP143E ***type rdev*** **in use by system**

Explanation

The specified real device is in use by the system for paging, spooling, networking, or temporary disk allocation. For example, DASD devices can be in use for the persistent data record (PDR) or can be shared spool volumes in an SSI cluster where the volume is still attached on the owning system.

System action

The command is not executed.

User response

Reissue the command when the device is no longer in use. If it is a DASD device, enter the QUERY ALLOC *volid* command, the QUERY SSI command, or the QUERY CPOWNED command. If it is a tape device, issue the QUERY *rdev* command.

HCP144E ***type rdev*** **not supported**

Explanation

The specified real device is not supported.

System action

The command is not executed.

User response

Specify a real device that is supported by the operating system.

HCP145I **User *userid* [at *rdev*] issued {a LINK command|a LOGON command|an AUTOLOG command specifying userid *auserid* |an APPCVM CONNECT specifying userid *tuserid*} with an invalid password *nnnn* times. The limit is *limit*.**

Explanation

The installation-defined threshold for incorrect passwords has been reached by *userid*, or *rdev*, or both.

The variables appearing in this message have the following meanings:

Variable
Meaning

rdev
The address of the terminal being used

nnnn
The current incorrect password count

limit
The current limit.

If this message includes: **an AUTOLOG command specifying userid *auserid***, then the message is the result of an AUTOLOG or XAUTOLOG command. In this case, *userid* is the user ID who entered the AUTOLOG or XAUTOLOG command, and *auserid* is the user ID specified in the AUTOLOG or XAUTOLOG command.

If this message includes: **an APPCVM CONNECT specifying user ID *tuserid***, then the message is the result of an APPCVM CONNECT function. In this case, *userid* is the source user ID of the APPCVM CONNECT, and *tuserid* is the target user ID specified in the APPCVM CONNECT. The source user ID initiated the APPCVM CONNECT when this is not a communication server acting on behalf of another user. If a communication server started the APPCVM CONNECT on behalf of another user ID, then *userid* is the communication server user ID and *tuserid* is the user ID on whose behalf the communication server is attempting the connect.

System action

When the current limit is met, message HCP145I is issued.

User response

Each installation has to define the specific action it wishes to take when this situation arises. Because the situation is a possible attempt to penetrate the system, it should not be ignored.

HCP146E VMDUMP failed; spooling error

Explanation

The VMDUMP command could not complete the dump. There was an error while CP was writing the reader spool file on the DASD.

System action

The system tries to close the spool file. If the spool file closes successfully, it is available to the virtual reader you specified. Command processing terminates; system operation continues.

User response

Notify your system programmer.

HCP148E Printer *rdev* buffer load *name* failed

Explanation

CP cannot accomplish the buffer load because of an I/O failure on the specified device or because an I/O error occurred when CP tried to access the specified buffer.

System action

The command is not executed; system operation continues.

User response

Reissue the command, attempting to load the buffer as before. If the problem persists, there is probably a hardware error. Call your system support personnel for assistance.

HCP150A User *userid* has issued a {CP|VM| CP or VM} read

Explanation

You will receive this message in one of three cases:

- You are acting as the secondary user for a disconnected user who has issued a console read.
- You are acting as the secondary user for a disconnected user for whom CP has issued a console read.
- You (or a privileged user) issued a CP SET SECUSER command to make you the secondary user for a disconnected user who has a VM or CP READ asking for input.

System action

The console read is not actually performed, but a record of it is kept in a queue.

User response

You must enter a CP SEND command to satisfy the console read.

HCP152E {PFCOPY|PFTAB} not available

Explanation

The CP/ESA feature of z/VM does not support the COPY or the TAB function settings for program function keys on TTY terminals. You can set tabs using the appropriate hardware facilities. For the 3101, you can use the PRINT keys instead of the PFCOPY function if the 3102 is attached. See the related hardware publications for the affected device.

System action

Ignores the PF request.

User response

Do not use the PF keys for COPY or TAB functions.

HCP153E Device {*vdev*|range} exceeds maximum number of virtual devices

Explanation

An attempt was made to add to a virtual machine's configuration a device that requires more subchannels than are available.

System action

The device (or range of devices) is not defined; system operation continues.

User response

Detach unused devices so that enough subchannels are available for defining the new devices.

HCP155E Device *rdev* has not been attached to the system because it is not a DASD device.

Explanation

An attempt was made to attach a non-DASD device to the system. Only supported DASD devices may be attached to the system.

System action

The command is not executed; system operation continues.

User response

Reissue the command, specifying the device number of a valid real DASD device.

HCP160E Hexloc *hexloc* exceeds storage[for ASIT *asit*, spaceid *spaceid*].

Explanation

The hexadecimal location you specified is beyond the range of defined storage.

For example, you cannot DISPLAY beyond the guest real storage area of an operating system running under z/VM.

System action

The command is not executed; system operation continues.

User response

Reenter the command, using a valid hexadecimal location within the defined storage range.

HCP161I END or ALL was specified or defaulted and storage exceeds maximum dumpable address *hexloc*. Pages over that address will not be dumped.

Explanation

VMDUMP was requested to dump to the end of configured storage, but the highest address that VMDUMP can dump is X'7FFFEFFF' for ESA/390 mode virtual machines, and X'7FFFFFFFFF' (512 Gigabytes) for z/Architecture mode virtual machines.

System action

VMDUMP dumps storage up to that limit. Processing continues.

User response

None.

HCP162I Hexloc *hexloc* exceeds maximum dumpable address *hexloc* and will not be dumped

Explanation

All or part of the specified range exceeds the maximum address that VMDUMP can process.

System action

VMDUMP dumps storage up to that limit. System operation continues.

User response

Enter the command again using only hexadecimal locations below the maximum address that VMDUMP can process.

HCP163E STORE exceeds maximum register

Explanation

The STORE command has specified that a number of operands are to be stored in contiguous registers, and

the number of operands specified would place the store beyond the valid register range.

System action

The system has stored up to, and including, the highest register allowed for the store function.

User response

Verify that the store command was entered correctly and that the beginning register was correctly specified. If they were not, reissue the STORE command, specifying the correct registers and operands.

HCP164E **Hexloc *hexloc* non-addressable storage [- block volatility exception]**

Explanation

The hexadecimal address specified with the command is within a non-addressable storage range.

System action

The command is not executed; system operation continues.

User response

Specify a valid hexadecimal address and then issue the command again.

In the case of a block volatility exception, the block-usage state of the storage is in the volatile state, and the block-content state is in the logically-zero state. This indicates that the contents of the block have been discarded. This state can change between commands due to host paging activity.

HCP167E **The mask is invalid for the specified data range.**

Explanation

You issued the TRACE GPR command specifying a DATA range and MASK value. When the MASK value was ANDed with both values in the DATA range, the lower limit of the resulting range was greater than the upper limit.

System action

The command is not executed; system operation continues.

User response

Reissue the command specifying a valid mask.

HCP170E **System *name* exceeds storage size; {*nnnnnnnn*K|*nnnn*M} required**

Explanation

The NSS (name) specified requires a guest real storage size larger than that defined for the virtual machine.

System action

The command is not executed; system operation continues.

User response

Redefine the virtual machine storage size using the DEFINE command, then reissue the command with the required storage size.

HCP174E **Paging I/O error; IPL failed**

Explanation

An I/O error occurred while the system was attempting to read a page from a direct access storage device.

System action

The IPL or DIAGNOSE X'64' failed.

User response

Reissue the IPL or DIAGNOSE X'64' command. If the failure persists, notify your system operator.

Programmer response

Resave the segment or system that failed. A possible cause of the condition is a bad DASD pack. If another DASD pack is available, use it to retry the IPL. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the software error.

HCP175E **IPL is not allowed on a secondary CPU; IPL failed**

Explanation

The IPL command cannot be issued on a secondary processor.

System action

The command is not executed; system operation continues.

User response

Issue the IPL command from the base CPU or a CPU that has the same type as the base.

HCP177E Your PARM data exceeds the limit of *nn* characters. Correct your data string and reissue the IPL command.

Explanation

The PARM option on your IPL statement is followed by a parameter string that exceeds the limit of characters than can be passed to the system to be IPLed. The value of *nn* specifies the maximum length of the string that can be passed. The largest value *nn* can be is 64. If the value of *nn* is less than 64, the named saved system specified by the IPL command was defined by your installation with a PARMREGS range of less than 16 registers.

System action

The command is not executed; system operation continues.

User response

Reissue the IPL command with no more than *nn* characters in the parameter string following the PARM option. If you received this message while logging on (LOGON), contact your installation support personnel to correct the IPL statement in your directory entry.

HCP180E Trace not in effect

Explanation

The TRACE END function has been specified, and the TRACE function was not in effect.

System action

System operation continues.

User response

None required.

HCP193E *userID* is in the CP directory and cannot be a substitute

Explanation

User IDs defined in the CP user directory cannot substitute for another user.

System action

System operation continues.

User response

If the directory entry is no longer required, remove it and define the user ID as a substitute using the DEFINE SUBSTITUTE command.

HCP194E *aliasname* is not a substitute

Explanation

An alias name was specified that is not a valid substitute.

System action

Processing stops.

User response

Enter QUERY SUBSTITUTE ALL to determine what substitutes are defined and retry the command specifying a valid substitute name.

HCP195E *alias* is a substitute for user *userID*

Explanation

An alias cannot be defined for more than one substitute user.

System action

System operation continues.

User response

If the definition is no longer required, remove it using the DEFINE SUBSTITUTE command and define it as a substitute for the desired user.

HCP196I Secondary user not in CP directory

Explanation

The directory for a user ID being logged on specifies a secondary user ID, but that user ID does not exist in the CP directory.

System action

The logon continues without a secondary user. Refer to the CONSOLE directory statement in *z/VM: CP Planning and Administration*, in the section on the system product user directory, for additional comments on the secondary user.

User response

Contact your system administrator to request a directory change.

HCP197I Secondary user is not available

Explanation

A user is disconnecting, and his designated secondary user ID is not logged on, is logging off, or is running disconnected without an IUCV connection to the *MSG or *MSGALL system service.

System action

The DISCONNECT continues normally.

User response

Log on the secondary user if terminal services are required.

HCP205I The virtual=real area is not available because it was not generated.

Explanation

The virtual=real (V=R) area is not available to the user logging on because the V=R area was not generated at system generation time. z/VM version 5 does not support a V=R area; therefore there is no way to generate a V=R area.

System action

The system permits the user logging on to run as a virtual machine without the use of the V=R area.

User response

None.

Programmer response

Change the specification for the user in the directory.

HCP206E Cannot connect to host virtual machine

Explanation

You attempted to enter DIAL or LOGON through a logical device to a virtual machine that has created a logical device, or you have attempted to dial or reconnect to the VTAM service machine that controls the device from which the command was entered. A disconnected VSM operator cannot reconnect through a terminal controlled by that VSM; this includes the VTAM and VSCS operators if VTAM is running in a separate virtual machine in a GCS group. A SNA/CCS user cannot dial into the VTAM virtual machine that controls the dialing terminal.

System action

The command is not executed; system operation continues.

User response

Enter DIAL or LOGON from another terminal that does not violate these restrictions.

HCP230E IPL {SIO|SSCH} ERROR

Explanation

The specified device could not be properly started for the IPL because the START I/O (SIO) instruction or the START SUBCHANNEL (SSCH) instruction received an unexpected condition code during the initial IPL sequence for the specified device.

System action

System operation continues.

User response

Verify that the device type is valid for an IPL simulation and that no unexpected status conditions exist in the device, and reissue the IPL command.

HCP231E IPL {TIO|TSCH} ERROR

Explanation

The IPL simulator encountered an unexpected condition code when executing the TEST I/O (TIO) instruction or the TEST SUBCHANNEL (TSCH) instruction on the specified virtual device.

System action

System operation continues.

User response

Verify that the device is valid for IPL operation and that no unexpected status conditions exist in the device; reissue the IPL command.

HCP232E IPL UNIT ERROR, {CSW=*csw*|IRB=*irb*}, SNS=*sense*

Explanation

During the IPL simulation process, the specified IPL device received an I/O interrupt and a unit check condition.

System action

System operation continues.

User response

Examine the CSW or the IRB and the sense bytes to determine the possible cause of the simulation failure. If no equipment checks are present, reissue the IPL command to the specified device.

HCP233E IPL OVERLAY ERROR

Explanation

During the IPL process, the IPL simulator module (either HCPVMI or HCPVMJ, depending on device class) detected an overlay condition that would cause the virtual machine-initiated I/O to overwrite the simulator module. The simulator module attempted to relocate itself using DIAGNOSE X'40', but was unable to find storage where it would not be overlaid.

This error is only possible if the program that is being IPLed uses indirect data address words (IDAWs) that do the following:

- They overlay the storage that the IPL simulator module occupies.
- They overlay every other storage location to which the simulator module tries to relocate to.

System action

The IPL sequence terminates.

User response

Either change the IDAWs to write to a different place in storage, or define a larger storage size. Defining a larger storage size will result in less chance of overlaying the simulator module.

HCP234E IPL SENSE ERROR

Explanation

A unit check occurred on the IPL device. A SENSE operation was used to get the sense bytes, and an unusual condition occurred.

System action

System operation continues.

User response

Verify that the device is not malfunctioning and reissue the IPL command for the required device.

HCP235E The variations of this message are explained below.

— Variation 1 IPL with NSSDATA failed because the NSS exceeds the end of the first extent of guest memory.

Explanation

Using the NSSDATA operand requires that the NSS be fully contained within the first extent of guest memory for a private copy of the contents of the NSS to be preserved.

System action

The command is not executed; system operation continues. Guest memory is left unchanged and the NSS is still imbedded in guest memory.

User response

If the NSS contents are not needed, reissue the command without NSSDATA. If the contents are needed, consider alternative methods for dumping the contents of memory to include the NSS.

To prepare for the future possibility of using NSSDATA for IPLing stand-alone dump utilities, you can redefine the guest virtual storage size to include the entire range necessary for the NSS. Redefining the virtual storage size clears the contents of memory; doing so should not be done until the dump has been obtained for the current situation.

— Variation 2 IPL with NSSDATA failed because the NSS extends into unassigned increments.

Explanation

Using NSSDATA operand requires that the NSS be fully contained within the first extent of guest memory for a private copy of the contents of the NSS to be preserved.

System action

The command is not executed; system operation continues. Guest memory is left unchanged and the NSS is still imbedded in guest memory.

User response

If the NSS contents are not needed, reissue the command without NSSDATA. If the contents are needed, consider alternative methods for dumping the contents of memory to include the NSS.

To prepare for the future possibility of using NSSDATA for IPLing stand-alone dump utilities, you can redefine the guest virtual storage size to include the entire range necessary for the NSS. Redefining the virtual storage size clears the contents of memory; doing so should not be done until the dump has been obtained for the current situation.

— Variation 3 **IPL with NSSDATA failed because the NSS contains page range(s) of type SW, SC, or SN.**

Explanation

NSSDATA was specified, but the NSS in use by the guest contains shared type page ranges that are not supported. The only shared type NSSDATA supports is SR.

System action

The command is not executed; system operation continues. Guest memory is left unchanged and the NSS is still imbedded in guest memory.

User response

If the NSS contents are not needed, reissue the command without NSSDATA. If the contents are needed, consider alternative methods for dumping the contents of memory to include the NSS.

To prepare for the future possibility of using NSSDATA for IPLing stand-alone dump utilities, determine whether the NSS can be redefined to include only EW, EN, ER, or SR page ranges.

— Variation 4 **IPL with NSSDATA failed because the NSS is defined with the VMGROUP attribute.**

Explanation

The NSSDATA operand cannot be used when the NSS is a VMGROUP NSS.

System action

The command is not executed; system operation continues. Guest memory is left unchanged and the NSS is still imbedded in guest memory.

User response

Reissue the IPL command without the NSSDATA operand. The IPL command processing preserves the contents of exclusive segments of a VMGROUP NSS when the NSSDATA operand is not specified and memory is not cleared.

HCP236E **The NSSDATA operand is not allowed {with the IPL of an NSS | when the IPL command is issued from the adjunct}.**

Explanation

When an NSS is IPLed, the guest memory is cleared; thus, the contents of the NSS in use prior to issuing the IPL command cannot be preserved.

System action

The command is not executed; system operation continues. Guest memory is left unchanged and the NSS is still imbedded in guest memory.

User response

If the contents of memory and the NSS are needed, then an NSS cannot be IPLed. Reissue the command to IPL a device.

If the contents of memory are not needed, then reissue the command without the NSSDATA operand.

HCP237E **The NSSDATA operand must be specified after the DUMP keyword for the IPL of an FCP device.**

Explanation

The device being IPLed is a SCSI device, which requires the DUMP operand be specified to preserve the contents of memory. If the DUMP operand is not specified, then the contents of memory are cleared. For the contents of the NSS to be preserved, memory must not be cleared.

System action

The command is not executed; system operation continues. Guest memory is left unchanged and the NSS is still imbedded in guest memory.

User response

Reissue the command to include the DUMP operand.

HCP240E **The form length mounted on printer *rdev* does not match the length described by the FCB *fcb*.**

Explanation

The length of the forms control buffer *fcb* you specified did not match the length of the form currently mounted on the printer *rdev*.

System action

If the FCB in error is the separator FCB, the printer is drained. If the FCB was requested by a user to print a file, then CP suspends printing of the problem file. The printer continues to print any other eligible files. The status of the file that was printing when the error occurred is reflected in message 1561E, which is issued in conjunction with this message.

Operator response

If the FCB in error is the separator FCB and the printer is a 3800 Model 1, you should start the device with either FCB 6, 8, or 12. If the printer is a 3800 Model 3, start the device with either FCB 6, 8, 10, or 12. These represent 6 lines per inch, 8 lines per inch, 10 lines per inch, and 12 lines per inch. For these FCBs, an appropriate FCB is constructed to match whatever form is active on the 3800. However, if you must use the FCB in error, contact your system programmer to correct the problem.

User response

If the printer is a 3800 Model 1, specify FCB 6, 8, or 12. If the printer is a 3800 Model 3, specify FCB 6, 8, 10, or 12. However, if you must use the FCB in error, contact your system programmer to correct the problem.

HCP241E **An undefined load image *imagename* was specified for printer *rdev*.**

Explanation

You requested an image *imagename* that does not exist in the named image library with which the printer *rdev* was started, or for which the LOADBUF command was specified.

System action

If the image in error is the separator FCB or character set, the printer is drained. If the image is requested by a file to be printed, then CP suspends printing of the problem file. The printer continues to print any other eligible files. The status of the file that was printing when the error occurred is reflected in message 1561E, which is issued in conjunction with this message.

Operator response

If the image in error is a separator FCB or character set, you may have made a typing error when you specified the FCB or CHARS. Reissue the START command with the correct FCB or CHARS. Verify that the printer was started with the correct image library. If it is valid, contact your system programmer for further assistance.

User response

Enter the QUERY *rdev* command to obtain the information pertaining to the *devtype* and *imagelib* associated with the device in question. If you made a typing error in specifying the load image (for example, FCBs, character sets, or copy modification modules), specify the correct load image, and if the file is not already purged, release the user HOLD status on the file. If you think the load image is supposed to be in the library, contact your system programmer to investigate.

HCP247I **NAMED IMAGE *imagename* CREATED**

Explanation

The IMAGELIB command created an image library *imagename*.

System action

System operation continues.

User response

None.

HCP248E **SPECIFIED IMAGE *imagename* NON-EXISTENT**

Explanation

CP cannot locate the text deck you specified as an image library member *imagename*. Creation of the image library does not take place.

System action

Command processing terminates; system operation continues.

User response

If the member was not supposed to be included in the library, remove the entry *imagename* from the control file and reissue the IMAGELIB command. If the member was to be included, make certain there is a

file "*imagename* TEXT" on one of your disks. If it does not exist, you have to recreate it using the GENIMAGE command.

HCP249E ERROR LOADING IMAGE *imagename*

Explanation

CP could not load the text deck you specified as an image library member *imagename* into your virtual storage. Creation of the image library does not take place.

System action

The command processing terminates; system operation continues.

User response

If the member was not supposed to be included in the library, remove the entry *imagename* from the control file and reissue the IMAGELIB command. If the member was to be included, take the necessary action to correct the problem in accessing the CMS file.

HCP254E ERROR SAVING *imagelib*; RC = *rc*

Explanation

An error occurred while CP was saving the 3800 image library. Creation of the image library does not take place.

Code
Reason

8
The image library is currently active.

24
A paging error occurred while CP was processing this request.

32
Spool space is full.

36
Abnormal termination occurred. CP issued soft abend NSI001.

40
The specified filename was invalid because it was not alphanumeric.

44
No spool IDs are available.

System action

The command processing terminates; system operation continues.

User response

Code
Action

8
Purge the old image library and reissue the command. When the printer is drained and started during normal operation, the system picks up the new library.

24
Reissue the command. If the problem persists, contact system support personnel.

32
Purge any unnecessary spool files or system data files.

36
Reissue the command. If the problem persists, contact system support personnel.

40
Reissue the command with an alphanumeric filename.

44
Purge any unnecessary spool files or system data files.

HCP255E PRINTER *rdev*; PAGE BUFFER DESTROYED, BACKUP PAGE COUNT = *nnnn*

Explanation

A certain number of pages (*nnnn*) on the photoconductor drum or in the page buffer of the device (*rdev*) were lost.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Using the backup page count given and the size of the files just requeued, determine how far to backspace the current file using the BACKSPACE command. Also, determine whether or not you want to replace the requeued files for printing. Use the BACKSPACE command, with the EOF option, to reprint the end of any requeued file when it begins printing again. Issue the CP START command to reinitiate printing operation.

HCP259E SIZE parameter missing or invalid

Explanation

The SIZE keyword is specified, and the parameters are either not specified or not valid 3800 parameters.

System action

System operation continues.

User response

Reissue the command specifying the SIZE parameters correctly.

HCP260E {Command|*command* command} processing cannot complete due to errors.

Explanation

Processing of the command operation requested cannot complete because CP detected one or more errors.

System action

The command processing terminates.

User response

Determine the cause of the error as specified in the associated CP error message. After taking corrective actions, verify the extent of command execution and reissue the command. This message may have been displayed due to a soft abend.

For the CHANGE or TRANSFER command, a change occurred in the spool file queue while the command was processing and the command was unable to complete. Reissue the command.

HCP261E *key* is an invalid storage key.

Explanation

The storage key specified in the STORE command is invalid. Either the key was not a hexadecimal specification, or the key operand was of a length greater than two hexadecimal digits.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid storage key.

HCP262E The virtual console is not defined or is detached.

Explanation

You have issued the TERMINAL CONMODE command with a detached or undefined console.

System action

The console mode remains unchanged.

User response

Define a virtual console, then issue the command TERMINAL CONMODE again.

HCP263E Too many operands were supplied for this command.

Explanation

You have entered more command operands than the syntax calls for.

System action

The command is not executed; system operation continues.

User response

Reissue the command with the correct number of operands.

HCP264I One or more options are ignored during reconnect processing - *option(s)*

Explanation

This message is issued in response to a LOGON command that resulted in a RECONNECT. An operand that would result in an alteration of the virtual machine's status is ignored under this condition. Options that may be listed are: ACCOUNT, STORAGE, IPL/NOIPL, MACHINE, and SECLABEL.

System action

LOGON/RECONNECT processing continues.

User response

None.

HCP266E An account number was not supplied or is invalid.

Explanation

The account number either was not specified or is invalid. A valid account number is eight characters or less and is contained in the user's directory.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid account number.

HCP267E **A subchannel number was not supplied or is invalid.**

Explanation

A subchannel number either has not been supplied or is invalid. A valid subchannel number is four characters or less and contains only hexadecimal characters.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid subchannel number.

HCP270E **The character sets specified for the printer *rdev* required more writable character generation modules than were available.**

Explanation

The character sets specified for the file required more writable character generation modules (WCGMs) than are available on the printer *rdev*. The most probable cause is that the 3800 printer has the 2WCGM feature, and the 4WCGM feature was assumed to be installed.

System action

CP suspends printing of the problem file. The printer continues to print any other eligible files. The status of the file that was printing when the problem occurred is reflected in message 1561E, which is issued in conjunction with this message.

Operator response

If message 1561E does not follow this message and the printer does not drain, no action is required. Otherwise, use the CHARS option with the START command specifying a character set that uses only 1 or 2 WCGMs.

User response

Use fewer character sets, or character sets that require fewer WCGMs. If the file is not already purged, issue the CHANGE command to release the user HOLD status on the file.

HCP287I **One or more EDEVICEs exist that match the specification. SET MITIME will be ignored for all EDEVICEs.**

Explanation

SCSI EDEVICEs have internal timers that can conflict with MITIME specifications and can cause system instability. Therefore, those internal timers are used to manage these devices rather than the MITIME specification.

System action

SET MITIME is ignored for EDEVICEs.

User response

None.

HCP288E **LOGON from the initial screen was unsuccessful**

Explanation

You have tried to LOGON from the logo with the PASSWORD field filled in but no user ID specified, or you had an imbedded blank in the USERID field.

System action

The LOGON attempt has failed, and the system has prompted you to try again.

User response

Try your connection attempt again as directed by the prompting messages.

HCP289I **{User|Group} {*userid*|*group*} already enabled by traceid *traceid*.**

Explanation

A user or group can only be enabled for recording by one trace ID at a time.

System action

The trace ID is not altered, and the rest of the command is processed.

User response

Decide which trace ID the user or group should record under and only enable that one.

HCP291I **DASD *rdev1* VOLID *volid* NOT ATTACHED, USING RDEV *rdev2* *volid***

Explanation

During the system IPL procedure, the system detected a DASD volume whose volume identifier was configured for a specific RDEV in the system configuration file. DASD *rdev1* does not match that configured value. The device number associated with this *volid* in the SYSTEM CONFIG file is *rdev2*.

System action

System operation continues. DASD *rdev1* is not attached.

Operator response

Verify that the volume mounted on DASD *rdev2* is the one to be used by the system. If the volume on *rdev1* is the one to be used, update the SYSTEM CONFIG file and change the configuration for *volid* to specify *rdev1*.

HCP292E **A virtual device was not found that supports this function.**

Explanation

None of the virtual devices specified on the command or searched for as attached to the user will support the ESS hardware FlashCopy® feature.

System action

Command processing is terminated.

User response

Correct the list of devices specified and reissue the command.

HCP293E **Control unit does not support multiple targets**

Explanation

A device control unit does not support the ESS hardware FlashCopy Version 2 feature.

System action

Command processing is terminated.

User response

Review the devices specified in the command and the level of control unit support. If ESS hardware FlashCopy Version 1 is supported, then only one target may be issued at a time and the DASD extents must match between source and target.

HCP294I **USERACCessid option ignored; not applicable on {NPIV-enabled subchannels | network devices.}**

Explanation

The USERACCessid option was used with a CP command to affect a subchannel enabled for N_Port ID virtualization (NPIV) or is a subchannel that is network device.

System action

The command is not executed; system operation continues.

User response

Retry the command without the conflicting option, or disable NPIV on the target subchannel.

HCP295E **The specified pages cannot be locked or unlocked because they are in the CP resident area.**

Explanation

You attempted to LOCK or UNLOCK a page, but you specified an address that was in the CP resident area.

System action

The command is not executed; system operation continues.

User response

In z/VM version 5, all addresses in the CP nucleus are resident and cannot be locked or unlocked. Check the address that was specified in the LOCK or UNLOCK command, correct it, and resume the command.

HCP296E	The variations of this message are explained below.
— Variation 1	**Status is not as required - {*rdev* | *vdev*}; deactivation is in progress**

Explanation

A CP cache management command has failed due to one of the following DASD subsystem states:

- Cache storage status is “pending.”
- Cache fast write access is “pending.”
- Caching status is “pending.”
- Nonvolatile status is “pending.”

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Retry the operation after waiting a few minutes.

— Variation 2	**Status is not as required - {*rdev*| *vdev*}; recovery action for pinned data is required**

Explanation

A CP cache management command has failed due to one of the following DASD subsystem states:

- Data is pinned in nonvolatile storage.
- DASD fast write status has failed.
- DASD fast write status is “pending.”
- Neither cache or nonvolatile storage has valid DASD fast write data for device synchronization.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

— Variation 3	**Status is not as required - {*rdev*| *vdev*}; FORCEOFF is invalid in the current state**

Explanation

A CP cache management command has failed due to one of the following DASD subsystem states:

- Cache storage is not “pending” with destage complete.
- DASD fast write Status is not “pending” or “failed” for the specified device.

A “pending” state occurs when subsystem deactivation was attempted, but a pinned data condition prevented completion.

You entered a SET CACHE SUBSYSTEM FORCEOFF or a SET DASDFW FORCEOFF command. These commands are intended as recovery tools following the failure of a SET CACHE SUBSYSTEM OFF or a SET DASDFW OFF command. You have not had a failure of a SET CACHE SUBSYSTEM OFF or a SET DASDFW OFF command.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

If you want to make the subsystem cache or the DASD fast write function unavailable, enter SET CACHE SUBSYSTEM OFF or SET DASDFW OFF. If that command fails, SET CACHE SUBSYSTEM FORCEOFF or SET DASDFW FORCEOFF may be used, but it can result in loss of data. See the descriptions of the SET CACHE and SET DASDFW commands in the *z/VM: CP Commands and Utilities Reference* for additional information.

— Variation 4	**Status is not as required - {*rdev*| *vdev*}; non-volatile storage is not available, code = *code***

Explanation

A CP cache management command has failed due to one of the following DASD subsystem states:

- Nonvolatile storage status has failed.
- Nonvolatile storage is unavailable.

The *code* is taken from byte 8 of the sense when byte 7 is ‘0F’ (FORMAT 0 message F, ‘Status Not As Required’). The reason for the *code* may be found in the appropriate hardware reference manual. For example:

Code
Reason

X'06'
An attempt was made to activate DASD fast write for a device, but the nonvolatile storage has failed.

X'0D'
A command was entered that requires nonvolatile storage when it was not available.

X'3F'
The microcode supporting NVS is not installed. This is the result of pending FCR 062H.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

If the code is X'0D', enter the SET NVS ON command. Otherwise, if the error persists, contact the appropriate hardware service personnel.

— Variation 5 **Status is not as required - {*rdev*|*vdev*}; initialization is in progress**

Explanation

A CP cache management command has failed due to one of the following DASD subsystem states:

- Nonvolatile storage is in process of initializing.
- Cache storage is in the process of initializing.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Retry the operation after waiting a few minutes.

— Variation 6 **Status is not as required - {*rdev*|*vdev*}; cache storage is not available, code = *code***

Explanation

A CP cache management command has failed due to one of the following DASD subsystem states:

- Cache storage is not available.
- Cache storage is failed.

The *code* is the format code in sense byte 8 that describes the error condition. A code of X'0E' indicates a command was entered that requires cache storage when it was not available. A code of X'28' indicates an attempt was made to read pinned tracks, but the cache storage failed or was unavailable.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

If the code is X'0E', enter the SET CACHE SUBSYSTEM ON command. Otherwise, if the error persists, contact the appropriate hardware service personnel.

— Variation 7 **Status is not as required - {*rdev*|*vdev*}; unlike channel types cannot be grouped together**

Explanation

An attempt has been made to establish a path group that contains devices attached to a serial channel and devices attached to a parallel channel. This is not permitted.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Ask your systems programmer to verify the system configuration to determine the changes needed.

— Variation 8 **Status is not as required - {*rdev*|*vdev*}; a diagnostic control command failed, code = *code***

Explanation

A Diagnostic Control command (DCTL) has failed due to a DASD subsystem state that is in conflict with the subsystem state necessary to enter the command. See the reason code descriptions for further information.

The *code* is the format code in sense byte 8 that describes the error condition:

Code
Reason

X'1D'
A DCTL command with an order other than X'0B' (Diagnostic Initialize Subsystem) was received on a subsystem that was in X'FC' condition (status cannot be determined), or a DCTL with an order other than X'0F' was received on a device that had an unreadable status track.

X'1E'
An attempt to “Reset Indefinite Condition for Device” for a device that is not in “Status Cannot be Determined” with an unreadable status track.

X'20'
A DCTL command with a “conditional” Diagnostic Initialize Subsystem order was received, and the subsystem has a valid global subsystem status track.

X'2C'
A DCTL Diagnostic Initialize Subsystem was received, and a previous Diagnostic Initialize Subsystem failed to clear the FC condition.

X'35'
A “Set Guaranteed Path” was received for a Fenced path.

X'3B'
The mode of the device that the DCTL command was entered to does not match the mode required by the subcommand modifier of the DCTL with the Emulation Control subcommand.

X'3C'
A device reserved for media maintenance received a DCTL command with a Track Emulation Control subcommand requesting a “Set Mode for Device,” or a device in Track Emulation transition received a DCTL command with a Media Maintenance Reserve.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Correct any user errors identified in the codes. If there is no user error, wait a few minutes and retry the operation. If the error persists, contact the appropriate hardware service personnel.

— Variation 9 Status is not as required - {*rdev*|*vdev*}; the control unit had insufficient message buffer space

Explanation

Space in the message buffer cannot be made available.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Contact the appropriate hardware service personnel.

— Variation 10 Status is not as required - {*rdev*|*vdev*}; pinned tracks are not identifiable, code = *code*

Explanation

A request to “Read Pinned Tracks” has failed. The pinned tracks are not identifiable because their location and data are in failed nonvolatile storage, as opposed to the cache.

The *code* is the format code in sense byte 8 that describes the error condition:

Code
Reason

X'2D'
A request to “Read Pinned Tracks” with the cache storage available or pending, but data for the device, which is in “Data in Failed NVS” status, is not in the cache storage.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Contact the appropriate hardware service personnel.

— Variation 11 Status is not as required - {*rdev*|*vdev*}; the device is undergoing media maintenance, code = *code*

Explanation

The command entered cannot be accepted because the device is in media maintenance mode.

The *code* is the format code in sense byte 8 that describes the error condition:

Code
Reason

X'3E'
A READ or WRITE command without device support or diagnostic authorization was received on a device that is in track emulation transition.

X'41'
A command chain operating with normal authorization was received on a device that is in media maintenance mode.

X'42'
A media maintenance Query order was received for a device in media maintenance reserve or track emulation transition state.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Contact the appropriate hardware service personnel.

— Variation 12 Status is not as required - {*rdev*|*vdev*}; the device is undergoing media maintenance, code = *code*

Explanation

The Establish Duplex Pair command has failed for one of several reasons. The *code* is the hexadecimal format code in sense byte 8 that describes the error condition:

Code
Reason

X'0F'
Space is not available in the non-volatile storage for the "out-of-sync" cylinder bit map.

X'10'
The addressed device is not failed duplex (resynchronization of the entire volume failed).

X'11'
The devices were not in failed duplex (resynchronization of the out-of-sync cylinders logged by the storage director has failed).

X'12'
The devices were not simplex.

X'13'
The secondary/alternate device was busy, reserved to another path-group, participating in a Concurrent Copy (CONCOPY) session, or a response message was owed for the device.

X'14'
The device specified in byte 3 is not simplex or the secondary of the duplex pair.

X'15'
Volume has pinned data.

X'17'
The established path-groups on the secondary or alternate are not the same as the primary. See *z/VM: System Operation* for information about ungrouping storage paths.

X'21'
Caching is active for any of the specified simplex devices.

X'26'
The two devices do not have the same geometry.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

If *code* is 13, and the device is not reserved to another path-group, retry the command. In all other cases, contact a system operator or the appropriate hardware service personnel.

— Variation 13 Status is not as required - {*rdev*|*vdev*}; a duplex state error occurred, code = *code*

Explanation

The state of a duplex pair is not valid for the given command. The *code* is the hexadecimal format code in sense byte 8 that describes the error condition:

Code
Reason

X'16'
Address specified as the secondary of an existing duplex pair, failed duplex, or duplex pending is not correct.

X'18'
An operation is attempted to a duplex pair with direct I/O to one device of the duplex pair, and the access is not one of the following:

- To a diagnostic track
- To a duplex pair that is failed duplex
- To a duplex (not failed duplex or duplex pending) with diagnostic or device support access authorization.

X'19'
An attempt was made to enter a ‘fail duplex pair’ PSF order to a volume that is failed duplex.

X'1A'
An attempt was made to read the output of a sync cylinder map from a device that is not a member of a duplex pair.

X'1B'
An attempt was made to enter a ‘terminate duplex pair,’ ‘fail duplex pair,’ or ‘direct I/O to one device of the duplex pair’ PSF order to a volume that is simplex.

X'1C'
An attempt was made to fail a duplex pair with the primary as the 'failed' device while the duplex pair is duplex pending.

X'23'
An attempt was made to terminate a duplex pair, and the duplex pair is DASD Fast Write pending.

X'24'
An attempt was made to direct I/O to one device of the duplex pair that is duplex pending.

X'27'
An attempt was made to write a home address or record zero on an active duplex volume.

X'31'
An attempt was made to direct I/O to one device of the duplex pair where the state of the duplex pair has been verified, and the state is not as expected.

X'3D'
A Media Maintenance Reserve was received on the primary address of a duplex pair and was not preceded by a direct I/O to one device of the duplex pair, or a 3380 Track Compatibility Mode Control was received on a device that is the primary address of a duplex pair.

X'40'
A Media Maintenance Reserve was received on the primary address of a duplex pair that was not failed duplex.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Contact a system operator or the appropriate hardware service personnel.

— Variation 14 **Status is not as required - {*rdev*|*vdev*}; an unexpected condition occurred while terminating a CONCOPY session, code = *code***

Explanation

An attempt to end a Concurrent Copy (CONCOPY) session has failed. The *code* is the hexadecimal format code in sense byte 8 that describes the error condition:

Code
Reason

X'48'
The device is not part of the CONCOPY session being terminated.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

None.

— Variation 15 **Status is not as required - {*rdev*|*vdev*}; the target VDEV must be in the same storage facility as the source VDEV**

Explanation

A FLASHCOPY command has failed because the VDEV specified as the target is not in the same Storage Facility as the source.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Verify the proper source and target VDEVs were specified. If the proper source and target VDEVs were specified, a method other than FLASHCOPY must be used to copy the source VDEV

— Variation 16 **Status is not as required - {*rdev*|*vdev*}; an unexpected condition occurred while executing a FLASHCOPY command, code = *code***

Explanation

An attempt to execute a FLASHCOPY command has failed. The *code* is the hexadecimal format code in sense byte 8 that describes the error condition:

Code
Reason

X'37'
A command was received while the subsystem was attempting to install a new microcode load.

X'56'
The source or the target volume has pinned data.

X'61'
Discard not allowed to a volume with the specified extents overlapping a FlashCopy or Concurrent Copy operation.

X'82'
One of the following conditions must be corrected:

- The resources required to complete this command are not available in the control unit.
- The number of Flash Copy relationships exceeds the maximum allowed.
- The target device is not available.

X'83'
The battery feature must be installed and operational for this command to be used.

X'84'
One of the following conditions must be corrected:

- The volumes specified are not the same track type.
- The target volume has fewer tracks than the source volume.
- The source and target must be in the same logical subsystem on some early models of DASD supporting FlashCopy.
- The number of target extents must equal the number of source extents.

X'85'
The specified target volume is a Peer-to-Peer Remote Copy primary or secondary volume.

X'9C'
Cannot complete due to internal hardware conditions or lack of resources to manage the relationship.

X'9D'
The number of FlashCopy relations exceeds the maximum allowed.

X'9F'
The target volume's Extent Space Efficient Pool does not have sufficient space to complete this FlashCopy relationship.

X'A5'
The FlashCopy operation is only valid for full volumes and does not allow specification of extents.

X'A6'
The number of FlashCopy target relations exceeds the maximum allowed for one or more of the source tracks.

X'A7'
Command cannot complete because the source of the new FLASHCOPY is already a target for an existing FLASHCOPY. Any single track may not be both a source and a target track, and a target track may have only one source at a time. If a previous FLASHCOPY is still completing in the background, and its target extents overlap with the source extents of the current FLASHCOPY, this error condition will result.

X'A8'
The number of FlashCopy relations exceeds the maximum allowed.

X'A9'
The volume is inhibited for FlashCopy relationships.

X'AB'
An incorrect FlashCopy command was received on a volume supporting Data set Level FlashCopy.

X'AC'
A FlashCopy command was received that is no longer supported.

X'AD'
The specified volume(s) are offline or inaccessible.

X'AE'
Command cannot complete because the target of the new FLASHCOPY is already a target for an existing FLASHCOPY. Any single track may have only one source at a time. If a previous FLASHCOPY is still completing in the background, and its target extents overlap with the target extents of the current FLASHCOPY, this error condition will result.

X'AF'
Command cannot complete because the target of the new FLASHCOPY is already a source for an existing FLASHCOPY. Any single track may not be both a source and a target track, and a target track may have only one source at a time. If a previous FLASHCOPY is still completing in the background, and its source extents overlap with the target extents of the current FLASHCOPY, this error condition will result.

X'B4'
An attempt was made to reverse the state of the FlashCopy relationship.

X'B7'
A FLASHCOPY function has been attempted that moves a data set or minidisk from a real source cylinder location to a non-matching real target cylinder location at the same time that another FLASHCOPY function is handling a data set or minidisk with matching real source and target cylinder locations; or vice versa. This may occur when a user is attempting a FLASHCOPY function via fullpack minidisk overlays while other users are doing FLASHCOPY functions to non-fullpack minidisks on the same physical volume.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

Correct any user errors identified in the codes. If there is no user error, wait a few minutes and retry the operation. If the error persists, contact the appropriate hardware service personnel.

— Variation 17 Status is not as required - {*rdev*|*vdev*}; code = *code*

Explanation

The *code* is the format code in sense byte 8 that describes the error condition.

Code
Reason

X'22'
A device is in "Status Cannot be Determined" state (sense format F, message C).

X'64'
The specified operation may not be executed on an alias address.

X'65'
The device is long busy, uninstalled, or performing a Write Same or Format Unit.

X'86'
The feature that the command references is not installed or enabled for the subsystem.

X'87'
Outboard copy operations are not allowed to overwrite the volume. The volume is in use by another copy operation.

X'8E'
A volume specified as a FlashCopy Target is already an Asynchronous Peer-to-Peer Remote Copy primary volume.

Any code issued in this category is a code that should not have been generated under the current level of support. The code you received might not have been defined by the hardware specification at the time the device support was applied.

The *rdev* or *vdev* displayed identifies the device where the error occurred.

System action

The command is rejected.

User response

See the documentation for the IBM DASD subsystem hardware device in question. Contact the appropriate hardware service personnel or the IBM Support Center if additional assistance is required.

HCP297E An unexpected condition occurred after the command was initiated and was accepted by the hardware, code = *code*. *userid* Command: FLASHCOPY *vdev1 scyl1 ecyl1* TO *vdev2 scyl2 ecyl2*

Explanation

An attempt to execute a FLASHCOPY command has failed.

The *userid* and FLASHCOPY command parameters identify the original command input and virtual device numbers (*vdev1* and *vdev2*) of the devices where the error occurred.

code is the hexadecimal format code that describes the error condition:

Code
Reason

X'06'
The source or the target volume has pinned data.

X'08'
The resources required to complete this command are not available in the control unit.

X'09'
The specified target volume is a Peer-to-Peer Remote Copy primary or secondary volume.

X'0A'
Lack of resources or internal hardware conditions.

X'0B'
The number of FlashCopy source and/or target relationships exceeds the maximum allowed.

X'0C'
The number of FlashCopy target relationships exceeds the maximum allowed.

X'0D'
Command cannot complete because the source or target of the new FLASHCOPY is already a source or target for an existing FLASHCOPY. Any single track may not be both a source and a target track and a target track may have only once source at a time. If a previous FLASHCOPY is still completing in the background, and its source or target extents overlap with the source or target extents of the current FLASHCOPY, this error condition will result.

X'11'
A FLASHCOPY function has been attempted that moves a data set or minidisk from a real source cylinder location to a non-matching real target cylinder location at the same time that another FLASHCOPY function is handling a data set or minidisk with matching real source and target cylinder locations; or vice versa. This may occur when a user is attempting a FLASHCOPY function via fullpack minidisk overlays while other users are doing FLASHCOPY functions to non-fullpack minidisks on the same physical volume.

System action

The command is rejected.

Operator response

Correct any user errors identified in the codes. If there is no user error, wait a few minutes and retry the operation. If the error persists, contact the appropriate hardware service personnel.

HCP298E ***userid vdev*** **not linked; request denied.**

Explanation

The external security manager (ESM) has determined you are not authorized to link to the virtual device that you specified in the LINK command.

System action

The command is ignored. The link is not done.

Operator response

Contact your system administrator to obtain the necessary authorization.

User response

Obtain the appropriate authorization and enter the LINK command again.

HCP299E **The {Named Saved System (NSS)| saved segment}** ***name*** **could not be defined because a class S file with the same name already exists.**

Explanation

You attempted to define an NSS or saved segment (*name*), but a skeleton (class S) with the same file name and file type already exists.

System action

CP does not define the NSS or saved segment; system operation continues.

Programmer response

Either purge the existing skeleton file, using the PURGE command, and reissue the DEFSEG or DEFSYS command, or issue the QUERY NSS command to see what skeleton files already exist. Then reissue the DEFSEG or DEFSYS command specifying a unique filename.

HCP300E **Save request beyond virtual machine size**

Explanation

When you issued the SAVESEG or SAVESYS command, one or more of the designated pages to be saved were outside the virtual machine addressable area.

System action

CP halts processing of the SAVESEG or SAVESYS command and does not save the NSS or saved segment.

Programmer response

Issue the appropriate QUERY command for storage and NSS with the map option. Then determine if the virtual system size is too small, or whether the DEFSEG or DEFSYS command had incorrect page ranges. If the virtual system size is too small, issue the DEFINE STORAGE command to increase the virtual system size. If the NSS or saved segment page definitions were incorrect, you must redefine the NSS or saved segment. You must also purge the system data file that is in error, using the PURGE command. Reissue the DEFSEG or DEFSYS command and reissue the SAVESEG or SAVESYS command.

HCP301E **The variations of this message are explained below.**

Explanation

- LINES SUPPRESSED BECAUSE OF SPOOL OUTPUT OVERFLOW
- Console spool data is being suppressed for user *userid*

When console output is generated faster than the system can process it, the queued output buffers might consume a large amount of system storage. This situation can cause the system to run out of system storage and result in an abend (such as FRF002 or

SXA004). To maintain system integrity, the system takes corrective action.

System action

When the queued output buffers consume too much storage, the first variation of this message is written to the console file and further output lines are suppressed to maintain system integrity. The second variation of this message is sent to the system operator. Writing of output lines to the console file resumes when the queued output buffers return to a manageable size.

Console output data, for the virtual machine (*userid*) receiving the data, is suppressed only if SET STGEXEMPT is OFF.

User response

Determine why excessive console output is being generated for the virtual machine and correct the condition. For example, excessive console output can be generated when a program is stuck in a loop which generates console output during each iteration.

Alternatively, issue SET STGEXEMPT *userid* ON to prevent console output suppression for the virtual machine.

Attention: If you set STGEXEMPT to ON, and the console output is not controlled, the system might run out of system storage and is at risk

HCP310E Date *date* invalid; not changed

Explanation

The system date contains invalid data and therefore cannot be updated for the midnight date change. Having an invalid date indicates a possible software system failure, because the date is automatically set by the system initialization routine.

System action

The date is not changed; however, the day of the week is changed. The clocks are set to change the date every 24 hours at midnight.

Operator response

Contact the system programmer at once. You can use the STORE HOST command to correct the date set in storage. Notify IBM software support personnel of the problem and supply a dump of CP storage if possible.

HCP319E Error processing subsystem command - *cmd* for {DASD *device*| userid *userid*}

Explanation

Either a timed I/O did not complete in the allotted time, or an irrecoverable I/O error occurred while a device management command destined for a storage subsystem was being processed.

cmd
The failing subsystem command (for example, SET CACHE, QUERY DASDFW, CONCOPY TERMINATE, FLASHCOPY, and so on)

device
The targeted real or virtual device

userid
The targeted virtual machine

System action

The command is not executed. System operation continues.

Operator response

Enter the command again. Contact your system support personnel if the command continues to fail.

Programmer response

Either examine the EREP outboard record (OBR) for additional details about the cause of the failure, or if VM does not log an EREP record, try entering the command again.

Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP320I *DASD rdev* SUBSYSTEM PROCESSING ERROR - FAULT CODE = *code* - {*ss*-XX-XX|*ssid.p*-*cc*-*dd*}

Explanation

An internal processing error occurred during a DASD subsystem storage operation, and the subsystem is unable to determine the cause of the failure. The variables in this message are as follows:

rdev
The failing device

code
The hardware problem description code

***ss*-XX-XX**
The physical identifier of the reporting storage director

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier and device unit address of the affected hardware components.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Record the fault code and the device address. If the error persists, contact your system support personnel.

Programmer response

Examine the EREP outboard record (OBR) for additional details as to the cause of the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP321I **DASD *rdev* SUBSYSTEM STORAGE EQUIPMENT CHECK - FAULT CODE = *code-ss*-XX-XX**

Explanation

An equipment check occurred on a DASD subsystem storage during a subsystem storage operation. The variables in this message are as follows:

rdev
The failing device

code
The hardware problem description code

***ss*-XX-XX**
The physical identifier of the reporting storage director

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Record the fault code and the device address. If the error persists, contact your system support personnel.

Programmer response

Examine the EREP outboard record (OBR) for additional details as to the cause of the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP322I ***DASD rdev* {SUBSYSTEM| NON-VOLATILE} STORAGE AVAILABILITY THRESHOLD CROSSED - {*ss*-XX-XX| *ssid.p-cc-dd*}**

Explanation

The amount of subsystem storage (cache) or nonvolatile storage (NVS) available to the DASD subsystem has been reduced to one of the reporting boundaries. The variables in the message are as follows:

rdev
The failing device.

***ss*-XX-XX**
The physical identifier of the reporting storage director.

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Record the fault code and the device address. If the error persists, contact your system support personnel.

Programmer response

Examine the EREP outboard record (OBR) for additional details as to the cause of the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP323E ***DASD rdev* {SUBSYSTEM|NON-VOLATILE} STORAGE IS**

UNUSABLE - FAULT CODE = *code* - {*ss*-XX-XX| *ssid.p-cc-dd*}

Explanation

The DASD subsystem storage (cache) or nonvolatile storage (NVS) for the specified device (*rdev*) is inoperative due to previously reported failures of a device or of subsystem storage. The variables in the message are as follows:

code
The hardware problem description code.

***ss*-XX-XX**
The physical identifier of the reporting storage director.

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Record the fault code and the device address. If the error persists, contact your system support personnel.

Programmer response

Examine the EREP outboard record (OBR) for additional details as to the cause of the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP324I **DASD *rdev* SUBSYSTEM MUST BE INITIALIZED - FAULT CODE = *code*-*ss*-XX-XX**

Explanation

An error occurred during a DASD subsystem storage operation on the 3880 Model 11 or 21 control unit. The specified storage director determined that a data loss may have occurred but cannot determine what, if any, of the data stored in the DASD subsystem was lost. The variables in this message are as follows:

rdev
The failing device.

code
The hardware problem description code.

***ss*-XX-XX**
The physical identifier of the reporting storage director.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Reinitialize subsystem storage. If the problem persists, reconfigure to use paging volumes on another DASD subsystem. Notify your system support personnel of the problem.

Programmer response

Examine the EREP outboard record (OBR) for additional details as to the cause of the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP325I ***DASD rdev* STORAGE DIRECTOR COMMUNICATION FAILED - FAULT CODE = *code* - {*ss*-XX-XX|*ssid.p-cc-dd* }**

Explanation

The other storage director in the subsystem failed to respond to a communication attempt, or communication is not allowed because of the subsystem storage mode switch setting.

The variables in this message are as follows:

rdev
The failing device.

code
The hardware problem description code.

***ss*-XX-XX**
The physical identifier of the reporting storage director.

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components.

This message is displayed in conjunction with other messages that provide information about channel

command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Record the fault code and the device address. If the error persists, contact your system support personnel.

Programmer response

Examine the EREP outboard record (OBR) for additional details as to the cause of the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP326I **DASD *rdev* TRACK FORMAT NOT SUPPORTED FOR PAGING - *ss*-XX-XX**

Explanation

The paging storage director attempted a cache to DASD (*rdev*) data transfer and discovered a track format that is not supported for paging mode.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Inform your system programmer of the unsupported track format.

HCP332E **Invalid control unit type - {*rdev*|*vdev*}**

Explanation

The device is attached to a control unit that is not valid for the entered command. The control unit does not support this function.

System action

The command is not executed.

User response

Enter the command again specifying the device number of a device that is attached to a valid control unit.

Note: The SET CACHE command cannot be entered for a 3880 Model 11 or 21.

HCP338I **DASD *rdev* CACHING REINITIATED-{*ss*-XX-XX |*ssid.p-cc-dd*}**

Explanation

The DASD subsystem for the specified device *rdev* automatically reestablished the use of the cache following an error.

The variables in the message are as follows:

***ss*-XX-XX**
The physical identifier of the reporting storage director.

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues to process with use of the cache.

User response

Inform your system programmer of the unsupported track format.

Programmer response

Examine the EREP outboard record (OBR) for additional details as to the cause of the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP339E **The command processing cannot complete because the page descriptor code *invalid-code* for the page range *nnnnn-nnnnn* should be exclusive.**

Explanation

You specified the DEFSEG or DEFSYS command with pages in segment zero defined in a page range that has a shared access page descriptor code. Valid page descriptor codes are:

EN
Exclusive read/write access, no data saved.

ER
Exclusive read-only access.

EW
Exclusive read/write access.

System action

CP halts processing of the DEFSEG or DEFSYS command, and creation of the system data file does not take place. CP does not purge the previously defined class S system data file for this NSS or saved segment name.

User response

Reissue the command and make sure that the pages in segment zero are in page ranges defined with an exclusive page descriptor code.

HCP340E The size of a DCSS is larger than the maximum size 2047M.

Explanation

When using the DEFSEG command to define a DCSS, you specified too many pages, and the size of the DCSS is larger than the allowed maximum of 2047 MB.

System action

The command is not executed; system operation continues.

User response

Reissue the command, specifying page ranges that do not exceed a total of 2047 MB.

HCP347E Excessive datalinks supplied for traceid *traceid*.

Explanation

The user has exceeded the limit of 255 data links per trace ID.

System action

The command is processed up to, and including, the 255th data link. The rest of the command is ignored.

User response

Define a new trace ID in the same code path to trace the extra data.

HCP348E Excessive data requested for traceid *traceid*.

Explanation

The amount of data requested for the indicated trace ID would result in a trace record longer than the limit of 4000 bytes.

System action

The command is ignored. The existing trace definition is not modified.

User response

Define a new trace ID in the same code path to trace the extra data.

HCP349E String supplied does not match storage contents.

Explanation

The instruction string supplied in the definition of a data-type trace ID does not match the storage at the specified location.

System action

The command is ignored. The existing trace definition is not modified.

User response

Recheck the system load map and verify instruction displacement into the module. Reissue the command.

HCP351W DASD *rdev* SYSRES NOT READY

Explanation

The disk drive specified by the *rdev* is not ready. The disk *rdev* was specified as the system residence device on the system console, Stand-Alone Loader screen, or the SHUTDOWN command.

System action

The system enters a wait state (wait state code = 351).

Programmer response

Make the device ready and reinitiate the IPL process.

HCP352E FATAL DASD I/O ERROR

Explanation

The SALIPL command processor encountered a fatal I/O error when reading from or writing to the DASD device.

System action

The command is not executed; system operation continues.

User response

Ensure that hardware is operational by using ICKDSF, CPFMTXA, or CMS FORMAT to reformat the DASD device. If the trouble persists, try another DASD device on a different drive. If the problem still persists, call IBM for hardware support.

HCP356E Access denied; User *userid* file *spoolid* not {changed|transferred|printed}

Explanation

The command you issued failed. If an external security manager (ESM) is installed on your system, you may receive this message if you are not authorized to issue the command.

System action

None. Processing continues.

User response

If you have any questions, see your system administrator.

HCP358I DASD *rdev* I/O SERVICES ARE NOW AVAILABLE FOLLOWING COMPLETION OF A STATE CHANGE.

Explanation

The specified real device has ended its state-change-pending condition, and is once again available to service I/O requests.

System action

System operation continues. Previously-queued I/O requests are sent to the device.

User response

None.

HCP361E [XAUTOLOG failed for *userid*:] LOGOFF/FORCE pending for user *userid* [at *sysname*]

Explanation

One of the following CP commands was issued for a virtual machine that is in the process of logging off or being relocated:

- AUTOLOG
- DETACH
- FORCE
- LOGON
- QUERY *userid*
- QUERY USERS *userid*
- XAUTOLOG

System action

The command ends, and no further processing takes place.

User response

If the DETACH, FORCE, or QUERY command was issued, no user action is required. The message indicates that the virtual machine in question is in the process of logging off. If the command was an asynchronous XAUTOLOG, the message indicates which user ID did not get logged on. If the user was being relocated, wait until the relocation is complete and then reissue the command, if necessary.

If the LOGON or AUTOLOG command was issued, wait until z/VM finishes logging off the specified virtual machine, then issue the command again. Logging off can take up to a few minutes.

HCP362I Device *rdev* cannot be varied online because the subchannel-id is invalid.

Explanation

The indicated device is not brought online because the specified subchannel ID is invalid. The subchannel ID must be specified as follows: X'0001'*xxxx*, where *xxxx* is the subchannel number.

System action

The device is not brought online.

User response

This is probably a hardware malfunction. Notify your system support personnel.

HCP364E **No alternate *userid* is currently set.**

Explanation

The command specified that the alternate user ID is to be used, but one is not set for this user.

System action

The command is not executed.

User response

An alternate user ID must be set before the command can be executed.

Invoke a program that sets an alternate user ID, or issue the command for your own user ID.

HCP365I **The variations of this message are explained below.**

Explanation

- Requested language *langid* is unavailable. Language *langid* set. RC=*rc*
- Requested system default language *langid* is unavailable. RC=*rc*

The return codes are explained as follows:

Code
Reason

20
A paging error occurred as CP was attempting to read a page of the requested message repository.

28
No message repository could be found for the specified language identifier.

32
The MSGREP identifier was not found on the first page of the requested message repository. This identifier is checked to determine if a valid message repository is saved.

36
A soft abend has been taken.

System action

The current language used to issue CP messages is unchanged.

User response

None.

HCP366I **DASD *rdev* I/O SERVICES ARE TEMPORARILY UNAVAILABLE DUE TO A STATE CHANGE IN PROGRESS.**

Explanation

The specified real device is in a state-change-pending condition, during which it cannot service I/O requests.

For critical system I/O and for CMS users, and for any other users of DIAGNOSE I/O (except DIAGNOSE X'98'), the I/O requests are queued to await the completion of the state change.

For users issuing I/O requests through non-DIAGNOSE I/O instructions or through the DIAGNOSE X'98' function, the state-change-pending unit check from the real device is reflected to the affected virtual machines.

The device signals when the condition is ended and I/O services are once again available. Queued system and CMS user operations automatically resume when the condition is ended. Virtual machines that receive a state-change-pending unit check are signalled that the condition is ended.

System action

System operation slows or stops if the affected device contains paging, spooling, or directory areas being used by the system. CMS user operations stop for those users with minidisks on the device; specifically, such users are held in an instruction simulation wait state during DIAGNOSE I/O.

User response

None. You will be notified of the end of the condition by message HCP358I.

The INDICATE I/O, INDICATE PAGING, and INDICATE QUEUES commands can be used to determine which CMS users might be stopped because of this condition.

HCP367I ***DASD rdev* CACHING STATUS HAS BEEN SET TO DEFAULT - *ssid.p-cc-dd***

Explanation

This message indicates that storage control was unable to determine the caching status, and recovered by assigning the caching status default values.
The caching status defaults are: subsystem caching available, device caching active, and cache fast write

active. This should not happen when the nonvolatile storage is in use.

The variables in the message are as follows:

rdev
The device used to report the condition.

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components.

System action

System operation continues.

Operator response

Contact your system support personnel. If you had caching turned off for the subsystem, or for one or more devices, you can restore the previous status by using the SET CACHE command.

Programmer response

Examine the EREP outboard record (OBR) for additional details as to the cause of the failure. Refer to the hardware System Reference Library (SLR) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP368I ***type rdev*** **I/O SERVICES ARE TEMPORARILY NOT AVAILABLE DUE TO AN ENCRYPTION KEY EXCHANGE.**

Explanation

The specified real device is in the process of exchanging encryption keys, during which it cannot service I/O requests.

System action

I/O operations stop to the device and will restart automatically when the key exchange completes.

User response

None.

HCP369E **Invalid location for tracing; command rejected**

Explanation

The command is in error for one or more of the following reasons:

- The specified location for the data trace lies in a restricted code
- The specified location is in a module loaded with the CPXLOAD command.
- The location is not a CP-owned page.
- The location is not on a halfword boundary.
- The instruction at the specified location is not supported by TRSOURCE ID TYPE DATA.

System action

The command is rejected. Existing trace definition is not modified.

User response

Check the location to make sure it is in a CP owned page and on a halfword boundary. If these conditions are met, then the specified location either contains an instruction not supported by TRSOURCE or lies in a restricted code path. The reasons for restricting a code path include:

- executing the code path while processing a data trace could result in a system loop or hang
- the code path issues an SVC instruction or changes the SVC PSW values.

Search for an adjacent code path that is not restricted.

HCP370E **Invalid datalink string supplied - *value***

Explanation

The string supplied as a data link did not conform to data link syntax rules.

System action

The command is rejected. The existing trace definition is not modified.

User response

Consult *z/VM: CP Commands and Utilities Reference* for syntax rules concerning data links and resubmit the command.

HCP371I **The variations of this message are explained below.**

— Variation 1 **Device *rdev* already enabled by traceid *traceid*.**

Explanation

The specified device cannot be enabled for tracing by more than one trace simultaneously.

System action

The device is not activated for tracing, and processing of the remaining devices continues.

User response

Redefine the traces so that the specified device is only enabled for one trace at a time.

— Variation 2 **Logical device L*ldev* already enabled by traceid *traceid*.**

Explanation

The specified logical device cannot be enabled for tracing by more than one trace simultaneously.

System action

The logical device is not activated for tracing, and processing of the remaining logical devices continues.

User response

Redefine the traces so that the specified logical device is only enabled for one trace at a time.

— Variation 3 **PCI function *rpfid* already enabled by traceid *traceid*.**

Explanation

The specified PCI function cannot be enabled for tracing by more than one trace simultaneously.

System action

The PCI function is not activated for tracing, and processing of the remaining devices continues.

User response

Redefine the traces so that the specified PCI function is enabled for only one trace at a time.

HCP372E **Invalid location for exit; command rejected**

Explanation

The location specified in a DEFINE EXIT or MODIFY EXIT command is not valid for one of the following reasons:

- Not on a valid instruction boundary
- Does not refer to a valid instruction
- Refers to a location where a TRSOURCE TYPE DATA command is active
- In a location where a dynamic exit cannot be defined

System action

The command is rejected.

User response

Correct the exit location and enter the command again. If the exit conflicts with the location specified in a TRSOURCE TYPE DATA command, change the exit or the TRSOURCE location. If the command specified a restricted location, analyze the requirements to identify an alternative exit point.

HCP373E **Exit already defined at location; command rejected**

Explanation

The location specified in a DEFINE EXIT or MODIFY EXIT command already has an exit defined. Only one exit can be defined at a location.

System action

The command is rejected.

User response

If feasible, use the existing exit definition. Otherwise, either use the MODIFY EXIT command to remove or relocate the existing exit point or identify an alternate location for the new exit point and enter the command again.

HCP374E **Exit number *exit* is not dynamic**

Explanation

A MODIFY EXIT command attempted to change the definition of an exit point that was not defined dynamically using the DEFINE EXIT command. Built-in exits cannot be modified using the MODIFY EXIT command.

System action

The command is rejected.

User response

Correct the exit number to specify a dynamic exit and enter the command again. If a built-in exit does not meet requirements, define a new one.

HCP375E Exit number *exit* is enabled or associated

Explanation

The exit number specified in a MODIFY EXIT command cannot be deleted because the exit is enabled or has exit routines associated with it.

System action

The MODIFY EXIT command is rejected.

User response

Disassociate any exit routines from the exit point and disable the exit. Then reissue the MODIFY EXIT command to delete the exit.

HCP376E Unknown entry point name *entry* cannot be associated with an exit point requiring resolution

Explanation

A DEFINE EXIT or MODIFY EXIT command specified the RESOLVE option for an exit point with which an ASSOCIATE EXIT command associated an undefined entry name.

System action

The command is rejected.

User response

Use the DISASSOCIATE EXIT command to remove the association of the undefined entry name with the exit point, use the CPXLOAD command to load the entry point name, or remove the RESOLVE option from the exit definition. Then, enter the command again.

HCP377E The variations of this message are explained below.

— Variation 1 Real PCI function *rpfid* not NVMe

Explanation

The specified real PCI function cannot be used because it is not NVMe.

System action

The EDEVICE is not defined.

User response

Issue the command again and specify an available NVMe PCI function.

— Variation 2 Real PCI function *rpfid* not configured

Explanation

The specified real PCI function cannot be used because it is not configured.

System action

The EDEVICE is not defined.

User response

Issue the command again and specify an available NVMe PCI function.

— Variation 3 Real PCI function *rpfid* already in use

Explanation

The specified real PCI function cannot be used because it is already in use.

System action

The EDEVICE is not defined.

User response

Issue the command again and specify an available NVMe PCI function.

— Variation 4 Error *code* enabling real PCI function *rpfid*

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 5 Real PCI function *rpfid* is not enabled

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 6 Error disabling real PCI function *rpfid*

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 7 Error *code* storing NVMe *rpfid* PCI Function Controls

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 8 Error *code* registering NVMe *rpfid* I/O Translation parameters

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 9 Unable to allocate NVMe *rpfid* PCI Function address space

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 10 Error *code* loading or storing NVMe *rpfid* PCI Function data

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 11 NVMe *rpfid* PCI Function class code *code* not recognized.

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 12 Error *code* registering NVMe *rpfid* adapter interruptions.

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 13 Error *code* refreshing NVMe *rpfid* PCI translations.

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 14 **Error *code* submitting NVMe *rpfid* command.**

Explanation

The reported condition was encountered.

System action

The EDEVICE is not defined.

User response

Contact your IBM Support Center personnel.

— Variation 15 **No more base EDEVICEs can be defined for NVMe PCI function *rpfid*.**

Explanation

An NVMe PCI function can have as many base EDEVICEs defined as are needed to consume the space on the device in approximately 1TB segments. The response to the QUERY EDEVICE DETAILS command for a base device shows the number of segments that are allowed.

System action

The EDEVICE is not defined.

User response

No action is required.

— Variation 16 **No more alias EDEVICEs can be defined for NVMe PCI function *rpfid*.**

Explanation

An NVMe PCI function can have 127 EDEVICEs. Of those 127 EDEVICEs, the maximum number of aliases is 127 minus the maximum number of base devices (segments) that are allowed. The response to the QUERY EDEVICE DETAILS command for a base device shows the number of segments that are allowed.

System action

The EDEVICE is not defined.

User response

No action is required.

— Variation 17 **A base EDEVICE must first be defined for NVMe PCI function *rpfid*.**

Explanation

The first EDEVICE that is defined for an NVMe PCI function must be a base device.

System action

The EDEVICE is not defined.

User response

Define a base EDEVICE and reissue the SET EDEVICE command to define the alias.

— Variation 18 **Formatted block size of 2**exponent is not supported.**

Explanation

The formatted block size of the NVMe SSD is not 512 bytes.

System action

The EDEVICE is not defined.

User response

Reformat the NVMe SSD and reissue the SET EDEVICE command. A Linux system may be used to perform the formatting operation.

HCP380E **INVALID {CYLINDER|PAGE} TYPE - '*type*'**

Explanation

In response to a CPFMTXA prompt, you entered a line of allocation data that contained an invalid extent type. The extent type is the first parameter in the line of allocation data, and it must be one of the following: DRCT, PAGE, PERM, SPOL, TDSK, PARM, or END (where END indicates that you want to terminate the allocation session).

System action

The command is not executed; system operation continues.

User response

When the prompt REENTER: TYPE AND {CYLINDERS|PAGES} OR 'END' appears on the display, reenter the line of allocation data with a valid extent type.

HCP381E **INVALID {CYLINDER|PAGE} RANGE - '*range*'**

Explanation

In response to a CPFMTXA prompt, you entered a line of allocation data that contained an invalid extent range. The extent range is the second parameter in the line of allocation data, and to be valid a range must be specified as *nnnn*, *nnnn.nnnn*, or *nnnn-nnnn*. With CPFMTXA, *nnnn nnnn* is also allowable (multiple imbedded blanks may be specified). The value *nnnn* must be a 1- to 4-digit decimal integer (or a 1- to 9-digit decimal integer for fixed-block DASD). In addition, DRCT, PAGE, and SPOL allocations may not reside above page 16,777,215 in the allocation range for a fixed-block DASD.

range is the invalid allocation range.

System action

The command is not executed; system operation continues.

User response

When the prompt REENTER: TYPE AND {CYLINDERS|PAGES} OR 'END' appears on the display, reenter the line of allocation data with a valid extent range.

HCP382E **EXTRANEOUS DATA DETECTED - '*data*'**

Explanation

If the first parameter in the allocation data is END, no more parameters may be specified. Otherwise, allocation data must contain only the type and range of cylinders to be allocated. In this message, *data* refers to the extraneous data in the allocation line.

System action

System operation continues.

User response

When the prompt REENTER: TYPE AND CYLINDERS OR 'END' appears on the display, reenter the line of allocation data with only a valid cylinder type and range.

HCP386E **{FORMATTING|ALLOCATING|ERASING} CANNOT BE DONE ON DASD *vdev* BECAUSE IT IS READ-ONLY.**

Explanation

Virtual device (*vdev*) is read-only, and CPFMTXA cannot write on it.

System action

The command is not executed; system operation continues.

User response

Select the correct virtual device and reissue the command.

HCP389E **THE {CYLINDER|PAGE} RANGE IS TOO LARGE BECAUSE DEVICE *vdev* HAS *nnnnnn* {CYLINDERS|PAGES}.**

Explanation

The ending extent or the sum of the starting extent plus the number of cylinders or pages exceeds the capacity of the virtual device. When specifying a range of cylinders or pages(*sext-eext*), the ending extent (*eext*) value must be less than the number of cylinders or pages on the virtual device. In this message, the variables are as follows:

vdev
The virtual device address of the failing device

nnnnnn
The capacity of the virtual device in cylinders or pages

System action

The command is not executed; system operation continues.

User response

Change the extent specification to something equal to, or less than, the capacity of the virtual device. Reissue the command in error.

HCP393E I/O ERROR ON DISK *vdev*; INCORRECT RECORD LENGTH

Explanation

The SALIPL command processor encountered an incorrect record length on disk (*vdev*) while reading or verifying disk records.

System action

The command is not executed. System operation continues.

User response

Ensure the disk has been properly formatted with the CP format program. Then enter the SALIPL command again. If the error persists, contact your system support personnel.

HCP394E I/O ERROR; DISK *vdev* IS BUSY OR HAS INTERRUPT PENDING

Explanation

The SALIPL command processor encountered an I/O error indicating that the specified device is busy or has an interrupt pending.

System action

The command is not executed. System operation continues.

User response

Enter the SALIPL command again. If the error persists, contact your system support personnel.

HCP395E PERMANENT I/O ERROR ON DISK *vdev*; SENSE=*xxxx*

Explanation

The SALIPL command processor encountered a permanent I/O error on a virtual device (*vdev*) that it cannot handle. In this message, *xxxx* refers to the first two sense bytes (in hexadecimal) for the error condition.

System action

The command is not executed. System operation continues.

User response

Ensure the hardware is operational and the specified device is supported by the system. Then enter the SALIPL command again. If the error persists, contact your system support personnel.

HCP396E I/O ERROR. THIN STACK FUNCTION=*function* RC=*rc*

Explanation

An I/O error occurred while the SALIPL command was attempting to read or write to a SCSI LUN.

System action

The SALIPL command failed; system operation continues.

User response

Reissue SALIPL. If the failure occurs again, determine if there is another available path to the SCSI LUN. Use the available path by specifying a different combination of the FCP subchannel, WWPN and LUN. Alternatively, use another available SCSI LUN. If the problem persists, contact your IBM support personnel.

HCP399E TDSK CANNOT BE ALLOCATED ON CYLINDER 0

Explanation

Cylinder 0 cannot be allocated as TDSK space.

System action

The command is not executed; system operation continues.

User response

Use the CPFMTXA utility to change the extent specification to a value other than zero. For more information on using the CPFMTXA utility to change the allocation map, see CPFMTXA in *z/VM: CP Commands and Utilities Reference*.

HCP400I The variations of this message are explained below.

— Variation 1 All {paging|spooling} space is in use.

Explanation

All paging or spooling disk space is in use.

System action

If both paging and spooling spaces are full, the system issues abend PGT004. If necessary, spooling space is used to fill paging requests.

User response

Review system usage and take steps to reduce the system load. Review the spool files. You may start additional printers to reduce print spool backlog; if a reader backlog exists, request all users to read in their files. In addition, you may use SPXTAPE to save selected spool files on tape before purging them.

— Variation 2	**All IOAT subpool space is in use.**

Explanation

Storage for IO address table is coming from the available list because all the IOAT subpool storage is in use.

System action

System operation continues.

User response

Reduce PCIe use or increase the IOAT subpool size.

HCP401I	**The variations of this message are explained below.**
— Variation 1	**90 percent of all {paging|spooling} space is in use.**

Explanation

Ninety percent of all paging or spooling space is in use.

System action

System operation continues.

User response

Review system usage and take steps to reduce the system load. Review the spool files. You may start additional printers to reduce print spool backlog. If a reader backlog exists, request all users to read in their files. In addition, you may use SPXTAPE to save selected spool files on tape before purging them.

— Variation 2	**0-99 percent of all IOAT subpool space is in use.**

Explanation

The percent of used IOAT subpool space is at the warning percent specified by the system programmer.

System action

System operation continues.

User response

Take preventative action, such as reducing PCIe usage or increasing the IOAT subpool size.

— Variation 3	**0-99 percent of pageable frames are locked.**

Explanation

The percent of pageable frames that are locked is at a level set by the system programmer.

System action

System operation continues.

User response

Take preventative action, such as reducing the number of PCIe functions active or reducing system load, to lower the number of frames locked.

— Variation 4	**Pin request failed. 0-99 percent of pageable frames are locked.**

Explanation

A pin request for PCIe IO failed because the percent of locked pages exceeded the fail percent specified by the system programmer.

System action

System operation continues.

User response

Reduce the number of PCIe functions active or reduce system load, to lower the number of frames locked.

— Variation 5	***warn_value* percent of all paging space is in use.**

Explanation

The amount of paging space in use reached the warning level defined on a PAGING statement in the system configuration file, or with a SET PAGING command.

System action

System operation continues.

User response

Determine if the current WARNING value is appropriate for the workload. If the amount of paging space in use is causing a concern, consider increasing the amount of paging space or reducing the size of the workload.

— Variation 6 Paging space is now in use.

Explanation

A PAGING WARNING value of 0% is in effect. The system has transitioned from a state of having no slots allocated on DASD to having some slots allocated on DASD.

System action

System operation continues.

User response

Determine if the current WARNING value is appropriate for the workload. You might also want to ensure the AGELIST EARLYWRITES setting is set to NO to ensure CP's frame replenishment algorithm does not write to paging volumes until there is a need for the system to replenish frames. The EARLYWRITES value is specified on the STORAGE system configuration statement or on the SET AGELIST command.

HCP403I *rdev* {SCU|CACHE|DASD|MEDIA} *sev* ALERT, MT=*tttt-mm* SER=*mmaa-bbbbbbb* REFCODE=*cccc-cccc-cccc* [ID=*id*] [VOLSER=*volser*] [CCHH=X'*cccc hhhh*'|X'*CCCcccc h*'] [REPEATED]

Explanation

The DASD storage subsystem has detected an abnormal operational condition within the DASD subsystem that requires service attention.

In this message, the terms are defined as follows:

rdev
The device used to report the condition; this will be omitted if no I/O activity is directed toward the affected device resulting in the SIM being presented on an unrelated device.

sev
ACUTE, SERIOUS, MODERATE, or SERVICE

tttt-mm
The machine type and model or 'UNKNOWN' if they cannot be determined

mmaa-bbbbbbb
The serial number of the failing device

cccc-cccc-cccc
The reference code

id
The Service Information Message (SIM) identifier

volser
The DASD volume serial number or '/UNKN\' if it is unrelated to this SIM

X'*cccc hhhh*'|X'*CCCcccc h*'
The address of the failing track (media SIMs)

REPEATED
For non-media SIMS (DASD hardware) only; it is shown when the message is a repeat presentation of a previously reported SIM.

System action

System operation continues.

Operator response

Record all the information displayed in the message and contact your system support personnel.

Programmer response

Collect EREP records that provide additional details on the failure. Contact the appropriate hardware service personnel with the EREP records and console messages recorded by the system operator.

HCP404E Device *rdev* not detached - device is being given

Explanation

The *user* attempted to detach real device address *rdev* while the corresponding real device was being given.

System action

The DETACH command is ignored, and the GIVE command continues processing.

User response

Retry the DETACH command after the GIVE command has completed.

HCP405A Mount form *operform* on {printer|punch} *rdev*

Explanation

The output device (*rdev*) requires that the form (*operform*) be mounted.

System action

CP suspends printing or punching on the device until the operator mounts the new form and presses the START button, or until the operator enters a START command at the console.

User response

Mount the appropriate form on the device. When the form is mounted, press the START button or issue the START command, and all files with the form specified and other requirements matching the START device selection criteria will print or punch.

HCP406A **Check forms alignment for form *operform* on printer *rdev*.**

Explanation

The printer (*rdev*) is in SETUP mode. The form that is active on the device should be checked for forms alignment.

System action

CP suspends printing on the device until the operator sets up the form and presses the STOP and START buttons, or until the operator enters a START command at the console.

User response

Check the form for alignment. Press the STOP and START buttons to get an alignment page. Each time an alignment page is printed, the printer idles. You can either press the STOP and START buttons to get another alignment page or, when the paper is properly aligned, you can issue the START command to print the entire file.

HCP410E **The variations of this message are explained below.**

Explanation

- CP ENTERED; PAGING ERROR
- Command terminated; paging error
- Request terminated; paging error

An error occurred during paging. This is probably a hardware error.

System action

System operation continues. The virtual machine enters console function mode. If the virtual machine was running disconnected and no action occurs within 15 minutes, CP logs off the virtual machine.

User response

Reload the virtual system to continue. If the error is from paging to DASD, examine the console messages and LOGREC records to find the DASD that is causing the paging error. If the problem persists, contact the IBM Support Center.

HCP413E **Command processing cannot complete due to a spool paging error.**

Explanation

An I/O error occurred while the system was attempting to read or write a spooling page to or from a direct access storage device.

System action

Command processing terminates; system operation continues.

User response

The command terminates, but the results vary, depending on the command. If you issued the START command with the IMG option, this caused the device to DRAIN. If you issued the TAG command, the tag is not updated. If you issued the CHANGE command, the file will appear to be changed, but the changes will not survive a system restart. Check the extent of command execution and reissue the command as required. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP415E **Six continuous paging errors have occurred on DASD *nnnn* volume *volser*.**

Explanation

At least six consecutive paging I/O errors have occurred on the same volume in a one second time span. The variables are:

nnnn
The real device number of the DASD

volser
The volume serial number

System action

A message with details of the error is written to the system operator's console. For write errors, the affected area of the volume is flagged unusable for the duration of the IPL, the write operation is retried and system operation continues. If the I/O operation is critical to the continued operation of the system and cannot be recovered, a hard abend will occur. Otherwise, a soft abend or a user abend may occur.

User response

If the system operator's console indicates a RECORD NOT FOUND I/O error, then the volume was improperly formatted, or the volume has been corrupted due to an overlapping minidisk or by another system sharing the volume. Use the Device Support Facilities (ICKDSF) CPVOLUME EXAMINE command to determine the location of the error.

For other types of I/O errors, examine the paging device for possible hardware problems.

HCP417E **{*rdev*|*vdev*} is not an output spooling device.**

Explanation

The device specified must be an output spooling device. Valid devices are printers and punches.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid output device specified.

HCP418E **{*rdev*|*vdev*} is not a spooled device.**

Explanation

The device specified is not a spooled device. For a real device, the device must be a nondedicated reader, printer, or a punch. For a virtual device, the device must be a console or a nondedicated reader, printer, or a punch.

System action

The command is not executed; system operation continues.

User response

Reissue the command specifying a spooled device.

HCP419E **{*rdev*|*vdev*} is not a spooled printer.**

Explanation

The specified device is not a spooled printer.

System action

The command is not executed; system operation continues.

User response

Reissue the command, specifying the address of a spooled printer.

HCP421E **Printer *prt-type* does not support the {*feature* feature|*command* command}. [*UCS_name* is the name of the UCS associated with the currently installed print band| The UCS could not be loaded or read]**

Explanation

The printer (1403, 3203, 3262, 3800, 4245 or 4248) specified in the command does not have the capabilities to perform the function requested.

If this error message includes **"The UCS could not be loaded or read,"** two possible reasons could be:

- The I/O to the printer to determine the Print Band ID fails.
- The I/O to the printer to determine the Print Band ID does not fail, but the Print Band ID returned is X'00000000'. This will occur if the LOADBUF command was entered on a second level system, and the printer is really a virtual simulated device.

System action

The command is not executed. System operation continues.

User response

If another printer is available that has the function requested, enter the command again for that printer. If a printer is not available with the function, enter the print request again without specifying that function.

HCP422E **The same option was specified twice.**

Explanation

You specified the same option twice in the same command.

System action

System operation continues.

User response

Reissue the command specifying the option only once.

HCP423E The function requested is incompatible with a previously specified operand.

Explanation

The function requested by a specified option is incompatible with a previously specified operand.

System action

CP processes the command until it encounters the error. System operation continues.

User response

Check the command syntax and reenter the command, making sure that each operand is compatible with all previous operands.

HCP424I The requested option(s) would result in incompatible settings for reader *vdev*. The reader has been spooled KEEP to remove this conflict.

Explanation

The reader was spooled CONT, RESCAN, HOLD, and NOKEEP.

System action

The reader is spooled KEEP to remove the conflict.

User response

None.

HCP427E *type* {*rdev* | *vdev* | *NSS_name* | *TRF_filename*[*.userid*]} system spool space full; file {closed | held | purged}

Explanation

System spooling space on the device specified, or for the system trace file specified, is full.

The *type* may be: a reader, printer, punch, console, tape, NSS, or system trace file.

If the message refers to one of the following file types, CP purges the files: reader, NSS, or tape.

Otherwise, CP closes the file. For a console, printer, or punch file, CP also puts it in HOLD status.

System action

When the console spool file closes, virtual console spooling stops. The virtual machine continues to execute, but without console spooling.

For virtual devices, an intervention-required unit check condition is returned to the virtual machine. CP makes the virtual device not ready, and the system continues execution when the printer or punch output file closes.

For the DEFSYS or DEFSEG command, CP does not create the skeleton file. For the SAVESYS or SAVESEG command, CP purges the system data file.

If the message refers to a system trace file, the open file is closed. Tracing is ended for the trace *name* or user *userid* generating data for this file.

The related files (spool IDs) already generated are saved, as if tracing had been terminated by user commands.

Operator response

Make an attempt to reduce the spooling load on the system as soon as possible. You may use SPXTAPE to save selected spool files on tape before purging them. If the real reader file is purged, try the read operation again when more space is available.

User response

Inform the system operator that you received this message. When spool space is available, issue the SPOOL CONSOLE START command to resume console spooling, or issue the READY command to resume printer or punch spooling.

If the message refers to a system trace file, inform the person who started trace recording so that they can reissue the command when spool space becomes available.

Programmer response

For NSS type files, purge unnecessary system data files or spool files to reclaim spool space. For system

trace files, purge unnecessary system data files or spool file files and reissue the TRSOURCE or TRSAVE command.

HCP428E ***type* {*rdev*|*name* [*userid]*} spool error; file {held| purged|closed}**

Explanation

A paging I/O error occurred while CP was reading or writing a file for the specified real device or trace file, or while tracing to a system data file.

System action

For all non-trace operations, if the file that was processing at the time the I/O error occurred is a printer or punch file, CP places the file in system HOLD status, and system operation continues. If the file is a reader file, CP purges it.

For system trace files, CP attempts to close the file. Tracing is ended for the trace *name* or origin ID *userid* generating data for this file. The related files (spool IDs) already generated are saved, as if tracing had been terminated by user command.

User response

If the file is a printer or punch file, try to print or punch it again when spooling activity on the printer or punch is low. You must first take the file out of system HOLD status.

If the file is a reader file, reload the cards in the reader and try again.

For system trace files, start the trace again.

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP429E ***type vdev* spool error; file {held| purged}**

Explanation

A paging I/O error occurred while CP was reading or writing a file for the specified virtual device.

System action

If it is a console spool file error, virtual console spooling stops, and CP closes the file. The virtual machine continues to execute, but without console spooling.

If it is a printer or punch spool file error, the virtual machine receives a unit check condition to stop the write operation. CP then places the file in system HOLD and makes the virtual device not ready.

If it is a reader file spool error, the virtual machine receives a unit check condition to stop the read operation. CP then places the file in system HOLD, and system operation continues.

User response

For a console file, issue a SPOOL CONSOLE START command and retry the output operation.

For a printer or punch file, issue the READY command to the virtual device and retry the output operation.

For a reader file, try again to read the file.

If the problem persists, the error is probably due to a hardware malfunction.

HCP431E **Reader *rdev* id card missing or invalid**

Explanation

The card just read in the reader at real device (*rdev*) was not a valid ID card. Two formats are acceptable:

- ID *userid*
- USERID *id*

Separator or blank cards are accepted before an ID card; any other card preceding the ID card is invalid.

System action

System operation continues.

User response

1. Run out the cards in reader *rdev*
2. Correct the ID card error
3. Make the reader ready using the corrected deck in the hopper.

HCP432E **The ID card for reader *rdev* is invalid because *userid* is not in the CP directory.**

Explanation

The user ID specified on an ID card in the reader at real device (*rdev*) is not in the z/VM directory.

System action

System operation continues.

User response

1. Run out the cards in reader *rdev*
2. Correct the ID card error if one is found

3. Make the reader ready with the corrected deck in the hopper.

If the *userid* in the message appears to be valid and is eight characters long, check the ID card for a *userid* that is greater than eight characters. Only the first eight characters of the *userid* will be displayed in the message.

If the ID card appears valid, check with the system programmer to determine why the user ID does not exist in the z/VM directory.

HCP433E **Reader *rdev* id card; invalid data - *data***

Explanation

The class specified on the ID card in the reader at real device (*rdev*) is incorrect, or the name specified is invalid. The data is the information in error on the ID card. If a class is specified, it must be one character, A through Z or 0 through 9. If no class is specified, the default is A. If a name is specified, it must be a 1- to 8-character file name and a 1- to 8-character file type, or a 1- to 16-character data set name. The fields of the ID card are free form as follows:

```
ID userid.. CLASS n NAME
filename filetype TAG tagdata
```

Note: If TAG is specified, all data that follows (if any) is used as tag information.

System action

System operation continues.

User response

1. Run out the cards in reader *rdev*
2. Correct the ID card error
3. Make the reader ready using the corrected deck in the hopper.

HCP435E **{SAVESYS|SAVESEG} command was not completed because a paging I/O error occurred while writing a page. or{DEFSYS|DEFSEG} command processing cannot complete because a paging I/O error occurred while writing a page.**

Explanation

A paging I/O error occurred while CP was writing a page to the system data file.

System action

CP halts processing of the SAVESEG or SAVESYS command and purges the NSS or saved segment skeleton file. If an NSS or saved segment with the same name was previously active (class A or R), CP does not purge it.

CP halts processing of the DEFSEG or DEFSYS command and does not define the NSS or saved segment.

User response

Issue the command again. If the paging I/O error persists, check to see if the spool DASD space is formatted correctly. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP439E **{User *userid*|*NSS|*IMG|*UCR|*NLS} spool fileid limit exceeded**

Explanation

The maximum number of spool files allowed for the specified user or queue has been exceeded. If the file was being transferred to a new user, the file remains on the originator's queue. If the file was being loaded from tape using SPXTAPE, the file was loaded and assigned to the user that entered the command. If *userid* entered the command, the file was not loaded.

System action

CP rejects the request for a spool file ID unless it is for an SPXTAPE LOAD, and the user entering the command has not exceeded the spool file limit. System operation continues.

User response

Delete all of your unnecessary spool files, or request the intended receiver of the spool file to do the same. If SPXTAPE has assigned the spool file to your user ID because you entered the command, transfer the file to the intended receiver or purge the file.

HCP440I **{Named Saved System (NSS)|Saved segment} *name* was successfully {saved|defined} in fileid *fileid*.**

Explanation

The specified NSS or saved segment was successfully defined or saved by a DEFSYS, DEFSEG, SAVESYS, or SAVESEG command. In this message, the variables are as follows:

name
The name of the NSS or saved segment.

fileid
The spool file number associated with the NSS or saved segment.

System action

System operation continues.

User response

None.

HCP445E The {Named Saved System (NSS)|Saved segment} *name* could not be {saved|defined} due to an unexpected error.

Explanation

A called routine issued an unexpected condition code or return code while defining or saving the NSS or saved segment.

This error might be reported if the collaborative memory management assist was in use, and the specified page range or ranges included pages in a block-usage state other than the stable state and the block-content state was logically zero.

System action

CP halts processing of the DEFSEG, DEFSYS, SAVESEG, or SAVESYS command. For the DEFSEG or DEFSYS command, CP does not create the NSS or saved segment skeleton file. For the SAVESEG or SAVESYS command, CP purges the NSS or saved segment skeleton file.

User response

If using the collaborative memory management assist, make sure all pages being saved are in the stable state.

In the case of an internal CP error, a soft abend NSD001 or NSS001 occurred. Refer to the abend code description for further details.

HCP446E The {Named Saved System (NSS)|saved segment} *name* was not previously defined and cannot be saved.

Explanation

The specified NSS or saved segment *name* was not previously defined by the DEFSEG or DEFSYS command.

System action

CP halts processing of the SAVESEG or SAVESYS command and system operation continues.

User response

Issue the DEFSEG or DEFSYS command for the NSS or saved segment, or correct the name of the NSS or saved segment and reissue the SAVESEG or SAVESYS command.

HCP447E System *sysname* cannot be IPLed due to an invalid processor configuration.

Explanation

CP cannot load the IPLed NSS or saved segment *sysname* because the virtual CPU configuration at SAVE time is not compatible with the virtual CPU configuration currently operating.

System action

CP halts processing of the IPL command and puts the user in a wait state. System operation continues.

User response

Issue the SET MACH command to change the virtual CPU configuration.

HCP448E System *name* not quiesced{. Outstanding I/O on device *rdev*.|due to an outstanding external interrupt.}

Explanation

You did not quiesce the indicated system in order to allow the save to continue.

System action

CP halts processing of the SAVESEG or SAVESYS command and does not save the NSS or saved segment skeleton file.

User response

Ensure that the NSS or saved segment does not have any outstanding I/O or external interrupts. Then issue the command again.

HCP449E Your userid is not authorized to IPL system *name*.

Explanation

You issued an IPL specifying restricted NSS *name* without the necessary authorization in the CP directory. If an external security manager (ESM) is installed on your system, you may receive this message if you are not authorized to IPL the specified system.

System action

The command is not executed; system operation continues.

User response

Obtain the authorization to access the restricted NSS from your system administrator.

HCP450W CP entered; disabled wait PSW *psw*

Explanation

The virtual machine loaded a disabled wait PSW, identified by *psw*.

System action

System operation continues. The virtual machine enters console function mode. If the virtual machine was running disconnected, it is logged off the system.

User response

This message may have been preceded by an explanatory message from the operating system running in your virtual machine. If it is not, examine the PSW portion of the message. To interpret the wait state code in the PSW, refer to the section on wait states of the corresponding manual for the system you were running in your virtual machine. Take the specified corrective action, then re-IPL the virtual system again.

The following paragraph is an explanation of a possible wait state situation for the CMS environment. It is not the only wait state that can be sent to a user. It is just an example of what the wait state might look like.

If you were running CMS, and you received this message with the PSW '00060000 00000070', then CMS received a virtual machine check. Re-IPL CMS and try again.

Programmer response

Examine the PSW portion of the message. Ensure that the program running in the virtual machine has a valid load PSW (LPSW). If not, determine why the PSW loaded was not masked for interrupts.

HCP452I CP entered; external interrupt loop

Explanation

While handling an external interrupt, the user's virtual machine external new PSW is enabled for an external interrupt condition that will not be cleared upon acceptance (for example, the timer is not expected to contain a negative value). It is possible to receive an interrupt condition from the CPU timer and the time-of-day (TOD) clock comparator that produces this loop.

System action

System operation continues. The virtual machine enters CP command mode.

User response

To continue, IPL the virtual system again.

Programmer response

Determine why the external interrupt new PSW is enabled for an interrupt condition that will not be cleared upon acceptance (that is, the timer is not expected to contain a negative value).

HCP453W CP entered; program interrupt loop

Explanation

A program interrupt occurred at the address specified in the virtual program new PSW.

System action

System operation continues. If no virtual CPU remains operational, the program interrupt is reflected to the virtual machine, the virtual CPU is placed in hard stop, and the user enters console function mode. If the virtual machine was running disconnected, it is logged off the system.

User response

To determine the reason for the loop, examine the program-check information in page zero of your virtual storage. If this error occurred immediately after the IPL command, the problem may be that you are trying to run a 370 guest in XA mode. z/VM no longer supports 370 mode; try using the 370 Accommodation Facility. After correcting the error, reissue the IPL command.

HCP454I Line *rdev* disabled

Explanation

The communication line is disabled as a result of I/O errors. See message HCP455I for reason of error.

System action

None.

User response

Check the line for any possible problems, and then try to enable the line.

HCP455I Line *rdev* not operational; {CC=3|command reject|fatal i/o error}

Explanation

The communication line is not operational for the indicated reason.

System action

The communication line is disabled.

User response

Check the line for any possible problems and then try to enable the line.

HCP475I Fatal I/O error trying to read directory from *volid* [for user *userid*]

Explanation

The z/VM directory that the system is currently using could not be read because of an unrecoverable I/O error.

System action

The system tries to continue.

Operator response

Try to rewrite the directory as soon as possible using the directory program (DIRECTXA). If the failure still exists after rewriting the directory, the area may have to be reformatted using ICKDSF or the CPFMTXA utility.

The error recording records contain information on the unrecoverable read errors.

If the problem persists, after reformatting and rewriting the directory, call your system support personnel.

User response

Reissue the command. If the problem persists, contact your system operator or system support personnel.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP477E Traceid *traceid* not enabled; incomplete definition

Explanation

The trace ID specified requires additional type dependent information before it can be enabled. If the trace is of type IO, this message may be issued for two reasons:

- The *traceid* definition never contained any valid DEVICE specifications.
- None of the devices specified for the given trace ID exist.

If the trace is of type DATA, this message may be issued for two reasons:

- The *traceid* definition never contained any valid LOC specifications.
- The *traceid* definition contains an incomplete IF statement, possibly missing an ENDIF statement.

System action

The trace ID is not enabled, and the rest of the command is processed.

User response

Find the missing information on *traceid* using either the TRSOURCE DISPLAY or QUERY TRSOURCE command, and define the missing information using

the required operands. Then enter the TRSOURCE command again to enable the trace.

If the trace was of type IO, verify all DEVICE operands specified exist before attempting to enable again. At least one of the specified devices should exist. If the trace was of type DATA, verify all LOC operands are specified and all IF statements are completed.

HCP479E Traceid *traceid* currently enabled

Explanation

The trace ID for which the command was invoked has already been enabled and cannot be altered.

System action

The command is rejected. The existing trace definition is not modified.

User response

Disable the trace ID and make the desired modification.

HCP480E AN OPERAND OF THE LOAD STATEMENT IS MISSING.

Explanation

An operand of the LOAD statement is missing.

System action

Processing is terminated, and control is returned to the caller with return code of 2 in register 15.

User response

Refer to *z/VM: CP Planning and Administration* to determine what the content of the statement should have been. Correct the missing operands in the control statement and reissue the DIRECTXA command.

HCP481E THE LOAD STATEMENT TYPE FIELD IS INVALID; ONLY “C”, “G”, “P”, “I”, “S”, OR “U” IS ALLOWED.

Explanation

The indicator of the type of LOAD control statement is invalid. It can be only C for CONTROL, G for POSIXGROUP, P for PROFILE, I for IDENTITY, S for SUBCONFIG, or U for USER.

System action

Processing is terminated, and control is returned to the caller with return code 2 in register 15.

User response

Correct the invalid operand in the control statement and reissue the DIRECTXA command.

HCP482E THE FORMAT OF AN OPERAND ON THE LOAD STATEMENT IS INVALID - operand.

Explanation

The indicated operand on the LOAD control statement is the wrong length or format.

System action

Processing is terminated, and control is returned to the caller with return code 2 in register 15.

User response

Correct the invalid operand in the control statement and reissue the DIRECTXA command.

HCP483E THE CMS STATE COMMAND FAILED WITH RETURN CODE *nnnn* WHILE TRYING TO LOCATE THE DEFINITION FILE SPECIFIED ON THE LOAD STATEMENT.

Explanation

The CMS STATE command failed while determining the existence of the separate part file or cluster file as specified on the LOAD statement.

System action

Processing is terminated, and control is returned to the caller with return code 1 in R 15.

User response

Consult *z/VM: CP Commands and Utilities Reference*, under the STATE command for the explanation of the return code displayed in the message. Determine the cause of the error, correct the problem, and reissue the DIRECTXA command.

HCP485I THE DIRECTORY PROCESS IS RUNNING IN CPUID = *nnnnnn-xxxx*, WITH SYSTEM AFFINITY NAME = *aaaaaaaa*.

Explanation

This message identifies the CPU, *nnnnnn-xxxx*, on which the DIRECTXA command is running and the

system, *aaaaaaaa*, for which the directory is being processed.

System action

Directory processing continues.

User response

None.

HCP486E THE DIRECTORY CONTROL STATEMENT HAS AN INVALID CPUID FIELD.

Explanation

The value of the CPUID parameter in the DIRECTORY control statement is either greater than 11 characters or not in the format of *nnnnnn-xxxx* or **nnnnn-xxxx*. These values must be a hexadecimal number.

System action

The failing control statement is displayed above this error message. Processing ends after the syntax of the remaining statements is checked.

User response

Correct the CPUID value and reissue the DIRECTXA command.

HCP487E NO DIRECTORY CONTROL STATEMENT WAS FOUND THAT MATCHES OUR CPUID (*nnnnnn-xxxx*).

Explanation

None of the DIRECTORY control statements in the USER DIRECT file or in the control DIRMPART file matched the CPU ID, *nnnnnn-xxxx*, of this system.

System action

Processing is terminated, and control is returned to the calling module with a return code of 2 in register 15.

User response

Determine which DIRECTORY control statement should have contained the CPU ID of your system. Correct the DIRECTORY control statement and reissue the DIRECTXA command.

HCP489E THIS DIRECTORY CONTROL STATEMENT DOES NOT HAVE A SYSTEM AFFINITY ID.

Explanation

A DIRECTORY control statement was specified with a CPUID parameter, *nnnnnn-xxxx*, but without a system affinity parameter, *sysafnid*.

System action

Processing is terminated, and control is returned to the calling module with a return code of 2 in register 15.

User response

Correct the statement and reissue the DIRECTXA command.

HCP490E THE EDIT MODE DIRECTORY STATEMENT MUST BE LAST IN THE SEQUENCE OF THE DIRECTORY STATEMENTS.

Explanation

The EDIT mode DIRECTORY statement is optional. However, if it is present, it must be the last statement in the sequence of DIRECTORY statements.

System action

Display the control statement, record the error, and scan the remaining control statements for syntax.

User response

Correct the placement of the statement, and then reissue the DIRECTXA command.

HCP491E A USER STATEMENT DOES NOT DIRECTLY FOLLOW A SYSTEM AFFINITY PREFIX STATEMENT (AT RECORD NUMBER *nnnnnnnn*) IN FILE *filename filetype filemode*.

Explanation

The control statement following a SYSAFFIN prefix control statement was not a USER control statement. Only a USER control statement can follow a SYSAFFIN prefix control statement.

System action

The control statement that follows the SYSAFFIN statement is displayed before this message is issued. Processing is terminated, and control is returned to the calling module with a return code of 2 in register 15.

User response

Correct the statement and reissue the DIRECTXA command.

HCP492I **LOAD COMPLETED, STATEMENTS READ FROM CLUSTER FILES = *nnnnnnnn*, CLUSTER FILE DEFINITIONS = *nnnnnnnn*, SEPARATE FILE DEFINITIONS = *nnnnnnnn*, TOTAL STATEMENTS PROCESSED = *nnnnnnnn*.**

Explanation

If DIRECTXA is operating in CLUSTER mode and the EDIT option is not specified, this summary statement is displayed. The variables *nnnnnnnn* for the cluster file and separate file definitions represent the counts of DIRECTORY, PROFILE, and/or USER definitions read from either of these modes of storage (CLUSTER files or DIRMPART,$DIRECT files, respectively).

System action

Continue processing.

User response

None.

HCP493E **THE *option* OPTION WAS SPECIFIED ON THE DIRECTXA COMMAND WITHOUT A VALUE FOLLOWING IT.**

Explanation

The user invoked DIRECTXA with an option that must be followed by a value, but the value was omitted.

System action

Processing is terminated, and control is returned to the calling module with a return code of 3 in register 15.

User response

Enter the DIRECTXA command again with a value for the option. For the SYSAFNID option, specify a value from one of the DIRECTORY control statements in the USER DIRECT file. For the &SYSRES option, specify the 1- to 6-character string to be used to represent the system residence volume serial.

HCP494I **User directory occupies *nnnnn* disk pages.**

Explanation

The object directory created from the source directory occupies the indicated number of pages on disk.

System action

Processing continues.

User response

None.

HCP496E **SSI option on the DIRECTORY statement conflicts with system affinity specifications.**

Explanation

System affinity specifications are not allowed with an SSI-enabled source directory. Items not allowed include

- SYSAFFIN statements in the directory
- The *sysafnid* operand on the DIRECTORY statement
- The *sysafnid* option on the DIRECTXA command.

System action

The directory program terminates without scanning the remaining statements for syntax and without bringing a new directory online.

User response

If you want to use system affinity specifications, then remove the SSI operand from the DIRECTORY statement. If you want to create an SSI-enabled source directory, then remove all system affinity specifications. Then reissue the DIRECTXA command.

HCP497E **An IDENTITY, SUBCONFIG or BUILD statement conflicts with system affinity specifications**

Explanation

System affinity specifications are not allowed in an SSI-ready or SSI-enabled directory.

System action

The directory program terminates without scanning the remaining statements for syntax and without bringing a new directory online.

User response

If you want to create a non-SSI directory with system affinity specifications, then you must remove any SSI-related options or statements that cause the directory to be SSI-ready or SSI-enabled. If you want to create an SSI-ready or SSI-enabled directory, then you must remove all SYSAFFIN statements and you must not specify the SYSAFNID option on the DIRECTORY statement or the DIRECTXA command.

After correcting the directory statements, reissue the DIRECTXA command.

HCP498E BUILD statements are only allowed within IDENTITY definitions.

Explanation

A BUILD statement was found outside of an identity entry. BUILD statements are allowed only within identity entries.

System action

After scanning the remaining statements for proper syntax, the directory program terminates without bringing a new directory online.

User response

Rearrange the directory statements so that BUILD statements appear only in identity entries.

After correcting the directory statements, reissue the DIRECTXA command.

HCP499E The number of BUILD statements exceeds the limit following IDENTITY *userid*.

Explanation

The number of BUILD statements per identity entry allowed in this type of source directory exceeded the limit. In an SSI-ready directory, at most one BUILD statement is allowed in an identity entry. In an SSI-enabled directory, up to 32 BUILD statements are allowed in an identity entry.

System action

After scanning the remaining statements for proper syntax, the directory program terminates without bringing a new directory online.

User response

Correct the directory statements so that the maximum number of BUILD statements is not exceeded.

After correcting the directory statements, reissue the DIRECTXA command.

HCP500I *type rdev* AN OPERATION WAS TERMINATED BECAUSE A COMMAND REJECT ERROR OCCURRED

Explanation

An error recovery routine detected a command reject I/O error on device *rdev*.

type
Type of Error Recovery Routine

GRAF
Display device

DASD
Disk

PRT
Printer

TAPE
Magnetic tape device

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

For all device types except DASD, no action is required. For a DASD, if this message occurs during the IPL, be sure the read/write switch on the drive is in the write position. If the message occurs after the IPL, no action is required.

HCP501A *type rdev* REQUIRES OPERATOR INTERVENTION

Explanation

An error recovery routine encountered an intervention-required condition on the device (*rdev*) specified.

type
Type of Error Recovery Routine

DASD
Disk

GRAF
328X display printer

TAPE
Tape

System action

System operation continues.

User response

If the device is intervention-required, then for:

A DASD:
Check to find out if the device is ready. If not, take appropriate action to make the device ready. Verify a disk pack has been mounted.

A tape:
Check to find out if the device is ready. If not, take appropriate action to make the tape ready. Verify a tape has been mounted.

Unit record devices:
If you cannot make the printer or punch ready to retrieve the active file on the device:

1. Use the FLUSH command to flush the device. The file will have a system hold status if you used the HOLD operand with the FLUSH command. This will free the file for processing on another device.
2. Use the DRAIN command to drain the device.
3. Vary the device offline.

HCP502I **GRAF *rdev* A BUS OUT PARITY CHECK OCCURRED**

Explanation

An error recovery routine detected an unrecoverable bus-out check I/O error on device *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

If the problem persists, contact your system support personnel.

HCP503I ***type rdev* AN EQUIPMENT CHECK OCCURRED**

Explanation

The system detected an equipment malfunction on device *rdev*.

type
Type of Error Recovery Routine

GRAF
Display device

DASD
Disk

PRT
Printer

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

None.

HCP504I ***type rdev* AN UNRECOVERABLE DATA CHECK OCCURRED**

Explanation

The system detected an unrecoverable data check on device *rdev*.

type
Type of Error Recovery Routine

GRAF
Display device

DASD
Disk

TAPE
Tape

PRT
Printer

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

This is a probable hardware error. For tape, check the tape to make sure it is not damaged. If the problem persists, examine the outboard record (OBR) within LOGREC for specific hardware error conditions and contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP505I ***type rdev*** **AN OPERATION WAS TERMINATED BECAUSE A DEVICE DEFERRED ACCESS OCCURRED**

Explanation

An error recovery routine found an unrecoverable overrun check I/O error on device *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

This is a probable hardware error. If the problem persists, contact your system support personnel.

HCP506I **DASD** ***rdev*** **TRKCOND CK CMD=*cm* SNS=*sense* [IRB=*irb* USERID=*userid*] [BBCCHH=*bbcchh*]**

Explanation

The disk error recovery routine found an unrecoverable track condition check I/O error. The variables are as follows:

rdev
The failing device

cm
The command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

userid
The associated user ID, if available

bbcchh
The address (bin, cylinder, and head), in hexadecimal, where the error occurred

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the outboard record (OBR) within LOGREC for specific hardware error conditions and contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP507I **DASD** ***rdev*** **SEEK CK CMD=*cm* SNS=*sense* [IRB=*irb* USERID=*userid*] [BBCCHH=*bbcchh*]**

Explanation

The disk error recovery routine found an unrecoverable seek check I/O error. In this message, the variables are as follows:

rdev
The failing device

cm
The command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

bbcchh
The address (bin, cylinder, and head), in hexadecimal, where the error occurred

userid
The associated user ID, if available

System action

System operation continues.

Operator response

None.

HCP508I **{DASD|PRT|PUN|RDR}** ***rdev*** **PERM ERROR CMD=*cm* SNS=*sense***

[IRB=*irb* USERID=*userid*]
[BBCCHH=*bbcchh*]

Explanation

The disk error recovery routine (DASD) or the spooling error recovery routine (PRT, PUN, or RDR) found an unrecoverable permanent error condition. In this message, the variables are as follows:

rdev
The failing device

cm
The command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

userid
The associated user ID, if available

bbcchh
The address (bin, cylinder, and head), in hexadecimal, where the error occurred (for DASD only)

System action

System operation continues.

Operator response

This is probably a hardware error. Contact your system support personnel.

Programmer response

Examine the outboard record (OBR) within LOGREC for specific hardware error conditions and contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP509I **DASD *rdev* AN OPERATION WAS TERMINATED BECAUSE THE TRACK CAPACITY WAS EXCEEDED**

Explanation

An unrecoverable track overrun check I/0 error is detected on device *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP510I **TAPE *rdev* CONVERT CK CMD=*cm* SNS=*sense* [IRB=*irb* USERID=*userid*]**

Explanation

The tape error recovery routine found an unrecoverable data convert check I/O error. In this messages, the variables are as follows:

rdev
The failing device

cm
The command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

userid
The associated user ID, if available

System action

System operation continues.

Operator response

This is a probable hardware error. Check the tape to make sure it is not damaged. If the problem persists, contact your system support personnel.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP512I **TAPE *rdev* LOAD POINT CMD=*cm* SNS=*sense* IRB=*irb* USERID=*userid***

Explanation

The tape error recovery routine found an unrecoverable load point I/O error. In this message, the variables are as follows:

rdev
The failing device

cm
The command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

userid
The associated user ID, if available.

Note: This message may be issued when an SPXTAPE operation is started with a 3420 type device if the volume was positioned to the beginning of the tape by an operation other than a rewind or the initial mount of the tape.

System action

System operation continues.

Operator response

None.

HCP513I ***type rdev*** **AN OPERATION WAS TERMINATED BECAUSE A FILE PROTECT ERROR OCCURRED**

Explanation

For a DASD device, a SEEK command or a read and/or search multitrack operation on device *rdev* violated the file mask. This is probably a programming error. For a tape device, device *rdev* is in read-only mode.

type
Type of Error Recovery Routine

TAPE
Magnetic tape device

DASD
Disk

System action

System operation continues.

Operator response

None.

HCP515I ***DASD rdev*** **AN OPERATION WAS TERMINATED BECAUSE AN END OF CYLINDER OCCURRED**

Explanation

CP detected a cylinder boundary during a basic multitrack operation on device *rdev*. This is probably a software error.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the OBR (outboard record) record within LOGREC for specific software error conditions. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the software problem.

HCP516I ***type rdev*** **A UNIT CHECK WITH NO SENSE DATA OCCURRED**

Explanation

The sense data that the failing device *rdev* passed to the error recovery program was invalid. The possible values of *type* are:

type
Type of Error Recovery Routine

DASD
Disk

TAPE
Tape

GRAF
Display device

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

None.

HCP517I ***type rdev*** **AN OPERATION WAS TERMINATED BECAUSE**

AN UNRECOGNIZED ERROR OCCURRED

Explanation

CP detected an error on device *rdev* that it cannot identify. Therefore, no recovery action is available.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP518I **TAPE *rdev* AN ERROR OCCURRED WHILE TRYING TO RECOVER FROM A PREVIOUS ERROR**

Explanation

While attempting recovery on tape drive *rdev*, the tape error recovery routine encountered an error not associated with the original error. Error recovery cannot continue.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Contact your system support personnel.

HCP519I **TAPE *rdev* PE BURST CMD=*cm* SNS=*sense* [IRB=*irb* USERID=*userid*]**

Explanation

The tape error recovery routine found an unrecoverable phase encode burst I/O error. In this message, the variables are as follows:

rdev
The failing device

cm
The command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

userid
The associated user ID, if available

System action

System operation continues.

Operator response

Contact your system support personnel.

HCP520I **_type_ *rdev* CHAN ERROR CMD=*cm* SNS=*sense* [IRB=*irb* USERID=*userid*] [BBCCHH=*bbcchh*]**

Explanation

An error recovery routine encountered an unrecoverable channel I/O error. *type* in the message indicates which error recovery routine it was:

type
Type of Error Recovery Routine

DASD
Disk

PRT,PUN,RDR
Spooling

TAPE
Tape

The other variables in the message are:

rdev
The failing device

cm
The command code, in hexadecimal, of the channel command word (CCW) being executed

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

bbcchh
The address (bin, cylinder, and head), in hexadecimal, where the error occurred

userid
The associated user ID, if available

System action

System operation continues.

Operator response

Contact your system support personnel.

HCP521I ***type rdev*** **has no available channel paths**

Explanation

Device *rdev* entered an unavailable state during an error recovery attempt. *type* indicates which error recovery routine it was:

type
Type of Error Recovery Routine

PRT,PUN,RDR
Spooling

DASD
Disk

TAPE
Tape

rdev refers to the failing device.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Contact your system support personnel.

HCP524I **PRT *rdev* AN OPERATION WAS TERMINATED BECAUSE A LOAD CHECK OCCURRED**

Explanation

CP detected invalid data while loading the FCB (forms control buffer), character set, or copy modification module.

rdev in the message identifies the failing device.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Retry the operation. If the problem persists, contact your system support personnel. This is probably a software error.

Programmer response

Examine the MDR (miscellaneous data record) record within LOGREC for specific software error conditions. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the software error.

HCP525A **{RDR|PUN} *rdev* FORMAT CK CMD=*cm* SNS=*sense* [IRB=*irb* USERID=*userid*]**

Explanation

The spooling error recovery routine (for PUN) encountered a format error on a write RCE (Read Column Eliminate) command. In this message, the variables are as follows:

rdev
The failing device

cm
The command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

userid
The associated user ID, if available

System action

System operation continues.

Operator response

Retry the operation. If the problem persists, a probable CP software error exists. Contact your system support personnel.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the software error.

HCP526I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A DATA SECURITY ERASE (DSE) CHECK OCCURRED**

Explanation

Tape drive *rdev* was not ready after the Data Security Erase (DSE) command was issued, or an error occurred while the command was processing, causing a timeout condition to exist on communication lines.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP529I **PRT *rdev* BUFFER PARITY ERROR OCCURRED**

Explanation

The spooling error recovery routine (for PRT) found an unrecoverable parity error in either the print line or the universal character set (UCS) buffer. This message is displayed in conjunction with a message that specifies the sense data. Sense byte 3, bit 0 indicates that the parity error occurred in the universal character set (UCS) buffer. Sense byte 3, bit 1 indicates that the parity error occurred in the print line buffer.

rdev in the message identifies the failing device.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

This is probably a hardware error. If the problem persists, contact your system support personnel.

Programmer response

Examine the MDR (miscellaneous data record) record within LOGREC for specific hardware error conditions. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP530I ***graf rdev* A UNIT SPECIFICATION OCCURRED**

Explanation

The display error recovery routine detected an irrecoverable device-detected error on the failing device *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

None.

HCP531I ***graf rdev* A CONTROL CHECK OCCURRED**

Explanation

The display error recovery routine detected an irrecoverable error. The addressed device *rdev* failed to perform a specified operation or respond to the control unit within a specified period of time.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

None.

HCP532I ***type rdev*** **AN OPERATION WAS TERMINATED BECAUSE AN OPERATION CHECK OCCURRED**

Explanation

The *type* error recovery routine detected an unrecoverable error. The control unit of the failing device *rdev* received a command that is not valid or order that it cannot execute.

type
Type of Error Recovery Routine

GRAF
Display device

TAPE
Tape

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

None.

HCP533I ***type rdev*** **AN UNRECOVERABLE CHECK DATA ERROR OCCURRED**

Explanation

The error recovery routine encountered an irrecoverable data check during read-back verification phase of a write command with write and check data specified in the preceding LOCATE command.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP536I ***rdev devname*** **REPORTS DISABLED INTERFACE - FAULT CODE =** ***cccc***

Explanation

A unit check occurred on a DASD I/O request to a storage director module. The resulting sense data indicates that a permanent error occurred on the companion storage director.

rdev
The failing device

cccc
The fault symptom code obtained from the sense data that the CE uses to locate the failing component

System action

The I/O request to the device *rdev* is restarted. This retry should succeed since it uses a different control unit.

Operator response

Record the fault symptom code. Notify your IBM Support Center personnel.

HCP537A ***DASD rdev*** **THE LABEL COULD NOT BE READ**

Explanation

The label on the DASD could not be read because of I/O errors. *rdev* identifies the failing device.

System action

The system will not accept more I/O for this device, and all current I/O operations to this device are cancelled.

Operator response

If the system remains in operation, remove the volume, if possible, from the device. Consult your system support personnel before mounting the pack on another device.

HCP541E **The PF key copy function cannot complete due to a permanent I/O error on the printer.**

Explanation

A permanent I/O error on the printer has prevented the PFnn copy function from completing.

System action

System operation continues.

Operator response

No response is necessary.

HCP542E **DASD *rdev* OP INC CMD=*cm* SNS=*sense* IRB=*irb* USERID=*userid* [BBCCHH=*bbcchh*]**

Explanation

An error recovery routine found an irrecoverable operation-incomplete condition. The module code in the message identifier indicates the module where the problem was found. In this message, the variables are as follows:

rdev
The failing device

cm
The command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

userid
The associated user ID, if available

bbcchh
The address (bin, cylinder, and head), in hexadecimal, where the error occurred.

System action

System operation continues.

Operator response

If the problem persists, contact your system support personnel.

Programmer response

This is probably a channel program error. Examine the program that was running when the message occurred. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the software error.

HCP543I ***type rdev* UNRECOVERABLE DATA CHECK OCCURRED**

Explanation

The spooling error recovery routine received an unrecoverable data check error.

type and *rdev* in the message identify the failing device.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Contact your system support personnel. This is probably a software error.

HCP565I ***DASD rdev* VOLUME *volid* IS FENCED FROM A STORAGE PATH - *ssid.p-cc-dd***

Explanation

An internal error occurred that caused the subsystem to fence the specified device from use by the specified storage path.

The variables in the message are as follows:

rdev
The device used to report the condition

volid
The volume identifier of the affected device

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the EREP records (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data formats and descriptions. Contact the appropriate hardware service personnel.

HCP566I ***DASD rdev* A CONTROLLER OF A STORAGE PATH IS NOT OPERATIONAL - *ssid.p-cc-dd***

Explanation

An internal error occurred that caused a storage path to lose access to a DASD controller.

The variables in the message are as follows:

rdev
The device used to report the condition.

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components.

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the EREP records (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data formats and descriptions. Contact the appropriate hardware service personnel.

HCP568E **Maximum number of devices exceeded for traceid *traceid*.**

Explanation

The maximum number of devices and/or ranges for the IO type trace has been exceeded.

System action

Command rejected.

User response

Define a separate trace ID to trace extra devices.

HCP572I ***type rdev* an operation was terminated because the subsystem is functionally incompatible.**

Explanation

A unit check indicates that a channel command was issued requesting an operation which is understood by the subsystem, but cannot be performed because of one of the following:

- State of the subsystem
- Its configuration
- The set of installed features.

type
Type of Error Recovery Routine

TAPE
Magnetic tape device

GRAF
Display device

DASD
Disk

PRT
Printer

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

No action is required.

HCP574I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE THE TAPE WAS MANUALLY REPOSITIONED OR UNLOADED**

Explanation

The REWIND UNLOAD switch on tape drive *rdev* has been pressed, and the cartridge has been repositioned or is unloading.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Retry the operation if the REWIND UNLOAD switch was pressed by accident.

HCP575I **I/O error add=*rdev*, userid= *userid***

Explanation

The z/VM error recording interface has determined that a permanent or temporary I/O error has occurred on a virtual machine. This message also appears when z/VM error routines are invoked for recording counter and buffer overflow statistics for various devices, for recording demounts, and for recording general statistical data.

System action

System operation continues.

Programmer response

If the problem persists, call your system support personnel.

HCP576I **TAPE *rdev* A DATA STREAMING ERROR OCCURRED**

Explanation

Data streaming is no longer operational on device *rdev*. The control unit has switched the data transfer mode to interlock. Interlock mode is used until the control unit detects a system reset or until the current volume is dismounted.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP580I **TAPE *rdev* UNEXPECTED SENSE DATA RECEIVED**

Explanation

Error recovery has received unusual SENSE data from the device because of either a hardware error or because the software issued a SENSE command with no outstanding unit check.

rdev refers to the failing device.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

If the problem persists, contact your system support personnel.

HCP581I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A LOAD DISPLAY CHECK OCCURRED**

Explanation

You issued a LOAD DISPLAY command to tape drive *rdev* while the cartridge was being loaded.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Retry the operation after the cartridge is loaded.

HCP582I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A WRITE ID MARK CHECK OCCURRED**

Explanation

The format identification mark could not be successfully written at the beginning of tape drive *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Retry the operation using a new tape. If the problem persists, contact your system support personnel.

HCP584I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A CAPABILITY CHECK OCCURRED**

Explanation

An attempt was made to read or write to a tape cartridge that may not be successfully read and/or written. The following list describes the supported media:

- 3590 Models B11 and B1A drives write and read in 128 track (B1x) format only
- 3590 Models E11 and E1A drives write in 256 track (E1x) format and read in 128 track (B1x) and 256 track (E1x) formats
- 3590 Models H11 and H1A drives write in 384 track (H1x) format and read in 128 track (B1x), 256 track (E1x) and 384 track (H1x) formats
- 3592 Model J1A drives write and read in 512 track format and support MEDIA5, MEDIA6, MEDIA7 and MEDIA8
- 3592 Model E05 drives write and read in 512 and 896 track formats and support MEDIA5, MEDIA6, MEDIA7, MEDIA8, MEDIA9 and MEDIA10
- 3592 Model E06 drives write in 896 and 1152 track formats and read in 512, 896 and 1152 track formats and support MEDIA5, MEDIA6, MEDIA7, MEDIA8, MEDIA9 and MEDIA10
- 3592 Model E07 drives write in 1152 and 2176 track formats and read in 512, 896, 1152 and 2176 track formats and support MEDIA9, MEDIA10, MEDIA11, MEDIA12 and MEDIA13

System action

System operation continues.

Operator response

If you are using the tape cartridge in an incompatible drive, you may not be able to read and/or write to the tape. You may be able to write to the tape if you rewind it to the beginning. If the problem persists, contact your system support personnel.

HCP585I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A TAPE VOID CHECK OCCURRED**

Explanation

A read-type operation terminated because CP found no data blocks on tape drive *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP586I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE OF A LOSS OF TENSION ON THE TAPE**

Explanation

Tape drive *rdev* encountered an error that caused a loss of tension on the tape.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Attempt to rewind the cartridge and retry the operation. If the problem persists, unload the cartridge.

HCP587I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A TAPE LENGTH ERROR OCCURRED**

Explanation

The tape length in the cartridge on drive (*rdev*) is too short. The error could occur when the leader block was replaced (the length of tape ahead of the beginning of tape (BOT) has been trimmed).

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Retry the operation using a new tape. If the problem persists, contact your system support personnel.

HCP588I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE THE**

PHYSICAL END OF TAPE WAS ENCOUNTERED

Explanation

CP encountered the physical end of tape on drive *rdev* during the execution of a command.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP589I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE THE BEGINNING OF THE TAPE WAS ENCOUNTERED**

Explanation

CP executed a backward-type command (for example, a BACKSPACE BLOCK or a BACKSPACE FILE command) when it encountered the beginning of tape on device *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Rewind the tape and retry the operation.

HCP591I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE DESIRED BLOCK WAS NOT FOUND**

Explanation

CP could not position tape drive *rdev* in front of the block/tape mark as requested by the LOCATE BLOCK command. You can find the logical block position for the next data block or tape mark in sense bytes 4, 5, and 6.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP592I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE THE DRIVE IS ASSIGNED ELSEWHERE**

Explanation

Tape drive *rdev* is not assigned to the channel path for which the command was issued. It is assigned to a different channel path.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

The action you take depends on what occurred previously.

Was a tape cartridge loaded onto the tape drive in anticipation of a successful ATTACH command being entered? If so, a security exposure may exist. Unauthorized access by another system to data on the tape could occur. Remove the tape cartridge.

Otherwise, the tape cartridge should not be removed. It is already being used by the system to which it is assigned. Wait for that system to release the tape drive. Then retry the operation.

If a scenario other than the above occurred, the corresponding documentation for the tape drive you are using should explain what to do for an "assigned elsewhere" condition.

HCP593I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE THE DRIVE IS OFFLINE**

Explanation

You issued a command (for example, READ, WRITE, or REWIND) for drive activity to tape drive *rdev*, which is not online. The following conditions may cause this error:

- The drive is switched offline.
- The drive power is switched off.
- The drive address is not set correctly.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Check to see if the drive is offline, powered off, or has an incorrect address. Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP594I **TAPE *rdev* A VOLUME INTEGRITY ERROR HAS OCCURRED; VOLUME NOT ACCESSIBLE**

Explanation

The control unit on tape drive *rdev*, or one of the control units in a dual control unit configuration, developed a severe error condition. The control unit still was able to reinitialize itself sufficiently to continue processing.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

rdev is the real device number of the tape drive.

System action

System operation continues.

Operator response

None.

HCP595I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A CONTROL UNIT ERP FAILURE OCCURRED**

Explanation

While attempting error recovery, the control unit encountered an error that was not associated with the original error. It is possible that the drive *rdev* is not positioned next to the block in error.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP596I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE THE CONTROL UNIT AND DRIVE ARE INCOMPATIBLE**

Explanation

Tape drive *rdev* requires updates (patches) unknown to the control unit, or the tape drive *rdev* model is incompatible with the control unit. In either case, the drive and control unit are incompatible.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Contact your system support personnel.

HCP597I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A READ OPPOSITE CHECK OCCURRED**

Explanation

A READ command failed, and the control unit was unable to read the data on tape drive *rdev* in the opposite direction. The data is stored in the control unit's buffer in reverse order.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP598I **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE OF AN INVALID BLOCK ID SEQUENCE**

Explanation

CP found the block ID of a data block on tape drive *rdev* to be out of sequence, or the device reported that it found a data block out of sequence.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP599I **TAPE *rdev* control unit error has been recovered**

Explanation

The control unit detected a hardware error, but was able to recover.

rdev is the real device number of the tape drive.

This message will appear on the system operator's console in conjunction with informational messages HCP6300I-6305I and HCP2216I.

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the EREP records (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data formats and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP600I ***type rdev* A CHANNEL DATA CHECK OCCURRED**

Explanation

A channel data check occurred on the channel associated with device type *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Probable hardware error. If the problem persists, contact your system support personnel.

Programmer response

Examine the SLH (subchannel logout handler) record within LOGREC for specific hardware error conditions. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP601I ***type rdev* A CHANNEL CONTROL CHECK OCCURRED**

Explanation

A channel control check occurred on a channel associated with device type *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Probable hardware error. If the problem persists, call your system support personnel.

HCP602I ***type rdev* AN INTERFACE CONTROL CHECK OCCURRED**

Explanation

An interface control check occurred on a channel associated with device type *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

This is probably a hardware error. If the problem persists, call your system support personnel.

HCP603W CHANNEL ERROR; RESTART SYSTEM

Explanation

A channel check condition occurred from which the channel check handler could not recover.

System action

The system enters a wait state (wait state code = 603).

Operator response

There is a hardware error. Restart the system. Call your system support personnel.

To restart, clear storage and IPL the z/VM system, specifying a CKPT start.

HCP604I CONFIGURATION ALERT FACILITY TEMPORARY ERROR ON CHANNEL PATH *xxxx*

Explanation

While attempting to service a request from a device, the channel subsystem could not associate a valid subchannel with that device. *xxxx* is the channel path identifier.

System action

System operation continues.

Operator response

If the problem continues call your system support personnel.

HCP610I CHECK-STOP ON CPU *nn*

Explanation

Processor *nn* has entered the check-stop state, but another processor continues functioning. A check-stop is similar to a severe machine check, but in addition, the processor comes to a halt. (This message is issued from another processor.)

System action

The system may or may not be able to continue normal operation, running on the remaining processor. It depends on what the system was doing at the time of the error. Watch for further error messages to follow this one immediately. If normal system operation continues, the check-stopped processor will be varied offline. If system termination is necessary, the automatic software re-IPL may or may not occur afterwards.

Operator response

Contact your system support personnel. If the system continues normal operation, the operator may consider varying the failed processor back online, using the CP VARY command. The check-stop may have been an isolated event that will not repeat itself. However, there is a risk in varying the failed processor back online because the error may repeat itself. And if the error does repeat, there is no guarantee that the error will again occur at a point where normal operation can continue; the system might terminate the next time.

HCP630E The TOD-clock could not be synchronized due to a processor controller failure.

Explanation

TOD clock synchronization failed because a processor physical vary offline or deconfiguration failed.

System action

System continues in single processor mode with TOD synchronization check disabled.

User response

Since the TOD clocks have not been synchronized, varying any offline processors online may cause TOD clock sync checks to recur. Contact your IBM Support Center personnel for software support.

HCP632E A system shutdown is recommended due to a processor controller failure.

Explanation

A service processor damage machine check has occurred, which indicates the processor controller

has failed. The following functions are no longer operational:

- SIGP for certain reset and console function orders
- Processing of machine checks (other than the present “service processor damage”)
- Processor controller request process.

The only recovery is to re-IML the processor complex, which will clear real storage.

System action

Attempt to keep the system running, continuing normal operations without the use of the processor controller. The system is in recovery mode attempting to provide the capabilities for guest operating systems to checkpoint themselves. System recovery mechanisms will reflect the service processor damage machine check to all guests. If there are any MVS™ production guests running applications such as IMS™, they may be recording checkpoint data as a result of receiving the reflected machine check. The handling of the processor controller request is suspended.

Operator response

A system shutdown is recommended at the earliest possible opportunity, as continued operation may lead to a sudden failure of the system. If this occurs, there will be no opportunity at that time to recover up-to-date checkpoint data.

1. Send messages to all users about the failure, giving instructions for anticipated action.
2. Before shutting down the system, verify that any MVS production virtual machines have completed checkpoint.
3. Shut down the system and contact your IBM Support Center personnel to repair the processor controller.

HCP642E INVALID POOL VALUE - *value*

Explanation

The LOW or HIGH value specified on the POOL statement is not a decimal number in the correct numerical range.

System action

Directory checking continues, but the directory is not updated.

User response

Check the numerical values specified in the POOL statement and correct them, then reissue the command.

HCP643E The variations of this message are explained below.

— Variation 1 Command not enabled in system configuration file

Explanation

The command was not enabled in the system configuration file with the FEATURES ENABLE statement. Therefore, the command cannot be processed.

System action

The command is not executed; system operation continues.

Operator response

Refer this message to your system programmer.

System programmer response

Update the system configuration file with the appropriate FEATURES ENABLE statement and re-IPL the system.

— Variation 2 Adjunct feature is not enabled on this system

Explanation

The adjunct feature was disabled in the system configuration file with the FEATURES DISABLE ADJUNCTS statement, or by the SET ADJUNCTS OFF command. Therefore the command cannot be processed.

System action

The command is not executed; system operation continues.

System programmer response

If you want to enable adjunct support on the system, update the system configuration file to remove the FEATURES DISABLE ADJUNCTS statement, and either re-IPL the system or issue the SET ADJUNCTS ON command to enable adjuncts dynamically. See the ADJUNCT directory statement in *z/VM: CP Planning*

and Administration for more information about configuring an adjunct.

User response

Refer this message to your system programmer.

HCP643I Adjunct feature is not enabled on this system

Explanation

The adjunct feature was disabled in the system configuration file with the FEATURES DISABLE ADJUNCTS statement, or by the SET ADJUNCTS OFF command.

System action

System operation continues.

System programmer response

If you want to enable adjunct support on the system, update the system configuration file to remove the FEATURES DISABLE ADJUNCTS statement, and either re-IPL the system or issue the SET ADJUNCTS ON command to enable adjuncts dynamically. See the ADJUNCT directory statement in *z/VM: CP Planning and Administration* for more information on configuring an adjunct.

User response

Refer this message to your system programmer.

HCP644E Unknown/unauthorized CP command: *command*

Explanation

The command you issued failed. If an external security manager (ESM) is installed on your system, you may receive this message if you are not authorized to issue the command.

System action

The command is not executed; system operation continues.

User response

If you have any questions, see your system administrator.

HCP646I *DASD rdev* VOLUME *volid* HAS PINNED DATA; DESTAGING IS RETRYABLE - *ssid.p-cc-dd*

Explanation

Due to a hardware error, data destined for the specified volume could not be written from subsystem storage or nonvolatile storage to DASD. Subsequent attempts made by the subsystem to perform this destaging will complete successfully when the hardware is repaired.

rdev
Identifies the device used to report the condition

volid
Is the volume identifier of the affected device

ssid.p-cc-dd
Is the subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the EREP outboard record (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP647I *DASD rdev* VOLUME *volid* - A TRACK FORMAT ERROR WAS ENCOUNTERED DURING DESTAGING - RC = *rc* - *ssid.p-cc-dd*

Explanation

An attempt to write data from a cache to a DASD encountered a DASD track format incompatible with the operation.

rdev
Identifies the device used to report the condition

volid
Is the volume identifier of the affected device

rc
Is the reason code

ssid.p-cc-dd
Is the subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the EREP outboard record (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP650I The virtual machine is placed in CP mode due to a complex interrupt loop.

Explanation

An external interrupt was taken in the virtual machine. The external new PSW was found to be an invalid-format PSW, which caused a program interrupt to be taken in the virtual machine. The program new PSW was found enabled for external interrupts. The external interrupt is repeated if a CPU timer or clock comparator interrupt is pending in the virtual machine.

System action

System operation continues. The virtual machine is placed in console function mode, and the PSW is set to the program new PSW.

User response

IPL the virtual system again to continue.

Programmer response

Determine why the external new PSW does not have a valid format. Determine why the program new PSW is enabled for external interrupts.

HCP651I *DASD rdev* DEVICE ADAPTOR NOT OPERATIONAL WITH STORAGE PATH - *ssid.p-cc-dd*

Explanation

An error recovery routine encountered a device adaptor that has been made unavailable to the system by the storage control. This happens when the storage control has determined that the device adaptor is in need of service. The variables in the message are as follows:

rdev
The failing device

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components

System action

System operation continues.

Operator response

Contact your IBM service representative.

Programmer response

Examine the EREP outboard record (OBR) for additional details as to the cause of the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP654E SECLABEL missing or invalid

Explanation

The operand for the SECLABEL option was specified incorrectly or was omitted.

System action

The command is rejected. System operation continues.

User response

Reissue the command with a valid 1- to 8- character SECLABEL.

HCP657E The virtual machine's prefix area is unavailable because it is damaged.

Explanation

A virtual machine's prefix area is unavailable due to a host paging error or a real storage error.

System action

The virtual machine is put in check-stop state.

User response

To continue, IPL the virtual machine using the CLEAR option.

HCP664E The variations of this message are explained below.

Explanation

- System *system-id* was specified on multiple BUILD statements following IDENTITY *userid*.
- SUBCONFIG ID *subconfig-id* was specified on multiple BUILD statements.

For the first variation: within an identity entry for *userid*, the system identifier (*system-id*) of an SSI cluster member appeared on more than one BUILD statement. Within an identity entry, the system identifier for an SSI cluster member can be specified on only one BUILD statement.

For the second variation: two or more BUILD statements in the user directory had the same SUBCONFIG identifier (*subconfig-id*). Within the entire user directory, each SUBCONFIG identifier can be specified on only one BUILD statement.

System action

After scanning the remaining statements for proper syntax, the directory program terminates without bringing a new directory on line.

User response

Correct your directory statements so that:

- Each BUILD statement within an identity entry has a unique system identifier.
- Each BUILD statement within the entire user directory has a unique SUBCONFIG identifier.

After correcting the directory statements, reissue the DIRECTXA

HCP665E A SUBCONFIG DEFINITION DOES NOT EXIST FOR *id*

Explanation

A BUILD statement specifies a SUBCONFIG identifier (*id*) that does not have a corresponding SUBCONFIG statement.

System action

After scanning the remaining statements for proper syntax, the directory program terminates without bringing a new directory online.

User response

Do one of the following actions:

- Add a SUBCONFIG statement for the SUBCONFIG *id* specified on the BUILD statement
- Change the SUBCONFIG *id* on the BUILD statement to specify an ID on an existing SUBCONFIG statement.
- Remove the BUILD statement.

After correcting the directory statement, reissue the DIRECTXA command.

HCP666E SUBCONFIG *id* IS NOT SPECIFIED ON ANY BUILD STATEMENTS

Explanation

The *id* on a SUBCONFIG statement must be specified on a BUILD statement. No BUILD statement was found that specified the *id*.

System action

After scanning the remaining statements for proper syntax, the directory program terminates without bringing a new directory online.

User response

Do one of the following actions:

- Delete the SUBCONFIG entry in error
- Create a BUILD statement with the SUBCONFIG *id*
- Correct the SUBCONFIG *id* on an existing BUILD statement.

After correcting the directory statements, reissue the DIRECTXA command.

HCP667E The object directory on volume (*volser*) is not enabled for use in a multi-member SSI cluster and will not be brought online.

Explanation

A member of a multi-member SSI cluster attempted to bring online an object directory that was created from either a non-SSI or SSI-ready source directory. For a member of a multi-member SSI cluster, the object directory must be created from an SSI-enabled source directory.

For more information, see Source Directory Types and Creating and Updating a User Directory in *z/VM: CP Planning and Administration*.

System action

The object directory is not brought online. The system continues to search for a usable object directory.

User response

If this error occurs during IPL, the system might find another object directory on another volume. If a usable object directory is brought online, ensure it is suitable for your environment. If no usable object directory is brought online, you must correct the error and then re-IPL in order to join the SSI cluster. To correct the error:

- Check that a volume with a compatible object directory is available.
- Check that the volume with the intended object directory will be found. There might be another volume with an object directory that was found before the intended one. The search order starts with the SYSRES volume if that volume is in the CP-owned list, followed by CP-owned volumes beginning at slot 1. Finding the wrong object directory could be the result of a change to the SYSTEM CONFIG, IPLing off the wrong volume, or writing an incompatible directory to a CP-owned volume earlier in the search order.
- When you have a compatible object directory that will be found, re-IPL the system.

If this error occurs when the system is running with no object directory and you are trying to rectify the situation by attaching a volume with an object directory, you can do one of the following:

- Attach another volume with a compatible object directory
- Use DIRECTXA to write a compatible directory to a CP-owned volume.

HCP668E The SSI-enabled object directory on volume (*volser*) is not valid for this configuration and will not be brought online.

Explanation

A non-SSI system attempted to bring online an object directory created from an SSI-enabled source directory. For a non-SSI system, the object directory must be created from a non-SSI or SSI-ready source directory.

For more information, see Source Directory Types and Creating and Updating a User Directory in *z/VM: CP Planning and Administration*.

System action

A new directory is not brought online.

User response

If this error occurs during IPL, the system might find another object directory on another volume. If a usable object directory is brought online, ensure it is suitable for your environment. If no usable object directory is brought online, you must correct the error and then re-IPL in order to join the SSI cluster. To correct the error:

- Check that a volume with a compatible object directory is available.
- Check that the volume with the intended object directory will be found. There might be another volume with an object directory that was found before the intended one. The search order starts with the SYSRES volume if that volume is in the CP-owned list, followed by CP-owned volumes beginning at slot 1. Finding the wrong object directory could be the result of a change to the SYSTEM CONFIG, IPLing off the wrong volume, or writing an incompatible directory to a CP-owned volume earlier in the search order.
- When you have a compatible object directory that will be found, re-IPL the system.

If this error occurs when the system is running with no object directory and you are trying to rectify the situation by attaching a volume with an object directory, you can do one of the following:

- Attach another volume with a compatible object directory
- Use DIRECTXA to write a compatible directory to a CP-owned volume.

HCP669I {&SYSRES|+VMRES} WILL NOT BE ALLOWED ON THE { DIRECTXA COMMAND | MDISK STATEMENT } IF THE SSI OPTION IS ADDED TO THE DIRECTORY STATEMENT.

Explanation

Using &SYSRES on the DIRECTXA command or using &SYSRES or +VMRES on an MDISK statement is not allowed when the SSI option is added to the DIRECTORY statement. This message is a warning that the user directory will be in error should you add the SSI option to the DIRECTORY statement. You receive a variation of this message for the following conditions:

- When the DIRECTXA command does not specify the &SYSRES option, and:
  - &SYSRES is used for the *volid* on the MDISK statement

  or

  - +VMRES is used for the *volid* on the MDISK statement
- When the DIRECTXA command specifies the &SYSRES option
- When the DIRECTXA command specifies the &SYSRES option, and:
  - &SYSRES is used for the *volid* on the MDISK statement

  or
  - The *volid* on the MDISK statement matches the value specified on the &SYSRES option on the DIRECTXA command.

  Note: When the DIRECTXA command specifies the &SYSRES option, +VMRES on the MDISK statement does not get a message because the &SYSRES option on DIRECTXA overrides +VMRES on the MDISK statement (unless the value for &SYSRES is +VMRES).

System action

The directory program continues.

User response

If you plan to use the user directory in an SSI cluster, do not use the &SYSRES option on DIRECTXA or &SYSRES or +VMRES on MDISK statements.

HCP670E **{&SYSRES|+VMRES} IS NOT ALLOWED ON THE { DIRECTXA COMMAND | MDISK STATEMENT } WHEN THE SSI OPTION IS SPECIFIED ON THE DIRECTORY STATEMENT.**

Explanation

Using &SYSRES on the DIRECTXA command or using &SYSRES or +VMRES on an MDISK statement is not allowed when the SSI option is added to the DIRECTORY statement. You receive a variation of this message for the following conditions:

- When the DIRECTXA command does not specify the &SYSRES option, and:
  - &SYSRES is used for the *volid* on the MDISK statement

  or
  - +VMRES is used for the *volid* on the MDISK statement
- When the DIRECTXA command specifies the &SYSRES option
- When the DIRECTXA command specifies the &SYSRES option, and:
  - &SYSRES is used for the *volid* on the MDISK statement

  or
  - The *volid* on the MDISK statement matches the value specified on the &SYSRES option on the DIRECTXA command.

  Note: When the DIRECTXA command specifies the &SYSRES option, +VMRES on the MDISK statement does not get an error message because the &SYSRES option on DIRECTXA overrides +VMRES on the MDISK statement (unless the value for &SYSRES is +VMRES).

System action

After scanning the remaining statements for correct syntax, the directory program terminates without bringing a new directory online.

User response

Remove the &SYSRES option on DIRECTXA or &SYSRES or +VMRES on MDISK statements, then reissue the DIRECTXA command.

HCP671E **If SSI is specified on the DIRECTORY statement, the system identifier on the BUILD statement cannot be *.**

Explanation

A BUILD directory statement with a system identifier "*" was specified in an SSI-enabled user directory. For an SSI-enabled user directory (SSI is specified on the DIRECTORY statement), a BUILD statement must explicitly identify the member of the SSI cluster that uses the specified subconfiguration entry.

System action

After scanning the remaining statements for proper syntax, the directory program terminates without bringing a new directory on line.

User response

If the user directory is SSI-enabled, change the BUILD statement to specify the system identifier of the SSI member that uses the specified subconfiguration entry. If the user directory is not intended to be SSI-enabled, then remove the SSI option from the DIRECTORY statement. Then, reissue the DIRECTXA command.

HCP672E **If SSI is not specified on the DIRECTORY statement, the system identifier on the BUILD statement must be *.**

Explanation

A BUILD directory statement with a system identifier other than "*" was specified in a user directory that is not SSI-enabled. If a user directory is not SSI-enabled (SSI is not specified on the DIRECTORY statement), the directory is not used in an SSI cluster with more than one member. For such an environment, BUILD statements must specify "*" for the system identifier and each identity entry can contain at most one BUILD statement.

System action

After scanning the remaining statements for proper syntax, the directory program terminates without bringing a new directory on line.

User response

If the user directory is to be SSI-enabled, then add the SSI option to the DIRECTORY statement. Otherwise, change the BUILD statements to specify "*" for the system identifier and ensure there is no more than one BUILD statement for each identity entry. Then reissue the DIRECTXA command.

HCP673E **USER | IDENTITY *userid* was defined with conflicting options *options***

Explanation

The combination of values in *options*, either CHPIDVIRTUALIZATION ONE and CFUSER or CHPIDVIRTUALIZATION ONE and CFVM, are in conflict and cannot be specified together.

System action

After scanning the remaining statements for correct syntax, the directory program terminates without bringing a new directory on line.

User response

Correct the conflicting directory statement(s) and then reissue the DIRECTXA command.

HCP674E **THE VOLID FOR *vdev* IS *volid* WHICH WAS NOT SPECIFIED ON THE DIRECTORY STATEMENT.**

Explanation

The volume ID of the device at the virtual address specified on the DIRECTORY statement does not match any of the volume IDs specified on the DIRECTORY statement.

System action

After scanning the remaining statements for correct syntax, the directory program terminates without bringing a new directory online.

User response

Ensure that the volume ID of the directory volume at the virtual address specified on the DIRECTORY statement is included in the volume IDs specified on the DIRECTORY statement. Then reissue the DIRECTXA command.

HCP675E **The VDISK operand is not allowed on the MDISK statement following IDENTITY *userid*.**

Explanation

A virtual disk in storage cannot be defined in an identity entry.

System action

After scanning the remaining statements for correct syntax, the directory program terminates without bringing a new directory online.

User response

Remove the VDISK definition from the identity entry and add it to the appropriate subconfiguration entry (or entries) for that IDENTITY. Then reissue the DIRECTXA command.

HCP676E **IDENTITY/SUBCONFIG statements are not allowed if the DIRECTXA DELTA option is specified.**

Explanation

DIRECTXA was invoked with the DELTA option against a source user directory with IDENTITY and/or SUBCONFIG statements. If the DELTA option is used, IDENTITY and SUBCONFIG statements are not allowed in the source user directory.

System action

DIRECTXA fails. The message is issued only once per source user directory, and does not display any of the failing records.

User response

Invoke DIRECTXA without the DELTA option.

HCP677E A mix of SSI and non-SSI DIRECTORY statements is not allowed.

Explanation:
The CP directory that is being processed contains more than one DIRECTORY statement. Some of those DIRECTORY statements have the SSI option and some do not. The SSI option must be specified on all of the DIRECTORY statements or none of the DIRECTORY statements.

System action:
After scanning the remaining statements for syntax, the directory program terminates without writing or updating the object directory.

User response:
Correct the DIRECTORY statements in the CP directory so they all include the SSI option or none of them include the SSI option, as appropriate for the systems on which the directory will be used. Then, run DIRECTXA again.

HCP678E Number of volids specified on the DIRECTORY statement(s) exceeds the limit.

Explanation:
The number of volume IDs specified on one or more DIRECTORY statement exceeds the maximum number allowed. The current limit is 8 volume IDs.

System action:
After scanning the remaining statements for syntax, the directory program terminates without writing or updating the object directory.

User response:
Make sure the number of volume IDs specified on all of the DIRECTORY statements does not exceed the maximum allowed. Then, run DIRECTXA again.

HCP696I VOLID READ IS *volid1* [NOT *volid2*]

Explanation

The variables in this message are as follows:

volid1
The volume identifier of the DASD specified by the control statement

volid2
The volume identifier from the input or output control statement.

System action

DDR function proceeds using the device identified by *volid1*.

User response

None.

Note: This message is issued in place of HCP711D if the PROMPTS OFF processing control statement has been entered by the user. For more information, refer to “HCP711D” on page 346.

HCP697I NO VOL1 LABEL FOUND FOR *volid*

Explanation

The program was unable to find a record with the key of VOL1 on cylinder 0 track 0. The program also could not read record 3 on cylinder 0 track 0 for the specified volume identifier *volid*.

The volume identifier is displayed only if specified on the INPUT or OUTPUT control statement.

System action

DDR function proceeds.

User response

None.

Note: This message is issued in place of HCP716D if the PROMPTS OFF processing control statement has been entered by the user. For more information, refer to “HCP716D ” on page 347.

HCP698I DATA DUMPED FROM *volid1* TO BE RESTORED TO *volid2*.

Explanation

The volume identifier from the dumped DASD volume *volid1* does not match the RESTORE to DASD volume identifier *volid2*.

volid1
The DASD volume identifier of the input tape

volid2
The volume identifier of the output DASD device that is to receive the data from *volid1*.

System action

DDR restore function proceeds.

User response

None.

Note: This message is issued in place of HCP717D if the PROMPTS OFF processing control statement has been entered by the user. For more information, refer to "HCP717D" on page 348.

HCP699I SOURCE DASD DEVICE WAS (IS) LARGER THAN OUTPUT DEVICE.

Explanation

For the RESTORE function-

The number of cylinders on the original DASD input unit contained more cylinders than the output device.

If the DASD was dumped using a different release of DDR and the DASD is a minidisk, this message could occur.

For the COPY function-

The input device contains more cylinders than the output device.

Note:

1. This message is issued in place of HCP725D if the PROMPTS OFF processing control statement has been entered by the user. For more information, refer to "HCP725D" on page 349.
2. This message is issued only if the ALL operand was specified on the RESTORE or COPY function statement.

System action

DDR copy or restore function proceeds.

User response

None.

HCP700E INPUT UNIT IS NOT A CPVOL

Explanation

The CPVOL operand was specified for a DUMP or COPY statement, but the last INPUT control statement did not describe a device that had been initialized using ICKDSF or the CPFMTXA utility.

System action

If the input is from cards, the program is terminated after scanning the remaining statements for syntax. Otherwise, the correct statement is solicited from the console.

User response

Describe the proper DASD device with the INPUT control statement. If the proper input device is defined, use the ALL operand or the explicit cylinder or block operand for the DUMP or COPY function.

HCP701E INVALID OPERAND - *operand*

Explanation

The specified operand is invalid.

System action

If the input is from cards, the card image is printed above the message, and the program is terminated after the remaining statements are scanned for syntax. Otherwise, the correct statement is solicited from the console.

User response

Correct the operand and resubmit the job.

HCP701I SYSPRINT NOT 00E or CONS—IGNORED

Explanation

The parameter specified in the SYSPRINT card was not 00E or CONS and the user was running under CMS.

System action

The SYSPRINT card is ignored and the current settings of SYSPRINT left unchanged.

User response

Redefine the SYSPRINT statement to direct output to printer 00E or CONS. For more information, refer to *z/VM: CP Programming Services*.

HCP702E CONTROL STATEMENT SEQUENCE ERROR

Explanation

The control statement above this message is not in the proper sequence.

System action

If the input is from cards, the card image is displayed above the error message, and the program is terminated after scanning the remaining statements for syntax. Otherwise, the correct statement is solicited from the console. Note that all DUMP, RESTORE, or COPY statements must be delimited by an INPUT or an OUTPUT control statement. When multiple explicit cylinder extents are defined, the DUMP, COPY, and RESTORE statements must not be intermixed.

User response

Place the control statements in the proper sequence, or correct the error and resubmit the job.

HCP703E OPERAND MISSING

Explanation

The control statement above this message contains insufficient information.

System action

If the input is from cards, the card image is displayed above the error message. The program is terminated after scanning the remaining statements for syntax. Otherwise, the correct statement is solicited from the console.

User response

Provide the missing operand and resubmit the job.

HCP704E DEVICE {*rdev*|*vdev*} NOT OPERATIONAL

Explanation

The indicated *rdev* or *vdev* is the device number of the unit that is not operational. If using the Stand-Alone Program Loader (SAPL), the device number from which the module is to be loaded is not operational.

System action

When using DDR and the input is from cards, the program is terminated after scanning the remaining statements for syntax. Otherwise, the next statement is solicited from the console.

User response

When using DDR, either attach the proper device to your system or redefine the device in error. Enter the function control statement again.

If using the SAPL, either attach the proper device to your system or specify the correct device address for the SAPL to load from. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

HCP704W DEVICE NOT OPERATIONAL

Explanation

The Stand-Alone Program Loader (SAPL) has determined that the device number from which the module is to be loaded is not operational.

System action

The system enters a disabled wait state (wait state code = 0704) and the registers contain the following information:

R0
Device number

R1
Subchannel ID of the device

R2
Offset cylinder/block

R3
Extent number

R4-R5
Name of module to load

R12
Base register

R13
Work page address

User response

Either attach the proper device to your system or specify the correct device address for the SAPL to load from. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

HCP705D I/O ERROR {*rdev*} IRB *irb* SNS *sense* CCW *ccw* [INPUT {*bbcchh*|*block*} |OUTPUT {*bbcchh*|*block*}] DO YOU WISH TO CONTINUE? RESPOND YES OR NO: Note: If the message EMSG option of the INPUT control statement is used, HCP705E is changed to HCP705D to solicit a response from the operator to continue.

Explanation

An unrecoverable I/O error has been detected. The variables have the following meanings:

rdev
The device in error

irb
The interrupt response block from the error

sense
The sense bytes, in hexadecimal, describing the error

ccw
The channel command word from the error

bbcchh
The address (00, cylinder, and head), in hexadecimal, where the error occurred on the input or output cylinder

block
The block number (for I/O to an FBA DASD) where the error occurred on the input or output device.

System action

The system waits for a response.

User response

Respond with “YES”, “Y”, “NO”, or “N” where these have the following results:

YES, Y
The job continues. The track in error, the block in error, or missing record is bypassed.

NO, N
The job step terminates. If the output device is tape, an attempt is made to write a trailer label closing the output device. A cylinder or block map is printed describing all valid data that was dumped, restored, or copied to the point of error.

HCP705E **I/O ERROR {*rdev*} IRB *irb* SNS *sense* CCW *ccw* [INPUT {*bbcchh*|*block*} |OUTPUT {*bbcchh*|*block*}]**

Explanation

An unrecoverable I/O error has been detected. The variables have the following meanings:

rdev
The device in error

irb
The interrupt response block from the error

sense
The sense bytes, in hexadecimal, describing the error

ccw
The channel command word from the error

bbcchh
The address (bin, cylinder, and head), in hexadecimal, where the error occurred on the input or output cylinder

block
The block number (for I/O to an FBA DASD) where the error occurred on the input or output device.

System action

The job step terminates. If the output device is tape, an attempt is made to write a trailer label closing the output device. A cylinder or block map is printed describing all valid data that was dumped, restored, or copied to the point of error.

Note: This may be a valid condition if a virtual machine user attempts to dump, restore, or copy past the cylinder or block extents of the minidisk.

User response

Determine whether or not the error was valid. If it was not valid, retry the operation. If the error persists, contact your IBM Support Center personnel for hardware support.

HCP708E **INVALID INPUT OR OUTPUT DEFINITION**

Explanation

The INPUT statement, OUTPUT statement, or both are not defined, or the wrong device type is defined. For example, the DUMP statement must have the input unit defined as a DASD device and the output unit defined as a tape device.

System action

If the input is from cards, the program ends after scanning the remaining statements for syntax. Otherwise, the next control statement is solicited from the console.

User response

Define the input or output definition again, or use the proper function control statement. For more information about DDR I/O definition and function statements, see *z/VM: CP Commands and Utilities Reference*.

HCP709E **WRONG INPUT TAPE MOUNTED**

Explanation

The tape is invalid for one of the following reasons:

- DDR either did not use this tape, or DDR could not find a volume header record at the point specified by the SKIP operand of the INPUT control statement.
- The volume header record cylinder identifier is higher than the cylinder being searched for.
- The volume header record time stamp is different from the preceding volume trailer label time stamp.

System action

The system rewinds and unloads the tape; then it attempts to read the next tape's volume header record. If the wrong input tape is mounted, the system rewinds and unloads the tape.

User response

Mount the proper tape. If a suitable tape is not available, issue HALT *rdev.*

HCP710A DEVICE {*rdev*|*vdev*} INTERVENTION REQUIRED

Explanation

rdev or *vdev* is the device that is not ready.

System action

The program waits for the specified device to become ready.

User response

Make the specified device ready.

HCP711D VOLID READ IS *volid2* DO YOU WISH TO CONTINUE? RESPOND YES, NO OR REREAD:

Explanation

The *volid2* is the volume serial number of the DASD specified by the control statement.

System action

The system waits for a response.

User response

Enter YES, NO, or REREAD to the prompt. These have the following results:

YES
The operation continues.

NO
If the input is from cards, the program terminates after scanning the remaining statements for syntax; otherwise, the next statement is solicited from the console.

REREAD
The label of the volume specified is read again.

A new volume may have been mounted in the interim.

Note: This message is issued when the PROMPTS ON processing control statement is in effect, which is the default. If PROMPTS OFF was in effect, message HCP696I would be issued in place of this message. For more information, refer to "HCP696I" on page 342.

HCP712E NUMBER OF EXTENTS EXCEEDS 300

Explanation

The DUMP, COPY, or RESTORE control statement has explicitly defined more than 300 extents, or if CPVOL was specified, the input unit has more than 300 physical extents defined.

System action

If the input is from cards, the program is terminated after scanning the remaining statements for syntax. Otherwise, the next control statement is solicited from the console.

User response

Do one of the following:

- Use the DUMP ALL statement
- Use the COPY ALL statement
- Use the RESTORE ALL statement.
- Perform the job specifying no more than 300 extents, and repeat DUMP, COPY, or RESTORE, if necessary, to complete the task.

HCP713E OVERLAPPING OR INVALID EXTENTS

Explanation

The DUMP, RESTORE, or COPY statement contains either invalid (outside the physical limits of the device or not specified in ascending order) or overlapping explicit cylinders.

System action

If the input is from cards, the program is terminated after scanning the remaining statements for syntax.

Otherwise, the correct statement is solicited from the console.

User response

Enter the proper cylinder information.

HCP714D **{RECORD *bbcchh* | BLOCK *block*} NOT FOUND ON INPUT TAPE DO YOU WISH TO CONTINUE? RESPOND YES OR NO:Note: If the EMSG option of the INPUT control statement is used, message HCP714E is changed to HCP714D to solicit a response from the operator to continue.**

Explanation

The record was not found on the tape. *bbcchh* refers to the address (bin, cylinder and head), in hexadecimal, of the missing track header record. When the tape contains FBA data, "BLOCK *block*" refers to the block number missing from the track header record.

System action

The system waits for a response.

User response

Respond “YES”, “Y”, “NO”, or “N” where these have the following results:

YES, Y
The job continues. The record that was not found is bypassed.

NO, N
The job step is terminated. All data restored or copied to that point is valid. If the input is from cards the program is terminated after scanning the remaining statements for syntax. Otherwise, the next control statement is solicited from the console. Try using the COPY ALL or RESTORE ALL statement, or use the correct explicit cylinder or block operand.

HCP714E **{RECORD *bbcchh* | BLOCK *block*} NOT FOUND ON INPUT TAPE**

Explanation

The record was not found on the tape. *bbcchh* refers to the address (bin, cylinder and head), in hexadecimal, of the missing track header record. When the tape contains FBA data, "BLOCK *block*" refers to the block number missing from the track header record.

System action

The job step is terminated. All data restored or copied to that point is valid. If the input is from cards, the program is terminated after the remaining statements are scanned for syntax. Otherwise, the next control statement is solicited from the console.

User response

Use the COPY ALL or RESTORE ALL statement, or use the correct explicit cylinder or block operand.

HCP715E **LOCATION *bbcchh* IS A FLAGGED TRACK**

Explanation

The DASD device has a flagged track. *bbcchh* refers to the address (bin, cylinder and head), in hexadecimal, of the flagged track.

System action

For the IBM 2305 and 3340, the job step continues; for the IBM 3330 and 3350, the job is terminated. All data dumped or copied to that point is valid. The input and output devices are closed, and a cylinder map of the data dumped or copied is printed.

For the IBM 2305 and 3340, flagged tracks are treated as any other track; that is, no attempt is made to substitute the alternate track data when a defective primary track is read; tracks are not inspected to determine if they were previously flagged when written. IBM recommends that volumes dumped containing flagged tracks be restored to the same volume. This message is displayed each time a defective track is dumped, copied, or restored, and the operation continues.

Flagged tracks are automatically handled by the control unit on an IBM 3330 or 3350. The flagged tracks should never be detected by the program. However, if the program does detect a flagged track, this message is displayed, and the job step terminates.

User response

Use the DUMP or COPY statements with the explicit cylinder operand to dump or copy around the flagged track.

HCP716D **NO VOL1 LABEL FOUND FOR *volid* DO YOU WISH TO CONTINUE? RESPOND YES, NO OR REREAD:**

Explanation

The program was unable to find a record with the key of VOL1 on cylinder 0 track 0. The program also could not read record 3 on cylinder 0 track 0 for the specified volume serial number *volid*.

System action

The system waits for a response.

User response

Enter "YES", "NO", or "REREAD" to the prompt. These have the following results:

YES
The operation continues.

NO
If the input is from cards, the program terminates after scanning the remaining statements for syntax; otherwise, the next control statement is obtained from the console.

REREAD
The label of the volume specified is read again.

A new volume may have been mounted in the interim.

Note: This message is issued when the PROMPTS ON processing control statement is in effect, which is the default. If PROMPTS OFF was in effect, message HCP697I would be issued in place of this message. For more information, refer to "HCP697I" on page 342.

HCP717D **DATA DUMPED FROM *volid1* TO BE RESTORED TO *volid2*. DO YOU WISH TO CONTINUE? RESPOND YES, NO OR REREAD:**

Explanation

The volume serial number from the dumped DASD volume (*volid1*) does not match the RESTORE to DASD volume serial number (*volid2*).

volid1
The DASD volume serial number of the input tape.

volid2
The volume serial number of the output DASD device that is to receive the data from *volid1*.

System action

The system waits for a response.

User response

Enter "YES", "NO", or "REREAD" to the prompt. These have the following results:

YES
The RESTORE function continues.

NO
If the input is from cards, the program terminates after scanning the remaining statements for syntax; otherwise, the next statement is solicited from the console.

REREAD
The input tape is backspaced to the start of the file, and the volume header label is reread.

If the wrong input tape is mounted, replace the tape and respond REREAD.

Note: This message is issued when the PROMPTS ON processing control statement is in effect, which is the default. If PROMPTS OFF was in effect, message HCP698I would be issued in place of this message. For more information, refer to "HCP698I" on page 342.

HCP718E **OUTPUT UNIT IS {FILE PROTECTED – TAPE| WRITE INHIBITED – DASD} {*rdev*|*vdev*}**

Explanation

The output device is protected from write operations.

System action

The write operation is terminated. The program may continue, allowing the user or the operator to intervene and remove the write protection. If the output unit is a tape drive, then the tape will be rewound and unloaded by the program.

User response

Enable the output unit for write operations, or select a unit or volume that is not write-protected. Some common methods of protecting a volume are:

Tape reel
Protect the volume by removing the plastic ring from the inside edge of the reel. Enable write operations by replacing the file security ring.

Tape cartridge
Protect the volume by moving a tab into the "protected" position (for example, a 3480 cartridge has a dial that must be rotated until the white dot is visible). Enable write operations by moving the tab into the "unprotected" position.

Virtual disk
Protect a virtual disk by using a read only link to the minidisk. Enable write operations by using a write link to the minidisk. Parameters on the CP LINK command control the type of link that is established.

HCP719E INVALID FILENAME OR FILE NOT FOUND

Explanation

This message can appear only if the DDR utility is running under CMS.

A file type was not entered from the CMS command line, or the file name and file type entered could not be found on the CMS files currently accessed.

System action

System operation continues.

User response

Either omit all operands on the CMS command line, defaulting to console input, or enter the proper file name, file type, and, optionally, file mode for the CMS file containing the input control statements.

HCP720E ERROR IN *routine*

Explanation

routine is the name of the CMS routine in error from the first eight characters of the CMS parameter list.

The CMS return code generated by the error is returned as follows:

PRINTR
The CMS return code plus 100

WAITRD
The CMS return code plus 200

RDBUF
The CMS return code plus 300

TYPE or TYPLIN
The CMS return code plus 400

System action

If the input is from cards or a CMS file, the program terminates after scanning the remaining statements for syntax. Otherwise, the program is immediately terminated.

User response

Correct the error as indicated by the return code, and resubmit the job.

HCP721E RECORD *cchhr* NOT FOUND

Explanation

The record indicated by *cchhr* was not found. The *cchhr* refers to the address (cylinder, head, and record) of the record explicitly described by the PRINT or TYPE function.

System action

The system terminates the PRINT or TYPE function in process and continues; the remaining job steps are unaffected.

User response

If the explicit record identifier is not known, print or type on a cylinder or track basis.

HCP725D SOURCE DASD DEVICE WAS (IS) LARGER THAN OUTPUT DEVICE. DO YOU WISH TO CONTINUE? RESPOND YES OR NO:

Explanation

For the RESTORE function-
The number of cylinders on the original DASD input unit contained more cylinders than the output device.

For the COPY function-
The input device contains more cylinders than the output device.

Note:

1. This message is issued when the PROMPTS ON processing control statement is in effect, which is the default. If PROMPTS OFF was in effect, message HCP699I would be issued in place of this message. For more information, refer to "HCP699I" on page 343.
2. This message is issued only if the ALL operand was specified on the RESTORE or COPY function statement.

System action

System waits for user's response.

User response

Determine if the copy or restore function is to continue; respond either YES or NO.

HCP726E MOVING DATA INTO ALTERNATE TRACK CYLINDER(S) IS PROHIBITED

Explanation

An extent statement was encountered that attempted to either RESTORE or COPY a cylinder of data into the alternate track cylinder. This is not permitted. Use the alternate track cylinders of disks only for alternate tracks and not as primary data area.

System action

The program attempts to read another control statement or to read another EXTENT statement.

Operator response

If the EXTENT statement contains a typographical error, correct it. Otherwise, find some other cylinders to restore or copy the data to. The REORDER operand of the EXTENT statement can be used to move an entire minidisk to different cylinders.

HCP728E DECODE ERROR ENCOUNTERED: *nn*

Explanation

DDR is unable to expand data from compact format when restoring to DASD from tape. *nn* is the return code from the decoding routing.

The return codes are as follows:

Code
Meaning

2
The first byte of input contains 0 or a number greater than 5. This should not occur. It may be caused by using a set of encoding tables that do not match the decoding tables that are supplied.

3
There is more data to be decoded, but the output buffer is not big enough to hold more. Decoding stopped when the output buffer became full.

4
The decoding tables are malformed, or the compacted data was incorrectly transmitted. The program tried to decode a codeword that could not be decoded within its first 21 bits.

5
The expanded data is not the same length as the original data.

System action

The program ends.

User response

Recreate the input. If this is not possible, call your system support personnel.

HCP729I FULL TRACK READ NOT AVAILABLE

Explanation

The FTR keyword has been requested on the DDR DUMP control statement, but the FTR hardware feature is not available.

System action

The FTR keyword is ignored and the output dump tape is created in 4KB block format.

User response

None.

HCP731I COMPACT OPTION IGNORED FOR COPY OPERATIONS

Explanation

The COMPACT or LZCOMPACT option was specified on the INPUT control statement or on the OUTPUT control statement for the copy function of DDR.

System action

The copy function continues processing, and the output tape is in the same format as the input tape.

User response

None.

HCP743I {DIAL | UNDIAL} function not available

Explanation

The UNDIAL command cannot be entered from this terminal because it is an integrated console that does not support either the UNDIAL or the DIAL function.The DIAL command cannot be entered from this terminal for one of the following reasons:

- It was issued from an integrated console.
- It was issued from a SNA terminal that is controlled by:
  - a level of VTAM Service Machine (VSM) that does not support the DIAL function.
  - a VSM and is not a 3270 display.

System action

The command is not executed. System operation continues.

User response

DIAL from a SNA terminal that is not a non-3270 display controlled by a VSM, or one that is controlled by a VSM that supports the DIAL function. Use UNDIAL only from devices that support it.

HCP750E RESTRICTED PASSWORD FILE{, ERROR DURING READ| HAS BAD RECORD FORMAT| HAS BAD RECORD LENGTH}

Explanation

Depending on the text of the message, the error is:

1. **ERROR DURING READ**

   An error occurred while attempting to read the RPWLIST DATA file.

2. **HAS BAD RECORD FORMAT**

   The RPWLIST DATA file is in variable format. Only fixed format is allowed.

3. **HAS BAD RECORD LENGTH**

   The RPWLIST DATA file had a record length of less than eight.

System action

The directory is not updated.

User response

Take the appropriate action for the message you received:

1. Contact your system programmer.
2. Change the record format of the RPWLIST DATA file to fixed and reissue the DIRECTXA command.
3. Change the record length of the RPWLIST DATA file to at least 8 and reissue the DIRECTXA command.

HCP750I RESTRICTED PASSWORD FILE NOT FOUND

Explanation

The restricted password file (RPWLIST DATA) is missing.

System action

Directory processing continues without checking for restricted passwords. As long as there are no other errors, the directory is updated.

User response

Determine if an RPWLIST DATA file is needed. If restricted password checking is desired and the file is not found, refer to *z/VM: CP Planning and Administration* to create one, and reenter the DIRECTXA command.

HCP751E The variations of this message are explained below.

Explanation

- INVALID OPERAND - *operand*
- INVALID OPERAND - *operand* FOLLOWING PROFILE *profname*
- INVALID OPERAND - *operand* FOLLOWING USER *userid*
- INVALID OPERAND - *operand* PRECEDING A POOL STATEMENT
- INVALID OPERAND FOLLOWING *type name* - COMMAND LENGTH EXCEEDED
- INVALID OPERAND FOLLOWING *type name* - MAXIMUM COMBINED COMMAND LENGTH EXCEEDED
- INVALID OPERAND - *operand* FOLLOWING IDENTITY *userid*
- INVALID OPERAND - *operand* FOLLOWING SUBCONFIG *id*

The specified operand is invalid. In the USER or IDENTITY statement preceding a POOL statement, the user ID must be no more than three characters in length.

System action

The directory statement on which the error occurred is displayed above the message. If the directory statement is longer than 237 characters, then only the first 237 characters of the statement are displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Correct the invalid operand in the control statement and reissue

HCP752E **STATEMENT SEQUENCE ERROR [FOLLOWING PROFILE/USER/ IDENTITY/SUBCONFIG {*profname* | *userid* | *id*}]**

Explanation

A directory statement was determined to be out of sequence following the specified PROFILE, USER, IDENTITY, or SUBCONFIG statement.

A sequence error is recorded for the following cases:

- A PROFILE statement that immediately follows another PROFILE statement, with no intervening definition statements
- A PROFILE statement encountered after the first USER or IDENTITY statement has been processed
- A machine characteristic statement encountered after the first device statement of a definition has been processed
- A user definition that does not contain at least one device statement.

See Creating and Updating a User Directory in *z/VM: CP Planning and Administration* for information on defining a directory entry.

System action

The statement that is out of sequence is displayed above this message. If the directory statement is longer than 237 characters, then only the first 237 characters of the statement are displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Place the directory statements in the proper sequence, or correct the error and reissue the DIRECTXA command.

HCP753E **The variations of this message are explained below.**

Explanation

- OPERAND MISSING
- OPERAND MISSING FOLLOWING PROFILE *profname*
- OPERAND MISSING FOLLOWING { USER *userid* | IDENTITY *userid* | SUBCONFIG *id* }
- OPERAND MISSING ON POOL STATEMENT

An operand is missing on a PROFILE, USER, IDENTITY, or SUBCONFIG directory statement.

System action

The directory statement on which the error occurred is displayed above the message. If the directory statement is longer than 237 characters, then only the first 237 characters of the statement are displayed above the message. The directory program terminates, without bringing a new directory online, after scanning the remaining statements for syntax.

User response

Add the missing operand to the directory statement and then reissue the statement.

HCP754E **CONFLICTING OPERAND - *operand* [FOLLOWING PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*]**

Explanation

The specified operand conflicts with one previously specified.

System action

The directory statement on which the error occurred is displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Correct the operand that is not valid in the control statement and reissue the DIRECTXA command.

HCP755E **INCORRECT *keyword* SPECIFICATION FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}**

Explanation

The specification for the indicated keyword is incorrect within the specified entry. The reasons for an incorrect keyword specification include the following:

- The length of the specification exceeds its allowed maximum.
- A quoted string specification contains mismatched single or double quotation marks.

System action

The directory statement on which the error occurred is displayed above the message. If the directory statement is longer than 237 characters, then only the

first 237 characters of the statement are displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Correct the keyword specification in the control statement and reissue the DIRECTXA command.

HCP756W PROGRAM CHECK PSW = *psw* CODE = *code*

Explanation

A program check has occurred while running IPL DDRXA.

The variables in this message are as follows:

psw
is the first and fourth words of the old PSW of the program in hexadecimal format.

code
is the interrupt code in hexadecimal format.

System action

The system enters a disabled wait state PSW (wait state code = 756).

User response

If the condition persists, contact your IBM support personnel.

HCP758E DUPLICATE {CONSOLE | UNIT} DEFINITION FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}

Explanation

The directory statement is defining a device that has a device (UNIT) address that was previously defined for the named entry, or the statement is attempting to redefine the user's console (multiple CONSOLE statements).

System action

The directory statement on which the error occurred is displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax. Note that checking for duplicate devices may be suspended for an individual user after the first 90 device control statements.

User response

Remove or correct the duplicate definition and reissue the DIRECTXA command.

HCP759E INSUFFICIENT VIRTUAL STORAGE

Explanation

The virtual machine executing the directory program does not have enough virtual storage to complete processing of the directory.

System action

Directory processing terminates.

User response

Define more storage for the virtual machine and reissue the DIRECTXA command. Note that you must re-IPL CMS after increasing the storage size.

HCP760E NOT ENOUGH SPACE ALLOCATED FOR DIRECTORY

Explanation

There is insufficient space on the directory volume to continue building the directory.

System action

The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax. Writing is suspended on the directory device.

User response

Using ICKDSF or the CPFMTXA utility, allocate more space on the directory volume and reissue the DIRECTXA command. Note that the directory program always starts building a new directory on a fresh cylinder or separate extent and does not overlay an existing directory written on the directory volume. After the directory is successfully updated, the space used by the old directory is marked as available for use by the next directory to be created.

HCP761E VOLID READ IS *volid1* NOT *volid2* ON *vdev*

Explanation

The wrong volume is mounted on the device described by the DIRECTORY control statement. In this message, the variables are as follows:

volid1
The volume serial number from the directory volume.

volid2
The volume serial number described by the DIRECTORY statement.

System action

The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Correct the DIRECTORY control statement, or mount the proper volume on the device described by the DIRECTORY control statement. Then reissue the DIRECTXA command.

HCP762E DIRECTORY STATEMENT MISSING

Explanation

The first control statement detected by the program was not either a valid DIRECTORY control statement or a LOAD C statement pointing to a valid DIRECTORY statement.

The statement might be an edit mode DIRECTORY statement having the *altvdevno* value of EDIT. The edit mode DIRECTORY statement cannot be used by itself.

System action

The directory program terminates and returns to the caller with return code 2 in R15.

User response

Add either the appropriate DIRECTORY statements to the beginning of the source directory or a LOAD C statement pointing to the DIRECTORY statements if it is a cluster format directory. Reissue the DIRECTXA command.

HCP763E INVALID FILENAME OR FILE NOT FOUND

Explanation

The specified file name or file type contains invalid characters, or CP cannot find the file on the CMS disks currently accessed by you. The default file name and file type are USER DIRECT *.

System action

None.

User response

Issue the DIRECTXA command again, specifying the correct CMS file containing the control statements.

HCP764E ERROR IN RDBUF

Explanation

A DASD error was encountered during an FSREAD operation. RDBUF is the routine of the module that issued the message. The CMS return code is the routine return code plus 100.

System action

After scanning the remaining statements for syntax, the directory program terminates without bringing a new directory on line.

User response

See FSREAD in *z/VM: CMS Macros and Functions Reference* for a description of the return codes. If you can correct the problem, correct it and issue the DIRECTXA command again. Otherwise, contact your system support personnel.

HCP765E INVALID {CLASS|DOMAIN} DEFINITION - {*class*|*domain*}

Explanation

One of the following happened:

1. The class value *class* is not in the range of A through Z or 1 through 6 on the CLASS directory statement; or either is not in the range of A through Z or 1 through 6, or is only an asterisk (*) in the class field of the USER directory statement.
2. Both the USER directory statement class field and the CLASS directory statement contain class definitions in the range of A through Z or 1 through 6.
3. The domain value (*domain*) is not in the range of 0-15 on the CRYPTO control statement.

System action

The system displays the statement in error immediately preceding this message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax. The system processes the control statements but does not write any directory data to disk.

Operator response

Correct the control statement containing the incorrect value and reissue the DIRECTXA command.

HCP766E DUPLICATE {CLASS|DOMAIN} DEFINITION - {*class*|*domain*}

Explanation

A class or domain value was specified more than once. Examples of when this error occurs are:

- A class was specified twice on a USER control statement.
- A class was specified twice on a CLASS control statement.
- A domain was specified twice on a CRYPTO control statement.

System action

The system displays the statement in error immediately preceding this message. The program is terminated after scanning the remaining statements for syntax. The system processes the control statements but does not write any directory data to disk.

Operator response

Correct the control statement that duplicates the value and reissue the DIRECTXA command.

HCP767I PASSWORD CHANGED TO NOLOG FOR *userid*

Explanation

The password for *userid* was found on the list of restricted passwords. It has been changed to "NOLOG".

System action

The card image is displayed above the message. The directory processing continues.

User response

Notify the directory administrator or the user that the password must be changed before the user will be allowed to access the system.

HCP770E The variations of this message are explained below.

Explanation

- MODIFY is not valid for Diagnose code *diag*
- MODIFY is not valid for command { *command* | QUERY *subcommand* | SET *subcommand* }
- MODIFY RESET is not valid for PRIV_CLASSES *classes*
- MODIFY [RESET] is not valid for command { *command* | QUERY *subcommand* | SET *subcommand* } because different EPNAMEs would be set

The system was unable to implement a modification request for the CP command, SET or QUERY operand, DIAGNOSE code, configuration file statement, privilege classes, or system function indicated by *command*, *operand*, *diag*, or *statement*.

One of the following occurred:

- You specified something that cannot be modified; for example: DIAGNOSE code X'214' cannot be modified.
- You specified a command or subcommand that is an alias of another. An alias cannot be modified.
- You specified a command or subcommand that cannot be modified or reset because it would create a conflicting EPNAME condition.

System action

CP terminates the command, DIAGNOSE code, or configuration file statement.

User response

None.

HCP771E RESTRICTED PASSWORD AND NOLOG INVALID FOR *userid*

Explanation

A restricted password was found on the USER statement for the user issuing the DIRECTXA command. If this user's password is changed to NOLOG, and if there are no other users who can issue the DIRECTXA command, no one will be able to logon to modify the directory.

System action

The card image is displayed above the message. The directory checking continues, but the directory is not updated.

User response

Change the password to an unrestricted password and reissue the DIRECTXA command.

HCP772E THE {PROFILE *profname* | USERID *userid* | POSIXGROUP *groupname*} WAS PREVIOUSLY DEFINED.

Explanation

The directory program detected a duplicate for one of the following:

- Profile name
- User ID (*userid* encompasses all of the IDs on USER, IDENTITY, and SUBCONFIG statements)
- Posix group name.

System action

The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Correct your directory statements so that all PROFILE, USER, IDENTITY, SUBCONFIG, and POSIXGROUP statements specify a unique profile name, user ID, or POSIX group name and reissue the DIRECTXA command.

HCP773E MINIOPT STATEMENT FOLLOWING {USER *userid* | IDENTITY *userid* | SUBCONFIG *id*} DOES NOT APPLY TO VIRTUAL DEVICE *vdev* BECAUSE IT IS A FULL PACK MINIDISK.

Explanation

The MINIOPT directory statement follows an MDISK directory statement, which defines a full pack minidisk.

System action

After scanning the remaining statements for correct syntax, the directory program terminates, without bringing a new directory on line.

User response

Correct the directory statement in error (MINIOPT or MDISK) for this user, and reissue the DIRECTXA command.

HCP774E I/O ERROR *vdev* UNIT EXCEPTION

Explanation

CP detected an I/O error due to the directory volume presenting a unit exception condition to the system.

System action

The error is from the directory volume, and the program no longer attempts to write on that volume. After scanning the remaining statements for correct syntax, the directory program terminates, without bringing a new directory on line.

User response

Reissue the DIRECTXA command. If the error persists, contact your system support personnel.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP775I ALTERNATE DEVICE *xxxx* IN USE

Explanation

The alternate device address specified on the directory control statement is being used to build the directory.

System action

Directory processing continues normally.

User response

None.

HCP776E DUPLICATE DIRECTORY CONTROL STATEMENT FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}

Explanation

A duplicate directory statement was found in the specified entry. The duplicate statement is displayed above the message. You can specify the directory statement only once within an entry.

System action

After scanning the remaining statements for correct syntax, the directory program terminates, without bringing a new directory on line.

User response

Remove the duplicate directory statement and reissue the DIRECTXA command.

HCP777E **DASDOPT STATEMENT FOLLOWING {USER *userid* | IDENTITY *userid* | SUBCONFIG *id*} DOES NOT APPLY TO VIRTUAL DEVICE *vdev* BECAUSE IT IS NOT A FULL PACK MINIDISK.**

Explanation

The DASDOPT directory statement follows an MDISK directory statement that does not define a full pack minidisk.

System action

The statement is displayed above the error message. The directory program terminates after scanning the remaining statements for syntax.

User response

Correct the directory statement in error (DASDOPT or MDISK) for this user and enter the DIRECTXA command again.

HCP778I **User class restructure is invalid on this system. UCR spool file is ignored**

Explanation

This message is displayed during system initialization when a UCR spool file is encountered.

System action

The system ignores the user class restructure information in the file.

User response

UCR spool files and the OVERRIDE command are no longer supported starting in z/VM V6.3. Customers should use the MODIFY statement in the system configuration file or the MODIFY command to implement changes to command privilege classes. For information about the MODIFY statement, see MODIFY COMMAND / CMD Statement in *z/VM: CPI Communications User's Guide*; for information on the MODIFY command, see *z/VM: CP Commands and Utilities Reference*.

Use the CVTOVRID utility to convert a class override file (one that is processed by the CP OVERRIDE utility) into a series of MODIFY statements to imbed into a system configuration file. Use the QUERY UCR command to display information about the UCR files on your system. Use the PURGE UCR command to purge all UCR files once your conversion to MODIFY statements is complete. That will stop this message from being displayed.

HCP780E **[XAUTOLOG failed for *userid* -] Maximum password attempts exceeded, try again later.**

Explanation

You attempted to logon using LOGON, AUTOLOG or XAUTOLOG with an incorrect password more times than the system permits. For security reasons, the system will not allow you to logon until a waiting period has passed.

System action

When the number of unsuccessful logon attempts exceeds the limit of ten (or the limit defined by the system administrator), the system issues this message and denies further logon attempts for 60 minutes (or for a period of time defined by the system administrator).

User response

Try to logon again later with the correct password. If you do not know your password, contact your system administrator for assistance.

HCP782E **ERROR ATTEMPTING TO GET FREE STORAGE**

Explanation

The CMSFREE routine could not find the space necessary to hold the restricted password list.

System action

Directory updating is terminated.

User response

Re-IPL to free up storage and retry the command and/or increase your virtual storage, re-IPL and reissue the DIRECTXA command. If it still fails, then contact your system support personnel.

HCP782I **ERROR ATTEMPTING TO RETURN FREE STORAGE**

Explanation

The CMSFRET routine did not return the space correctly during exit processing.

System action

Exit processing continues.

User response

None.

HCP783I **OPERAND IGNORED - *operand* [FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}]**

Explanation

The specified operand is ignored because the MIXED option was specified on the DIRECTXA command.

System action

The system displays the statement in error above the message. After scanning the remaining statements for correct syntax, if no other errors are found the new directory is put on line.

User response

None.

HCP784E **I/O ERROR *vdev* DEVICE NOT ATTACHED**

Explanation

CP detected an I/O error due to the specified virtual device (*vdev*) not being attached to the system.

System action

The system was unable to locate the specified directory volume. The program no longer attempts to write on that volume. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Check to see if the specified volume is attached, then reissue the DIRECTXA command. If the error persists, contact your system support personnel.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP786I **EDIT CHARACTER - *value* IS NOT VALID FOLLOWING {USER *userid* | IDENTITY *userid*}**

Explanation

The directory entry for USER *userid* or IDENTITY *userid* contains an invalid edit character. An edit character can not be alphanumeric or the bytes X'0E' (shift out) or X'0F' (shift in).

System action

The USER or IDENTITY definition is accepted and the default edit character is used. After scanning the remaining statements for correct syntax, if no other errors are found the new directory is put on line.

User response

Specify a valid edit character in the user's directory entry and reissue the DIRECTXA command.

HCP787E **I/O ERROR *vdev* INCORRECT RECORD LENGTH DETECTED**

Explanation

An I/O error has been detected on the directory volume due to an incorrect record length. Possible reasons for this error are:

- An incorrectly-formatted directory volume was used.
- The device type specified on the DIRECTORY statement did not match the device type of the directory volume.

System action

The error is from the directory volume, and the program no longer attempts to write on that volume. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Check that the directory volume has been properly formatted with the CP format program, then reissue the DIRECTXA command. If the error persists, contact your system support personnel.

HCP788E **PERMANENT I/O ERROR *vdev***

Explanation

An unrecoverable I/O error has been detected. All attempts to recover from this I/O error have failed. EREP records have been recorded by the system to aid in problem determination.

System action

EREP records will be recorded. The error is from the directory volume, and the program no longer attempts to write on that volume. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Check for the following problems:

- The hardware is not operational
- The specified device is not supported by the system
- The minidisk is not linked with write access.

Then reissue the DIRECTXA command. Check EREP records for error indications. If the error persists, contact your system support personnel.

HCP789E **NUMBER OF CPU STATEMENTS EXCEEDS CPU LIMIT FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid*}**

Explanation

The number of CPU statements for this PROFILE *profname*, USER *userid*, or IDENTITY *userid* exceeded the limit of virtual CPUs. This limit is either set by the MCPU parameter on the MACHINE *statement* or defaults to decimal 64, which is the maximum number of virtual CPUs a user can define.

System action

The system displays the statement in error above the message. After scanning the remaining statements for correct syntax, the directory program terminates, without bringing a new directory on line.

User response

Correct either the number of CPU statements or the MCPU parameter on the MACHINE statement defined for this user. Reissue the DIRECTXA command.

HCP790E **CPU STATEMENT CONTAINS INVALID CPU ADDRESS FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid*}**

Explanation

A directory CPU statement for this PROFILE *profname*, USER *userid*, or IDENTITY *userid* contains a *cpuaddr* value outside the acceptable range. The *cpuaddr* value must be between X'0' and X'3F'.

System action

The system displays the statement in error above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Correct the CPU statement and reissue the DIRECTXA command.

HCP791E **DUPLICATE CPU DEFINITION FOLLOWING {PROFILE *profname* or USER *userid* | IDENTITY *userid*}**

Explanation

A directory CPU statement for this PROFILE *profname*, USER *userid*, or IDENTITY *userid* contains a *cpuaddr* parameter that is a duplicate of one already specified for this user.

System action

The statement in error is displayed, followed by the message. The program is terminated after scanning the remaining statements for syntax, without bringing a new directory on line.

Operator response

Correct the CPU statement and reissue the DIRECTXA command.

HCP792E **A BASE CPU HAS ALREADY BEEN DEFINED FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid*}**

Explanation

A directory CPU statement for this PROFILE *profname*, USER *userid*, or IDENTITY *userid* contains the BASE parameter after CP found BASE on a previous CPU statement for this user.

System action

The statement in error is displayed followed by the message. The program is terminated, after scanning

the remaining statements for syntax, without bringing the new directory on line.

Operator response

Correct the CPU statement and reissue the DIRECTXA command.

HCP793E LOGICAL RECORD LENGTH OR RECORD FORMAT IS INCORRECT

Explanation

The requested CMS file that contains the directory source is not in fixed-record (F) format, or the logical record length is not 80.

System action

Directory processing terminates.

User response

Correct the requested CMS file and reissue the command.

HCP794E *dasd rdev* - ACCESS IS PROHIBITED ON {SUBSYSTEM| VOLUME *volid*} DUE TO STATUS ERROR - RC = - *ssid.p-cc-dd*

Explanation

This message is generated when the storage director cannot determine the status of the volume, or cannot synchronize the volume with the data in nonvolatile storage.

The variables in the message are as follows:

rdev
The device used to report the condition

volid
The volume identifier of the affected device

rc
The reason code

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the EREP records (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data formats and descriptions. Contact the appropriate hardware service personnel.

HCP795E STATEMENT CONFLICTS WITH {CLASS VALUE | STORAGE SIZE} ON {USER | IDENTITY} STATEMENT FOLLOWING {USER *userid* | IDENTITY *userid*}

Explanation

A CLASS, STORAGE, or MAXSTORAGE directory statement is present in the entry for the indicated user, but the USER or IDENTITY directory statement has a value other than blank or an asterisk (*) in the corresponding field.

System action

The CLASS, STORAGE, or MAXSTORAGE directory statement is displayed above the message. After scanning the remaining statements for correct syntax, the directory program terminates, without bringing a new directory on line.

User response

Remove the CLASS, STORAGE, or MAXSTORAGE directory statement, or change the USER or IDENTITY statement to eliminate the conflict. Then reissue the DIRECTXA command.

HCP797E THE VALUE OF *keyword1* CONFLICTS WITH THE VALUE OF *keyword2* FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}.

Explanation

The value specified for *keyword1* conflicts with the value specified for *keyword2*.

System action

The directory program terminates, after scanning the remaining statements for syntax, without bringing a new directory online.

Operator response

To find the description of the statement in error, see *z/VM: CP Planning and Administration*. Use the statement description to determine the cause of the

conflict. Correct the directory statement in error and reissue the DIRECTXA command.

HCP798E ***keyword1* KEYWORD CONFLICTS WITH *keyword2* FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}**

Explanation

You specified *keyword1* for a PROFILE *profname*, USER *userid*, IDENTITY *userid*, or SUBCONFIG *id* that has *keyword2* already specified. These two keywords are in conflict.

```
Example: DEDICATE KEYWORD CONFLICTS WITH
         NONDEDICATE KEYWORD FOLLOWING USER
         USER1
```

System action

The statement in error is displayed followed by the message. The program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

Programmer response

Delete one of the conflicting keywords and reissue the DIRECTXA command.

HCP799E **IPL failed due to insufficient or faulty storage**

Explanation

While attempting a request to IPL a program in a virtual machine, CP was unable to find a page of user's virtual storage in which to copy the IPL simulator module (either HCPVMI or HCPVMJ, depending on device class).

System action

The requested IPL command is not completed. System operation continues.

User response

There is probably a hardware malfunction. Contact your IBM Support Center personnel for hardware support.

HCP814E **INSUFFICIENT STORAGE AVAILABLE FOR RESTORE**

Explanation

DDR RESTORE has been issued in an environment that has a small amount of real storage available (approximately less than 2M). The tape you are trying to restore was created using the DDR DUMP function without the OLDFORM option. At that time, there was adequate storage available and DDR used its larger internal buffers for performing the dump.

System action

The job step terminates.

User response

Define or obtain more storage so you can restore the tape.

HCP816E **{Traceid|Traceset} *operand* does not exist**

Explanation

A trace ID for which the TRSOURCE command was issued cannot be found. It was misspelled or previously dropped.

System action

If attempting to alter the trace, the command is rejected.

User response

Verify the trace ID and retry if it was in error.

HCP819I **Traceid *traceid* disabled; group *group* enabled by *traceid***

Explanation

The trace ID has been disabled because tracing for the FOR USER trace ID has been superseded by the enabling of the FOR VMGROUP trace ID.

System action

Tracing is done for the user ID specified in the disabled FOR USER trace ID. However, the entries for this user ID are now created because of the newly enabled FOR VMGROUP trace ID.

User response

No action is necessary if you want the user ID to record under the FOR VMGROUP trace ID. Otherwise, disable the FOR VMGROUP trace ID and reenable the FOR USER trace ID.

HCP821E No traceids defined.

Explanation

An action was attempted on one or more trace IDs, but none were found.

System action

The action attempted was not completed.

User response

Define the trace IDs required before attempting the command again.

HCP824E SOFTWARE-RE-IPL IS SUPPRESSED. REASON: *text*

Explanation

The system is terminating. There will be no automatic software re-IPL. If the cause of the termination was a check-stop or a machine check, then message HCP610I will have been issued prior to this message. The cause of the termination may also have been an abend or the result of the operator performing a SYSTEM RESTART.

text in this message indicates why the expected software re-IPL will not be performed.

Note: This message may be issued more than once during an incident.

text:

- **INVALID MCIC.**

  An invalid machine check interrupt code (hardware failure) has occurred.
- **SIGP INSTRUCTION FAILED.**

  A processor is in an unknown state; it did not respond correctly to a SIGP instruction during termination.
- **SEVERE I/O DAMAGE.**

  There is severe I/O subsystem damage.
- **RECOVERY SOFTWARE FAILURE.**

  A processor's MCVBK was found not empty (error in error recovery software), or a processor's MCVBK or MCKBK could not be found (error in error recovery software).

System action

In some cases a final dump may be generated after this message is issued. Except when a processor is in the unknown state (processor fails to respond to the SIGP instruction), all processors are left in one of the following states:

- Stopped
- Disabled wait
- Check-stop.

Operator response

Contact your system support personnel. A hardware re-IPL may be attempted.

HCP827W SYSTEM LOAD FAILURE; INSUFFICIENT CONTIGUOUS STORAGE TO BUILD THE FRAME TABLE

Explanation

Not enough contiguous storage could be found to build the system frame table. This could occur because there is not enough storage in your configuration or you have a hardware problem (storage errors).

System action

System loads a disabled PSW.

User response

Increase the amount of contiguous storage available in your storage configuration. If you have a hardware problem, call your service representative.

HCP830I The processor controller is responding slowly.

Explanation

CP has not yet received an expected completion signal from the processor controller. CP has issued a command to the processor controller, for which it expects a completion signal. A service processor external interrupt, code X'2401', normally signals completion within a specified time interval.

System action

System operation continues except for processor controller requests. Use of the processor controller can continue only if a completion signal is received. Virtual machine requests to the real processor controller are accepted and held for later.

Operator response

If the processor controller has not responded after five minutes, contact your IBM Support Center personnel

for hardware support. This condition may indicate a malfunction of the processor controller.

HCP831I The processor controller is now responding.

Explanation

After an unusually long wait, CP has received the completion signal, a service processor external interrupt, code X'2401', from the processor controller in response to an accepted command. (This message is issued after message 830.)

System action

The system continues normal operation, including processor controller requests.

Operator response

None.

HCP832E The processor controller is disconnected due to a system error.

Explanation

The response information, for the requested command, from the processor controller is returned in a data block. The address of this data block is passed to the system with the completion signal, a service processor external interrupt, code X'2401'. When the data block address used by the processor controller does not match the data block address sent by the system, there is an error.

System action

The system suspends the use of the processor controller command process and attempts to continue normal operations. No further requests are accepted or attempted for the processor controller.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem. This message indicates possible malfunction of the processor controller. If the processor controller command process is required, it may be brought on-line only by system IPL.

HCP833I An IOCP has started a write sequence that will alter the I/O configuration data set *xx*.

Explanation

An I/O configuration program (IOCP) has initiated a write sequence that will alter the I/O configuration Data Set *xx*. This IOCP write sequence will result in changes to the physical I/O configuration defined on the data set. The *xx* indicates the requested data set level that the IOCP write sequence will alter.

System action

The system continues normal operation. The altered IOCDS data set is not accepted as the active physical configuration until the IOCP write sequence has completed and the altered data set is selected as the active IOCDS on an ensuing IML.

Operator response

None.

HCP834I The IOCP write processing cannot complete because the I/O configuration data set *xx* is invalid.

Explanation

An I/O configuration program (IOCP) was processing an IOCP write sequence to the I/O configuration data set (IOCDS) *xx* that has been terminated before normally completing the sequence. The IOCDS data set *xx* is left unusable and open. The *xx* indicates the requested data set level that the terminated IOCP sequence was writing to.

System action

The system continues normal operation. The same user may start IOCP write sequence. The IOCDS data set is that is not valid is not usable as the active physical configuration until another IOCP write sequence is completed.

Operator response

None.

HCP835I The IOCP write processing has completed; the I/O configuration data set *xx* is altered.

Explanation

An I/O configuration program (IOCP) has completed a write sequence that has altered the I/O configuration data set *xx*. The IOCP write sequence has changed the physical I/O configuration defined on the data set. The *xx* indicates the data set level that has been altered.

System action

System operation continues.

Operator response

A hardware IML and re-IPL of the system is required to make the new definition active.

HCP836I The IOCP write request cannot complete because *userid* already has a sequence in progress.

Explanation

An I/O configuration program (IOCP) is attempting to begin an IOCP write sequence that will write to an I/O configuration data set (IOCDS). The first request of the sequence has been rejected because another user has an IOCP sequence in process.

userid is the user ID currently processing the IOCP sequence.

System action

The request is not accepted, and the new IOCP write sequence is not initiated. Normal processing continues for the current IOCP sequence.

User response

Run the IOCP after the current IOCP sequence has completed.

HCP837I The IOCP read request cannot complete because *userid* already has a sequence in progress.

Explanation

An I/O configuration program (IOCP) is attempting to begin an IOCP read sequence. The first request of the sequence has been rejected because another user has an IOCP sequence in process.

userid is the user ID currently processing the IOCP sequence.

System action

The request is not accepted, and the new IOCP read sequence is not initiated. Normal processing continues for the current IOCP sequence.

User response

Run the IOCP after the current IOCP sequence has completed.

HCP838E The request process cannot complete due to a processor controller failure.

Explanation

The processor controller has failed and is no longer available for software use. All processor controller request processing (Service Calls) have been suspended. Impacted functions include those that alter or obtain information about the physical configuration of the processor complex.

System action

The system has suspended the use of the processor controller request process and is attempting to continue normal operations without the use of the processor controller. No further requests are accepted or attempted for the processor controller.

User response

Hardware error. Stand by for further instructions from your CP operator. The system is expected to shut down as soon as the necessary IMS data checkpointing has completed.

HCP839I The IOCP read open request cannot complete because data set *xx* is already open.

Explanation

An I/O configuration program (IOCP) attempted to issue an IOCP READ OPEN command to begin an IOCP read sequence. CP rejected the request because you have already opened a different level of IOCDS for a read sequence. You are limited to having one IOCDS request open at a time. The *xx* in the message indicates the IOCDS level that you currently have open.

System action

The system rejects the request and does not initiate the new IOCP read sequence. Normal processing continues for the current open IOCDS level *xx* request.

User response

You may continue with the IOCP read sequence for the IOCDS currently open, or issue an IOCP READ CLOSE command to IOCDS level *xx* and then issue an IOCP READ OPEN command to the IOCDS level you now want opened.

HCP840I **The IOCP write open request cannot complete because data set *xx* is already open.**

Explanation

An I/O configuration program (IOCP) attempted to issue an IOCP WRITE OPEN command to begin an IOCP write sequence. CP rejects the request because you have already opened a different level of IOCDS for a write sequence. This is usually caused by a failure in an earlier IOCP program while the IOCDS level is open. You are limited to having one IOCDS request open at a time. The *xx* in the message indicates the IOCDS level that you currently have open.

System action

The system rejects the request and does not initiate the new IOCP write sequence. Normal processing continues for the current open IOCDS level *xx* request.

User response

You should reexecute the original IOCP program that failed to close that IOCP level, and then reexecute this IOCP program. If the problem persists, contact your support personnel.

HCP841I **The processor controller request process cannot complete due to no SCP information.**

Explanation

During CP initialization or reinitialization, CP attempted to get system control program information by issuing a READ SCPINFO processor controller request. The request failed for one of the following reasons:

1. There is no processor controller for the processor on which CP is running.
2. The processor controller is logically disconnected.
3. The processor controller request process is suspended.

System action

CP continues IPL processing but does not accept any more processor controller requests.

User response

Normal operations on z/VM continue, but any operations that require the processor controller (such as IPLing MVS or running the IOCP program) are not possible.

HCP842I **The IOCP read request cannot complete because the data set is not open. The current open data set is *xx*.**

Explanation

An I/O configuration program (IOCP) attempted to issue an IOCP READ command to a level of IOCDS that is not open. CP rejected the request because you have already opened a different level of IOCDS for a read sequence. You are limited to having one IOCDS open at a time. The *xx* in the message indicates the IOCDS level that you currently have open.

System action

The system rejects the request and does not initiate the IOCP read sequence. Normal processing continues for the current open IOCDS level *xx* request.

User response

You may continue with the IOCP read sequence for the IOCDS currently open, or issue an IOCP READ CLOSE command to IOCDS level *xx* and then issue an IOCP READ OPEN command to the IOCDS level you now want opened.

HCP843I **The IOCP write request cannot complete because the data set is not open. The current open data set is *xx*.**

Explanation

An I/O configuration program (IOCP) attempted to issue an IOCP WRITE command to a level of IOCDS that is not open. CP rejected the request because you have already opened a different level of IOCDS for a write sequence. This is usually caused by a failure in an earlier IOCP program while the IOCDS level is open. You are limited to having one IOCDS open at a time. The *xx* in the message indicates the IOCDS level that you currently have open.

System action

The system rejects the request and does not initiate the IOCP write sequence. Normal processing continues for the current open IOCDS level *xx* request.

User response

Reexecute the original IOCP program that failed to close that IOCDS level, and then reexecute this IOCP program. If the problem persists, contact your support personnel.

HCP844E The device is not defined due to an invalid control unit type.

Explanation

You attempted to define a minidisk on a 3880 Model 11 or a 3880 Model 21 subsystem. Minidisks are not permitted on 3880 Models 11 and 21 subsystems.

System action

System operation continues.

User response

Reissue the DEFINE command for a DASD on a control unit that supports minidisks.

HCP845E DASD *rdev* not attached; paging addresses offline

Explanation

You are attempting to ATTACH the base and paging addresses of a DASD on a 3880 Model 11 or 3880 Model 21 subsystem, but the paging addresses are offline.

This message should generally be received only when running second level or higher.

System action

System operation continues.

User response

- If you are attaching the DASD to a user, reissue the command with the NOCTL option. This causes the attachment of the base address only.
- If you are attaching the DASD to the system, reconfigure the base system to include the paging addresses.

HCP846E Invalid channel path identifier.

Explanation

You did not correctly specify the path ID when you issued one of the following commands:

- DETACH CFLINK *msgprocid1 msgprocid2* CHPID *yy*
- QUERY CHPID *yy*
- SET CFLINK *msgprocid* CHPID *yy* ...
- VARY ON PATH *yy* TO ...
- VARY OFF PATH *yy* FROM ...

System action

The command processing is ended; system operation continues.

User response

Reissue the command with a valid path ID.

HCP847E Maximum system spool file limit exceeded

Explanation

All available spool file IDs for the system are assigned. The maximum number of available spool files is determined by the number of warmstart cylinders specified on the SYSTEM_RESIDENCE statement.

System action

CP rejects the request for a spool file ID.

Operator response

Request all users to purge all unnecessary spool files in order to enable system spooling activity to continue. If necessary, spool files may be saved on tape (using the SPXTAPE command) before purging.

User response

Ask the operator to request that all users delete unnecessary spool files.

Programmer response

It may be necessary to increase the current spool file capacity. The capacity is increased by enlarging the warmstart area. Refer to *z/VM: CP Planning and Administration*.

HCP848E SYSTEM parameter is invalid with the spoolid option

Explanation

You specified the SYSTEM parameter with the spool ID option. You can only specify the SYSTEM option with generic options, such as CLASS and FORM. To be valid, a spool ID must be accompanied by the corresponding user ID.

System action

The command terminates; system operation continues.

Operator response

Determine the user ID of the file to be selected and reenter the command with that user ID.

User response

None.

Programmer response

None.

HCP849E A userid must be specified with the spoolid

Explanation

The command you issued contained a spool ID but no user ID. Since different users may have spool files with the same spool ID, the spool file for which you issued the command must be specified with both a spool ID and a user ID in order to indicate a unique file.

System action

The command terminates; system operation continues.

Operator response

Determine the user ID of the file to be selected and reenter the command with that user ID.

User response

None.

Programmer response

None

HCP850I UNABLE TO READ DUMP

Explanation

The DUMPLOAD command was unable to read the dump from a reader spool file, or a dump record that is needed for DUMPLOAD to process the dump is missing. Problems in reading from the CMS card reader can be caused by one of the following:

- The reader is not at address 00C
- An active file is already on the reader
- The reader is not ready.

System action

The command is not executed; system operation continues.

User response

If the dump is in a reader spool file, verify that the virtual machine configuration is correct for DUMPLOAD to process the dump. Also, be sure that the card reader at 00C is a spooled card reader in closed status. If the problem is not the card reader, notify the system programmer.

HCP852E FATAL I/O ERROR WRITING DUMP, {FSWRITE | FSERASE | FSSTATE | CMSCALL} RC = *rc*

Explanation

An irrecoverable I/O error occurred during the writing of the dump on the CMS disk or SFS directory. A CMS error message describing the specific error that occurred may precede this message.

System action

Command processing is terminated.

User response

Refer to the documentation on the CMS macro to determine the error that corresponds to the given return code. Issue the command again after you correct the error.

HCP853E NO DUMP FILES EXIST

Explanation

The CP interface indicates that you either have no dump spool files in your reader or CP cannot process the dump spool files that are in your reader. If reader files are in SYSHOLD or USERHOLD status, they will not be found.

System action

Command processing terminates.

User response

Make sure that the dump file in your reader has the required class, and that your user ID has the correct privilege class to load a CP dump. Verify also that the class of the reader matches that of the dump. The class of the reader at 00C should be class D for a CP abend dump, or class V for a virtual machine dump. To read a CP system abend dump, you need a class C or

class E authorization. If there are no more dump files in your reader, you do not need to invoke DUMPLOAD again. If a dump file exists under a different user ID, ask your operator to transfer that file to your user ID so that you can access it. If a dump file is in SYSHOLD or USERHOLD status, remove the hold condition so the file can be accessed.

HCP863E Invalid parameter - *parameter*

Explanation

The command line or exec statement specified an operand that is not valid or has too many or extraneous operands.

System action

The command is not executed; system operation continues.

Operator response

Correct the operand and reissue the command.

HCP864E The variations of this message are explained below.

— Variation 1 Partition *pname* not found

Explanation

A dynamic command was entered on an LPAR system and a logical partition name that was not valid was entered as part of the command.

System action

The command is not executed and system operation continues.

User response

Enter the command again with the correct logical partition name.

— Variation 2 Partition *pname* does not have access to CSS *nn*

Explanation

A dynamic command was entered on an MCSS system and a valid logical partition name that does not have access to the specified CSS was entered as part of the command.

System action

The command is not executed and system operation continues.

User response

Enter the command again with the correct logical partition name or correct CSS.

— Variation 3 A reserved partition slot does not exist for CSS *nn*, MIF-ID *mm*

Explanation

The CP DEFINE LPAR command was entered and a reserved partition slot does not exist for the specified CSS/MIF-ID combination.

System action

The command failed. System operation continues.

User response

Use the CP QUERY LPARS command to determine the reserved partition slots on your system and enter the CP DEFINE LPAR command again with the correct CSS/MIF-ID combination.

— Variation 4 Partition *pname* is already configured in CSS *nn*, MIF-ID *mm*

Explanation

The CP DEFINE LPAR command was entered and the partition name specified already exists on your system.

System action

The command failed. System operation continues.

User response

Enter the command again with the correct logical partition name.

— Variation 5 Partition *pname* is not configured in CSS *nn*, MIF-ID *mm*

Explanation

The CP DELETE LPAR command was entered and the specified partition name was not found to be configured at the specified CSS/MIF-ID combination.

System action

The command failed. System operation continues.

User response

Use the CP QUERY LPARS command to determine the location of the partition and enter the CP DELETE

LPAR command again with the correct CSS/MIF-ID combination.

HCP865I **The request to alter the *facility_name* facility for the system cannot be fulfilled. The facility is deprecated on this machine and is no longer alterable.**

Explanation

This message is issued to the z/VM operator at initialization when a valid SYSTEM_FACILITY system configuration file statement is present and requests an alteration to a facility that is no longer alterable. This occurs when z/VM is running on a processor that deprecates the facility.

System action

None.

User response

None.

HCP866I ***facility_name* facility behavior for the system has been set to *setting* by user *userID*.**

Explanation

This message is issued to the z/VM operator when a valid SET FACILITY command is issued that changes the current system setting.

System action

None.

User response

None.

HCP875A **The processor controller can only perform a minimum subset of functions. Follow local procedures for reporting a processor controller problem.**

Explanation

The processor controller has reported a change in its operation. If this message occurs at IPL of z/VM after a change to the processor, this message can be ignored. If this message occurs after IPL during normal operations, the processor controller has encountered a problem and can now only perform a minimum subset of functions.

System action

System operation continues. However, functions that use the processor controller, for example VARY PROCESSOR and IOCP commands, may not succeed.

Operator response

Follow local procedures for reporting a processor controller problem.

HCP876I **The processor controller will not notify VM prior to deactivation. To preserve guest integrity, issue a SHUTDOWN command before deactivating the partition or machine where VM is running.**

Explanation

The processor controller cannot supply VM with an indication that a deactivation is about to be performed, so VM will not be able to shut down its guests or itself in an orderly fashion if such a deactivation were to occur. This may affect system operation, for example if a guest must be shut down in order to start cleanly the next time it is IPLed.

System action

Operation continues.

Operator response

Do not perform functions that would cause the VM image to be deactivated until the VM system and its guests have been shut down using the SHUTDOWN command.

HCP877I **The variations of this message are explained below.**

— Variation 1 **CPU capability has changed**

Explanation

The capability of the CPUs in the configuration might have changed as a result of a processor upgrade, processor downgrade, or other system event. It is possible that a hardware change has occurred and caused this message to be issued even though the CPU capability has not actually changed, such as in the case of a Support Element (SE) reboot.

System action

Accounting is performed for all users and an accounting record recording the new CPU capability value is produced. A Monitor event record is created to record the new CPU capability value. System operation continues.

User response

Verify that the system is not in a degraded state due to a cooling problem or some other abnormal event. Perform any actions that your installation determines are necessary (for example, stop and restart performance-sensitive service machines) because of a change in the relative performance of the CPUs in the configuration.

— Variation 2 Storage configuration has changed

Explanation

The storage resources in the reserved state may have changed as the result of a system event.

System action

A Monitor event record is created to record the memory configuration change. System operation continues.

User response

None.

HCP878I {Processor *nnnn*|Core *nnnn*} has been {added to|removed from} the configuration.

Explanation

A processor or core has changed its state from reserved to standby (added to the configuration) or from standby to reserved (removed from the configuration).

System action

Operation continues.

User response

If the processor or core was added to the configuration, it may be varied online using the VARY PROCESSOR or VARY CORE command.

HCP879I CPU installed facilities have changed

Explanation

One or more CPU-related facilities might have been installed and are now available for use, or uninstalled and no longer available for use. The available facilities are reported by the Store System Information (STSI) and Store Facilities List Extended (STFLE) instructions, the query and test functions of certain multiple-function instructions, and other means. It is possible that a hardware change has occurred and caused this message to be issued even though the facilities have not actually changed, such as in the case of a Support Element (SE) reboot.

System action

System operation continues. New CPU-related facilities may be used by the system. Notification of changes to availability of CPU-related facilities is presented to enabled guests.

User response

None.

HCP880E The command processing cannot complete because {processor *nnnn*|core *nnnn*} is already online.

Explanation

A VARY ONLINE PROCESSOR command was issued for a processor that was already online, or a VARY ONLINE CORE command was issued for a core that was already online.

System action

No action performed.

Operator response

Verify the processor address or core ID and reissue the command with the correct value.

User response

Same as operator response.

HCP881E The command processing cannot complete because {processor *nnnn*|core *nnnn*} is already offline.

Explanation

A VARY OFFLINE PROCESSOR command is issued for a processor that is already offline, or a VARY OFFLINE CORE command is issued for a core that is already offline.

System action

No action performed.

Operator response

Verify the processor address or core ID and reissue the command with the correct value.

User response

Same as operator response.

HCP882E **The VARY command processing cannot complete due to an initialization failure.**

Explanation

The processor or core that was the target of a VARY ONLINE command failed to complete initialization.

System action

The failing processor or core loads a disabled wait PSW. The processor that was handling the VARY command initiates VARY OFFLINE processing to remove the processor or core from the configuration.

User response

Make sure the service processor is available and the processor or core is able to run (for example, the STOP button has not been depressed or the processor or core is not in machine check stop). Then retry the command. If the condition persists, contact your IBM Support Center personnel to repair the failing processor or core.

HCP883E **The command processing cannot complete because processor *pppp* [within core *nnnn*] is not responsive.**

Explanation

The processor or a processor within the core that is the target of a VARY command does not respond to SIGP communication. The VARY command cannot be completed. When multithreading is enabled, every thread within a core must be responsive for the VARY CORE command to complete successfully.

System action

No action is performed.

Operator response

Retry the VARY command, making sure the target processor or every processor within the target core is operational (for example, the STOP button has not been depressed). If the problem persists, contact your IBM Support Center personnel to correct the hardware problem.

User response

The same as the operator response.

HCP884E **The command processing cannot complete because {processor *nnnn*|core *nnnn*} is the only active primary {processor|core}.**

Explanation

A VARY OFFLINE PROCESSOR command or VARY OFFLINE CORE command has been issued for the only primary processor or core currently online and available. The only primary processor or core cannot be varied offline.

System action

None.

User response

If another primary processor or core is available, vary it online, then retry the vary offline for the first processor or core. Otherwise, if you want to take the system down, issue the SHUTDOWN command.

HCP885E **The VARY processing cannot complete because the physical vary failed; {processor *nnnn*|core *nnnn*} is logically offline.**

Explanation

The processor or core that was the target of the VARY command has been quiesced, reset, and is in a disabled wait, but for some reason the processor controller was unable to remove it from the hardware configuration. There is a possible processor controller failure.

System action

No action is performed.

Operator response

Retry the command. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the malfunction.

User response

The same as the operator response.

HCP886E **The VARY command processing cannot complete because {processor *nnnn*|core *nnnn*} is not available.**

Explanation

The processor or core that was the target of a VARY ONLINE PROCESSOR command or VARY ONLINE CORE command cannot be physically attached to the system for one of the following reasons:

- The processor or core is busy or not operational.
- There is a failure in the processor controller.

System action

No action is performed.

Operator response

Verify that the command is using the correct processor address or core ID. If correct, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP888E **CPU DEDICATE is no longer supported**

Explanation

The ability to DEDICATE or UNDEDICATE CPUs is no longer supported by CP.

System action

The DEDICATE command is unsuccessful; system operation continues.

User response

Check the user directory for the CPU DEDICATE statement and remove it.

HCP899I **Rewind not performed.**

Explanation

Rewind at tape *vdev* failed because there is no real tape drive associated with the virtual drive, the real tape drive is in a not ready state, or some type of subchannel error occurred.

System action

System operation continues.

User response

1. Make sure that a real tape drive is attached to your virtual machine. If not, reissue the rewind after the tape drive has been made available to your virtual machine.
2. If a real tape drive is present, contact your system operator to ensure that the real tape drive is in a ready state. Then, reissue the command.

HCP902W **System recovery failure; fatal I/O error**

Explanation

During system initialization, an unrecoverable input/output error occurred on the volume that contains checkpoint data. One way that this error might occur is if a CMS formatted minidisk was accidentally copied onto the checkpoint or warm start cylinders of the system.

On a second-level system, this error might occur if the checkpoint or warm start volume is a minidisk and you defined the checkpoint area or the warm start area on cylinders or pages that do not exist on the minidisk.

System action

The system enters a disabled wait state (wait state code = 902).

Operator response

Re-IPL the system.

If the error reoccurs, from another system, use CPFMTXA to format the cylinders where the checkpoint data and the warm start data reside. Then, re-IPL the system and do a FORCE start.

Tip: The volume that contains the checkpoint data is defined by using the CHECKPOINT operand of the SYSTEM_RESIDENCE statement in the system configuration file. The volume that contains the warm start data is defined by using the WARMSTART operand of the SYSTEM_RESIDENCE statement in the system configuration file.

If the error persists, move the failing volume, if possible, to another drive and retry the IPL.

If this system is a second-level system, enter QUERY VIRTUAL *vdev* for the checkpoint and warm start devices. Verify that the checkpoint or warm start cylinders or pages exist on the device and change them if necessary.

If the problem persists, take a stand-alone dump and contact your IBM Support Center personnel for assistance.

HCP904E System recovery failure; incorrect warm start data

Explanation

During a system warm start procedure, the warm start module encountered incorrect or missing data. This error will also occur for one of these reasons:

- A new nucleus was IPLed with the specification of a warm start.
- There was an error in the checkpoint data saved. You may need to format the volume containing the checkpoint cylinders.

System action

Message HCP9205A is displayed asking the operator whether a force start is desired.

Operator response

The operator should enter FORCE if a force start is desired. Otherwise, the operator should enter STOP to stop processing.

HCP904W System recovery failed; incorrect warm start data

Explanation

During a system warm start procedure, the warm start module encountered incorrect or missing data. This error occurs if you IPLed a new nucleus and specified a warm start. It also occurs if there was an error in the checkpoint data saved.

You may need to format the volume containing the checkpoint cylinders.

System action

The system enters a disabled wait state (wait state code = 904).

Operator response

This message indicates the checkpoint information needed for warm start processing is incorrect or missing. IPL the system and specify a FORCE start. If CP cannot perform a FORCE start, IPL the system and specify a COLD start. If the problem persists, do the following:

- Take a stand-alone dump of the system.
- Using the DDR utility with the PRINT option, print the contents of the checkpoint cylinders.

Save this output and contact your IBM Support Center personnel.

After IPLing the system, use ICKDSF or the CPFMTXA command to check the format of the volume containing the checkpoint cylinders. Refer to *z/VM: System Operation* for additional information.

HCP908I SYSTEM FAILURE ON CPU *nnnn*, CODE - *code*, *yyyy-mm-dd* SYSTEM *systemid*

Explanation

The system has encountered a severe software failure that caused a system dump. CPU *nnnn* indicates the failing processor. *code* is a CP abend code.

System action

A system abend dump to the dump device immediately follows this message, and then automatic or normal restart procedures are initiated.

Operator response

Save the CPU number printed at the console, including the documentation of activity prior to the problems with system operation, and contact your IBM Support Center personnel for software support.

HCP909W SYSTEM DUMP DEVICE NOT READY

Explanation

It is not possible to write on the system dump device because it is not in a ready state.

System action

The system enters a wait state (wait state code = 909).

Operator response

Make the system dump device ready; the dump operation continues.

HCP912W System recovery failure; volid *volid* not mounted

Explanation

A volume necessary for checkpointing the system is not mounted. The *volid* refers to the volume ID of the volume that is not mounted.

When CP issues this message, the *volid* should be the volume ID that is specified by using the CHECKPOINT or WARMSTART operands of the SYSTEM_RESIDENCE statement in the system configuration file.

The warm start data indicates spool files are allocated on a system volume, and that volume is not mounted.

The possible causes are:

- The volume is not mounted.
- The volume is not in the CP OWNED VOLUME LIST.
- The volume may be a secondary PPRC volume or a cascading intermediate PPRC volume.
- A non-CP formatted volume was specified in the SYSTEM_RESIDENCE statement for the CHECKPOINT or WARMSTART operands' *volid*.
- The allocation record (record 4 for CKD or blocks 3-4 for FBA) is missing or not valid.

System action

The system enters a disabled wait state (wait state code = 912).

Operator response

Mount the specified volume required for CP warm start and IPL the system again. If this is unsuccessful, you may IPL the system again and specify a COLD or FORCE start.

Programmer response

Ensure that the volume is CP formatted and in the CP OWNED VOLUME LIST. Verify that the correct *volid* is specified on the SYSTEM_RESIDENCE statement in the system configuration file, if one was specified.

HCP951I **{CP|USER} VOLID *volid* NOT MOUNTED**

Explanation

You may have to mount and make ready the specified volume.

System action

System processing continues.

Operator response

If you receive this message for a CP volume required for spooling, you may not be able to warm start successfully. If the specified volume contains spool files and you want to warm start, you should invoke a shutdown in response to the prompt for type of start. Make sure that the specified volume is mounted and ready before loading CP again, then proceed with the warm start.

If you receive this message for a user volume, you can mount and ready the volume and attach it to the system during normal system operation. Users who are already logged on will have to issue the LINK command if they want to access a minidisk defined on that volume.

HCP952I ***storsize* system storage: Permanent = *permsize* Reconfigurable = *reconfsize***

Explanation

The message identifies the total amount of real storage initialized during IPL, as well as how much of the total is permanent versus reconfigurable storage. For more information, refer to QUERY STORAGE in *z/VM: CP Commands and Utilities Reference*. If your z/VM system is running on a machine that does not support reconfigurable storage, the reconfigurable value will be displayed as `Reconfigurable = --`.

System action

The system continues normal operation.

Operator response

No explicit action is necessary because this message is presented to the operator for informational purposes only. If the amount of storage differs from what is expected, the operator should ask the system programmer to verify that normal system operation is in effect.

HCP953E **CP is unable to allocate system DASD dump space.**

Explanation

CP was unable to find enough disk space to hold a possible CP abend dump. This could occur if you did not use ICKDSF or the CPFMTXA utility on DASD, or did not specify a valid DASD address in the SET DUMP command.

System action

The system continues normal operation.

Operator response

The system will not produce a dump if a hard abend occurs. Process the spool files on the system, or manipulate the spool space to free clusters to enable DASD dump space to be assigned for a system abend dump.

If spool space becomes available, use the SET DUMP command to set the dump device. Use ICKDSF or the CPFMTXA utility to check the format of the system volume. See *z/VM: System Operation* for additional information.

HCP954I DASD *rdev1* VOLID *volid* IS A DUPLICATE OF DASD *rdev2*

Explanation

During the system IPL procedure, the system detected duplicate volume identifiers on two DASD volumes. DASD *rdev1* contains a volume identifier *volid* identical to DASD *rdev2*.

System action

System operation continues. DASD *rdev1* is not attached.

Operator response

Verify that the volume mounted on DASD *rdev2* is the one to be used by the system. If it is not, CP may perform incorrect allocation on the volume specified. Shut down the system and remove the incorrectly labeled volume that is a duplicate. This message usually occurs after a system restart when users have mounted volumes with labels identical to those of other user or CP volumes.

rdev1
The device number of DASD with identical volume identifier

volid
The volume identifier

rdev2
The device number of the DASD with the specified volume identifier that is currently attached to the system

HCP955W INSUFFICIENT STORAGE FOR IPLING CP

Explanation

The generated system is larger than the real machine size, or a hardware malfunction has occurred that prohibits CP from using the necessary storage.

System action

The system enters a wait state (wait state code = 955).

Operator response

Increase the amount of storage on the system. The minimum amount of real memory to IPL z/VM as a first-level system is 512 MB. The minimum amount of storage required when z/VM is IPLed in a virtual machine is 128 MB. When running in an LPAR, the initial storage allocation in the image profile, or when running within a virtual machine, the DEFINE STORAGE configured amount (the AS value), should be equal to or greater than this minimum amount. For more information, see Host Storage Planning and Administration in *z/VM: CP Planning and Administration*.

HCP956I REAL DEVICE *rdev* IGNORED; DEVICE NUMBER ALREADY IN USE FOR SCSI SYSTEM RESIDENCE DEVICE

Explanation

During the system IPL procedure, the system detected a real device at the same address as the SCSI system residence device. The device number that is being used for SCSI system residence device was specified on the PDVOL= IPL Parameter.

System action

System operation continues. Real device *rdev* is not attached.

Operator response

If real device *rdev* must be attached for correct system operation, shut down the system and specify an address on the PDVOL= IPL Parameter that does not conflict with any real device on the system.

HCP957W Insufficient storage for IPLing CP from DVD

Explanation

The system does not have enough real storage to finish IPLing from DVD. First-level installation from DVD

requires at least 576 MB of real storage be assigned to the LPAR where z/VM will be installed.

System action

The system enters a wait state (wait state code = 957).

User response

Increase the amount of storage on the system. If you change the amount of storage in an activation profile, you must activate the LPAR for the change to take effect. For more information about installation requirements, see *z/VM: Installation Guide*.

HCP959I ***sysname*** **SYSTEM TERMINATION IN PROGRESS ON** ***yyyy-mm-dd***

Explanation

System termination has started on the system whose *sysname* appears in the message.

System action

Termination continues.

User response

None.

HCP960I **System shutdown may be delayed for up to** ***interval*** **seconds**

Explanation

A SHUTDOWN command was issued or a deactivation was performed via the system console, causing a termination signal to be sent to enabled users. The signal will remain active for up to the indicated amount of time, after which system termination will commence.

System action

Execution continues.

Operator response

To terminate the system immediately, issue a SHUTDOWN IMMEDIATE command. To prevent system termination, issue a SHUTDOWN CANCEL command.

HCP961W **SYSTEM SHUTDOWN COMPLETE FOR** ***sysname*** **ON** ***yyyy-mm-dd***

Explanation

The system has been brought to a successful orderly shutdown.

System action

The system enters a wait state (wait state code = 961).

If the system shutdown was caused by receiving a shutdown signal from the hardware, the hypervisor, or a signaling user, the system enters a disabled wait state with a wait state code of 0FFF.

Operator response

No explicit action is necessary. You may now or at a later time reload for reinitialization of the CP system. You should normally specify a warm start; however, if errors are encountered in the warm start procedure, a cold start or a force start must be issued.

HCP962I **VM SHUTDOWN COMPLETED IN** ***duration*** **SEC**

Explanation

A SHUTDOWN command was issued or a deactivation signal was received from the hardware console. The time required to perform the processes associated with shutting down the VM Control Program itself (i.e., excluding any time allowed for guest systems to terminate) was the indicated *duration*, in seconds.

System action

Termination concludes.

Operator response

Use the reported value as an aid to determining how to set the duration specified by the SET SHUTDOWNTIME command or configuration statement.

HCP963I **SHUTDOWN STEP** ***name function***

Explanation

A system shutdown is in progress and is starting the step identified as *name*, which performs the designated *function*.

System action

Shutdown continues.

User response

If message HCP961I does not appear within a reasonable amount of time and if new shutdown

steps are not being reported by message HCP963I, shutdown may have encountered a problem that is preventing it from continuing. In that case, initiate any action that may allow the stalled shutdown step to proceed (e.g., take a failed device offline). If corrective action is unsuccessful, make a note of the content of message HCP963I, take a stand-alone dump, and restart the system. Depending on where shutdown stalled, it may be necessary to perform a FORCE start.

HCP964W SYSTEM SHUTDOWN COMPLETE FOR SYSTEM IPLED FROM DVD

Explanation

The system has been brought to a successful orderly shutdown.

System action

The system enters a disabled wait state (wait state code 964).

Operator response

No explicit action is necessary. You may now or at a later time use the system console to IPL your system.

HCP965E The IPLPARMS option is not allowed when this command is executed remotely with the AT command.

Explanation

The IPLPARMS option is not allowed in this configuration.

System action

The command is not executed; system operation continues.

Operator response

Issue the SHUTDOWN command on the SSI member that you are shutting down.

HCP967I Disconnect *userid* - system restarted {MMMMMM| SHUTDOWN} and system console not VM operator console.

Explanation

This message appears at system restart after a CP system failure or SHUTDOWN REIPL command. This occurs only if the system operator was not logged onto the primary system console at the time the system failure or SHUTDOWN REIPL occurred.

The variables in this message are as follows:

userid
The user ID of the system operator

MMMMMM
The abend code

SHUTDOWN
Issued if the restart resulted from a SHUTDOWN REIPL

System action

The operator virtual machine is disconnected.

Operator response

No action is required. Reconnect to the operator virtual machine by entering a LOGON command.

HCP970E Invalid range specified

Explanation

The IOEXPLOR utility was issued with a range that is not valid. When entering a range, *rdev2* must be greater than *rdev1* and a range cannot span subchannel sets.

System action

Command processing terminates.

User response

Issue the command again with a valid range.

HCP971E Missing operand(s)

Explanation

The IOEXPLOR utility was issued without one of the required operands.

System action

Command processing terminates.

User response

Issue the command again with the required operand.

HCP972I The PAGE option is not valid for device *rdev*

Explanation

The PAGE option on the IOEXPLOR utility is not valid for real DASD. It is valid for emulated devices.

System action

Command processing of that device ends.

User response

None.

HCP973E	The variations of this message are explained below.
— Variation 1	No virtual FCP devices are available

Explanation

No virtual FCP devices are attached to this virtual machine. This error occurred while running the SCSIDISC utility.

System action

Command processing terminates.

User response

Attach one or more virtual FCP devices to the virtual machine and enter the request again.

— Variation 2	Output files already exist

Explanation

The name of at least one of the provided files (Outfile and/or Logfile) already exists. This error occurred while running the SCSIDISC utility. The OUTFN operand of this utility is used to specify these output files.

System action

Command processing terminates.

User response

Perform one of the following actions:

- Enter the request again and allow SCSIDISC to replace the output files when prompted.
- Enter the request again using file names that do not conflict with currently existing files.
- Erase or rename the conflicting output files and enter the request again.

— Variation 3	Unknown file error

Explanation

SCSIDISC failed to write to the Outfile and/or Logfile for unknown reasons. This error occurred while running the SCSIDISC utility. The OUTFN operand of this utility is used to specify these output files.

System action

Command processing terminates.

User response

Erase or rename the conflicting output files and enter the request again. If the problem persists, contact your IBM Support Center personnel.

HCP974E	The variations of this message are explained below.
— Variation 1	*operand* is not a valid command line operand

Explanation

When specifying the SCSIDISC utility, the user supplied a command line operand that is not valid or is a duplicate of a valid command line operand.

System action

Command processing terminates.

User response

Correct the command line operand and issue the request again.

— Variation 2	*option* is not a valid command line option

Explanation

When specifying the SCSIDISC or IOEXPLOR utility, the user supplied a command line option that is not valid.

System action

Command processing terminates.

User response

Correct the command line option and issue the request again.

— Variation 3	FCPCH has to be given if WWPN and LUN are given

Explanation

When specifying the SCSIDISC utility, the WWPN and LUN operands were specified but the required FCPCH operand was not specified.

System action

Command processing terminates.

User response

If you want to specify WWPN and LUN, make sure you also specify FCPCH. Then issue the request again.

— Variation 4 **LUN *lun* must be a 16-character hexadecimal value or ALL**

Explanation

When specifying the SCSIDISC utility, the user supplied a LUN that was not a 16-character hexadecimal value nor was it the ALL keyword.

System action

Command processing terminates.

User response

Correct the LUN and issue the request again.

— Variation 5 **OUTFM *filemode* must be a 1-character alphabetic value**

Explanation

When specifying the SCSIDISC utility, the user supplied a file mode that was not valid. The file mode must be a 1-character alphabetic value.

System action

Command processing terminates.

User response

Correct the OUTFM file mode and issue the request again.

— Variation 6 **OUTFN *filename* must be a 1- to 8-character alphanumeric or an allowed special character value**

Explanation

When specifying the SCSIDISC utility, the user supplied a file name that was not a 1- to 8-character alphanumeric or an allowed special-character value. Some special characters allowed include # and $.

System action

Command processing terminates.

User response

Correct the OUTFN file name and issue the request again.

— Variation 7 **Virtual FCP device *device* must be an 8-character hexadecimal value or ALL**

Explanation

When specifying the SCSIDISC utility, the user supplied a virtual FCP device that was not an 8-character hexadecimal value nor was it the ALL keyword.

System action

Command processing terminates.

User response

Correct the virtual FCP device and issue the request again.

— Variation 8 **WWPN and FCPCH have to be given if LUN is given**

Explanation

When specifying the SCSIDISC utility, the LUN operand was specified but either WWPN and/or FCPCH was not specified.

System action

Command processing terminates.

User response

If you want to specify LUN, make sure you also specify WWPN and FCPCH. Then issue the request again.

— Variation 9 **WWPN *wwpn* must be a 16-character hexadecimal value or ALL**

Explanation

When specifying the SCSIDISC utility, the user supplied a WWPN value that was not a 16-character hexadecimal value nor was it the ALL keyword.

System action

Command processing terminates.

User response

Correct the WWPN and issue the request again.

— Variation 10 'NOLOG' cannot be specified with NOTERM

Explanation:
This message is issued when the NOLOG option follows a previously-specified NOTERM option.

System action:
Command processing terminates.

User response:
Specify NOLOG or NOTERM and issue the request again.

— Variation 11 'NOTERM' cannot be specified with NOLOG

Explanation:
This message is issued when the NOTERM option follows a previously-specified NOLOG option.

System action:
Command processing terminates.

User response:
Specify NOLOG or NOTERM and issue the request again.

HCP975I The variations of this message are explained below.

— Variation 1 Given virtual FCP device *vdev* ignored because it is not available and therefore any given WWPN or LUN is also ignored

Explanation

The specified virtual FCP device is not attached to this virtual machine. This error occurred while running the SCSIDISC utility.

System action

Command processing continues.

User response

Ensure the correct *vdev* was specified and issue the command again.

— Variation 2 Nameserver error, all WWPNs on virtual FCP device *vdev* may not have been obtained

Explanation

An error occurred when attempting to retrieve the next WWPN from the name server. This error occurred while running the SCSIDISC utility.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 3 Virtual FCP device *vdev* ignored

Explanation

SCSIDISC failed to initialize the virtual FCP device and/or obtain WWPNs from the name server. This error occurred while running the SCSIDISC utility.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 4 Virtual FCP device *vdev* ignored because the adapter was not able to connect to the fibre channel network

Explanation

Network topology information could not be obtained. This error occurred while running the SCSIDISC utility.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 5 Virtual FCP device *vdev* not initialized

Explanation:
SCSIDISC failed to initialize the virtual FCP device.

System action:
The issue is ignored and command processing continues.

User response:
IPL CMS to see whether this condition clears. If it does not, you might need to repair the connections and reissue the command.

— Variation 6	**Virtual FCP device *vdev* not reinitialized**

Explanation

SCSIDISC failed to reinitialize the virtual FCP device.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

HCP976I	**The variations of this message are explained below.**
— Variation 1	**Given WWPN *wwpn* on virtual FCP device *vdev* ignored because a point-to-point connection is being utilized and therefore any given LUN is also ignored**

Explanation

The specified WWPN was not valid because a point-to-point connection is being utilized. This error occurred while running the SCSIDISC utility.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can issue the command again without supplying a WWPN.

— Variation 2	**Given WWPN *wwpn* on virtual FCP device *vdev* ignored because it was not returned by the nameserver and therefore any given LUN is also ignored**

Explanation

The specified WWPN was not valid because it was not returned by the name server. This error occurred while running the SCSIDISC utility.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can select a valid WWPN and issue the command again.

— Variation 3	**Point-to-point destination WWPN *wwpn* on virtual FCP device *vdev* could not be closed**

Explanation

SCSIDISC failed to close the associated port.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 4	**Point-to-point destination WWPN *wwpn* on virtual FCP device *vdev* could not be opened**

Explanation

SCSIDISC failed to open the associated port.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 5	**Point-to-point destination WWPN *wwpn* on virtual FCP device *vdev* ignored**

Explanation

SCSIDISC failed to obtain LUN information from the point-to-point connection.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 6	WWPN *wwpn* on virtual FCP device *vdev* could not be closed

Explanation

SCSIDISC failed to close the associated port.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 7	WWPN *wwpn* on virtual FCP device *vdev* could not be opened

Explanation

SCSIDISC failed to open the associated port.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 8	WWPN *wwpn* on virtual FCP device *vdev* ignored

Explanation

SCSIDISC failed to obtain LUN information from the WWPN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

HCP977I	The variations of this message are explained below.
— Variation 1	Given LUN *lun* on point-to-point destination WWPN *wwpn* and virtual FCP device *vdev* ignored because it was not returned by utility LUN

Explanation

The specified LUN was not valid because it was not returned by the utility LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can select a valid LUN and issue the command again.

— Variation 2	Given LUN *lun* on WWPN *wwpn* and virtual FCP device *vdev* ignored because it was not returned by utility LUN

Explanation

The specified LUN was not valid because it was not returned by the utility LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can select a valid LUN and issue the command again.

— Variation 3	LUN *lun* on point-to-point destination WWPN *wwpn* and virtual FCP device *vdev* could not be closed

Explanation

SCSIDISC failed to close the associated LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 4	**LUN *lun* on point-to-point destination WWPN *wwpn* and virtual FCP device *vdev* could not be opened**

Explanation

SCSIDISC failed to open the associated LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 5	**LUN *lun* on WWPN *wwpn* and virtual FCP device *vdev* could not be closed**

Explanation

SCSIDISC failed to close the associated LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 6	**LUN *lun* on WWPN *wwpn* and virtual FCP device *vdev* could not be opened**

Explanation

SCSIDISC failed to open the associated LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 7	**The utility LUN on point-to-point destination WWPN *wwpn* and virtual FCP device *vdev* could not be opened**

Explanation

SCSIDISC failed to open the associated utility LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again. The utility LUN (X'0000') cannot be opened if it is in use on another system.

— Variation 8	**The utility LUN on point-to-point destination WWPN *wwpn* and virtual FCP device *vdev* returned an error**

Explanation

The associated utility LUN failed to report LUNs on this port.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 9	**The utility LUN on WWPN *wwpn* and virtual FCP device *vdev* could not be opened**

Explanation

SCSIDISC failed to open the associated utility LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again. The utility LUN (X'0000') cannot be opened if it is in use on another system.

— Variation 10	**The utility LUN on WWPN *wwpn* and virtual FCP device *vdev* returned an error**

Explanation

The associated utility LUN failed to report LUNs on this port.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

HCP978I	**The variations of this message are explained below.**
— Variation 1	**READ SIZE error for LUN *lun* on point-to-point destination WWPN *wwpn* and virtual FCP device *vdev***

Explanation

An error occurred when SCSIDISC attempted to read the size FCP virtual device number (*vdev*) of the associated LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 2	**READ SIZE error for LUN *lun* on WWPN *wwpn* and virtual FCP device *vdev***

Explanation

An error occurred when SCSIDISC attempted to read the size of the associated LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 3	**INQUIRY error for LUN *lun* on point-to-point destination WWPN *wwpn* and virtual FCP device *vdev***

Explanation

An error occurred when SCSIDISC attempted to issue an inquiry for the associated LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

— Variation 4	**INQUIRY error for LUN *lun* on WWPN *wwpn* and virtual FCP device *vdev***

Explanation

An error occurred when SCSIDISC attempted to issue an inquiry for the associated LUN.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can repair the connections and issue the command again.

HCP979I	**Disk write failure, EXECIO_RC=*return code***

Explanation

An error occurred when SCSIDISC attempted to write to the logfile.

System action

The issue is ignored and command processing continues.

User response

No action is required; however, you can use EXECIO_RC to determine the error returned by the EXECIO command and take appropriate action.

HCP980I SYSTEM RECOVERY FAILURE; CHECKPOINT I/O ERROR

Explanation

An error occurred in initializing, reading, or writing the checkpoint records.

System action

Termination processing terminates.

Operator response

Contact your system programmer. To restart, IPL the system and specify a WARM start. If the error persists, IPL the system and specify a FORCE start.

HCP981I SYSTEM RECOVERY FAILURE; INVALID ACCOUNTING TIME

Explanation

The time-of-day clock (TOD) is either in error or is not operational at the time of system termination.

System action

No accounting is generated for terminated virtual machines. The checkpoint procedure continues.

Operator response

No action can be taken to recover the accounting records that could not be checkpointed.

HCP982I SYSTEM RECOVERY FAILURE; SPOOL FILE ERROR

Explanation

During system checkpoint processing, an error occurred trying to save an open spool file.

System action

The file in error is deleted.

Operator response

None.

HCP983W System recovery failed due to a spool file error.

Explanation

During warm start processing, an error occurred during an attempt to recover a previously checkpointed spool file.

System action

The system enters a disabled wait state (wait state code = 983).

User response

Re-IPL the system and specify FORCE or COLD. If FORCE is specified, all spool files found to be in error are purged.

HCP984A TOD clock damaged. Enable clock set switch

Explanation

z/VM is being IPLed or warm started with the time-of-day clock (TOD) not in the SET or NOT SET state.

System action

The system loops until the operator enables the time-of-day enable-set switch or resets the processor. When the operator enables the switch, the system attempts to clear the error by setting the clock to all zeros. If this is successful, the system continues, and asks the operator for the correct time and sets the clock again. If not, the system enters a disabled wait state.

User response

1. Enable the clock set switch if recovery is desired. Otherwise, reset the processor.
2. If setting the clock to zeros does not clear the error, notify the hardware service representative.

HCP985E The variations of this message are explained below.

— Variation 1 STP timestamping enabled but STP facility not installed

Explanation

Although usage of the Server Time Protocol (STP) has been enabled in the system configuration file, the facility has not been installed on the underlying hardware.

System action

IPL continues with STP usage disabled.

User response

Contact your IBM representative for more information on the STP hardware feature.

— Variation 2 STP timestamping enabled but STP facility not enabled

Explanation

Although usage of STP has been enabled in the system configuration file and the hardware facility is installed, the hardware facility has not yet been enabled for usage.

System action

IPL continues with STP usage disabled.

User response

Access the Hardware Management Console (HMC) and enable the STP facility.

— Variation 3 Error *errno* obtaining STP information

Explanation

While trying to synchronize with STP, an unexpected error was encountered. The specific error number is represented by *errno*.

System action

Synchronization with STP has failed. STP remains in a suspended state.

User response

Check the HMC to ensure the STP facility is operating correctly. Contact your IBM service representative for further diagnosis.

— Variation 4 STP Timing Mode not active

Explanation

While trying to synchronize with STP, CP discovered that the Collaborative Timing Network (CTN) is using a timing mode other than STP.

System action

Synchronization with STP has failed. STP remains in a suspended state.

User response

z/VM can only participate in a CTN that is using STP timing mode. The CTN must be updated to use STP as the timing mode via the HMC.

— Variation 5 STP clock source is not usable

Explanation

While trying to synchronize with STP, CP received an error that specifies an unusable clock source.

System action

Synchronization with STP has failed. STP remains in a suspended state.

User response

This error implies a hardware failure on the clock source. Check the HMC Hardware Messages logs for more information. Contact your IBM service representative for further guidance.

— Variation 6 STP leap seconds not valid

Explanation

While trying to synchronize with STP, CP received an invalid value for STP leap seconds.

System action

Synchronization with STP has failed. STP remains in a suspended state.

User response

Check the HMC for the current leap seconds setting. If the leap seconds value does not look correct, adjust appropriately. If this does not resolve the problem, contact your IBM service representative.

— Variation 7 STP time zone offset not valid

Explanation

While trying to synchronize with STP, CP received an invalid value for the STP time zone offset.

System action

Synchronization with STP has failed. STP remains in a suspended state. The active system time zone remains unchanged.

User response

Check the HMC for the current STP time zone setting. If invalid, correct the value via the HMC. If this does not resolve the problem, contact your IBM service representative.

— Variation 8 STP total time offset not valid

Explanation

While trying to synchronize with STP, CP received an invalid value for the total time offset.

System action

Synchronization with STP has failed. STP remains in a suspended state. The active system time zone remains unchanged.

User response

Check the HMC for the current STP time zone setting. Ensure that the time zone offset and Daylight Savings Time (DST) settings are valid. If invalid, correct the value via the HMC. If this does not resolve the problem, contact your IBM service representative.

— Variation 9 Error *errno* storing STP time zone information

Explanation

While trying to synchronize with STP, an unexpected error was encountered. The specific error number is represented by *errno*.

System action

Synchronization with STP has failed. STP remains in a suspended state.

User response

Check the HMC to ensure the STP facility is operating correctly. Contact your IBM service representative for further diagnosis.

— Variation 10 Error *errno* setting STP controls

Explanation

While trying to synchronize with STP, an unexpected error was encountered. The specific error number is represented by *errno*.

System action

Synchronization with STP has failed. STP remains in a suspended state.

User response

Check the HMC to ensure the STP facility is operating correctly. Contact your IBM service representative for further diagnosis.

— Variation 11 XRC_TEST is only valid when CP is running as a virtual machine guest

Explanation

The XRC_TEST feature can only be specified for a z/VM system running as a virtual machine guest of another z/VM system.

System action

IPL continues without XRC_TEST enabled.

User response

XRC_TEST is invalid for this system, so remove the setting from the system configuration file. Timestamping of I/O can be enabled by specifying the STP_Timestamping feature in the configuration file (The STP hardware facility is required).

HCP986I The variations of this message are explained below.

— Variation 1 TOD Clock synchronized via STP

Explanation

During system initialization, this message indicates that CP has successfully synchronized the system TOD clock via the Server Time Protocol (STP). After system initialization, this indicates that CP has updated the TOD difference between CP's clock and the STP clock, which is used for timestamping of I/O.

System action

If STP_Timestamping is enabled, I/O to XRC-capable DASD will now be timestamped. If I/O was previously deferred due to loss of STP synchronization, those channel programs will now be issued with timestamps.

User response

None required.

— Variation 2 Server Time Protocol activation complete. Timezone information obtained from the STP facility.

Explanation

CP has successfully acquired time zone information from Server Time Protocol (STP) facility during IPL.

System action

CP has updated its view of the time zone to reflect the STP time zone. Time zone definitions and boundaries specified in the system configuration file are ignored. Use of the SET TIMEZONE command to change the active time zone and the DEFINE TIMEZONE command to create time zone definitions are not allowed.

User response

None required.

HCP987E The variations of this message are explained below.

— Variation 1 SET TIMEZONE not valid - STP timezone in use

Explanation

The SET TIMEZONE command was issued, but the current time zone has been set via the Server Time Protocol (STP) facility.

System action

The SET TIMEZONE command is rejected. No change is made to the active time zone.

User response

The time zone must be modified via the Hardware Management Console (HMC) because the STP facility is being used to manage time zones. If STP management of the time zone is not desired, remove ENABLE STP_TIMEZone or STP_TZ from the FEATURES statement in the system configuration file and re-IPL the system.

— Variation 2 DEFINE TIMEZONE not valid - STP timezone in use

Explanation

The DEFINE TIMEZONE command was issued but time zone definitions are being obtained from the Server Time Protocol (STP) facility.

System action

The DEFINE TIMEZONE command is rejected. The specified time zone definition is not created.

User response

The DEFINE TIMEZONE command cannot be used to create time zone definitions because the STP facility is being used to manage time zones. If STP management of time zones is not desired, remove ENABLE STP_TIMEZone or STP_TZ from the FEATURES statement in the system configuration file and re-IPL the system.

HCP988I TOD Clock synchronization suspended

Explanation

A Server Time Protocol (STP) machine check has been received. As a result, our TOD clock is now considered out-of-sync with the Collaborative Timing Network (CTN).

System action

If STP_Timestamping has been enabled in the configuration file, timestamping will cease on XRC-capable DASD. If XRC_OPTional was specified in the configuration file, I/O will be issued to XRC-capable DASD without timestamps. Otherwise, I/O to these devices will be deferred until CP has re-synchronized with STP.

User response

CP will automatically attempt to synchronize with STP. If message HCP986I 'TOD Clock synchronized with STP' is not received within a few seconds after this message has been reported, check the Hardware Management Console (HMC) to determine what is wrong with the STP network and repair the problem.

HCP1001E An operand is missing for *option*.

Explanation

You issued a command with an option and that option requires an operand, but you did not specify the operand.

System action

CP does not execute the command; system operation continues.

User response

Issue the command again and specify the missing operand.

HCP1002E Volume identifier *volid* does not exist.

Explanation

The volume ID specified in the command does not exist.

System action

The command is not executed; system operation continues.

User response

Reissue the command; specify only valid and defined real volume IDs.

HCP1003E {*external symbol name* | *rdev* | *ldev* | *rpfid* | *vpfid* | *prodid* | *module*} {is | was} not found.

Explanation

Either a default command or a command from the command line failed because CP could not find the target argument (*external symbol name*, *rdev*, *ldev*, *rpfid*, *vpfid*, *prodid*, or *module*). The argument may be: an active display, an attached display, a free display, an offline display, devices, a PCI function ID, SCHIBs, an attached unit record device, a system unit record device, a free unit record device, an offline unit record device, a console, an active device, an attached device, a system device, a free device, an offline device, an active CTCA, an attached CTCA, a free CTCA, an offline CTCA, an active DASD, an attached DASD, a system DASD, a reserved DASD, a free DASD, an offline DASD, an active tape, an attached tape, a system tape, a free tape, an offline tape, a CP module that you are attempting to customize with a dynamic exit.

System action

The command processing terminates.

User response

Determine the proper target (external symbol name, device, product, module name, or PCI function ID) and enter the command again.

HCP1004E *xxxx* is not a DASD volume or is an invalid DASD type.

Explanation

The specified device *xxxx* is either not a DASD volume or is not recognized as a valid DASD type. If this message was displayed by the SDINST utility, the virtual device must be a 3390 or FCP device.

System action

The command ends without action.

User response

Correct the device number and enter the command again.

HCP1005E An invalid character was encountered.

Explanation

An expression in the command line contains an illegal character.

System action

The command is not executed; system operation continues.

User response

Determine which character is illegal and reissue the command.

HCP1006E The variations of this message are explained below.

— Variation 1 Command processing cannot complete because the system does not support the coupling over InfiniBand channel-path facility

Explanation

You entered a command and specified a parameter that is not valid because your system does not support the coupling over InfiniBand channel-path facility.

System action

The command failed. System operation continues.

User response

Issue the command again using only parameters that are valid for your system.

— Variation 2 Command processing cannot complete because the system does not support the logical-channel-subsystem facility

Explanation

You entered a command and specified a parameter that is not valid because the system does not support the logical-channel-subsystem facility.

System action

The command failed. System operation continues.

User response

Issue the command again using only parameters that are valid for your system.

— Variation 3 **Command processing cannot complete because the system does not support the logical-partition-configuration facility**

Explanation

You entered a command or specified a parameter on a command that is not valid because the system does not support the logical-partition-configuration facility.

System action

The command failed. System operation continues.

User response

Do not issue the command, or issue the command again using only parameters that are valid for your system.

— Variation 4 **Command processing cannot complete because the system does not support the OSA-NCP-(OSN)-channel-path facility**

Explanation

You entered a command and specified a parameter that is not valid because the system does not support the OSA-NCP-(OSN)-channel-path facility.

System action

The command failed. System operation continues.

User response

Issue the command again using only parameters that are valid for your system.

— Variation 5 **Command processing cannot complete because the system does not support the OSC 3215-type device facility**

Explanation

You entered a command and specified a parameter that is not valid because the system does not support the OSC 3215-type device facility.

System action

The command failed. System operation continues.

User response

Issue the command again using only parameters that are valid for your system.

— Variation 6 **Command processing cannot complete because the system does not support the OSX and OSM Channel-Path-Types facility.**

Explanation

You entered a command and specified a parameter that is not valid because your system does not support the OSX and OSM channel-path-types facility.

System action

The command failed. System operation continues.

User response

Issue the command again using only parameters that are valid for your system.

— Variation 7 **The command processing cannot complete because system resources are not available**

Explanation

There is no system free storage available for the processing of your command.

System action

The system rejects the command and system operation continues.

User response

Issue the command again later. Determine whether your virtual machine has spool files, trace sets, virtual devices, or virtual CPUs that can be deleted to free additional system resources.

— Variation 8 **The command processing cannot complete because the system is not running in EMIF mode**

Explanation

You entered a command and specified a parameter that is not valid because your system is not running in external memory interface (EMIF) mode.

System action

The command failed. System operation continues.

User response

Issue the command again using only parameters that are valid for your system.

— Variation 9 **Command processing cannot complete because the system does not support the Dynamic-I/O-for-I/O-Adapters facility**

Explanation

You entered a command and specified a parameter that is not valid or you specified a command that is not valid because your processor does not support the Dynamic-I/O-for-I/O-Adapters facility.

System action

The command failed. System operation continues.

User response

Issue the command again using only parameters that are valid for your processor or only use commands that are valid for your processor.

— Variation 10 **Command processing cannot complete because the system does not support the Utility-string facility**

Explanation

You entered a command and specified a parameter that is not valid because your processor does not support the utility-string facility.

System action

The command failed. System operation continues.

User response

Issue the command again using only parameters that are valid for your processor.

— Variation 11 **Command processing cannot complete because the system does not support the multiple-subchannel-set facility.**

Explanation

You entered a command and specified a parameter that is not valid because your system does not support the multiple-subchannel-set facility.

System action

The command failed. System operation continues.

User response

Issue the command again using only parameters that are valid for your system.

HCP1007E **The VMSTOP option is only permitted when CP itself is running in a virtual machine.**

Explanation

The VMSTOP option was specified on the SET CPCHECKING command, but CP is not running in a virtual machine.

System action

The system rejects the command, and system operation continues.

User response

Issue the command again without the VMSTOP parameter, if desired.

HCP1008E **Device *rdev* is not a DASD**

Explanation

The specified device *rdev* either was not a valid DASD, or was of an illegal DASD type.

System action

The command is not executed; system operation continues.

User response

Reissue the command. Specify a valid real DASD device.

HCP1009E **Device *rdev* is not attached to the system**

Explanation

The specified device *rdev* is not attached to the system.

System action

The command is not executed; system operation continues.

User response

Reissue the command, specifying a device that is attached to the system.

HCP1010W The operator's console could not be found.

Explanation

The indicated disabled wait state PSW is loaded when an operational operator's console cannot be found.

If you were running in virtual mode, CONMODE was not set to 3270.

System action

The system enters a disabled wait state (wait state code = 1010). If using the Stand-Alone Program Loader (SAPL), all registers contain the values held at the time the wait state was entered. Register 2 contains the console device address.

Operator response

There is probably a hardware malfunction. Notify your system support personnel. Verify the OPERATOR_CONSOLE statement in the system configuration file properly define the system consoles.

If you were running in virtual mode, enter the TERMinal CONMODE 3270 command, and re-IPL.

If using SAPL, either specify the correct console address on the LOADPARM parameter of the IPL command or specify the correct console address using the 'CONS=' IPL parameter on the SAPL menu screen. You can also use the CONSxxxx load parameter to cause SAPL to pass CONS=xxxx as an IPL parameter to CP. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP1011I Maximum number of unique inhibited soft abends exceeded.

Explanation

The SET ABEND command forces specific soft abend codes to be viewed as hard or snapdump abends, to be allowed only if a soft abend dump is not already in progress, or to prevent soft abends from being generated. Up to 20 unique soft abend codes can be specified by issuing the SET ABEND command one or more times. This message indicates that more than 20 soft abend codes have been specified.

System action

Up to a maximum of 20 unique valid codes are saved. Additional codes are not saved.

Operator response

Issue QUERY ABEND to inspect the soft abend codes currently forced to HARD, OFF, SNAPDUMP, or SOFTONLY. To clear all inhibited soft abends, issue any of the global SET ABEND commands: SET ABEND HARD, SET ABEND OFF, SET ABEND SNAPDUMP, SET ABEND SOFT, or SET ABEND SOFTONLY. To remove a specific abend code that was previously set to inhibit a soft abend, issue a SET ABEND command for that specific abend that is the same as the global SET ABEND setting.

HCP1012E Queue type missing or invalid

Explanation

The command requires you to supply a file queue type, but it is either missing or not valid. A valid queue type is READER, PRINTER, PUNCH, NSS, IMG, UCR, NLS, or TRF. Generic queue types also valid for the SPXTAPE command are STD, SDF, or SPOOL.

System action

The command is not processed; system operation continues.

User response

Enter the command again with the correct queue type.

HCP1013E **An invalid operand was supplied for *option* - *operand*.**

Explanation

You cannot use the specified operand with the specified option. If an external security manager (ESM) is installed on your system, you may receive this message if you are not authorized to issue the specified option.

System action

CP does not execute the command; system operation continues.

User response

Issue the command again, and specify the correct operand or the correct option. Or, contact your system administrator to obtain the proper authorization.

HCP1014E **A required option is {missing.| missing - *option*}**

Explanation

A required option is missing from the command line.

System action

CP does not execute the command; system operation continues.

User response

Enter the command again and specify a valid option.

HCP1015E **[XAUTOLOG failed for *userid*:] Insufficient storage is available to satisfy your request.**

Explanation

The contiguous storage required to satisfy a DEFINE STORAGE, IPL, AUTOLOG, XAUTOLOG, or LOGON request is not currently available.

This can occur when more than 1023MB of virtual storage is being requested.

If the command was an asynchronous XAUTOLOG, the message text indicates which user ID did not get logged on.

System action

System operation continues, but the command request is denied.

Operator response

When it is necessary to DEFINE STORAGE, AUTOLOG, XAUTOLOG, or LOGON with this amount of storage, you can simply wait, then try again later.

Otherwise, you can DEFINE STORAGE, XAUTOLOG, or LOGON with a smaller storage request, or have your system administrator lower the default storage size in your directory entry.

When IPLing, simply wait and try again later.

HCP1016E **The variations of this message are explained below.**

Explanation

- Command rejected; CP does not support System/370 mode virtual machines.
- Command rejected; SET MACHINE Z is not available in the current relocation domain.

The first variation indicates that an attempt was made to do SET MACHINE 370, which is invalid because CP does not support System/370™ virtual machines. The second variation indicates that an attempt was made to do SET MACHINE Z for a virtual machine whose current relocation domain does not include the z/Architecture-only mode facility.

System action

The command is not executed and the machine mode is not changed.

User response

Reissue the command specifying a valid machine mode.

- To run 370 applications, use the 370 Accommodation Facility; refer to *z/VM: CP Programming Services* for more information.
- To successfully change to MACHINE Z, have your system administrator either disable relocation for your virtual machine or switch it to a relocation domain in which the z/Architecture-only facility is available.

HCP1017I **A channel command was rejected because you do not have MAINTCCW authorization.**

Explanation

A channel command word (MAINTCCW) has been encountered that requires MAINTCCW directory authorization. This MAINTCCW, if not used properly, could compromise system integrity. Therefore, this

MAINTCCW is disallowed for the general user. This is done by terminating the channel program with a unit check and providing sense data that indicates a command reject.

System action

System operation continues.

User response

Contact the system administrator to obtain MAINTCCW authorization.

HCP1018E	The variations of this message are explained below.
— Variation 1	The POWEROFF function requested on the SHUTDOWN command is not supported on this processor

Explanation

You entered the SHUTDOWN command with the POWEROFF option, but the system is currently running on a processor that does not support this function.

System action

The command is not executed. System operation continues.

User response

Issue the command again with the correct parameters.

— Variation 2	The AFTER_POWEROFF option requested is not supported on this processor

Explanation

A user entered the SET or QUERY PROMPT AFTER_POWEROFF command, or the FEATURES statement in the system configuration file specified the ENABLE or DISABLE PROMPT AFTER_POWEROFF option. The processor is not an ES/9221 that supports the POWEROFF hardware feature.

System action

System operation continues.

User response

The POWEROFF option is supported only on ES/9221 processors with the POWEROFF hardware feature running first level and not in an LPAR. If you believe that your configuration meets these requirements and you receive this message, contact the IBM Support Center to diagnose and correct the problem.

HCP1019E	The variations of this message are explained below.
— Variation 1	The POWEROFF option is invalid for a system running in a Logical Partition.

Explanation

You entered the SHUTDOWN command with the POWEROFF option, but the system is currently running in a Logical Partition.

System action

The command is not executed. System operation continues.

User response

Enter the command again without the POWEROFF parameter.

— Variation 2	The AFTER_POWEROFF option requested is invalid for a system running in a logical partition.

Explanation

A user entered the SET or QUERY PROMPT AFTER_POWEROFF command, or the FEATURES statement in the system configuration file specified ENABLE/DISABLE PROMPT AFTER_POWEROFF option, but the machine is in LPAR mode (logically partitioned).

System action

System operation continues.

User response

The AFTER_POWEROFF option is only supported on ES/9221 processors with the POWEROFF hardware feature running first level and not in an LPAR. If you believe that your configuration meets these requirements and you receive this message, contact your IBM software support to diagnose and correct the problem.

HCP1020E	The variations of this message are explained below.
— Variation 1	The POWEROFF option is invalid for a system running as a guest operating system

Explanation

You entered the SHUTDOWN command with the POWEROFF option, but the system is currently running as a guest operating system in a virtual machine.

System action

The command is not executed. System operation continues.

User response

Issue the command again without the POWEROFF parameter.

— Variation 2 **The AFTER_POWEROFF option requested is invalid for a system running as a guest operating system**

Explanation

A user entered the SET or QUERY PROMPT AFTER_POWEROFF command, or the FEATURES statement in the system configuration file specified the ENABLE or DISABLE PROMPT AFTER_POWEROFF option, but the system is running as a guest operating system (second level).

System action

System operation continues.

User response

The POWEROFF option is supported only on ES/9221 processors with the POWEROFF hardware feature running first level and not in an LPAR. If you believe that your configuration meets these requirements and you receive this message, contact the IBM Support Center to diagnose and correct the problem.

HCP1021W **SYSTEM SHUTDOWN COMPLETED WITHOUT REQUESTED POWEROFF**

Explanation

The system has been brought to a successful orderly shutdown. However, the POWEROFF option that was requested is unable to be performed because the processor does not have the Poweroff Hardware feature.

System action

The system enters a wait state (wait state code = 1021).

Operator response

No explicit action is necessary. You may reload for reinitialization of the CP system at anytime. The POWEROFF option was accepted by CP, therefore the IPL will come up Warm automatically, with no prompting to the system operator.

HCP1022A **Enter 1 if you wish to have your privilege classes unlocked.**

Explanation

A CP SET PRIVCLASS command was entered with the UNLOCK option specified to unlock the privilege class settings for your own user ID. You must enter 1 for the command to complete. The command will terminate with any other response.

System action

CP goes into CP READ mode and waits for your response. If you enter a 1, CP issues a response and your privilege classes are unlocked. The command terminates with any other response.

User response

Enter 1 to complete the command execution, or anything else to terminate the command.

HCP1023E **An error was detected while processing the user's response. Please retry the command.**

Explanation

An error occurred while handling the user's response to the SET PRIVCLASS * UNLOCK command. The error could be an I/O error, soft abend, or a miscellaneous system error.

System action

CP rejects the CP SET PRIVCLASS command. System operation continues.

User response

Enter the CP SET PRIVCLASS command again, and enter a response of 1.

HCP1025E **A recursive trace call cannot be done.**

Explanation

During TRACE command processing, a recursive call has been attempted to a current trace set.

System action

The trace call is ignored.

User response

Modify the trace set to remove the recursion.

HCP1026E The trace return cannot be done because there is no matching trace call.

Explanation

During TRACE command processing, CP detected a TRACE RETURN that it could not match to a TRACE CALL.

System action

The trace event is ignored.

User response

Modify the trace set to remove the TRACE RETURN that is in error.

HCP1027I An active trace set has turned RUN off.

Explanation

You issued a TRACE command that made a TRACE set active. The setting that allows your virtual machine to continue running has been turned off.

System action

System operation continues.

User response

To turn RUN on again, you must specify SET RUN ON when a TRACE set is not active.

HCP1028E Trace entry cannot complete due to paging error.

Explanation

During TRACE processing, the system detected a system or user paging error.

System action

The trace event is ignored.

User response

None.

HCP1029E CCW tracing cannot complete because the maximum buffer size has been exceeded.

Explanation

Trace information is collected in a fixed-size virtual storage area. This message indicates that the trace information for a single channel program has exceeded the fixed size.

System action

Further CCW tracing is terminated.

User response

This situation arises when large amounts of trace information are collected for very long or very complex channel programs. The only way to reduce the volume of trace information is to simplify the channel program.

HCP1030E CCW tracing cannot complete due to {a system virtual storage paging error|a VDISK storage error}

Explanation

The usual cause of a paging error is an I/O error on a paging device.

System Virtual Storage Paging Error
Trace information is collected in system virtual storage pages before being displayed or printed. CP encountered a paging error that prevented it from reading a system virtual storage page.

VDISK Storage Error
Trace information is collected for some virtual disk in storage supported CCWs by reading data from the virtual disk in storage address space. A storage error occurred that prevented the reading of such information, and it is probably a paging error.

System action

Further CCW tracing is terminated.

User response

None. If the error persists related to storage for virtual disks in storage, contact your IBM support personnel.

HCP1031I SET RUN ON is not allowed when the trace function is active.

Explanation

The command SET RUN ON cannot be used when TRACE is active.

System action

The command is ignored; system operation continues.

User response

To turn RUN on, you must specify SET RUN ON when a TRACE set is not active.

HCP1032E A syntax error was encountered.

Explanation

The syntax of an expression in the command line is invalid.

System action

The command is not executed; system operation continues.

User response

Determine why the syntax is invalid and reissue the command using a valid expression.

HCP1033I No SPECIFIC CP TRACE is in effect.

Explanation

You attempted to modify specific tracing when there was no specific tracing in effect.

System action

None.

User response

Issue the QUERY CPTRACE command to verify CPTRACE status.

HCP1034I No SPECIFIC CP TRACE is in effect for *userid*.

Explanation

You attempted to reset a specific trace of *userid* when there was no specific trace of *userid* in effect.

System action

None.

User response

Issue the QUERY CPTRACE command to verify CPTRACE status.

HCP1035E A trace set cannot be appended to itself.

Explanation

You issued the TRACE APPEND trace set command, and you specified the current trace set as the set to be appended.

System action

CP rejects the command; system operation continues.

User response

Reissue the command and specify a different trace set name.

HCP1036E {*traceset*|The current trace set} is an empty trace set.

Explanation

You issued the TRACE APPEND command, and the *traceset* you specified did not contain any trace traps.

System action

System operation continues.

User response

Verify that you entered the correct trace set name. If not, then reissue the command with the correct trace set name.

HCP1037E The command cannot be processed because the maximum number of TRACE traps is already defined.

Explanation

TRACE has been requested to monitor another event, but the total number of events being traced is already at the maximum.

System action

No action is taken on the current request. No change is made to the trace environment that already exists.

User response

Delete any established trace traps that are not needed and reenter the new trap specification. If the new trap would have only amended the action of an existing trap, edit the existing trap, using the TRACE command to include the new function.

HCP1040E **TRACE suspended - Incompatible with virtual machine's use of PER instruction-fetching-nullification facility.**

Explanation

Use of the CP TRACE command is not allowed when PER instruction-fetching-nullification is active.

System action

TRACE is suspended.

User response

The virtual machine must turn off PER instruction-fetching-nullification in order to use the CP TRACE command.

HCP1041E **Address space *spaceid* does not exist.**

Explanation

The spaceid specified has no corresponding address space.

System action

The command is not executed; system operation continues.

Operator response

Reissue the command with the correct address space spaceid.

HCP1042E **{NSS|Saved segment|NSS or saved segment} with {name *name*| spoolid *spoolid*} is not loaded[, is a member segment,] or does not exist.**

Explanation

For NSS, it either does not exist or is not loaded. For saved segment, it either does not exist, is not loaded, or is a member segment.

System action

The command is not executed; system operation continues.

Operator response

Reissue the command with a correct name or spoolid.

HCP1043E **{Printer|Punch} *rdev* was not flushed because SPXTAPE is using the file which is active on the {printer|punch}. Wait until SPXTAPE has finished and reissue the command.**

Explanation

The indicated printer or punch device cannot be flushed until the SPXTAPE command finishes with the spool file which is active on the device.

System action

The command is not executed; system operation continues.

User response

Reissue the FLUSH command after the SPXTAPE command completes.

HCP1044W **This system's floating-point hardware does not support a feature available when the NSS was saved.**

Explanation

The NSS is being IPLed on a system different from the one on which it was saved. The hardware on which this NSS is being IPLed does not support a floating-point feature that was available and enabled in the floating-point-control register at the time it was saved in the NSS.

System action

IPL of the NSS continues, but the floating-point-control register is loaded with zeroes rather than the value saved in the NSS.

User response

If the value in the floating-point-control register is unimportant, then the user does not need to do anything. If the value is important, then the NSS should be rebuilt and saved on a system with the same floating-point capabilities as the system on which it will be IPLed.

HCP1050E **The variations of this message are explained below.**

— Variation 1 **SET SRM POLARIZATION not performed; CPU topology is not available.**

Explanation

When topology information is not available (for example, when running second level on z/VM), the default polarization is horizontal, and it cannot be changed.

System action

The command terminates. The SET SRM POLARIZATION command was unsuccessful.

User response

None.

— Variation 2	**SET SRM POLARIZATION not performed; multithreading is enabled.**

Explanation

Horizontal polarization is not supported if multithreading is enabled.

System action

The command terminates. The SET SRM POLARIZATION command was unsuccessful.

User response

None.

— Variation 3	**SET SRM DSPWDMETHOD not performed; multithreading is enabled.**

Explanation

The rebalance dispatcher work distribution method is not supported if multithreading is enabled.

System action

The command terminates. The SET SRM DSPWDMETHOD command was unsuccessful.

User response

None.

— Variation 4	**SET SRM WARNINGTRACK not performed; warning-track-interruption facility is not available.**

Explanation

The warning-track-interruption facility is not available in the configuration in which z/VM is running (a second-level system in a virtual machine, for example). Warning-track support cannot be enabled.

System action

The SET SRM WARNINGTRACK ON command was unsuccessful. Command processing terminates.

User response

None.

HCP1051E	**The variations of this message are explained below.**
— Variation 1	**CPU topology is not available; forced to horizontal polarization.**

Explanation

VERTICAL polarization was requested in the system configuration file. When topology information is not available (for example, when running second level on z/VM), the default polarization is horizontal, and it cannot be changed.

System action

The partition is running in horizontal polarization mode.

User response

None.

— Variation 2	**Warning-track support cannot be enabled because the machine facility is not available.**

Explanation

The warning-track-interruption facility is not available in the configuration in which z/VM is running (a second-level system in a virtual machine, for example). Warning-track support cannot be enabled.

System action

The partition is not enabled for warning-track support.

User response

None.

HCP1052I **Global performance data is disabled. This may degrade system performance.**

Explanation

The z/VM system is running in vertical polarization mode, but global performance data is disabled. When running in vertical polarization mode, z/VM uses data about other partitions to determine when it can use vertically polarized logical CPUs with low entitlement. When global performance data is disabled for the z/VM partition, z/VM cannot access this data, and might make poor decisions about the use of such CPUs. Therefore, you should enable global performance data for a z/VM partition that is run in vertical polarization mode.

System action

The SET SRM POLARIZATION command was successful.

User response

The system administrator should consider enabling global performance data for the z/VM partition, or running the z/VM partition in horizontal polarization mode.

HCP1054E **SET SRM LIMITHARD DEADLINE cannot be issued while a resource pool exists**

Explanation

The resource pooling function requires the system to use consumption limiting. That is, the SET SRM LIMITHARD CONSUMPTION command must be in effect when a resource pool is created, and after the pool is defined this setting cannot be changed.

System action

The command is not executed; system operation continues.

User response

None.

HCP1056I **The variations of this message are explained below.**

— Variation 1 **MODE1 ON request set, but required machine support not available.**

Explanation

The machine support for the CPPROTECT MODE1 facility is not available.

System action

The ON request will be stored for use when the support becomes available. In the meantime MODE1 will be OFF for the system.

User response

To use this function, ensure that currently available service has been applied to your machine. Then issue QUERY CPPROTECT (or SET CPPROTECT if desired) to cause z/VM to recognize the updated service.

— Variation 2 **MODE2 ON request set, but required machine support not available.**

Explanation

The machine support for the CPPROTECT MODE2 facility is not available.

System action

The ON request will be stored for use when the support becomes available. In the meantime the effective MODE2 setting will be OFF for all users.

User response

To use this function, ensure that currently available service has been applied to your machine. Then issue QUERY CPPROTECT (or SET CPPROTECT if desired) to cause z/VM to recognize the updated service.

HCP1100E **A logical device number was not supplied or it is invalid.**

Explanation

The logical device number is either missing or invalid. An invalid device number is either more than four characters long or contains non-hexadecimal characters.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid logical device number.

HCP1101E **DASD *rdev* is not supported as a system-owned device.**

Explanation

An attempt was made to attach to the system a device that z/VM does not support as a system-owned device. A device of this type, a 3090™ Model 3 control unit, cannot be attached to the system.

System action

The command is not executed; system operation continues.

User response

Reissue the ATTACH command, specifying a device of a type that may be attached to the system.

HCP1102E **DASD *rdev* has not been attached because the paging subsystem is already owned by *userid*.**

Explanation

An attempt has been made to attach a multiple-exposure paging subsystem device that is already under the control of another user. A user controls the entire subsystem, even if only one device is attached.

System action

The command is not executed; system operation continues.

User response

Wait until the controlling user detaches the subsystem devices, then reissue the ATTACH command.

HCP1103E **DASD *rdev* has not been attached because a real DASD paging subsystem must map to only one virtual paging subsystem.**

Explanation

The user already has a multiple exposure paging subsystem device attached. An attempt has been made to attach a real multiple exposure device from the same real subsystem to what would be a *different* virtual subsystem for that user. A real subsystem must map to only one virtual subsystem.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid virtual device number.

HCP1104E **DASD *rdev* has not been attached because multiple real DASD paging subsystems must not map to the same virtual DASD paging subsystem.**

Explanation

The user already has a multiple exposure paging subsystem device attached. An attempt has been made to attach a real multiple exposure device from a *different* real subsystem to the same virtual subsystem. A virtual subsystem must consist of devices from only one real subsystem.

System action

The command is not executed; system operation continues.

User response

Reissue the command with a valid device number.

HCP1105E **Tape *rdev* not attached; tape assigned elsewhere.**

Explanation

The 3480 tape *rdev* subsystem requested by the user is already assigned to another system.

System action

System operation continues.

Operator response

Try to attach a different tape drive.

HCP1107E **The variations of this message are explained below.**

— Variation 1 ***command* failed; I/O error on tape *rdev***

Explanation

The command cannot be executed successfully because of an I/O error on the specified device.

System action

The command is not executed; system operation continues.

User response

Make sure the device and control unit are powered on and enabled. Then, issue the command again.

— Variation 2 ***command*** **failed; encryption requires tape** ***rdev*** **to be positioned at the beginning-of-tape**

Explanation

The command cannot be executed successfully because hardware encryption was requested and the specified device is not positioned at the beginning-of-tape (BOT).

System action

The command is not executed; system operation continues.

User response

Issue the command again, without the key option to write to the tape using the encryption settings that are currently defined for the device.

If the intent is to change or remove the encryption settings, the tape must first be attached without the key option, rewound, and unloaded. Then, issue the command again, with the desired encryption settings.

HCP1109E **The** ***command*** **command cannot be processed for device** ***rdev*** **because the device is the secondary in a duplex pair.**

Explanation

A device is a secondary in a duplex pair. When two volumes are in the duplex, duplex pending, or failed duplex states, only the primary volume is fully functional to the attaching host systems. The secondary volume will accept only a selected subset of commands. Refer to the appropriate storage control manual for additional dual copy information. You may have specified an incorrect device number.

System action

System operation continues.

Operator response

If an incorrect device number was specified, reissue the command to the correct device.

HCP1110E **Device {*rdev*|*vdev*} is not in a duplex pair.**

Explanation

This message is displayed when the device is not a primary or secondary device. You may have specified an incorrect device number.

System action

System operation continues.

Operator response

Reissue the command to the correct device.

HCP1111E **Device** ***rdev*** **is not the primary volume of a duplex pair.**

Explanation

This message is displayed when DUPLEX ON (to re-establish a duplex pair or to replace the secondary volume of a duplex pair), DUPLEX SUSPEND, or DUPLEX OFF is issued and the device specified by *rdev* is not the primary device of a known duplex pair. You may have specified an incorrect device number.

System action

System operation continues.

Operator response

Reissue the command to the correct device.

HCP1112E **Device** ***srdev*** **is not the associated secondary volume with device** ***prdev*****.**

Explanation

This message is displayed when DUPLEX ON is issued to re-establish a duplex pair and the device identified by *srdev* is not the secondary device associated with the primary device, which is identified by *prdev*. You may have specified an incorrect secondary device number.

System action

System operation continues.

Operator response

Reissue the command to the correct secondary device.

HCP1113I **DASD** ***rdev*** **was not ATTACHed to the SYSTEM because this operation would conflict with an MDISK definition for user** ***userid*****.**

Explanation

The device specified by the ATTACH command was not attached. The device is in use as a minidisk defined by device number (that is, using the DEVNO parameter) in the directory of the user ID given in the message. During such use, the device cannot be attached to the system. You may have indicated an incorrect device number.

System action

System operation continues.

Operator response

If an incorrect device number was specified, reissue the ATTACH command with the correct device number. If a correct device number was specified, then all users' LINKs to this minidisk must be removed before the device may be ATTACHed to the system.

HCP1114I **DASD *rdev* was not ATTACHed to the SYSTEM because it is the secondary in a duplex pair.**

Explanation

The device specified on the ATTACH command was not attached because it is the secondary volume of a duplex pair. Secondary volumes cannot be attached to the system.

System action

System operation continues.

Operator response

If an incorrect device number was specified, reissue the ATTACH command with the correct device number.

HCP1115E **Device {*rdev*|*vdev*} was not given. A {GIVE|return} is [already] pending for device {*rdev*|*vdev*}.**

Explanation

The device cannot be given to another user for one of these reasons:

- A GIVE command was already entered for this device, but the command had not completed.
- It was originally given to this user with the RETURN option specified.

System action

The command is not executed. System operation continues.

User response

Before giving the device to another user:

If a GIVE is pending-
You must wait until the GIVE is complete before giving the device to another user. Enter the QUERY TAPE command to determine when the GIVE has completed.

If a return is pending-
You may detach the virtual device, return it to the originator, and then use the MESSAGE command to ask the originator to give it to the other user.

HCP1116E **TAPE *rdev* not attached; the tape is being rewound.**

Explanation

The tape requested by the user is in the process of being rewound, or CP is in the process of checking if rewind is possible.

System action

System operation continues.

Operator response

Enter the command again following completion of the rewind process.

HCP1117I **DASD *rdev* was not ATTACHed to the SYSTEM because it is the secondary in a PPRC pair or a cascading intermediate PPRC volume.**

Explanation

The device specified on the ATTACH command was not attached because it is the secondary volume of a PPRC pair or a cascading intermediate PPRC volume. These volumes cannot be attached to the system.

System action

System operation continues.

Operator response

If an incorrect device number was specified, enter the ATTACH command again with the correct device number.

HCP1118E **Device {*rdev*|*vdev*} was not given. GIVE cannot be performed on a device attached MULTIUSER.**

Explanation

The device cannot be given to another user because it was attached with the MULTIUSER option of the CP ATTACH command or DEDICATE directory control statement.

System action

The command is not executed. System operation continues.

User response

Use the CP DETACH command with the ALL option to detach the device from all users sharing the device. Then use the CP ATTACH command (without the MULTIUSER option) to attach the device to the user who was the target of the CP GIVE command.

HCP1119E **Device *rdev* was not detached. Detach with the ALL option is only valid for devices dedicated to a user or for tapes attached MULTIUSER.**

Explanation

The device cannot be detached because the DETACH command was entered with the ALL operand and the device is not dedicated to a user or a tape attached MULTIUSER.

System action

The command is not executed. System operation continues.

User response

For devices dedicated to the system, reenter the DETACH command with the SYSTEM operand instead of ALL.

HCP1120E **The requested {*command*|DETACH|GIVE} for device {*ldev*|*rdev*} did not complete in the allotted time.**

Explanation

The possible reasons for this message depend upon the command identified in the message text:

DETACH or GIVE:
The command entered for the device failed to complete in a reasonable amount of time.

***command*:**
The indicated command may have been entered against a device in use by another system or a device with a subchannel that has been quiesced.

System action

If you were detaching a list or a range of devices, the command may partially execute up to, but not including the device number given in the message. System operation continues.

User response

If a DETACH or GIVE was requested -
Query the indicated device. If the query shows the device still exists, the user's virtual machine is probably hung. Entering a DETACH or GIVE again for the device indicated in this message is not necessary because the DETACH or GIVE is still pending for that user. Once the hang condition clears up, the device will be detached or given.

If *command* was requested -
Enter the command again. If this message is encountered repeatedly, contact your system administrator or your IBM Support Center personnel for assistance.

HCP1121E **The DETACH command has been cancelled for {device {*rdev*|*ldev*} | devices {*rdev-rdev*|*ldev-ldev*}}.**

Explanation

The user's device you requested to detach did not send back an indication that the detach completed successfully in a reasonable amount of time, as indicated by the previous message HCP1120E. Since the user's virtual machine may be hung, other detach attempts would cause your virtual machine to wait for each subsequent detach. Therefore, the rest of the detach attempts are cancelled.

System action

System operation continues.

User response

The detach command may have been partially executed. However, the devices indicated in the message have not been detached. Retry the detach command, using the device or devices indicated in this message, once the user's virtual machine has been freed from the hang condition.

HCP1122E ***command* was not performed. Tape *vdev* has been given to user *userid*.**

Explanation

The command could not be performed because you are no longer the owner of the real device associated with the virtual device specified as *vdev*. This occurs when you have issued the GIVE command with the RETURN option for this device. *command* may be either IPL, REWIND, or RESET.

System action

The command is not performed, and system operation continues.

User response

You will not be able to issue this command to this virtual device until the current owner of the device detaches it.

HCP1123E **Multiple options are possible for operand *operand*. Resolution is impossible.**

Explanation

The operand can have multiple interpretations in a command syntax. Usually it means the operand can be a valid user ID as well as a valid device number. Example - ABC.

System action

The command is not executed; system operation continues.

User response

Use qualifiers such as "FROM" "TO" "AS" to make the meaning clear and reissue the command.

HCP1124I **An allocation map containing invalid data was found on DASD *rdev*, volume *volid*; the device is not attached.**

Explanation

Incorrect data was found in the allocation map of the specified volume. This is usually caused by copying a volume image from a smaller device to a larger device (such as copying from a single-density 3380 volume to a double- or triple-density 3380 volume) without properly reformatting cylinder zero (for CKD, ECKD) or pages 0-1 (for FBA) on the larger device and reallocating. It could also be caused by copying a volume with an extent-based allocation map to a volume that does not use the extent-based allocation map.

System action

System operation continues. The volume is not attached to the system.

Programmer response

Correct the allocation record on the volume by reformatting cylinder zero or pages 0-1 and reallocating the entire volume. If using the wrong type of allocation map, then reallocate the volume without reformatting cylinder zero. Then reattach the volume to the system.

HCP1125I **The allocation map for DASD *rdev*, volume *volid* contains an area that is currently undefined. That area will be ignored.**

Explanation

Incorrect data was found in the allocation map of the specified volume. This is caused by allocating an area on the DASD with allocation type PARM, and then re-allocating only a portion of that area. The cylinders or pages that had type PARM, and were not re-allocated, are the cylinders or pages that will be ignored.

System action

System operation continues. The volume is attached to the system. Those cylinders or pages that were not re-allocated will be ignored.

Programmer response

Re-allocate the cylinders or pages that were previously PARM cylinders or pages. Then re-attach the volume to the system. In the future when re-allocating an area with allocation type PARM, re-allocate the entire area.

HCP1126I **Device (*rdev*) is {detached from the system | draining}.**

Explanation

The CP volume on *rdev* was removed from the I/O configuration. An attempt was made to detach the *rdev* from the system. If the detach is unsuccessful, then the *rdev* is drained in order to prevent further attempts to allocate space on the volume.

System action

System operation continues without the CP volume.

Operator response

None.

HCP1127E {*rdev*|*volid*} is permanently drained.

Explanation

The *rdev* or *volid* draining status cannot be reset, because the device has been boxed with paging or spooling space still allocated.

System action

The command processing terminates.

User response

After all the paging and spooling space has been deallocated by the system, you may then detach the device from the system. Upon detach, the permanent drain status is reset.

HCP1128E The variations of this message are explained below.

— Variation 1 Device {*rdev*|*vdev*} not attached; {MULTIUSER|SINGLEUSER} not supported on this device.

Explanation

The MULTIUSER or SINGLEUSER operand was specified on either the CP ATTACH command or the DEDICATE directory control statement, but the specified device does not support this operand.

SINGLEUSER and MULTIUSER are valid only for tape devices. SINGLEUSER is accepted for all tape devices. MULTIUSER is restricted to the 3424, 3480, 3490, and 3590 tape devices.

System action

The command is not executed; system operation continues.

User response

To attach the device, enter the CP ATTACH command without the unsupported operand or remove the operand from the DEDICATE directory control statement.

— Variation 2 FCP {*rdev*|*vdev*} not attached; USERACCESSID not supported on this device.

Explanation

USERACCESSID is only valid for FCP devices that support LUN Access Control.

System action

The command is not executed; system operation continues.

User response

To attach the device, enter the CP ATTACH command without the unsupported operand or remove the operand from the DEDICATE directory control statement.

— Variation 3 Device {*rdev*|*vdev*} not attached; hardware encryption is not supported.

Explanation

The command is only valid for devices that support hardware encryption.

System action

The command is not executed; system operation continues.

User response

To attach the device, enter the CP ATTACH command without the operands that attempt to enable hardware encryption.

— Variation 4 Device {*rdev*|*vdev*} not attached; a mismatch in hardware encryption settings was detected.

Explanation

Shared tape devices can utilize hardware encryption only when the requested key settings match for every attach of a given tape device.

System action

The command is not executed; system operation continues.

User response

To attach the device, enter the CP ATTACH command with the hardware encryption key settings that are already in use.

— Variation 5 **Device *rdev* not attached; *user* is not authorized.**

Explanation

An external security manager (ESM) is installed and the VMDEV class is active. User *user* has not been authorized by the ESM to attach the real device *rdev*. The level of access required varies depending on the following specified options:

SYSCTL
requires CONTROL access

R/O
requires READ access

otherwise
requires UPDATE access

System action

The device *rdev* is not attached to the guest machine *user*.

User response

Contact your security administrator.

— Variation 6 **Device *rdev* not attached; unsupported mode specified.**

Explanation

The mode requested by the user is not supported by the device.

System action

The command is not executed; system operation continues.

User response

To attach the device, enter the CP ATTACH command with a valid mode supported by the device.

HCP1129I **The variations of this message are explained below.**

— Variation 1 ***type rdev* has invalid volume label.**

Explanation

The volume label contains characters other than capital letters or numbers. Spaces may only be used as padding at the end.

System action

System operation continues.

User response

Reformat or relabel the volume using a label consisting of only capital letters and numbers.

— Variation 2 ***type rdev* has invalid volume prefix.**

Explanation

The volume label prefix that identifies the label type is not recognized by VM.

System action

System operation continues.

User response

Label the volume using CMS FORMAT, ICKDSF, CPFMTXA, or another utility that creates a recognizable label type. The recognized prefixes are VOL1, DIR1, CMS1, and CMS=.

HCP1130E **Device *rdev* does not support a rekey operation**

Explanation

A CP SET TAPE command was issued to a device that does not support encryption rekeying. The command failed for one of the following reasons:

- The specified device is not an encryption-capable tape drive, or
- The control unit for the specified device does not support rekey operations.

System action

CP does not execute the command; system operation continues.

User response

Direct the command to a rekey-capable tape drive or upgrade the tape control unit. Then, retry the operation.

HCP1131I **Rekey operation succeeded for device *rdev***

Explanation

A CP SET TAPE command was issued to a device and completed successfully.

System action

System operation continues.

User response

None.

HCP1132E **Rekey operation failed for device *rdev*. [Tape cartridge is invalid.]**

Explanation

A CP SET TAPE command was issued that attempted to rekey an encrypted tape cartridge to new key encryption values. The command failed for one of the following reasons:

1. The specified tape device is not mounted with an encrypted tape.
2. The specified tape device is assigned elsewhere.
3. An I/O error occurred while performing the rekey operation.

System action

CP does not execute the command; system operation continues.

User response

While holding the tape assignment, mount the tape drive with the correct cartridge. Then, try the operation again.

HCP1133I **Insufficient STANDBY storage to complete storage {initialization| reconfiguration} as requested.**

Explanation

During IPL or while adding storage to a configuration using the SET STORAGE command, attempts to get additional storage failed before the requested amount could be satisfied.

System action

System operation continues. The STANDBY storage that was available to this partition has been configured.

User response

Issue the QUERY STORAGE command to see how much storage is configured currently and whether additional reconfigurations are desired. To increase the likelihood of a successful storage reconfiguration, make sure there are no other storage reconfigurations in progress on the CPC. This includes logical partition activation or deactivation, as well as storage configuration actions by operating systems in other partitions.

HCP1136E **Unexpected hardware error encountered.**

Explanation

When trying to retrieve a delayed response message, an unexpected hardware error occurred.

System action

System operation continues.

User response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP1138I **Paging device *rdev* no longer using transport mode channel programs.**

Explanation

Transport-mode channel programs were enabled with the FEATURES ENABLE PAGING_HPF statement. Multiple attempts by the paging I/O driver to issue a transport-mode channel program for the specified device have failed.

System action

Transport mode channel programs will no longer be used for the device. Soft abend PAJ002 or PAJ003 has been taken.

Operator response

Contact your IBM Support Center personnel. In addition to collecting the dump, the operator console log and information about the DASD configuration should be collected.

HCP1142E The AT option is not allowed when this command is executed remotely with the AT command.

Explanation

The AT option is not allowed if this command is initiated with an AT command from another system.

System action

The command is not executed; system operation continues.

User response

Issue the command again without the AT option, or log on to a user ID on the desired system and execute the command on that system without the AT option.

HCP1143E Member *sysname* is not in Joined status in this SSI cluster

Explanation

The *sysname* specified is not in Joined status and therefore cannot be communicated with from the SSI member from which the command was executed.

System action

The command is not executed; system operation continues.

User response

Issue the command again with the *sysname* of an SSI member that is in Joined status, or move the *sysname* you specified to Joined status and then reissue the command.

HCP1144E Unknown CP command executed with the AT command: *command_string*

Explanation

The command specified is not a valid command when issued with the AT command.

System action

The command is not executed; system operation continues.

User response

Issue the AT command again using a command that is allowed to be sent to an active SSI member with the AT command.

HCP1145E Unknown command option specified with the AT command: *option*

Explanation

The command option specified is not a valid option when the command is executed with the AT command.

System action

The command is not executed; system operation continues.

User response

Issue the AT command again using an option that is allowed to be sent to an active SSI member with the AT command.

HCP1146E Unable to open connection for *portname* to *sysname*; rc=*rc*

Explanation

A connection to the target system could not be opened.

System action

The system continues normal operation.

User response

Verify that the SSI cluster is stable and there is connectivity to the target member. Try the command again. If the problem persists, contact your IBM Support Center personnel.

HCP1146I Unable to open connection for *portname* to *sysname*; rc=*rc*

Explanation

A connection to the target system could not be opened.

System action

The system continues to join the SSI cluster. The connection will be opened when the appropriate connectivity is established.

User response

Once the system has joined the SSI cluster and the SSI cluster is in stable mode, issue QUERY ISFC TRANSPORT to verify that a connection has been opened for *portname*. If the connection is not displayed, contact your IBM Support Center personnel.

HCP1147E Spool synchronization with member *sysname* failed.

Explanation

Spool synchronization failed with the designated member.

System action

System operation continues.

User response

Spool synchronization will automatically try again later, and you will see another initiated message at that time. If synchronization fails frequently, contact your IBM Support Center personnel.

HCP1147I Spool synchronization with member *sysname* {initiated| completed}.

Explanation

In an SSI environment, this message indicates that spool synchronization has started or completed with the indicated partner member.

System action

System operation continues.

User response

None.

HCP1148E USERID synchronization error at join time. Lost communication with member *sysname*.

Explanation

The SSI cluster has returned to stable mode; however, the user ID information on all systems in the SSI cluster does not match due to a communication problem. The message identifies the member whose user ID information is not synchronized with the rest of the SSI cluster.

System action

System operation continues. The communication problem should be noticed by the SSI cluster and handled appropriately. The user ID synchronization problem will automatically be fixed by the SSI cluster the next time *sysname* leaves and reenters STABLE state.

User response

None.

HCP1149E Error communicating with another SSI member. It cannot be determined if *command* executed remotely.

Explanation

While transporting the indicated command to another SSI member, a communications error occurred and we do not know if the command executed successfully.

System action

System operation continues.

User response

Verify that the command was successfully executed before trying it again.

HCP1150E DASD {*rdev*|*vdev*} is not a valid base exposure.

Explanation

The specified real or virtual device number is not a valid base exposure for a multiple exposure device.

System action

The command is not executed.

User response

Reissue the command, specifying a valid base exposure for the device number in error.

HCP1151E *userid vdev* has not been linked because it is not within CP volume cylinder extents.

Explanation

The minidisk definition specifies a system-owned volume, and the specified cylinder extents are outside the range of the real volume.

System action

System operation continues.

User response

Inform your system programmer of the problem; the directory entry for the device you have specified in the LINK command is incorrect.

HCP1152E ***userid vdev*** **has not been linked because it would overlap system {spool|paging|temporary disk} space**

Explanation

The specified mini-DASD definition would overlap one of the following types of system DASD space:

- Spool
- Page
- Temporary disk.

For minidisk definitions beginning with cylinder 0 of a system-owned volume, no check is made to determine if the minidisk definition would overlap system DASD space.

System action

System operation continues.

User response

Inform your system programmer of the problem; the directory entry for the device you specified in the LINK command is incorrect.

HCP1153E ***userid vdev*** **cannot be re-linked {R/O|R/W} because it is part of a minidisk-pool and was previously linked {R/W|R/O}.**

Explanation

The specified DASD to be relinked cannot change modes from read-only to write or write to read-only because it has been specified as part of a minidisk-pool.

The minidisk remains linked in the original mode.

System action

System operation continues.

User response

The minidisk is part of a minidisk-pool and cannot be relinked. It must be removed from the minidisk pool. This can be accomplished by detaching the device and then linking it again in the correct mode. Check with the system programmer or the owner of the user ID before trying to detach the minidisk.

HCP1154I **There were no stable links in effect to the specified minidisk.**

Explanation

None of the current links to this minidisk were made with any of the stable access modes.

System action

The query operation is complete with the issuance of this message.

User response

None.

HCP1155E **You do not have the proper directory authorization to LINK a minidisk with the link mode of** ***mode*****.**

Explanation

The user executing the LINK command or a default link during logon has attempted to LINK a minidisk using one of the stable or exclusive link modes. These require authorization through the LNKS or LNKE options on the OPTION directory control statement in the user's directory definition.

System action

The LINK operation is terminated, and this message issued.

User response

The user should either use another non-stable or exclusive mode to link the desired disk, or see the local systems administrator for the authority to use the desired link mode.

Programmer response

If use of the stable of exclusive mode capability is justified, update the user's directory definition with the required option.

HCP1156I **The variations of this message are explained below.**

— Variation 1 **DASD *device number* forced R/O; unauthorized for R/W**

Explanation

The security label governing your current session gives you insufficient authority to access the DASD in read/write mode. However, you are entitled to read-only access to the DASD.

System action

The system has given you read-only access to the DASD.

User response

If you require R/W access, contact your local security administrator. Otherwise, access the DASD in read-only mode or detach it.

— Variation 2 **Real device *rdev* forced R/O; unauthorized for R/W**

Explanation

The external security manager (ESM) is installed and the VMDEV class is active. You have insufficient authority to access the device in read/write mode. However, you are entitled to read-only access to the device.

System action

The system has given you read-only access to the DASD.

User response

If you require R/W access, contact your local security administrator. Otherwise, access the DASD in read-only mode or detach it.

HCP1157I **DASD *vdev* was not LINKed because the MDISK DEVNO parameter requires the device to be a free volume.**

Explanation

The device specified by the command was not linked. The MDISK definition being processed contained the DEVNO parameter, defining the minidisk by its real device number. Such a minidisk definition requires the real device to be a free volume. Instead, the device was found to be in use in some other manner (that is, attached to the system).

System action

System operation continues.

Operator response

If the correct device number was specified, the device must be made free before the MDISK definition is re-attempted (by logging on again).

HCP1158E **Stable and exclusive links are not supported. A system that shares this volume is not at Release VM/ESA 1.1 or greater.**

Explanation

This message is displayed when a user tries to link a disk that is part of a CSE complex in one of the new enhanced modes and the disk is XLINK formatted on a system with a release of VM/ESA lower than Version 1 Release 1.1. The enhanced modes are stable read (SR), stable write (SW), stable multi (SM), exclusive read (ER). and exclusive write (EW).

System action

Nothing happens to the system. The user is denied the link. The operator is not notified. The user can link the disk in a valid mode.

User response

If all of the systems in the CSE complex for this disk are at VM/ESA Version 1 Release 1.1 or greater, the disk can be xlink formatted from one of these systems and the enhanced link modes will be valid.

HCP1159E **DASD *address* is not linked; RDEV *rdev* is already attached.**

Explanation

The DASD the user is trying to link to is already attached to another user.

System action

System operation continues.

User response

Ensure that the specified RDEV is not already attached to another user, then reenter the command.

HCP1160E **Device *vdev* has excessive indirect links in CP directory**

Explanation

The device *vdev* is defined in the queried user's directory entry by a LINK statement to another user's device. This indirect linking continues across the user directory entries until the defined limit of such indirect links is exceeded. This limit is considered exceeded when the device's defining MDISK statement is not located within 50 indirect links.

System action

System operation continues.

User response

Have operations personnel correct the number of indirect links associated with the device in the CP user directory.

HCP1161I ***userid*: Virtual machine has a dedicated PCI function**

Explanation

The relocation of the specified guest was terminated because a dedicated PCI function was found in its configuration.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

If acceptable, remove any dedicated PCI functions from the virtual machine using the DETACH PCIFUNCTION command. Then retry the relocation.

HCP1162I **The variations of this message are explained below.**

— Variation 1 **Active missing interrupt remediation initiated for PCI function rpfid.**

Explanation

A missing interrupt was detected for the NVMe PCI function, and action to detect and handle pending interrupts has started. Interruptions might not be handled as quickly as usual.

System action

Operation continues.

User response

None.

— Variation 2 **Active missing interrupt remediation terminated for PCI function rpfid.**

Explanation

After a missing interrupt was detected for the NVMe PCI function, an interruption was received, so remediation efforts are no longer needed and have been terminated. Interruptions should now be handled as quickly as possible.

System action

Operation continues.

User response

None.

HCP1163E **The variations of this message are explained below.**

— Variation 1 **PCI function *rpfid* initialization has failed; return code *rc*, response code *respcode*.**

Explanation

The system was attempting to initialize a PCI function, but initialization failed due to an internal CP processing error identified by the specified return code (*rc*), response code (*respcode*) combination.

System action

The PCI function remains in an offline state.

Operator response

Enter the VARY ONLINE PCIFUNCTION command to initialize the PCI function again. If the error persists, contact the IBM Support Center.

— Variation 2 **PCI function *rpfid* cannot be allowed online because PCI support is not enabled for the system.**

Explanation

The system was attempting to initialize a PCI function or a VARY PCIF command was issued, but PCI support is not enabled on the system, so the PCI function cannot be allowed online.

System action

The PCI function is left in the offline state.

Operator response

No PCI functions will be allowed online on this system because PCI support is not enabled. In order to enable PCI support for this system, a FEATURES ENABLE PCI statement must be added to the system configuration file and the system must be re-IPLed.

HCP1164I	**The variations of this message are explained below.**
— Variation 1	**PCI function *rpfid* has been added to the configuration and is in standby state.**

Explanation

CP processed a machine check indicating that the specified PCI function has been added to your system. CP initialized the PCI function successfully, but it is currently in the standby (offline) state.

System action

System operation continues.

User response

Enter the VARY ONLINE PCIFUNCTION command to configure the PCI function for use by the system.

— Variation 2	**PCI function *rpfid* has been added to the configuration and is free.**

Explanation

CP processed a machine check indicating that the specified PCI function has been added to your system. CP initialized the PCI function successfully. The PCI function is currently in the online state and free for use by the system.

System action

System operation continues.

User response

None.

— Variation 3	**PCI function *rpfid* has been added to the configuration and is not configured.**

Explanation

CP processed a machine check indicating that the specified PCI function has been added to your system. CP's attempt to initialize the PCI function left it in a not configured (offline) state.

System action

System operation continues.

User response

Issue the VARY ONLINE PCIFUNCTION command to configure the PCI function for use by the system.

— Variation 4	**PCI function *rpfid* is now available for use by the configuration.**

Explanation

CP processed a machine check indicating that the specified PCI function has transitioned to the configured state and is online to the system.

System action

System operation continues.

User response

None.

— Variation 5	**PCI function *rpfid* is no longer available for use by the configuration.**

Explanation

CP processed a machine check indicating that the specified PCI function has transitioned to the standby state and is offline to the system.

System action

System operation continues.

User response

Issue the VARY ONLINE PCIFUNCTION command to configure the PCI function for use by the system, if desired.

— Variation 6	**PCI function *rpfid* recovery was successful.**

Explanation

The PCI function was in an error state but has recovered successfully. This might indicate that a SET PCIFUNCTION RESET command was issued and completed successfully.

System action

System operation continues.

User response

For an NVMe PCI function, determine if any associated EDEVICEs require intervention and take corrective action to reactivate them. Reactive an EDEVICE by completing the following steps:

1. VARY OFF
2. VARY OFF SUBCHANNEL
3. DELETE EDEVICE
4. SET EDEVICE

Otherwise, contact your IBM Support Center personnel.

HCP1165I **PCI function *rpfid* has been deleted from the configuration.**

Explanation

The specified PCI function has been deleted from the configuration because your system no longer has access to it. Access to the specified PCI function may have been taken away from your system either via dynamic I/O or via the HMC.

System action

The PCI function definition is deleted from the system.

Operator response

None.

HCP1166E **IOAT subpool not allocated because storage was not available**

Explanation

The system programmer requested more storage for the IOAT subpool than is available.

System action

System operation continues.

User response

Reduce the requested size of the IOAT subpool and reIPL.

HCP1167E **The variations of this message are explained below.**

— Variation 1 **PCI function *rpfid* cannot be brought online because it is of an unknown type.**

Explanation

The PCI function being brought online was not a function type known by z/VM.

System action

The PCI function was not brought online and processing continued.

User response

Determine if there is missing service for the PCI function type which was not known.

— Variation 2 **PCI function *rpfid* cannot be brought online because it is a NETD type function defined as a physical function.**

Explanation

The PCI function being brought online was of type NETD defined as a physical function. NETD physical functions are not supported by CP and cannot come online.

System action

The PCI function was not brought online and processing continued.

User response

Virtual NETD PCI functions are supported by CP. Choose another PCI function to vary online, if appropriate.

— Variation 3 **PCI function *rpfid* cannot be brought online because it is a PAIA type function defined as a physical function.**

Explanation

The PCI function being brought online was of type PAIA defined as a physical function. PAIA physical

functions are not supported by CP and cannot come online.

System action

The PCI function was not brought online and processing continued.

User response

Virtual PAIA PCI functions are supported by CP. Choose another PCI function to vary online, if appropriate.

HCP1168E **PCI function *rpfid* cannot be attached to *userid* because a function with the same UID is already attached to that guest.**

Explanation

For some guest operating systems, it is required that PCI functions each have a unique UID value. To enforce this rule, CP checked the UID value for the function being attached with all of those PCI functions already attached to this guest. A matching UID value was found on a PCI function already attached to the guest and so this function cannot be attached.

System action

The PCI function is not attached to the virtual machine and remains in the FREE state.

User response

If this userid does not require unique UID enforcement, the SET IO_OPT UID command can be used to turn off this checking and allow the PCI function to be attached to this userid.

HCP1169I **NVMe *rpfid* controller reported a fatal status condition.**

Explanation

An NVMe controller reported a fatal status condition and terminated operation.

System action

In-flight I/O operations to the associated EDEVICEs are terminated and placed in Intervention Required state.

User response

Restore access to the NVMe resources.

1. Delete all EDEVICEs that are associated with the controller:
   a. DETACH all guest minidisks
   b. DETACH the EDEVICE from SYSTEM
   c. VARY OFF and VARY OFF SUBCHANNEL the EDEVICE
   d. DELETE EDEVICE
2. Redefine the EDEVICEs.

The process might require restarting guests that have minidisks defined on the redefined EDEVICEs.

HCP1170E **The variations of this message are explained below.**

— Variation 1 **Support Element notification failed for PCI function *rpfid*.**

Explanation

An attempt to communicate with the Support Element to complete a notification function was unsuccessful.

System action

System operation continues.

User response

If the condition persists, try using the Support Element user interface to perform the function. If you still cannot perform the function, contact your IBM Support Center personnel.

— Variation 2 **Support Element operation failed for PCI function *rpfid*.**

Explanation

An attempt to communicate with the Support Element to complete a reset or deconfigure function was unsuccessful.

System action

System operation continues.

User response

If the condition persists, try using the Support Element user interface to perform the function. If you still cannot perform the function, contact your IBM Support Center personnel.

HCP1171E ***type rdev* THE COMMAND IS NOT ALLOWED THROUGH A SOFT FENCED STATE**

Explanation

The device rejected a CCW that was issued to it because the device is in a soft fence state.

System action

System operation continues.

User response

Issue the CP QUERY FENCES command to determine whether a device is fenced, or reset the fence state using the CP SET DASD FENCE RESET command.

HCP1172E	**No action for device *rdev* because control unit does not support soft fence**

Explanation

The control unit does not support the Soft Fence feature, so this command cannot be run on the input device.

System action

The command is not run; system operation continues.

User response

Specify a *rdev* that is on a control unit that supports the Soft Fence feature.

HCP1173E	**The variations of this message are explained below.**
— Variation 1	**Reset soft fence operation failed for device *rdev***

Explanation

The operation to reset the soft fence state for device *rdev* failed.

System action

System operation continues.

User response

Make sure the correct device was specified and enter the command again. If the condition persists, contact the IBM Support Center.

— Variation 2	**Reset soft fence operation failed for devices *rdev-rdev***

Explanation

The operation to reset soft fence state for the range of devices (*rdev-rdev*) failed.

System action

System operation continues.

User response

Make sure the correct range of devices was specified and enter the command again. If the condition persists, contact the IBM Support Center.

HCP1200E	**DASD *vdev* has not been redefined because paging subsystem device cannot be redefined.**

Explanation

The user specified a multiple exposure paging subsystem device in an attempt to redefine it to another virtual device number. You may not redefine paging subsystem devices.

System action

System operation continues.

User response

To redefine a multiple exposure paging subsystem device, detach it and then have the system operator attach it to you as the desired virtual device.

HCP1201E	**Device *vdev* cannot be readied because it is active.**

Explanation

You issued the READY vdev command but the device *vdev* is active.

System action

The system does not execute the command.

Operator response

Reissue the command.

HCP1202E	**Device *vdev* was not rewound because it is active.**

Explanation

You issued the REWIND vdev command, but the device *vdev* is active.

System action

The system does not execute the command.

Operator response

Reissue the command.

HCP1249I Device *rdev* cannot be varied subchannel {disable|enable} because a time-out condition occurred

Explanation

The user entered a VARY command to disable or enable a subchannel and a time-out condition occurred.

System action

CP command processing terminates and system operation continues.

User response

Enter the command again. If the condition persists, contact your system support personnel.

HCP1250I Device *rdev* cannot be varied online because a time-out condition occurred.

Explanation

The indicated device is not brought online because it failed to complete an I/O operation in the given amount of time. An I/O operation must complete within five seconds for the real machine, and within five minutes for a virtual machine.

System action

The device is not brought online.

Operator response

If this error occurs during IPL, try to vary the device online after IPL.

This is probably a hardware malfunction. Notify your system support personnel.

HCP1251I Device *rdev* cannot be varied online because it requires operator intervention.

Explanation

The indicated device is not brought online because it is in an intervention-required state or, in some cases, because it is not physically connected to the control unit.

rdev identifies the device that is not being brought online.

System action

The device is not brought online.

Operator response

Ready the device and vary it online.

HCP1252I Device *rdev* has been unassigned by user *userid*

Explanation

A tape drive that was assigned using the VARY command and then attached to a user (with or without the assign option) is found unassigned during detach processing.

System action

System operation continues.

Operator response

Vary off the device, then vary it back on with the ASSIGN option.

HCP1280E The variations of this message are explained below.

Explanation

- Device *vdev* not usable; assign lost.
- Device *vdev* not usable; reserve lost.
- Device *vdev* not usable; reserve lost by *userid* as *vdev*.

A virtual device has been made unavailable because the operating system has detected that an assign or reserve to that device has been lost, and the state of the data is unpredictable. This message is issued to the holder of the assign or reserve.

System action

System operation continues.

Operator response

If you were the user that lost the assign, determine whether the data is usable. If it is, the assign must be re-established in order to safely continue accessing the data. One way to re-establish the assign is to detach the device and then attach it again.

HCP1281I **Path *channel* to device *rdev* now offline; path group ID mismatch.**

Explanation

The operating system has detected that one of the paths to a device has a path group ID that does not match that which the system uses to access the device. Since attempts to use this path would result in “hang” conditions, the system has marked the path offline.

System action

System action continues.

Operator response

If possible, physically reset the path and then vary it online to that device.

HCP1282I **Path *yy* to device *xxxx* has been forced offline; a configuration change was detected.**

Explanation

A reset event occurred on this path, and CP has detected that the channel path has been reconnected to a different device.

System action

The channel path is logically varied offline from the device.

Operator response

Reconnect the channel path to the original device and issue the VARY ON PATH command.

HCP1283I **This message is shown below.**

Explanation

Path *channel* **to device** *rdev* **currently not responding.**
[**LEVEL:** *level*
STATUS: *status*
MODIFIER: *modifier*]

The system has detected that one of the paths to a device is not responding to system I/O requests. The system has stopped using this path. Because this is a multiple path device, the system can still access the device. However, the loss of the path could degrade I/O performance.

If more detailed information is available to the system:

- *level* indicates the scope of the error by indicating the type of resource that has been affected by the error indicated by the STATUS and MODIFIER indicators
- *status* identifies the current or last known status of the channel path
- *modifier* further identifies the type of status within the general status that is described by *status*.

System action

System action continues. Even though the path is not being used, the system might consider the path to be online.

Operator response

If possible, reset the path physically. Issue the VARY ONLINE PATH command to make sure the system is using this path. If the problem persists, issue the VARY OFFLINE PATH command and then contact your system support personnel.

HCP1284I **The link-recovery-threshold count for path *nn* has been reset.**

Explanation

The VARY ONLINE PATH command was issued for a channel path that was in the "not operational" state due to the link-recovery-threshold facility determining that it was a flapping link because it exceeds the link-recovery-threshold count. A flapping link condition is defined to be when a channel path fails repeatedly and recovers many times. This causes the host to continually process channel path recovery, reacting when the path is unavailable and reacting again when it becomes available. This continuous recovery could cause the host to become so busy that it seems as though a hang condition exists. The link-recovery-threshold facility is enabled on the system to prevent these hang conditions.

System action

System action continues. The link-recovery-threshold count for the channel path is reset and the path is allowed to come online (unless some other condition prevented it from coming online).

User response

A flapping link condition is a hardware problem that can be resolved only by fixing the channel path at the hardware. The path was allowed to come back online because of the overt action of the user issuing the VARY ONLINE PATH command. It is likely that the path will end up in the "not operational" state again when it exceeds the link-recovery-threshold count again.

HCP1321E The variations of this message are explained below.

— Variation 1 VARY PROCESSOR is not valid because multithreading is enabled.

Explanation

When multithreading is enabled, only whole cores can be configured or deconfigured.

System action

The command failed. System operation continues.

User response

Use the QUERY PROCESSORS command to determine which core is associated with the target processor. Then use the VARY CORE command to configure and deconfigure cores. Be aware that the VARY CORE command affects all of the processors on the core.

— Variation 2 SET MULTITHREAD is not valid because multithreading is not enabled.

Explanation

The SET MULTITHREAD command is valid only when multithreading is enabled.

System action

CP does not execute the command; system operation continues.

User response

Use the QUERY MULTITHREAD command to determine whether multithreading is not installed or was not enabled.

If multithreading is installed and you would like to enable it, add or correct the MULTITHREADING statement in the system configuration file and then re-IPL the system.

HCP1350E Named Saved System (NSS) *name* cannot be saved because active MP users cannot save a Named Saved System (NSS).

Explanation

A virtual multiprocessor (MP) guest, with more than one active CPU, cannot save a NSS.

System action

System operation continues.

User response

Issue the SAVESYS command early enough in the IPL sequence so that the guest operating system is still running in uniprocessor (UP) mode. Once the guest operating system sends a SIGP signal to one or more additional CPUs, they become active, and the guest operating system is running in MP mode.

HCP1351I LOAD REQUEST TERMINATED; SEGMENT *segment-number* WOULD BE OVERLAID.

Explanation

You tried to load a saved segment that would cause an overlay of at least one segment of an existing NSS or saved segment.

System action

CP does not load the saved segment.

User response

Refer to *z/VM: CP Programming Services* for a detailed description of DIAGNOSE X'64'.

HCP1352E System *name* cannot be processed.

Explanation

Because of internal errors, the named saved system specified by *name* cannot be IPLed, or the discontiguous saved segment specified by DIAGNOSE X'64' cannot be loaded.

System action

A soft abend dump has been generated.

User response

Reissue the command and, if the problem persists, contact your system support personnel.

Programmer response

Examine the soft abend dump associated with this failure. Refer to the description of that abend code for further information.

HCP1353E An invalid {name *name*|page range *nnnnn- nnnnn*} was detected in the {DEFSYS|DEFSEG} command.

Explanation

You issued a DEFSYS or DEFSEG command with an invalid name or page range. The variables in this message are as follows:

name
The name of the saved segment or NSS.

nnnnn
A 1- to 5-digit hexadecimal page number that must be less than or equal to X'7FEFF' (2047 MB).

System action

CP halts processing of the DEFSYS or DEFSEG command, and creation of the system data file does not take place.

Programmer response

Correct the required name or page range and reissue the command.

HCP1354E An invalid storage page descriptor code *invalid-code* was detected for page range *nnnnn-nnnnn*.

Explanation

You specified an invalid page descriptor code (*invalid-code*) for page range *nnnnn-nnnnn* on the command line. Valid page descriptor codes are:

EN
Exclusive read/write access, no data saved

ER
Exclusive read-only access

EW
Exclusive read/write access

SC
CP-writeable, virtual machine shared read-only access, no data saved

SN
Shared read/write access, no data saved

SR
Shared read-only access

SW
Shared read/write access

All page ranges in the same segment must be defined for either shared access (SC, SN, SR, or SW) or exclusive access (EN, ER, or EW), but not both.

System action

CP halts processing of the DEFSYS or DEFSEG command, and creation of the system data file does not take place. CP does not purge the previously-defined class S system data file for this NSS or saved segment name.

Programmer response

Correct the invalid storage page descriptor code and reissue the command.

HCP1355E Segment number *nnn* was defined with both shared and exclusive page descriptor codes.

Explanation

You specified a pair of page ranges for segment *nnn* with page descriptor codes specifying both shared and exclusive access. Valid page descriptor codes are:

EN
Exclusive read/write access, no data saved

ER
Exclusive read-only access

EW
Exclusive read/write access

SC
CP-writeable, virtual machine read-only access, no data saved

SN
Shared read/write access, no data saved

SR
Shared read-only access

SW
Shared read/write access

All page ranges in the same segment must be defined for either shared access (SC, SN, SR, or SW) or exclusive access (EN, ER, EW), but not both.

If no ranges specified on the command have conflicting descriptor codes, the conflict is with a

range in a previously-defined member of the segment space.

System action

CP halts processing of the DEFSEG or DEFSYS command, and creation of the system data file does not take place. CP does not purge the previously-defined class S system data file for this NSS or saved segment name.

Programmer response

Reissue the command and make sure that all page ranges in the specified segment are defined with compatible page descriptor codes.

When the conflict is with a currently-defined member of the segment space, use the QUERY NSS NAME fn MAP command. The output of this command shows the page ranges and their descriptor codes for each existing member of the logical saved segment.

HCP1356E ***nnnnn-nnnnn*** **is a conflicting page range. Please check for overlaps and reissue the command.**

Explanation

You specified overlapping page ranges (*nnnnn-nnnnn*) on the command line.

System action

CP halts processing of the DEFSEG or DEFSYS command, and creation of the system data file does not take place.

Programmer response

Correct the overlap condition and reissue the command.

HCP1358E **CP saved segment *name* cannot be loaded in exclusive mode**

Explanation

You attempted to load the CP saved segment specified by *name* using the DIAGNOSE X'64' LOADNSHR subcode. A CP saved segment is one in which one or more page ranges were defined with the “SC” page descriptor code.

System action

System processing continues. The user's storage is not changed.

User response

Verify that you specified the correct saved segment name. If you specified an incorrect saved segment name, reissue the Diagnose with the correct name. If the name was correct, and you want access to the CP saved segment, reissue the Diagnose with the LOADSHR (load shared) or LOADNOVL (load shared with no overlay) subcode instead of with the LOADNSHR (load non-shared) subcode.

HCP1359E **[CP]{Saved segment|Named Saved System (NSS)}** ***name*** **cannot be saved because a [CP] copy is already {active| waiting to be purged}.**

Explanation

You attempted to save a new copy of a CP NSS or saved segment while there were still users associated with an old copy of the same name.

A CP NSS or saved segment is one in which one or more page ranges were defined with the SC page descriptor code.

System action

SAVESYS or SAVESEG processing terminates. The old copy of the NSS or saved segment is not changed.

Programmer response

Before saving a new copy of this NSS or saved segment, you must be sure that all users are disassociated with the old copy. Determine which users have loaded the NSS or saved segment by following the chain of SHRBKs from the SNTBK for this NSS or saved segment. Each SHRBK points to the VMDBK of a user that had loaded this NSS or saved segment. Each user must issue DIAGNOSE code X'64' with the PURGESEG subcode (for saved segment) or the SYSTEM CLEAR subcode (for NSS or saved segment) to release the DCSS or NSS before a new copy may be saved.

HCP1360E **Segment *name* was not defined because a saved segment with this name already exists.**

Explanation

You tried to define a segment with a name already given to a segment space, member saved segment, or saved segment.

System action

The new segment definition was not created.

User response

If you want this name to be associated with the new definition, the old definition must be purged. Be careful: the name might be currently associated with a segment space or a member saved segment. Any other member you want purged must be purged separately. You might want to issue a QUERY NSS NAME fn MAP command to determine which member saved segments or segment spaces are associated with this saved segment before purging it.

HCP1361E The SAMERANGE operand was used with an invalid or missing SPACE operand.

Explanation

SAMERANGE is used to associate a currently defined member saved segment with another segment space. You issued the DEFSEG command with the SAMERANGE operand and either did not specify the segment space with which you wanted the member associated, or you specified a segment space name for which there is no skeleton file, and the member saved segment is not a skeleton file.

System action

The member saved segment definition was not associated with any segment space.

User response

If you want this name to be associated with another segment space, reissue the command specifying the segment space. If the segment space name specified is not yet defined, the member saved segment must be a skeleton file.

HCP1362E *name* is not a segment space and cannot have members added.

Explanation

The name used with the LSEG operand was defined as a saved segment and cannot have members.

System action

The shared storage environment is not changed.

User response

You may determine the status of a saved segment by issuing the QUERY NSS NAME fn MAP command. If the saved segment has no members, it is a saved segment and cannot have members. To have this saved segment be a segment space with members, the current definition must be purged and redefined using the SPACE operand.

HCP1363E The specified segment space *name* already has the maximum number of members.

Explanation

You have tried to add another member to a segment space that already has 64 members. This segment space is full; no additional members can be defined.

System action

The shared storage environment is not changed.

User response

You may determine the members of a segment spaces by issuing the QUERY NSS NAME fn MAP command. If the segment space has 64 members, no more can be added. To define the segment space with different members, the current definition must be purged and redefined with the new members.

HCP1364E Segment *name* is a segment space and will be saved by CP when the final member is saved.

Explanation

You have tried to save a segment space by name. A segment space is automatically saved when all of its members are saved.

System action

The segment space is not saved.

User response

Save each member of the segment space individually. You may determine the members of a segment space by issuing the QUERY NSS NAME fn MAP command.

HCP1366E Member saved segment *name* cannot be associated with another segment space.

Explanation

A DEFSEG command using the SAMErange operand was issued for a member saved segment. This member has at least one page range defined as writeable storage or is already associated with the maximum number of segment spaces. Members with writeable storage can be associated with only segment space. A member may be associated with 64 or fewer segment spaces.

System action

The shared storage environment is not changed.

User response

Use the QUERY NSS NAME fn MAP command to determine the page range definition of the member and the list of segment spaces associated with this segment space. If you want the member associated with a different segment space, you must purge the existing definition. Then redefine it with the name of the new segment space used for the SPACE operand.

HCP1367E **A DIAGNOSE X'64' LOAD REQUEST WAS RECEIVED WITH A SHARED/EXCLUSIVE MODE THAT CONFLICTS WITH A CURRENTLY LOADED PORTION OF THE SAME SEGMENT SPACE.**

Explanation

You currently have access to the segment space, or at least one of its members, in shared or exclusive mode and have issued a DIAGNOSE X'64' load request for another portion of the same segment space with the opposite shared/exclusive attribute.

When a segment space or a member saved segment is first loaded, the shared/exclusive attribute used must be the same as that used on subsequent loads of other members.

System action

None.

User response

Notify your system programmer.

Programmer response

Either reissue this load with the other shared/exclusive attribute, or purge the portions currently loaded and reissue the same load request. If the application requires that one member be loaded shared and another exclusive, these members must be in different segment spaces. Should they need to be in different spaces, the current definition must be purged, and the new one created.

HCP1368E **Named saved system (NSS) *name* can not be saved when running in {an ESA|an XC|a Z} virtual machine.**

Explanation

The NSS you attempted to save was defined using the MACHMODE parameter on the DEFSYS command. You attempted to save the NSS when your virtual machine was not in an architecture mode specified by the MACHMODE parameter. When a named saved system is defined using the MACHMODE parameter on the DEFSYS command, it can be saved only when the virtual machine is in an architecture mode specified by the MACHMODE parameter.

System action

The system continues to run, but processing of the SAVESYS command is halted.

Programmer response

Issue the SET MACHINE command to place your virtual machine in an architecture mode specified by the MACHMODE parameter. You can use the QUERY NSS ENVIRONMENT command to determine the virtual-machine modes in which it is valid to save (and IPL) the NSS.

HCP1369E ***name* is already defined in segment space *name*.**

Explanation

The member you just defined is already defined in the specified segment space. Either identical page range and descriptor code information was specified, or the SAMERANGE operand was used for a member that was previously defined in this segment space.

System action

None.

User response

No action is required if you want this member in this segment space. If the SAMERANGE operand was used, you may want to use the QUERY NSS NAME fn MAP command for the segment space to see what the members' ranges are and how they relate to other members of the segment space. If you do not want

this member in this segment space, please see the PURGE NSS command for an explanation on how to delete members.

HCP1370E **You cannot purge *name* using the ASSOCIATES option.**

Explanation

The SDF with spool ID or name cannot be purged. It is not a segment space or a member segment.

If *name* is a NSS or saved segment, use the PURGE NSS NAME/spoolid to purge the SDF. The ASSOCIATES option is valid for segment spaces and member segments only.

System action

None.

Programmer response

Reissue the command without the ASSOCIATES option.

HCP1371E ***name* is not defined as a member saved segment.**

Explanation

The saved segment you attempted to add to another space by using the SAMERANGE option was not previously defined as a member saved segment. One of the following conditions exists:

1. The saved segment was not previously defined.
2. The saved segment was previously defined as a saved segment or segment space.
3. The saved segment was previously defined, but is now in a pending purge state due to a PURGE NSS command.

System action

None. No saved segment SDF's were changed.

User response

You may want to use the QUERY NSS MAP command to see if this name was previously defined as a saved segment, or a segment space. If so, you can either choose to do nothing to keep the previous definition, or to purge the previous definition and define it again as a member saved segment, using a specific range. See Usage Notes for the DEFSEG command in *z/VM: CP Commands and Utilities Reference*.

HCP1374I **The {SAVESEG|SAVESYS} command was terminated by User *userid*. {SEGMENT|SYSTEM} *name* was purged.**

Explanation

User *userid* entered a PURGE NSS command for the saved segment or named saved system that was being saved.

System action

The saved segment or named saved system was purged from spool and the SAVESEG or SAVESYS command was terminated.

User response

If you intend to resave the saved segment or named saved system, you must first use the DEFSEG or DEFSYS command to redefine it.

HCP1376E ***name1 spoolid* has an entry for *name2* which was not found.**

Explanation

The *name1* SDF (System Data File) with spool ID *spoolid* has an entry within it for *name2*. However, an SDF with a file name of *name2*, having the proper characteristics and spool file class as indicated in the entry, was not found.

System action

System operation continues.

User response

If SPXTAPE is using *name2*, wait for the operation to complete and retry the command.

If SPXTAPE is not using *name2*, it is possible that *name1* and *name2* are in an inconsistent state.

1. If *name1* is a segment space name, purge the SDF specified by *spoolid*. When *name2* was purged, all associated segment spaces should have been purged as well.
2. If *name1* is a member saved segment name, either purge the SDF specified by *spoolid* or define a segment space with the name *name2* that includes *name1* as one of its members.

If *name2* is in the process of being recreated, defining *name2* is probably what should be done.

HCP1377E ***name1 spoolid* has an entry for *name2* which was not found. *name1* purged.**

Explanation

The *name1* SDF (System Data File) with spool ID *spoolid* has an entry within it for *name2*. However, an SDF with a file name of *name2*, having the proper characteristics and spool file class as indicated in the entry, was not found. This occurred during a save operation for *name1*. The SDF with *name1* has been purged.

System action

System operation continues. *name1* has been purged.

User response

Examine *name2* to identify other SDFs which may also need to be purged. Purge any member saved segment SDFs which belong to the purged *name1* segment space SDF. Then define the member saved segment and all of the segment spaces of which it is a part before trying to save the member saved segment.

HCP1390E **Encrypt Paging cannot be enabled due to missing hardware support**

Explanation

Encrypted Paging ephemeral key support relies on the TRNG facility of CPACF (Feature 3863) for the IBM z14™ being enabled for your z/VM logical partition. If it is not enabled, encryption cannot be performed.

System action

ENCRYPT PAGING is set to OFF and an error message is issued.

User response

If the TRNG facility of CPACF is not available on your hardware, you cannot enable encrypted paging. To use encrypted paging, ensure that CPACF is installed on your machine. Then re-IPL the system. If Feature 3863 has not been licensed, please contact IBM for more information about enabling this hardware support.

HCP1391E **Encryption algorithm previously set to *algorithm*; no change made**

Explanation

The algorithm value indicated in the message was previously set, either in the system configuration file or using a CP command, and then the SET ENCRYPT command was specified with a different algorithm than what was originally defined. An algorithm for Encrypted Paging can be set only once per system IPL.

System action

The SET ENCRYPT command fails.

User response

Specify the correct algorithm. If a change to the ALGORITHM value is required, update your configuration either by modifying the ENCRYPT statement in the system configuration file or by changing the automated method used to issue the SET ENCRYPT command. Then re-IPL your z/VM system.

HCP1392E **Encrypt Paging is required; no change made**

Explanation

Once the REQUIRED option is specified for Encrypted Paging, SET ENCRYPT cannot be used to modify the setting. This lock mechanism is provided for auditing assurance.

System action

The SET ENCRYPT command fails.

User response

If you require a change to the ENCRYPT setting, re-IPL your z/VM system. If ENCRYPT PAGING REQUIRED is specified in the system configuration file, modify that file before re-IPLing the system.

HCP1393W **Encrypt paging cannot be enabled due to missing hardware support, specified as required**

Explanation

The last valid ENCRYPT PAGING statement in the system configuration file specified that encryption is required, but the LPAR is missing the hardware support needed to implement encryption. Encrypted Paging ephemeral key support requires that the TRNG facility of CPACF (Feature 3863) of the IBM z14™ is enabled for your z/VM LPAR. If CPACF is not enabled, encryption cannot be performed.

System action

The system IPL terminates with a disabled wait state (wait state code = 1393).

User response

Validate that CPACF has been enabled for your LPAR, then re-IPL the system. Or, connect to the DASD containing the system configuration file from an alternate z/VM system and remove the REQUIRED keyword to allow for system IPL.

HCP1394I **Encryption of paging changed from *state* to *state*, [with algorithm *algorithm*,] by user *userid***

Explanation

This message is issued to the primary system operator after a successful completion of the SET ENCRYPT command that results in a change of encryption status. This message is provided for auditing assurance.

System action

None.

User response

None.

HCP1399E ***userid*: Guest frame at virtual address *addr* was found still pinned during the last pass of memory move.**

Explanation

This message is issued in response to a **VMRELOCATE MOVE** command when the guest page at the indicated guest virtual address was found to be still pinned during the last pass of guest memory move.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Take a **VMDUMP** that includes the indicated page of storage for the guest whose relocation failed.

HCP1401I **Expanded Storage is not supported.**

Explanation

CP does not support expanded storage (XSTORE). If you have expanded storage configured, consider reconfiguring it to central storage.

System action

System operation continues.

User response

None.

HCP1404E **Asynchronous page-fault handshaking for the host-primary space is already in effect. PAGEX cannot be activated.**

Explanation

Page-fault handshaking for the host-primary address space (invoked by the VERSION=2 parameter being specified with the PFAULT TOKEN macro) is already active for the virtual configuration. Therefore, the PAGEX pseudo-page-fault facility cannot be initiated.

System action

Page-fault handshaking for the host-primary address space continues. The pseudo-page-fault facility is not activated.

User response

No action is necessary because the program running in the virtual machine is already running with the performance improvements available from page-fault handshaking.

HCP1449I **The SCMBK operand of the STORAGE statement is ignored on this processor.**

Explanation

This message is issued when the SCMBK operand of the STORAGE statement in the SYSTEM CONFIG file is specified and you are using format-1 measurement blocks.

System action

None.

User response

None.

HCP1451I **CP is unable to dump {page *hexloc* of|storage from} ASIT *asit*, spaceid *spaceid*.**

Explanation

The VMDUMP command was unable to dump the page you requested:

- Because of a paging error—the starting address of the page that could not be dumped is at location *hexloc* of the address space.
- Because the address space has become unavailable to your virtual machine since you entered the VMDUMP command.

This message also is issued if a paging error occurs while you are getting the page's storage key for the storage key map. If errors occur both while you are getting the storage key and while you are dumping the page, this message is given twice.

System action

Command processing continues. The resulting dump will not contain either the noted page's storage or the noted page's storage key in the storage key map.

If this message appears twice, the resulting dump will contain neither the storage nor the storage key.

If the address space became unavailable, the dump may contain a portion of the storage requested from the address space.

User response

None.

HCP1452I The VMDUMP command is unable to process CPU dump data for more than 64 CPU's.

Explanation

The VMDUMP command is unable to process CPU dump data for more than 64 CPUs.

System action

Command processing continues.

User response

None.

HCP1453E CPU *nn* is not defined because it already exists.

Explanation

The user attempted to define or redefine a processor to an address where a virtual CPU already exists.

System action

None.

User response

Issue the command QUERY VIRTUAL CPUS to examine the virtual machine configuration and determine what changes are needed.

HCP1454E CPU *nn* does not exist.

Explanation

The user specified a virtual CPU address that does not exist in the virtual machine configuration.

System action

System operation continues.

User response

Issue the command QUERY VIRTUAL CPUS to examine the virtual machine configuration and determine what changes are needed.

HCP1455E The variations of this message are explained below.

— Variation 1 CPU *nn* is not started because it is a secondary processor that is not operational.

Explanation

A command with a BEGIN or implicit BEGIN function was executed for a secondary processor in the configuration that was not in the correct state to start. An implicit BEGIN function is an ATTN or a REQUEST.

System action

The BEGIN function is ignored.

User response

Make sure the following two requirements are satisfied in order to make the secondary processor operational:

1. The virtual machine must be in z/Architecture mode.
2. The guest operating system must support secondary processors.

— Variation 2 CPU *nn* is not started because it is in check-stop state.

Explanation

A command with a BEGIN or implicit BEGIN function, was executed while a processor in the configuration was check-stopped. An implicit BEGIN function is an ATTN or a REQUEST.

System action

The BEGIN function is executed on any non-check-stopped processors in the virtual configuration. The check-stopped processor ignores the BEGIN function.

User response

Take one of the following actions:

1. Issue the SYSTEM RESET command.
2. Use the DETACH CPU *nn* command to detach the check-stopped processor.

If you issue the SYSTEM CLEAR command, it will clear storage, and any currently-running tasks are destroyed.

HCP1456E The base CPU *nn* cannot be detached.

Explanation

A DETACH CPU command was issued that specified the base processor created at LOGON. This message is issued for any DETACH CPU ALL command that returns the user to a virtual uniprocessor environment.

System action

The attempt to detach the base processor is ignored.

User response

None.

HCP1457I The SLEEP command processing was halted due to an attention interrupt at the console.

Explanation

A SLEEP command specifying a time interval was issued. The SLEEP interval never expired, however. The SLEEP command ended due to an attention being signaled at the user's console.

System action

The SLEEP command ends. If the command was issued through a DIAGNOSE X'08' instruction, a return code of 1457 is passed back to the virtual machine.

This message is never actually issued to the user's terminal. This definition exists only in order to document the return code.

User response

None.

HCP1458E An attempt was made to define more CPU's than is allowed in your directory.

Explanation

The user entered a DEFINE CPU command that would cause the user to exceed the number of processors for which the user is authorized.

System action

No processors have been defined.

User response

If more processors are required, your user ID must be authorized to have more processors. These processors will be defined in the user directory. Contact your operations staff.

HCP1459E The variations of this message are explained below.

Explanation

- The virtual machine is placed in system check-stop state.
- The virtual machine is placed in check-stop state due to a system malfunction with CPU *nn*.

The virtual machine was placed in check-stop or system check-stop state due to an uncorrectable system malfunction. This system malfunction could not be described specifically by a machine check interrupt condition.

Some possible malfunctions are:

A bad page in a named saved system (NSS):
This problem could be reflected to other users sharing the NSS. An example would be a damaged page on DASD that is part of the CMS NSS. The same could be true of a discontiguous saved segment (DCSS).

A damaged processor:
A damaged processor could be taken offline and the user redispatched.

System action

Execution of instructions and interrupts terminates, the interval timer is not updated, and console function mode is entered.

System programmer response

In the case of a failed NSS or DCSS, resave the segment or system that failed. If another DASD pack is available, use it to retry the IPL. If the problem persists, contact the IBM Support Center to diagnose and correct the error.

User response

Issue the SYSTEM RESET or SYSTEM CLEAR command to leave check-stop state. If the problem persists, contact your system programmer. The check-stop might be indicative of a more serious error.

HCP1460E Only one of the CPU commands may specify multiple virtual CPUs when entering nested CPU commands.

Explanation

More than one nested CPU command specifying multiple virtual CPUs was entered.

System action

The command is not executed. System operation continues.

User response

Enter the command again without specifying multiple virtual CPUs on more than one nested CPU command.

HCP1461E No adjunct configuration defined

Explanation

The user named in the ADJUNCT directory statement is not defined in the user directory, or the named user is defined but is not a NOLOG user.

System action

The command is not executed. System operation continues.

User response

Request a system administrator to define an adjunct template user in the user directory file, or make sure the existing adjunct template user is defined with NOLOG in the password operand of the USER statement.

HCP1462E An attempt was made to define CPU(s) that would create a virtual CPU configuration that is not valid

Explanation

The type of CPU being defined was not valid with the current primary virtual CPU type or an attempt was made to change the primary virtual CPU to a type that is not valid.

System action

The command is not executed; system operation continues.

User response

Refer to the DEFINE CPU command documentation to determine what CPU types are allowed in valid virtual CPU configurations.

HCP1463I CPU affinity is suppressed for CPU type *type*

Explanation

CPU affinity could not be obtained for the specified CPU type because a real CPU of the same type does not exist.

System action

CPU affinity is suppressed for the specified CPU type; system operation continues.

User response

None.

HCP1464I CPU affinity is suppressed for CPU *n*

Explanation

CPU affinity could not be obtained for the specified CPU because a real CPU of the same type does not exist.

System action

CPU affinity is suppressed for the specified CPU; system operation continues.

User response

None.

HCP1465I CPU affinity is no longer suppressed for CPU type *type*

Explanation

CPU affinity has been obtained for a CPU type that was suppressed.

System action

CPU affinity is no longer suppressed for the specified CPU type; system operation continues.

User response

None.

HCP1466I CPU affinity is no longer suppressed for CPU *n*

Explanation

CPU affinity has been obtained for a CPU that was suppressed.

System action

CPU affinity is no longer suppressed for the specified CPU; system operation continues.

User response

None.

HCP1467E Virtual *type* processors are not supported on your system.

Explanation

The real system to which you are logged on does not support a real processor of the type you are trying to define. Virtual processors of this type can only be defined on hardware that supports real processors of the same type.

System action

The virtual CPU is not defined; system operation continues.

User response

None.

HCP1469E An attempt was made to define a virtual configuration mode that is not compatible with your virtual CPU configuration.

Explanation

The virtual configuration mode being defined is not compatible with the current virtual CPU configuration.

System action

The command is not executed; system operation continues.

User response

Refer to the documentation for the SET VCONFIG MODE and DEFINE CPU commands to determine what virtual configuration modes and CPU types are allowed in valid virtual CPU configurations.

HCP1470E The virtual configuration mode that was specified is not valid. It must be LINUX because CP is running in a Linux®-Only logical partition.

Explanation

The SET VCONFIG MODE command was issued for a user of a z/VM system that is running in a Linux-only logical partition, and the mode specified was not LINUX.

System action

The command is not executed; system operation continues.

User response

The virtual configuration mode of the user is already set to LINUX during logon. It is not necessary to issue the SET VCONFIG MODE command for this user, although the command SET VCONFIG MODE LINUX is accepted and processed without any change.

HCP1471E The virtual configuration mode that was specified is not valid. CF is the only valid virtual configuration mode for CFVM users.

Explanation

A CFVM virtual machine has its virtual configuration mode set to CF by automatic logon processing and is not permitted to change that mode.

System action

The virtual configuration mode is not changed; system operation continues.

User response

None.

HCP1472I **One or more directory COMMAND statements were found for the CFVM user and were discarded. Directory COMMAND statements are not allowed for CFVM users.**

Explanation

A CFVM virtual machine is not allowed to use directory COMMAND statements.

System action

The commands that were specified are not executed. LOGON processing continues.

User response

None.

HCP1473E **CPU Affinity cannot be turned OFF for a user in a resource pool**

Explanation

The SET CPUAFFINITY command was issued against a user ID that is in a resource pool. All user IDs in a resource pool must have CPU affinity ON.

System action

The command is not executed; system operation continues.

User response

Check whether the correct user ID was specified on the SET CPUAFFINITY command. If you are sure that you want CPU affinity set to OFF for this user, then the user must first be removed from the resource pool.

HCP1500E **[XAUTOLOG failed for *userid*:] Logon cannot be done because userid *userid* is in system hold state.**

Explanation

A user who had been placed in system hold attempted to log on to the system. If the command was an asynchronous XAUTOLOG, then the message will indicate which user ID did not get logged on.

System action

The LOGON request is denied.

User response

Ask the system operator about the status of the HOLD request. If the user is removed from HOLD status, then the user can reenter the command.

HCP1501E **An accounting error was encountered.**

Explanation

The LOGON accounting routine returned a nonzero return code.

System action

The user is not logged on to the system.

User response

Contact your system programmer for specific requirements for accounting procedures.

HCP1502E **The directory entry for this userid is in use.**

Explanation

The directory entry for a user who is logging on is already in use by LOGON processing. This message is issued when someone else is logging on at the same time under the same virtual machine user ID.

System action

LOGON/AUTOLOG denied.

User response

Attempt LOGON/AUTOLOG using another user ID.

HCP1503E **Hold status is not set because the hold queue is full.**

Explanation

A HOLD command was issued after the maximum number of 32 users in the hold queue had been reached.

System action

System operation continues.

Operator response

Enter the FREE command to free a user from the hold queue.

HCP1505I The device being used for LOGON conflicts with the {console definition in the directory | current console definition}

Explanation

A LOGON command was issued on a non-3270 device for a user that has a 3270 console defined in the directory, or a LOGON command was issued on a non-3270 device to reconnect to a user whose console is a 3270.

System action

LOGON processing continues.

User response

Disconnect and reconnect on a compatible device.

HCP1506E The last line (50) in the log message is already in use.

Explanation

You entered the SET LOGMSG command without *nn* to add a message at the end of the log message, but the last entry (50) is already in use.

System action

The command is not executed, system operation continues.

User response

Examine the log message for unused or unneeded lines. Use the SET LOGMSG command to free the last lines or reenter the SET LOGMSG with the *nn* for specific log message placement.

HCP1507E The directory is not valid.

Explanation

During initial LOGON processing for the system operator, or during subsequent system operation, CP found the system directory to be invalid.

System action

This message is sent to the system operator to inform him or her to enter the DIRECTXA command.

Operator response

Enter the DIRECTXA command to bring a valid directory online.

HCP1509E You are not authorized to issue XAUTOLOG with the PASSWORD or PROMPT options.

Explanation

A class G user has entered the XAUTOLOG command with either the PASSWORD or PROMPT option.

System action

The command is not executed; system operation continues.

User response

Directory authorization is the only way for class G users to successfully issue XAUTOLOG. Reenter the command with the DIRECTORY (default) option instead of the PASSWORD or PROMPT option.

HCP1510I Device *vdev* not defined; *device vdev* already defined

Explanation

The virtual device specified is already defined within the virtual machine's configuration. If the type is CONSOLE, your console was not defined because only one virtual CONSOLE is allowed on each virtual machine configuration.

System action

System operation continues.

User response

Enter the command again; specify a virtual device that is not already defined within the virtual machine configuration, or detach the conflicting virtual device before reentering the command.

If you want to redefine your console to some other device type, you must first detach your current console and then define the new one.

HCP1512E The variations of this message are explained below.

— Variation 1 **The System/370 machine mode was requested, but CP does not support System/370 mode virtual machines; the machine mode will be set to XA instead.**

Explanation

The directory entry for this user specified a machine mode that is not valid.

System action

The user ID has been logged on, but the machine mode was set to XA.

User response

Specify a valid machine mode. To run System/370 applications, use the 370 Accommodation Facility. For more information, see *z/VM: CP Programming Services*.

— Variation 2 **The z/Architecture-only machine mode was requested, but is not supported in this relocation domain. The machine mode will be set to ESA instead.**

Explanation

The directory entry for this user or a LOGON command option specified MACHINE Z, a mode that is not valid in the current relocation domain.

System action

The user ID has been logged on, but the machine mode was set to ESA.

User response

Arrange with your system administrator to have your virtual machine associated with a relocation domain that supports the z/Architecture-only facility.

HCP1513E **[XAUTOLOG failed for *userid*:] A logon is already in progress [on {*type rdev*|*type ldev*|*luname*|SYSC}]**

Explanation

The user ID you specified in a LOGON, AUTOLOG, or XAUTOLOG command is already in the logon process. If the message does not include the terminal identification, then an AUTOLOG or XAUTOLOG is being performed for that user.

Some terms used in this message are:

type
Device type

rdev
Real device number

ldev
Logical device number

luname
VTAM definition of the terminal as a SNA logical unit

SYSC
System console.

System action

The command is not executed. System operation continues.

User response

No user action is required.

HCP1514E ***userid* already disconnected**

Explanation

An attempt to disconnect a user by issuing the FORCE command failed because the user was already disconnected.

System action

The command is not executed; system operation continues.

User response

No user action is required.

HCP1515E **Invalid operand *operand* passed on MACHINE option.**

Explanation

An operand that was not valid was passed on the MACHINE option of the LOGON or XAUTOLOG command.

System action

Command is terminated.

User response

Resubmit the command with a valid MACHINE mode setting.

HCP1516E **XAUTOLOG failed: The PROMPT option cannot be specified with the AT command.**

Explanation

The PROMPT option is not allowed on an XAUTOLOG command if XAUTOLOG is issued from a remote SSI member with the AT command. PROMPT is not allowed in this case because of the difficulty of prompting the AT command issuer for a password on the remote system.

System action

Command is terminated.

User response

XAUTOLOG the user with the PROMPT option from a user on the local SSI member.

HCP1550E **The variations of this message are explained below.**

Explanation

- *rdev* is an invalid device class.
- Device *rdev* device class does not match requested device class.

You issued a CP SET RDEVICE command that tried to change the device class of a device. The command failed for one of the following reasons:

- CP does not recognize the specified device class as a valid CP device.
- CP cannot allow you to change the device class because the RDEVICE is a different class than the device type requested.
- CP cannot process the RDEVICE FEATURE request because the selected device does not support the requested feature.

System action

CP does not execute the command; system operation continues.

User response

Specify a valid device class and then issue the CP SET RDEVICE command again.

HCP1551E ***value* is an invalid number for MODIFY.**

Explanation

The option specified requires that a decimal value be supplied, but the operand given is either not a decimal value, not within a required range, or has a greater length than is possible for a valid operand.

System action

The command is not executed; system operation continues.

User response

Reenter the command with a valid decimal value as specified in the description of the MODIFY command in *z/VM: CP Commands and Utilities Reference*.

HCP1552E **More than {4|8} operands were specified for the {CHARS|CLASS} option.**

Explanation

The option specified allows more than one operand to follow, but no more than four for CHARS or eight for CLASS.

System action

The command is not executed; system operation continues.

User response

Reenter the command with the proper number of operands.

HCP1553I ***userid* is not in hold status for {printer|punch|logon|all devices}.**

Explanation

The user ID had no HOLD set for the specified option. For the ALL option the user ID was in neither PRINT, ALL, LOGON, nor PUNCH HOLD status.

System action

The command is not executed; system operation continues.

Operator response

Enter the QUERY HOLD command to display users that are being held, and check the hold options set for that user ID.

HCP1554E A blank directory entry has been bypassed for the *vdev* virtual machine.

Explanation

During LOGON processing, a blank directory entry has been detected while defining virtual devices.

System action

The blank entry is ignored and this message is sent to the system operator.

Operator response

Inform system support personnel so that the directory entry can be corrected.

User response

None.

HCP1558E Command processing cannot complete.

Explanation

A file has been deleted during the processing of one of the following QUERY commands:

- FILES
- RDR
- PRT
- PUN
- NSS
- IMG
- SDF
- UCR
- TRF
- NLS

Therefore, the command is unable to complete.

System action

The command is not executed; system operation continues.

User response

Reenter the command.

HCP1559E The DSNAME is truncated to 16 characters.

Explanation

The data set name specified on the NAME operand is longer than the maximum allowed length of 16 characters.

System action

The first 16 characters of the string specified are assigned to the data set name.

User response

None.

HCP1560E File was not {changed|transferred} because it was created with the NORETURN option.

Explanation

The spool file requested was not changed or transferred because the NORETURN option was specified with DIAGNOSE X'94' when the file was created. The NORETURN option indicates that the file cannot be changed or transferred back from the dump receiver.

System action

System operation continues.

Programmer response

Contact your system support personnel if you need access to this file.

HCP1561E User *userid*'s file *spoolid* is {held | purged | flushed | requeued | closed}.

Explanation

An error occurred when CP was trying to read or write a file. This message follows message HCP240E, HCP241E, HCP270E, HCP2501E, HCP2502E, or HCP2504E.

System action

The status of the file after the error occurred is as follows:

held
The file is placed in user HOLD.

purged
The file is purged because the user or the operator purged it.

flushed
The file is disconnected from the device by the operator. It may be held or purged depending on the options entered on the FLUSH command.

requeued
The error occurred with the separator FCB or character set. The file is returned to the print queue for possible processing on another device.

closed
The file is closed and its disposition depends on the setting of its HOLD and KEEP status.

User response

Refer to the description of the error message issued before this one for the response.

HCP1562E The length of buffer *bufname* is invalid.

Explanation

An attempt is made to send a forms control buffer (FCB) or a universal character set (UCS) buffer to an impact printer. When the member *bufname* is read from the image library, the buffer is found to have a greater length than the maximum allowed for an FCB or UCS buffer length.

System action

The system does not load the buffer into the device.

User response

Redefine the buffer to the correct length. Then, enter the command again.

HCP1600E Specified cylinder number *cylinder* is not on the virtual DASD.

Explanation

The cylinder number is invalid. It is not on the specified virtual device.

System action

The command is not executed; system operation continues.

User response

Ensure that the cylinder number is on the virtual device specified, and reenter the command.

HCP1601E The PARM option is not allowed for the system specified with the IPL command.

Explanation

The named saved system (NSS) specified in your IPL command was defined by your installation to accept no parameter string input (PARMREGS=NONE) from the IPL command.

System action

The command is not executed; system operation continues.

User response

Remove the PARM option and any following data from your IPL command and then reenter the command. If you received this message while logging on (LOGON), contact your installation support personnel to correct the IPL statement in your directory entry.

If you believe the PARM data you specified is correct, check to see if you specified the correct named saved system on the IPL command. If you believe that both the PARM data and system name are correct, contact your installation support personnel to verify that the named saved system is installed correctly.

HCP1603W INSUFFICIENT OR FAULTY STORAGE FOR CP RESIDENCE

Explanation

During the IPL process or system bounce processing, insufficient or faulty storage was encountered. The probable causes are:

- Set Prefix instruction failed when trying to establish the prefix page.
- There is insufficient storage available for the system nucleus.
- A 4KB storage block that was to contain a page of the CP nucleus is faulty.

System action

The system enters a wait state (wait-state code = 1603).

Operator response

IPL to the Stand-Alone Loader screen and specify X'2000' as the LOAD ORIGIN address. If the error persists, contact the appropriate hardware service personnel.

HCP1604W **DASD *rdev volid* NOT PROPERLY ALLOCATED**

Explanation

The module HCPISA determined that the checkpoint or warm-start areas were not allocated as PERM.

System action

The system enters a wait state (wait-state code = 1604).

User response

If this message is issued during system initialization, then use ICKDSF or the CPFMTXA utility to check, and change if necessary, the allocation of PERM space for the checkpoint or warm-start area. The checkpoint or warm-start area is specified on the SYSTEM_RESIDENCE statement in the system configuration file.

HCP1605W **Unexpected error during CP storage initialization**

Explanation

During CP storage initialization, insufficient frames were available to initialize the SXS DAT tables.

System action

The system enters a wait state (wait state code = 1605).

User response

If the problem persists, contact your system support personnel to diagnose and correct the problem.

HCP1608I **SOME MESSAGES SENT DURING TERMINATION AND INITIALIZATION HAVE NOT BEEN SAVED.**

Explanation

During the previous system shutdown (if any) and the current system bring-up, messages sent to the operator were saved for display, once the system was fully up and the operator logged on.

However, there was not enough warm-start space available to save all the messages that were sent to the operator during shutdown and bring-up. The messages received after the warm-start message save area was full have been lost.

System action

Messages that could not be saved have been discarded.

User response

None. The warm-start message area cannot be increased.

HCP1611E **The variations of this message are explained below.**

— Variation 1 **Limit of three ALTERNATE definitions exceeded.**

Explanation

An attempt was made to define more than three ALTERNATE paths for a LOADDEV or DUMPDEV configuration.

System action

The command is rejected.

User response

Issue a **QUERY LOADDEV** or **QUERY DUMPDEV** command. If the alternate paths are not defined correctly, issue a **SET LOADDEV CLEAR** or **SET DUMPDEV CLEAR** command to clear the configuration parameters and reissue **SET LOADDEV** or **SET DUMPDEV** commands to establish the correct ones.

— Variation 2 **Device *fcp_vdev* PORTNAME *hhhhhhhh hhhhhhhh* is already part of the definition.**

Explanation

An attempt was made to define a primary or ALTERNATE path but a path with the specified device number and port name is already defined.

System action

The command is rejected.

User response

Reissue the SET LOADDEV or SET DUMPDEV command with a device number and port name that is not already part of an existing path definition.

For more information, see the following topics:

- QUERY DUMPDEV
- QUERY LOADDEV
- SET DUMPDEV

- SET LOADDEV

HCP1612E **Conflicting device numbers were specified on the IPL and SET LOADDEV or SET DUMPDEV commands.**

Explanation

An attempt was made to IPL by using an FCP-attached device. However, the device number that was specified on the **IPL** command (the *fcp_vdev* operand) was different than the device number that was set in the LOADDEV or DUMPDEV DEVICE parameter. If the **IPL** command specifies the *fcp_vdev* operand, then the LOADDEV or DUMPDEV DEVICE parameter must match the *fcp_vdev* operand or be cleared. The LOADDEV DEVICE parameter is used for IPL without dump, the DUMPDEV DEVICE parameter is used for IPL with dump.

An alternative method is to use the **IPL LOADDEV** or **IPL DUMPDEV** command. The LOADDEV or DUMPDEV DEVICE parameter must be set to the appropriate load device number.

System action

The **IPL** command is rejected.

User response

Use the **QUERY LOADDEV** or **QUERY DUMPDEV** command to determine the LOADDEV or DUMPDEV DEVICE parameter. Also, confirm the correct load device number.

If the LOADDEV or DUMPDEV DEVICE parameter is set to the correct load device number:

Try the IPL again. You can use either form of the IPL command:

- Use the **IPL** command and specify the LOADDEV or DUMPDEV operand.
- Use the **IPL** command and specify the device number (*fcp_vdev* operand). The device number that you specify on the **IPL** command must match the LOADDEV or DUMPDEV DEVICE parameter.

If the LOADDEV or DUMPDEV DEVICE parameter is set to an incorrect device number:

Clear the LOADDEV or DUMPDEV DEVICE parameter or set it to the correct load device number by using the **SET LOADDEV** or **SET DUMPDEV** command. Then, try the IPL again.

If you clear the DEVICE parameter, use the **IPL** command and specify the device number (*fcp_vdev* operand).

If you set the LOADDEV or DUMPDEV DEVICE parameter to the correct load device, you can use either form of the IPL command:

- Use the **IPL** command and specify the LOADDEV or DUMPDEV operand.
- Use the **IPL** command and specify the device number (*fcp_vdev* operand). The device number that you specify on the command must match the device number that you set in the LOADDEV or DUMPDEV DEVICE parameter.

The same problem and message can occur at logon. If the error occurs at logon, update the IPL directory statement and LOADDEV directory statements:

- If the IPL directory statement specifies the load device number (*fcp_vdev* operand), then the load device number that is specified on the LOADDEV directory statement DEVICE operand must be cleared or must match the load device number that is specified on the IPL directory statement.
- If the IPL directory statement specifies the LOADDEV operand, then the LOADDEV directory statement DEVICE operand must be set to the load device number.

After the directory statements are updated, run DIRECTXA. After DIRECTXA runs, the user must log off and then log on.

For more information, see the following topics:

- In *z/VM: CP Commands and Utilities Reference*:
  - IPL
  - QUERY DUMPDEV
  - QUERY LOADDEV
  - SET DUMPDEV
  - SET LOADDEV
- In *z/VM: CP Planning and Administration*:
  - IPL Directory Statement
  - LOADDEV Directory Statement

HCP1613E **An attempt was made to set both SCSI and ECKD parameters for a future IPL. These are conflicting parameters.**

Explanation

LOADDEV parameters can be set for only one device type at a time (SCSI or ECKD). After the first LOADDEV parameter is set, either by a **SET LOADDEV** command or a LOADDEV directory statement, all subsequent LOADDEV parameters that are set must be appropriate for the same device type until a CLEAR operand is specified.

Likewise, DUMPDEV parameters can be set for only one device type at a time (SCSI or ECKD). After the first DUMPDEV parameter is set, all subsequent DUMPDEV parameters that are set must be appropriate for the same device type until a CLEAR operand is specified.

The device type for LOADDEV parameters can be different from the device type for DUMPDEV parameters.

The following operands of the **SET LOADDEV** and **SET DUMPDEV** commands set parameters that are specific for SCSI devices. After a parameter is set for an ECKD device, you cannot use these operands until a CLEAR operand is specified:

- SCSI
- PORTNAME
- LUN
- BR_LBA

The following operands of the **SET LOADDEV** and **SET DUMPDEV** commands set parameters that are specific for ECKD devices. After a parameter is set for a SCSI device, you cannot use these operands until a CLEAR operand is specified:

- ECKD
- BOOTREC

SCSI is the default device type. For example, after the following command is entered, the SCSI device type is set.

```
SET LOADDEV CLEAR DEVICE 1111
```

Until another **SET LOADDEV CLEAR** command is issued, subsequent **SET LOADDEV** commands must specify parameters that are specific for SCSI devices.

System action

The command is rejected.

User response

If you want to set parameters for an IPL without dump:

1. Issue the **SET LOADDEV** command with the CLEAR operand.
2. Issue the **SET LOADDEV** command with operands to set IPL parameters for a SCSI device or an ECKD device but not for both kinds of devices.

If you want to set parameters for an IPL with dump:

1. Issue the **SET DUMPDEV** command with the CLEAR operand.
2. Issue the **SET DUMPDEV** command with operands to set IPL parameters for a SCSI device or an ECKD device but not for both kinds of devices.

HCP1614E The variations of this message are explained below.

— Variation 1 An IPL without the SECURE operand cannot be performed because the system being dumped was IPLed with the SECURE operand.

Explanation

A dump program must be IPLed with the SECURE operand to dump a system that was IPLed with the SECURE operand. This message is issued when an attempt is made to IPL a dump program without the SECURE operand if the running system was IPLed by using secure IPL.

System action

The **IPL** command is rejected.

User response

1. Determine that the stand-alone dump program was built to be IPLed securely.
2. Issue the **SET DUMPDEV** command with the SECURE operand, which indicates that a secure IPL is requested.
3. Issue the **IPL DUMPDEV** command again.

— Variation 2 An IPL without the SECURE operand cannot be performed because the virtual machine has the SECUREIPLREQUIRED option set in its directory entry.

Explanation

The system administrator set the SECUREIPLREQUIRED operand on this user's OPTION directory statement, which requires a secure IPL. An attempt was made to do an IPL that is not secure. A secure IPL starts only when both of the following conditions are true:

- The **IPL LOADDEV** or **IPL DUMPDEV** command is used to IPL.
- The SECURE parameter was previously set by using the **SET LOADDEV** or **SET DUMPDEV** command or the LOADDEV directory statement.

Any other form of the **IPL** command fails with this message if the SECUREIPLREQUIRED option is in effect for this user.

System action

The **IPL** command is rejected.

User response

If you want to IPL without dump:

1. Determine that the operating system program was built to be IPLed securely.
2. Use the **SET LOADDEV** command to indicate that the next IPL will be a secure IPL.
3. Issue the **IPL LOADDEV** command.

If you want to IPL with dump:

1. Determine that the stand-alone dump program was built to be IPLed securely.
2. Use the **SET DUMPDEV** command to indicate that the next IPL with dump will be a secure IPL.
3. Issue the **IPL DUMPDEV** command.

HCP1615E IPL LOADDEV|DUMPDEV failed because not all necessary parameters have been set.

Explanation

Before a device can be IPLed, sufficient information about the location of the program must be set by using one or more **SET LOADDEV** or **SET DUMPDEV** commands or the LOADDEV directory statement. This message is received if an IPL is attempted when insufficient location information is set.

This message might be displayed during a logon if the user directory entry includes an IPL LOADDEV statement and all the necessary LOADDEV statements are not included. This error is detected at logon time, not when DIRECTXA is run.

System action

The **IPL** command is rejected.

User response

Use the **QUERY LOADDEV** or **QUERY DUMPDEV** command to determine which settings are missing:

- For IPL of a SCSI device, the PORTNAME, LUN, and virtual device number parameters must be set. Nonzero values must be set for PORTNAME and LUN. The other parameters either are optional or have a default value.
- For IPL of an ECKD device, only the device number parameter must be set. The other parameters either are optional or have a default value.

If the error occurred when the **IPL** command was issued, then issue the **SET LOADDEV** or **SET DUMPDEV** command to set the missing, necessary parameters. Set the other parameters or verify that the default values are appropriate for your environment. After the parameters are set, issue the **IPL** command again.

If the error occurred at LOGON, then set the operands appropriately in the LOADDEV user directory statements, run DIRECTXA, and log on again.

HCP1616E IPL of a dump program failed because no dump save areas are available. Try again later.

Explanation

To avoid overcommitment of virtual free storage, z/VM allows a limited number of dump save areas to be simulated at the same time. This message is received if other virtual machines are using the allowed number and no dump save areas are available for this operation now.

System action

After this message is displayed, the IPL fails and the virtual machine is put into stopped state.

User response

Wait for a while and try again. After some time, the other virtual machines that used a dump save area should finish their IPL. When they finish their IPL, they release the save area that they used and the save area becomes available for other virtual machines. If the problem persists, it could be because another virtual machine's IPL failed and the save area was not released. In that case, have your system programmer contact IBM for assistance in determining which users did not release their save areas.

HCP1617E IPL by device number failed because secure IPL can be done only when using the LOADDEV or DUMPDEV form of the command.

Explanation

When an FCP device is IPLed, the **IPL** command or IPL directory statement cannot specify the *fcp_vdev* operand (device number) if the SECURE option is set in the LOADEV or DUMPDEV parameters.

System action

The **IPL** command fails.

User response

Set the SECURE or NOSECURE load parameter and use the IPL command format for the required type of IPL. IPL types vary by security requirements, dump requirements, and whether the IPL occurs at logon or when a guest is running.

If a secure IPL is required, you must set the SECURE load parameter and IPL by using the LOADDEV or DUMPDEV operand on the **IPL** command or IPL directory statement.

To initiate a secure IPL (without dump) for a running guest, complete the following steps:

1. Use the **SET LOADDEV** command to set the SECURE parameter and set all other required load parameters.
2. IPL the load device by using the **IPL LOADDEV** command.

A secure IPL is initiated immediately.

To initiate a secure IPL with dump for a running guest, complete the following steps:

1. Use the **SET DUMPDEV** command to set the SECURE parameter and set all other required load parameters.
2. IPL the load device by using the **IPL DUMPDEV** command.

A secure IPL is initiated immediately.

To initiate a secure IPL (without dump) when the user logs on, complete the following steps:

1. Use the LOADDEV directory statements to set the SECURE parameter and set all other required load parameters.
2. Use the IPL LOADDEV directory statement.

A secure IPL is initiated when the user logs on.

If a secure IPL is not required, you can specify the *fcp_vdev* operand on the **IPL** command or IPL directory statement. When an IPL uses the *fcp_vdev* operand, the NOSECURE parameter must be set in the LOADDEV or DUMPDEV parameters.

You can verify the LOADDEV parameters settings by using the **QUERY LOADDEV** command. You can verify the DUMPDEV parameters settings by using the **QUERY DUMPDEV** command.

For more information, see the following topics:

- In *z/VM: CP Commands and Utilities Reference*:
  - IPL
  - QUERY DUMPDEV
  - QUERY LOADDEV
  - SET DUMPDEV
  - SET LOADDEV
- In *z/VM: CP Planning and Administration*:
  - IPL Directory Statement
  - LOADDEV Directory Statement

HCP1630I **PDR volume *volid1* has been replaced with PDR volume *volid2*.**

Explanation

A SET SSI PDRVOLUME command completed successfully and this message is displayed to the system operator to indicate that a PDR relocation has occurred on the system.

System action

None.

User response

None.

HCP1631I **PDR on volume *volid1* is obsolete. Please update the system configuration file with replacement PDR volume *volid2*.**

Explanation

A successful PDR relocation has occurred, but the system configuration file has not been updated with the volume ID of the replacement PDR volume.

System action

System operation continues using the replacement volume.

User response

Update the SSI statement in the system configuration file with the volume ID of the replacement PDR volume and ensure that the specified PDR volume is CP-owned or in the user volume list.

HCP1634A **If any other systems in the SSI cluster are running, system integrity will be compromised and data corruption may occur. {Confirm that the following systems are shut down: *system_id* | Confirm that all systems in the SSI cluster are shut down.}**

Confirm the persistent data record (PDR) is located on volume label. Enter GO to continue with the clearing of the PDR. After that normal IPL continues. To abort the IPL, enter STOP.

Explanation

The CLEARPDR IPL parameter was specified on the Stand-Alone Program Loader screen when the system was IPLed, and the system was configured to be a member of an SSI cluster on an SSI statement in a system configuration file.

System action

The system waits for an operator response.

Operator response

Choose one of these actions, as requested in the text of the message:

- After confirming that all other members in the SSI cluster are shut down, CP will clear the PDR. Once the PDR is cleared, the IPL will continue.
- Cancel the IPL. The system enters a disabled wait state (wait state code = 6719). See message HCP6719W for more information.

HCP1635I **Persistent data record (PDR) on volume *label* for SSI *ssiname* will be automatically upgraded.**

Explanation

This message is issued during system initialization to indicate that the system automatically expanded the record size of each system in the persistent data record (PDR) for the specified z/VM Single System Image cluster (*ssiname*) on the given volume (*label*). The system records on disk must be expanded in order for the system to initialize and function in the SSI cluster.

System action

The system automatically upgrades the PDR on the specified volume and continues initialization. If the upgrade is unsuccessful, the system will:

- Issue hard abend ARD011, or
- issue message HCP9052W and enter disabled wait state 9052.

User response

See the documentation for hard abend ARD011 or message HCP9052W (as appropriate). If the problem persists, contact your IBM Support Center personnel.

HCP1636I **Continuing attempts to join the SSI cluster.**

Explanation

This message is issued when the RETRY option is entered at prompt HCP1696A.

System action

The system continues to attempt to join the SSI cluster by waiting for ISFC connectivity (if the local system is not connected to other Joined members of the SSI cluster), waiting for Suspended members to unsuspend, or attempting to synchronize the local system state to JOINING.

User response

Determine if the local system was able to join the SSI cluster. If not, determine if the SSI cluster is in Stable mode, and if so, determine if the local system is connected to all Joined members of the SSI cluster. If not connected, determine why the local system is not connected and restore connectivity. If the SSI cluster is not in Stable mode, determine the reason for Safe mode and restore the SSI cluster to Stable mode. For more information on SSI cluster problem diagnosis, see z/VM SSI Environment in *z/VM: CP Planning and Administration*.

HCP1637E **Communication error when exchanging service feature data. *function_description* code *nnnn***

Explanation

The SSI manager is unable to communicate with other members of the SSI cluster. The *function_description* and code *nnnn* provide details of the failure.

System action

The members of the SSI cluster enter Suspended state and the SSI mode changes to Safe until the communication problem is resolved.

System programmer response

There might be other error messages on the system operator's console that would help you diagnose this problem. Verify that the ISFC links between this and all other members of the SSI cluster are operational. If

necessary, contact your IBM Support Center personnel for assistance.

HCP1638E Error processing service feature data from *sysname* code *nnnn*

Explanation

The local member could not interpret the service feature bitmap data from member *sysname*. The code *nnnn* indicates the reason for the failure.

System action

If this message is displayed on a member that is already Joined, an error indicator is sent back to the Joining member. The Joining member enters Isolated state. The Joined member remains Joined and the SSI cluster returns to Stable mode.

If this message is displayed on the member that is Joining, the Joining member enters Isolated state. The Joined member(s) remain Joined and the SSI cluster returns to Stable mode.

System programmer response

Contact your IBM Support Center personnel for assistance.

HCP1639E The product definition for *prodid* may not be added, altered or deleted.

Explanation

The *prodid* that was specified is not one that can be changed by the SET PRODUCT command.

System action

The command is not executed; system operation continues.

User response

Refer to the memo to users or program directory associated with the product or feature that you are trying to change.

HCP1640E The variations of this message are explained below.

— Variation 1 Volume *volid* is already the PDR volume.

Explanation

An attempt to relocate the PDR volume using the SET SSI PDRVOLUME command was unable to complete successfully because the specified replacement PDR volume is already the PDR volume.

System action

The command terminates. The SET SSI PDRVOLUME command was unsuccessful.

User response

Verify that the correct volume ID was specified on the command.

— Variation 2 Replacement PDR volume *volid* is not properly formatted.

Explanation

An attempt to relocate the PDR volume using the SET SSI PDRVOLUME command was unable to complete successfully because the specified replacement PDR volume is not formatted properly or was not initialized with the correct cluster name.

System action

The command terminates. The SET SSI PDRVOLUME command was unsuccessful.

User response

Make sure the specified replacement PDR volume has been initialized by FORMSSI with the correct cluster name or contains a previously-used PDR that is marked obsolete and still names the same cluster. Use the DISPLAY function of the FORMSSI utility to validate the PDR.

— Variation 3 Replacement PDR volume *volid* is not online.

Explanation

An attempt to relocate the PDR volume using the SET SSI PDRVOLUME command was unable to complete successfully because the specified replacement PDR volume is not online on the issuing system.

System action

The command terminates. The SET SSI PDRVOLUME command was unsuccessful.

User response

Make sure the specified replacement PDR volume is online on the issuing system.

— Variation 4 **Replacement PDR volume *volid* is not attached to the system.**

Explanation

An attempt to relocate the PDR volume using the SET SSI PDRVOLUME command was unable to complete successfully because the specified replacement PDR volume is not attached to the issuing system.

System action

The command terminates. The SET SSI PDRVOLUME command was unsuccessful.

User response

Make sure the specified replacement PDR volume is attached to the issuing system.

— Variation 5 **Replacement PDR volume *volid* is not available on all member systems.**

Explanation

An attempt to relocate the PDR volume using the SET SSI PDRVOLUME command was unable to complete successfully because not all joined member systems support the PDRVOLUME operand of the SET SSI command.

System action

The command terminates. The SET SSI PDRVOLUME command was unsuccessful.

User response

Make sure the SET SSI PDRVOLUME feature is available on all joined member systems.

— Variation 6 **SET SSI PDRVOLUME was rejected on system *sysname***

Explanation

An attempt to relocate the PDR volume using the SET SSI PDRVOLUME command was unable to complete successfully because the specified system rejected this command.

System action

The command terminates. The SET SSI PDRVOLUME command was unsuccessful.

User response

Make sure the specified system has the proper access to the PDR volume specified by the SET SSI PDRVOLUME command. The PDR volume must be online and attached to the specified system. The PDR volume must have been initialized by the FORMSSI utility with the correct cluster name or it must contain a previously-used PDR that is marked obsolete and still names the same cluster. Use the DISPLAY function of the FORMSSI utility to validate the PDR.

HCP1641I **The variations of this message are explained below.**

Explanation

- *statement* statement ignored because REPAIR IPL parameter was specified
- All XLINK and XSPOOL statements ignored because REPAIR IPL parameter was specified

The REPAIR IPL parameter was specified on the Stand-Alone Program Loader screen when the system was IPLed. The statement specified has been ignored. The REPAIR IPL parameter allows a system to IPL in order to fix an error in the system configuration file.

System action

System operation continues.

User response

Fix any problems that caused you to IPL with the REPAIR IPL parameter.

HCP1642W **SSI statement conflicts with use of XLINK MINIDISK sharing**

Explanation

This wait state occurs if both an SSI statement and an XLINK statement are found in the system configuration file.

System action

The system enters a disabled wait state (wait state code = 1642).

User response

If another member in the SSI cluster is active, make changes to fix the problem from that member. If no other member in the SSI cluster is active, re-IPL and specify the REPAIR IPL parameter. For more information about using the Stand-Alone Program Loader (SAPL) and passing IPL parameters, see Using

the Stand-Alone Program Loader in *z/VM: System Operation*.

Use the CPSYNTAX utility to check for errors in the system configuration file before using that file during system IPL.

HCP1643E System *sysname* was specified more than once.

Explanation

The specified system was listed multiple times on the SET SSI command. Duplicate system names are not allowed.

System action

The command is not executed; system operation continues.

User response

Reissue the SET SSI command using unique system names.

HCP1644I The following is the current status of the SSI member systems according to the PDR:

Explanation

This message is issued during system initialization when the local member is waiting for ISFC connectivity to remote members that are already joined to the SSI cluster. The following information is displayed after this message:

- SSI name
- PDR device volume label and address
- For each remote member in the SSI cluster:
  - The system slot number
  - The system name
  - The system state
  - The PDR heartbeat.

System action

System initialization continues.

User response

Ensure that all joined remote members have active ISLINKs (ISFC connections) to the local member.

HCP1645E SET SSI command did not complete because an error occurred reading the PDR

Explanation

An attempt to mark a member of the SSI cluster Down using the SET SSI MEMBER command was unable to complete successfully because, while attempting to check if the member was still active, an error occurred reading the PDR.

System action

The command is not executed. System operation continues.

User response

Determine why the PDR cannot be read by the member on which the SET SSI command was issued and correct the error.

HCP1646E Too many qualifiers specified on BEGIN or END statement. No more than 64 qualifiers may be specified.

Explanation

More than 64 qualifiers were specified on a BEGIN or END statement in a system configuration file.

System action

If a BEGIN statement caused this error, the statement is ignored and no BEGIN block is opened. If an END statement caused this error, any open BEGIN statements are cleared.

This error message can be displayed during system initialization or by the CPSYNTAX utility. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1689). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

Correct the BEGIN or END statement by specifying fewer qualifiers. For more information, see the user response in message "HCP1689W" on page 456.

HCP1647E Unexpected END statement found. BEGIN and corresponding END statement must be in the same file.

Explanation

An END statement was found in a different file than the file in which the current open BEGIN statement was located.

System action

Any open BEGIN statements are cleared.

This error message can be displayed during system initialization or by the CPSYNTAX utility. If this error occurs during system initialization, the system enters a disabled wait state (wait state code = 1689) after the entire system configuration file is processed. If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

Correct the system configuration file specification so that any corresponding BEGIN and END statements occur in the same file. For more information, see the user response in message "HCP1689W" on page 456.

HCP1648E SET SSI command did not complete because a higher priority SSI action is in progress.

Explanation

The synchronization of a SET SSI command operation between the local member and remote members of the SSI cluster was aborted in order for the system to process a higher priority SSI action.

System action

The command is not executed. System operation continues.

User response

Try to determine what SSI action has taken precedence over the SET SSI command and wait for that action to complete. Then reissue the SET SSI command. If necessary, contact your IBM Support Center personnel for assistance.

HCP1649E SET SSI command was rejected by another member of the SSI cluster.

Explanation

SET SSI command execution was aborted because a remote member of the SSI cluster failed verification of the SET SSI operation.

System action

The command is not executed. System operation continues.

User response

See the description of the SET SSI command in *z/VM: CP Commands and Utilities Reference* to determine if the command was issued in an appropriate environment. If necessary, contact your IBM Support Center personnel for assistance.

HCP1650E SET SSI command is not allowed because SSI mode is *mode*.

Explanation

The SET SSI command is not allowed when the SSI cluster is in IN-FLUX or SAFE mode, with one exception: when the SSI cluster is in SAFE mode due to a member being in Unknown state and the SET SSI MEMBER *system_id* DOWN command is used to mark that member Down.

System action

The command is not executed; system operation continues.

User response

If the SSI mode is IN-FLUX, a member is in a state transition (Joining or Leaving the SSI cluster). This transition is expected to be a short term state. In general, new SSI-wide operations are deferred until the SSI mode changes to Stable. In this case, you should wait until the SSI mode changes to Stable and then reenter the SET SSI command.

If the SSI mode is Safe, a member is in one of the following states:

- Suspended State

  A member is in Suspended state when it does not but should have connectivity to another member in the SSI cluster. When a member that is in Suspended state receives a connectivity state change for another member, the member in Suspended state attempts to join the SSI cluster if the other member's status is changed from unconnected to connected.
- Unknown State

  A remote member's state is Unknown if connectivity from the local member is lost. If the remote member is inactive, you can mark the remote member Down using the SET SSI MEMBER *system_id* DOWN command. Once the SSI mode returns to Stable

mode with all members in either Down, Isolated, or Joined state, reenter your original SET SSI command.

HCP1651E SET SSI command is not allowed because this system's state is Isolated.

Explanation

The SET SSI command is not allowed when the local member is in Isolated state. A member is in Isolated state when it cannot join the SSI cluster because a failure in the enablement of SSI operations or because a failure occurred while attempting to join the SSI cluster.

System action

The command is not executed; system operation continues.

User response

Determine why the local member is in Isolated state and fix the problem. Once the problem is fixed, re-IPL the member in order for it to join the SSI cluster. Once the member has been re-IPLed and is no longer in Isolated state, reenter the SET SSI command, if necessary.

HCP1652E SSI system slot *slot_number* is already Available.

Explanation

The slot specified on the SET SSI SLOT command is already marked Available and is available for allocation of a new member of the SSI cluster.

System action

The command is ignored; system operation continues.

User response

Ensure that you specified the correct slot number.

HCP1653E System slot *slot_number* cannot be marked Available because its current state is *state*.

Explanation

The system slot specified on the SET SSI SLOT command contains a member that has not been shut down. A member can not be removed from the SSI cluster if the member is not in the Down state.

System action

The command is not executed; system operation continues.

User response

Ensure that you specified the correct slot number. Then shut down the specified member and reenter the appropriate SET SSI SLOT command.

HCP1654E SSI system slot *slot_number* already in use.

Explanation

The slot specified on the SET SSI SLOT command is already assigned to another member. A slot must be marked Available before the slot can be updated to contain a new system identifier.

System action

The command is not executed; system operation continues.

User response

If you want to change the specified slot to a different member, do the following:

1. Shut down the member that is currently configured in the slot
2. Enter the SET SSI SLOT command for the specified slot using the AVAILABLE keyword
3. Enter the SET SSI SLOT command with a new system identifier for the specified slot
4. Update the system configuration file.

HCP1655E System identifier already being used in slot *slot_number*.

Explanation

The system identifier specified on the SET SSI SLOT command is already configured in the slot *slot_number*. A member cannot be configured in more than one slot in the SSI cluster.

System action

The command is not executed; system operation continues.

User response

If you want to change the slot number associated with the system identifier specified on the SET SSI SLOT command, do the following:

1. Shut that member down.
2. Issue the SET SSI SLOT command with the AVAILABLE keyword to remove the system identifier from its current slot.
3. Issue the QUERY SSI command to determine the current configuration of the SSI cluster and which member slots are available.
4. Issue the SET SSI SLOT command to configure the system identifier in one of the available slots.
5. Update the system configuration file.

HCP1656E **System *sysname* cannot be marked Down because its current state is *state*.**

Explanation

The member specified on the SET SSI MEMBER *sysname* DOWN command is in the given state. A member can be marked DOWN only when the member is in the UNKNOWN state and the member is inactive. A member is determined to be active if it appears responsive. The operator is responsible for verifying that the member is and will remain down.

System action

The command is not executed; system operation continues.

User response

Verify that the correct system name was specified. If possible, shut down the specified member and retry the SET SSI MEMBER *sysname* DOWN command. If necessary, contact your IBM Support Center personnel for assistance.

HCP1657E **System *sysname* cannot be marked Down because it is currently active.**

Explanation

The member specified on the SET SSI MEMBER *sysname* DOWN command is active. A member can be marked down only when the member is not active. A member is determined to be active if it appears responsive. The operator is responsible for verifying that the member is and will remain down.

System action

The command is not executed; system operation continues.

User response

Verify that the correct system name was specified. If possible, shut down the specified member and retry the SET SSI MEMBER *sysname* DOWN command. If necessary, contact your IBM Support Center personnel for assistance.

HCP1658E **SET SSI command is not allowed because this system was IPLed with the REPAIR IPL parameter**

Explanation

The SET SSI command is not allowed when the system has been IPLed using the REPAIR IPL parameter.

System action

The command is not executed; system operation continues.

User response

If any other members in the SSI cluster are running, system integrity will be compromised and data corruption can occur. Confirm that all members in the SSI cluster are shut down. Make changes to the SSI cluster configuration using the SSI statement in a system configuration file.

HCP1659E **SET SSI command is not allowed because the user directory is not compatible with SSI.**

Explanation

One of the following occurred:

- You are attempting to define a second member of your SSI cluster but your user directory is not SSI-enabled.
- The number of SSI members was changed unexpectedly during processing of the SET SSI command.

System action

The command is not executed; system operation continues.

User response

Convert the user directory to be SSI-enabled and reissue the SET SSI command.

HCP1660I {REPAIR | CLEARPDR} IPL parameter specified. All other systems in the SSI cluster must be shut down.

Explanation

The REPAIR parameter or the CLEARPDR IPL parameter was specified on the Stand-Alone Program Loader screen when the system was IPLed, and the system was configured to be a member of an SSI cluster on an SSI statement in a system configuration file.

System action

Message HCP1660I is followed by operator prompt HCP1661A for REPAIR, or HCP1634A for CLEARPDR, requesting the operator to continue or stop the IPL.

User response

Verify all systems in the SSI cluster are shut down. For more information, refer to message HCP1661A for REPAIR or message HCP1634A for CLEARPDR. For more information on these parameters, see the "Using the Stand-Alone Program Loader" chapter in *z/VM: System Operation*.

HCP1661A If any other systems in the SSI cluster are running, system integrity will be compromised and data corruption may occur. {Confirm that the following systems are shut down: *system_id* | Confirm that all systems in the SSI cluster are shut down.} Enter GO to continue with the IPL and bypass automatic logon of virtual machines. To abort the IPL, enter STOP.

Explanation

The REPAIR IPL parameter was specified on the Stand-Alone Program Loader screen when the system was IPLed and the system was configured to be a member of an SSI cluster on an SSI statement in a system configuration file.

System action

The system waits for an operator response.

Operator response

Choose one of the options that CP gives you:

- After confirming that all other members in the SSI cluster are shut down, continue the IPL. Automatic logon of some special user IDs (for EREP, accounting, symptom records, startup, etc.) does not occur. Also, terminal devices are not enabled.
- Cancel the IPL. The system enters a disabled wait state (wait state code = 6719). See message HCP6719W for more information.

HCP1662I REPAIR IPL parameter specified but this system is not defined as a member of an SSI cluster. Virtual machines will not be automatically logged on during IPL.

Explanation

The REPAIR IPL parameter was specified on the Stand-Alone Program Loader screen when the system was IPLed and the system was not defined to be a member of an SSI cluster through the SSI statement in a system configuration file.

System action

System operation continues. Automatic logon of some special user IDs (for EREP, accounting, symptom records, startup, etc.) does not occur. Also, terminal devices are not enabled.

User response

None.

HCP1663E SSI function *function* has failed for service *service*.

Explanation

An SSI-related function could not be completed by the indicated service.

System action

System operation continues but SSI functions and access to shared resources might be restricted.

User response

Analyze all messages to determine what caused the failure.

HCP1664E SET SSI command is not allowed because [the specified system | system *sysname*] is not a member of the SSI cluster.

Explanation

The SET SSI command was issued to mark a member in the SSI cluster DOWN, but the specified system is not a member of the SSI cluster.

System action

The command is not executed; system operation continues.

User response

Verify that the correct system name was specified and reissue the SET SSI command specifying the correct system identifier of the member of the SSI cluster.

HCP1666E **This system is not a member of an SSI cluster.**

Explanation

The system on which the SET SSI command is issued must be a member of an SSI cluster.

System action

The command is not executed; system operation continues.

User response

Verify the command was entered on the correct system, or configure the system to be a member of an SSI cluster using the SSI system configuration statement. Once the system is a member of an SSI cluster, use the SET SSI command to modify the SSI configuration.

HCP1667E **Variations of this message are explained below.**

Explanation

- The *command* command is not allowed because the system is a member of an SSI cluster.
- THE *utility* UTILITY IS NOT ALLOWED BECAUSE THE SYSTEM IS A MEMBER OF AN SSI CLUSTER.

This command or utility is not allowed if the system is a member of an SSI cluster.

System action

The command or utility is not executed; system operation continues.

User response

Verify that the command or utility was issued on the correct system.

HCP1668E **System *sysname* cannot be forced Down because it is the local system.**

Explanation

The SET SSI command was issued to mark a member of the SSI cluster Down, but the specified system is the system on which the SET SSI command was issued. The local system cannot be marked Down by the SET SSI command.

System action

The command is not executed; system operation continues.

User response

If you did not intend to specify the local system, reissue the SET SSI command with the correct system name. If the specified system was correct, you must either use the CP SHUTDOWN command to terminate the system or issue the SET SSI command on another member of the cluster.

HCP1669I **Waiting for ISFC connectivity in order to join the SSI cluster.**

Explanation

When a system is configured as a member of an SSI cluster, the system joins the cluster during IPL. In order to join the cluster, the system must have ISFC connectivity to remote members that are already joined.

System action

System initialization stops until connectivity to remote joined members is established.

User response

Ensure that all joined remote members have active ISLINKs (ISFC connections) to the local system.

HCP1670W **This system is configured as a member of an SSI cluster. ACTIVATE ISLINK statement(s) are missing from the system configuration file, or could not complete successfully.**

Explanation

There are not enough ACTIVATE ISLINK statements in the system configuration file to define a direct connection to each member, or existing ACTIVATE statements could not complete due to a problem such as a device error. When a system is configured as a member of an SSI cluster, the system configuration file must contain ACTIVATE ISLINK statements defining a direct connection to each of the other members of the SSI. Otherwise, the system cannot establish ISFC connectivity with the other members during IPL.

System action

The system enters a disabled wait state (wait state code = 1670).

User response

ACTIVATE ISLINK statements defining a direct connection to each of the other members of the SSI must be added to the system configuration file. Update the local system's configuration file from an active member of the SSI and re-IPL. Run CPSYNTAX on the updated system configuration file to check for errors before IPLing the system with that file. If no other member in the SSI cluster is active, re-IPL the local system using the REPAIR IPL parameter, and update the system configuration file. For information on using the Stand-Alone Program Loader (SAPL) and passing IPL parameters, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

If ACTIVATE statements exist for all members, examine the OPERATOR console for messages about device errors such as `HCPFCA2750I ISFC ACTIVATE is deferred for offline device` *nnnn*, or `HCPFCA006E Invalid device type -` *nnnn*.

The situation where ACTIVATE statements do not complete due to a problem such as a device error might occur in a disaster recovery situation, because the persistent data record (PDR) incorrectly shows other members as active when in fact they are down. To resolve this problem, re-initialize the PDR by IPLing one of the members of the cluster in REPAIR mode and using the FORMSSI utility CREATE function. Or re-IPL one of the members and specify the CLEARPDR IPL parameter to re-initialize the PDR. For more information about the REPAIR or CLEARPDR IPL parameter, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

HCP1671E **This system is not a member of the SSI cluster.**

Explanation

An SSI statement was found but the *systemid* of the executing system is not a member on the SSI statement.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. The rest of the system configuration file is processed. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1682). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

Ensure that the *systemid* is being assigned as expected by a SYSTEM_IDENTIFIER statement. If it is, ensure that the *systemid* appears on the SSI statement. For more information, see the user response of message “HCP1682W” on page 455.

HCP1672E **The variations of this message are explained below.**

Explanation

- SSI statement encountered but system identifier has not been defined.
- The system ID was changed by a SYSTEM_IDENTIFIER statement after the SSI statement was processed.

A system name must be already assigned to the system when the SSI statement is encountered and the *systemid* cannot be changed after the SSI statement.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. The rest of the system configuration file is processed. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1682). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

Change the order of statements in the system configuration file or add a SYSTEM_IDENTIFIER statement, if necessary. For more information, see the user response of message HCP1682W.

HCP1673E **The system identifier *sysname* is not the same as the gateway identifier *gateid*. They must be the same because this system is a member of an SSI cluster.**

Explanation

After processing the entire system configuration file, CPSYNTAX determined that the SYSTEM_IDENTIFIER_DEFAULT or SYSTEM_IDENTIFIER statement in effect has specified a system identifier that is not the same as the gateway identifier. If a system is a member of an SSI cluster, the gateway identifier must match the system identifier.

System action

CPSYNTAX continues processing the file.

User response

Correct the offending SYSTEM_IDENTIFIER_DEFAULT or SYSTEM_IDENTIFIER statement before using the configuration file for system IPL.

HCP1673W **The system identifier *sysname* is not the same as the gateway identifier *gateid*. They must be the same because this system is a member of an SSI cluster.**

Explanation

After processing the entire system configuration file, CP has determined that the SYSTEM_IDENTIFIER_DEFAULT or SYSTEM_IDENTIFIER statement in effect has specified a system identifier that is not the same as the gateway identifier. If a system is a member of an SSI cluster, the gateway identifier must match the system identifier.

System action

All queued initialization messages are displayed and the system enters a disabled wait state (wait state code = 1673).

User response

If another member in the SSI cluster is active, make changes to fix the problem from that member. Correct the offending SYSTEM_IDENTIFIER_DEFAULT or SYSTEM_IDENTIFIER statement. If no other member in the SSI cluster is active, re-IPL and specify the REPAIR IPL parameter. For more information about using the Stand-Alone Program Loader (SAPL) and passing IPL parameters, see Using the Stand-Alone Program Loader in *z/VM: System Operation*. Use CPSYNTAX to check for errors in the system configuration file before using the file during system IPL.

HCP1674W **Unable to change local state to Isolated. The state change request was rejected by another member of the SSI cluster.**

Explanation

An attempt to join the SSI cluster failed due to one of the following reasons:

- The state change to Joined was rejected by a local system service. Previous message HCP1663E indicates which service failed.
- The local member could not interpret the service feature bitmap data from another member of the cluster. Previous message HCP1638E indicates what problem occurred.

Upon the failure of the join attempt, the local member attempted to synchronize its state to Isolated with the other Joined members of the cluster, but one of the other members rejected the state change request. The system cannot initialize any function unless it can change to Isolated state.

System action

The system enters a disabled wait state (wait state code = 1674).

User response

Determine the reason for the failure to join based on previously issued messages. Make changes to fix the problem from one of the active members of the cluster, and then re-IPL the local member.

HCP1675E **Missing qualifier on BEGIN statement**

Explanation

The BEGIN statement in the system configuration file requires that you specify one or more record qualifiers, but you did not specify a record qualifier.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. The statement is ignored and no BEGIN block is opened. If this error occurs during system initialization, after the entire

system configuration file is processed, the system enters a disabled wait state (wait state code = 1689). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

Correct the BEGIN statement. For more information, see the user response of message "HCP1689W" on page 456.

HCP1676E **No END statement found for BEGIN statement on line *number* of file *fn ft*. BEGIN and corresponding END statement must be in same file.**

Explanation

The end of a file was encountered and a BEGIN block was still open. A BEGIN and corresponding END statement must be in same file.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. The open BEGIN statement is closed. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1689). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

Add an END statement in the file containing the BEGIN statement in the appropriate place. For more information, see the user response of message "HCP1689W" on page 456.

HCP1677E **Unexpected END statement because no BEGIN statement is in effect**

Explanation

An END statement was found and no BEGIN statement is in effect.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1689). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

Investigate why an unmatched END statement appears in the file. There might have been a syntax error with the associated BEGIN statement. Also remember that BEGIN and corresponding END statement must be in same file. Correct the error. For more information, see the user response of message "HCP1689W" on page 456.

HCP1678E **BEGIN statement encountered while another BEGIN statement is in effect.**

Explanation

A BEGIN statement was found while another BEGIN statement is in effect. A BEGIN block cannot be nested.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. The BEGIN statement is ignored. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1689). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

If this error was caused by an attempt to nest BEGIN blocks, rearrange the statements so the BEGIN blocks are not nested. If this error was caused by a missing END statement or an extra BEGIN statement, correct the error. For more information, see the user response of message "HCP1689W" on page 456.

HCP1679E **Specified qualifier(s) do not match qualifiers that are in effect**

Explanation

An END statement was found and the specified qualifiers are not the same as those specified on the last BEGIN statement.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. The system processes the END statement as though the correct qualifiers were specified. Thus, any previous BEGIN is ended. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1689). If this error occurs when

using CPSYNTAX, processing of the configuration file continues.

User response

Correct the error. For more information, see the user response of message "HCP1689W" on page 456.

HCP1680E **Record qualifiers not allowed because BEGIN statement is in effect**

Explanation

A record qualifier was encountered on a statement while a BEGIN block is open.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. The statement is ignored; system operation continues. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1689). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

This error could be caused by a missing END statement or extra BEGIN statement. Correct the error. For more information, see the user response of message "HCP1689W" on page 456.

HCP1681E **SSI statement already processed - statement ignored**

Explanation

A second SSI statement was found when processing the system configuration file. Only one SSI statement is allowed.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. Extra SSI statements are ignored and the rest of the system configuration file is processed. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1682). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

Delete the extra SSI statement from the system configuration file before the next IPL. For more information, see the user response of message "HCP1682W" on page 455.

HCP1682W **Errors found while processing SSI statement.**

Explanation:
This wait state could occur for syntax errors on the SSI statement or various other errors related to the SSI statement.

System action:
The message is put on the queue of messages to be displayed and the system enters a disabled wait state (wait state code = 1682).

User response

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, use a Hardware Management Console (HMC) to open the Operating System Messages window for the logical partition where you tried to IPL z/VM.

If another member in the single system image (SSI) cluster is active, make changes to fix the problem from that member. If no other member in the SSI cluster is active, re-IPL and specify the REPAIR IPL parameter.

Use CPSYNTAX to check for errors in the system configuration file before using that file during system IPL.

For more information about using the Stand-Alone Program Loader (SAPL) and passing IPL parameters, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

HCP1683E ***statement*** **statement on line** ***number*** **of file** ***fn ft fm*** **must not be specified with SSI statement.**

Explanation

During CPSYNTAX processing, an XLINK or XSPOOL statement was found in a system configuration file that also contained an SSI statement.

System action

CPSYNTAX continues processing the file.

User response

If this system is part of an SSI cluster, delete any XLINK or XSPOOL statements from the system

configuration file before using the configuration file for system IPL.

HCP1684E ***statement*** **statement conflicts with SSI statement**

Explanation

During system initialization, a XLINK or XSPOOL statement has been encountered and an SSI statement is also present in the system configuration file.

System action

After the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1642).

User response

If this system is part of an SSI cluster, delete any XLINK or XSPOOL statements from the system configuration file. For more information, see the user response of message "HCP1642W" on page 445.

HCP1685E **The same system ID appears more than once on the SSI statement.**

Explanation

An SSI statement has the same system identifier in two or more slots.

System action

This error message can be displayed during system initialization or by the CPSYNTAX utility. The SSI statement is in error and is ignored. If this error occurs during system initialization, after the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1682). If this error occurs when using CPSYNTAX, processing of the configuration file continues.

User response

Correct the SSI statement. For more information, see the user response of message "HCP1682W" on page 455.

HCP1687E **Variations of this message are explained below.**

Explanation

- The statement failed because the LPAR name is unknown. Specify the LPAR option of CPSYNTAX.
- &LPARNAME cannot be resolved. Specify the LPAR option of CPSYNTAX.

CPSYNTAX found a statement that contained the string &LPARNAME or a SYSTEM_IDENTIFIER statement that specified the LPAR operand. The LPAR option was not specified when CPSYNTAX was invoked, so there was no LPAR name for CPSYNTAX to use.

System action

CPSYNTAX continues processing the file.

User response

Specify the LPAR option when running CPSYNTAX on this configuration file.

HCP1688E **&LPARNAME cannot be resolved because system is not running in an LPAR. The string NOTLPAR has been substituted for &LPARNAME.**

Explanation

This error can occur only on some older processor models that are able to be configured in Basic Mode. &LPARNAME is valid only when running in LPAR mode.

System action

System operation continues.

User response

Remove the &LPARMODE specification from the configuration file if the system does not run in an LPAR.

HCP1689W **An error was found related to a BEGIN or END statement. System IPL will fail unless this error is corrected.**

Explanation

An error was found while processing a BEGIN or END statement in the system configuration file.

System action

After the entire system configuration file is processed, the system enters a disabled wait state (wait state code = 1689).

User response

If another member in the SSI cluster is active, make changes to fix the problem from that member. If

no other member in the SSI cluster active, re-IPL and specify the REPAIR IPL parameter. For more information about using the Stand-Alone Program Loader (SAPL) and passing IPL parameters, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

An error related to a BEGIN or END statement is a serious error and could cause system configuration file statements to be processed that should be ignored. If possible, re-IPL your system using a backup version of the system configuration file and fix the BEGIN or END statement. Use CPSYNTAX to check for errors in the system configuration file before using that file during system IPL.

HCP1690I The following is the current status of the SSI cluster according to CP QUERY SSI STATUS:

Explanation

This message is issued during system initialization to indicate the status of the SSI cluster when the local system becomes joined to the SSI cluster. The format of the response is the same as the CP QUERY SSI STATUS command and is documented in *z/VM: CP Commands and Utilities Reference*. To view the help information for this command, enter:

```
help cpquery ssi
```

System action

System initialization continues.

User response

Verify the status of the SSI cluster when appropriate.

HCP1691E SSI service initialization failed

Explanation

During system initialization, one or more SSI services detected a non-terminating error.

System action

System operation continues but the system enters Isolated state and does not join the SSI cluster. Access to shared resources is not permitted.

User response

Analyze previous messages to determine what caused the error. The system cannot join the SSI cluster from Isolated state. Once the problem is fixed, re-IPL the system so it joins the SSI cluster.

HCP1692W SSI service initialization failed

Explanation

During system initialization, one or more SSI services detected a terminating error.

System action

The system enters a disabled wait state (wait state code = 1692).

User response

Analyze previous messages to determine what caused the error. If another member in the SSI cluster is active, make changes to fix the problem from that member. If no other member in the SSI cluster is active, then re-IPL the local system using the REPAIR IPL parameter, fix the problem, and re-IPL the system in order for it to join the SSI cluster.

HCP1693E SSI Manager communication initialization failed

Explanation

Initialization of SSI Manager socket communication with remote members has failed.

System action

System operation continues but the system enters Isolated state and does not join the SSI cluster. Access to shared resources is not permitted.

User response

Analyze previous messages to determine what caused the error, and ensure that an ACTIVATE ISLINK statement for each remote member is included in the system configuration file. The system cannot join the SSI cluster from Isolated state. Once the problem is fixed, re-IPL the system so it joins the SSI cluster.

HCP1694E SSI service communication initialization failed

Explanation

Initialization of socket communication for one or more SSI services has failed.

System action

System operation continues but the system enters Isolated state and does not join the SSI cluster. Access to shared resources is not permitted.

User response

Analyze previous messages to determine what caused the error, and ensure that an ACTIVATE ISLINK statement for each remote member is included in the system configuration file. The system cannot join the SSI cluster from Isolated state. Once the problem is fixed, re-IPL the system so it joins the SSI cluster.

HCP1695E **All remote members of this SSI cluster are Isolated or shut down or appear inactive, in that they have not updated their status on disk recently. This system cannot join the SSI cluster unless all non-Isolated inactive members become active or are marked Down in the Persistent Data Record (PDR).**

Explanation

This message appears before prompt HCP1696A. The local system cannot join the SSI cluster because other members that have previously joined the cluster are no longer active according to the persistent data record. It is possible that the previously joined members abended or did not shut down properly.

System action

Prompt HCP1696A is issued and the system waits for an operator response.

User response

Refer to the documentation for prompt HCP1696A.

HCP1696A **If any other non-Isolated members in the SSI cluster are running, system integrity will be compromised and data corruption may occur. Confirm that the following systems are shut down: *sysname1...* Enter GO to mark all non-Isolated members of the SSI cluster Down in the PDR and continue IPL. Enter RETRY to continue to attempt to join the SSI cluster. To abort the IPL, enter STOP.**

Explanation

This prompt appears after message HCP1695E. The local system cannot join the SSI cluster because other members that have previously joined the cluster are no longer active according to the persistent data record (PDR). It is possible that the previously joined members abended or did not shut down properly.

System action

The system waits for an operator response.

User response

Verify that all members of the SSI cluster are either Isolated or are not running. Any member that is IPLing and is at this message prompt is considered Down and not running. If any systems in the cluster are running and are in a state other than Isolated, determine if the running systems are still not updating the PDR. If so, enter STOP to abort the IPL and determine why the non-Isolated systems are not updating their status on disk or responding to the system which received prompt HCP1696A. If necessary, contact your IBM Support Center personnel for assistance.

If the other systems are either Down or running and actively updating the PDR, enter RETRY so that the local system can continue IPL and attempt to join the SSI cluster.

If all systems are known to be either Isolated or inactive, enter GO so that the state of all systems in the cluster (except those which are in Isolated state) will be changed to Down in the PDR. This will allow the local system to continue initialization.

If prompt HCP1696A appears on more than one system at a time in the cluster, enter GO on only one system. Once the system on which you entered GO successfully joins the cluster, enter RETRY on the other systems so that they may continue to IPL and join the SSI cluster. If you answer GO on more than one system, the systems on which you previously entered GO will receive a PLM018 abend.

HCP1697I **The state of SSI system *systemid* has changed from *ssi_state* to *ssi_state***

Explanation

The state of one of the members of the SSI cluster has changed.

System action

System operation continues. Depending on the new state, communication with remote members and access to shared resources might not be permitted.

User response

If the new state indicates either a communication failure or that the system has failed to join the SSI

cluster, determine the cause of the failure and correct it. In some cases, re-IPL of the system might be necessary.

HCP1698I The mode of the SSI cluster is *ssi_mode*

Explanation

The SSI mode is changed based on the states of all SSI members.

System action

System operation continues. Depending on the new mode, communication with remote members and access to shared resources might not be permitted.

User response

If the new mode is SAFE, determine the cause and correct it. In some cases, re-IPL of the member might be necessary.

HCP1699E Waiting to join SSI cluster *ssi_name* because one or more member systems is in Suspended state

Explanation

A system cannot join an SSI cluster during initialization when one or more active members of the SSI cluster are in Suspended state.

System action

System initialization stops until the active members are no longer in Suspended state. When none of the active members remain in Suspended state, initialization of the local member will continue and it will join the cluster.

User response

When members of an SSI cluster are in Suspended state, the most likely cause is unexpected loss of ISFC connectivity to other member(s) in the cluster. Check ISFC connectivity among the active members.

HCP1705I Unexpected CP errors have occurred *errcount* times during APVIRTUAL crypto message processing.

Explanation

CP encountered a situation that is not expected to occur.

System action

The resource is removed from the shared pool and system operation continues using other operational shared crypto resources, if available.

User response

Verify that all service for CP Crypto support has been applied. If the problem persists, contact the IBM Support Center. A snapdump of CP might be needed.

HCP1706I Crypto AP *apnum* Domain *domnum* returned an undefined Response Code *respcode* for Error State *errflag*.

Explanation

Shared crypto resource AP *apnum*, Domain *domnum* has returned an unsupported return code identified by *respcode*, resulting in the resource being placed in an error state identified by *errflag*.

System action

The resource is removed from the shared pool and system operation continues using other operational shared crypto resources, if available.

User response

Issue the QUERY CRYPTO DOMAIN command to obtain the status of the crypto resource and to determine whether alternate crypto resources need to be assigned to the shared pool.

Use the ATTACH CRYPTO TO SYSTEM command to assign alternate crypto resources to the shared pool, if needed.

Verify that all service for CP Crypto support has been applied.

If CP service was current when the error occurred, do *not* reattach the failing crypto resource. Report the error to the IBM Support Center, including all of the information displayed by this message and the output from the QUERY CRYPTO DOMAIN command.

If CP service was *not* current when the error occurred, apply the missing service. Then use the ATTACH CRYPTO TO SYSTEM command to add the detached resource back into the shared pool. If the error persists, report the error to the IBM Support Center, including all of the information displayed by this message and the output from the QUERY CRYPTO DOMAIN command.

HCP1707I **A check-stop state has been detected for crypto AP *apnum* Domain *domnum*.**

Explanation

CP has detected that this crypto resource is in check-stop state. No new messages will be queued to this resource.

System action

System operation continues.

User response

Ensure that crypto resources assigned to the shared pool are online and operational.

If this problem persists, then report it to IBM Service. A snapdump may be required.

HCP1708I **A crypto request issued by user *username* has exceeded the maximum retry threshold.**

Explanation

Requests sent to the Crypto shared pool by user *username* have been retried but continue to fail.

System action

CP fails the request and continues to process other requests. System operation continues.

User response

Check the operation of the shared crypto resources on the system. If the shared pool is operational, check the validity of the crypto requests issued by this user.

HCP1709I **There are no operational AP crypto resources in the shared pool. Number of messages rejected for user *username* is *nnnn*.**

Explanation

There are no operational and online resources assigned to the shared pool.

System action

System operation continues.

User response

Crypto resources should be added to the shared pool using the ATTACH CRYPTO command. Ensure resources assigned to the shared pool are online and operational.

HCP1710I **All operational AP crypto resources in the shared pool are undergoing error recovery.**

Explanation

All resources in the shared pool are in the process of error recovery and not capable of processing messages. If this condition clears, message requests will be retried automatically. If it does not clear then messages affected will be rejected.

System action

System operation continues.

User response

Either wait for the resources in the shared pool to complete error recovery, or assign additional operational resources to the shared pool using the ATTACH CRYPTO command.

HCP1711I **The variations of this message are explained below.**

— Variation 1 **A recovered machine failure was detected for crypto AP *apnum* Domain *domnum*.**

Explanation

This shared crypto resource completed error recovery and is now operational.

System action

CP will retry affected messages automatically. System operation continues.

User response

No immediate action is required; however note the resource affected. Be prepared to apply maintenance to the affected Crypto Express adapter.

— Variation 2 **A recovered message filtering failure occurred for crypto AP *apnum* Domain *domnum*. Use of a crypto filtering facility has been suspended.**

Explanation

A crypto facility has been removed from this system. The failing crypto operation will be retried using software simulation.

System action

CP will retry affected messages automatically. System operation continues.

User response

No immediate action is required; however note the resource affected. Be prepared to apply maintenance to the affected crypto express adapter or perform a MCL on this system.

HCP1712I	**AP *apnum* has returned *checkstop_count* check-stop failures, *machfail_count* recovered Machine Failures and *undeferr_count* undefined errors while online.**

Explanation

This message is issued following HCP1706I, HCP1707I and HCP1711I to summarize the errors counted, by category, against AP *apnum*.

System action

System operation continues.

User response

Follow the recommendations given for the associated prior message.

HCP1713E	**The variations of this message are explained below.**
— Variation 1	**A required facility is not available to allow Crypto to operate with polling off. Polling remains on.**

Explanation

The facility that allows Crypto to operate with polling off is not available on this system. This message can appear on the operator's console at CP initialization and in response to the SET CRYPTO APVIRTUAL POLLING OFF command.

System action

Crypto continues to operate with polling on.

User response

None.

— Variation 2	**A crypto facility required by CP is not available on this processor: *number***

Explanation

The specified crypto facility is not available on this processor. *number* indicates the missing crypto facility:

- 01 - Query AP Configuration Information (QCI) Facility
- 02 - AP Extended Addressing (APXA) Facility

System action

Crypto initialization does not complete and crypto resources will not be recognized by CP.

User response

None.

HCP1717I	**AP *apnum* Domain *domnum* is already in use by another user.**

Explanation

A crypto resource specified on a CRYPTO APDED statement in this user's directory entry is already dedicated to a different virtual machine.

System action

Logon processing continues; however, this crypto resource will not be assigned to this virtual machine for dedicated use.

User response

Contact your the system administrator to determine if a different crypto resource can be assigned for dedicated use. If this resource was assigned in error, it should be removed from the user's CRYPTO APDEDICATED directory statement and a different crypto resource should replace it. Changes to the user directory take effect after the new directory is brought online and the user logs off and logs back on. The ATTACH CRYPTO command can be used to assign a different crypto resource to the user immediately.

HCP1718I	**AP *apnum* Domain *domnum* is not available for dedicated use.**

Explanation

The user's CRYPTO directory statement specifies a crypto resource to be dedicated to the virtual machine at logon. This crypto resource is not available to be dedicated to the virtual machine. The specified *apnum* and *domnum* might not be available in the hardware configuration or might be available but already included on the system's pool of shared crypto resources.

System action

System operation continues.

User response

Contact the system administrator to have a different crypto resource assigned.

HCP1720I	**The variations of this message are explained below.**
— Variation 1	**None of the AP crypto resources specified in the system configuration file are available; therefore, no AP crypto resources are available for shared use.**

Explanation

System operation continues.

System action

Specify the CRYPTO APVIRTUAL statement in the system configuration file to configure crypto resources for shared use. To enable the system to automatically select up to two crypto resources at system initialization time for shared use, remove all CRYPTO APVIRTUAL statements from the system configuration file. After system initialization, crypto resources can be assigned for shared use with the ATTACH CRYPTO to SYSTEM command.

User response

None.

— Variation 2	**CRYPTO APVIRT NONE was specified in the system configuration file. No crypto resources are assigned to the shared pool.**

Explanation

When the NONE operand is specified, no shared resources are assigned to the shared pool. CRYPTO APVIRT NONE overrides any CRYPTO APVIRT AP or CRYPTO APVIRT DOMAIN statements.

System action

System operation continues.

User response

Modify the CRYPTO APVIRTUAL statements in the system configuration file if you want crypto resources assigned to the shared pool during system initialization.

HCP1721I	**Crypto AP *apnum* Domain *domnum* cannot be dedicated because it is reserved for shared use.**

Explanation

The specified crypto resource is already defined for shared use in the system configuration file and cannot be dedicated.

System action

System operation continues.

User response

Do not assign the same crypto resource on both the CRYPTO DOMAIN statement in the user directory and the CRYPTO APVIRTUAL statement in the system configuration file.

HCP1722I	**Maximum number of shared AP crypto resources exceeded. AP crypto resources beyond *apnum* Domain *domnum* will be ignored.**

Explanation

The CRYPTO APVIRTUAL statements in the system configuration file specify crypto adapters and domains to be assigned for shared use during system initialization. A maximum of 512 crypto resources can be assigned from the adapters and domains specified in the system configuration file. Crypto resources specified with duplicate adapter/domain pairs are included in this count.

System action

System operation continues.

User response

Modify the CRYPTO APVIRTUAL system configuration statement(s) to include no more than 512 crypto resources.

HCP1723I	The variations of this message are explained below.
— Variation 1	Crypto AP *apnum* Domain *domnum* type changed. It has been removed from the shared pool.

Explanation

CP has detected that the type or mode of a crypto resource assigned to the shared pool has changed. The resource has been removed from the shared pool.

System action

System operation continues.

User response

None.

— Variation 2	Crypto AP *apnum* Domain *domnum* is no longer assigned to this system. It has been removed from the shared pool.

Explanation

CP has detected that a crypto resource, which was included in the shared pool, is no longer assigned to this system. The resource has been removed from the shared pool.

System action

System operation continues.

User response

None.

— Variation 3	Crypto AP *apnum* Domain *domnum* usage access revoked. It has been removed from the shared pool.

Explanation

CP requires usage-and-control access to shared crypto resources. If usage access is revoked from CP, then the resource is removed from the shared pool.

System action

System operation continues.

User response

If shared crypto resources are required, issue Q CRYPTO DOMAIN to verify that there are resources assigned to the shared pool. If necessary, use the ATTACH CRYPTO command to add crypto resources to the shared pool.

HCP1724E	Crypto APVIRTUAL is already defined.

Explanation

The DEFINE CRYPTO APVIRTUAL command was issued by a virtual machine that already has access to the shared pool of crypto resources on the system.

System action

System operation continues.

User response

None.

HCP1725E	The variations of this message are explained below.
— Variation 1	The VARY command cannot complete because crypto AP *apnum* is already online.

Explanation

The VARY ONLINE CRYPTO command was issued for a crypto adapter that is already online.

System action

System operation continues.

User response

None.

— Variation 2	The VARY command cannot complete because crypto AP *apnum* is already offline.

Explanation

The VARY OFFLINE CRYPTO command was issued for a crypto adapter that is already offline.

System action

System operation continues.

User response

None.

HCP1726E	The variations of this message are explained below.
— Variation 1	User *userid* has no dedicated AP crypto resources to detach.

Explanation

The target virtual machine does not have any dedicated crypto resources.

System action

System operation continues.

User response

None.

— Variation 2	User *userid* has no dedicated AP crypto resources to detach on AP *apnum*.

Explanation

The target virtual machine does not have any dedicated crypto resources on the specified adapter.

System action

System operation continues.

User response

None.

— Variation 3	User *userid* has no dedicated AP crypto resources to detach on Domain *domnum*.

Explanation

The target virtual machine does not have any dedicated crypto resources on the specified domain.

System action

System operation continues.

User response

None.

HCP1727E	The variations of this message are explained below.
— Variation 1	Crypto AP *apnum* Domain *domnum* is not attached to SYSTEM.

Explanation

Only crypto resources that are attached to SYSTEM for shared use can be detached from SYSTEM.

System action

System operation continues.

User response

Only use the SYSTEM option on the DETACH CRYPTO command to detach shared crypto resources.

— Variation 2	There are no shared AP crypto resources to detach from SYSTEM.

Explanation

Only crypto resources that are attached to SYSTEM for shared use can be detached from SYSTEM.

System action

System operation continues.

User response

Only use the SYSTEM option on the DETACH CRYPTO command to detach shared crypto resources.

HCP1728E	The variations of this message are explained below.
— Variation 1	AP crypto resources are not installed on this system.

Explanation

There are no Crypto Express adapters installed on this system.

System action

System operation continues.

User response

None.

— Variation 2	Crypto AP *apnum* Domain *domnum* is not assigned to this system.

Explanation

The crypto resource specified on the command is not assigned to this system.

System action

System operation continues.

User response

None.

— Variation 3	**Crypto AP *apnum* is not assigned to this system.**

Explanation

The crypto adapter specified on the command is not assigned to this system.

System action

System operation continues.

User response

None.

— Variation 4	**Crypto Domain *domnum* is not assigned to this system.**

Explanation

The crypto domain specified on the command is not assigned to this system.

System action

System operation continues.

User response

None.

— Variation 5	**Crypto Domain *domnum* is not assigned to this system for usage and control access.**

Explanation:
CP does not have the requested usage-and-control access to the domain specified on the ATTACH CRYPTO command.

System action

System operation continues.

User response:
None.

HCP1729I	***userid*: Virtual Machine is using AP Crypto capabilities not available at the destination system.**

Explanation

The specified virtual machine is using a crypto capability on the source system that will not be available on the destination system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Verify that the *userid* specified on the command is the virtual machine to be relocated.

HCP1730E	**The variations of this message are explained below.**
— Variation 1	**Crypto AP *apnum* Domain *domnum* has been detached because it is no longer assigned to this system.**

Explanation

A crypto resource has been removed from the system configuration. This could result from an operation performed at the Hardware Management Console (HMC). It is no longer available for use, so it is detached from any virtual machine that had it dedicated.

System action

System operation continues.

User response

None.

— Variation 2	**Crypto AP *apnum* Domain *domnum* has been detached from *userid* because it is no longer assigned to this system.**

Explanation

A crypto resource has been removed from the system configuration. This could result from an operation performed at the Hardware Management Console (HMC). It is no longer available for use, so it is detached from any virtual machine that had it dedicated.

System action

System operation continues.

User response

None.

— Variation 3 **Crypto AP *apnum* Domain *domnum* has been detached because usage access to the domain has been revoked.**

Explanation

The hardware configuration has changed resulting in CP's usage access to a crypto resource being revoked. When this resource is attached to a user for usage-and-control access, it must be detached because the requested access can no longer be granted.

System action

System operation continues.

User response

None.

— Variation 4 **Crypto AP *apnum* Domain *domnum* has been detached from *userid* because usage access to the domain has been revoked.**

Explanation

The hardware configuration has changed resulting in CP's usage access to a crypto resource being revoked. When this resource is attached to a virtual machine for usage-and-control access, it must be detached because the requested access can no longer be granted.

System action

System operation continues.

User response

None.

HCP1737E **The variations of this message are explained below.**

— Variation 1 **Crypto AP *apnum* Domain *domnum* cannot be attached to SYSTEM because it is attached to a user.**

Explanation

Crypto resources that are attached to a virtual machine for dedicated use cannot be attached to the system for shared use.

System action

System operation continues.

User response

Choose a free crypto resource to attach to the system for shared use.

— Variation 2 **Crypto AP *apnum* Domain *domnum* cannot be attached to SYSTEM because it is not configured in coprocessor or accelerator mode.**

Explanation

Crypto resources must be configured in accelerator or CCA coprocessor mode to be attached to SYSTEM for shared use.

System action

System operation continues.

User response

Reconfigure the crypto adapter to accelerator or CCA coprocessor mode and then issue the ATTACH command again.

— Variation 3 **Crypto AP *apnum* Domain *domnum* cannot be attached to SYSTEM because it is not the currently defined shared type.**

Explanation

Crypto resources in the shared pool must all be the same type and configured in the same mode (accelerator or CCA coprocessor).

System action

System operation continues.

User response

Choose crypto resources of the same type and mode to be in the shared pool.

— Variation 4 **Crypto AP *apnum* Domain *domnum* cannot be attached to SYSTEM because CP does not have usage and control access to this resource.**

Explanation

CP must have usage-and-control access to all crypto resources in the shared pool

System action

System operation continues.

User response

None.

— Variation 5 **Crypto AP *apnum* Domain *domnum* cannot be attached to SYSTEM because it is an unsupported type.**

Explanation

The crypto resource specified on the attach command is not a supported AP crypto type.

System action

The specified crypto resource is not attached. System operation continues.

User response

Re-issue the attach command. Specify an AP crypto resource with a valid type as reported by the Q CRYPTO DOMAIN command. If there are AP crypto resources already in the shared pool, any new resources added to the shared pool must be the same type and must be configured in the same mode.

HCP1738E **The variations of this message are explained below.**

— Variation 1 **Only APs or domains can be specified, not both, when attaching AP crypto resources to a user that already has dedicated AP crypto resources assigned.**

Explanation

After a virtual machine has dedicated crypto resources attached, subsequent attaches can specify one or more additional adapters *or* one or more additional domains, but not adapters *and* domains.

System action

System operation continues.

User response

Specify adapters *or* domains only and then issue the ATTACH CRYPTO command again.

— Variation 2 **Both APs and Domains must be specified when attaching AP crypto resources to a user that does not have dedicated AP crypto resources already assigned.**

Explanation

The first time crypto resources are attached to a virtual machine for dedication, an adapter number *and* a domain number must be specified on the ATTACH command to establish a rectangular resource set for this virtual machine. For more information, see the ATTACH command in the *z/VM: CP Commands and Utilities Reference*.

System action

System operation continues.

User response

Specify one or more adapters *and* one or more domains and then issue the ATTACH command again.

— Variation 3 **Both APs and Domains must be specified when attaching AP crypto resources to SYSTEM.**

Explanation

Attaching resources to SYSTEM requires specification of APs and Domains.

System action

System operation continues.

User response

Reissue the command and specify at least one AP and at least one Domain.

— Variation 4 **Both usage and control access and control-only access is requested for one or more Domains.**

Explanation

The ATTACH CRYPTO command was issued requesting both usage-and-control access and control-only access to the same domain. The same domain number cannot be specified after the DOMAIN keyword and after the CONTROL keyword. For example, in the following command domain 5 is incorrectly duplicated:

```
ATTACH CRYPTO AP 4 DOMAN 5 CONTROL 5 TO *
```

System action

System operation continues.

User response

Check the domain numbers that follow the DOMAIN and CONTROL keywords and reissue the command without duplicating a domain number.

HCP1739E	Dedicated AP crypto resources cannot be attached to an APVIRTUAL crypto user.

Explanation

Virtual machines that have access to the pool of shared crypto resources cannot have dedicated crypto resources.

System action

System operation continues.

User response

In order to attach dedicated crypto resources to a virtual machine, you must first detach APVIRTUAL crypto resources. Issue DETACH CRYPTO APVIRTUAL from the virtual machine and issue the ATTACH command again.

HCP1740E	Crypto APVIRTUAL is not defined.

Explanation

The DETACH CRYPTO APVIRTUAL command was issued by a virtual machine that does not have access to the pool of shared crypto resources.

System action

System operation continues.

User response

None.

HCP1741E	The variations of this message are explained below.
— Variation 1	The VARY command cannot complete because crypto AP *apnum* has the last operational resource attached to *userid*. The FORCE option is required.

Explanation

The FORCE option is required when the crypto adapter that is being varied offline contains the last operational dedicated crypto resource attached to a virtual machine.

System action

System operation continues.

User response

None.

— Variation 2	The VARY command cannot complete because crypto AP *apnum* has the last operational resource attached to SYSTEM. The FORCE option is required.

Explanation

The FORCE option is required when the crypto adapter that is being varied offline contains the last operational crypto resource in the shared pool.

System action

System operation continues.

User response

None.

HCP1742E	The VARY command cannot complete because crypto AP *apnum* is not assigned to this system.

Explanation

The VARY ONLINE CRYPTO or VARY OFFLINE CRYPTO command was issued for a crypto adapter that is not available to this system.

System action

System operation continues.

User response

None.

HCP1743E	The variations of this message are explained below.
— Variation 1	The VARY command cannot complete because the physical

vary failed; AP *apnum* is logically online.

Explanation

The VARY ONLINE CRYPTO command was issued for a crypto adapter; however, CP could not configure the crypto adapter.

System action

System operation continues.

User response

If the specified adapter is deconfigured, use the Hardware Management Console (HMC) to configure the adapter online.

— Variation 2	**The VARY command cannot complete because the physical vary failed; AP *apnum* is logically offline.**

Explanation

The VARY OFFLINE CRYPTO command was issued for a crypto adapter; however, CP could not deconfigure the crypto adapter.

System action

System operation continues.

User response

If the crypto adapter is not deconfigured, use the Hardware Management Console (HMC) to configure the adapter offline.

HCP1744E	**The variations of this message are explained below.**
— Variation 1	**The FORCE option is required to detach AP *apnum* Domain *domnum* because it is the last shared AP crypto resource.**

Explanation

When detaching the last crypto resource from the shared pool, the FORCE option must be specified. The FORCE option must be used even if all shared resources are non-usable. Non-usable resources are OFFLINE or ONLINE + (RC01-invalid, RC03-deconfigured, RC04-checkstop, or RC05-busy).

System action

System operation continues.

User response

Specify the FORCE option on the DETACH CRYPTO command.

— Variation 2	**The FORCE option is required to detach AP *apnum* Domain *domnum* because it is the last usable crypto resource in the shared pool.**

Explanation

When detaching the last usable shared resource from the shared pool, the FORCE option must be specified. The FORCE option must be used for resources that are ONLINE + (RC00-Operation or RC02-Resetting)

System action

System operation continues.

User response

Specify the FORCE option on the DETACH CRYPTO command.

HCP1745E	**Crypto APVIRTUAL cannot be defined because you do not have authorization to access shared crypto resources on this system.**

Explanation

The DEFINE APVIRTUAL command requires a virtual machine to be enabled to access the shared crypto resources on the system. A CRYPTO APVIRTUAL statement is needed in the user's USER DIRECTORY entry.

System action

System operation continues.

User response

Contact your system administrator to request directory authorization to access the shared crypto resources on the system.

HCP1746E	**Crypto APVIRTUAL cannot be defined because you already have access to dedicated crypto resources.**

Explanation

The DEFINE APVIRTUAL command was issued by a virtual machine that already has dedicated crypto resources assigned. A virtual machine cannot have access to both shared and dedicated crypto resources on a system.

System action

System operation continues.

User response

To gain access to the shared crypto resources on the system, first detach all of the dedicated crypto resources assigned to the virtual machine. Then reissue the DEFINE CRYPTO APVIRTUAL command.

HCP1747E **Crypto AP *apnum* Domain *domnum* is already attached to SYSTEM.**

Explanation

The specified crypto resource is already attached to SYSTEM for shared use.

System action

System operation continues.

User response

None.

HCP1748E **The variations of this message are explained below.**

— Variation 1 **Crypto AP *apnum* cannot be attached because not all domains assigned to this user are free on this AP.**

Explanation

In order for a crypto adapter to be added to the rectangular resource set that is already attached to this virtual machine, all domains in the rectangular resource set must be free on this adapter. For more information, see the ATTACH command in *z/VM: CP Commands and Utilities Reference*.

System action

System operation continues.

User response

Verify that all of the crypto resources in the cross section of adapters and domains that are being attached are free or are already attached to this virtual machine.

— Variation 2 **Crypto Domain *apnum* cannot be attached because this domain is not free on all APs assigned to this user.**

Explanation

In order for a domain to be added to the rectangular resource set that is already attached to a virtual machine, the domain must be free on all adapters in the virtual machine rectangular resource set. For more information, see the ATTACH command in the *z/VM: CP Commands and Utilities Reference*.

System action

System operation continues.

User response

Verify that all of the crypto resources in the cross section of adapters and domains that are being attached are free or are already attached to this virtual machine.

— Variation 3 **Crypto AP *apnum* Domain *domnum* cannot be attached.**

Explanation

The crypto resource could not be attached for one of the following reasons:

1. The crypto resource is already included in the shared pool.
2. The crypto resource is already attached to a virtual machine for dedicated use.
3. The crypto resource is not assigned to this system.

System action

System operation continues.

User response

Only use the ATTACH command to attach free resources to the system or to a virtual machine.

— Variation 4 **Crypto AP *apnum* Domain *domnum* cannot be attached because CP does not have access to Domain *domnum*.**

Explanation

The crypto domain *domnum* that is specified in the command is not assigned to this system.

System action

System operation continues.

User response

None.

— Variation 5 **Crypto AP *apnum* Domain *domnum* cannot be attached because CP does not have access to AP *apnum*.**

Explanation

The crypto AP *apnum* that is specified in the command is not assigned to this system.

System action

System operation continues.

User response

None.

— Variation 6 **Crypto AP *apnum* Domain *domnum* cannot be attached for control access because the maximum number of virtual machines already have control access to this resource.**

Explanation

The specified crypto resource is already attached to the maximum of four virtual machines for control-only access.

System action

System operation continues.

User response

None.

— Variation 7 **Crypto Domain *domnum* cannot be attached for usage and control access because it is already attached for control access.**

Explanation

The specified crypto domain is already attached to the virtual machine for control-only access. The ATTACH CRYPTO command cannot be used to change the type of access a virtual machine has to a crypto domain.

System action

System operation continues.

User response

Detach the crypto domain then reissue the ATTACH command.

— Variation 8 **Crypto Domain *domnum* cannot be attached for control access because it is already attached for usage and control access.**

Explanation

The specified crypto domain is already attached to the virtual machine for usage-and-control access. The ATTACH CRYPTO command cannot be used to change the type of access a virtual machine has to a crypto domain.

System action

System operation continues.

User response

Detach the crypto domain then reissue the ATTACH command.

— Variation 9 **Crypto AP *apnum* Domain *domnum* cannot be attached to *userid1* because it is already attached to *userid2*.**

Explanation

A crypto resource can be attached to only one virtual machine for dedicated usage-and-control access. The specified crypto resource is already attached to a different virtual machine for usage-and-control access.

System action

System operation continues.

User response

None.

— Variation 10 **Crypto AP *apnum* Domain *domnum* cannot be attached for usage-and-control access because CP does not have usage-and-control access to Domain *domnum*.**

Explanation

A crypto resource cannot be attached to a virtual machine for usage and control access if CP does not have usage and control access to the specified domain.

System action

System operation continues.

User response

None.

— Variation 11 **Crypto AP *apnum* Domain *domnum* cannot be attached because it is already attached to SYSTEM.**

Explanation

A crypto resource can not be attached to a virtual machine because it is already attached to SYSTEM for shared use.

System action

System operation continues.

User response

None.

— Variation 12 **Crypto AP *apnum* Domain *domnum* cannot be attached because it is not assigned to this system.**

Explanation

A crypto resource can not be attached because is it not assigned to the system.

System action

System operation continues.

User response

None.

HCP1749E **The variations of this message are explained below.**

— Variation 1 **AP crypto resources on AP *apnum* are already attached to this user.**

Explanation

The crypto adapter specified with the ATTACH command is already included in the crypto resources that are attached to this virtual machine.

System action

System operation continues.

User response

None.

— Variation 2 **AP crypto resources on Domain *domnum* are already attached to this user for usage and control access.**

Explanation

The specified domain is already attached to the virtual machine.

System action

System operation continues.

User response

None.

— Variation 3 **AP crypto resources on Domain *domnum* are already attached to this user for control access.**

Explanation

The specified domain is already attached to the virtual machine.

System action

System operation continues.

User response

None.

HCP1750E **An error has been detected in the CP directory. Re-create the CP directory using the DIRECTXA command.**

Explanation

CP detected an error in the contents of the directory while reading a virtual machine definition from the directory.

System action

System operation continues with a virtual machine definition that is possibly erroneous.

Operator response

Recreate the CP directory using the DIRECTXA command.

HCP1752E No directory could be initialized.

Explanation

During initialization, CP found no directory that could be brought online.

System action

The system completes initialization and forces LOGON of the operator.

Operator response

Contact your system support personnel.

Programmer response

The volume that has the system directory may not be online. Bring the volume online and ATTACH the volume; the ATTACH will cause the directory to come online. If there is no directory, you will have to write a new directory to a CP-owned volume using the DIRECTXA utility.

HCP1753E There is no directory online because the directory on volume *volser* at address *rdev* is not valid.

Explanation

The CP-owned volume with directory space that CP attempted to bring online during initialization or attach-volume processing was not valid.

System action

During initialization, the system completes initialization and forces LOGON of the operator. During attach-volume processing, the system is left without a directory as it was before the ATTACH command was entered.

Operator response

Contact your system support personnel.

Programmer response

If the directory specified in the message is not the directory you want brought online, the volume that has the valid system directory may not be online, or the correct directory resides on a disk that is higher in the search order than the incorrect one. Vary the volume online and attach the volume; the ATTACH command will cause the directory to come online. If the directory specified in the message is the directory you want brought online, you will have to rewrite the directory using the DIRECTXA CMS command.

HCP1754I DISK SPACE ON THE DIRECTORY VOLUME IS TOO FRAGMENTED - CANNOT CREATE NEW DIRECTORY EXTENT

Explanation

The maximum number of allocated extents has been reached on the directory volume. CP was unable to split a partially used directory extent. This may cause directory processing to have insufficient disk space on this volume to build a new directory.

System action

The directory program continues.

User response

No action is necessary at this time. However, before installing a new directory using DIRECTXA, it is recommended that you use the Device Support Facilities program (ICKDSF) to allocate the disk space into fewer extents.

HCP1755E THERE IS NO POSIXGROUP DEFINED WITH {GID *gid* | GNAME *gname*} FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid*}.

Explanation

The indicated POSIX group ID or group name specified on the statement in the indicated profile, user, or identity entry is not defined on a POSIXGROUP statement in the directory.

System action

The directory statement on which the error occurred is displayed above the message. If the directory

statement is longer than 237 characters, then only the first 237 characters of the statement are displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Either change the POSIX group specification on the failing statement to identify a valid group or add a POSIXGROUP statement to define the group. Then reenter the DIRECTXA command.

HCP1756E **THE *statement* STATEMENT WAS CONTINUED PAST END OF FILE.**

Explanation

The last directory record in the source directory file ends in a continuation comma.

System action

The directory statement on which the error occurred is displayed above the message. If the directory statement is longer than 237 characters, then only the first 237 characters of the statement are displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Either provide the missing record to complete the last continued directory statement or remove the comma if the last directory statement was already complete. Then reenter the DIRECTXA command.

HCP1757E **THE *statement* STATEMENT EXCEEDS ITS ALLOWED MAXIMUM LENGTH FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}**

Explanation

You used a multiple-record statement that is too long.

System action

The directory statement on which the error occurred is displayed above the message. Only the first 237 characters of the statement are displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Correct the multiple-record statement and reenter the DIRECTXA command.

HCP1758E **DUPLICATE {GID *gid* | GNAME *gname*} SPECIFIED IN THE POSIXGLIST STATEMENT FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid*}**

Explanation

The indicated POSIX group ID or group name is listed more than once on the POSIXGLIST statements in the identified profile, user, or identity entry.

System action

The directory statement on which the error occurred is displayed above the message. If the directory statement is longer than 237 characters, then only the first 237 characters of the statement are displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Delete all but one occurrence of the POSIX group ID or group name on all POSIXGLIST statements in this profile, user, or identity entry. Then reenter the DIRECTXA command.

HCP1759E ***operand* HAS ALREADY BEEN SPECIFIED FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}.**

Explanation

Multiple specifications for *operand* have been encountered in a profile, user, identity, or subconfiguration entry. The operand can be specified only once.

System action

The directory statement on which the error occurred is displayed above the message. Only the first 237 characters of the statement are displayed above the message. The directory program terminates, without bringing a new directory on line, after scanning the remaining statements for syntax.

User response

Delete all but one specification of *operand* within the indicated profile, user, identity, or subconfiguration entry and reenter the DIRECTXA command.

HCP1760E AN OPERAND EXCEEDS ITS ALLOWED MAXIMUM LENGTH FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}

Explanation

You used an operand on the displayed statement that is too long.

System action

The card image is displayed above the message. The program terminates after scanning the remaining statements for syntax.

User response

Correct the invalid operand in the control statement and reenter the DIRECTXA command.

HCP1762E INVALID CYLINDER/BLOCK SPECIFICATION CODE= *nn* FOLLOWING {USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}

Explanation

The reason code (*nn*) indicates one of the following conditions:

Code
Reason

4
A starting cylinder/block number has been specified that exceeds the possible maximum for the MDISK device type.

8
A cylinder/block count is equal to 0.

12
The cylinder/block count is larger than the maximum number of cylinders/blocks for the MDISK device type.

16
The sum of the starting cylinder/block number and the cylinder/block count is larger than the maximum number of cylinders/blocks for the MDISK device type.

System action

The program is terminated after scanning the rest of the statements for syntax.

User response

Correct the entry in error and reenter the DIRECTXA command.

HCP1763E I/O ERROR *vdev* VIRTUAL DEVICE IS BUSY

Explanation

CP detected an I/O error caused by the specified device *vdev* presenting a busy condition.

System action

The error is located in the directory volume. The program no longer attempts to write on that volume. The program attempts to scan the syntax on the remaining records and then terminates.

User response

Reenter the DIRECTXA command. If the error persists, contact your system support personnel.

HCP1764E Variations of this message are explained below.

Explanation

- MSGPROC WAS SPECIFIED ON A SPECIAL STATEMENT BUT NEITHER CFUSER NOR CFVM WAS SPECIFIED FOLLOWING {USER *userid* | PROFILE *name* | IDENTITY *userid* | SUBCONFIG *id*}
- MSGPROC WAS SPECIFIED ON A SPECIAL STATEMENT AND DEVICE COUNT IS INVALID OR OUT OF RANGE FOLLOWING {USER *userid* | PROFILE *name* | IDENTITY *userid*}

You specified MSGPROC on a SPECIAL statement in a user, profile, identity, or subconfiguration entry, but one of the following problems was found:

1. Neither CFUSER nor CFVM was specified.
2. The device count was invalid or out of range.

System action

After scanning the remaining statements for correct syntax, the directory program terminates.

User response

Specify CFUSER or CFVM or specify a valid device count and then issue the DIRECTXA command again.

HCP1765E THE PROFILE STATEMENT HAS NO NAME.

Explanation

The PROFILE name is omitted from the PROFILE Statement.

System action

The card image is displayed above the error message. The program terminates after scanning the remaining statements for syntax.

User response

Provide the missing operand in the control statement and reenter the DIRECTXA command.

HCP1766E The variations of this message are explained below.

Explanation

- THE PROFILE NAME ON THE PROFILE STATEMENT EXCEEDS 8 CHARACTERS.
- THE PROFILE NAME ON THE INCLUDE STATEMENT FOLLOWING {USER userid | IDENTITY userid} EXCEEDS 8 CHARACTERS.
- THE PROFILE NAME ON THE INCLUDE STATEMENT FOLLOWING {USER userid | IDENTITY userid} NOT FOUND.
- THE PROFILE NAME ON THE POOL STATEMENT FOLLOWING {USER userid | IDENTITY userid} EXCEEDS 8 CHARACTERS.
- THE PROFILE NAME ON THE POOL STATEMENT FOLLOWING {USER userid | IDENTITY userid} NOT FOUND.

The profile name on an INCLUDE, POOL, or PROFILE statement is incorrect.

System action

The incorrect directory statement is displayed above the error message. The program terminates after scanning the remaining statements for correct syntax.

User response

Correct the profile name operand on the directory statement and then issue the DIRECTXA command again.

HCP1767E THERE IS MORE THAN ONE PROFILE NAME SPECIFIED ON THE PROFILE STATEMENT.

Explanation

There was more than one PROFILE name specified on the PROFILE statement.

System action

The card image is displayed above the error message. The program terminates after scanning the remaining statements for syntax.

User response

Correct the missing operand in the control statement and reenter the DIRECTXA command.

HCP1768E AN MDISK OR MINIOPT STATEMENT WAS FOUND IN PROFILE *profname*.

Explanation

An MDISK or MINIOPT statement was encountered while processing the named PROFILE.

System action

The card image is displayed above the error message. The program terminates after scanning the remaining statements for syntax.

User response

Remove the MDISK statement from the PROFILE statement and reenter the DIRECTXA command.

HCP1769E A[N] {INCLUDE|POOL|CRYPTO} STATEMENT WAS FOUND IN PROFILE *profname*. {INCLUDE|POOL|CRYPTO} STATEMENTS CANNOT BE IMBEDDED IN PROFILES.

Explanation

An INCLUDE, POOL or CRYPTO statement was encountered while processing the named PROFILE.

System action

The card image is displayed above the error message. The program terminates after scanning the remaining statements for syntax.

User response

Remove the invalid statement from the named PROFILE *profname* and reenter the DIRECTXA command.

HCP1770E AN INCLUDE STATEMENT WAS NOT PRECEDED BY A USER OR IDENTITY STATEMENT FOLLOWING {USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}.

Explanation

An INCLUDE statement was found that was not immediately preceded by a USER or IDENTITY statement while processing the identified user, identity, or subconfiguration entry.

System action

The directory statement is displayed above the error message. The program terminates after scanning the remaining statements for syntax.

User response

Either add the missing USER or IDENTITY statement or delete the extra INCLUDE statement and reenter the DIRECTXA command.

HCP1771E THE PROFILE NAME IS MISSING FROM THE *type* STATEMENT FOLLOWING {USER *userid* | IDENTITY *userid*}.

Explanation

The INCLUDE or POOL statement following the specified USER or IDENTITY directory statement has no PROFILE name specified.

System action

The card image is displayed above the error message. The program terminates after scanning the remaining statements for syntax.

User response

Either add the PROFILE name or delete the INCLUDE or POOL statement and reenter the DIRECTXA command.

HCP1772E MORE THAN ONE PROFILE NAME WAS SPECIFIED ON THE *type* STATEMENT FOLLOWING {USER *userid* | IDENTITY *userid*}.

Explanation

The INCLUDE or POOL statement following USER *userid* or IDENTITY *userid* has more than one name specified on it.

System action

The card image is displayed above the error message. The program is terminates after scanning the remaining statements for syntax.

User response

Correct the INCLUDE or POOL statement, specifying only one PROFILE, and reenter the DIRECTXA command.

HCP1773E A PROFILE STATEMENT WAS FOUND PRECEDING THE DIRECTORY STATEMENT.

Explanation

A PROFILE statement was found preceding the DIRECTORY statement.

System action

The card image is displayed above the error message. The program terminates after scanning the remaining statements for syntax.

User response

If the PROFILE statement was extraneous, delete it or move it to its appropriate position and reenter the DIRECTXA command.

HCP1774E THE RPWLIST ENTRY - *rpw* - IS INVALID.

Explanation

The RPWLIST entry in the message is invalid for one of the following reasons:

- The password entry did not start in column 1.
- The password was not a contiguous set of 1 to 8 nonblank characters.
- Column 9 was not blank.

System action

The card image is displayed above the error message. The program terminates after the remaining statements are scanned for syntax.

User response

Correct or delete the invalid entries and reenter the DIRECTXA command.

HCP1775E **PROFILE DEFINITION *profname* IS INVALID AND WILL NOT BE PROCESSED FOR ANY USER DEFINITIONS THAT INCLUDE IT.**

Explanation

Directory statements in the named PROFILE entry were found to be in error. The PROFILE is marked as invalid.

System action

The PROFILE name is validated for all INCLUDE statements that reference it, but the content is not processed for any user or identity entries that include it. The program terminates after the remaining statements are scanned for syntax.

User response

Correct the directory statements of the named PROFILE that were in error and reenter the DIRECTXA command.

HCP1776E **DEFAULT STORAGE SIZE EXCEEDS MAXIMUM STORAGE SIZE FOR {USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}**

Explanation

After resolving which default and maximum storage sizes to use from the USER, IDENTITY, or SUBCONFIG statement and the user, identity, or profile entry STORAGE and MAXSTORAGE statements, the default size exceeded the maximum.

System action

The directory program terminates after scanning the remaining statements for syntax.

User response

Correct the storage specification and rerun the DIRECTXA program.

HCP1777E **The directory on volume *volser* could not be initialized**

Explanation

A CP-owned volume with directory space that CP attempted to bring online during initialization was not valid.

System action

The system continues searching CP-owned volumes for a valid directory.

Programmer response

If the directory specified in the message is not the directory you want brought online, no action is necessary.

If the directory specified in the message is the directory you want brought online, you must rewrite the directory, using the DIRECTXA CMS command.

HCP1779I **THE DEVICE TYPE *type* ON THE PRECEDING CONSOLE STATEMENT IS INVALID AND SHOULD BE CHANGED TO THE APPROPRIATE VALUE. IT HAS BEEN DEFAULTED TO 3215 FOR THIS EXECUTION OF DIRECTXA.**

Explanation

As of VM/XA SP™ Release 1 there was no support for the device types 1052 and 3210. While DIRECTXA is operating in MIXED mode, the values are accepted and defaulted to the equivalent of 3215.

System action

Display the failing CONSOLE statement, display this message, default the device type to 3215, and continue processing.

User response

Check the *z/VM: CP Planning and Administration* description of the CONSOLE statement for the correct device type value, enter it on the CONSOLE statement, and reenter the DIRECTXA command.

HCP1781E **THE *option1* OPTION WAS SPECIFIED ON THE DIRECTXA COMMAND WITHOUT THE *option2* OPTION.**

Explanation

The user invoked DIRECTXA with the MIXMSG/NOMIXMSG keyword but failed to specify the MIXED keyword.

System action

Processing is terminated, and control is returned to the caller with return code 3 in register 15.

User response

Correct the error and reenter the DIRECTXA command.

HCP1782E THE DUPLICATE OPTION *option* WAS SPECIFIED ON THE DIRECTXA COMMAND.

Explanation

The user invoked DIRECTXA with a duplicate option.

System action

Processing is terminated, and control is returned to the caller with return code 3 in register 15.

User response

Reenter the DIRECTXA command with the appropriate options.

HCP1783E AN OPERAND OF THE SYSAFFIN STATEMENT IS MISSING.

Explanation

One or more *sysafnid* parameters is missing from the SYSAFFIN control statement.

System action

The failing control statement is displayed above the error message. Processing terminates and control is returned to the caller with a return code of 2 in register 15.

User response

Add the missing *sysafnid* to the SYSAFFIN control statement and reenter the DIRECTXA command.

HCP1784E THE *option* OPTION SPECIFIED ON THE DIRECTXA COMMAND HAS AN INVALID VALUE.

Explanation

The DIRECTXA command was entered with a value that is not valid for the indicated keyword option.

System action

Processing is terminated, and control is returned to the calling module with a return code of 3 in register 15.

User response

Enter the DIRECTXA command again with a valid value for the option. For the SYSAFNID option, specify a value from one of the DIRECTORY control statements in the USER DIRECT file. For the &SYSRES option, specify a 1- to 6-character string to be used to represent the system residence volume serial.

HCP1785E THE {PROFILE *profname* | USER *userid* | POOL *poolid* | IDENTITY *userid* | SUBCONFIG *id*} FROM THE {PROFILE | USER | IDENTITY | SUBCONFIG} STATEMENT DOES NOT MATCH THE {PROFILE *profname* | USER *userid* | POOL *poolid* | IDENTITY *userid* | SUBCONFIG *id*} FROM THE INCLUDING LOAD STATEMENT.

Explanation

The following must match:

- The PROFILE name specified on the LOAD P statement must match that on the PROFILE statement.
- The user ID specified on the LOAD U statement must match that on the USER statement.
- The POOLID specified on the LOAD U statement must match that on the USER statement.
- The user ID specified on the LOAD I statement must match that on the IDENTITY statement.
- The SUBCONFIG ID specified on the LOAD S statement must match that on the SUBCONFIG statement.

System action

The system issues this message, processing is terminated, and control is returned to the caller with return code 2 in Register 15.

User response

Correct the profile name, user ID, pool ID, or SUBCONFIG ID and reenter the DIRECTXA command.

HCP1786E THE STATEMENT IS NOT VALID IN A CLUSTER DIRECTORY INDEX.

Explanation

Only LOAD and comment statements are valid in the DIRECTORY INDEX file. The DIRECTORY INDEX file is the file specified on the DIRECTXA command.

System action

Processing is terminated, and control is returned to the caller with return code 2 in register 15.

User response

Correct the invalid control statement and reenter the DIRECTXA command.

HCP1787E THE DIRECTORY STATEMENT DOES NOT CONTAIN THE CPUID AND SYSAFNID FIELDS.

Explanation

The CPUID and SYSAFNID parameters are missing on the DIRECTORY control statement.

System action

Processing is terminated, and control is returned to the calling module with a return code of 2 in register 15.

User response

Correct the DIRECTORY control statement and reenter the DIRECTXA command.

HCP1788E THE CONFLICTING OPTION *option* WAS SPECIFIED ON THE DIRECTXA COMMAND.

Explanation

The user entered DIRECTXA with a conflicting option.

System action

This message is issued, processing is terminated, and control is returned to the caller with return code 3 in register 15.

User response

Reenter the DIRECTXA command with the correct options.

HCP1789E DUPLICATE SYSAFNID VALUE *value* WAS SPECIFIED ON THE SYSAFFIN STATEMENT.

Explanation

The SYSAFFIN statement has a duplicate *sysafnid* value.

System action

The failing control statement is displayed above the error message. Processing terminates after the syntax of the remaining statements is checked.

User response

Correct the SYSAFFIN statement and reenter the DIRECTXA command.

HCP1790E THE CPUID IS A DUPLICATE OF ONE FOUND ON A PREVIOUS DIRECTORY STATEMENT.

Explanation

The CPUID specified on this DIRECTORY control statement was specified on a preceding DIRECTORY control statement.

System action

The failing statement is displayed above the error message, processing is terminated, and control is returned to the calling module with a return code of 2 in register 15.

User response

Correct the DIRECTORY statement that is in error and reenter the DIRECTXA command.

HCP1791E THE LOAD STATEMENT WAS FOUND OUT OF ORDER.

Explanation

The LOAD type C statement must precede the LOAD type G, LOAD type P, and LOAD type U statements. The LOAD type G statement must precede the LOAD type P and LOAD type U statements. All LOAD type P statements must precede the LOAD type U statements. Only one LOAD type C statement followed by zero or one LOAD type G statement is allowed in a USER DIRECT file maintained in cluster file format.

System action

The failing statement is displayed above the error message, processing is terminated, and control is returned to the caller with return code 2 in register 15.

User response

Correct the LOAD statement sequence and reenter the DIRECTXA command.

HCP1792E MORE THAN 56 SYSAFNIDS WERE SPECIFIED.

Explanation

The maximum number of *sysafnid*s that can be specified—one on each DIRECTORY control statement—was exceeded. A maximum of 56 system affinity ids can be specified.

System action

The failing statement is displayed above the error message, processing is terminated, and control is returned to the calling module with a return code of 2 in register 15.

User response

Eliminate unnecessary DIRECTORY control statements so that no more than 56 *sysafnid*s are specified.

HCP1793E AN OPERAND ON THE LOAD STATEMENT HAS AN INVALID VALUE - *value*.

Explanation

The records specified by the *startrec* and/or *reccount* fields exceed the size of the file specified on the LOAD statement, or the *startrec* and/or *reccount* fields have the value of 0.

System action

The failing statement is displayed above the error message, processing is terminated, and control is returned to the caller with return code 2 in register 15.

User response

Correct the error and reenter the DIRECTXA command.

HCP1794E AN OPERAND ON THE SYSAFFIN STATEMENT HAS AN INVALID VALUE - *value*.

Explanation

Either a valid SYSAFFIN prefix parameter was not specified, or a *sysafnid* on a SYSAFFIN control statement does not match one of those specified on the DIRECTORY control statements.

System action

The failing statement is displayed above the error message, processing is terminated, and control is returned to the calling module with a return code of 2 in register 15.

User response

Correct the error and reenter the DIRECTXA command.

HCP1795E POOL STATEMENT IS MISSING IN *fileid*.

Explanation

The LOAD statement specified a POOL definition, but the definition did not contain a POOL statement.

System action

Directory processing terminates after the remaining statements are scanned for syntax.

User response

Either remove the POOL definition from the LOAD directory statement or add a POOL statement to the file *fileid*

HCP1796E A POOL STATEMENT WAS FOUND FOLLOWING {USER *userid* | IDENTITY *userid*} IN *fileid*. THE CORRESPONDING LOAD STATEMENT DID NOT SPECIFY A POOL DEFINITION.

Explanation

Directory processing encountered a POOL directory control statement while processing the *userid* in the file *fileid*. However, the LOAD directory control statement corresponding to this *userid* did not specify the *userid* as being a pool definition.

System action

After scanning the remaining statements for correct syntax, the directory program terminates, without bringing a new directory online.

User response

Either remove the POOL statement from *fileid* or specify a pool definition on the corresponding LOAD statement and reenter the DIRECTXA command. To specify a pool definition on the corresponding LOAD statement, the "*parttype*" parameter on the LOAD statement must be either POOLPART or $DIRECTP.

HCP1797E CONFLICTING DEVICE INFORMATION HAS BEEN SPECIFIED ON MULTIPLE

DIRECTORY CONTROL STATEMENTS CONTAINING THE SAME SYSTEM AFFINITY NAME - *sysafnid*.

Explanation

The device information: device address, device type, and volume label, appearing on multiple DIRECTORY control statements with the same system affinity name, must be identical.

System action

The directory program terminates, without updating the existing directory, after scanning the remaining statements for syntax.

User response

Make the device information identical for the DIRECTORY statements containing system affinity name *sysafnid*.

HCP1799E **The variations of this message are explained below.**

Explanation

- A(N) *stmt* STATEMENT WAS FOUND IN SUBCONFIG *id*. *stmt* STATEMENTS ARE NOT ALLOWED IN SUBCONFIG DEFINITIONS.
- A(N) *option* OPTION WAS FOUND IN SUBCONFIG *id*. *option* OPTIONS ARE NOT ALLOWED IN SUBCONFIG DEFINITIONS.

Certain statements and options are not allowed within a subconfiguration entry. For a detailed explanation of each statement, see Creating and Updating a User Directory in *z/VM: CP Planning and Administration*.

System action

After scanning the remaining statements for correct syntax, the directory program terminates, without bringing a new directory online.

User response

Remove the statement or option from the subconfiguration entry and consider moving that statement to the appropriate identity or profile entry. When the source directory has been corrected, issue the DIRECTXA command again.

HCP1801E **Command *command* could not be completed due to a relocation in progress**

Explanation

A command was issued with a target user ID that is currently in the process of being relocated through VMRELOCATE. This command cannot be processed while a relocation for the target user is active.

System action

The command is terminated. The relocation will continue processing and will be cancelled once the cause of the delay is resolved.

User response

Reissue the command once the relocation completes. The VMRELOCATE STATUS command can be used to determine the status of the relocation. If the relocation is not progressing because the system is waiting for input from the guest, you must provide the necessary input using a secondary console or by logging on to the guest. One example of why the guest might be waiting is the password prompt on a CP LINK command.

HCP1802E ***userid*: Message versions incompatible, message type = *type*, subsystem = *ssname*, source version = *sversion*, destination version = *dversion***

Explanation

A message sent by the source system cannot be handled by the destination system. The system service levels are not compatible.

System action

The relocation is terminated. The virtual machine continues to run on the source system.

User response

Determine the system service levels on the source and destination systems. Relocate the user to another member of the SSI cluster with the same system service level as the source system. If this is not possible, consider upgrading the lower level system to the same system service level as the higher level system. If you do not want to perform this upgrade, contact your IBM Support Center personnel for additional assistance. Ensure that you record the message type and message source and destination versions.

HCP1803E ***userid*: A failure occurred moving the content of the virtual machine's memory to the destination system**

Explanation

The relocation cannot complete due to a change or a problem in the configuration of the ISFC collection.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Correct any connectivity problem and then try the relocate again. For example, use the QUERY SSI CONNECTIVITY command to confirm that a path exists between the source and the target nodes. Also, investigate the status of the ISFC link devices using the QUERY ISFC command if QUERYSSI does not show Connect Type: Direct and Hops: 0.

HCP1804E **Relocation of *userid* to *destination* failed because a time out occurred while waiting for an expected response**

Explanation

The relocation failed because the source system sent a message to the destination system and the expected response was not received within a reasonable amount of time. This could mean that a message was lost by ISFC or that there is a problem on the destination system that caused the response to not be sent.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system. Message HCP1935E may also be issued with a reason code that can be used to determine which response was not received.

User response

Attempt the relocation again. If the problem was a lost ISFC message, the relocation will likely work this time. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem

HCP1805I ***userid*: Guest is obtaining data from a service processor**

Explanation

The relocation of the specified guest was terminated because the guest is reading/writing the I/O Configuration data set (IOCDS) or is reading data from a service processor.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Try the relocation again since the problem only occurs when outstanding I/O exists. Once these are complete, the relocation should work. If the problem persists, contact your IBM Support Center personnel for assistance.

HCP1806I ***userid*: The reserve status for DASD *vdev* could not be determined**

Explanation

The relocation of the specified guest was terminated because the reserve status of the specified DASD device could not be determined. CP tried to issue I/O to the device to determine the reserve status and the I/O failed.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Try the relocation again, because the I/O error could have occurred due to a transient condition. If the I/O error persists, contact your IBM Support Center personnel for additional assistance.

HCP1807I ***userid*: The reserve is held for DASD *vdev***

Explanation

The relocation of the specified guest was terminated because it holds the reserve on a DASD device.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Release the reserve on the indicated DASD device and try the relocation again.

HCP1808E **Relocation of *userid* to *destination* failed because the destination is the same as the source**

Explanation

The relocation failed because the destination system specified on the VMRELOCATE command was the same as the source system. Most likely this is a result of the destination system being specified incorrectly on the command.

System action

The relocation is not performed and the virtual machine continues to run on the source system.

User response

Attempt the relocation again with the proper destination.

HCP1809E **Device *vdev* cannot be detached from the user because it is a VDISK and Live Guest Relocation is active**

Explanation

A VDISK may not be detached from a guest which is currently in the process of being relocated to another system due to a VMRELOCATE command.

System action

The detach of the VDISK fails and the relocation continues.

User response

If the VDISK must be detached, either cancel the relocation (VMRELOCATE CANCEL command) or wait until the relocation completes and detach it on the destination system.

HCP1810I **The variations of this message are explained below.**

Explanation

1. *userid*: Current storage use *footprint* exceeds available capacity on destination *destination* by *difference*
2. *userid*: Current storage use exceeds capacity on destination
3. *userid*: PERMANENT storage use (*footprint*) exceeds available capacity on destination (*destination*) by *difference*
4. *userid*: PERMANENT storage use (*footprint*) exceeds maximum capacity on destination (*destination*) by *difference*

Variations 1 and 2:

The current storage footprint of this virtual machine exceeds the current available storage resources (central storage, auxiliary storage, and expanded storage) on the destination system. Allowing such a virtual machine to relocate could result in a system abend. The current storage footprint includes the pageable and non-pageable CP storage required to virtualize the guest, in addition to all storage currently used in its base address space and for all of its virtual disks. If values are specified for the current storage footprint of the virtual machine and the current available resource of the destination system, be aware that these values are transient and should be considered subject to change.

Note: Expanded storage is not supported on z/VM 6.4 and later.

Variations 3 and 4:

The permanent storage footprint of this virtual machine exceeds the storage resources on the destination system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Take steps on the destination system to reduce the system load or increase paging capacity. Alternatively, you could relocate this virtual machine to a different system with adequate capacity in the SSI cluster.

HCP1811I ***userid*: Maximum storage use *guest_footprint* exceeds available capacity on destination *destination_resource* by *difference***

Explanation

The maximum storage footprint of this virtual machine exceeds the available storage resources (central storage, expanded storage, and auxiliary storage) on the destination system. Should this guest use all of its storage, the destination system could abend. The

maximum storage footprint includes the pageable and non-pageable CP storage required to virtualize this guest, the size of each virtual disk defined by the guest, and the size of the guest's base address space. It also accounts for any standby and reserved storage that can be assigned to the virtual machine through dynamic storage reconfiguration as defined on the DEFINE STORAGE command. The current available resource of the destination system is a transient value and should be considered subject to change.

Note: Expanded storage is not supported on z/VM V6.4 and later.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system..

User response

Take steps on the destination system to reduce the system load or increase paging capacity. Alternatively, you could relocate this virtual machine to a different system with adequate capacity in the SSI cluster. (Be aware of the maximum storage specification for this virtual machine.) If you are sure the guest will not exceed its current storage use, you can consider using FORCE STORAGE on the VMRELOCATE command, but do so with caution. See Paging Space and Creating a z/VM SSI Cluster in *z/VM: CP Planning and Administration* for guidelines to help you determine how much paging space is recommended.

HCP1812I ***userid*: Current pageable storage use *footprint* exceeds available auxiliary paging space on destination *destination* by *difference***

Explanation

The pageable portion of the current storage footprint of this virtual machine exceeds the available paging space on the destination system. If CP needs to page out the guest after it is relocated to replenish the supply of real storage frames, paging capacity could be exceeded, resulting in a system abend. The pageable portion of the current storage footprint includes the pageable CP storage required to virtualize this guest, in addition to all storage currently used in its base address space and for all of its virtual disks. The current pageable storage footprint of the virtual machine and the current available auxiliary paging space of the destination system are transient values and should be considered subject to change.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Take steps on the destination system to increase paging capacity. Alternatively, you could relocate this virtual machine to a different system with adequate capacity in the SSI cluster. If you are sure the guest will not exceed its current storage use, you can consider using FORCE STORAGE on the VMRELOCATE command, but do so with caution. See Paging Space and Creating a z/VM SSI Cluster in *z/VM: CP Planning and Administration* for guidelines to help you determine how much paging space is recommended.

HCP1813I ***userid*: Maximum pageable storage use *guest_footprint* exceeds available auxiliary paging space on destination *dest_aux_stg* by *difference***

Explanation

The pageable portion of the maximum storage footprint of this virtual machine exceeds the available paging space on the destination system. If CP needs to page out the guest after it is relocated to replenish the supply of real storage frames, paging capacity could be exceeded, resulting in a system abend. The pageable portion of the maximum storage footprint includes the pageable CP storage required to virtualize this guest, the size of each virtual disk defined by the guest, and the size of the guest's base address space. It also accounts for any standby and reserved storage that can be assigned to the virtual machine through dynamic storage reconfiguration as defined on the DEFINE STORAGE command. The current available auxiliary paging space of the destination system is a transient value and should be considered subject to change.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Take steps on the destination system to increase paging capacity. Alternatively, you could relocate this virtual machine to a different system with adequate capacity in the SSI cluster. If you are sure the guest will not exceed its current storage use, you can

consider using FORCE STORAGE on the VMRELOCATE command, but do so with caution. See Paging Space and Creating a z/VM SSI Cluster in *z/VM: CP Planning and Administration* for guidelines to help you determine how much paging space is recommended.

HCP1814E ***domain_name* is not a valid relocation domain name**

Explanation

An attempt was made to define a relocation domain with a RELOCATION_DOMAIN statement in the SYSTEM CONFIG file or with a DEFINE RELODOMAIN command. However, the domain name specified is not valid. A domain cannot be defined or redefined with the name of any of the default domains. There is a default domain named SSI. There are also default domains with the name of each of the members of the SSI cluster.

System action

The requested domain is not defined or redefined.

User response

Reissue the command with a valid domain name or change the RELOCATION_DOMAIN statement.

HCP1815E **Relocation domain *domain* could not be defined because *system_name* is not an SSI cluster member**

Explanation

An attempt was made to define a relocation domain with a RELOCATION_DOMAIN statement in the SYSTEM CONFIG file or with a DEFINE RELODOMAIN command. However, one of the members specified is not a member of the SSI cluster.

System action

The requested domain is not defined or redefined.

User response

Reissue the command with a valid domain name or change the RELOCATION_DOMAIN statement. Ensure that an SSI statement is present and has no errors, and that the RELOCATION DOMAIN statement follows it.

HCP1816E **A relocation domain with the name *domain_name* has already been defined**

Explanation

If this message occurs at system initialization time, it means there are two RELOCATION DOMAIN statements in the SYSTEM CONFIG file with the same domain name specified. If this message occurs as the result of a SET SSI SLOT command, it means the member name being assigned to the slot matches an already existing relocation domain name. The member may not be assigned.

System action

For the system initialization case, the first definition of the relocation domain is created and subsequent ones are ignored. For the SET SSI case, the command is rejected and the member name is not assigned to the slot.

User response

For the system initialization case, correct the SYSTEM CONFIG file by deleting the duplicates or by correcting the name on one of the duplicates. For the SET SSI case, either remove the relocation domain from the SYSTEM CONFIG file or choose a different name for the newSSI cluster member.

HCP1817E **The DEFINE RELODOMAIN command cannot be processed at this time**

Explanation

There is some temporary reason why the DEFINE RELODOMAIN command could not be processed. It is most likely that the SSI cluster is in an unstable state such as SAFE mode.

System action

Command processing is terminated and the relocation domain definition is unchanged.

User response

Try issuing the command again at a later time. To determine the state of the SSI cluster, use the QUERY SSI command.

HCP1818I **Excluded members: *mem1 [mem2 mem3 mem4...]***

Explanation

This is an informational message that may be issued as part of the response to either the QUERY or SET VMRELOCATE commands. It is a list of the members of the user's relocation domain to which

it is not eligible to relocate. These members can be excluded for various reasons. For example, when a SET VMRELOCATE command is issued for the user, it may be necessary to restrict this user from relocating to some members of the domain in order to avoid a virtual architecture change to the user that would cause it to lose facilities. Also, redefinition of the user's domain to include a new member could cause this to happen.

System action

This message is issued in response to a successful QUERY or SET VMRELOCATE command. The command completes with return code of zero.

User response

No response required. Study the message and understand the implications for future relocations of this user.

HCP1819E **The command could not be processed because the relocation domain specified is marked for deletion**

Explanation

The command issued had a relocation domain specified as part of its syntax. The relocation domain specified has been marked for deletion. A domain that is marked for deletion cannot be changed using the DEFINE RELODOMAIN command. Also, a SET VMRELOCATE command cannot be used to assign a user to a domain that is marked for deletion.

System action

Command processing is terminated with none of the requested changes made.

User response

Determine whether the command was issued with the wrong relocation domain specified. This could also be a temporary situation that occurs when an SSI cluster member is joining and its RELOCATION_DOMAIN statements do not match the relocation domain topology of the members that were already joined into the cluster. If that is the case, examine the SYSTEM CONFIG domain definitions for each SSI member to determine why they do not all match.

HCP1820I ***userid*: Virtual machine has directory authorization to use the virtual Multi-Path Lock Facility**

Explanation

Potential use of the virtual Multi-Path Lock Facility (virtual MPLF) makes this guest ineligible for relocation. If a guest is authorized by the LKFAC option in its CP directory entry, this message is issued when a relocation is attempted.

User response

This guest may not be relocated as long as it is using the virtual MPLF facility. If this guest is not using virtual MPLF, remove the LKFAC option from its directory entry and have the guest log off and then log on. Then it will be relocatable.

HCP1821E **Relocation domain *domain* does not exist**

Explanation

The relocation domain specified does not exist because it is not defined in SYSTEM CONFIG or by the DEFINE RELODOMAIN command, nor is it one of the default domains.

System action

The command is rejected.

User response

Reissue the command with the proper relocation domain name or define the relocation domain.

HCP1822E **The variations of this message are explained below.**

— Variation 1 **User *userid* cannot be set to relocation domain *domain* without the FORCE ARCHITECTURE option**

Explanation

An attempt was made to set the user to a new relocation domain. This change would cause the guest to lose architecture capabilities and so is not allowed unless the FORCE ARCHITECTURE option is specified on the command.

System action

The user's relocation settings are not changed and the command is rejected.

User response

If you are sure that the guest can tolerate the possible downgrade to its architecture, issue the command again and use the FORCE ARCHITECTURE option.

— Variation 2 **User *userid* cannot be set to relocation domain *domain***

Explanation

An attempt was made to set the user to a new relocation domain but the attempt failed.

System action

The user's relocation settings are not changed and the command is rejected.

User response

In some cases, the guest cannot be relocated even when the FORCE ARCHITECTURE option is used. A guest might have a facility in the guest's current virtual architecture that is not available in the target architecture level. Some such facilities prohibit relocation if a member of the SSI cluster does not provide the facility. In that case, the FORCE ARCHITECTURE option cannot be used to relocate the guest.

HCP1823E **A multiconfiguration virtual machine cannot be relocated**

Explanation

Since a multiconfiguration virtual machine cannot be relocated, the SET VMRELOCATE cannot may not be used to change its relocation settings. This type of virtual machine will always have relocation turned off, and its domain will always be set to the singleton domain of the member to which it is logged on.

System action

The command is rejected and the virtual machine's relocation settings remain unchanged.

User response

Reissue the command with the correct user ID of the virtual machine whose relocation settings are to be changed.

HCP1824E **Assigned relocation domain *domain* does not exist. The user has been assigned to the SSI domain**

Explanation

A VMRELOCATE statement in the user's directory entry indicates the user should be assigned to a particular relocation domain. When the user was logging on, it was determined that the domain specified does not exist. There is a slight possibility that a domain could briefly appear to be unavailable if a cluster rejoin occurred at the same time as the user was being assigned to the domain.

System action

The user is logged on but is assigned to the default relocation domain called SSI which consists of all the member systems of the SSI.

User response

Correct the VMRELOCATE statement in the user's directory entry. The next time the user logs on, it will be assigned to the proper relocation domain. Use the SET VMRELOCATE command to change the user's relocation domain dynamically to the proper domain without requiring the guest to logoff and log back on again.

HCP1825I ***userid*: Relocation domain structure has changed during relocation of this user.**

Explanation

When a live guest relocation is requested, checks are done to determine if the guest is eligible to be relocated as requested by the VMRELOCATE command. The checks are done twice: once immediately after the command is issued and again after the guest is quiesced for the final step of the relocation. During the second set of checks, the code determines if there was a change in the underlying domain virtual architecture (VAL) structure. This can happen due to a hardware upgrade in the SSI cluster or because of a DEFINE RELODOMAIN command.

System action

The live guest relocation of the guest (*userid*) indicated in the message is terminated, and this message is issued. The guest continues to run on the source member without being relocated to the target member.

User response

This is a temporary condition caused by a change in the relocation domain and/or VAL structure during the relocation of a guest in that domain. Use the VMRELOCATE TEST command to verify the guest is

eligible to be relocated, and then try the relocation again.

HCP1826E The system limit of incorrect passwords was specified with an invalid number - *number*

Explanation

A SET CMDLIMIT command was entered with a value specified that is not in the allowable range of 1 to 255. The value supplied is not a decimal value, not within the required range, or has a greater length than is possible for a valid operand.

System action

The command does not run; system operation continues.

User response

Reenter the command, specifying a system limit value between 1 and 255.

HCP1827E The maximum number of relocation domains has already been defined

Explanation

Either a RELOCATION_DOMAIN statement in the SYSTEM CONFIG file or a DEFINE RELODOMAIN command has attempted to define a relocation domain on the system but the maximum number of relocation domains (256) has already been defined.

System action

The relocation domain is not created.

User response

Either modify an existing domain to meet your requirements or remove some RELOCATION_DOMAIN statements from the SYSTEM CONFIG file. To process the SYSTEM CONFIG changes when removing a relocation domain, all SSI member systems must be shut down at the same time and re-IPLed.

HCP1828I *userid*: A matching crypto facility does not exist on the destination.

Explanation

The virtual machine has access to the source system's shared crypto resources. There is either no shared crypto resource on the destination system or the shared crypto resource on the destination system is not compatible with the resource used for sharing on the source system. Therefore the relocation cannot proceed. For the shared crypto resources to be compatible on the source and destination systems, the adapter and domain numbers of the shared crypto resources may be different but the crypto type and mode must be the same.

System action

The relocation is terminated with no further action. The guest continues to run on the source system.

User response

If the virtual machine has access to the system's shared crypto resources, relocate the virtual machine to an SSI cluster member that has a compatible shared crypto resources. If you know that the virtual machine is not using crypto resources, another option is to remove the guest's access to crypto resources. This can be done by

1. Issuing DETACH CRYPTO APVIRTUAL for the virtual machine. This will remove the virtual machine's access to the system's shared crypto resources without requiring the virtual machine to logoff and logon.
2. Removing the CRYPTO statement from the virtual machine definition in the CP directory. This will allow the relocation to occur, without the crypto compatibility check, once the virtual machine is logged off and then logged back on after the directory is changed.

If no other architecture incompatibilities were reported and it is known that the guest is not using crypto, the FORCE ARCHITECTURE option on the VMRELOCATE command may be used to relocate the guest without changing its access to crypto resources.

HCP1829I *userid*: A pending unit check with critical sense data was found for DASD *vdev*

Explanation

The relocation of the specified guest was terminated because sense data is pending for the specified DASD device.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The unit check will be cleared by the next I/O to the device. Then retry the relocation.

HCP1830I Virtual architecture has been adjusted to permit AP Dedicated Crypto facilities not allowed in the assigned or default relocation domain.

Explanation

A dedicated crypto user was logged on in a relocation domain that does not allow the use of the APXA facility, even though the facility is installed on the machine that the user is logging on to.

System action

The user is logged on and assigned to the specified relocation domain. The user's virtual architecture level is adjusted to allow the use of up to 256 APs and 256 domains when they are available on dedicated crypto cards.

User response

The VMRELOCATE statement can be included in the user's directory entry to assign this user to a relocation domain that allows the use of the APXA facility.

HCP1831E The command could not be completed because of a temporary condition. Try again later.

Explanation

Several attempts were made to process this command, but a temporary condition existed that prevented it from completing. For example, the proper serialization could not be obtained. The condition should clear up after a short amount of time.

System action

Command processing terminates; system operation continues.

User response

Wait a few minutes and issue the command again. If the condition does not clear up after several attempts to reissue the command, call your system support personnel.

HCP1835E SPXTAPE command may only be issued on the base CPU

Explanation

The SPXTAPE command may be issued from the base CPU only. The default is the base CPU; however, the CPU command can override the default. For example, if the base is CPU 0, the following command would execute on CPU 1, and cause this error.

```
CPU 1 SPXTAPE DUMP 181 RDR ALL REW
```

System action

Command processing terminates; system operation continues.

User response

Use the QUERY VIRTUAL CPUS command to determine the base CPU and reissue SPXTAPE on that CPU.

HCP1836E SPXTAPE operation operand missing. Use DUMP, LOAD, SCAN, END, or CANCEL

Explanation

The SPXTAPE operation was not specified on the command.

System action

The command does not run; system operation continues.

User response

Enter the SPXTAPE command again with an operation operand.

HCP1837E SPXTAPE device specification missing. Specify 'vdev' or 'vdev1-vdev2'

Explanation

No tape drive for the SPXTAPE operation was specified on the command.

System action

The command does not run; system operation continues.

User response

Enter the SPXTAPE command again with a single virtual device number or a range of virtual device numbers.

HCP1838E **Permanent I/O error on virtual device *vdev*. Attempting to read any remaining files**

Explanation

While reading files on the tape volume mounted on the specified device, the SPXTAPE LOAD or SCAN command encountered a permanent I/O error.

System action

SPXTAPE attempts to skip over tape records with errors to read other files that were dumped to the tape with the same logical SPXTAPE DUMP command. If the record skipping is successful, the command continues. If the record skipping is not successful, the tape is positioned based on the disposition specified on the command and whether there are other active tapes:

- If the disposition is RUN, or if there are other active tapes, the command continues.
- If the disposition is LEAVE or REW, and the tape is either the only tape or the last active tape, the command completes with errors and system operation continues.

User response

If you have received a response from SPXTAPE asking you to mount the next tape, and you have more tapes to process, you can mount the next tape on this drive or any other drive that is active for this command. You can also add more drives to the operation by entering the SPXTAPE LOAD or SCAN command with an expanded device range that includes the new devices and all the currently active and mount-pending devices. Do not specify any additional file selection criteria. For example, if the original range on an SPXTAPE LOAD command was 181-182, and you have device 183 attached that you want to add, enter:

```
spxtape load 181-183
```

After the command completes, you can determine if any files have been skipped by comparing the volume logs from this load or scan with the ones that were created when the files were dumped. Skipped files are not recoverable.

Some files may have been only partially loaded or scanned. For a load operation, see the section on recovering from an I/O error, cancel, reset, or system failure in the description of the SPXTAPE LOAD command in the *z/VM: CP Commands and Utilities Reference*.

If skipping was not successful, the remaining files in that tape file are not recoverable. A tape file (ending with one or more tape marks) contains files dumped by one logical SPXTAPE DUMP command, which may have been a single command or multiple commands with the APPEND disposition. If the tape contains files dumped by other logical SPXTAPE DUMP commands, you may still be able to read them. Use the CMS TAPE command to position the tape to the beginning of the next tape file, and enter the SPXTAPE LOAD or SCAN command with the appropriate file selection criteria.

HCP1839E **File *userid spoolid2* (was *spoolid1* on tape) has been placed in system hold status because of a tape read I/O error**

Explanation

While loading file *spoolid1* from tape to the specified user ID (a new spool ID of *spoolid2* was assigned to the file on the system), the SPXTAPE LOAD command found part of the file to be unreadable and placed the file in system hold status.

System action

Command processing continues.

User response

Purge the partially loaded file and try loading the file from another tape drive. If the error occurs again, you may want to ask the spooling operator to release the file from system hold status so you can try reading the part that was loaded. If this is unsuccessful, you cannot recover the file from the tape.

HCP1840E **File {*userid*|*IMG|*NLS|*NSS|*UCR} *spoolid* has been skipped because SPXTAPE could not read the control information. [The file has been placed in system hold status]**

Explanation

While trying to dump the specified file to tape, the SPXTAPE DUMP command could not read the information that identified the DASD pages that contained the file. The file was not dumped. If the file was a standard spool file, SPXTAPE placed it in system hold status.

System action

Command processing continues.

User response

If the file is a standard spool file, you may want to ask the spooling operator to release it from system hold status for additional processing. Otherwise, purge the file.

HCP1841E **Page read error while dumping *userid spoolid fn ft*. XAB data has been omitted on tape**

Explanation

While dumping the specified file to tape, the SPXTAPE DUMP command could not read the associated extended attribute (XAB) data. The XAB data was omitted, but the rest of the file was dumped. The file was flagged to indicate information was missing.

System action

Command processing continues.

User response

None. For future reference, remember the XAB data is no longer available for this file. If the file is ever loaded, the flagging results in message HCP1843E.

HCP1842E **Page read error while dumping {*userid*|*IMG|*NLS|*NSS|*UCR} *spoolid fn ft*; *nnnnnnn* pages were not dumped to tape**

Explanation

While dumping the specified file to tape, the SPXTAPE DUMP command could not read a number of pages and omitted them from the tape. The rest of the file was dumped and flagged to indicate data was missing.

This error was caused by one of these conditions:

- I/O errors that occurred while trying to read the data pages from spool space
- Paging errors that occurred while processing the file after its control information was read into system virtual storage.

System action

Command processing continues.

User response

Enter the SPXTAPE DUMP command again. If the error was caused by the second condition, the file should dump correctly. If the error was caused by the first condition, the condition probably still exists, and you will receive this error message again. In that case, you may want to process the file without the missing pages. If the file is ever loaded, the flagging results in message HCP1843E.

HCP1843E **File {*userid*|*IMG|*NLS|*NSS|*UCR} *spoolid2* (was *spoolid1* on tape) has been {placed in system hold status|purged} because of pages omitted when the file was dumped**

Explanation

While the SPXTAPE LOAD command was loading the *spoolid1* file from tape to the specified user ID or queue (a new spool ID of *spoolid2* was assigned to the file on the system), SPXTAPE found the file contained a flag (set when the file was dumped) indicating the file contained incomplete data. If the file was a standard spool file, SPXTAPE placed it in system hold status. If the file was a system data file, SPXTAPE purged it.

System action

Command processing continues.

User response

If the file is a standard spool file, you may want to ask the spooling operator to release it from system hold status so you can try reading the part that was loaded. Otherwise, purge the file. If the file is a system data file, it is not recoverable from the tape. You must either rebuild it or recover it from other sources.

HCP1844E **Permanent error on virtual device *vdev*. Discard the volume and mount a new volume, or leave the drive not ready if other drives are active, or add another drive with the SPXTAPE DUMP command**

Explanation

The SPXTAPE DUMP command encountered a permanent tape write I/O error on the specified device. The disposition of the tape was changed to RUN. The tape was rewound and unloaded, and the drive was placed in the mount pending state.

A cause of the error could be if MODE COMP was specified on the original SPXTAPE DUMP command to use the hardware compaction feature, but device *vdev* did not have that feature.

System action

The command continues by reprocessing all the files contained on the volume with the error and dumping

them to other tape drives active for this SPXTAPE DUMP command (if any) or to this drive when a new tape is mounted.

User response

Mount another tape volume on the drive. If you suspect the tape drive is contributing to the problem, and no other drives in the device range are active, you can add one or more drives by entering the SPXTAPE DUMP command again with an expanded range that includes the old range plus the new drives. If other drives in the range are active, you can use the SPXTAPE CANCEL command to remove the failing drive. However, if no other drives are active, using the SPXTAPE CANCEL command cancels the SPXTAPE DUMP command. This may leave partial files on other volumes already dumped.

HCP1845E **User {canceled|reset} last virtual device *vdev*; {DUMP|LOAD|SCAN} *vdev1*[-*vdev2*] has been canceled**

Explanation

The last or only tape drive in the SPXTAPE operation was canceled with the SPXTAPE CANCEL command or reset with the RESET, DETACH, GIVE, or similar CP command. The SPXTAPE operation was canceled.

System action

The command is canceled; system operation continues.

User response

If you want to continue the canceled SPXTAPE operation (after attaching new drives, if necessary):

For DUMP with PURGE:
Discard the tape volumes that were not already rewound and unloaded prior to the cancel, and enter the SPXTAPE DUMP command again with the same file selection criteria.

For DUMP without PURGE:
Discard all the tape volumes already dumped and repeat the total process by entering the SPXTAPE DUMP command again.

For LOAD:
See the section on recovering from an I/O error, cancel, reset, or system failure in the description of the SPXTAPE LOAD command in the *z/VM: CP Commands and Utilities Reference*.

For SCAN:
Discard the volume logs for the volumes that were actively being scanned at the time of the cancel (the ones that contain the response SPXTAPE SCAN CANCELED ON VDEV *vdev*). Enter the SPXTAPE SCAN command again for these volumes.

HCP1846E **Maximum system spool file limit exceeded; LOAD *vdev1*[-*vdev2*] has been canceled**

Explanation

While the SPXTAPE LOAD command was running, the maximum number of spool files allowed on the system was exceeded. The SPXTAPE command was canceled.

System action

System operation continues.

Operator response

Request all users to purge all unnecessary spool files to enable system spooling activity to continue.

System programmer response

Purge all unnecessary system data files. It may be necessary to increase the maximum spool files allowed on the system by enlarging the checkpoint and warmstart areas on the system residence volume.

User response

As soon as possible, inform the system operator you have received this message. Purge all unnecessary spool files. After spool files have been purged or the system capacity has been increased, enter the SPXTAPE LOAD command again.

HCP1847E **Tape on virtual device *vdev* contains data that is not valid. The tape is positioned incorrectly or the volume is not in SPXTAPE format. Ending processing of this volume**

Explanation

The SPXTAPE LOAD or SCAN command read a block that contained unexpected data from the tape volume mounted on the specified device. Processing of the volume was ended.

System action

If the disposition on the SPXTAPE command is RUN, the current tape is rewound and unloaded, and the system waits for another tape to be mounted. If the disposition is REW or LEAVE, no more processing is done on that tape drive:

- If other drives are active, the SPXTAPE command continues on another drive.
- If this is the last or only active tape drive, this SPXTAPE command is ended and system operation continues.

User response

If an incorrect volume is mounted, mount the correct volume. If the volume is incorrectly positioned (either not rewound or positioned somewhere other than at the beginning of a set of records written by the SPXTAPE DUMP command, possibly at the logical end of the tape if the last SPXTAPE operation had a disposition of LEAVE), use the CMS TAPE FSF and BSF commands to position the tape correctly. Then enter the SPXTAPE command again.

HCP1848E Spool space exhausted; LOAD *vdev1*[-*vdev2*] has been canceled

Explanation

While the SPXTAPE LOAD command was running, the total available spool space was exhausted. The SPXTAPE command was canceled.

System action

System operation continues.

Operator response

Reduce the spooling load on the system as soon as possible.

System programmer response

Purge all unnecessary system data files. It may be necessary to increase the current spooling system capacity by obtaining more DASD or reformatting existing DASD with more space allocated for spooling.

User response

As soon as possible, inform the system operator you have received this message. Purge all unnecessary spool files. When spool space is available, enter the SPOOL CONSOLE START command to resume console spooling, or enter the READY command to resume printer or punch spooling. Then enter the SPXTAPE LOAD command again.

HCP1849E SPXTAPE DUMP was not started. File selection criteria did not match any files

Explanation

The file selection criteria on the SPXTAPE DUMP command did not match any files on the system, so no files were dumped.

System action

The command does not run; system operation continues.

User response

Check the file selection criteria specified on the SPXTAPE command to ensure the files you want to dump are identified.

HCP1850E User {canceled|reset} virtual device *vdev*. [Discard volume]

Explanation

The current SPXTAPE operation on the specified device was canceled by the user, the user reset the device (using RESET, DETACH, GIVE, or a similar CP command), or the device was reset by a privileged user (such as the system operator).

System action

If there are more tape drives active for the command, the command continues. If there are no other active drives, the command is ended and system operation continues.

User response

If the device was reset by a privileged user, determine why the device was removed from your user ID.

If you want to continue the canceled operation (after attaching new drives, if necessary):

For DUMP with PURGE:
If other drives are available, do nothing. If this is the last or only tape drive, discard the tape volumes that were not already rewound and unloaded prior to the cancel, and enter the SPXTAPE DUMP command again with the same file selection criteria.

For DUMP without PURGE:
If other drives are available, do nothing. If this is the last or only tape drive, discard all the tape volumes already dumped and repeat the total process by entering the SPXTAPE DUMP command again.

For LOAD:
See the section on recovering from an I/O error, cancel, reset, or system failure in the description

of the SPXTAPE LOAD command in the *z/VM: CP Commands and Utilities Reference*.

For SCAN:
Discard the volume logs for the volumes that were actively being scanned at the time of the cancel (the ones that contain response 4 with CANCEL as the reason for termination). Enter the SPXTAPE SCAN command again for these volumes.

HCP1858I **The variations of this message are explained below.**

— Variation 1 **The non-destructive dump function has completed.**

Explanation

A system error initiated a non-destructive dump or a privileged user issued the SNAPDUMP command, and the non-destructive dump process has finished honoring the request. A dump was taken or further dump processing messages indicate why no dump was taken.

System action

None.

User response

The system might have been unavailable for an extended period of time prior to the message being issued. The message indicates that the system is available again, but the operator will have to make sure all resources are online again. Servers that might have timed out or lines that were dropped might have to be made active again.

— Variation 2 **A non-destructive dump request occurred for ABEND *mmm###*. The dump was NOT taken because a required system resource was unavailable.**

Explanation

A system error requested a non-destructive dump, but non-destructive dump processing was unable to obtain a resource. Therefore, no dump was taken. The *mmm###* variable is the abend code.

System action

None.

User response

None. If a dump was not taken at the time of the failure, initiating a dump after this message is received will be too late to capture the failing environment. If the same abend indicated consistently fails to result in a dump, contact the IBM Support Center for assistance. A problem might exist if this particular abend should not be using the non-destructive dump function.

HCP1876E **THE USER ID *userid* IS A RESTRICTED USER ID AND MAY NOT BE SPECIFIED IN THE CP DIRECTORY.**

Explanation

DIRECTXA encountered a USER, IDENTITY, or SUBCONFIG statement that attempted to use a restricted user ID or SUBCONFIG ID. The statement in error precedes this error message. Restricted user IDs are user IDs that might cause CP to function inappropriately when logged on. Examples of these user IDs are: LOGN0100, LOGL0001, and LOGV0025.

System action

After scanning the remaining statements for correct syntax, the directory program terminates without bringing a new directory online.

User response

Change the statement in error to define a user ID or SUBCONFIG ID that is not restricted and reenter the DIRECTXA command.

HCP1879E ***statement* STATEMENT WITH {WRKALLEG | NOWRKALLEG} OPTION FOLLOWING {USER *userid* | IDENTITY *userid* | SUBCONFIG *id*} DOES NOT APPLY TO VIRTUAL DEVICE *vdev* BECAUSE THE {PREVIOUS STATEMENT IS NOT AN MDISK | DEVICE IS DEFINED READ-ONLY}**

Explanation

You specified a MINIOPT or DASDOPT that is not valid with the WRKALLEG or NOWRKALLEG option because the device is defined with read-only access, or the DASDOPT did not follow an MDISK statement. To specify the WRKALLEG or NOWRKALLEG option, the device must be configured for write access. If WRKALLEG or NOWRKALLEG is specified with DASDOPT, the DASDOPT must follow an MDISK statement. It cannot follow DEDICATE or LINK.

System action

After scanning the remaining statements for correct syntax, the directory program terminates without bringing a new directory online.

User response

Determine if the virtual device specified is the correct device for the WRKALLEG or NOWRKALLEG option. If so, correct the error resulting in this message.

HCP1880E **CLOSING QUOTATION MARK IS MISSING FROM QUOTED STRING FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}**

Explanation

The directory statement contains an incomplete quoted string.

System action

The directory statement on which the error occurred is displayed above the message. Only the first 237 characters of the statement are displayed above the message. After scanning the remaining statements for correct syntax, the directory program terminates, without bringing a new directory on line,

User response

Correct the quoted string in the record and reenter the DIRECTXA command.

HCP1882E **NICDEF REJECTED; {TYPE MUST BE SPECIFIED FIRST | DEVICE COUNT IS OUT OF RANGE *n-nnnn* | LAST DEVICE IS ABOVE FFFF | PORTNUMBER *pnum* IS OUT OF RANGE 1-2048 | VLAN *vidspec* IS OUT OF RANGE 1-4094 | PORTTYPE ACCESS CONFLICTS WITH VLAN OPTION | LAN MUST BE SPECIFIED WITH PORTNUMBER, PORTTYPE, VLAN, PROMISCUOUS, or PQUPLINKTX | VLAN LIST WITH MORE THAN *nnnn* DISCRETE RANGES } FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}.**

Explanation

The NICDEF statement in the user directory begins with NICDEF and the base device address of the adapter. Options for the same adapter may appear on separate, but contiguous statements with the same base device address. The indicated NICDEF statement contains one of the following errors:

- **TYPE MUST BE SPECIFIED FIRST:** TYPE is required as the first option on the first NICDEF statement for each adapter.
- **DEVICE COUNT IS OUT OF RANGE *n-nnnn*:** The number of devices specified on this NICDEF statement is outside the valid range. Adjust the DEVICES parameter to a value within this range, or omit the DEVICES parameter to use the default.
- **LAST DEVICE IS ABOVE FFFF:** The specified base address and DEVICES count would generate a series of virtual devices with addresses that would exceed FFFF (the last possible virtual device address). Adjust the DEVICES parameter or the base device address to keep the last device address within the range of 0000-FFFF.
- **PORTNUMBER *pnum* IS OUT OF RANGE 1-2048:** The portnumber specified on this NICDEF statement is outside the valid range. Adjust the PORTNUMBER parameter to a value within this range.
- **VLAN *vidspec* IS OUT OF RANGE 1-4094:** The VLAN specified on this NICDEF statement is outside the valid range. Adjust the VLAN parameter to a value within this range.
- **PORTTYPE ACCESS CONFLICTS WITH VLAN OPTION:** PORTTYPE ACCESS and VLAN were specified on this NICDEF statement and more than one VLAN was specified. PORTTYPE TRUNK is required when more than one VLAN is specified.
- **LAN MUST BE SPECIFIED WITH PORTNUMBER, PORTTYPE, VLAN, PROMISCUOUS, or PQUPLINKTX:** When the PORTNUMBER, PORTTYPE, VLAN, PROMISCUOUS, or PQUPLINKTX options are used on a NICDEF statement, the LAN operand must also be specified to identify which LAN or virtual switch the NIC will be coupled to.
- **VLAN LIST WITH MORE THAN *nnnn* DISCRETE RANGES:** The VLAN list specified on this NICDEF statement has more VLAN ranges than is supported (100). Express the VLAN parameter with fewer ranges.

FOLLOWING {USER | PROFILE | IDENTITY | SUBCONFIG} *name* indicates the user, profile, identity, or subconfiguration entry that contained the incorrect NICDEF statement.

System action

The directory statement on which the error occurred is displayed above the message. After scanning the remaining statements for correct syntax, the directory

program terminates, without bringing a new directory on line.

User response

Correct the operand that is not valid in the control statement and enter the DIRECTXA command again.

HCP1900E **SPXTAPE operation *operation* is not recognized. Use DUMP, LOAD, SCAN, END, or CANCEL**

Explanation

The operation specified on the SPXTAPE command was not valid.

System action

The command does not run; system operation continues.

User response

Enter the SPXTAPE command again with a valid operation operand.

HCP1901E ***vdev_field* is not a valid virtual device number or range; use 'vdev' or 'vdev1-vdev2'**

Explanation

The data specified in the virtual device field on the SPXTAPE command was not a valid virtual device number or range of virtual device numbers.

System action

The command does not run; system operation continues.

User response

Enter the SPXTAPE command again with a valid virtual device number or range.

HCP1902E **Virtual device *vdev1*[-*vdev2*] not attached**

Explanation

No device was attached to your virtual machine at the virtual device number or range specified on the SPXTAPE command.

System action

The command does not run; system operation continues.

User response

Have the tape drives you want to use attached to your user ID, then enter the SPXTAPE command again with the virtual device number or range.

HCP1903E **Virtual device *vdev1*[-*vdev2*] not supported for SPXTAPE**

Explanation

No tape drive supported by SPXTAPE was attached to your user ID at the virtual device number or range specified on the SPXTAPE command.

System action

The command does not run; system operation continues.

User response

Ensure the tape drives you want to use are attached to your virtual machine. Enter the SPXTAPE command again with the virtual device number or range.

HCP1904E **Virtual device *vdev1*[-*vdev2*] not active**

Explanation

The SPXTAPE DUMP, LOAD, or SCAN command was not operating on a tape drive attached to your user ID at the virtual device number or range specified on the SPXTAPE END or CANCEL command.

System action

The command does not run; system operation continues.

User response

Determine if the SPXTAPE DUMP, LOAD, or SCAN operation has already completed, or whether an incorrect device number or range has been specified on the SPXTAPE END or CANCEL command. If necessary, enter the SPXTAPE command again with the tape drives you want to end or cancel.

HCP1905E **Virtual device *vdev1*[-*vdev2*] is not valid; *vdev3* is already active with SPXTAPE {DUMP|LOAD|SCAN}**

Explanation

The virtual device range specified on the SPXTAPE command was not valid because tape device *vdev3*, which was included in the range, was already active with a different SPXTAPE command.

System action

The command does not run; system operation continues.

User response

If the SPXTAPE operation you are trying to run is END or CANCEL, enter the SPXTAPE command again with a corrected device range that includes tape drives associated with only one SPXTAPE DUMP, LOAD, or SCAN operation.

If the SPXTAPE operation you are trying to run is DUMP, LOAD, or SCAN, and if *vdev1-vdev2* is the correct range, then determine why *vdev3* is still active from a previous command. The possible reasons are:

- SPXTAPE is still actively working or waiting on your last DUMP, LOAD, or SCAN request with the APPEND disposition, and you have yet to enter an SPXTAPE command addressing *vdev3* with a disposition other then APPEND. If there are no more files to be appended, enter the SPXTAPE DUMP, LOAD, or SCAN command, addressing the same device range as the original command, with a disposition of RUN, REW, or LEAVE to complete the SPXTAPE operation. When the operation completes, enter your SPXTAPE command again that begins the next operation.
- SPXTAPE LOAD or SCAN with a disposition of RUN has not completed because *vdev3* is in mount-pending status as a result of reaching logical end-of-tape. If there are no more volumes to be processed, enter the SPXTAPE END command, addressing the same device range as the original command, to complete the SPXTAPE operation. When the operation completes, enter your SPXTAPE command again that begins the next operation.
- SPXTAPE DUMP, LOAD, or SCAN has not completed because *vdev3* is in mount-pending status as a result of reaching physical end-of-tape with some files not yet dumped, loaded, or scanned. If you want the files dumped, loaded, or scanned, then mount another tape volume on *vdev3*. Otherwise, enter the SPXTAPE END command, addressing the same device range as the original command, to complete the operation. When the operation completes, enter your SPXTAPE command again that begins the next operation.

If the operation or device range specified on the SPXTAPE command was not correct, enter the SPXTAPE command again with the correct operation or range.

Note: If the operation is DUMP or LOAD, it is better for performance reasons to run only one SPXTAPE DUMP or LOAD operation at a time.

HCP1906E **File {*userid*|*IMG|*NLS|*NSS|*UCR} *spoolid2* (was *spoolid1* on tape) has been purged because {spool space is full|the tape was canceled}**

Explanation

While the SPXTAPE LOAD command was loading file *spoolid1* from tape to the specified user ID or queue (a new spool ID of *spoolid2* was assigned to the file on the system), the total available spooling space was exhausted or the tape drive was canceled. (An implicit cancel resulted if the tape drive was detached.) Because the file was only partially loaded, it was purged.

System action

If spooling space is exhausted, or if the canceled tape drive is the last or only drive, the command stops. Otherwise, command processing continues.

User response

When spooling space is available, or when you have corrected the problem with the tape, you can load the file individually. If possible, examine the volume logs for when the tapes were created or scanned to determine the volumes on which file *spoolid1* resides. Enter the SPXTAPE LOAD command with the appropriate queue and file selection criteria, including spool ID *spoolid1*.

HCP1907E **File {*userid*|*IMG|*NLS|*NSS|*UCR} *spoolid2* (was *spoolid1* on tape) has been purged because of a DASD error. The file can be recovered by reloading it from tape**

Explanation

While loading file *spoolid1* from tape to the specified user ID or queue (a new spool ID of *spoolid2* was assigned to the file on the system), the SPXTAPE LOAD command encountered an unrecoverable DASD error when it tried to read or write the control information that indicates where files are located on the DASD. Because the file was only partially loaded, it was purged.

System action

Command processing continues.

User response

You can load the file individually. If possible, examine the volume logs for when the tapes were created or scanned to determine the volumes on which file *spoolid1* resides. Enter the SPXTAPE LOAD command with the appropriate queue and file selection criteria, including spool ID *spoolid1*.

Note: The volume log where the partially loaded file (*spoolid2*) was logged does not reflect the error because the log entry was created before the error was encountered. Also, the number of spool pages reported in response 3 for the completed SPXTAPE LOAD operation includes some or all of the purged file. The data lost because of the error makes it impractical to determine the number of pages to remove from the count.

HCP1908E **File {*userid*|*IMG|*NLS| *NSS| *UCR} *spoolid2* (was *spoolid1* on tape) has been {placed in system hold status|purged} because it was partially loaded. One or more tapes containing parts of the file were not loaded**

Explanation

The SPXTAPE LOAD command only partially loaded file *spoolid1* from tape to the specified user ID or queue (a new spool ID of *spoolid2* was assigned to the file on the system). The partial load may have occurred because the file was contained on more than one tape volume, and all the volumes were not mounted before the command ended. If the file was a standard spool file, it was placed in system hold status. If the file was a system data file, it was purged.

System action

Command processing continues.

User response

If possible, examine the volume logs for when the tapes were created or scanned to determine the volumes on which file *spoolid1* resides.

If you can locate the missing tape volumes:

1. Purge file *userid spoolid2* from the system (standard spool file only).
2. Enter the SPXTAPE LOAD command with the appropriate queue and file selection criteria, including spool ID *spoolid1*.
3. Remount all the tape volumes that contain the file to be loaded.

If you cannot locate the missing volumes:

- For a standard spool file, use the CHANGE command to change the file's hold status to NOSYS (requires class D authority), and try to process the part of the file that was loaded. If this is not successful, the file will have to be recreated or recovered from another source.
- For a system data file, the file will have to be recreated or recovered from another source.

HCP1909E **File dumped as *userid1 spoolid1* has been loaded to *userid2* as file *spoolid2*.**

Explanation

The SPXTAPE LOAD command loaded the *userid1 spoolid1* file from tape, but could not assign it to *userid1* on the system. Either the user ID did not exist on the system, or the user had reached the maximum number of spool IDs allowed for that virtual machine. The file was assigned to the user who entered the SPXTAPE LOAD command (*userid2*) as spool ID *spoolid2*. (This message was not displayed if IMSG was set OFF, but was recorded in the command summary log.)

System action

Command processing continues.

User response

Transfer the file to the proper owner, or purge the file if it is not wanted.

HCP1910E **File {*userid*|*IMG|*NLS|*NSS| *UCR} *spoolid2* (was *spoolid1* on tape) was partly loaded and then purged because of a tape read I/O error**

Explanation

While loading file *spoolid1* from tape to the specified user ID or queue (a new spool ID of *spoolid2* was assigned to the file on the system), the SPXTAPE LOAD command encountered a permanent I/O error. The file was only partially loaded and then purged.

System action

Command processing continues.

User response

You probably cannot recover the file from this source. Try loading the file from a different tape drive. If that is unsuccessful, you must reconstruct the file from another source.

HCP1911W **Tape on virtual device *vdev* not positioned at beginning-of-tape or after a tape mark. Attempting to process anyway**

Explanation

The SPXTAPE LOAD or SCAN command found the tape volume mounted on the specified virtual device was not positioned where data dumped by SPXTAPE DUMP should begin: either at the beginning-of-tape (BOT) or immediately following a tape mark.

System action

Command processing continues.

User response

If the tape volume is incorrectly positioned, enter the SPXTAPE CANCEL command to cancel the device. (Incorrectly positioned means either not rewound or positioned somewhere other than at the beginning of a set of records written by the SPXTAPE DUMP command, possibly at the logical end-of-tape if the last SPXTAPE operation had a disposition of LEAVE.) After the drive is canceled, use the CMS TAPE FSF and BSF commands to correct the position of the tape. If the SPXTAPE LOAD or SCAN had not completed before you canceled the tape, enter the SPXTAPE LOAD or SCAN command with just the device range (no selection criteria) to reactivate the device. If the SPXTAPE LOAD or SCAN had completed, enter the original SPXTAPE command again to redo the operation.

No action is necessary if you intend to start processing at other than the beginning of a section of data dumped by SPXTAPE DUMP. However, this capability is supported only for extreme manual error recovery in situations where SPXTAPE LOAD has skipped tape records with errors.

HCP1912E **Tape on virtual device *vdev* not positioned at beginning-of-tape or after a tape mark. Device *vdev* has been canceled**

Explanation

The SPXTAPE DUMP command could not begin dumping data because the tape volume mounted on the specified virtual device was not positioned either at the beginning-of-tape (BOT) or immediately following a tape mark. The SPXTAPE DUMP operation on that device was canceled. The tape was not repositioned.

System action

If this is the last or only tape drive, the command stops. Otherwise, command processing continues.

User response

If this is the last or only tape drive, use the CMS TAPE command to correct the position of the tape. Then enter the SPXTAPE DUMP command again.

If this is not the last or only tape drive:

- If the command has already completed using the other drives, do nothing.
- If the command is still processing on the other drives, use the CMS TAPE command to position the tape on this drive. Then enter the SPXTAPE DUMP command with just the virtual device range (no selection criteria).

HCP1913I **SPXTAPE selection criteria includes system data files that will not be purged**

Explanation

The file selection criteria specified for the SPXTAPE DUMP command with the PURGE operand included system data files. SPXTAPE DUMP cannot purge system data files from the system.

System action

Command processing continues. The system data files are dumped, but not purged. Standard spool files included in the selection criteria are dumped and purged.

User response

None required for the SPXTAPE operation. If you want the system data files purged, you must do so manually with the PURGE command.

HCP1914E **Virtual device *vdev1*[-*vdev2*] not write-enabled**

Explanation

The requested operation was not started because the specified virtual device was attached read-only, or the

specified range did not contain any device that was attached write-enabled.

System action

The command does not run; system operation continues.

User response

Ensure you have specified the correct device or range of devices, and each device you want to use is write-enabled. To write-enable a tape reel, ensure the tape has a write-enable ring. To write-enable a tape cartridge, turn the thumbwheel on the cartridge so the white dot does not show. To write-enable a virtual DASD, link it in write mode.

HCP1915E **Operands beginning with *operand* conflict with an active SPXTAPE command**

Explanation

An active SPXTAPE command was already running on one of the tape devices in the range specified on the new SPXTAPE command. Because the active command was not entered with the APPEND operand, additional file selection criteria could not be specified on the new command.

System action

The new command does not run; the active command continues processing.

User response

This depends on what you are attempting to do by entering the new SPXTAPE command:

- If you want to add file selection criteria to the active SPXTAPE command, but you forgot to include the APPEND operand when you entered that command, you may want to use the SPXTAPE CANCEL command to cancel the active command and start over.
- If you want to expand the device range of the active SPXTAPE command, you cannot specify file selection criteria on the new command. Enter the new command again with no file selection criteria (no operands after the expanded range).
- If you want to start a separate SPXTAPE operation, but you entered the wrong device number or range on the new command, enter the new command again with a device number or range that does not include any device being used by an active SPXTAPE command.
- If you want to start a separate SPXTAPE operation on the same device or range being used by the active command, you must wait for the active command to finish. Then enter the new SPXTAPE command again.

HCP1916I **File *userid queue spoolid* matches the SPXTAPE selection criteria but could not be dumped**

Explanation

The SPXTAPE DUMP command found the selected file in the spooling system, but could not dump it to tape for one of these reasons:

- The file was open.
- The file was in use.
- The file was a class W system trace file.
- The file was a secure saved segment.
- Security authorization for the file failed.
- The file was locked on another system in the SSI cluster.

System action

The file is not dumped, and command processing continues.

Note: This message is written in the SPXTAPE command summary log only; it is not displayed. The SET IMSG command has no effect on the issuing of this message.

User response

If it is important for the specified file to be dumped, you must determine the reason why it was not dumped. If possible, correct the condition. Then enter the SPXTAPE DUMP command with the appropriate file selection criteria. Many of these conditions can be avoided if you use SPXTAPE DUMP when all or most other users are not logged on.

- If the file was open, you must contact the owner of the file to close it. This is often a temporary condition, and the file may be already closed by the time you check. However, open console files fall into this category, and these files will not close unless the owner logs off or stops spooling the console.
- If the file was in use, either it will be out of that status by the time you check or you will have to contact the owner of the file to close it.
- If the file is a class W system trace file, have the owner use the TRSAVE command to turn off the tracing.

- If the file is a secure saved segment, you are not authorized to dump the file. Only the user who created the file can dump it.
- If the security authorization for the file failed, you do not have the security authorization required to dump the file. You must either obtain the necessary authorization or have someone who has the authorization dump the file.
- Unlock the spool file on the other member of the SSI cluster, and reissue the SPXTAPE DUMP.

HCP1917E The variations of this message are explained below.

— Variation 1 Tape device(s) {*rdev*[-*rdev*] | *vdev*[-*vdev*]} attached MULTIUSER.

Explanation

The command entered cannot operate on a tape drive attached MULTIUSER.

System action

The command is not executed. System operation continues.

User response

Use the CP QUERY TAPES command to determine which tape devices specified on the original command are attached as MULTIUSER. Use the CP DETACH command to detach the tape devices that are attached as MULTIUSER. If necessary, use the CP ATTACH command (without the MULTIUSER option) to reattach the tape devices. Then, reissue the original command that failed.

— Variation 2 Tape device(s) {*rdev*[-*rdev*] | *vdev*[-*vdev*]} are attached with a mismatch of the KEY option.

Explanation

The command that was issued cannot operate on a range of tape drives where some drives have been attached with the KEY option and some drives have been attached without the KEY option.

System action

The command is not executed. System operation continues.

User response

The tape devices specified on the command must all be attached with the KEY option or without the KEY option. Use the CP QUERY TAPES command to determine which tape devices specified on the original command are attached with the KEY option. Use the CP DETACH command to detach the appropriate tape devices. If necessary, use the CP ATTACH command (with or without the KEY option) to reattach the tape devices. Then, reissue the original command that failed.

HCP1920E Minidisk cache not enabled for system.

Explanation

The minidisk cache is not in use for this system. The minidisk cache must be set on (enabled) for the system in order to change or query cache settings for a real device, for a minidisk, or for a user ID.

System action

The command is not processed.

User response

Enable the system for minidisk caching and enter the command again.

HCP1921E Cache settings could not be {changed | queried} for {*rdev* code *cc* | *userid vdev* code *cc* | *rdev-rdev* | *userid vdev-vdev* | system code *cc*}

Explanation

An error occurred that prevented the SET MDCACHE or QUERY MDCACHE command from being processed. If a code is not specified in the message, then the command could not be performed on any of the specified devices in the requested range. The specific error could be different for each of the devices in the range, but will be one of the reasons listed below for each device. The variables in this message are as follows:

rdev
The real device specified in the command

userid vdev
The user ID and virtual device specified in the command

cc
A code indicating the specific error that occurred:

4
Specified device is not attached to the system or not a cacheable device type.

8
Specified device does not exist.

12
Information could not be obtained from the directory.

16
Specified user ID is not in the directory.

20
Not enough host storage available to initialize the cache.

24
The minidisk is on an FBA device and either does not start on or does not end at a full page boundary.

28
The device is an alias Parallel Access Volume. Cache settings are inherited from its associated base Parallel Access Volume.

32
The device is an alias HyperParallel Access Volume. Cache settings are only applicable for base HyperParallel Access Volumes.

System action

The command is not processed.

User response

Refer to the code to determine the error. Correct any errors and retry the command.

HCP1922W **SSI cluster member *membername* is missing required support; install *support_description***

Explanation

This message is displayed when a member of a single system image (SSI) cluster detects that support required on all members of the cluster is missing on at least one member. This message is issued whenever an SSI cluster member detects that another member does not have the required support installed. This can be when a member joins the cluster or whenever the SSI relocation domain virtual architecture level is recomputed, for example during a concurrent driver upgrade.

Reasons this message is issued:

- Before including a member running on a z14 (or later) machine, all members of the cluster must have APAR VM65976 installed.
- Before an SSI member can join the cluster with SPOOL_MEMBERS set to 8, all members of the cluster must have APAR VM66462 installed. APAR VM66462 is included in the base version of z/VM 7.4 and in later versions.

System action

- **For APAR VM65976:**

  This message is displayed on the OPERATOR console of the system that is running on the z14 (or later) machine. It is issued once for each member that is missing the support. The system continues to run, but there could be problems with the live guest relocation functions.

- **For APAR VM66462:**

  This message is displayed on the OPERATOR console of the system that is being IPLed with SPOOL_MEMBERS 8. It is issued once for each member that is missing the support. The IPL fails and wait state 1682 is loaded following this message.

User response:
Install the required support as soon as possible on each member that does not have it.

HCP1924I ***userid*: Virtual machine is not in the destination system CP directory**

Explanation

The user being relocated has either been deleted from the CP directory of the single system image cluster or the object directories of the systems in the single system image cluster are not the same. This message also appears if the directory entry is already in use or there is an I/O error reading the directory entry. Because the given conditions are only checked if the MAXUSERs limit has been hit on the destination system, it is possible that a guest that was successfully relocated to the source or destination system previously will get this message on later relocations.

This message is preceded by message HCP1939E or message HCP1940E, with a return code that is the same as the error message number.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Correct the problems with the CP directory of the single system image cluster or of the destination system then reissue the VMRELOCATE command.

HCP1925E **Live Guest Relocation could not create its listening socket**

Explanation

During SSI system enable time, live guest relocation could not create and bind its listening socket (port=*LGR). This socket is needed to relocate a guest from any system in the SSI cluster to this newly joining system. As a result of this failure, live guest relocation is not enabled.

System action

The system that tried to join the SSI cluster will be put in ISOLATED state because at least one SSI service (live guest relocation) failed to initialize.

User response

Determine why the ISFC CREATE_SERVER call failed to create and bind the requested socket. Correct the problem or call IBM.

HCP1926E Relocation is not in progress for *userid*

Explanation

An attempt was made to modify, cancel, or check the status of a relocation for a virtual machine that has no relocation in progress on this system. These commands can only be used on the source or destination systems of an in-progress relocation. This message is received if there are no relocations of this userid (either inbound or outbound) active on this system.

System action

The modify, cancel, or status check request is ignored.

User response

Reissue the VMRELOCATE command with the correct userid.

HCP1927E System *sysname* is not a member of an SSI cluster

Explanation

The system name specified on the VMRELOCATE command does not exist in a single system image cluster. This could also occur if the source system was IPLed in repair mode.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Ensure the source system is not in repair mode. Then issue the VMRELOCATE command again from a member of the SSI cluster and specify a destination system that is also in the cluster.

HCP1928E Cannot communicate with partner system *system*

Explanation

The partner system specified on the VMRELOCATE command exists in the single system image cluster but the communications link is not available.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Determine why the communications link is down and reissue the VMRELOCATE command after the link is fixed. Use QUERY SSI and QUERY ISFC TRANSPORT commands to troubleshoot the problem. Also check the system operator's console for messages that might explain why the link is down.

HCP1929E Cannot relocate *userid* because *member* is not joined

Explanation

A user may only be relocated within an SSI cluster. Both the source and destination must be members of the same cluster and must be currently joined to that cluster. This message is received when a VMRELOCATE of the user is attempted when either the source system or the destination system was not in the joined state at the time.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Attempt the relocation again once both members are joined into the SSI cluster.

HCP1930I *userid*: The maximum {*quiesce* | *total*} time was exceeded

Explanation

This message can be received if either the total time or the quiesce time exceeds the maximum allowed as specified by the MAXTOTAL and MAXQUIESCE operands on the VMRELOCATE command.

Some virtual machines can only tolerate a stoppage of a certain length of time before time-outs occur, causing problems for the virtual machine. During a relocation, the virtual machine is quiesced temporarily near the end of the process. When the VMRELOCATE command is issued, MAXQUIESCE time can be specified to set the maximum amount of time a virtual machine can tolerate being stopped during the relocation. If the maximum quiesce time is exceeded, this message is received.

Maximum quiesce time could be exceeded because VMRELOCATE could not reach the storage threshold prior to doing the quiesce thereby lengthening the necessary quiesce time. This can occur if the threshold was not reached in the amount of time allowed by the prior maximum total time specified as MAXTOTAL. In other words, if the threshold is not reached by the time MAXTOTAL-MAXQUIESCE, then the quiesce is done with storage amounts still above the threshold. Maximum quiesce time can be exceeded even if the threshold was reached prior to quiesce.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The command can be reissued with a longer maximum quiesce time or maximum total time if the virtual machine can tolerate it. Alternatively, the relocation could be attempted at a later time when the virtual machine is not as busy or when the communications link is less busy.

HCP1931W **Relocation of *userid* to *destination* can occur but the virtual machine may not be able to return to source**

Explanation

This message is issued in response to a VMRELOCATE command with the MOVE or TEST operand, when the request is to move or test eligibility for a move to a destination system that has hardware architecture capabilities unavailable on the source system. This message is a warning that the virtual machine can only be relocated back to the source system by using the ARCHFORCE option.

System action

When the VMRELOCATE command is issued with the TEST operand, the command completes after displaying all the reasons why this relocation would not be allowed. When the VMRELOCATE command is issued with the MOVE operand, the command continues and the relocation is performed if no eligibility check failures occur.

User response

When the VMRELOCATE command is issued with the TEST operand, determine whether it is wise to actually relocate this virtual machine to the destination system. Consider whether the virtual machine will be relocated back to the source system and whether it will be acceptable to use the ARCHFORCE option.

HCP1932E **Relocation of *userid* to *destination* is terminated as a result of virtual machine action – *action***

Explanation

Certain virtual machine functions lead to termination of a relocation in progress for that virtual machine. When a virtual machine does any of the following while it is being relocated, the relocation is terminated and this message is issued.

- DEFCPU (guest changed its CPU configuration with DEFINE CPU)
- DEFSTOR (guest redefined its storage)
- DEFVDISK (guest defined a Vdisk)
- DETCPU (guest detached one of its virtual CPUs)
- DIAG64 (guest is loading or unloading a DCSS)
- DIAG214 (guest is using Pending Page Release)
- IPL (guest IPLed)
- LOGOFF (guest did a logoff or was forced off the system)
- SCLPDSR (guest software initiated dynamic storage reconfiguration request such as Unassign Storage)
- SETMACH (guest used SET MACHINE to change its architecture mode)
- SETVCONF (guest changed its virtual configuration with SET VCONFIG)
- SETVTOD (guest changed the setting of its virtual TOD clock)
- SYSTEM (guest reset itself with the CP SYSTEM command)
- TRACE (guest issued a CP TRACE command)

System action

The relocation of this virtual machine is canceled and the virtual machine continues to run on the source system. In unusual circumstances this can happen even if the action which initiated the cancellation did not complete. For example, if a FORCE command is issued with the relocating guest as its target, the relocation is generally cancelled and the FORCE occurs. However, if the relocation cannot be cancelled in a reasonable amount of time, the FORCE command fails and the relocation might eventually be canceled.

User response

If the relocation is still needed, reissue the VMRELOCATE command.

HCP1933E **Cannot relocate *userid* because the SSI cluster is not STABLE or INFLUX**

Explanation

A user may only be relocated within an SSI cluster. The SSI cluster must be in either STABLE or INFLUX mode for the relocation to be allowed. This message is received if a VMRELOCATE of the user is attempted when the cluster is in some mode other than either of these.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Attempt the relocation again once the SSI cluster has gone to STABLE mode.

HCP1934E **A relocation {MOVE | TEST} of this virtual machine by *userid* is already in progress**

Explanation

The virtual machine specified is already being relocated or a VMRELOCATE TEST is in progress. It is possible the wrong user was specified on the VMRELOCATE command. It is also possible to receive this message when VMRELOCATE is quickly issued to restart a recently terminated relocation. A message that the original command failed may be received on the source system before the destination system has completed its termination processing. This continuing termination processing could cause a new VMRELOCATE command to fail with this message. Termination processing should finish shortly and the command may then be reissued.

System action

The command is terminated. The relocation that was already in progress continues.

User response

Wait until the current VMRELOCATE TEST has completed and reissue the command again. Also, determine if the wrong user ID was specified and reissue the command with the correct one.

HCP1935E ***userid*: Relocation processing error: RC=*code***

Explanation

This message is issued during the relocation of a virtual machine when an unexpected error condition is encountered. Generally this is due to a code problem that needs to be addressed by IBM. However, if reason code 141, 143 or 144 (RC=141, RC=143 or RC=144) is received, this could be due to a timing issue when a guest is relocated from one member of the SSI cluster to another and then quickly relocated again.

System action

The relocation is terminated.

User response

User response: If RC=141 or RC=143 was received, wait a while and try the relocation again. Otherwise, report the error to IBM. If RC=141 or RC=143 persists for longer than a few minutes, report the error to IBM. If RC=144 then retry the relocation when the shared pool at the destination is configured to be compatible with the source or use FORCE ARCHITECTURE.

HCP1936E ***userid*: Device *vdev* is not responding**

Explanation

This message is issued during the relocation of a virtual machine when a device on the source VM fails to complete an active I/O.

System action

The relocation is terminated.

User response

Correct the problem with the device before attempting to relocate the virtual machine.

HCP1937E ***userid*: Unable to {ATTACH | DETACH | DEFINE | LINK | COUPLE} device *vdev*. RC=*xxxx-ff*[-*rdev*]**

Explanation

This message is issued during the relocation of a virtual machine when a device on the destination system cannot be relocated. The message indicates the command that failed, the virtual device number, and a return code to aid you in problem determination. In the return code, the *xxxx* indicates the error message number associated with the failing command; *ff* indicates the message format; *rdev* (if displayed) indicates a real device number.

A common failure for ATTACH is RC=0130-01 (message HCP0130I). This indicates no free real device was found on the destination system that had an EQID matching the device on the source system. The device was probably attached to another user on the destination system during an active relocation. The device was free when the relocation started but was found to be unavailable when an attempt was made to attach it to the target user ID.

System action

The relocation is terminated.

User response

Refer to the failing command for details related to the error message number. Correct the problem and then reissue the command.

HCP1938I ***userid*: Virtual machine's storage configuration was created using the DEFINE STORAGE CONFIG command**

Explanation

The DEFINE STORAGE CONFIG command is used to set up a single storage extent or multiple, non-contiguous storage extents. This configuration is not supported for relocation.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Use the DEFINE STORAGE command without the CONFIG option to allocate the storage for the virtual machine. This action will cause the virtual machine to be reset.

HCP1939E **Relocation of *userid* to *destination* is terminated for the following reason(s):**

Explanation

This message is issued when a virtual machine whose relocation is in progress has changed characteristics in such a way that it is no longer eligible for relocation. When the VMRELOCATE was issued the virtual machine was eligible, but the virtual machine became ineligible at some point during the relocation process.

System action

One or more messages are displayed following this message, showing the reasons why this virtual machine is not eligible for relocation. The relocation is terminated with no further action, and the virtual machine continues to run on the source system.

User response

Determine from the following message(s) why the virtual machine could not be relocated and how to correct the problem. Consider whether the virtual machine can be relocated to a different system in the SSI, or whether the configuration can be changed to make the virtual machine eligible.

HCP1940E ***userid* is not relocatable for the following reason(s):**

Explanation

This message is issued in response to a VMRELOCATE MOVE or TEST command when it is determined that the specified virtual machine is not eligible to be relocated. Eligibility checks are made immediately after the command is issued, before relocation commences. These checks are repeated just before the guest execution is resumed on the destination system, in case the guest state changed during the relocation. This message may be displayed at either of those times.

System action

One or more messages are displayed following this message, showing the reasons why this virtual machine is not eligible for relocation. If this message

is in response to a VMRELOCATE MOVE, the relocation is terminated with no further action and the virtual machine continues to run on the source system. If this message is in response to a VMRELOCATE TEST, the messages are displayed and the command completes.

User response

Determine from the following message(s) why the virtual machine could not be relocated and how to correct the problem. Consider whether the virtual machine can be relocated to a different system in the SSI, or whether the configuration can be changed to make the virtual machine eligible.

HCP1941E **VMRELOCATE MODIFY is valid only on the system where the relocation originates**

Explanation

In order to modify a relocation in progress the VMRELOCATE MODIFY command must be issued from the source system.

System action

The relocation continues without modification.

User response

Reissue VMRELOCATE MODIFY from the source system.

HCP1942E ***userid*: A virtual machine cannot issue a VMRELOCATE command with itself as the target**

Explanation

The user ID specified in a VMRELOCATE command was that of the command issuer. The attempt was rejected because self-relocation is not supported. No VMRELOCATE commands are allowed to be issued with the issuing virtual machine as its target userid.

System action

The virtual machine is not relocated.

User response

Issue the VMRELOCATE command for a user other than yourself.

HCP1943I ***userid*: Virtual machine has SET VMRELOCATE OFF**

Explanation

The user ID specified in a VMRELOCATE command has issued SET VMRELOCATE OFF and therefore cannot be relocated.

System action

The relocation attempt is terminated with no further action. The virtual machine continues to run on the source system.

User response

Determine whether the VMRELOCATE command was issued for the wrong user. If so, reissue the command specifying the proper userid. If the VMRELOCATE was issued for the proper user and you really do want to relocate that virtual machine, change the setting of the SET VMRELOCATE command for that user.

HCP1944I **The variations of this message are explained below.**

Explanation

1. *userID*: **Architecture incompatibility**
2. *userID*: **Architecture incompatibility due to differing system facility settings**

A VMRELOCATE command was issued to relocate a virtual machine from one member to another in a single system image (SSI) cluster. The virtual machine cannot be relocated for one of the following reasons:

- The destination system is not in the guest's assigned domain.
- The source and destination systems have different architecture facilities and the virtual machine's current relocation domain does not allow relocation from this system to the specified destination.
  The virtual machine's current relocation domain is assigned by the SET VMRELOCATE command or the VMRELOCATE directory statement.
- The relocation might be an attempt to move the guest to an out-of-domain member of the SSI cluster, or to an excluded member of the guest's domain. A member system in the guest's assigned domain can be excluded as a relocation target for several reasons:
  - The virtual machine's domain assignment was changed since the guest was IPLed.
  - The domain definition (list of member systems) was changed since the guest was IPLed.
  - The excluded member has less facility than when the guest was IPLed. For example, the guest was IPLed on a different hardware or software level.

– The destination member has a different system facility setting than the source member. In this case, variation 2 is displayed.

The VMRELOCATE options FORCE ARCHITECTURE and FORCE DOMAIN can be used to allow relocation despite the incompatibility. Use the FORCE ARCHITECTURE option with caution and only when it is known that the virtual machine can handle this architecture transition.

System action

The relocation is ended with no further action. The virtual machine continues to run on the source system.

User response

Issue the QUERY VMRELOCATE command to determine the virtual machine's assigned relocation domain and use QUERY RELODOMAIN to determine the members of the virtual machine's relocation domain. The QUERY VMRELOCATE command also identifies any domain members to which the guest is temporarily excluded from relocating. Use the VMRELOCATE TEST operand to find a system in the SSI cluster to which this virtual machine can be relocated. Confirm that the relocation target has the required capabilities to support the guest.

To relocate the guest outside its assigned domain, use the FORCE DOMAIN option on the VMRELOCATE command. To relocate the guest between different architecture levels, use the FORCE ARCHITECTURE option. It might be necessary to use both options (FORCE ARCHITECTURE DOMAIN) to relocate the user.

Important: Using the FORCE ARCHITECTURE option causes the guest to lose some architecture facilities that previously were available, which might cause the guest to fail or abend. Use the FORCE ARCHITECTURE option with caution.

In some cases, the guest cannot be relocated even when the FORCE ARCHITECTURE option is used. A guest might have a facility in its current virtual architecture that is not available in the target architecture level. Some such facilities prohibit relocation if a member of the SSI cluster does not provide the facility. In that case, the FORCE ARCHITECTURE option cannot be used to relocate the guest.

HCP1945I ***userid*: Virtual machine is still logging on or is being autologged on**

Explanation

A virtual machine cannot be relocated while it is in the process of logging on.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Wait until the virtual machine is completely logged onto the source system and then reissue the VMRELOCATE command.

HCP1946E ***userid*: Virtual machine is logging off or is being forced off the system**

Explanation

A virtual machine cannot be relocated while it is in the process of logging off.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system and will eventually be logged off.

User response

Once the virtual machine logoff is complete, determine on which system you want the virtual machine and logon the virtual machine to that system.

HCP1946I ***userid*: Virtual machine is logging off or is being forced off the system**

Explanation

A virtual machine cannot be relocated while it is in the process of logging off.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system and will eventually be logged off.

User response

Once the virtual machine logoff is complete, determine on which system you want the virtual machine and logon the virtual machine to that system.

HCP1947I ***userid*: Virtual machine is in system hold state on the destination system**

Explanation

System hold prevents a userid from logging onto a specific system through a normal logon or LOGON BY. Since a virtual machine may be allowed to logon to some systems in the SSI cluster but not others, this condition is checked before a userid is allowed to relocate to another system. If the virtual machine being relocated is in system hold on the destination system, or the userid that logged on the virtual machine being relocated via LOGON BY is in system hold on the destination system, the relocation cannot occur.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Have the system operator check the status of the system hold for the user being relocated on the destination system. Ensure the system hold status for the user being relocated and the LOGON BY user have been removed before retrying the relocation. The FREE command can be used to remove the system hold status.

HCP1948I ***userid*: Virtual machine system reset is in progress**

Explanation

A virtual machine cannot be relocated while it is being reset.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Wait until the virtual machine is completely reset and then reissue the command.

HCP1949I ***userid*: Virtual machine is primary system operator**

Explanation

The primary system operator cannot be relocated to another system in the SSI cluster.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Use the SET SYSOPER command to reassign the primary system operator role to another virtual machine. Then reissue the VMRELOCATE command.

HCP1950I ***userid*: Virtual machine is not running disconnected**

Explanation

A virtual machine can only be relocated if it is running disconnected. A virtual machine that is logged onto a real terminal cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Disconnect the virtual machine and reissue the command.

HCP1951I ***userid*: Virtual machine has CP traces set**

Explanation

A virtual machine that has active traces set (via the CP TRACE command) cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Turn off all CP traces for the virtual machine and reissue the command.

HCP1952I ***userid*: Virtual machine is terminating**

Explanation

A virtual machine cannot be relocated while it is in the process of terminating and has an active CP Signal Quiesce.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system and will eventually complete its quiesce.

User response

Once the virtual machine quiesce is complete, the command can be reissued.

HCP1953I ***userid*: Virtual machine has dedicated crypto capability**

Explanation

A virtual machine cannot be relocated if it has a dedicated crypto statement in its user directory entry. A dedicated crypto statement is one with the APDEDicated operand.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The crypto statement in this virtual machine's directory user entry must be removed or changed to APVIRT before this virtual machine can be relocated. Put the new directory online, log the user ID off and then back on, and then reissue the command.

HCP1954I ***userid*: Virtual machine device *vdev* is a logical device**

Explanation

A virtual machine cannot be relocated if it has a logical device as part of its virtual configuration.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the logical device and reissue the command.

HCP1955I ***userid*: Virtual machine is IPLing**

Explanation

A virtual machine cannot be relocated while it is being IPLed.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Wait until the virtual machine IPL is complete and then reissue the command.

Note: A guest that has IPLed from SCSI disk with the DUMP option is not eligible for relocation until the dump has successfully completed or the guest has reIPLed without the DUMP option.

HCP1956I ***userid*: Single path CHPID virtualization is not enabled**

Explanation

A guest cannot be relocated unless it has single path CHPID virtualization enabled.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Enable single path CHPID virtualization for this userid by setting the CHPIDVirtualization option on in its user directory entry. Put the new directory online, log the user ID off and then back on, and then reissue the command.

HCP1957I ***userid*: Virtual machine is a batch worker machine**

Explanation

A virtual machine that is using diagnose x'D4' cannot be located.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Verify that the userid specified on the command is the virtual machine to be relocated.

HCP1958I ***userid*: Virtual machine is a Coupling Facility virtual machine**

Explanation

A Coupling Facility virtual machine (CFVM) cannot be relocated. A CFVM is defined in its user directory by having the CFVM operand on its OPTION statement.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Verify that the userid specified on the command is the virtual machine to be relocated.

HCP1959I ***userid*: Virtual machine configuration includes access to a virtual Coupling Facility**

Explanation

A virtual machine that is using a coupling facility because it is a member of a SYSPLEX cannot be relocated. This message is displayed if the virtual machine is defined as a member of a SYSPLEX because it has a CFUSER operand on the OPTION statement in its user directory entry.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Verify that the userid specified on the command is the virtual machine to be relocated.

HCP1960I ***userid*: Virtual machine is using, or is the subject of, system trace facilities**

Explanation

A virtual machine that is the subject of an enabled TRSOURCE trap of type GT, or is writing to a system trace file using diagnose x'E0', or is reading a system trace file using the TRACERED command, cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Disable any TRSOURCE traps of type GT that target the virtual machine, and make sure the guest is not reading from or writing to a system trace file. Then retry the relocation.

HCP1961I ***userid*: Virtual machine is in a resource pool and a compatible pool does not exist on the destination system**

Explanation

A VMRELOCATE command was issued to relocate a virtual machine from one system to another in an SSI cluster. The virtual machine cannot be relocated because it is in a resource pool that does not exist on the destination system, or the pool exists on the destination system with a different type of CPU being limited, or the pool has reached the limit on the number of members. There is no way to override this relocation requirement, even with the FORCE ARCHITECTURE or FORCE DOMAIN option.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The VMRELOCATE command can be issued with the TEST operand to find a system in the SSI cluster to which this virtual machine can be relocated. Consider defining the resource pool on the other system if it does not exist. Or change the type of processor of the pool on the destination system by deleting the pool and redefining it as the desired CPU type. If the pool on the destination system has reached the limit on the number of members, determine why it has so many members, as it is unlikely to be intentional. However, if that many members are required, you can create multiple pools and divide the members among them.

HCP1963I ***userid*: Virtual machine is using VMCF**

Explanation

A virtual machine that has issued a VMCF authorize is using VM and cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the use of VMCF from the virtual machine and retry the relocation.

HCP1964I ***userid*: Virtual machine is using CMS POSIX facilities**

Explanation

A virtual machine that is using CMS POSIX facilities cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Stop the virtual machine from using CMS POSIX facilities and retry the relocation.

HCP1965I ***userid*: Virtual machine has an Adjunct started**

Explanation

An adjunct configuration has been instantiated for the user. Relocation of a user with an adjunct configuration is not permitted.

System action

The command is not executed. System operation continues.

User response

Issue ADJUNCT END on the userid to terminate the adjunct configuration, then reissue the VMRELOCATE command.

HCP1966I ***userid*: The integrated ASCII console is attached to the virtual machine**

Explanation

A virtual machine with an attached ASCII console cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the ASCII console from the virtual machine and retry the relocation.

HCP1968I ***userid*: Virtual machine used DIAGNOSE x'214' to establish a pending page release and those page releases have not yet been processed.**

Explanation

The virtual machine used DIAGNOSE x'214' (Pending Page Release) to request CP release a range of pages. DIAGNOSE x'214' allows CP to delay or omit the reclamation of host resources.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Discontinue the virtual machine's usage of DIAGNOSE x'214' and retry the relocation.

HCP1969I ***userid*: Virtual machine device *vdev* is a TDISK.**

Explanation

A virtual machine with T-disk defined cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the T-disk from the virtual machine and retry the relocation.

HCP1970I ***userid*: Virtual machine device *vdev* is a shareable VDISK**

Explanation

A virtual machine with a shareable virtual disk cannot be relocated. For relocation purposes, a shareable virtual disk is defined using an MDISK directory statement.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the shareable virtual disk from the directory on both the target and the source systems and retry the relocation.

HCP1971I ***userid*: Virtual machine has directory authorization to use diagnose x'98'**

Explanation

A virtual machine that uses diagnose x'98' is relying on the host real address of pages it has locked using that facility. Relocation of a virtual machine cannot guarantee that any pages locked by diagnose x'98' would have the same host real address on the destination system. So a virtual machine that is authorized for the use of diagnose x'98' is not eligible for relocation.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the authorization for using diagnose x'98' (OPTION DIAG98) from the user's directory entry if the virtual machine does not need it. Put the new directory online, log the user ID off and then back on, and then reissue the command.

HCP1972I ***userid*: Virtual machine has a CPU-type or VCONFIG setting conflict**

Explanation

There are restrictions on the type of virtual CPU configurations that can be relocated. Note that a configuration can contain either all type CP virtual processors or all type IFL virtual processors. This message is issued for the following reasons:

- A virtual machine has a mixed set of virtual CPU types in its configuration, and an attempt was made to relocate the virtual machine.
- An attempt was made to relocate an all type CP virtual machine to a system that is an all IFL environment.
- An attempt was made to relocate a virtual machine to a destination system running on a LINUX-only logical partition but whose VCONFIG mode is not LINUX.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The QUERY VIRTUAL CPUS and QUERY VCONFIG commands can be issued on the target virtual machine to determine its current virtual CPU configuration setting. Then consider performing the following actions:

- If this virtual machine has a mixed engine type configuration, make the appropriate adjustments to the virtual machine CPU configuration if you want to be able to relocate it.
- If you are attempting to relocate a virtual machine with type CP virtual processors to an all IFL machine, you must either change the destination system to one with type CP processors or modify the virtual machine's CPUs to be all IFLs.
- If you are attempting to relocate a virtual machine to a LINUX-only logical partition, set the virtual machine's VCONFIG mode to LINUX.

Then reissue the relocate command.

HCP1973I ***userid*: Virtual machine is in XC mode or has access to an address space owned by another virtual machine**

Explanation

A virtual machine that is in XC mode or a virtual machine having access to an address space belonging to another virtual machine (via ALSERV ADD and diagnose x'248') cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

In order for relocation to be successful, you need to do one of the following:

- If your virtual machine does not need to run in XC mode, use the SET MACHINE command to change the architecture. This command performs a system reset, which places all processors in your virtual machine's configuration in a hard stop condition.
- If your XA or ESA virtual machine has access to an address space of another virtual machine, you need to remove that access via the ALSERV REMOVE macro.

HCP1974I ***userid*: Virtual machine has connections to another virtual machine or to a system service that cannot be relocated.**

Explanation

The virtual machine to be relocated has an IUCV or APPC/VM connection that cannot be relocated. A virtual machine with an IUCV connection to another virtual machine or any system service other than *MSG or *MSGALL cannot be relocated. A virtual machine with any APPC/VM connection cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove all of the virtual machine's IUCV connections to other virtual machines and system services not listed above. Remove all of the virtual machine's APPC/VM connections. Then retry the relocation.

HCP1975I ***userid*: Error loading NSS or DCSS *ssname* on the destination system; error code = *code***

Explanation

An unexpected error occurred while loading an NSS or DCSS on the destination system. The value of the error code identifies the problem encountered:

12
The saved segment or system was purged after relocation eligibility checks, but prior to loading it for the relocating guest.

16
A paging error occurred.

24
Soft abend NSL001 or NSJ001 occurred on the destination system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

If the error cannot be resolved, contact your IBM Support Center personnel for additional assistance.

HCP1976I ***userid*: Virtual machine is defined as a multiconfiguration virtual machine**

Explanation

A multiconfiguration virtual machine is defined in such a way that the same userid may be logged onto more than one member of the SSI cluster at a time with different virtual configurations. Each of these virtual configurations is restricted to a particular member of the SSI cluster. Therefore multiconfiguration virtual machines cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Ensure you specified the correct user ID. If the user ID is correct, make this user non-restricted in order to relocate this virtual machine.

HCP1977I ***userid*: Virtual machine device *vdev* has an open, non-console, spool file**

Explanation

A virtual machine with an open spool file (other than an a console file) cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Close all open spool files and retry the relocation.

HCP1978I ***userid*: Virtual machine device *vdev* has an SPXTAPE operation in progress**

Explanation

A virtual machine with an SPXTAPE operation in progress cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Wait for the SPXTAPE operation to complete or cancel it and retry the relocation.

HCP1979I **The variations of this message are explained below.**

Explanation

- *userid*: Virtual machine is using NSS or DCSS containing page range(s) of type SW, SC, or SN - *ssname*
- *userid*: Virtual machine is using NSS defined with VMGROUP attribute - *ssname*
- *userid*: Virtual machine is using DCSS that is a segment space or a member of a segment space - *ssname*

The virtual machine is using a DCSS or NSS that is defined with attributes that prevent the virtual machine from being relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Determine whether the virtual machine needs the NSS or DCSS. If not, remove it from the virtual machine's configuration. If the NSS or DCSS is needed, determine whether it can be redefined so that it does not have the attribute identified in the message.

HCP1980I **The variations of this message are explained below.**

Explanation

- *userid*: An identical NSS or DCSS *ssname* does not exist on the destination system
- *userid*: NSS or DCSS *ssname* on the source system does not have a checksum value
- *userid*: NSS or DCSS *ssname* on the destination system does not have a checksum value

The virtual machine is using an NSS or DCSS on the source system that does not have an identical match on the destination system. This can occur because the NSS or DCSS does not exist on the destination system or it does exist, but the checksum value on the destination does not match the value on the source. In addition, if the NSS or DCSS on either system is missing a checksum value, the comparison cannot be made.

The checksum value for a NSS and DCSS is computed when it is saved using the SAVESYS or SAVESEG command, respectively.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Make sure the NSS or DCSS on the destination system contains the same data as the NSS or DCSS on the source system, or remove the *ssname* from the virtual machine's configuration and retry the relocation.

HCP1981I **The variations of this message are explained below.**

— Variation 1 ***userid*: Source system virtual device *vaddr* on real device *raddr* cannot be created on the destination system because the equivalent real device *raddr* is offline**

Explanation

The virtual machine has a device that is an offline device on the destination system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Make sure the *raddr* or an equivalent device is online on the destination system and retry the relocation.

— Variation 2 ***userid*: Source system dedicated virtual device *vaddr* on real device *raddr* cannot be created on the destination system because the equivalent real device *raddr* is not free**

Explanation

The virtual machine has a dedicated device that is not available on the destination system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Make sure the *raddr* or an equivalent device is available on the destination system and retry the relocation.

— Variation 3 ***userid*: Source system minidisk *vaddr* on real device *raddr* cannot be created on the destination system because the equivalent real device *raddr* is not system attached**

Explanation

The virtual machine has a minidisk that is not available on the destination system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Make sure the *raddr* is system attached on the destination system and retry the relocation.

— Variation 4 ***userid*: Source system virtual device *vaddr* on real PAV device *raddr* cannot be created on the destination system because the equivalent real device *raddr* is not in the same PAV mode**

Explanation

The virtual machine has a virtual PAV device that is a classic PAV device or a HyperPAV device (not necessarily the virtual device specified in the message text) that is associated with the source real device. The PAV mode of the source real device and the equivalent real device on the destination system is not the same.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Make sure the PAV device *raddr* is in the same PAV mode as its equivalent device on the source system, and retry the relocation. For the PAV mode to take effect, you might need to use SET CU commands to adjust the PAV mode of the devices, and you might need to bring associated alias devices online.

— Variation 5 ***userid*: Source system DEVNO defined minidisk *vaddr* on real device *raddr* cannot be created on the destination system because the equivalent real device *raddr* is neither a DEVNO defined minidisk nor free**

Explanation

The virtual machine has a DEVNO-defined minidisk, but the associated real device on the destination system is not already defined as a DEVNO minidisk, nor is it free so that the DEVNO device from the source system can be created on it.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Make sure the *raddr* is already DEVNO defined or free on the destination system and retry the relocation.

HCP1982I	The variations of this message are explained below.
— Variation 1	***userid*: Source system network device *vaddr* is coupled to a Guest LAN**

Explanation

The virtual machine has a simulated NIC device coupled to a guest LAN that is available to the source system only. Relocating the specified network device to the destination system will result in a loss of communication with other users currently on the guest LAN.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Suspend all virtual machine communication with the specified device and issue a CP UNCOUPLE command to remove the network device from the source system's guest LAN. Only simulated NIC devices coupled to a VSWITCH that has connectivity to an external network can be relocated. All other simulated NIC devices must be uncoupled and manually coupled to a guest LAN on the destination system after the virtual machine is relocated before LAN connectivity is restored. It is recommended that guests using guest LAN support should be converted prior to relocation. The guest LAN usage should be converted to use of a VSWITCH which can be relocated.

— Variation 2	***userid*: Source system real network device *raddr* requires an EQID to be assigned**

Explanation

The virtual machine has a real network device in its virtual I/O configuration that can't be identified on the destination system specified on the CP VMRELOCATE command. The identical equivalency ID (EQID) must be assigned to this device using the CP SET RDEVICE command or RDEVICE system configuration file statement on the source and destination systems.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Assign an EQID for the specified real network device on the source system. The EQID assigned must be identical to the EQID assigned to a real network device in the destination system's I/O configuration that has the same LAN connectivity as the source system's real network device.

— Variation 3	***userid*: Source system network device *vaddr* is a simulated NIC coupled to a VSWITCH without external connectivity**

Explanation

The virtual machine has a simulated network device in its virtual I/O configuration that is coupled to a VSWITCH that doesn't have connectivity to an external LAN. Relocating the specified network device on the destination system will result in a loss of communication with other users currently on the source system's VSWITCH.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Contact your system administrator to vary on one or more external OSA ports assigned to the VSWITCH that the simulated NIC is coupled to, or suspend all virtual machine communications with the specified device and issue a CP UNCOUPLE command to remove the network device from the source system's VSWITCH. Uncoupling the specified device on the source system requires you to manually COUPLE the device to the VSWITCH on the destination system after the virtual machine is relocated but before LAN connectivity is restored.

— Variation 4	***userid*: Source system simulated network device *vaddr* is coupled to a VSWITCH without an assigned EQID**

Explanation

The virtual machine has a simulated network device in its virtual I/O configuration coupled to a VSWITCH without an equivalency ID (EQID) assigned to its external OSA ports. An identical EQID must be assigned to the VSWITCH (OSA ports) using the CP SET RDEVICE command or RDEVICE system configuration file statement on both the source

and destination systems for the specified simulated network device to be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Assign an EQID to the external OSA devices for the VSWITCH to which the specified simulated network device is coupled. The EQID assigned must be identical to the EQID assigned to the OSA devices for the VSWITCHs in both the source and destination systems I/O configuration. The VSWITCH OSA devices on both systems must have connectivity to the same physical LAN segment.

— Variation 5 ***userid*: Source system simulated network device *vaddr* is coupled to a VSWITCH without external connectivity**

Explanation

The virtual machine has a simulated network device in its virtual I/O configuration coupled to a VSWITCH without any real OSA ports configured by the system administrator. Relocating the specified network device on the destination system will result in loss of communication with users on the source system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Contact your system administrator to configure external VSWITCH OSA devices on both the source and destination systems. The VSWITCH OSA devices on both systems must have identical EQIDs assigned using the CP SET RDEVICE command or the RDEVICE system configuration file statement, and their NIC ports must be connected to the same physical LAN segment.

— Variation 6 ***userid*: Destination system VSWITCH *switchname* for simulated network device *vaddr* does not have external connectivity at this time**

Explanation

The virtual machine has a simulated network device in its virtual I/O configuration that is coupled to a VSWITCH without connectivity to an external LAN on the destination system specified on the VMRELOCATE command. Relocating the specified network device on the destination system will result in loss of communication with other users currently on the source system's VSWITCH.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Contact your system administrator to vary on one or more external OSA ports assigned to the specified VSWITCH on the destination system specified on the VMRELOCATE command.

— Variation 7 ***userid*: EQID of the destination system's VSWITCH *switchname* external OSA ports for the simulated network device *vaddr* does not match EQID of the source system's VSWITCH external OSA ports**

Explanation

The virtual machine has a simulated network device in its virtual I/O configuration, but the VSWITCH on the destination system does not have the same equivalency ID (EQID) assigned to its external OSA devices. A unique, identical EQID must be assigned to the external OSA devices for the VSWITCH on the source and destination systems using the CP SET RDEVICE command or RDEVICE system configuration file to ensure that they are connected to the same physical LAN segment.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Assign the identical EQID to the external OSA devices for the VSWITCH to which the specified simulated network device is coupled on both the source and destination systems. The VSWITCH OSA devices on

both systems must also have connectivity to the same physical LAN segment.

— Variation 8 ***userid*: Destination system VSWITCH *switchname* for simulated network device *vaddr* is not configured to have external connectivity or does not exist**

Explanation

The virtual machine has a simulated network device in its virtual I/O configuration coupled to a VSWITCH, but the VSWITCH on the destination system does not exist or does not have connectivity to a physical LAN segment with an external OSA port with the same equivalency ID (EQID) as the source system. The VSWITCH on the source and destination systems must have the connectivity to the same physical LAN segment. Relocating the specified network device on the destination system will result in loss of communication with users on the source system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Contact your system administrator to configure external VSWITCH OSA devices on both the source and destination systems. The VSWITCH OSA devices on both the source and destination systems must have an identical equivalency IDs (EQID) assigned using the CP SET RDEVICE command or the RDEVICE system configuration file statement, and their NIC ports must be connected to the same physical LAN segment.

— Variation 9 ***userid*: Source system network device *vdev* is coupled to a VSWITCH but the virtual NIC has too many devices assigned**

Explanation

Only simulated network adapters with eight or less devices are eligible for relocation to another z/VM system within an SSI cluster. The relocation of large network adapters is not currently supported by guest relocation.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Limit the NIC defined in the guest's virtual I/O configuration to the actual number of network devices you intend to use to establish a network connection. Detach the NIC associated with the specified *vdev* from the guest's virtual I/O configuration with the DETACH NIC CP Command. Use the DEFINE NIC CP Command to redefine the network device, but omit the DEVICES keyword to only create an adapter with three devices or specify a maximum of eight devices on the DEVICES keyword. A minimum of three devices is required to establish a network connection. If more than eight network devices are required, define multiple NICs with eight or less devices and couple them to the same VSWITCH. This will provide the same network connectivity, but it will be spread across multiple adapters rather then a single large adapter. In this configuration, you must insure the set of devices you choose to establish network connections are all on the same NIC. A single network connection cannot span across multiple NICs.

— Variation 10 ***userid*: *nnn* consecutive free network devices with EQID *eqid* cannot be found on the destination system to relocate virtual device *vdev***

Explanation

The virtual machine has a network device in its virtual I/O configuration that does not have an equivalent network device on the destination system. The destination system must have *nnn* consecutive free network devices with the specified equivalency ID (EQID).

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Contact your system administrator to make available the required number of consecutive network devices on the destination system with the appropriate EQID. The EQID assigned to the network devices must be identical on both the source and destination systems for the network device to be relocated. The network devices on both systems must have connectivity to the same physical LAN segment.

— Variation 11 ***userid*: Destination system VSWITCH *switchname* for simulated network device *vaddr***

is VLAN AWARE while the source VSWITCH is VLAN UNAWARE.

Explanation

The virtual machine has a simulated NIC device coupled to a virtual switch. The VLAN attribute for the virtual switch is not the same on both the source and destination systems. The source and destination must both be VLAN AWARE or they must both be VLAN UNAWARE.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Define the virtual switch on the source and destination systems with the same VLAN attribute of VLAN AWARE or VLAN UNAWARE.

— Variation 12 ***userid*: Destination system VSWITCH *switchname* for simulated network device *vaddr* is VLAN UNAWARE while the source VSWITCH is VLAN AWARE.**

Explanation

The virtual machine has a simulated NIC device coupled to a virtual switch. The VLAN attribute for the virtual switch is not the same on both the source and destination systems. The source and destination must both be VLAN AWARE or they must both be VLAN UNAWARE.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Define the virtual switch on both the source and destination systems with the same VLAN attribute of VLAN AWARE or VLAN UNAWARE.

— Variation 13 ***userid*: Destination system VSWITCH *switchname* PORTTYPE attribute for simulated network device *vaddr* is PORTTYPE TRUNK while the source system PORTTYPE attribute is PORTTYPE ACCESS**

Explanation

The virtual machine has a simulated NIC device coupled to a virtual switch. The virtual port PORTTYPE attribute is not the same on the source and destination systems. The source and destination must both be PORTTYPE ACCESS or they must both be PORTTYPE TRUNK.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Issue the appropriate SET VSWITCH GRANT commands to set the same PORTTYPE attribute for the virtual port on the source and destination systems.

— Variation 14 ***userid*: Destination system VSWITCH *switchname* PORTTYPE attribute for simulated network device *vaddr* is PORTTYPE ACCESS while the source system PORTTYPE attribute is PORTTYPE TRUNK.**

Explanation

The virtual machine has a simulated NIC device coupled to a virtual switch. The virtual port PORTTYPE attribute is not the same on both the source and destination systems. The source and destination must both be PORTTYPE ACCESS or they must both be PORTTYPE TRUNK.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Issue the appropriate SET VSWITCH GRANT commands to set the same PORTTYPE attribute for the virtual port on the source and destination systems.

— Variation 15 ***userid*: Destination system VSWITCH *switchname* is not configured as {IP | ETHERNET | USERBASED | PORTBASED} *vdevno***

Explanation

The virtual machine (*userid*) has a simulated NIC device (*vdevno*) coupled to a VSWITCH (*switchname*) that is incompatible with the same VSWITCH on the destination system. Relocating the specified network device to the destination system would result in a loss of communication.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The network administrator should update the appropriate virtual switch configuration to make all instances of the same virtual switch consistent.

— Variation 16 ***userid*: Destination system VSWITCH *switchname* is not configured with {NATIVE VLAN | TYPE QDIO | ISOLATION ON | ISOLATION OFF | source PORTNUMBER} *vlanid* for simulated NIC *vdevno*.**

Explanation

The virtual machine (*userid*) has a simulated NIC device (*vdevno*) coupled to a VSWITCH (*switchname*) that is incompatible with the same VSWITCH on the destination system. Relocating the specified network device to the destination system would result in a loss of communication.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The network administrator should update the appropriate virtual switch configuration to make all instances of the same virtual switch consistent.

— Variation 17 ***userid*: Source system network device *vdevno* is coupled to a PORTBASED VSWITCH. Destination system does not accept PORTBASED relocations.**

Explanation

The relocation failed because the guest has a network device (*vdevno*) coupled to a PORTBASED VSWITCH. The destination system, though it is able to create and use a PORTBASED VSWITCH, does not have the necessary support to accept a *relocation* for a PORTBASED VSWITCH.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Contact your system administrator to upgrade the destination system with the appropriate system level that can accept a relocation of a PORTBASED VSWITCH.

— Variation 18 ***userid*: Source system network device *vdevno* is coupled to a VSWITCH with VEPA ON. Destination system does not support VEPA.**

Explanation

The virtual machine (*userid*) has a simulated NIC device (*vdevno*) coupled to a VSWITCH that is incompatible with the same VSWITCH on the destination system. Relocating the specified network device to the destination system would result in a loss of communication.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The command invoker might not be able to correct this problem. The network administrator should update the appropriate virtual switch configuration to make all instances of the same virtual switch consistent.

— Variation 19 ***userid*: Destination system VSWITCH *switchname* is not configured with VEPA ON for simulated NIC *vdevno*.**

Explanation

The virtual machine (*userid*) has a simulated NIC device (*vdevno*) coupled to a VSWITCH (*switchname*)

that is incompatible with the same VSWITCH on the destination system. Relocating the specified network device to the destination system would result in a loss of communication.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The command invoker might not be able to correct this problem. The network administrator should update the appropriate virtual switch configuration to make all instances of the same virtual switch consistent.

— Variation 20 ***userid*: Destination system VSWITCH *switchname* is not configured with VEPA OFF for simulated NIC *vdevno*.**

Explanation

The virtual machine (*userid*) has a simulated NIC device (*vdevno*) coupled to a VSWITCH (*switchname*) that is incompatible with the same VSWITCH on the destination system. Relocating the specified network device to the destination system would result in a loss of communication.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The command invoker might not be able to correct this problem. The network administrator should update the appropriate virtual switch configuration to make all instances of the same virtual switch consistent.

— Variation 21 ***userid*: Source system network device *vdevno* is coupled with a PORTNUMBER outside the range supported by the destination system.**

Explanation

The virtual machine (*userid*) has a simulated NIC device (*vdevno*) coupled to a PORTBASED VSWITCH using a system assigned port number. This is acceptable among systems that support port numbers in the range of 1-4095, but the destination system only allows user-defined ports in the range of 1-2048.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

The command invoker might not be able to correct this problem. The network administrator should configure this device with a user-defined port number (in the range of 1-2048) using the SET VSWITCH command, or NICDEF with the PORTNUMBER option. The virtual machine (*userid*) must UNCOUPLE from the VSWITCH and COUPLE to the newly defined portnumber in order to activate the connection with a portnumber that is eligible for relocation to the destination system.

— Variation 22 ***userid*: Source system network device *vdevno* is coupled to a VSWITCH with multiple network connections with different attributes. Destination system does not accept this configuration.**

Explanation

The relocation failed because the guest has more than one network device (*vdevno*) coupled to a USERBASED VSWITCH with different configuration attributes (for example, VLAN set or PORTTYPE). The destination system does not have the necessary support to accept such a relocation.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Contact your system administrator to upgrade the destination system with the appropriate system level that can accept a relocation of such a VSWITCH.

— Variation 23 ***userid*: Destination system VSWITCH *vswitchname* for simulated network device *vdevno* does not support PRIQUEUING. Change PQUPLINKTX setting to NORMAL.**

Explanation

The virtual machine (*userid*) has a simulated NIC device (*vdevno*) coupled to a virtual switch (*vswitchname*) that is incompatible with the same virtual switch on the destination system. The

source guest has configured PQUPLINKTX HIGH or LOW, but the destination system does not support PRIQUEUING or the destination system virtual switch has PRIQUEING OFF.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Issue the SET VSWITCH command with the PQUPLINKTX operand to change the priority to NORMAL. Then, try the VMRELOCATE command again.

HCP1983I	**The variations of this message are explained below.**
— Variation 1	***userid*: Virtual machine's maximum storage size of *size* exceeds destination hardware maximum of *maxsize***

Explanation

The size of the virtual machine's base address space exceeds the processor limit on the destination system. The maximum storage size includes the standby and reserved storage as specified by the DEFINE STORAGE command.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Relocate the virtual machine to another system with a larger processor limit.

— Variation 2	***userid*: Virtual machine's highest addressable byte exceeds destination hardware maximum of *size*-1**

Explanation

The addressable range of the virtual machine's base address space exceeds the processor limit on the destination system. The addressable range includes the maximum byte addressable by this address space, and accounts for any ranges defined with the DEFINE STORAGE CONFIG command.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Relocate the virtual machine to another system with a larger processor limit.

HCP1984I	***userid*: Virtual machine's total VDISK space exceeds the VDISK system or user limit on the destination system**

Explanation

The destination system either does not have enough free virtual disk space to accommodate the source virtual machine's virtual disks, or the source virtual machine has more virtual disk space defined than the destination system allows.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Consider performing the following actions:

- Make more virtual disk space available on the destination system.
- Increase the virtual disk SYSLIM and USERLIM settings on the destination system.
- Remove the source virtual machine's virtual disks or decrease their size.

Then retry the relocation.

HCP1985I	***userid*: The maximum number of users allowed is already logged on the destination system**

Explanation

The destination system already has the maximum allowed number of virtual machines logged on as defined by the FEATURES MAXUSERS statement in the system configuration file.

It is possible to get this message for a userid with the IGNMAXU directory option specified if there was an error reading the userid's directory entry on the destination system. For this case, message 1924I will also be displayed as a reason for the relocation failing.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Either log off some virtual machines on the destination system, or set a higher virtual machine limit on the destination system and retry the relocation.

HCP1986I ***userid*: A list-directed IPL or dump is in progress**

Explanation

The guest being relocated has one or more guests of its own which are currently using either a list-directed IPL or a list-directed dump function. The guest cannot be relocated while this is occurring.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

This should be a temporary condition. Reissue the VMRELOCATE command after the list directed IPL or dump is complete.

HCP1987I ***userid:* Unsupported Vector Register Length**

Explanation

The virtual machine cannot be relocated. The vector register length in use on the source side is not supported on the target side.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Relocate the virtual machine to another system that supports the vector register length.

HCP1989I ***userid*: Virtual machine is hosting a logical device**

Explanation

A virtual machine cannot be relocated if it is hosting a logical device. A logical device is created with diagnose X'7C'.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the logical device and reissue the command.

HCP1990I **Relocation of *userid* will reset the virtual machine's SET RESERVED setting of *rrrrrrrr* to zero on the destination system Relocation of *userid* has reset the virtual machine's SET RESERVED setting of *rrrrrrrr* to zero**

Explanation

The virtual machine has a SET RESERVED *rrrrrrrr* setting on the source system. Relocation does not carry the reserved frame setting over to the destination system.

System action

Relocation processing continues.

User response

You may want to issue the SET RESERVED command for the relocated guest once the relocation is successfully completed. Be sure to take the workload and the capacity of the destination system into consideration when setting a new reserved frame count for a virtual machine. System performance may be adversely affected if the total number of reserved frames is near or exceeds the pageable DPA.

HCP1991I **The variations of this message are explained below.**

Explanation

- *userid*: *nnnnnnnn* guest pages locked to real storage frames have been unlocked during relocation
- *userid*: *nnnnnnnn* guest pages locked to host logical storage pages have been unlocked during relocation

During the final pass to copy the virtual machine's memory to the destination system for a VMRELOCATE

command, *nnnnnnnn* pages were found to have been locked by the LOCK command.

System action

The locked pages have been unlocked and the relocation continues. If the relocation is terminated or canceled prior to completion, the pages remain unlocked.

User response

After considering the other workload on the destination system, you can use the LOCK command to reestablish any locked pages on the destination system after the relocation completes. If the relocation is not successful, you should consider re-locking pages on the source system.

HCP1992I The variations of this message are explained below.

Explanation

- *userid*: A customizable field in a CP control block appears to be in use
- *userid*: Virtual machine device *vdev* has an associated CP control block that contains a customizable field in use.

Certain fields in the VMDBK and VDEV are customizable by the installation or by service personnel. If any of these fields are not in the initial state, relocation cannot proceed because the contents are indeterminate.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Inspect the VMDEBUG1 through VMDEBUG4 fields in the VMDBK, which should contain a series of BR 14 (07FE) instructions if not in use. Inspect the VMDEBUG5 through VMDEBUG8 fields in the VMDBK, which should contain 0s if not in use. Inspect the VMDUSER1 through VMDUSER8 fields in the VMDBK, which should contain 0s if not in use. Inspect the RDEVUSR1 through RDEVUSR4 fields in the RDEV for the real device that is associated with the specified virtual device, which should contain 0s if not in use. Inspect the MDIUSR1 through MDIUSR4 fields in the MDISK that is associated with the specified virtual device, which should contain 0s if not in use. Inspect the VDEVUSR1 through VDEVUSR4 fields in the VDEV, which should contain 0s if not in use. Determine which of these fields are in use and why. Then determine whether something can be done to temporarily suspend their use while relocation occurs.

If the VMDUSER1-VMDUSER8 fields are the cause of the eligibility check failure, there is another option. Additional flag bits exist in the VMDBK that can be used to inform the relocation code how to handle each field during a relocation attempt. The flags in VMDUSKCK can be set to cause the eligibility check of each of those eight fields to be skipped if they would not be important to the relocation destination system. The flags in VMDUSRMV can be set to request that the contents of each corresponding field should be moved to the destination system along with the VMDBK. For example, to skip the eligibility check but not move VMDUSER1 contents to the destination, set VMDUSKCK.VMDUSRS1 on and set VMDUSRMV.VMDUSRM1 off. To move the contents of VMDUSER2 to the destination system, set VMDUSKCK.VMDUSRS2 and VMDUSRMV.VMDUSRM2 on. Note that the VMDUSRMV bit option is not useful for these fields if they contain pointers to data because that data will not be at the same location on the destination system.

HCP1993I *userid*: Virtual machine is relocating another virtual machine

Explanation

A virtual machine cannot be relocated while it is in the process of relocating another virtual machine, that is, while awaiting completion of a VMRELOCATE MOVE command it issued.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Wait for the current relocation to complete. Then reissue your VMRELOCATE command.

HCP1994I *userid*: Virtual machine has 370ACCOM set on

Explanation

Virtual machines running 370-mode applications that require 370ACCOM mode may not be relocated.

System action

The relocation attempt is terminated with no further action. The virtual machine continues to run on the source system.

User response

If the operating system or application running in this virtual machine does not require 370ACCOM, use the CP SET 370ACCOM command to turn off 370ACCOM mode. Then reissue the VMRELOCATE command.

HCP1995I **The variations of this message are explained below.**

Explanation

- *userid*: Virtual machine device *vdev* is an unsupported device
- *userid*: Virtual machine device *vdev* is an attached real terminal
- *userid*: Virtual machine device *vdev* is a dialed GRAF
- *userid*: Virtual machine device *vdev* is a dialed in LINE
- *userid*: Virtual machine device *vdev* is a simulated CTCA that is coupled
- *userid*: Virtual machine device *vdev* is coupled to a Coupling Facility virtual machine
- *userid*: Virtual machine device *vdev* is a dedicated SWITCH
- *userid*: Virtual machine device *vdev* is a dedicated OSA on an OSH CHPID

This device in the virtual machine's configuration is a type of device that cannot be relocated to another system in the SSI cluster.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the device from the virtual machine's configuration and then try the relocation again.

HCP1996I **The variations of this message are explained below.**

— Variation 1 ***userid*: Virtual machine device *vdev* is associated with a minidisk that was created with the DEFINE MDISK command**

Explanation

A minidisk created with the DEFINE MDISK command cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Detach this minidisk from the virtual machine and then try the relocation again. You will have to reacquire the minidisk on the destination system manually after relocation completes.

— Variation 2 ***userid*: Virtual machine device *vdev* is a link to a local minidisk**

Explanation

This device in the virtual machine's configuration on the source system cannot be relocated because it is a local minidisk, which means that it cannot be linked on the destination system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Detach the device from the virtual machine's configuration and try the relocation again.

— Variation 3 ***userid*: Virtual machine device *vdev* is associated with a non-fullpack minidisk that was created with mode suffix V on the MDISK directory statement**

Explanation

This device is using virtual reserve/release, which is not supported cross-system within an SSI cluster, and therefore is not eligible for relocation.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Detach this minidisk from the virtual machine and then try the relocation again.

— Variation 4 ***userid*: Virtual machine device *vdev* is associated with a minidisk that is currently using virtual working allegiance simulation**

Explanation

This device is using virtual working allegiance simulation, which is not supported cross-system within an SSI cluster, and therefore is not eligible for relocation.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Use the SET WRKALLEG OFF command to discontinue using virtual working allegiance simulation or detach the device from the virtual machine's configuration and try the relocation again. If this device or working allegiance is needed on the destination system, you must reacquire the device, set working allegiance on, or both.

— Variation 5 ***userid*: Virtual machine device *vdev* is associated with real device *rdev* that is currently quiesced for HyperSwap**

Explanation

The virtual machine's device is associated with a real device on the source system or an equivalent real device on the destination system that is quiesced for HyperSwap. All I/O to that device (a source system device or a destination system device) is stalled until HyperSwap resume occurs.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Wait for a short amount of time for the HyperSwap resume to occur and then try the relocation again.

— Variation 6 ***userid*: Virtual machine device *vdev* is an FBA DASD associated with real device *rdev* for which the reserve state is unknown**

Explanation

Relocation of reserves on an FBA DASD is not supported. This message indicates that a reserve was done at least once to the virtual machine's device on a FBA DASD associated with a real device on the source system. The DASD might not be reserved at this time, but the reserve state is unknown.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Detach this FBA DASD from the guest that was being relocated or IPL the virtual machine, changing the workload so that a reserve is not done. Then try the relocation again.

— Variation 7 ***userid*: Virtual machine device *vdev* is a full-pack overlay minidisk**

Explanation

This device in the virtual machine's configuration on the source system cannot be relocated because it is a full-pack overlay minidisk.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Detach the device from the virtual machine's configuration and try the relocation again.

— Variation 8 ***userid* Virtual machine device *vdev* is allocated on NVMe EDEVICE *rdev*.**

Explanation

This device is in the virtual machine's configuration on the source system. The device cannot be relocated because it is allocated on an NVMe EDEVICE, which means it cannot be linked on the destination system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Detach the device from the virtual machine's configuration and then try the relocation again.

HCP1997I	The variations of this message are explained below.
— Variation 1	***userid*: Virtual machine device *vdev* is associated with real device *rdev* which has no EQID assigned to it**

Explanation

The virtual machine's device is associated with a real device that requires an equivalency ID (EQID) in order to find an equivalent device on the destination system for the relocation, but there is no EQID associated with it on the source system.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the device from the virtual machine's configuration or use the SET RDEVICE command to assign an EQID to the device. Then try the relocation again.

— Variation 2	***userid*: Source system virtual device *vaddr* on real device *raddr* cannot be created on the destination system because the real device does not exist there**

Explanation

The virtual machine's device is associated with a real device that requires the device to exist on the destination system for the relocation, but one does not exist.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the device from the virtual machine's configuration, or dynamically add the device to the destination system. Then try the relocation again.

— Variation 3	***userid*: Source system virtual device *vaddr* on real device *raddr* cannot be created on the destination system because an eligible equivalent real device cannot be found**

Explanation

The virtual machine's device is associated with a real device that requires an equivalency ID (EQID), but there is no EQID associated with the destination system.

If an equivalent device cannot be found on the destination system, it could be due to one of the following reasons:

- No devices have that EQID assigned
- There are some devices with that EQID assigned, but there are not enough devices to satisfy the relocation of the guest from the source system.

A device found with the same EQID on the destination system would not be eligible for use because of one of the following reasons:

1. The device is offline.
2. The device has a different class, a different type, or both than the source device.
3. The device is attached already and must be free.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Remove the device from the virtual machine's configuration, use the SET RDEVICE command on the destination system to assign a source system EQID to an equivalent device on the destination system, or change the state of an existing device with that EQID on the destination system so it is eligible for use. Then try the relocation again.

HCP1998I	The variations of this message are explained below.
— Variation 1	***userid*: Virtual machine device *vaddr* has an outstanding delayed response message**

Explanation

The completion of an asynchronous event is pending on the virtual machine's *vaddr* device. The virtual machine cannot be relocated until this event completes.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Wait for a short amount of time for the delayed response message to be presented to the virtual machine. Then try the relocation again.

— Variation 2 ***userid*: Virtual machine device *vaddr* is a single-user TAPE that is currently assigned**

Explanation

This device in the virtual machine's configuration cannot be relocated because it owns an assign.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Unassign the tape drive or detach the tape drive from the virtual machine. Then try the relocation again.

— Variation 3 ***userid*: Virtual machine device *vaddr* is a multi-user TAPE and the virtual machine currently owns the assign**

Explanation

This device in the virtual machine's configuration cannot be relocated because it owns an assign.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Unassign the tape drive or detach the tape drive from the virtual machine. Then try the relocation again.

— Variation 4 ***userid*: Source system multi-user tape virtual device *vaddr* on real device *raddr* cannot be created on the destination system because the equivalent real device *raddr* is neither defined as a multi-user tape nor free**

Explanation

The virtual machine has a multi-user tape device and it cannot be created on the destination system because the equivalent real device there is not defined as multi-user and is not free.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Make sure the tape device in question is free or defined as multi-user. Then try the relocation again.

— Variation 5 ***userid*: Source system tape virtual device *vaddr* on real device *raddr* is associated with an encryption key and cannot be created on the destination system because the equivalent real device *raddr* is associated with a different encryption key or one cannot be established for it**

Explanation

One of the following conditions applies to the virtual machine:

1. It has a tape device that is associated with an encryption key and the equivalent tape device on the destination system is associated with a different encryption key.
2. It is a multi-user tape with no encryption key defined, so no new encryption key can be established.
3. It is an unattached tape with no encryption key defined that is not at BOT (beginning of tape), so no new encryption key can be established.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Make sure that the tape device in question is disassociated from its current encryption key or placed at BOT by issuing the REWIND command. Then try the relocation again.

— Variation 6 ***userid*: Virtual machine has directory authorization to use DIAGNOSE X'254' to control a Tape Library Dataserver**

Explanation

The virtual machine has directory authorization via the STDEVOPT statement with LIBRARY CTL specified. This gives the virtual machine authority to use the Diagnose X'254' Open CP Connection function and maintain an active connection for performing I/O via this diagnose. Diagnose X'254' is an internal CP Diagnose code and its current user, the RMS server of DFSMS/VM, never closes the connection. The connection is opened at RMS initialization and closed at termination. This connection is ineligible for relocation.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

None. A virtual machine running RMS cannot be relocated.

— Variation 7 ***userid*: Virtual machine device *vaddr* is a single-user TAPE for which assign status could not be determined**

Explanation

This device in the virtual machine's configuration cannot be relocated because I/O issued to it (to determine its assign status) failed. Also, the virtual machine might own an assign, and assigns cannot be relocated.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Try the relocation again, because the I/O error could have occurred due to a transient condition. If the I/O error persists, contact the IBM Support Center.

— Variation 8 ***userid*: Source system tape virtual device *vaddr* on real device *raddr* is not associated with an encryption key and cannot be created on the destination system because the equivalent real device *raddr* is associated with a key**

Explanation

The virtual machine has a tape device that is not associated with an encryption key and the equivalent tape device on the destination system is associated with an encryption key. If the relocation were allowed to proceed, this could result in a mixed data set on the destination tape.

System action

The relocation is terminated with no further action. The virtual machine continues to run on the source system.

User response

Associate the tape device on the source system with the same encryption key as the one on the destination system or disassociate the destination tape device from its current encryption key. Then try the relocation again.

HCP1999E **The assign was not reset on *rdev* because {it is not a tape that supports assign | a time_out condition occurred}**

Explanation

The CP RESET command was entered to reset the assign on a device that is either not a tape drive or a tape drive that does not support assign, or the unassign I/O timed out.

System action

System operation continues.

Operator response

None.

HCP2000E **The reserve was not reset on *rdev* because it is not a shared DASD.**

Explanation

You identified a real device that was not defined as a SHARED full-pack minidisk when you entered the RESET RESERVE (ON) *rdev* command.

System action

System operation continues.

Operator response

Enter the CP QUERY DASD RESERVE command to determine the reserve status of the devices in your configuration.

HCP2001E The reserve was not reset on DASD *rdev* because it was not reserved.

Explanation

You entered the RESET RESERVE (ON) *rdev* command, specifying a device (*type rdev*) that is not currently reserved by CP.

System action

System operation continues.

User response

Enter the CP QUERY DASD RESERVE command to determine the reserve status of the devices in your configuration.

HCP2002I Reserved device *vdev* is unconditionally reserved by *userid*'s *vdev*.

Explanation

The virtual device *vdev* that a user had in RESERVE status has received an UNCONDITIONAL RESERVED request from the specified user's virtual device. In this case, the first user loses the device. Data integrity may be affected with a possible loss of some information.

System action

The RESERVE to the specified virtual device is reset. The specified user now has the virtual device reserved.

User response

None.

HCP2003E Shared not set for *type rdev*; not a shared device.

Explanation

You issued a SET SHARED command against a device (*type rdev*) that is not defined as a full-pack minidisk. Only shared full-pack minidisk devices may be identified as shared by the SET SHARED command.

System action

System operation continues, but the device cannot be shared because it cannot be defined as a full-pack minidisk, and does not support concurrent virtual reserve/release.

User response

Inform your support personnel that the device cannot be shared between virtual and real systems as currently defined.

HCP2004E Shared not set for *type rdev*; does not support reserve/release.

Explanation

You attempted to identify the device (*type rdev*) as shared, either with the SHARED=YES option in the RDEVICE statement in HCPRIO or with the SET SHARED command. However, the device does not support hardware reserve/release CCWs and cannot be shared between multiple real and virtual systems.

System action

System operation continues but the device does not support concurrent virtual and real reserve/release.

User response

Inform your support personnel that the device does not support reserve/release CCWs.

HCP2005I Reserve pending on DASD *rdev* for user *userid*

Explanation

A missing interrupt was detected because of an outstanding reserve request for the device *rdev*.

The *userid* variable in the message identifies the system for which CP is trying to obtain the reserve.

System action

System operation continues.

User response

None.

HCP2006E **Shared not set for DASD *rdev*; device not online.**

Explanation

You entered the SET SHARED command for device *rdev*, but the device is not online. Sharing will only be set ON or OFF for online devices.

System action

System operation continues, but the device does not support concurrent virtual and real reserve/release.

Operator response

Vary the device online with the VARY ON command; then reenter the SET SHARED command.

HCP2007E **Shared not set for DASD *rdev*; WRKALLEG is ON for user *userid*, minidisk *vdev*.**

Explanation

You entered a SET SHARED command against a real device that had an associated virtual device with WRKALLEG ON. SET WRKALLEG ON and SET SHARED are incompatible. Use SET SHARED for sharing real devices; use SET WRKALLEG for sharing virtual devices.

System action

System operation continues, but the device cannot be shared because virtual working allegiance has been specified on one of the minidisks associated with the real device.

User response

Determine if the device number is correct. If so, contact the owner of the minidisk returned in the message to determine if WRKALLEG should be on.

HCP2008E **Device *vdev* is currently reserved by user *userid*.**

Explanation

The operation could not complete because a virtual reserve is held for the device *vdev*. The *userid* identified in the message identifies is the user holding the virtual reserve.

System action

System operation continues.

User response

Retry the operation. Virtual reserves are short term. A consistent failure may indicate a problem with the user holding the reserve.

HCP2009I **The system detected I/O errors while attempting to release a real reserve that was held on device *rdev* [by user *userid*, virtual device *vdev*]. {The reserve is now held by the system|The current reserved state of the real device could not be determined}**

Explanation

The system or a guest tried to release a device, but the release failed with an irrecoverable I/O error. The system now holds the real reserve on the device.

The definitions for the message variables are:

rdev
Identifies the real device where the error occurred

userid
Identifies the guest the reserve was held for (if the reserve was not held by the system)

vdev
Identifies the virtual device the reserve was held for (if the reserve was not held by the system).

If the message text includes:

The reserve is now held by the system
The real device is still held reserved to this system, but it is no longer reserved to the guest. This system and its guests will continue to have access to the device, but other native systems sharing the device will be unable to access it.

The current reserved state of the real device could not be determined
A query was sent to the real device to determine if the device is still reserved to this system, but the query failed. The device may or may not be reserved to this system, but it is no longer reserved to the guest. This system and its guests will continue to have access to the device, but other native systems sharing the device may be unable to access it. Querying the device should indicate it is reserved to this system.

System action

System operation continues.

Operator response

Enter the RESET RESERVE command to force the device to be released. If errors persist, contact your

IBM Support Center personnel for assistance with diagnosing the problem.

HCP2010E	The variations of this message are explained below.
— Variation 1	**DASD *vdev* is dedicated, WRKALLEG is rejected.**

Explanation

The virtual device specified has characteristics incompatible with virtual working allegiance. Dedicated DASD may be shared between multiple real systems. Virtual working allegiance is incompatible with sharing real DASD. WRKALLEG is only for sharing virtual devices.

System action

System operation continues.

User response

None.

— Variation 2	**DASD *vdev* is read only, WRKALLEG is rejected.**

Explanation

The virtual device specified has characteristics incompatible with virtual working allegiance. You must have write access to the device to issue SET WRKALLEG. Because SET WRKALLEG affects all users accessing the minidisk, and only write access can cause data integrity problems, only users with write access can turn working allegiance on.

System action

System operation continues.

User response

Reaccess the device with write authority, if allowed, and issue the command again.

— Variation 3	**DASD is a full-pack mini on a shared real volume, WRKALLEG is rejected.**

Explanation

The virtual device specified has characteristics incompatible with virtual working allegiance. Shared has been set on for the underlying real device. Virtual working allegiance is incompatible with sharing real DASD. WRKALLEG is only for sharing virtual devices.

System action

The CHPID is not deleted.

User response

Reaccess the device with write authority, if allowed, and issue the command again.

— Variation 4	**DASD is a VDISK, WRKALLEG is rejected.**

Explanation

The virtual device specified has characteristics incompatible with virtual working allegiance. Working allegiance is always simulated for virtual disks in storage.

System action

System operation continues.

User response

None.

HCP2050I	LIBRARY *libnum* VOLUME *volser* IS A DUPLICATE VOLUME ADDITION REQUEST

Explanation

The specified VOLSER is already present in the library inventory.

System action

System operation continues.

User response

Examine the tape label and ensure the correct tape VOLSER is specified in the command.

HCP2051I	LIBRARY *libnum* VOLUME *volser* IS DAMAGED AND WAS EJECTED FROM THE LIBRARY

Explanation

A *volser* is damaged and cannot be loaded on a 3490 subsystem. The *volser* was ejected to the convenience output station.

System action

The system logs a temporary error and continues operation.

Operator response

Retrieve the ejected volume from the output station and determine why it is damaged.

User response

If the tape is ejected during mount processing, enter the mount request again to another *volser*.

HCP2091I **I/O priority setting available to CP has changed. New setting is {enabled with range *nnn* to *mmm*| not enabled}.**

Explanation

The I/O priority values for the LPAR were changed by the system operator on HMC console. This message is sent to the system operator. *nnn* is the lowest I/O priority available to your logical partition and *mmm* is the highest.

System action

System operation continues. CP recalculates effective I/O priority values for all users on the system. CP reflects a machine check to I/O priority-aware users to notify them of the new I/O priority values.

User response

None.

HCP2092E **Second value of range must be greater than or equal to first value of range**

Explanation

When specifying a range of the form "value1 to value2", the value specified for the second value range must be greater than or equal to value specified for the first value of range.

System action

The command is not executed; system operation continues.

User response

Issue the command again and specify a valid range.

HCP2094I **Requested ABSOLUTE I/O priority range falls outside range currently allowed by CP and has been changed to fit within CP's range.**

Explanation

An absolute I/O priority range was requested and one or both values of the range is higher or lower than the I/O priority range currently allowed by CP. This message can occur during SET IOPRIORITY command processing and also during LOGON processing when a user has an IOPRIORITY directory statement.

System action

The I/O priority values requested are retained and an I/O priority range is generated that fits within the range allowed by CP. Processing continues.

User response

Both the I/O priority range that was requested and the I/O priority range that is now in effect for the user can be displayed by the QUERY IOPRIORITY command. The I/O priority range currently allowed by CP can also be displayed by the QUERY IOPRIORITY command. No user action is required because CP adjusts the range automatically. To eliminate this message, specify a range that fits entirely within the range allowed by CP.

HCP2101E **This terminal is not dialed to a virtual machine.**

Explanation

The UNDIAL command has been issued but this terminal was never DIALed. The terminal is directly connected to the host.

System action

None.

User response

Continue to use the terminal as a directly connected one. At this time you can perform any of the actions shown on the screen.

HCP2102E **This terminal is logged on to a virtual machine. You must logoff or disconnect before issuing UNDIAL.**

Explanation

The CP UNDIAL command cannot be used from a logged-on terminal.

System action

None.

User response

Logoff or disconnect; then enter the command again.

HCP2103E This terminal is connected to a VTAM service machine. You must disconnect from the service machine before issuing UNDIAL.

Explanation

The CP UNDIAL command cannot be used from a terminal that is attached to a VTAM service machine (VSM).

System action

None.

User response

To return to a host session, terminate your VSM session and reissue UNDIAL.

HCP2104I DBCS output disabled by {APL|TEXT} ON because VTAM service machine controlling this terminal does not support DBCS and APL|TEXT output.

Explanation

You have issued the TERMINAL {APL|TEXT} ON command from a Double-Byte Character Set (DBCS) capable terminal, and the DBCS output support has become disabled. This is because the terminal is connected to VTAM through a VSM (VTAM Service Machine) which is prior to the level of VSCS which supports DBCS data with TERMINAL APL or TEXT ON. Any DBCS data used as output will appear unreadable.

System action

System operation continues.

User response

Continue using APL or TEXT data but be prepared for DBCS data to be unreadable. Or issue TERMINAL *xxxx* OFF to continue using the DBCS output support without using the APL or TEXT support.

HCP2105E SO and SI are invalid command name characters

Explanation

The shift-out (SO) X'0E', or shift-in (SI) X'0F', characters which delimit Double-Byte Character Set (DBCS) data have been found within the specified command name token. DBCS data is not supported within command names.

System action

System operation continues.

User response

Reissue the command without including DBCS data in the command name token, or issue any valid CP command.

HCP2106I TRACE caused a guest transaction at *tbegin_address* to be aborted at *abort_address*

Explanation

A TRACE event has caused a guest transaction to abort. The guest will run from the abort code path unless the user intervenes to alter the guest state.

System action

The transaction was aborted with condition code 3. The virtual machine was stopped with a CP READ. If a constrained transaction was aborted, the guest PSW instruction address points to the TBEGINC instruction that initiated the aborted transaction. If a non-constrained transaction was aborted, the guest PSW instruction address points to the instruction following the outermost TBEGIN instruction that initiated entry to transactional-execution mode.

User response

You might need to take action to ensure that this or a future transaction does not perpetually abort. For a non-constrained transaction, condition code 3 will generally cause the program to take the non-transactional path when virtual machine execution is resumed. However, a constrained transaction will loop repeatedly with this condition, and a future transaction might do the same.

You can use the TRACE TXSUSPEND command to suspend tracing during all transactions, allowing transactions to complete normally. Alternatively, you could disable the trace traps that might have caused this condition. Note that a combination of trace traps might cause program events (and therefore aborts) to be recognized involving instruction or storage locations beyond the ones designated by the trace traps. After you have taken the chosen action, issue BEGIN to resume execution of the virtual machine.

Note: The *abort_address* value reported by HCP2106I does not necessarily coincide with a defined TRACE trap, but might result from additional events due to multiple traps being concurrently active. Outside of transactional-execution mode such additional events are silently suppressed by TRACE. However, in transactional-execution mode such additional events cannot be suppressed because they cause the transaction to abort.

The *tbegin_address* value is the address of the TBEGINC or outermost TBEGIN instruction that initiated entry into transactional-execution mode.

HCP2107E The virtual machine's use of PER Event Suppression conflicts with TRACE *txsusp*.

Explanation

TRACE has detected a conflicting use of PER event suppression by the guest.

txsusp indicates the PER event suppression keyword currently in effect. This keyword can be TXSUSPEND when TRACE is using PER event suppression, or NOTXSUSPEND when TRACE is not using PER event suppression.

System action

The virtual machine is stopped with a CP READ. The system does not run the guest while the conflict persists.

User response

You must resolve the PER event suppression conflict by doing one of the following:

- Use TRACE TXSUSPEND or TRACE NOTXSUSPEND to match the guest's use of PER event suppression.
- Suspend tracing.
- Alter the guest state, specifically the use of control register 9, to resolve this conflict.

HCP2110E { Virtual machine | User *userid* } is not enabled for signals

Explanation

A SIGNAL command was issued but the target virtual machine is not enabled to receive the specified type of signal.

System action

Execution continues.

Operator response

If the correct guest was signalled, install a level of the guest operating system that supports signalling. Otherwise, address the signal to the correct guest.

HCP2111E {Virtual machine|User *userid*} has not responded to a previous signal

Explanation

A SIGNAL command was issued but the target virtual machine has not responded to a previous signal.

System action

Execution continues.

Operator response

If the correct guest was signalled, wait for it to finish processing the previous signal. Otherwise, address the signal to the correct guest.

HCP2112I { Signal | User *userid* signal } timeout interval has expired

Explanation

The guest did not complete processing a signal before the associated timeout interval expired.

System action

If the guest's console is connected, execution continues. Otherwise, the guest is logged off.

Operator response

Increase the timeout interval on the SIGNAL, FORCE, or SHUTDOWN command or on the hardware deactivation operation that caused the signal to be transmitted to the guest.

HCP2113I User *userid* has reported successful termination

Explanation

A SIGNAL, FORCE, or SHUTDOWN command was issued or a deactivation was performed via the system console, causing a termination signal to be sent to the user's virtual machine. The target virtual machine has responded to the signal with an indication that it has successfully terminated operation.

System action

Execution continues.

Operator response

None.

HCP2114I User *userid* termination may be delayed for up to *interval* seconds

Explanation

A FORCE command was issued for user *userid*, causing a termination signal to be sent to the user's virtual machine. The termination of the user will be delayed for as much as *interval* seconds to allow the virtual machine to respond to the termination signal.

System action

Execution continues.

Operator response

To log the user off immediately, issue another FORCE command for them and specify the IMMEDIATE option.

HCP2115E The operating system running in the virtual machine is not enabled for shutdown signals.

Explanation

A SET SHUTSIGNAL command was issued to temporarily disable or to re-enable this user for shutdown signals, but the guest operating system running in the virtual machine is not enabled for shutdown signals, or there is no guest running in the virtual machine. The SET SHUTSIGNAL operation is valid only when a guest operating system is running in the virtual machine and has enabled for shutdown signals.

System action

The command is not executed; system operation continues.

User response

IPL a guest operating system in the virtual machine that supports shutdown signals and ensure that the guest has enabled for receiving these signals.

HCP2116I SHUTDOWN issued at *yyyy-mm-dd hh*:*mm*:*ss* by *userid*

Explanation

This informational message is sent to the primary system operator whenever a SHUTDOWN has been initiated. The message records the date and time when the SHUTDOWN was initiated (by the SHUTDOWN command or a hardware deactivation) as well as the user ID that issued the command. If a hardware deactivation initiated the shutdown, *userid* is reported as SYSTEM. The purpose of the message is to provide operators with a record of what happened so they can determine why a user or server enabled for signals is unexpectedly found logged off.

System action

System operation continues.

Operator response

No further action is required.

HCP2117I SHUTDOWN CANCEL issued at *yyyy-mm-dd hh*:*mm*:*ss* by *userid*

Explanation

This informational message is sent to the primary system operator whenever a SHUTDOWN CANCEL command has been issued. The message records the date and time when the SHUTDOWN CANCEL command was issued as well as the user ID that issued the command. The purpose of the message is to provide the operators with a record of what happened.

System action

System operation continues.

Operator response

No further action is required.

HCP2118I The variations of this message are explained below.

Explanation

- Shutdown signal sent to *user* because a FORCE was issued at *yyyy-mm-dd hh*:*mm*:*ss* by *userid*
- SIGNAL SHUTDOWN {ALL | *user*} issued at *yyyy-mm-dd hh*:*mm*:*ss* by *userid*

This informational message is sent to the primary system operator whenever a FORCE *user* command is issued against a user enabled for signals or a SIGNAL SHUTDOWN {ALL | *user*} command is issued. The message records the date and time the command was issued, the specific command issued, and the user ID that issued the command. The purpose of the message is to provide operators with a record of what happened

so they can determine why a user or server that is enabled for signals is unexpectedly found logged off.

There are two formats of this message. Commands (such as FORCE *user*) that sometimes send this message to the operator use the first format and only send the message when the command causes a signal to be sent to the targeted user, who is enabled for signals. Commands (such as SIGNAL SHUTDOWN ALL and SIGNAL SHUTDOWN *user*) that always send this message to the operator use the second format. These commands always send the message because their primary objective is to send signals to users.

System action

System operation continues.

Operator response

No further action is required.

HCP2147E Environment variable is not set because the maximum number of environment variables are already defined.

Explanation

The CP SET VARIABLE command was issued or system configuration statement was specified to define an environment variable, but the maximum number of environment variables (1000) already exist.

System action

The environment variable is not defined; system operation continues.

Operator response

If this message is issued during system initialization, reduce the number of variables that are set in the configuration file and, if desired, re-IPL to process the file again.

User response

If this message was issued in response to the CP SET VARIABLE command, issue the CP SET VARIABLE command to delete some environment variables by specifying the null string for the value of an existing variable. Then use the CP SET VARIABLE command to define the new environment variable.

HCP2148I No [system] environment variables exist.

Explanation

The QUERY VARIABLE command was issued to display environment variables and their values, but no environment variables of the type specified exist.

System action

System operation continues.

User response

None.

HCP2149E A variable name starting with the reserved prefix "CP." cannot be set.

Explanation

The CP SET VARIABLE command was issued or system configuration statement was specified to define an environment variable, but the variable name begins with "CP.", which is reserved for system use.

System action

The environment variable is not defined; system operation continues.

Operator response

If this message is issued during system initialization or by the CPSYNTAX utility, modify the system configuration statement, specifying an environment variable name that does not have a "CP." prefix, and run the CPSYNTAX utility or re-IPL to process the file again.

User response

If this message was issued in response to the CP SET VARIABLE command, issue the command again, specifying an environment variable name that does not have a "CP." prefix.

HCP2150I *type* {*vdev* | *rdev*} AN INTERRUPT IS PENDING

Explanation

An I/O operation was started on the indicated device *vdev* or *rdev*, but the missing interrupt interval expired before the device sent an interrupt. This message is issued only when the missing interrupt handler has been turned off (SET MIH OFF). The variables are as follows:

type
Identifies the type of failing device.

vdev/rdev
For the virtual machine operator, this is the virtual device number. For the system operator, this is the real device number.

System action

CP issues this message to alert the system operator and the virtual machine operator of the condition.

Operator response

Examine the device *rdev* for hardware malfunctions such as the SELECT light turned on for a tape, or examine the switching units for proper connection. If the user ID is available, issue a warning message to the user.

Programmer response

Examine the LOGREC records for a MITREC (missing interrupt record) for possible causes.

HCP2151I ***type rdev*** **missing interrupt on a CSCH**

Explanation

A CSCH was initiated on the indicated device, but the missing interrupt interval (MITIME) expired before the device presented final completion status. The first occurrence of this message is issued as a warning that system function relying on this device may be degraded. If the hardware does not present completion status by the next MITIME interval, the device will be BOXed and made unusable.

System action

System operation continues, but is degraded because of a stalled I/O scheduling queue.

Operator response

This is a probable hardware error. Contact your system support personnel.

If the device goes into a BOXed state, a VARY ON command may be issued to initiate a recovery. Otherwise, an automatic recovery action will take place if and when the expected interrupt is ever received from the hardware.

System programmer response

Examine and verify the MITIME setting for the device in error. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

User response

None.

HCP2152I ***type rdev*** **returned back to the active configuration**

Explanation

A device that was previously BOXed because of not receiving final solicited status on a Clear Sub-Channel Instruction (CSCH) is no longer BOXed. The device is now on-line and available for use. IOS has finally received the missing CSCH status and verified the integrity of the sub-channel by performing a VARY ONLINE function.

System action

The previous BOXed device is returned to an on-line state and is available for use.

User response

None.

HCP2153I ***type rdev*** **I/O cancelled due to a missing interrupt**

Explanation

An I/O operation was started on the indicated device *rdev*, but the missing interrupt interval expired before the device sent an interrupt. To prevent the I/O scheduling queues from stalling, CP will cancel the active I/O operation. This message is issued whenever an I/O operation is canceled by the missing interrupt handler. The variables are as follows:

type
Identifies the type of failing device.

rdev
The real device number.

Note: If a device is varied offline and running diagnostics, this message may not indicate a problem. Diagnostic testing can cause a device to broadcast a state change interrupt, and at the same time prevent the device from responding to resulting queries by an operating system.

System action

CP issues this message to alert the system operator of the condition and returns the I/O request back to its requestor as fatal. If the I/O operation was a guest-initiated request, final status for the canceled I/O operation is presented back to the guest with a simulated interface control check (IFCC).

Operator response

Examine the device *rdev* for hardware malfunctions such as the SELECT light on for a tape, or examine the switching units for proper connection. If the user ID is available, enter a warning message to the user.

Programmer response

Examine the LOGREC records for a MITREC (missing interrupt record) for possible causes. In addition, ensure the time allotted for an I/O operation to complete on the failing device is sufficient. This time is specified with the CP SET MITIME command.

There are times when CP will temporarily override the current MITIME setting for a device, which may cause this message to be displayed. This is done during the execution of various key CP commands (such as VARY, ATTACH, DETACH, and so on) to prevent a delay to either CP or a user because of nonresponsive I/O operations.

HCP2154E Missing adapter interruption

Explanation

An expected adapter interruption was not received or a pending adapter interruption was not processed in a reasonable amount of time.

System action

Recovery will be attempted to prevent system performance degradation. Message HCP2155E is issued when recovery has failed 10 or more times.

User response

There might be a hardware or software problem. If this problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP2155E System performance may be degraded due to a missing adapter interruption

Explanation

An expected adapter interruption was not received or a pending adapter interruption was not processed in a reasonable amount of time and is unrecoverable after multiple tries. This condition results in severe degradation of OSA, Hipersockets, and FCP device performance until z/VM is reIPLed.

System action

None.

User response

ReIPL z/VM to recover from this condition. If this problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP2156I Additional system action was needed to perform I/O on device *rdev*.

Explanation

An I/O issued to the adapter associated with the real device *rdev* has been left adapter-owned for a period of time that exceeds a system-defined threshold. This message documents the event and informs the operator that corrective measures have been taken to ensure the I/O is completed.

System action

The I/O in question is reissued to the adapter.

User response

If this message occurs repeatedly, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP2160I CCW translation is required in logically partitioned mode.

Explanation

CP is running in a logical partition that requires CCW translation. This command option is not supported in this environment.

System action

The command has no effect on system operation.

User response

No action is required.

HCP2162I The variations of this message are explained below.

— Variation 1 QIOAssist is not available

Explanation

The SET QIOAssist requires a facility that is available only when running z/VM directly in a logical partition on a processor that supports the assist.

System action

The command is not executed; system operation continues.

User response

No action is required.

— Variation 2 IOAssist is not available

Explanation

The SET IOAssist requires a facility that is available only when running z/VM directly in a logical partition on a processor that supports the assist.

System action

The command is not executed; system operation continues.

User response

No action is required.

HCP2163I MEMASSIST is not permitted

Explanation

You have issued SET MEMASSIST ON, but the system administrator has forbidden use of the collaborative memory management facility assist by issuing SET MEMASSIST OFF FOR ALL.

System action

System operations continue.

User response

Contact the system administrator to find out why MEMASSIST has been turned off, and whether or not it can be turned on for this user.

For more information, refer to SET MEMASSIST in *z/VM: CP Commands and Utilities Reference*.

HCP2200I PRT *rdev* AN OPERATION WAS TERMINATED AT OPERATORS REQUEST

Explanation

You pressed the CANCEL key on printer console *rdev* and canceled the output.

System action

System operation continues.

Operator response

None.

HCP2201I *type rdev* A PERSISTENT ERROR LOG FULL CONDITION OCCURRED

Explanation

The error recovery procedure encountered a persistent ERROR LOG FULL condition when trying to restart the failing channel program. This indicates a probable hardware problem on the device *rdev*.

System action

System operation continues.

Operator response

This is a probable hardware error. Contact your system support personnel.

Programmer response

Examine the MDR (miscellaneous data record) within LOGREC for specific hardware error conditions. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP2202A *type rdev* REQUIRES OPERATOR INTERVENTION DUE TO A LINE OVERRUN CONDITION

Explanation

The overrun condition occurred when the channel failed to respond in the anticipated time interval to the control unit's request for service from I/O device *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Press the CANCEL key and then PRINTER READY; this places the spool file in system HOLD. This is probably a hardware error. To print the spool file that was being processed when the error occurred, change the file to NOSYS to remove system HOLD. If the problem persists, contact your system support personnel.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP2203A ***type rdev*** **REQUIRES OPERATOR INTERVENTION DUE TO AN EQUIPMENT CHECK**

Explanation

The spooling error recovery routine detected an unrecoverable equipment check on device type *rdev*, which is an error requiring operator intervention.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

If the printer is made ready, the file will continue printing. To make the printer ready, press the STOP and then the START keys on the printer console.

For unit record devices, if you cannot make the printer or punch ready to retrieve the active file on the device:

1. Use the FLUSH command to flush the device. The file will have a system HOLD status if you used the HOLD operand with the FLUSH command. This will free the file for processing on another device.
2. Use the DRAIN command to drain the device.
3. Vary the printer offline.

If the error persists, report a permanent I/O error to your system support personnel.

HCP2204A **RDR** ***rdev*** **BAD CMD SQ CMD=***cm* **SNS=***sense* **[IRB=***irb* **USERID=***userid***]**

Explanation

The 2540R error recovery routine detected an unusual sequence of commands (a read followed by a read but no intervening feed). For system-owned devices, this indicates a possible system error. The variables in this message are as follows:

rdev
The unit address of the failing device

cm
The command code, in hexadecimal, of the channel word (CCW) being executed when the error occurred

sense
The sense bytes, in hexadecimal, for the error condition

irb
The failing interrupt response block (IRB), in hexadecimal

userid
The associated user ID, if available

System action

System operation continues.

Operator response

This is an unusual condition. It indicates a possible system error. Notify your system support personnel.

HCP2205I ***type rdev*** **HAS BEEN VARIED OFFLINE**

Explanation

The system has varied device *rdev* offline.

The *type* variable in the message identifies the error recovery routine.

Type
Error Recovery Routine

DASD
Disk

LINE
Line

TAPE
Tape

System action

The system prevents any further I/O to the device until it is varied online.

Operator response

Correct the condition that caused the device to be varied offline and vary the device back online.

HCP2206A **THE VOLUME MOUNTED ON DASD** ***rdev*** **DOES NOT HAVE VOLID** ***label***

Explanation

The volume label on the pack mounted on the device does not match the label expected. The variables in this message are as follows:

rdev
The unit address of the failing device

label
The label expected

System action

The system does not proceed with I/O to this device until the proper volume is mounted.

Operator response

Check the pack that is mounted on the device. The volume label for that volume should match the one in the message. It is possible that a pack was mounted on the wrong device or that a volume label was accidentally changed.

HCP2207A ***type rdev*** **THE ERROR COUNT EXCEEDED THE THRESHOLD**

Explanation

The large number of errors occurring on device *rdev* prevent any further use of the device. The type in the message identifies the error recovery routine:

Type
Error Recovery Routine

DASD
Disk

GRAF
Display device

LINE
Line

RDR
Reader

PRT
Printer

PUN
Punch

System action

The system prevents any future I/O to the device and cancels any current I/O to the device.

User response

If the system continues operating, transfer work from the failing device to another available device, if possible. Notify your system support personnel.

Programmer response

Examine the EREP outboard recorder (OBR) record within LOGREC for specific hardware error conditions and contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP2208A **THE EQUIPMENT CHECK COUNT FOR DASD *rdev* EXCEEDED THE THRESHOLD**

Explanation

Continuous equipment checks occurred on the device. This indicates possible damage to the recording media. The *rdev* variable refers to the failing device.

System action

The system will no longer accept I/O for this device, and all current I/O requests are cancelled.

Operator response

Turn off the drive and notify your system support personnel. If the device has a removable pack, do not try to remount the pack.

Programmer response

Examine the OBR (outboard recorder) record within LOGREC for specific hardware error conditions and contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP2209I **PRT *rdev* AN OPERATION WAS TERMINATED BECAUSE A COMMAND SUPPRESSION ERROR OCCURRED**

Explanation

A command suppression occurred during printer error recovery. This error indicates an interface disconnection before channel end has been signaled.

Failing device *rdev* is identified in the message text.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Contact your system support personnel. This is probably a software error.

HCP2210A **TAPE *rdev* REQUIRES OPERATOR INTERVENTION; RELOAD CARTRIDGE**

Explanation

The tape cartridge on device *rdev* is not inserted correctly, or the tape is not threaded correctly.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Reload the cartridge into the drive and retry the operation. If the problem persists, contact your system support personnel.

HCP2211A **TAPE *rdev* REQUIRES OPERATOR INTERVENTION; UNLOAD CARTRIDGE**

Explanation

The drive on device *rdev* cannot maintain tape tension and control tape movement during an unload operation.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Retry the unload operation. If the problem persists, contact your system support personnel.

HCP2213I **{TAPE|SWCH} *rdev* SUBSYSTEM IN DEGRADED MODE**

Explanation

CP detected a condition on device *rdev* that can cause degraded subsystem performance within the subsystem.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP2214I ***type rdev* AN OPERATION WAS TERMINATED BECAUSE AN INTENT VIOLATION OCCURRED**

Explanation

An operation violated the intent specified by the LOCATE RECORD command. The *rdev* variable refers to the failing device.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Examine the EREP outboard recorder (OBR) record for additional details on what caused the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP2215A **TAPE *rdev* REQUIRES OPERATOR INTERVENTION; MAKE DRIVE READY**

Explanation

The tape drive *rdev* is not ready.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Ready the device and retry the operation.

HCP2216I CHANNEL PATH ID = *cc*

Explanation

This is an informational message that displays the channel path ID (CHPID) in hexadecimal. If CP cannot determine the channel path, the message “CHANNEL PATH ID = INVALID:” is displayed. The *cc* variable refers to the channel path ID (CHPID) where the error occurred.

System action

System operation continues.

Operator response

None.

HCP2217A TAPE *rdev* REQUIRES OPERATOR INTERVENTION; RELOAD TAPE REEL

Explanation

The tape reel on device *rdev* is not loaded correctly, or the tape is not threaded correctly.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Reload the reel or cartridge into the drive and retry the operation. If the problem persists, contact your system support personnel.

HCP2218E DISK *mode* IS READ-ONLY

Explanation

The file mode specifies a disk that cannot be written on.

System action

The command does not run; system operation continues.

User response

Access the disk as a read/write disk, not as an extension of another disk. You can also use the LINK command to attach the disk to a read/write mode and then access the disk. Then reenter the original command.

HCP2119E The CP service data included in the CP nucleus is incompatible with the QUERY CPSERVICE command.

Explanation

The HCPLVL text deck that the CP module build process produced is incompatible with the QUERY CPSERVICE command.

System action

None.

User response

Rerun the service process for the CP component, ensuring that your VMSES system is at the same level as the CP nucleus you are building.

HCP2219E DISK *mode* NOT ACCESSED

Explanation

The specified disk has not been accessed.

System action

The command does not run; system operation continues.

User response

Access the specific disk and reenter the command.

HCP2220I PHYSICAL CHANNEL PATH ID = *cccc*

Explanation

This is an informational message that displays the physical channel path ID (PCHID) in hexadecimal.

If CP cannot determine the PCHID, the message "PHYSICAL CHANNEL PATH ID = INVALID:" is

displayed. The *cccc* variable refers to the physical channel path ID where the error occurred.

System action

System operation continues.

User response

None.

HCP2221I DASD *rdev* VOLUME *volid* - A PERMANENT DATA CHECK WAS RECOVERED ON THE SECONDARY VOLUME - *ssid.p-cc-dd*

Explanation

An unrecoverable data check is detected on the primary of a duplex pair and is recovered on the secondary device.

The variables in the message are as follows:

rdev
Identifies the device used to report the condition.

volid
Is the volume identifier of the affected device.

ssid.p-cc-dd
Is the subsystem identifier, storage path number, controller identifier and device unit address of the affected hardware components.

System action

System operation continues.

User response

Examine the EREP OutBoard Record (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP2225E DUPLEX PAIR (*prirdev,secrdev*) - {PRIMARY | SECONDARY} VOLUME IS SUSPENDED, {PRIMARY | SECONDARY} IS {INTERVENTION REQUIRED | CACHE UNAVAILABLE | FAILED-RC = *rc*} - *ssid.p-cc-dd*

Explanation

This message is generated when the storage director cannot successfully destage to one of the volumes of a duplex pair; the non-volatile storage was not available at IML; the cache is not available; or a PSF Fail Duplex Pair order issued by ERP is successfully executed.

When CP is running in a guest virtual machine, hyphens (----) will appear in the secrdev position if the secondary volume is not in the guest's CP I/O configuration.

The variables in the message are as follows:

prirdev,secrdev
The primary device number and the secondary device number.

rc
Is the reason code.

ssid.p-cc-dd
Is the subsystem identifier, storage path number, controller identifier and device unit address of the affected hardware components.

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the EREP OutBoard Record (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP2226E PPRC SUSPENDED (*prdev srdev*) - {PRIMARY DEVICE WRITE FAILURE.| SECONDARY SUBSYSTEM FAILURE.| COMMUNICATIONS FAILURE TO THE SECONDARY DEVICE.| CRITICAL VOLUME STATE. ALL WRITES WILL FAIL. | INTERVENTION REQUIRED ON THE SECONDARY.} PSER=*aaaa-bbbbb*,CCA=*cc*,SSER=*aaaa-bbbbb*,CCA=*cc*.

Explanation

If the message text displayed includes:

PRIMARY DEVICE WRITE FAILURE
A Write failure occurred when attempting to write data from the application-site storage control to the primary device. The PPRC pair has been suspended and no further updates are being made to the secondary device. The application-site

storage control continues to update the primary device, if possible. It keeps track of changed cylinders for re-synchronization with the recovery-site subsystem after the problem is corrected and the PPRC pair is re-established.

SECONDARY SUBSYSTEM FAILURE
A failure occurred in the recovery storage subsystem that caused the PPRC pair to be suspended. The application-site storage control continues to update the primary device. It keeps track of changed cylinders for re-synchronization with the recovery-site subsystem after the problem is corrected and the PPRC pair is re-established.

COMMUNICATION FAILURE TO THE SECONDARY DEVICE
A failure occurred in the PPRC communication paths. The application-site storage control for the primary device can no longer communicate with the recovery-site storage control. The PPRC pair has been suspended and no further updates are made to the secondary device. The application-site storage control continues to update the primary device. It keeps track of changed cylinders for re-synchronization with the recovery-site subsystem after the problem is corrected and the PPRC pair is re-established.

CRITICAL VOLUME STATE
For an installation-selected critical volume, the PPRC pair is set up so that all write operations will fail following an unsuccessful update to the secondary device. Such an unsuccessful secondary-device update has occurred and the PPRC pair has been suspended. No further updates are made to either device.

INTERVENTION REQUIRED ON THE SECONDARY
The secondary device of a PPRC pair is in a not-ready condition and the PPRC pair has been suspended. The application-site storage control continues to update the primary device. It keeps track of changed cylinders for re-synchronization with the recovery-site subsystem after the problem is corrected and the PPRC pair is re-established.

The variables in the message are as follows:

prdev srdev
The primary device number and the secondary device number

aaaa
The first four bytes of the storage control serial number

bbbbb
The last five bytes of the 12-byte sequence number

cc
Channel connection address of the device.

System action

Unless CRIT(YES) has been specified when the PPRC pair was established, the processing continues in a suspended duplex state. Based on the specific error reason, the primary volume storage control continues to keep track of changed cylinders, such that after the error is corrected, you may select the RESYNC option to reestablish the PPRC pair. However, depending on the nature of the error, if there is a possibility that data has been lost on the secondary subsystem or device, the recovery action requires a full copy after the problem has been fixed and the PPRC pair re-established.

Operator response

The system issues this message because of a hardware error. Follow the procedures for your installations when reporting this error.

Programmer response

This is a hardware problem. Collect the appropriate EREP information for diagnostic output, and contact your hardware support personnel. The full sense data is logged in the EREP user ID set up on the system to which the error has been reported.

Note: Disaster and recovery protection is exposed until this error is corrected and the PPRC pair is re-established.

HCP2227E Device *rdev* is a volume of a PPRC pair.

Explanation

The device specified on the DUPLEX command was not duplexed because it is already a volume of a PPRC pair.

System action

System operation continues.

Operator response

If an incorrect device number was specified, enter the DUPLEX command again with the correct device number.

HCP2228I DASD *rdev* THE SUBSYSTEM TRACE DATA HAS BEEN SAVED - {*ss*-XX-XX|*ssid.p*-*cc*-*dd*}

Explanation

Data was stored in the support facility as the result of a trace event. The trace is normally set by the service representative to fix intermittent problems. The variables in this message are as follows:

rdev
The device number.

***ss*-XX-XX**
The physical identifier of the reporting storage director.

ssid.p-cc-dd
The subsystem identifier, storage path number, controller identifier, and device unit address of the affected hardware components

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Record the device and path information, then contact your system support personnel.

Programmer response

Examine the EREP outboard recorder (OBR) record for additional details as to the cause of the failure. Refer to the hardware publications for sense data format and descriptions. If a hardware problem exists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP2229I **PPRC PAIR (*prdev*,*srdev*) PPRC-PATH - *text*. RC = *rc*, SSID = *ssid*, PSER = *xxxx-yyyyy*, CCA = *cc*, SSER = *xxxx-yyyyy*, CCA = *cc*.**

Explanation

A unit check is generated to alert the operating system when one or more paths between peer subsystems are removed or established for any reason other than online execution of an establish peer-to-peer remote copy paths order or a remove peer-to-peer remote copy paths order.

The variables in this message are as follows:

prdev
is the primary device number.

srdev
is the secondary device number.

text
is one of the following:

- ALL PPRC PATHS REMOVED BY CUIR
- ALL PPRC PATHS REMOVED UNEXPECTEDLY
- ONE OR MORE PPRC PATHS DEGRADED
- ONE OR MORE PPRC PATHS NO LONGER DEGRADED
- ONE OR MORE PATHS REMOVED BY CUIR
- ONE OR MORE PATHS REMOVED UNEXPECTEDLY
- ONE OR MORE PPRC PATHS RESTORED

rc
is the reason code.

ssid
is the subsystem identifier of the primary device.

xxxx-yyyyy
are the last four bytes of the storage control serial number and the last five bytes of the 12-byte sequence number.

cc
is the channel connection address of the device.

System action

Performance might be affected by the loss or addition of a path. If the last path between peer subsystems was removed, a message is issued and the PPRC operation is suspended.

User response

The status of the PPRC hardware has changed. To obtain more information about the cause of this change, contact the appropriate hardware service personnel.

HCP2230I **PPRC PAIR (PRDEV,SRDEV) SUSPENDING - EXTENDED LONG BUSY STATE. RC=RC,SSID=SSSS,PSER=AAAA-BBBBB, CCA=CC,SSER=AAAA-BBBBB,CCA=CC.**

Explanation

The control unit is in the process of suspending the PPRC pair. This text only appears when the device is in the extended long busy state.

The variables in this message are as follows:

rc
The reason code.

ssid
The subsystem identifier of the primary device.

prdev srdev
The primary device number and the secondary device number.

aaaa
The first four bytes of the storage control serial number.

bbbbb
The last five bytes of the 12-byte sequence number.

cc
The channel connection address of the device.

System action

If no action is taken by the operator or the automation program, at the end of the EXTENDED LONG BUSY period, processing will continue in suspended duplex state.

Operator response

This message is intended for use by automation programs that monitor operator messages. Actions may be attempted by the operator but an automation program is recommended.

HCP2233I ***type rdev*** **NOT READY, CP OPERATOR NOTIFIED**

Explanation

An error recovery routine encountered an intervention-required condition on the device *rdev*.

The variables in this message are as follows:

type
The device class of the failing device

rdev
The failing device.

System action

System operation continues.

Programmer response

Wait for the CP operator to ready the device.

HCP2234E **LINK {DEGRADED|FAILURE} TM=*typ/modl* SER=*mmmpp-sssss* IF=*xxxx* LA=*zz* IC=*yy* [CHPID=*nn*] CALL SERVICE**

Explanation

A link-maintenance information record has been written to LOGREC in response to the reporting of a serial incident. Information concerning the serial incident follows:

DEGRADED or FAILURE
Indicates the general severity of the error. The message will state either link degraded or link failure.

TM
Type and Model of device reporting incident or attached node

typ
the 6 characters of TYPE

modl
3 characters of MODEL

SER
serial number of device reporting incident or attached node, or both

mmm
the 3 characters of MANUFACTURER

pp
the 2 characters of PLANT OF MANUFACTURER

sssss
the rightmost 5 characters of SEQUENCE NUMBER

IF
interface ID of device reporting incident or attached node, or both

xxxx
the TAG field that contains the physical interface number

LA
link address of device reporting incident or attached node, or both

zz
LINK ADDRESS associated with the physical port whose interface ID is contained in the TAG field — a link address of 00 indicates that no link address information is provided

IC
incident code of serial incident

yy
the INCIDENT CODE

CHPID
channel path ID when report is from channel

nn
the CHPID

System action

A link-maintenance information record is created.

User response

Report the serial incident to your IBM service representative.

HCP2235I ***type rdev*** **REQUIRES OPERATOR ACTION; MAKE DISKETTE DRIVE READY**

Explanation

The diskette drive in device *rdev* is not ready.

This message is displayed when either the diskette drive is not operational or the diskette is not properly inserted in the drive. The primary functions of the switch will operate normally.

System action

System operation continues.

User response

Ready the device.

HCP2236E **TAPE *rdev* THE MAXIMUM BLOCK SIZE HAS BEEN EXCEEDED**

Explanation

An error occurred at the tape drive because the block of data being read or written was larger than the maximum size allowed by the control unit.

System action

The operation writing data to the tape is terminated. System operation continues.

User response

The data should be re-written using a smaller block size.

HCP2238E ***type rdev*** **A CHANNEL INTERFACE ERROR HAS OCCURRED**

Explanation

An error occurred at the channel, and the channel was not able to retry the operation.

System action

System operation continues.

User response

Examine the outboard record (OBR) within logrec for specific hardware error conditions, and contact your IBM support center personnel to diagnose and correct the hardware error.

HCP2239E **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE THE END OF DATA WAS ENCOUNTERED**

Explanation

An operation was terminated because it attempted to read past the end-of-data marker on a tape. The end-of-data marker marks the end of the validly written data on the tape. This error normally indicates that the tape was not closed properly during its last session.

This message is displayed in conjunction with other messages that provide information about channel command words, sense, user ID, and other variables when necessary.

System action

System operation continues.

User response

Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP2240E ***type rdev*** **A CHANNEL PROTOCOL ERROR HAS OCCURRED**

Explanation

The channel has detected a device-level error and cannot present status for the current operation, or there is no current operation.

System action

The operation is terminated, and the system logs a permanent error.

User response

Examine the outboard record (OBR) within logrec for specific hardware error conditions, and contact your IBM support center personnel to diagnose and correct the hardware error.

HCP2241E **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A TAPE LENGTH INCOMPATIBLE ERROR OCCURRED**

Explanation

The tape length in the cartridge on device *rdev* is too long for the device it was mounted on.

This error could occur when a tape longer than a Cartridge System Tape is mounted on a device which is only capable of processing Cartridge System Tapes.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System action continues.

Operator response

You should remove the cartridge and mount it on a device which is capable of processing the cartridge.

HCP2242E **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A TAPE LENGTH VIOLATION ERROR OCCURRED**

Explanation

The tape length in the cartridge on device *rdev* is too long.

This error could occur when a tape longer than an Enhanced Capacity Cartridge System Tape is mounted on a device which is not capable of processing tapes longer than Enhanced Capacity Cartridge System Tapes.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System action continues.

Operator response

You should remove the cartridge and retry the operation using a cartridge with a tape length that is supported on device *rdev*.

HCP2243E **TAPE *rdev* AN OPERATION WAS TERMINATED BECAUSE A COMPACTION ALGORITHM INCOMPATIBLE ERROR OCCURRED**

Explanation

Tape on device *rdev* cannot be read or decompacted because the subsystem does not support the compaction algorithm used to compact the tape.

System action

The operation is terminated, and the system logs a permanent error.

User response

The tape should be removed and mounted on a device that is capable of decompacting the logical block.

Programmer response

When a unit check with associated sense data indicating ERA X'5E' is encountered, the unsupported algorithm identification can be found in sense byte 9.

HCP2244I **SWCH *rdev* WARNING, A POSSIBLE INVALID ATTACHMENT HAS BEEN DETECTED PORT NUMBER *n1*, PORT ADDRESS *n2***

Explanation

The identified port may have an attachment that is not valid due to one of the following reasons:

- A port that is connected to a port on the same SWCH or another SWCH does not have a dedicated connection.
- A port transmitter is connected to its own receiver.

System action

System operation continues.

Operator response

Contact your system support personnel to investigate this problem.

HCP2246E **TAPE *rdev* WORM OVERWRITE REJECTED.**

Explanation

An attempt was made to overwrite data to a Write Once Read Many (WORM) tape cartridge. Writes are only allowed to a WORM cartridge to update the data portion of a volume label construct, or if the new data write follows the logical End Of Data (EOD) mark for data previously written on the tape.

System action

System operation continues, but the current tape operation has ended with a permanent error condition.

Operator response

Position the current WORM cartridge following the EOD mark or use a brand new WORM cartridge that has never been written to before. If the problem persists, contact your system support personnel.

HCP2252I ***type rdev*** **PATH** ***xx*** **NOT OPERATIONAL**

Explanation

Channel path *xx* became inoperative during an I/O operation. The variables used in this message are as follows:

type
The device class of the failing device.

rdev
The failing device.

xx
The channel path identifier (CHPID).

System action

The operating system will no longer use channel path *xx* to device *rdev*.

User response

This is a hardware problem. Contact your IBM Support Center personnel to diagnose and correct the hardware problem. System performance and availability may be affected by the loss of this channel path.

HCP2253E **DEVICE** ***rdev*** **OPERATION TERMINATED DUE TO KEY ENCRYPTION EXCHANGE FAILURE.**

Explanation

The command cannot be executed successfully because of a key exchange failure for hardware encryption on the specified device.

System action

The command is not executed; system operation continues.

User response

Ensure the device and control unit are powered on, enabled, and able to communicate with the external key manager. Then reissue the command.

HCP2254E **DEVICE** ***rdev*** **OPERATION TERMINATED DUE TO KEY ENCRYPTION FAILURE. KEY ENCRYPTION HAS NOT BEEN ENABLED.**

Explanation

Key encryption was specified and could not be enabled by CP. The CCWs executed to enable key encryption failed, the tape was not positioned at Beginning of Tape or there was no path to the device.

System action

The command is not executed; system operation continues.

User response

Ensure the device supports key encryption and is at Beginning of Tape.

HCP2255E **DEVICE** ***rdev*** **DOES NOT SUPPORT HARDWARE ENCRYPTION.**

Explanation

The command is only valid for devices that support hardware encryption.

System action

The command is not executed; system operation continues.

User response

Reissue the command and do not specify key encryption.

HCP2256E **The variations of this message are explained below.**

— Variation 1 **Unexpected EOF while reading/ writing to pipe.**

Explanation

An end-of-file error occurred while writing to the CMS Pipelines output stage.

System action

The DDR operation is halted.

User response

Check the specified output to make sure it is valid and that there is enough space to hold the output data.

— Variation 2 **Multiple instances of DDR detected.**

Explanation

The DDR pipe stage appears more than once in a single CMS Pipelines command.

System action

The command is not executed.

User response

The DDR pipe stage can appear only once in a single CMS Pipelines command. Issue two separate commands to perform the necessary operation.

HCP2259I **Device *rdev* is malfunctioning and producing repeated interrupts. The system is attempting to recover.**

Explanation

The real I/O device (*rdev*) is experiencing a hardware malfunction and producing repeated I/O interrupts.

System action

CP issues a Clear Subchannel to attempt to clear the malfunction. System operation continues.

Operator response

This is probably a hardware error. If the problem persists, contact your system support personnel.

Programmer response

Examine the MDR (miscellaneous data record) within LOGREC for specific hardware error conditions. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP2260A **Device *rdev* has been removed from the active I/O configuration (BOXED).**

Explanation

The real I/O device (*rdev*) has been removed from the active I/O configuration, usually because of a hardware condition.

System action

The device is removed from the active I/O configuration. The device is placed in an offline state. System operation continues.

The following conditions may apply if this message was:

Preceded by message HCP2259I:
The device has been removed from the active I/O configuration because of repeated unsolicited interrupts presented by the device. The subchannel associated with the malfunctioning device is left in a status-pending condition.

A status-pending condition on a subchannel may prevent the associated control unit (and control-units channel attached after it) from presenting status on any subchannel, thereby making those devices unavailable also.

For a malfunctioning multiexposure device, all exposures are removed from the active I/O configuration and placed in an offline state.

Preceded by message HCP2151I:
The device has been removed from the active I/O configuration due to a missing interrupt on a CSCH instruction.

Accompanied by message HCP6322I:
The device has been removed from the active I/O configuration because CP has been notified by the hardware of a configuration change on the subchannel for this device, and the device is no longer available to the system.

Note: If this occurs on a second level VM system, it could mean the device was detached on the first level system, thereby making it unavailable on the second level system.

Operator response

Determine the reason the device was boxed. If it was a hardware malfunction, contact your system support personnel and notify them of the hardware problem.

If no hardware problem exists, attempt to vary the device back online. This will reinitialize the device. If the condition that caused the device to be boxed no longer exists, then the device will return to an online state.

If the message was preceded by message HCP2259I, attempt to "clean-up" the status-pending condition

by physically powering-off or varying on the malfunctioning device.

Programmer response

Examine the MDR (miscellaneous data record) within LOGREC for specific hardware error conditions. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP2261I Channel Path *chpid*.

Explanation

All hot I/O interrupts occurred on the channel path listed. This may mean that the malfunction is not in the device, but in the control unit or the channel path hardware. This message only occurs in conjunction with message 2260I.

System action

System operation continues.

Operator response

Attempt to “clean-up” the status-pending condition by physically powering off or varying offline the malfunctioning control unit or isolating the failing channel path. The VARY PATH command may be used to isolate the channel path.

Programmer response

Examine the MDR (miscellaneous data record) within LOGREC for specific hardware error conditions. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP2263I Path *yy* to device *rdev* is available and online.

Explanation

A path, to the device, that was previously unavailable is now available. CP has brought the path online for use.

System action

The channel path is logically varied online.

Operator response

None.

HCP2264I Device *rdev* is available and online.

Explanation

A device that was previously unavailable is now available. CP has brought the device online for use.

System action

The device is varied online.

Operator response

Any pending actions to use the device may now be performed, for example, attaching the device to a VM guest.

HCP2265I Device *rdev* has been restored.

Explanation

A condition in the channel subsystem caused the subchannel associated with this device to be placed in an initialized state. CP restored the subchannel back to its enabled state.

System action

The device is enabled and available for use.

User response

None.

HCP2270I *rdev* DASD fast write function is active.

Explanation

The device has reported the following state change:

```
DASD fast write entered the ACTIVE state
```

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2271I *rdev* DASD fast write deactivate pending.

Explanation

The device has reported the following state change:

```
DASD fast write entered the PEND (SC)
state
```

This Indicates a destage of DASD fast write data has either failed or is in the process of being destaged.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

Contact your system support personnel if DASD fast write destage has failed.

Programmer response

If DASD fast write destage has failed, examine the EREP outboard recorder (OBR) record for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP2272I ***rdev*** **DASD fast write function is inactive.**

Explanation

The device has reported the following state change:

```
DASD fast write entered the INACTIVE state
```

indicating that the DASD fast write function has been turned off.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2273I ***rdev*** **Subsystem cache is available.**

Explanation

The device has reported the following state change:

```
Subsystem cache entered the ACTIVE state
```

indicating that the subsystem cache is now available.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2274I ***rdev*** **Subsystem cache destage is in progress.**

Explanation

The device has reported the following state change:

```
Subsystem cache entered the PEND (SA) state
```

indicating that the subsystem cache is currently transferring data to backing storage.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2275I ***rdev*** **Subsystem cache destage has failed.**

Explanation

The device has reported the following state change:

```
Subsystem cache entered the PEND (SC) state
```

indicating that a hardware failure occurred while attempting to transfer data from cache to backing storage.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

User response

Examine the EREP outboard recorder (OBR) record for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP2276I ***rdev*** **Subsystem cache has failed.**

Explanation

The device has reported the following state change:

```
Subsystem cache entered the FAILED state
```

indicating that the subsystem cache has failed because of hardware errors.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

Contact your system support personnel.

Programmer response

Examine the EREP outboard recorder (OBR) record for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP2277I ***rdev*** **Subsystem cache is unavailable.**

Explanation

The device has reported the following state change:

```
Subsystem cache entered the INACTIVE state
```

indicating that the subsystem cache has been turned off.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2278I ***rdev*** **Device caching is active.**

Explanation

The device has reported the following state change:

```
Device caching entered the ACTIVE state
```

indicating that the caching for the device is now available.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2279I ***rdev*** **Device cache deactivate pending.**

Explanation

The device has reported the following state change:

```
Device caching entered the PEND (SC) state
```

This indicates either a failure occurred while attempting to transfer data from the cache to the backing storage device, or the deactivation of device cache is still in progress.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

Contact your system support personnel if a failure occurred while attempting to transfer data from the cache to the backing storage device.

Programmer response

If a failure occurred while attempting to transfer data from the cache to the backing storage device, then examine the EREP outboard recorder (OBR) record for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP2280I ***rdev*** **Device caching is inactive.**

Explanation

The device has reported the following state change:

```
Device caching entered the INACTIVE state
```

indicating that the caching for the device has been turned off.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2281I ***rdev* Subsystem cache fast write function is active.**

Explanation

The device has reported the following state change:

`Cache fast write entered the ACTIVE state`

indicating that the cache fast write function is now available.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2282I ***rdev* Subsystem cache fast write function is inactive.**

Explanation

The device has reported the following state change:

`Cache fast write entered the PEND (SA) state`

indicating that the cache fast write function has been turned off.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2283I ***rdev* Subsystem non-volatile storage is available.**

Explanation

The device has reported the following state change:

`NVS entered the ACTIVE state`

indicating that the nonvolatile storage is now available.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2284I ***rdev* Subsystem non-volatile storage destage is in progress.**

Explanation

The device has reported the following state change:

`NVS entered the PEND (SA) state`

indicating that the nonvolatile storage is in the process of destaging data to backing storage.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2285I ***rdev* Subsystem non-volatile storage destage has failed.**

Explanation

The device has reported the following state change:

`NVS entered the PEND (SC) state`

indicating that the destaging of nonvolatile storage data to backing storage has failed because of a hardware failure.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

User response

Examine the EREP outboard recorder (OBR) record for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP2286I ***rdev*** **Subsystem non-volatile storage has failed.**

Explanation

The device has reported the following state change:

`NVS entered the FAILED state`

indicating that a hardware failure has caused the nonvolatile storage to become unavailable.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

User response

Examine the EREP outboard recorder (OBR) record for additional details of the failure. Refer to the hardware system reference library (SRL) manuals for sense data format and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel.

HCP2287I ***rdev*** **Subsystem non-volatile storage is unavailable.**

Explanation

The device has reported the following state change:

`NVS entered the INACTIVE state`

indicating that the nonvolatile storage has been turned off.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2288I ***rdev*** **Data is pinned in cache or non-volatile storage for device.**

Explanation

The device has reported the following state change:

`Data became pinned for the device`

indicating that data cannot be destaged from cache or nonvolatile storage because of a hardware failure. Unless this message was issued because of transient pinned data, this data cannot be removed and the space it occupies cannot be used again until either the problem is fixed or the data is discarded.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

If this message was issued because of transient pinned data, it may be ignored after four minutes has passed and neither QUERY PINNED or QUERY CACHE indicate pinned data. Otherwise, contact your system support personnel to correct the hardware failure or enter the DISCARD command to discard the pinned data and free up the cache or nonvolatile storage for other data.

HCP2289I **Duplex pair (*prdev,srdev*) - suspended.**

Explanation

The duplex pair is in the suspended duplex state. Either the primary or the secondary volume has been suspended.

When CP is running in a guest virtual machine, hyphens (----) will appear in the *srdev* position if the secondary volume is not in the guest's CP I/O configuration.

System action

System operation continues.

User response

None.

HCP2291I **Duplex pair (*prdev,srdev*) - copy operation is in progress.**

Explanation

Two volumes have been identified as a duplex pair and the subsystem is doing a copy to synchronize the two devices.

When CP is running in a guest virtual machine, hyphens (----) will appear in the *srdev* position if the secondary volume is not in the guest's CP I/O configuration.

System action

System operation continues.

User response

None.

HCP2292I Duplex pair (*prdev,srdev*) - active.

Explanation

The duplex pair has just become active.

When CP is running in a guest virtual machine, hyphens (----) will appear in the *srdev* position if the secondary volume is not in the guest's CP I/O configuration.

System action

System operation continues.

User response

None.

HCP2293I Device (*rdev,vdev*) - has gone to simplex mode.

Explanation

The device specified has gone from duplex to simplex mode. Duplexing has been terminated for this device.

System action

System operation continues.

User response

None.

HCP2294I Device *rdev* has been boxed due to the device type or model changing.

Explanation

The device type or model has been changed.

System action

Varies device offline and boxes the device to prevent access.

User response

The operator may do one of two things. If the new device is the one needed, vary this new device online. Otherwise, replace the boxed device with the correct device and vary it online.

HCP2295I *rdev* Subsystem fast write function is suspended

Explanation

The device has reported the following state change:

```
Fast write has entered the suspended
state
```

This indicates that the cache fast write and DASD fast write functions have been temporarily stopped.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2296I *rdev* Subsystem fast write function is resumed

Explanation

The device has reported the following state change:

```
Fast write has entered the resumed state
```

This indicates that the cache fast write and DASD fast write functions have been started after having been temporarily stopped.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

Operator response

None.

HCP2297I Mirroring for *rdev* is {operational|pending|failed}

Explanation

The device reported the following state change:

operational
The mirroring device has become operational

pending
A copy operation is in progress to establish a mirroring pair

failed
One copy of the data is being maintained because one member of the pair has failed. This is due to a hardware failure. A service call will automatically be made to resolve the problem.

The *rdev* variable identifies the device reporting the state change.

System action

System operation continues.

User response

None is required because this is a temporary condition that will resolve itself. However, because the data on this device is not currently being protected by mirroring, you may decide to move this data or new allocations, or both, to a device that is currently mirrored.

HCP2298I **Device *rdev* is pending expansion. The new size will be *cccccccc* cylinders.**

Explanation

The volume has been expanded. This message will not be issued if the device is an emulated device that represents a real SCSI device.

System action

None.

User response

To use the expanded space, vary the device offline and online.

HCP2301E **LIBRARY *libnum type rdev* AN OPERATION COULD NOT COMPLETE BECAUSE A LIBRARY PATH CHECK HAS OCCURRED**

Explanation

The control unit detected an unrecoverable error on the Library Attachment Facility either during initialization or during subsequent command processing, and there are no other operational paths between the control unit and the library manager.

System action

The operation is terminated, and the system logs a permanent error.

Operator response

Contact your system support personnel.

HCP2302E **LIBRARY *libnum type rdev* AN OPERATION COULD NOT COMPLETE BECAUSE THE LIBRARY MANAGER IS OFFLINE**

Explanation

The library manager is offline to the subsystem.

System action

The operation is terminated, and the system logs a permanent error.

Operator response

Contact your system support personnel.

HCP2303E **LIBRARY *libnum* OPERATION COULD NOT COMPLETE BECAUSE OF A LIBRARY MANAGER INCOMPATIBILITY**

Explanation

The control unit presents unit check status if anyone of the following conditions apply:

- The library manager and 3490 control unit microcode levels are not compatible.
- If the library sequence number is received from the 3490 subsystem does not match the value know to the library manager
- A valid message type is received from the 3490 subsystem, but it contained information not recognized by the library manager.

System action

System operation continues.

Operator response

None.

HCP2303I **LIBRARY *libnum type rdev* AN OPERATION COULD NOT COMPLETE BECAUSE OF A LIBRARY MANAGER INCOMPATIBILITY**

Explanation

The control unit and library manager are incompatible, which might be caused by one of the following conditions:

- The library manager and 3490 control unit microcode levels are not compatible.
- The sequence number of the 3490 subsystem does not match the value known to the library manager.
- A valid message type is received from the 3490 subsystem, but it contains information not recognized by the library manager.

System action

The operation is terminated, and the system logs a permanent error.

Operator response

Contact your system support personnel.

HCP2304I LIBRARY *libnum* BULK AND/OR CONVENIENCE OUTPUT STATIONS ARE FULL

Explanation

The bulk or convenience output stations in the tape library are full.

System action

The system logs a temporary error and continues operation.

Operator response

Empty one or more of the output stations.

HCP2305E LIBRARY *libnum* VOLUME *volser* MISPLACED

Explanation

During processing in the tape library, the indicated tape volume was detected as being misplaced and cannot be located. The volume is flagged in the inventory as misplaced.

System action

The operation is terminated.

Operator response

None.

HCP2306E LIBRARY *libnum* AN OPERATION COULD NOT COMPLETE BECAUSE THE LIBRARY VISION SYSTEM IS NONOPERATIONAL

Explanation

A 3495 Special Purpose command was issued that required the vision system to be operational, and the vision system is nonoperational.

System action

The operation is terminated.

Operator response

If the problem persists, contact your system support personnel.

HCP2307I LIBRARY *libnum* VISION SYSTEM IS NONOPERATIONAL

Explanation

During processing in the tape library, the vision system has become nonoperational.

System action

The system logs a permanent error and continues operation.

Operator response

Contact your system support personnel.

HCP2308I LIBRARY *libnum* A LIBRARY MANAGER EQUIPMENT CHECK HAS OCCURRED

Explanation

During processing in the tape library, the library manager has become nonoperational.

System action

The system logs a permanent error and continues operation.

Operator response

If the problem persists, contact your system support personnel.

HCP2309I LIBRARY *libnum* IS IN PAUSE MODE BECAUSE OF A LIBRARY EQUIPMENT CHECK

Explanation

The library manager has detected an unrecoverable error, which caused the library manager to automatically enter the pause state.

System action

The system logs a permanent error and continues operation.

Operator response

Try operating the library manager manually. If the problem persists, contact your system support personnel.

HCP2310I LIBRARY *libnum* REQUIRES OPERATOR INTERVENTION

Explanation

A cartridge has become inaccessible to the library, and needs to be retrieved.

System action

The system logs a temporary error and continues operation.

Operator response

Put the library manager into pause mode and perform the intervention indicated on the library manager console.

HCP2311E LIBRARY *libnum* VOLUME *volser* IS INACCESSIBLE

Explanation

The specified volume is in a position that is inaccessible to the library manager, or a condition in the library manager results in the volume being inaccessible.

System action

The operation is terminated, and the system logs a permanent error.

Operator response

Put the library manager into pause mode, place the required volume where the library manager can access it, and rerun the job.

HCP2312I LIBRARY *libnum* ALL CELLS ARE FULL

Explanation

All available storage cells in the library have been filled.

System action

The system logs a temporary error and continues operation.

Operator response

Eject volumes from the library to make cells available.

HCP2313I LIBRARY *libnum* DUPLICATE VOLUME *volser* WAS EJECTED FROM LIBRARY

Explanation

A duplicate VOLSER was found in the library. The VOLSER that is ejected is the one that is not at the location indicated by the inventory.

System action

The system logs a temporary error and continues operation.

Operator response

Retrieve the ejected volume from the output station and determine why it is a duplicate.

HCP2314I LIBRARY *libnum* DUPLICATE VOLUME *volser* WAS FOUND IN THE INPUT STATION

Explanation

A duplicate VOLSER was found in the input station during an insert operation.

System action

The system logs a temporary error and continues operation.

Operator response

Retrieve the volume from the input station and determine why it is a duplicate.

HCP2315I LIBRARY *libnum* VOLUME *volser* HAS AN UNREADABLE OR INVALID LABEL AND WAS FOUND IN THE INPUT STATION

Explanation

During an insert operation, one of the following conditions occurred:

- A volume was found with an unreadable VOLSER label.
- A volume was found without a label.
- A volume was found whose VOLSER contained one or more invalid characters.

System action

The system logs a temporary error and continues operation.

Operator response

Retrieve the volume from the input station and determine why the VOLSER was unreadable or invalid.

HCP2316E **LIBRARY *libnum* VOLUME *volser* HAS BEEN MANUALLY EJECTED**

Explanation

The volume has been assigned to the manually ejected category.

System action

The operation is terminated, and the system logs a permanent error.

Operator response

None.

HCP2317I **LIBRARY *libnum* IS OUT OF CLEANER VOLUMES**

Explanation

A drive cleaning operation was attempted, but there are no cleaner volumes in the library.

System action

System operation continues.

Operator response

Add cleaner volumes to the library through the input station.

HCP2318I **LIBRARY *libnum* I/O STATION DOOR IS OPEN**

Explanation

One of tape library input or output station doors is open.

System action

The system logs a temporary error and continues operation.

Operator response

Check the input and output station doors and close them, as appropriate.

HCP2319E **LIBRARY *libnum type rdev* DEVICE FAILURE, VARY DEVICE OFFLINE AND CALL FOR SERVICE**

Explanation

Error recovery was unsuccessful on a device installed in an automated tape library.

System action

The system logs a permanent error and continues operation.

Operator response

Use the VARY OFFLINE *rdev* command to disable the device. If appropriate, attach a different device to the guest. Call for service on the device that failed.

HCP2320I **LIBRARY *libnum* VOLUME *volser* IS UNEXPECTED AND WAS EJECTED FROM THE LIBRARY**

Explanation

A volume was found in the library that was not in the inventory. The volume was ejected from the library.

System action

The system logs a temporary error and continues operation.

Operator response

Retrieve the volume from the output station and determine where it belongs.

HCP2321I **LIBRARY *libnum* AN ENVIRONMENTAL ALERT HAS BEEN DETECTED WITHIN THE LIBRARY ENCLOSURE**

Explanation

An environmental alert (such as the presence of smoke) has been detected within the library enclosure.

System action

The system logs a temporary error and continues operation.

Operator response

Notify operations of the environmental alert. You must reset the library from the Environmental Alert state before automated operations can resume.

HCP2322I **LIBRARY *libnum* ONE OR MORE VOLUMES HAVE BEEN INSERTED INTO THE LIBRARY**

Explanation

One or more volumes have been inserted into the library input station.

System action

System operation continues.

Operator response

None.

HCP2323I **LIBRARY *libnum* ONE OR MORE VOLUMES HAVE BEEN MANUALLY EJECTED FROM THE LIBRARY**

Explanation

One or more volumes have been manually removed from the library enclosure.

System action

System operation continues.

Operator response

Update the log of volumes in the library to indicate the volumes that have been removed.

HCP2324I **LIBRARY *libnum* MESSAGE FROM LIBRARY MANAGER: *message***

Explanation

The specified message has been sent from the Library Manager Console.

System action

System operation continues.

Operator response

None.

HCP2325I **LIBRARY *libnum* AN OPERATION COULD NOT COMPLETE BECAUSE THE VOLUME SPECIFIED IS INACCESSIBLE**

Explanation

The volume specified in the library command has been flagged as inaccessible by the library manager.

System action

System operation continues.

Operator response

Make the specified volume accessible within the library enclosure.

HCP2326I **LIBRARY *libnum* AN OPERATION COULD NOT COMPLETE BECAUSE ALL CATEGORIES HAVE BEEN RESERVED**

Explanation

A library reserve category command has not been performed because there are not enough available categories to satisfy the request.

System action

System operation continues.

Operator response

Inform the Library Administrator.

HCP2327I **LIBRARY *libnum* VOLUME *volser* IS BEING EXPORTED**

Explanation

The specified volume has been assigned to the exported category.

System action

The system logs a permanent error and continues operation.

Operator response

Retry operation on a different volume since the current volume is being removed from the library.

HCP2328I LIBRARY *libnum* VOLUME *volser* IS VALID BUT INACCESSIBLE

Explanation

The specified volume exists in the library inventory but a valid copy is not currently accessible.

System action

The system logs a permanent error and continues operation.

Operator response

Retry operation on a different volume if possible. In addition, contact IBM hardware service personnel for assistance in determining why the specified volume can not be accessed.

HCP2329I TAPE *rdev* OPERATION TERMINATED BECAUSE OF UNWRITTEN DEFERRED TAPE MARK

Explanation

A tape operation was terminated. A deferred conditional write tape mark command was issued to the media and did not complete because of a permanent write error or some other event that prevented the mark from being written. Some examples of events that could prevent the mark from being written are as follows:

- A manual unload occurred.
- A manual rewind occurred.
- An undetectable change in media position was discovered.

System action

System operation continues.

User response

Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP2330I LIBRARY *libnum* IS IN AUTOMATED OPERATIONAL STATE

Explanation

The library is operating in automated mode.

System action

System operation continues.

Operator response

None.

HCP2331I LIBRARY *libnum* IS IN PAUSED OPERATIONAL STATE

Explanation

The library is operating in paused mode.

System action

System operation continues.

Operator response

None.

HCP2332I LIBRARY *libnum* IS IN MANUAL MODE OPERATIONAL STATE

Explanation

The library is operating in manual mode.

System action

System operation continues.

Operator response

None.

HCP2333I LIBRARY *libnum* IS OPERATING IN DEGRADED MODE

Explanation

One or more components in the library are unavailable. The library is operating in degraded mode. The unavailable components may affect the performance of the library.

System action

System operation continues.

Operator response

Restore the unavailable components, as needed.

HCP2334I **LIBRARY *libnum* SAFETY ENCLOSURE INTERLOCK HAS BEEN OPENED**

Explanation

The library's safety enclosure interlock has been opened. The library cannot operate in automated mode.

System action

System operation continues.

Operator response

Close the safely enclosure interlock when appropriate.

HCP2335I **LIBRARY *libnum* IS OFFLINE**

Explanation

The library manager has started offline processing. Additional library commands will be rejected.

System action

System operation continues.

Operator response

None.

HCP2336I **LIBRARY *libnum* VOLUME *volser* WAS MISPLACED AND HAS BEEN FOUND**

Explanation

A volume that was previously considered to be misplaced has been found within the library enclosure.

System action

System operation continues.

Operator response

None.

HCP2337I **LIBRARY *libnum* VOLUME *volser* IS INACCESSIBLE**

Explanation

A volume within the library has become inaccessible.

System action

System operation continues.

Operator response

Pause the library and place the volume where it is accessible.

HCP2338I **LIBRARY *libnum* VOLUME *volser* WAS INACCESSIBLE AND HAS BEEN RESTORED**

Explanation

A volume that was previously considered to be inaccessible has become accessible within the library.

System action

System operation continues.

Operator response

None.

HCP2339I **LIBRARY *libnum* CLEANER VOLUME EJECTED**

Explanation

A volume used for cleaning operations has been ejected from the library. It may need to be replaced with a new cleaner volume

System action

System operation continues.

Operator response

Insert a new cleaner volume into the library.

HCP2340I **TAPE *rdev* OPERATION TERMINATED BECAUSE FILE WAS NOT FOUND**

Explanation

An operation was terminated because I/O was issued to position the tape to a specific file number and the file either could not be found or could not be validated.

System action

System operation continues.

Operator response

Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP2341I **TAPE *rdev* OPERATION TERMINATED BECAUSE PARTITION WAS NOT FOUND**

Explanation

An operation was terminated because I/O was issued to position the tape to a specific partition number and the partition could not be found or could not be validated.

System action

System operation continues.

Operator response

Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP2342I **TAPE *rdev* OPERATION TERMINATED BECAUSE PHYSICAL INDEX WAS NOT FOUND**

Explanation

An operation was terminated because I/O was issued to position the tape to a specific physical reference index and the physical reference index could not be found or could not be validated.

System action

System operation continues.

Operator response

Rewind the tape and retry the operation. If the problem persists, contact your system support personnel.

HCP2343I **LIBRARY *libnum* VOLUME *volser* IS MISPLACED**

Explanation

The indicated volume was not found during an operation.

System action

System operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2344I **LIBRARY *libnum* VOLUME *volser* IS A DUPLICATE AND HAS BEEN EJECTED**

Explanation

The indicated volume was found in an unexpected location and an audit of the library inventory found a volume with the same volser where expected.

System action

The duplicate volume is placed in a convenient output station and system operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2345I **LIBRARY *libnum* VOLUME *volser* IS A DUPLICATE AND HAS BEEN LEFT IN THE INPUT STATION**

Explanation

The indicated volume was found in an input station but an audit of the library inventory found a volume with the same volser to already exist in the expected storage cell.

System action

The duplicate volume is left in the input station and system operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2346I **LIBRARY *libnum* VOLUME *volser* IS UNREADABLE AND HAS BEEN LEFT IN THE INPUT STATION**

Explanation

The indicated volume was found in an input station but either it did not have an external label or the label was unreadable by the vision system.

System action

The volume is left in the input station and system operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2347I **LIBRARY *libnum* VOLUME *volser* IS UNEXPECTED AND HAS BEEN EJECTED**

Explanation

The indicated volume was found in a storage cell or other position that was not expected.

System action

The volume is placed in a convenient output station if it had an unreadable external label or if the volume is not in the inventory. System operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2348I **LIBRARY *libnum* VOLUME *volser* IS DAMAGED AND HAS BEEN EJECTED**

Explanation

The indicated volume was found to be damaged in such a way that it could not be loaded on a device.

System action

The volume is placed in a convenient output station and system operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2349I **LIBRARY *libnum* IS IN VISION SYSTEM NON-OPERATIONAL STATE**

Explanation

The vision system in the indicated automated tape library is non-functional.

System action

System operation continues but audit and insert/eject operations can not be performed.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2350I **LIBRARY *libnum* IS IN INTERVENTION REQUIRED STATE**

Explanation

A condition has occurred in the indicated tape library that requires operator assistance. One or more conditions may exist.

System action

System operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2351I **LIBRARY *libnum* IS IN LIBRARY MANAGER CHECK 1 CONDITION**

Explanation

A library manager for the indicated tape library has encountered an unrecoverable error and there is no secondary library manager installed or available.

System action

System operation continues but the library manager is offline to the attached subsystems. All prior accepted library operations and pending responses are lost.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2352I LIBRARY *libnum* IS IN ALL STORAGE CELLS FULL STATE

Explanation

All available storage cells in the indicated tape library are used.

System action

System operation continues but no more tape cartridges can be added to the library.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2353I LIBRARY *libnum* IS IN OUT OF CLEANER VOLUMES STATE

Explanation

There are no cleaner volumes in the indicated tape library and a drive clean operation must be performed.

System action

System operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2354I LIBRARY *libnum* IS IN DUAL WRITE DISABLED STATE

Explanation

The secondary database in the library manager for the indicated tape library is not being updated.

System action

System operation continues. Only the primary database is used.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2355I LIBRARY *libnum* IS IN ENVIRONMENTAL ALERT STATE

Explanation

Smoke has been detected in the library enclosure for the indicated tape library.

System action

System operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2356I LIBRARY *libnum* IS IN INSUFFICIENT RESOURCES FOR MOUNTS STATE

Explanation

The Virtual Tape Server for the indicated tape library no longer has the resources needed to continue mount processing.

System action

System operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2357I LIBRARY *libnum* IS IN LIBRARY MANAGER SWITCH OVER IN PROGRESS STATE

Explanation

A switch over between the primary and the secondary library manager for the indicated tape library is in progress.

System action

System operation continues but the library managers are offline to the attached subsystems. All prior accepted library operations and pending responses are lost.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2358I LIBRARY *libnum* IS IN VTS OUT OF EMPTY STACKED VOLUMES STATE

Explanation

The Virtual Tape Server for the indicated tape library has run out of empty stacked volumes.

System action

System operation continues. Mount operations are accepted and queued, but are not executed while in this state.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2359I LIBRARY *libnum* IS IN COPY OPERATIONS DISABLED STATE

Explanation

Copy operations in the Virtual Tape Server for the indicated tape library are disabled.

System action

System operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2360I LIBRARY *libnum* IS IN VTS OPERATIONS DEGRADED STATE

Explanation

Operations in the Virtual Tape Server for the indicated tape library are degraded.

System action

System operation continues but library performance and availability of library resources are impacted.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2361I LIBRARY *libnum* IS IN IMMEDIATE MODE COPY COMPLETION'S DEFERRED STATE

Explanation

The Virtual Tape Server for the indicated tape library is operating in immediate copy mode and at least one copy has not been completed prior to the completion of a rewind unload command.

System action

System operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2362I LIBRARY *libnum* IS IN SERVICE PREPARATION STATE

Explanation

The Virtual Tape Server for the indicated tape library is in the Service Preparation mode.

System action

System operation continues.

Operator response

Follow the problem determination procedures for the specified error condition. These procedures can be found in the Operator's Guide for the indicated tape library.

HCP2400E **User exit EXEC *execname* not found**

Explanation

The user exit *execname*, specified by the EXEC operand on the MONWRITE command, could not be found using the default CMS search order.

System action

Command processing is terminated.

User response

Locate the user exit EXEC and reissue the MONWRITE command with the correct EXEC file name.

HCP2401I **Unexpected error from EXEC *execname* rc *code***

Explanation

MONWRITE received an unexpected error return code from user exit *execname*.

System action

Processing continues.

User response

Debug and correct the error in the user exit EXEC and then reissue MONWRITE.

HCP2450E **SOURCE operand missing.**

Explanation

The SOURCE operand is missing from a FLASHCOPY command.

System action

The command is not executed. System operation continues.

User response

Enter the missing operand and issue the command again.

HCP2451E **SOURCE must be a full-pack extent.**

Explanation

The *vdev* that was identified by a FLASHCOPY SOURCE operand is required to be a dedicated device or full-pack minidisk.

System action

The command is not executed. System operation continues.

User response

Ensure that the *vdev* is a dedicated device or full-pack minidisk and issue the command again.

HCP2452E **SOURCE must be a minidisk extent.**

Explanation

The *vdev* that was identified by a FLASHCOPY SOURCE operand is required to be a non-full-pack minidisk.

System action

The command is not executed. System operation continues.

User response

Ensure that the specified *vdev* does not span the entire real volume.

HCP2453E **TARGET operand missing.**

Explanation

The TARGET operand is missing from a FLASHCOPY command.

System action

The command is not executed. System operation continues.

User response

Enter the missing operand and issue the command again.

HCP2454E **TARGET must be a full-pack extent.**

Explanation

The *vdev* that was identified by a FLASHCOPY TARGET operand is required to be a dedicated device or full-pack minidisk.

System action

The command is not executed. System operation continues.

User response

Ensure that the *vdev* is a dedicated device or full-pack minidisk and issue the command again.

HCP2455E TARGET must be a minidisk extent.

Explanation

The *vdev* that was identified by a FLASHCOPY SOURCE operand is required to be a non-full-pack minidisk.

System action

The command is not executed. System operation continues.

User response

Ensure that the specified *vdev* does not span the entire real volume.

HCP2456E SOURCE and TARGET must both be full-pack or minidisk extents.

Explanation

The SOURCE and TARGET *vdevs* of a FlashCopy relationship must both be either full-pack or non-full-pack minidisks. These cannot be mixed in the specification of a FLASHCOPY command.

System action

The command is not executed. System operation continues.

User response

Correct the offending operand or operands and issue the command again.

HCP2458E SOURCE *vdev* specifies *n* cylinders but TARGET *vdev* specifies *n* cylinders.

Explanation

For FLASHCOPY, the total number of cylinders specified for each TARGET *vdev* must equal the total number of cylinders specified for the SOURCE *vdev*.

System action

The command is not executed. System operation continues.

User response

Check the specifications for the SOURCE and TARGET extent definitions. Note that an extent specification of 100.50 is the same as 100–149, not 100–150. If there are no extent definitions, ensure that both *vdevs* have the same number of cylinders. Correct the error and issue the command again.

HCP2459E Unable to read or verify the current volume label on *vdev*.

Explanation

The FLASHCOPY SAVELABEL option causes the system to read the volume label from the TARGET virtual cylinder 0, head 0, record 3 before the FlashCopy is started. The first four bytes of the record are checked for VOL1, DIR1, CMS1, or CMS=. If these are not present, this error will occur.

System action

The FlashCopy operation is not started. System operation continues.

User response

Verify that the correct *vdev* was specified. Also, ensure that the volume has a valid label by using the DDR utility to print cylinder 0, head 0. Consider using the LABEL option instead.

HCP2460E Unable to update current volume label on *vdev*.

Explanation

During a FlashCopy with the SAVELABEL option, the system was able to read and verify the label on the TARGET before the FlashCopy started, but now cannot verify it after the FlashCopy started. Assuming that the SOURCE and TARGET were correctly formatted before, the following command will cause this error:

```
FLASHCOPY ESTABLISH SOURCE 200 1.1 TARGET 300
0.1
SAVELABEL
```

because the TARGET cylinder 0 was overwritten with SOURCE cylinder 1 which does not contain a valid label.

During a FlashCopy with the LABEL option, the system was not able to read and verify the label on the

TARGET after the FlashCopy started. This is either caused by the SOURCE cylinder 0 not containing a valid label when it is included in the FlashCopy operation or the TARGET cylinder 0 not containing a valid label when it is not included in the operation.

A valid label is located at virtual cylinder 0, head 0, record 3 and contains VOL1, DIR1, CMS1, or CMS= in the first four bytes.

System action

The FlashCopy relationship is formed. System operation continues.

User response

Verify that the appropriate labels exist on the SOURCE and TARGET volumes as needed, and issue the command again.

HCP2461I **Volume label on *vdev* is now *volser*.**

Explanation

A FLASHCOPY operation has successfully performed the SAVELABEL or LABEL operation.

System action

System operation continues.

User response

Verify that the LABEL reported was the one you expected.

HCP2462I ***extenttype* extent on CP-OWNED volume *volser*, tracks *cccc/hh* to *cccc/hh*, is the Source for FlashCopy Relationship *sequence*.**

Explanation

The *cccc/hh* values represent the cylinder and head in decimal. For more detailed information, see DASD Sharing in *z/VM: CP Planning and Administration*.

System action

System operation continues.

User response

Use the QUERY FLASHCOPY HARDWARE command to help identify the offending FlashCopy relationship. Verify that the identified FlashCopy relationship is valid. If it is not valid, withdraw it.

HCP2463E ***extenttype* extent on CP-OWNED volume *volser*, tracks *cccc/hh* to *cccc/hh*, is the Target for FlashCopy Relationship *sequence*.**

Explanation

The *cccc/hh* values represent the cylinder and head in decimal. For more detailed information, see DASD Sharing in *z/VM: CP Planning and Administration*.

System action

System operation continues.

User response

Use the QUERY FLASHCOPY HARDWARE command to help identify the offending FlashCopy relationship. If necessary, use the FLASHCOPY WITHDRAW command to remove the relationship.

HCP2464E **Volser is missing after LABEL operand.**

Explanation

The FLASHCOPY LABEL operand requires a volser specification that will be recorded on the TARGET after the FlashCopy has started.

System action

The command is not executed. System operation continues.

User response

Enter the missing operand and issue the command again.

HCP2465I **No matches found.**

Explanation

No matching table entries were found when you entered one of the following commands: QUERY FLASHCOPY TABLED, CREATED, OWNER, DEVICE, or VOLUME

System action

System operation continues.

User response

None.

HCP2466I **Device *rdev* - No FlashCopy relationships reported.**

Explanation

No matching hardware entries were found when you entered the QUERY FLASHCOPY HARDWARE command.

System action

System operation continues.

User response

None.

HCP2467E **The CP-OWNED volume *volser* is allocated on Space-Efficient device *rdev*. Space-Efficient volumes are not allowed as CP-OWNED volumes.**

Explanation

CP does not support PAGE, SPOOL, DRCT, PARM, TEMP, Checkpoint, or Warmstart areas on Space-Efficient volumes.

System action

System operation continues.

User response

Change the allocation of the volume to a non-Space-Efficient state. Change the *volser* to one that is not in the CP-OWNED list in the system configuration file.

Note: Do not ignore this situation. It is possible that when the system is IPLed again, the volume might be detected and result in a wait state code 9050.

Refer to message HCP9050W for more information.

HCP2469E **WITHDRAW failed because *n* tracks remain to be copied to *vdev*.**

Explanation

In response to a FLASHCOPY WITHDRAW command, there are *n* unmodified tracks remaining to be copied to the *vdev*.

System action

The command is not executed. System operation continues.

User response

Issue the command again after a period of time. The command should complete successfully or display this message again with a lower number of tracks.

If the relation was created with the FLASHCOPY ESTABLISH NOCOPY option (see QUERY FLASHCOPY HARDWARE flag X'0002'), you must issue the FLASHCOPY BACKGNDCOPY command to initiate the background copying process.

If you do not want to retain the contents of the targets, issue the FLASHCOPY WITHDRAW command again specifying the FORCE option. FORCE will prevent this message and probably render the targets useless.

HCP2470E **Duplicate operands specified for the target *vdev***

Explanation

On the FLASHCOPY command, you specified the same operand more than once in the target list for the indicated *vdev*

System action

The command is not executed.

User response

Check the target operands for duplicates and reissue the command. The command should complete successfully or display this message again if duplicate target operands still exist.

HCP2471E **At least one of the specified devices does not support PRESERVEMIRROR. Retry the command specifying NOPRESERVEMIRROR.**

Explanation:
A FlashCopy command was specified with the PRESERVEMIRROR operand, but one of the specified devices does not support the preserve mirror feature. It is also possible that the wrong device address was specified.

System action:
The FlashCopy command does not run. System operation continues.

User response:
Correct the device address and issue the FlashCopy command again. If the command is not successful, issue the FlashCopy command again and specify the NOPRESERVEMIRROR option.

HCP2500E **Image library *libname* could not be found [for printer *rdev*].**

Explanation

The image library *libname* you specified does not exist. If "for printer *rdev*" appears in the message, the image library previously in use by printer *rdev* is no longer accessed by the printer.

System action

If you entered the START command, CP rejects the command. If the image library file was active on the printer, the printer is drained.

Operator response

Enter the QUERY IMG command to display available image libraries. If another image library file is available that can be used in place of the current image library, start the printer with that image library. Otherwise, ask your system programmer to recreate the image library file using the IMAGELIB or IMAGEMOD command.

HCP2501E **A spool paging I/O error occurred while reading image [library] *imagename* on printer *rdev***

Explanation

A spool paging I/O error occurred while CP was reading a member *imagename* from the image library file with which printer *rdev* was started. If "library" appears in the message, there is an error in opening the library (*imagename*).

System action

Printer *rdev* is drained. The status of the file that was printing when the error occurred is reflected in message 1561E, which is issued in conjunction with this message.

Operator response

If the image library that failed is not used often, consider starting the printer again with the same library. Otherwise, contact your system programmer to correct the problem.

User response

If the file is not already purged, release the user HOLD status on the file.

HCP2502E **Image *imagename* on printer *rdev* caused a load check error**

Explanation

A member in the image library *imagename* with which printer *rdev* is started caused load check I/O errors.

System action

CP suspends printing of the problem file. If the error occurred on a default character set or FCB, printer *rdev* is drained.

Operator response

If the image that failed is not used often, consider starting the printer again with the same library. Otherwise, contact your system programmer to correct the problem.

User response

If it is not already purged, release the user HOLD status on the file.

HCP2503E **An invalid separator {FCB|CHAR} image *imagename* was specified for printer *rdev***

Explanation

The load image for the separator character set or forms control buffer was undefined or caused an I/O error (such as a load check).

System action

Printing ceases for printer *rdev*, and the printer is drained.

Operator response

Reenter the START command for the device in error with a valid FCB or CHAR image. Also, check to see that the correct *imagelib* (option IMAGE on the START command) is being used for the printer.

HCP2504E ***type rdev* was {drained|reset} due to a permanent {I/O|library} error.**

Explanation

An unrecoverable I/O error occurred on the reader, printer, or punch device, or in accessing the image library for a 3800 printer.

System action

CP either drains the device or resets it. If it is reset, the device begins to process the next available file. The status of the file that was printing when the

error occurred is reflected in message 1561E, which is issued in conjunction with this message.

Operator response

Start the device if it is drained. To process a file placed in HOLD status, change the file NOSYS to reset system HOLD. If the problem persists, contact your system support personnel.

HCP2505E **An output device is an invalid destination for system data files.**

Explanation

You tried to direct a system data file to an output device. A system data file, which contains no channel command words (CCWs), cannot be processed directly on an output device.

System action

The system data file remains on the reader queue; command processing is terminated.

User response

Reenter the command, specifying a valid destination queue.

HCP2506E **Error {reading|writing} System Spool File Index {from|to} the WARMSTART area on volume *volser*: The total count of pages in error is *nnnn*.**

Explanation

The System Spool File Index contains entries to locate all spool files possible in the system. On a read error, system initialization may be cancelled, and the device possibly repaired. On a write error, some part of spooling may have been lost.

System action

For a read error, the system will ask the operator if initialization should continue.

For a write error, system operation continues. This message indicates that some part spooling may have been lost.

Operator response

Report this error to I/S. The specified device may need maintenance.

HCP2507E **Spool files on offline volume *volser* will be deleted**

Explanation

The volume specified is needed by, but not available to, the spooling subsystem. The volume serial is specified if the volume is defined in the SYSOWN list but is offline. The volume serial is also displayed if the volume is in the SYSOWN list but has no spool space or page space allocated. If the volume has no entry in the SYSOWN list, “V = *nn*” is displayed. “V” is the volume number of the DASD page address definition “CCPV”, (cylinder/page/volume, if device is a CKD or ECKD) or “PPPV” (page/volume, if the device is an FBA) that is used by spooling to locate each page of spool data. “V” correlates to SYSOWN entries at zero index and is a hexadecimal number: “V = X'00'” is the first entry, “V = X'04'” is the fifth entry, and “V = X'0A'” is the eleventh (decimal) entry.

System action

System operation continues temporarily. There may be additional messages for other offline volumes or for errors in spooling initialization. When the preliminary phase of spooling initialization is complete, spool file summary status will be displayed, and system initialization can be stopped at operator request.

Operator response

If this is an offline spooling volume, put it online. If you cannot, or if this is not a spooling volume, contact your system programmer before responding to message HCP2511A, which will follow.

Programmer response

If spool volumes are offline, spool files are lost. (Message HCP2513I is issued, telling you how many files are deleted.)

If this is a normal spool volume, simply get it online. If the message indicated a CP volume that has no spool space allocated, or a volume not defined to CP, there may be a serious operational problem. This could be caused by one of the following:

- The SYSOWN list has been reorganized to put spool volumes at different relative position.
- A previous spool volume has been reallocated.
- The WARMSTART area has been overwritten.

HCP2508E **{Spool file|Spooling} I/O error on volume *volser* {CCCCHHR=*CCCCHHR*|BLOCK=*blkno*}**

Explanation

There was an I/O error when the system attempted to recover a spool file from DASD. Volume *volser* is the label specified in the SYSOWN list. If the volume is a CKD or ECKD device, the *CCCCHHR* variable identifies in hexadecimal the cylinder (*CCCC*), head (*HH*), and record (*R*) of the page in error. If the volume is an FBA device, the *blkno* variable identifies in hexadecimal the block number of the page in error. The spool file is scheduled to be deleted. This error could also occur for system data files that will also be scheduled for deletion.

System action

System operation continues temporarily. If the file in error is known, it is identified in message HCP2510E, which is issued after this message.

When the preliminary phase of spooling initialization is complete, spool file summary status is displayed, and system initialization can be stopped at operator request.

Operator response

Report this error condition to your system support personnel.

HCP2509E **Spool file control data error {,CCPV *CCCCPPVV*|on volume *volser*, BLOCK *blkno*}**

Explanation

This spool file has bad control information. If the device is a CKD or ECKD, the *CCCCPPVV* variable is the cylinder (*CCCC*), page (*PP*), and volume (*VV*). If the device is an FBA, the *volser* variable is the label specified in the SYSOWN list and the *blkno* variable identifies in hexadecimal the block number where the spool file in error is located. The spool file is scheduled to be deleted.

This could be caused by one of the following:

- The CPVOL list may have been reordered, leaving spool volumes at different relative positions on the list.
- The WARMSTART cylinders (CKD/ECKD devices) or pages (FBA devices) may have been overwritten.
- Some portion of spool space may have been overwritten, corrupting the spool map pages.
- A volume with the same name as the valid spool volume may have been picked up by the system, in place of the proper volume.

This error could also occur for system data files that will also be scheduled for deletion.

System action

System operation continues temporarily. If the file in error is known, it is identified in message HCP2510E, which is issued after this message.

When the preliminary phase of spooling initialization is complete, spool file summary status is displayed, and system initialization can be stopped at operator request.

Operator response

Report this error condition to your system support personnel.

HCP2510E **Spool file {*userid spid*|UNKNOWN FILE} will be deleted**

Explanation

The previous message, either HCP2508E or HCP2509E, showed a spool volume error. This spool file or system data file will be deleted because of that error.

System action

System operation continues temporarily. When the preliminary phase of spooling initialization is complete, spool file summary status is displayed, and system initialization can be stopped at operator request.

Operator response

Report this error condition to your system support personnel.

HCP2511A **The variations of this message are explained below.**

— Variation 1 **Spool file errors encountered during initialization. No files have been deleted yet. To continue restart and delete the files, enter GO. To stop so you can check spool volumes, enter STOP.**

Explanation

Spool files and possibly system data files will be lost because either spool volumes are offline or I/O errors occurred on spool volumes.

Message HCP2513I, which is displayed prior to this message, summarizes the number of spool files and system data files that will be lost for various reasons.

Messages HCP2506E through HCP2510E may be displayed with more information about individual spool file errors or spool volumes that are offline.

System action

If STOP is entered, system restart is canceled, and there is no change to the spooling system. If GO is entered, system initialization continues, and the spool files and system data files mentioned above are deleted.

User response

Enter STOP to stop initialization, and start manual recovery actions to check and correct a possible configuration error. If previous messages indicate hardware errors, contact your support personnel (or the IBM Support Center for assistance) to diagnose and correct the errors, if possible.

Enter GO to continue initialization, with the loss of the files as indicated by the previous messages.

— Variation 2	**Spool files will be deleted because of COLD start. No files have been deleted yet. To continue COLD start and delete files, enter GO. To stop COLD start without deleting files, enter STOP.**

Explanation

Spool files will be discarded from the system by COLD start.

If message HCP2513I, which is displayed prior to this message, indicates spool files will be deleted due to spool volumes being offline or I/O errors on spool volumes, it is possible system data files will also be lost. Messages HCP2506E through HCP2510E may be displayed with more information about individual spool file errors or spool volumes that are offline.

System action

If STOP is entered, system restart is canceled, and there is no change to the spooling system. If GO is entered, system initialization continues, and the spool files and system data files mentioned above are deleted.

User response

Enter STOP to stop initialization, and start manual recovery actions to check and correct a possible configuration error. If previous messages indicate hardware errors, contact your support personnel (or the IBM Support Center for assistance) to diagnose and correct the errors, if possible.

Enter GO to continue initialization, with deletion of the files indicated by the previous messages.

— Variation 3	**CLEAN start has been selected. This will cause all spool files and System Data Files (NSS, DCSS, TRF, IMG, UCR, NLS) to be deleted. No files have been deleted yet. To continue CLEAN start and delete files, enter GO. To stop CLEAN start without deleting files, enter STOP.**

Explanation

All spool files and system data files will be discarded by CLEAN start.

System action

If STOP is entered, system restart is canceled, and there is no change to the spooling system. If GO is entered, system initialization continues, and the spool files and system data files mentioned above are deleted.

User response

Enter STOP if you want to stop initialization and preserve the previous state of the spooling system. None of the existing spool files or system data files will be deleted. Enter GO to continue initialization and delete spool files and system data files.

— Variation 4	**Spooling errors were encountered that may cause loss of system data files. No system data files have been deleted yet, but continuation of the system IPL could cause them to be deleted. Enter GO to continue initialization and risk deleting system data files. To stop processing without deleting files, enter STOP.**

Explanation

System data files may be lost because either spool volumes are offline or I/O errors occurred on spool volumes.

Message HCP2513I, which was displayed prior to this message, summarized the number of spool files and system data files that will be lost for various reasons. Messages HCP2506E through HCP2510E may be displayed with more information about individual spool file errors or spool volumes that are offline

System action

If STOP is entered, system restart is canceled, and there is no change to the spooling system. If GO is entered, system initialization continues, and the spool files and system data files mentioned above are deleted.

User response

Enter STOP to stop initialization, and start manual recovery actions to check and correct a possible configuration error. If previous messages indicate hardware errors, contact your support personnel (or the IBM Support Center for assistance) to diagnose and correct the errors, if possible.

Enter GO to continue initialization and risk deleting system data files.

HCP2512I Spooling initialization complete

Explanation

All spool files have been recovered, the allocation maps are updated, and the system and user spool file queues are established.

System action

System operation continues.

Operator response

None.

HCP2513I Spool files {available|on offline volumes|with I/O or data errors|to be discarded} - {*nnnnnn*| NONE} Total files to be deleted - {*nnnnnn*}

Explanation

This message provides spool file summary status after the preliminary phase of spooling initialization is complete.

System action

If all spool files are recovered, system operation continues. If files are to be deleted, the system issues message HCP2511A.

Operator response

None.

HCP2514E Printer *rdev* was drained because {no human readable label was found for SECLABEL *seclabel*.| the external security manager is unavailable.}

Explanation

The installation has enabled CP print filtering, meaning that CP should include a human-readable security label on the header and trailer pages of all printed output. CP could not locate the human-readable label that corresponds to the security label for the printer. Or, the external security manager is not available so it cannot print audit records for the printing of files.

System action

The printer has been drained, and the file is held. This is done because the condition would occur again if CP tried to print another file on the printer.

User response

Contact your installation's security manager.

HCP2515E Automatic {WARM|COLD} start failed.

Explanation

An automatic IPL was specified in the system configuration file, but it did not complete because of spooling errors.

System action

This message is followed by an operator prompt to STOP, GO or change the type of IPL from WARM to FORCE.

Operator response

Enter STOP in response to the prompt if you want to stop initialization and preserve the previous state of the spooling system. None of the existing spool files or system data files will be deleted. Enter GO to continue initialization and delete spool files and system data files which have errors. Enter FORCE if you want to continue initialization and ignore (delete) warm start data which is not valid.

HCP2516W Automatic IPL failed because of spooling errors.

Explanation

An automatic IPL was specified in the system configuration file, but it did not complete because of spooling errors. This wait state is only issued if IPL_Messages are disabled in the system configuration file.

System action

The system enters a disabled wait state (wait-state code = 2516).

Operator response

Either correct the errors and then re-IPL the system, or enable IPL_Messages to determine what the spool errors are and then re-IPL.

HCP2520E	**No more error messages for volume *volid* will be shown. See the summary below for the overall error count.**

Explanation

No more spooling error messages will be displayed for this volume during SPOOL initialization.

System action

If all spool files are recovered, system operation continues. If files are to be deleted, the system issues message HCP2511A.

Operator response

None.

HCP2547E	**The variations of this message are explained below.**
— Variation 1	**SET RESERVED was not processed. Filename *filename* does not identify {an NSS | a DCSS} in an available state.**

Explanation

The specified filename does not identify a class A (available, unrestricted) or class R (available, restricted) NSS or DCSS.

System action

No additional storage is reserved.

User response

Issue the QUERY NSS command to identify an NSS or DCSS in an available state.

— Variation 2	**SET RESERVED was not processed. Spoolid *spoolid* does not identify an NSS or DCSS in an available or pending purge state.**

Explanation

The specified spoolid does not identify a class A (available, unrestricted), class R (available, restricted), or class P (pending purge) NSS or DCSS.

System action

No additional storage is reserved.

User response

Issue the QUERY NSS command to identify an NSS or DCSS in an available or pending purge state.

— Variation 3	**SET RESERVED was not processed. The DCSS with {filename *filename* | spoolid *spoolid*} is a member segment or segment space.**

Explanation

You cannot reserve storage for a DCSS that is a member segment or segment space.

System action

No additional storage is reserved.

User response

Verify that you specified the correct DCSS *filename* or *spoolid* on the SET RESERVED command.

— Variation 4	**SET RESERVED was not processed. *rsvsize* exceeds the amount of private addressable storage *(privsize)* for user *userid*.**

Explanation

You cannot reserve more storage than a virtual machine currently has privately addressable. This includes private storage in the virtual machine's base address space and data spaces, plus any storage in exclusive ranges of an imbedded NSS or DCSS(s).

System action

No additional storage is reserved.

User response

Verify that the *userid* of the virtual machine is the one you intended. If it is correct, reissue the command with a smaller reserved storage amount.

— Variation 5 **SET RESERVED was not processed. *rsvsize* exceeds the amount of shared storage *(sharsize)* for the {NSS | DCSS} with filename *filename*.**

Explanation

You cannot reserve more storage for an NSS or DCSS than the amount of shared storage defined by the DEFSYS or DEFSEG command. Even though the smallest allowable storage unit accepted on the SET RESERVED command is M for megabytes, the amount of shared storage associated with the NSS or DCSS may be shown in K (kilobyte) units.

System action

No additional storage is reserved.

User response

Verify the file name of the DCSS or NSS specified on the command is the one you intended. If it is correct, reissue the command with a smaller reserved storage amount.

— Variation 6 **SET RESERVED was not processed. *rsvsize* exceeds the amount of shared storage *(sharsize)* for the NSS or DCSS with spoolid *spoolid*.**

Explanation

You cannot reserve more storage for an NSS or DCSS than the amount of shared storage defined by the DEFSYS or DEFSEG command.

System action

No additional storage is reserved.

User response

Verify that the name of the DCSS or NSS specified on the command is the one you intended. If it is correct, reissue the command with a smaller reserved storage amount. Even though the smallest allowable storage unit accepted on the SET RESERVED command is M (for megabytes), the amount of shared storage associated with the NSS or DCSS might be shown in K (kilobyte) units.

— Variation 7 **SET RESERVED was not processed. Total reserved would exceed the system maximum of *maxsize* by *storsize*.**

Explanation

CP maintains the total amount of storage reserved via all SET RESERVED commands. The total amount of reserved storage cannot exceed the maximum established by the STORAGE RESERVED statement in the SYSTEM CONFIG file or via the SET RESERVED SYSMAX command.

System action

The reserved storage setting for the user, NSS, or DCSS is not changed. The system continues with the settings that were in place prior to the command.

User response

Use the QUERY RESERVED ALL command to reassess the existing reserved storage settings. You can reduce the size of reserved storage for other users, NSSs, or DCSSs, or possibly raise the system maximum via the SET RESERVED SYSMAX command. Having a total reserved size that is too large could have a negative effect on system performance. See *z/VM: Performance* for guidelines to determine an appropriate SYSMAX based on your storage configuration and workload.

— Variation 8 **SET RESERVED was not processed. Total reserved would exceed the current DPA by *storsize*.**

Explanation

CP maintains the total amount of storage reserved via all SET RESERVED commands. When a SET RESERVED command is issued to increase the amount of reserved storage for a user, NSS, or DCSS, the new total is compared against the current pageable DPA (dynamic paging area). If the new total exceeds the size of the current pageable DPA, CP issues this message and the reserved value is not changed for the user, NSS, or DCSS.

System action

The reserved storage setting for the user, NSS, or DCSS is not changed. The system continues with the settings that were in place prior to the command.

User response

You can reduce the amount of storage requested on the command. However, in general it is not advisable to have the total amount of reserved storage near or greater than the size of the DPA. Issue the QUERY RESERVED ALL command to reassess all of the reserved settings currently in place. You should also

establish an explicit maximum that is less than the size of DPA by using the STORAGE RESERVED statement in the SYSTEM CONFIG file, or by issuing the SET RESERVED SYSMAX command.

HCP2548I	**The variations of this message are explained below.**
— Variation 1	**SET RESERVED completed successfully. However, total reserved still exceeds the system maximum of *maxsize* by *storsize*.**

Explanation

CP maintains the total amount of storage reserved using all SET RESERVED commands. When a SET RESERVED command is issued to decrease the reserved storage for a user, NSS, or DCSS, and an explicit reserved system maximum is in effect, the new total is compared against the maximum. If the new total exceeds the maximum, CP issues this message.

The reserved setting is decreased as requested. The command has improved the situation although it has not fully alleviated the problem. The total reserved storage amount still exceeds the system maximum by the storage size displayed in the message

System action

The reserved storage setting is decreased to the value specified on the command.

User response

Having a total reserved storage amount greater than the system maximum indicates the current maximum was set after the reserved settings were in effect. Issue the QUERY RESERVED ALL command to reassess the reserved settings currently in place. Having a total reserved that is too high may have a negative effect on performance. See *z/VM: Performance* for guidelines to determine an appropriate SYSMAX based on your storage configuration and workload.

— Variation 2	**SET RESERVED completed successfully. However, total reserved still exceeds the current DPA by *storsize*.**

Explanation

CP maintains the total amount of storage reserved via all SET RESERVED commands. When a SET RESERVED command is issued to decrease the reserved storage for a user, NSS, or DCSS, and no SET RESERVED SYSMAX is in effect, the new total is compared against the current pageable DPA (dynamic paging area). If the new total exceeds the current pageable DPA, CP issues this message.

The reserved setting is decreased as requested. The command has improved the situation although it has not fully alleviated the problem. The total reserved storage amount still exceeds the pageable DPA by the storage size given in the message.

System action

The reserved storage setting is decreased to the value specified on the command.

User response

In general it is not advisable to have the total amount of reserved storage near or greater than the size of the DPA. Issue the QUERY RESERVED ALL command to reassess all of the reserved settings currently in place. You should also establish an explicit maximum that is less than the size of DPA by using the STORAGE RESERVED statement in the SYSTEM CONFIG file, or by issuing the SET RESERVED SYSMAX command.

HCP2549E	**{NSS | DCSS} with {spoolid *spoolid* | filename *filename*} could not be found.**

Explanation

The requested NSS or DCSS could not be found.

System action

The command is not processed.

User response

Verify the *spoolid* or *filename* you specified in the CP QUERY RESERVED command is correct.

HCP2550I	**The console has been defined as a 3215 because a console mode of 3270 is not supported by the VTAM Service Machine controlling the real terminal.**

Explanation

The VTAM Service Machine (VSM) controlling the real terminal does not support a console mode of 3270. VSMs running programs released before ACF/VTAM Version 3 Release 1.1 for VM/SP only support a console mode of 3215. A console mode of 3270 was specified either on a DEFINE CONSOLE command, TERMINAL CONMODE command, or on the CONSOLE directory statement in your directory entry. If this message is issued during a reconnect, it is because

your console was defined as a 3270 during your previous terminal session and a console mode of 3270 is not supported for your new terminal session.

System action

Your console is defined, but as a 3215 rather than a 3270.

User response

Ensure that your application environment will be able to use a 3215 console, or move to a terminal that supports a console mode of 3270.

HCP2551I **The console has been defined as a 3215 because the real device is not a 3270 display.**

Explanation

The real device on which you are trying to define a console with a console mode of 3270 does not support a console mode of 3270. A console mode of 3270 was specified either on a DEFINE CONSOLE command, TERMINAL CONMODE command, or on the CONSOLE directory statement in your directory entry. If this message is issued during a reconnect, it is because your console was defined as a 3270 during your previous terminal session and a console mode of 3270 is not supported for your new terminal session.

System action

Your console is defined, but as a 3215 rather than a 3270.

User response

Ensure that your application environment will be able to use a 3215 console, or move to a 3270 display station.

HCP2553I **TERMINAL BRKKEY *breakkey* is not allowed during this session; it has been changed to PA1.**

Explanation

The only TERMINAL BRKKEY settings for Systems Network Architecture Console Communications Services (SNA/CCS) terminal users are PA1 and NONE. Your break key setting from your previous session is not allowed during this session.

System action

Your break key setting has been changed to PA1. Note that your break key setting from your previous session will not be restored for future sessions.

User response

Ensure that your application environment functions properly with the new setting, or move to a terminal that supports your original setting.

HCP2554I **TERMINAL BREAKIN {GUESTCTL|MINIMAL} is not allowed during this session; it has been changed to IMMED.**

Explanation

The VTAM service machine controlling this Systems Network Architecture Console Communications Services (SNA/CCS) terminal does not support the BREAKIN GUESTCTL or the BREAKIN MINIMAL option. The only valid TERMINAL BREAKIN setting for this SNA/CCS terminal users is IMMED. Your break in setting from your previous session is not allowed during this session.

System action

Your break in setting is changed to IMMED. Note that your break in setting from your previous session will not be restored for future sessions.

User response

Ensure your application environment functions properly with the new setting, or move to a terminal that supports your original setting.

HCP2555I **TERMINAL MORE *nnn mmm* is not allowed during this session; values have been changed to 050 010.**

Explanation

This message is issued during a reconnect because your terminal was defined with TERMINAL MORE command values other that the defaults, 50 10, in your last terminal session. When you reconnected, you were at a SNA terminal controlled by a VTAM Service Machine (VSM) that does not support changing the TERMINAL MORE command values.

System action

The TERMINAL MORE command values are changed back to the defaults, 50 10.

User response

If you want to alter the TERMINAL MORE command values, move to a local or logical terminal or a SNA terminal controlled by a VSM that supports changing the TERMINAL MORE command values.

HCP2556I **TERMINAL HOLD OFF is not allowed during this session; it has been changed to ON.**

Explanation

This message is issued during a reconnect because your terminal was defined with a TERMINAL HOLD command value other than the default, ON, in your last terminal session. When you reconnected, you were at a SNA terminal controlled by a VTAM Service Machine (VSM) that does not support changing the TERMINAL HOLD command value.

System action

The TERMINAL HOLD command value is changed back to the default, ON.

User response

If you want to alter the TERMINAL HOLD command value, move to a local or logical terminal or a SNA terminal controlled by a VSM that supports changing the TERMINAL HOLD command value.

HCP2575E **The message repository for *langid* cannot be found.**

Explanation

An invalid language ID was specified for the message repository in the command.

System action

The command does not run; system operation continues.

User response

Reenter the command with a valid language ID. To get a list of valid language IDs, you enter the QUERY CPLANGLIST command.

HCP2576E **The command processing cannot complete and a soft abend has been taken because an unrecoverable system error has occurred.**

Explanation

An unrecoverable system error occurred, which caused a soft abend. The command that was entered did not complete.

System action

The command did not run; system operation continues.

User response

Reenter the command, and if the error persists, inform your system support personnel.

HCP2577E **Message repository file *name* is damaged**

Explanation

The keyword MSGREP was missing from the first page of the message repository. The *name* variable is the system data file name.

System action

The user's current language is not changed. A flag is set so that the damaged repository will be purged when all other users are through with it.

User response

Ask the system programmer to load a new copy of the repository.

HCP2579E **The variations of this message are explained below.**

— Variation 1 **SET STORAGE command unavailable until system reIPL**

Explanation

CP could not complete the SET STORAGE command as requested.

System action

The command fails; system operation continues.

User response

Storage cannot be added until after a reIPL of the system is complete.

— Variation 2 **SET STORAGE command unavailable**

Explanation

One of the following conditions occurred:

- You issued a SET STORAGE command too early during system initialization.
- You issued a SET STORAGE command on a second-level system, but the storage for the first-level virtual machine in which that system is running has been defined with one or more storage extents by using the DEFINE STORAGE command with the CONFIG operand.

System action

The command fails; system initialization or operation continues.

User response

If the command failed during initialization, wait for the system to complete initialization, reissue the SET STORAGE command. If the command failed on a second-level system after initialization, redefine the storage for the first-level virtual machine by issuing the DEFINE STORAGE command without the CONFIG operand.

HCP2580I **Storage reconfiguration to add *permsize* of permanent and *reconfsize* of reconfigurable initiated by *userid*.**

Explanation

User *userid* issued the SET STORAGE command to increase the size of the z/VM real storage configuration.

System action

CP processes the SET STORAGE command by increasing the z/VM real storage configuration by the specified amount of permanent storage, reconfigurable storage, or both.

User response

Use the QUERY STORAGE RECONFIGURATION command to view the status of the storage reconfiguration.

HCP2581I **Storage reconfiguration to remove *reconfsize* of reconfigurable initiated by *userid*.**

Explanation

User *userid* issued the SET STORAGE command to decrease the size of the z/VM real storage configuration.

System action

CP processes the SET STORAGE command by decreasing the z/VM real storage configuration by the specified amount of reconfigurable storage.

User response

Use the QUERY STORAGE RECONFIGURATION command to view the status of the storage reconfiguration.

HCP2582I **Storage reconfiguration by *userid* is complete. Permanent = *permsize* Reconfigurable = *reconfsize***

Explanation

A change to z/VM's real storage configuration initiated by user *userid* has completed successfully. The permanent and reconfigurable storage amounts in the storage configuration after completion of the reconfiguration are displayed in the message. This message can also appear after completion of a storage reconfiguration during system initialization. A storage reconfiguration happens during initialization if more or less storage is requested than was defined for the LPAR or the virtual machine.

If your z/VM system is running on a machine that does not support reconfigurable storage, the reconfigurable value will be displayed as `Reconfigurable = --`.

System action

System operation continues.

User response

None.

HCP2583I **The variations of this message are explained below.**

— Variation 1 **Storage reconfiguration has been signaled to halt processing by *userid*.**

Explanation

User *userid* issued the SET STORAGE HALT command to stop a real storage reconfiguration in progress.

System action

The SET STORAGE HALT command sets an internal flag that is checked periodically by storage reconfiguration processing. After the halt is recognized, the reconfiguration process stops processing. Storage configuration changes made prior to detection of the halt remain in effect. Vacated frames in storage increments that have not been taken offline are again available for use.

User response

None.

— Variation 2	**Storage reconfiguration halt was already initiated by {*userid*|SYSTEM}.**

Explanation

You issued a SET STORAGE HALT command to terminate a storage reconfiguration in progress. However, a previous request to halt the reconfiguration was already in progress.

System action

System operation continues.

User response

None.

HCP2584I	**Storage reconfiguration has been halted by {*userid*|SYSTEM}.**

Explanation

A change to z/VM's real storage configuration was stopped because user *userid* issued the SET STORAGE HALT command or because the system detected an error and could not continue.

When this message indicates that the reconfiguration has been halted by SYSTEM, an error message identifying the type of error encountered precedes this message.

System action

Storage configuration changes that were made prior to detection of the halt remain in effect. Vacated frames in storage increments that have not been taken offline are again available for system use.

User response

You can use the QUERY STORAGE command to find the permanent and reconfigurable storage amounts in the configuration after the reconfiguration was stopped.

HCP2585E	**The variations of this message are explained below.**
— Variation 1	**Storage request exceeds Maximum STORAGE of *maxsize*.**

Explanation:
The specified real storage configuration, as defined by STORAGE statements in the system configuration file or the SET STORAGE command, exceeds the maximum that is allowed for the partition. The maximum is the amount of `Initial + Reserved` storage specified in the image profile for the logical partition or the maximum amount of real storage supported by your z/VM system, whichever is less. This value is also displayed in the `Maximum STORAGE` field of the QUERY STORAGE command response. See Host Storage Planning and Administration in *z/VM: CP Planning and Administration* for the maximum amount of real storage supported by z/VM.

System action:
System operation continues.

User response:
Determine the current z/VM real storage configuration by issuing the QUERY STORAGE command. If desired, issue the SET STORAGE command to bring standby storage online, up to the maximum amount of storage.

— Variation 2	**Reconfigurable storage size of *stgsize* exceeds the maximum allowed reconfigurable storage size of *maxsize*. Reconfigurable storage is restricted to a maximum of *xx*% of all online storage.**

Explanation:
The specified amount of reconfigurable storage (*stgsize*), as defined by STORAGE statements in the system configuration file or the SET STORAGE command, exceeds the maximum amount of reconfigurable storage (*maxsize*) that is allowed for the partition. The maximum is 50% of the total amount of online storage.

System action:
If issued in response to the SET STORAGE command, the command is rejected. If issued at system initialization, reconfigurable storage is brought online only up to the specified percentage. System operation continues.

User response

Reconfigurable storage is allowed up to the maximum amount (*maxsize*). If you need more reconfigurable storage, you might need to add additional permanent storage to make sure the amount of reconfigurable storage does not exceed the allowed percentage (*xx*) of total configured storage.

Determine the current z/VM real storage configuration by issuing the QUERY STORAGE command. If desired, issue the SET STORAGE command to bring standby storage online as permanent or reconfigurable storage.

— Variation 3 **Reconfigurable storage size of *stgsize* (rounded up to *rndsize*) exceeds the maximum allowed reconfigurable storage size of *maxsize*. Reconfigurable storage is restricted to a maximum of *xx*% of all online storage.**

Explanation:
The specified reconfigurable storage amount (*stgsize*) configuration, as defined by STORAGE statements in the system configuration file, exceeds the maximum amount of reconfigurable storage that is allowed for the partition (*maxsize*). Before making comparisons, CP might round up the requested amount of reconfigurable storage to *rndsize* based on the INC size reported by QUERY STORAGE. The maximum is 50% of the total amount of online storage.

System action:
Reconfigurable storage is brought online only up to the maximum percentage. System operation continues.

User response

Reconfigurable storage up to *maxsize* is allowed. If you need more reconfigurable storage, you might need to add additional permanent storage to make sure the reconfigurable storage amount does not exceed the allowed percentage (*xx*) of total configured storage.

Determine the current z/VM real storage configuration by issuing the QUERY STORAGE command. If desired, increase the STORAGE statement's permanent and reconfigurable values.

HCP2586E **RECONFIGURABLE storage of *reconfsize* is insufficient to satisfy request.**

Explanation

You issued a SET STORAGE command to remove real storage, but the amount of reconfigurable storage that is currently available online to z/VM is less than the amount you asked to remove.

System action

The SET STORAGE command fails.

User response

To determine how much reconfigurable storage is available, issue the QUERY STORAGE command. Then, reissue the SET STORAGE command to remove storage, specifying an amount of reconfigurable storage that is less than or equal to *reconfsize*.

HCP2587E **PERMANENT storage of *permsize* must be online before RECONFIGURABLE storage can be added to the configuration.**

Explanation

Reconfigurable storage cannot be added to your z/VM configuration during IPL, as requested on a STORAGE statement in the system configuration file, or after IPL, via the SET STORAGE command, because you don't have the minimum required amount of permanent storage.

System action

If this error occurs during IPL, the system starts with no reconfigurable storage. If this error occurs during a reconfiguration initiated by the SET STORAGE command, the command fails.

User response

Issue a SET STORAGE command to make more permanent storage available to z/VM, and, if desired, reconfigurable storage.

HCP2588E **RECONFIGURABLE storage is not supported on this system.**

Explanation

You cannot define reconfigurable storage on the STORAGE statement in the system configuration file or on the SET STORAGE command because your system is running in an environment that does not support reconfigurable storage. If z/VM is running in a logical partition, the required support is not available on your model of machine. If z/VM is running second-level in a virtual machine, the DEFINE STORAGE command used to establish the second-level storage configuration did not include the STANDBY or RESERVED options.

System action

If the error occurs during IPL, the system starts up with no reconfigurable storage. If the error occurs

during a reconfiguration initiated by the SET STORAGE command, the command fails.

User response

See *z/VM: Migration Guide* for information about the required level of hardware needed to support reconfigurable storage.

HCP2589E **Storage size *storsize* is not a multiple of the storage increment size *incrsize*. The nearest increment multiples are *mult1* and *mult2*.**

Explanation

The storage amount you specified on a SET STORAGE command is not a multiple of the storage increment size.

System action

The SET STORAGE command fails; system operation continues.

User response

To display the storage increment size, issue the QUERY STORAGE command. Then, reissue the SET STORAGE command, using a storage amount that is a multiple of the storage increment size (*incrsize*).

HCP2590E **SET STORAGE HALT cannot be processed because there is no user-initiated storage reconfiguration in progress.**

Explanation

You issued a SET STORAGE HALT command but there is no real storage reconfiguration operation active that is eligible to be halted. At various times, such as during initialization, the system might initiate real storage reconfigurations. You cannot halt these operations by issuing a command.

System action

The SET STORAGE command fails; system operation continues.

User response

Use the QUERY STORAGE RECONFIGURATION command to ensure a storage reconfiguration is active before issuing the SET STORAGE HALT command.

HCP2591E **Storage reconfiguration failed - Processor controller response code *code***

Explanation

CP could not complete the SET STORAGE command as requested because a processor controller operation failed.

System action

System operation continues.

User response

The processor controller failure might have been temporary. Reissue the SET STORAGE command. If the failure persists, contact your IBM Support Center personnel.

HCP2592I **The variations of this message are explained below.**

Explanation

- **STORAGE PERMANENT *permsize* ignored because IPL parameter STORE= was specified.**
- **STORAGE RECONFIGURABLE *reconfsize* ignored because IPL parameter STORE= was specified.**
- **STORAGE AFTER_SHUTDOWN_REIPL KEEP ignored because IPL parameter STORE= was specified.**
- **STORAGE AFTER_RESTART KEEP ignored because IPL parameter STORE= was specified.**
- **STORAGE PERMANENT *permsize* ignored because the system is not DSR capable.**

The specified operand on the STORAGE system configuration statement is ignored because it has been overridden by an IPL parameter ST0RE= value, or because dynamic storage reconfiguration (DSR) capabilities do not exist on your z/VM system (applies to second-level z/VM systems only).

System action

System operation continues. Other options on the STORAGE statement are processed normally.

User response

Use the QUERY STORAGE command to determine the current storage configuration. If your configuration includes standby storage, or if all of the configured storage is not online and this is not a second-level DEFINE STORAGE CONFIGURATION environment, you

can use the SET STORAGE command to modify the configuration.

HCP2593I **Storage reclamation viability test passed with MAXPAGEFULL value of *xxx*%. *yyy*% of paging space could be required for the current workload.**

Explanation

A storage reclamation viability test passed and the storage removal operation began. CP determined that the removal would not fill paging volumes beyond the MAXPAGEFULL percentage. The MAXPAGEFULL value used in the calculation is one of the following:

1. The MAXPAGEFULL value specified on the SET STORAGE command
2. If MAXPAGEFULL was not specified on the SET STORAGE command, the paging warning percentage as specified on a PAGING system configuration statement or on a previous SET PAGING command.

If the viability test fails later during a storage removal operation, the operation will be halted by the system.

System action

The storage removal operation continues.

User response

To receive information about the status of the storage removal operation, issue QUERY STORAGE RECONFIGURATION. To cancel the storage removal operation, issue SET STORAGE HALT.

HCP2594I ***stgsize* of reconfigurable storage has been converted to permanent to meet system demands. Permanent = *permsize* Reconfigurable = *reconfsize***

Explanation

The system needed more permanent real storage for CP control structures, or for guest pages that needed to be pinned long-term (that is, locked in real storage resident memory). *stgsize* was converted from reconfigurable to permanent storage.

System action

System operation continues. *permsize* and *reconfsize* indicate the amount of permanent and reconfigurable storage available online to z/VM after the conversion completed.

User response

Use the QUERY STORAGE command to determine the current storage configuration. If desired, use the SET STORAGE command to modify the configuration.

HCP2595I **{PERMANENT|RECONFIGURABLE} storage of *stgsize* rounded to *rndsize* to be a multiple of the storage increment size *incrsize*.**

Explanation

During system initialization, CP modified a storage size specification obtained from a STORAGE statement in the system configuration file, or from the IPL parameter STORE= to be a multiple of the storage increment size (*incrsize*). The storage size is rounded up to the next higher multiple, unless there is an inadequate amount of standby storage available, in which case the value will be rounded down.

System action

System operation continues.

User response

Use the QUERY STORAGE command to determine the current storage configuration. If desired, use the SET STORAGE command to modify the configuration.

HCP2596I **FEATURES {PAGING_ALIAS|PAGING_HPF} and PAGING {ALIAS|HPF} are synonyms. It is recommended you consolidate paging options on the PAGING statement.**

Explanation

This message is issued by the CPSYNTAX utility when the system configuration file contains a FEATURES PAGING_ALIAS statement and a PAGING ALIAS statement, or a FEATURES PAGING_HPF statement and a PAGING HPF statement.

System action

CPSYNTAX operation continues.

User response

Use the PAGING system configuration statement to specify the HyperPAV ALIAS and High Performance FICON (HPF) settings for the paging subsystem. In addition, any FEATURES PAGING_ALIAS and PAGING_HPF system configuration specifications should be deleted.

HCP2597I **AGELIST storage size reduced from *size1* to allowed maximum of *size2* during storage {initialization|reclamation}.**

Explanation

The fixed AGELIST size as specified on a STORAGE AGELIST system configuration statement or a SET AGELIST command was adjusted downward to be 5% of the dynamic paging Area (DPA) size. The DPA size varies over time. It includes available frames and in-use frames with pageable content. A fixed AGELIST size will be reduced to 5% of DPA, if necessary, after storage initialization completes at IPL, and also upon completion of a SET STORAGE command to remove storage from the configuration. There is no automatic increase in the fixed AGELIST size when a SET STORAGE command is used to add storage to the configuration.

System action

System operation continues.

User response

To have an AGELIST size that varies proportionally to the size of the storage configuration, it is recommended that you specify the AGELIST size as a percentage of DPA on the STORAGE AGELIST system configuration statement or the SET AGELIST command, rather than as a fixed storage amount. When a percentage is specified, the system recalculates the target AGELIST size periodically, up and down, to maintain the AGELIST size as a percentage of the DPA.

HCP2598E **PERMANENT storage cannot be added and RECONFIGURABLE storage removed in the same SET STORAGE command.**

Explanation

You cannot use one SET STORAGE command to add permanent storage and to remove reconfigurable storage.

System action

The SET STORAGE command fails; system operation continues.

User response

Use two SET STORAGE commands: one to add permanent storage and the other to remove reconfigurable storage.

HCP2599E **SET STORAGE HALT cannot be processed because the storage has been vacated.**

Explanation

You issued a SET STORAGE HALT command but the real storage reconfiguration has finished vacating storage.

System action

The SET STORAGE command fails; system operation continues.

User response

The storage reconfiguration remove process first vacates the storage and then removes the storage from the configuration by transitioning the storage to the standby state. SET STORAGE HALT for a storage reconfiguration remove action is allowed only during the storage vacate process. Use the QUERY STORAGE RECONFIGURATION command to monitor the storage removal in progress and then, if desired, issue a new SET STORAGE command after the reconfiguration has completed.

HCP2600I **DASD *rdev* subsystem storage status cannot be determined.**

Explanation

CP could not determine the status of the storage directors during processing of a QUERY CACHE command destined for a 3880 Model 21 subsystem. The *rdev* variable refers to the real device number.

System action

System operation continues.

Operator response

Reenter the command. If the error persists, contact your IBM Support Center personnel for hardware support.

HCP2611E **{Data|Key} cannot be stored into a read-only page.**

Explanation

The user attempted to store either a storage key or data for a page that was specified as read/only. When this condition is detected, processing of the STORE command ends.

System action

The command does not run.

User response

None.

HCP2625I The virtual machine is placed in CP mode due to a SIGP initial program reset from CPU *nn*.

Explanation

The virtual CPU with address *nn* has issued a SIGP initial program reset order to the virtual CPU on which the message is displayed.

System action

System operation continues. The virtual CPU is reset and placed in hard stop state.

User response

IPL the virtual machine again to recover the reset virtual CPU.

Programmer response

Determine why the virtual CPU issued the signal processor instruction and take appropriate action.

HCP2626I The virtual machine is placed in CP mode due to a SIGP program reset from CPU *nn*.

Explanation

The virtual CPU with the address (*nn*) has issued a SIGP program reset order to the virtual CPU on which the message is displayed.

System action

System operation continues. The virtual CPU is reset and placed in hard stop state.

User response

If it is determined that this action is the result of an error, IPL the virtual machine again to recover the reset processor.

Note: This message is informational only and issued as a result of a virtual processor's action. This action may be normal for your virtual machine and may not require a response.

Programmer response

Determine why the signal processor instruction was issued by the virtual CPU and take appropriate action.

HCP2627I The virtual machine is placed in CP mode due to a SIGP initial CPU reset from CPU *nn*.

Explanation

The virtual CPU with address *nn* has issued a SIGP initial CPU reset order to the virtual CPU on which the message is displayed.

System action

System operation continues. The virtual processor is reset and placed in a hard stop state. Note, however, that if the initial CPU reset is performed as part of initial program loading (IPL), this CPU enters the load state and a CPU reset is propagated to all other CPUs in the virtual configuration.

User response

If it is determined that this action is the result of an error, IPL the virtual machine again to recover the reset processor.

Note: This message is informational only and issued as a result of a virtual processor's action. This action may be normal for your virtual machine and may not require a response.

Programmer response

If the initial CPU reset was not performed as part of initial program load (IPL), determine why the virtual processor issued the signal processor instruction and take appropriate action.

HCP2628I The virtual machine is placed in CP mode due to a SIGP CPU reset from CPU *nn*.

Explanation

The virtual CPU that has the address *nn* has issued a SIGP CPU reset order to the virtual CPU on which the message is displayed.

System action

System operation continues. The virtual CPU is reset and placed in hard stop state. The virtual machine continues operation without the reset processor.

User response

If it is determined that this action is the result of an error, IPL the virtual machine again to recover the reset processor.

Note: This message is informational only and issued as a result of a virtual processor's action. This action may be normal for your virtual machine and may not require a response.

Programmer response

Determine why the virtual CPU issued the signal processor instruction and take appropriate action.

HCP2629I **The virtual machine is placed in CP mode due to a SIGP stop from CPU *nn*.**

Explanation

The processor with the address *nn* has issued a SIGP stop order to the virtual CPU on which the message is displayed.

System action

System operation continues. The virtual CPU is placed in hard stop state. The virtual machine continues operation if there are any operational virtual CPUs.

User response

If it is determined that this action is the result of an error, IPL the virtual machine again or issue a BEGIN CPU command to start the stopped virtual processor.

Note: This message is informational only and issued as a result of a virtual processor's action. This action may be normal for your virtual machine and may not require a response.

Programmer response

Determine why the virtual CPU issued the signal processor instruction and take appropriate action.

HCP2630I **The virtual machine is placed in CP mode due to a SIGP stop and store status from CPU *nn*.**

Explanation

The virtual CPU with the address *nn* has issued a SIGP stop and store status order to the virtual CPU on which the message is displayed.

System action

System operation continues. The virtual CPU is placed in hard stop state. The virtual machine continues operation if there are any operational virtual CPUs.

User response

If it is determined that this action is the result of an error, IPL the virtual machine again or issue a BEGIN CPU command to start the stopped virtual processor.

Note: This message is informational only and issued as a result of a virtual processor's action. This action may be normal for your virtual machine and may not require a response.

Programmer response

Determine why the virtual CPU issued the signal processor instruction and take appropriate action.

HCP2631I **370ACCOM has been set off due to a SIGP set architecture from CPU *cpuaddr***

Explanation

The CPU identified in the message issued a SIGP instruction with the set architecture order code. This caused the virtual machine to be placed into z/Architecture® mode, which is not compatible with 370ACCOM mode.

System action

The 370ACCOM facility is set off.

User response

The virtual machine can either have 370ACCOM turned on or it can be in z/Architecture mode, but not both. The virtual machine is now in z/Architecture mode with 370ACCOM set off. If that is what is required, there is nothing to do. If the program running in the virtual machine requires 370ACCOM, then the virtual machine must be taken out of z/Architecture mode and a SET 370ACCOM ON command must be issued to put it back into that state.

HCP2632E **When a virtual machine is in z/Architecture or z/XC mode, you cannot set 370ACCOM ON.**

Explanation

A SET 370ACCOM ON command was issued in an attempt to place the user in 370ACCOM mode, but the virtual machine was in z/Architecture or z/XC mode, which is not compatible with 370ACCOM mode.

System action

The command is rejected.

User response

The virtual machine can either have 370ACCOM turned on or it can be in z/Architecture or z/XC mode, but not both. The virtual machine is now in z/Architecture or z/XC mode with 370ACCOM set off. If that is what is required, there is nothing to do. If the program running in the virtual machine requires 370ACCOM, the virtual machine must first be taken out of z/Architecture or z/XC mode and then you can issue the SET 370ACCOM ON command.

HCP2650E **Storage reclamation viability test failed with MAXPAGEFULL value of *xxx*%. *yyy*% of paging space could be required for the current workload.**

Explanation

A storage reclamation viability test failed prior to or during a storage removal operation, because CP determined that the removal would fill paging volumes beyond the MAXPAGEFULL percentage. The MAXPAGEFULL value used in the calculation is one of the following:

1. The MAXPAGEFULL value specified on the SET STORAGE command
2. If MAXPAGEFULL was not specified on the SET STORAGE command, the paging warning percentage as specified on a PAGING system configuration statement or on a previous SET PAGING command.

If the viability test failed while a storage removal operation was in progress, message HCP2583E indicates that the operation was halted by the system.

System action

If a storage removal operation was in progress, it has been signaled to stop processing. Any storage that was already removed from the configuration is not restored to the configuration. Vacated frames in storage increments that have not been taken offline are again available for use. *permsize* and *reconfsize* indicate the amount of permanent and reconfigurable storage after the reconfiguration was terminated.

User response

If the size of workload has stabilized and a significant proportion of guest pages exist on paging volumes, consider issuing another SET STORAGE command to complete storage removal using the MAXPAGEFULL operand to increase the paging warning value for this storage removal operation.

The viability test can be overridden with the FORCE operand. This operand should be used only after you have considered the full storage configuration on your system, including real storage, paging capacity and usage, and virtual storage (for example: instantiated, resident, and DASD page counts for users, as well as writeable NSS/DCSS pages, CP pageable pages, and CP control structures).

The VIR2REAL and CHKRECLM EXECs can be helpful in assessing your storage usage and determining if the FORCE option is appropriate. The VIR2REAL EXEC gathers information about the real and virtual storage on your system as it currently appears (that is, based on the guests that are logged on and the current paging usage). The CHKRECLM EXEC accepts a storage amount as input, and uses information about your current storage configuration and usage to model how your system might look after a reclamation. It shows how the reclamation could change the virtual to real ratios, real storage, and paging. These EXECs are available here:

VM Download Packages (https://www.ibm.com/support/pages/zvm/download/packages/)

HCP2700I **The variations of this message are explained below.**

— Variation 1 **No system gateway identified.**

Explanation

The system gateway has not been identified on the local z/VM system.

System action

System processing continues.

User response

If NOSYSGAT was coded on either the SYSTEM_IDENTIFIER or SYSTEM_IDENTIFIER_DEFAULT statement for the

local z/VM system, then no action is necessary. Otherwise, ensure that there is a SYSTEM_IDENTIFIER statement for the local z/VM system or a SYSTEM_IDENTIFIER_DEFAULT statement specified. For more information, see *z/VM: CP Planning and Administration*.

— Variation 2 System gateway *gateid* identified.

Explanation

The system gateway successfully been identified on the local z/VM system.

System action

System processing continues.

User response

None.

HCP2701I Link *linkname* went down.

Explanation

This is a response to either a DEACTIVE ISLINK command or a failure for the link group to receive a response from the other end of this link. When the link group cannot get a response, this could mean one of the following:

- There is a malfunction.
- The other system went down.
- The ISLINKs were deactivated on the other system.

System action

The link is no longer available for communications.

User response

Issue the ACTIVATE ISLINK command for the link devices that make up the link. If the link is still down, this may indicate a hardware failure.

HCP2702I Link *linkname* came up.

Explanation

The link group got a response from the other end of this link.

System action

The system will use the new link.

User response

None.

HCP2703I {Remote node | Node} *nodeid* deleted from collection.

Explanation

The node *nodeid* has been deleted from the collection table of each node in the CS collection. If this happens after a detected partition, the collection management structures of *nodeid* no longer agree with the rest of the collection or are not available because *nodeid* stopped communicating. If *nodeid* is still communicating, no sessions are broken. As long as all components are still working correctly, the system corrects the problem.

System action

Node *nodeid* is removed from the collection table. The system attempts to rejoin the node using handshake messages.

User response

None.

HCP2704I Node *nodeid* added to collection.

Explanation

The node *nodeid* has been added to the collection table of each node in the CS collection. This means that the remote node is now defined to the local z/VM system.

System action

Node *nodeid* is added to the CS collection. The local and remote systems exchange gateway names, resource names, and pacing count information. The systems can now communicate over the data link.

User response

None.

HCP2705I Monitor response not received on link *linkname*. [Link device *rdev* status: {Busy | Deactivate in progress | Fatal I/O on link | Handling link attention | Idle | Initialization in progress | Read in progress | Reset in progress | Unknown | Write in progress}.]

Explanation

A frame sequence error was detected.

System action

System processing continues.

User response

Record the error message and notify your system programmer. If the problem persists, contact your IBM Support Center Personnel.

HCP2706I {Link *linkname* | Conversation *convid*} { activated | deactivated } by user *userid*.

Explanation

This is a response to the ACTIVATE ISLINK, DEACTIVE ISLINK, or DEACTIVE CONV (for conversation) command and indicates the user initiating the command.

System action

None.

User response

None.

HCP2707I Link *linkname* suspended to verify duplicate node *nodeid*.

Explanation

This message is displayed on the system console when an ISFC link receives a message identifying a remote node with the same name (*nodeid*) as another node in this collection. This could mean either of the following:

- The new identification could have been sent by a system that was shutdown, and a re-IPL occurred so quickly that the old instances of that node have not yet been flushed from the collection. If that is the case, the "old" node will not respond. The link will be automatically reset every 30 seconds so it will come up when the obsolete references to this node have been deleted.
- The new node could have the same name as another node in this collection. If that is the case, the "old" node will respond and the system will deactivate this link (issuing message HCP2708I). This represents a true duplicate node in the collection.

System action

Any subsequent resource messages from this link (*linkname*) are ignored. If the established node (*nodeid*) in this collection responds, the system issues message HCP2708I and deactivates this link. Otherwise, this link is reset with every link monitor test cycle, and should initialize completely when the obsolete references to the node have been removed from this collection.

User response

Wait for the system to determine if a duplicate node really exists. Within five minutes or so, you should see either the link start normally, or the link deactivated with message HCP2708I.

HCP2708I The variations of this message are explained below.

— Variation 1 Link device *rdev* deactivated because of duplicate node *nodeid*.

Explanation

ISFC automatically deactivated the link device (*rdev*) because the node on the other side of the link has the same ID (*nodeid*) as a node that already exists in the collection. This condition is detected immediately after activating the link device.

The ISFC node name is set based on the contents of the SYSTEM CONFIG file, and generally matches the SYSTEMID statement. ISFC cannot tolerate two nodes with the same node name.

System action

The link device is deactivated and no additional attempts are made to reset the link device.

User response

Issue the QUERY GATEWAY command to examine the collection on each side of the link. Determine which nodes have the same ID and change one of the node IDs. For more information about using the QUERY GATEWAY command, see *z/VM: CP Commands and Utilities Reference*.

— Variation 2 Link *linkname* deactivated due to insufficient resources.

Explanation

ISFC automatically deactivated the link devices that make up *linkname* because there are inadequate system resources for ISFC to continue operations. For example, there was a sudden spike in real

storage consumption. ISFC detects this condition and automatically deactivates all ISFC link devices to protect the system. When link devices are deactivated, active conversations are stopped and system resources are released.

This message was preceded by message "HCP2710E" on page 597, which indicated that all link devices are being deactivated.

System action

The link devices are deactivated and no additional attempts are made to reset them.

User response

Investigate the cause of the abnormal demand on system resources. You can activate the link devices while investigating the cause. For more information, see message "HCP2710E" on page 597.

HCP2709I No direct link exists to *nodeid*.

Explanation

The DEACTIVATE ISLINK, QUERY ISLINK, or QUERY ISFC ACTIVITY command was issued with the NODE option, but no link exists to connect to the specified node.

System action

ISFC ignores the command.

User response

Use the QUERY COLLECT command to see the nodes in the collection. Then reissue the command using a *nodeid* that is in the collection.

HCP2710E Insufficient system resources for ISFC operation. All ISFC links are being deactivated immediately.

Explanation

There are inadequate system resources for ISFC to continue operations. For example, there was a sudden spike in real storage consumption. ISFC automatically deactivates all ISFC link devices to protect the system from a system abend. As ISFC link devices are deactivated, ISFC resources are released for general system use.

System action

All link devices are deactivated.

User response

Activate ISFC links manually to restore connectivity and investigate the cause of the abnormal demand on system resources. Make note of the following during investigation:

- A new node joining the ISFC collection just prior to this condition.
- An established node leaving the ISFC collection just prior to this condition.
- A new application that might be using ISFC for connectivity.
- An ISLINK configuration change that removes one or more devices from an ISFC logical link.

Review the system configuration data.

Using the information obtained during investigation, determine the cause of the abnormal demand on system resources. Potential causes might be:

- A change in ISFC link configuration while a VMRELOCATE MOVE is in progress.

  When DEACTIVATE ISLINK is used to remove a link device from an ISFC logical link while a VMRELOCATE MOVE command is in progress, the relocation may be less efficient and it can cause excessive use of storage.
- Unresolved resources when using distributed IUCV.

  When distributed IUCV is enabled in the SYSTEM CONFIG file, an IUCV application on one node might connect to a resource (user ID) on any other node in the collection. If a resource cannot be resolved on any node in the collection, multiple searches are performed before the request times out. For a large collection, a series of unresolved searches might consume all available ISFC storage.

  When journaling is enabled, unresolved resources are recorded in the journal area. Use this data to identify the originator (user ID) of the unresolved connection and eliminate it or define the required IUCV resource on a node that is in the collection.
- Loss of a critical member of the collection.

  If an IUCV resource is defined on one node in the collection only, the loss of that node will lead to unresolved searches within the remaining ISFC collection.

  Restarting the failing system or activating the link device might correct the immediate problem.

  To prevent this problem, define resources on more than one node. An IUCV connection (with distributed IUCV enabled) will connect to an instance of the resource (user ID) that is already logged on (if one

exists in the collection). If not, one of the nodes will log on the target resource.

HCP2711E Link device *rdev* exceeds the limit for link *linkname*.

Explanation

An attempt was made to activate more than 16 CTCA devices connected to *linkname*.

System action

ISFC ignores the command.

User response

None.

HCP2712I The variations of this message are explained below.

— Variation 1 Link device *device* was stopped by the remote node. It was rejected because of an incompatible driver.

Explanation

The remote node stopped this device because it cannot interface with the ISFC device driver on the local node. This might happen if the remote node has been updated to address a problem that cannot be managed using the existing protocol.

System action

Both nodes leave the adapter disconnected.

User response

Investigate the CP support level on both nodes to determine if a new CP level has been installed on one node, but not on the other. Both nodes must be running compatible CP ISFC support.

— Variation 2 Link device *device* was stopped by the remote node. It was deactivated from the link.

Explanation

The remote node disconnected that side of the adapter from ISFC. This suggests that a system administrator or system operator on the remote node disabled this device with the CP DEACTIVATE ISLINK command.

System action

This device will remain disconnected until the remote node takes action to activate it. If this was the only device supporting the logical link, the logical link is terminated as a result.

User response

No response is necessary on the local node. This device can only be reconnected by action from the remote node.

— Variation 3 Link device *device* was stopped by the remote node. It was reset because an I/O operation timed out.

Explanation

The remote node started an I/O operation that did not complete within the time normally allowed for ISFC operations. The remote side of the adapter is reset (stopping the active I/O operation).

System action

The remote node will automatically restart this device connection. The local node should restart this side of the connection. If this is the only device supporting the logical link, this means the logical link will also be restarted.

User response

No response is necessary on the local node. This is expected to be a transient problem. If the problem happens repeatedly, investigate the cause of delay. The local node may have experienced an unusual demand for system resources.

— Variation 4 Link device *device* was stopped by the remote node. It was rejected because of a conflicting nodeid.

Explanation

The remote node already has a logical link with a name that matches the local node ID, but other attributes do not match. This suggests that there are two nodes with the same node ID in the ISFC collection.

System action

The remote node will try to challenge the devices connected to the existing link. The resulting exchange may confirm that the other node is still active, or it may force the discovery that these were obsolete connections to the local node. If the existing link is

disabled, the remote node will automatically restart this device.

User response

If this is a transient condition, the remote node will reset the affected devices and establish this connection automatically. If this condition persists, the system programmer should investigate the ISFC collection using CP QUERY GATEWAY and CP QUERY COLLECT commands to identify the devices leading to a duplicate node.

HCP2713E Link device *rdev* responded with an incorrect {length | type} value. This connection attempt failed.

Explanation

While ISFC was trying to initialize link device *rdev*, the connected device driver responded with an unexpected message length or message type. If the problem persists, it may indicate that the other side of device *rdev* has been connected to some application other than ISFC.

System action

If this is the result of a transient synchronization problem, the system recovers automatically by repeating the initialization sequence. If that action fails to connect the link device, user intervention may be required.

User response

If the link does not automatically recover, verify that the failing device is configured to connect to a compatible CP system where it is assigned to ISFC by the ACTIVATE ISLINK command.

HCP2714I Link device *rdev* added to link *linkname*.

Explanation

The link group got a response from the other end of this link device indicating initialization is complete.

System action

System processing continues.

User response

None.

HCP2715I Link device *rdev* removed to link *linkname*.

Explanation

This is a response to either a DEACTIVE ISLINK command or a failure for the link group to receive a response from the other end of this link device.

When the link group cannot get a response, this could mean one of the following:

- There is a malfunction.
- The other system went down.
- The link device was deactivated on the other system.

System action

The link to *linkname* is removed and is no longer available for communications.

User response

Issue the ACTIVATE ISLINK command for the link device. If the link device is still down, this may indicate a hardware failure.

HCP2716I Link device *rdev* is stopped.

Explanation

This is a response to either a DEACTIVE ISLINK command or a failure for the link group.

System action

None.

User response

If no DEACTIVATE ISLINK command was issued, examine the operator console for the systems on both ends of the link for commands related to the problem. Use the QUERY ISLINK command to display the current status of the device.

HCP2717E Cannot create socket - all socket identifiers in use

Explanation

An ISFC socket cannot be created because the limit on the number of sockets has been reached. For an SSI member, the limit is 65,536; for non-SSI systems or an SSI member started in REPAIR mode, the limit is 512.

System action

This message is issued only once: the first time a socket cannot be created. System operation continues, but because the socket cannot be created, some or all attempts to perform certain SSI functions (for

example, Live Guest Relocation) from that point on might be unsuccessful.

User response

Take a SNAPDUMP and contact your IBM Support Center personnel.

HCP2718E	The variations of this message are explained below.
— Variation 1	Link *linkname* exceeded the current limit of *page_count* pages. Link *linkname* will be reset now.

Explanation

ISFC detected that an ISFC activity for link *linkname* was consuming an unusual amount of system resources. For example, the storage capacity of the system is not sufficient to handle the volume of traffic due to a guest relocation. ISFC automatically deactivated all ISFC link devices in the logical link to avoid adversely affecting the performance of other workload and to protect the system from a system ABEND.

System action

All link devices making up the logical link to system *linkname* are deactivated. Any tasks using the link are automatically terminated. ISFC link devices will be re-initialized to restore connectivity to the system.

User response

Investigate the cause of unusual demands on system resources, such as the relocation of a user ID to a system with inadequate storage.

— Variation 2	Link *linkname* inbound transmission *seqno* sequence number is lost. Link *linkname* will be reset now.

Explanation

ISFC detected that a package with sequence number *seqno* was lost in transmission. The receiver and sender channel interfaces operate independently, which makes it possible for the receiver to rarely miss a transmission and be unable to proceed. This is not typically a direct response to user commands but a problem that is associated with ISFC activity that might cause a user virtual machine to hang or the system to terminate.

System action

The system automatically resets the link in an attempt to prevent virtual machine hangs or system termination. All link devices that make up the logical link to system *linkname* are deactivated. Any tasks that use the link are automatically terminated. ISFC link devices are re-initialized to restore connectivity to the system. Manual intervention is not required.

User response

No action is required. If re-initialization does not resolve connectivity of the link, contact IBM Service.

HCP2719E	The variations of this message are explained below.
— Variation 1	Link device *device* is not ready.

Explanation

ISFC tried to communicate with a remote node using link device *device* but encountered a fatal I/O error. The adapter is not ready (also known as "intervention required").

System action

This device will be left in disconnected mode, owned by the ISFC subsystem. If this is a transient error because the local node activated the device earlier than the remote node, ISFC will restart this connection in response to the remote activation.

User response

If this condition is not automatically resolved when the remote node activates the link, investigate the CTCA device addresses to confirm that they connect to the nodes (and remote devices) that you expect. Use the CP QUERY ISLINK command to determine the real device address in the context of each node, and use CP I/O commands to verify the real subchannel identifiers and hardware connections.

— Variation 2	Link device *device* presented an unexpected Read.

Explanation

The local node discovered that the remote node is trying to read from this device when it should only be sending data. If a data transfer was in progress, it is terminated.

System action

This device is restarted automatically.

User response

No action is required. If this condition persists, contact the IBM Support Center for assistance.

— Variation 3 Link device *device* presented an unexpected Write-EOF.

Explanation

The local node discovered that the remote node used Write-EOF during a data transfer. The current data transfer operation is terminated.

System action

This device is restarted automatically.

User response

No action is required. If this condition persists, contact the IBM Support Center for assistance.

— Variation 4 Link device *device* inbound frame length is wrong.

Explanation

The local node was processing an inbound frame from an ISFC link device and discovered an incorrect length value. This suggests an incomplete I/O operation or loss of synchronization between the two nodes. The current operation is terminated.

System action

This device is restarted automatically.

User response

No action is required. If this condition persists, contact the IBM Support Center for assistance.

— Variation 5 Link device *device* inbound frame type is wrong.

Explanation

The local node was processing an inbound frame from an ISFC link device and discovered an incorrect type or function code. This suggests a loss of synchronization between the two nodes. The current operation is terminated.

System action

This device is restarted automatically.

User response

No action is required. If this condition persists, contact the IBM Support Center for assistance.

— Variation 6 Link device *device* did not receive a timely response.

Explanation

The local node started an I/O operation that did not complete within the time normally allowed for ISFC operations. This is classified as a missing interrupt condition. It may be the result of a resource constraint on the remote system. The current operation is terminated.

System action

This device is restarted automatically.

User response

No action is required. This is expected to be a transient problem. If it happens repeatedly, investigate the cause of delay. The remote node may have experienced an unusual demand for system resources.

— Variation 7 Link device *device* was stopped by the remote node.

Explanation

The remote node sent a message on this device to indicate that it is stopping this connection. Any current device activity for this node must also be terminated.

System action

This is considered a persistent error, since it can only be resolved by an action on the remote node. This device is left in disconnected mode, and will be restarted automatically if the remote node begins a new connection sequence.

User response

No action is required.

— Variation 8 Link device *device* remote driver is incompatible.

Explanation

This device is being initialized for use as an ISFC link device. During the initial exchange of messages, it became clear that the local version of ISFC support is not compatible with the remote version.

System action

This is considered a persistent error, since it can only be resolved by restarting one node with a version of CP that is compatible with the other node. The local node leaves this device in disconnected mode.

User response

Use the QUERY CPLEVEL command to determine what level of support is installed on each node. One of these systems (either the remote node or the local node) should be upgraded to a compatible CP level.

— Variation 9 **Link device *device* connects to duplicate node *nodeid*.**

Explanation

During initialization, the remote node ID matches the name of an existing neighbor, but does not match some other attribute of the existing neighbor. This suggests that there are two neighboring nodes with the same name.

System action

This node stops device *device* temporarily, and sends a test frame on each device that currently supports the existing link with a conflicting name. If the new node is really just a new instance of the original neighbor (after a restart) then the test probes will expedite the failure of the existing link devices. When the obsolete link is removed, the conflicting device will be restarted. If, instead, the existing node responds properly, the conflicting device is left in disconnected mode.

User response

If the problem persists, the system programmer should investigate the ISFC collection to determine if one of the members should be renamed.

— Variation 10 **Link device *device* failed with I/O return code *rc*.**

Explanation

The local node encountered an unexpected I/O error. The I/O return code indicates the type of error. If a data transfer was in progress, it is terminated.

System action

This device is restarted automatically.

User response

No action is required unless this is a persistent condition. If the condition persists, contact the IBM Support Center for assistance.

— Variation 11 **Link device *device* CCW *cc-ff-nnnn* failed with CSW status *dd-ss-nnnn*.**

Explanation

The local node encountered an unexpected I/O error. The I/O status indicates the type of operation that was in progress at the time:

cc-ff-nnnn
represents the hexadecimal format of bytes 0-3 of the failing channel command word (CCW).

dd-ss-nnnn
represents the hexadecimal format of bytes 4-7 of the channel status word (CSW).

If a data transfer was in progress, it is terminated.

System action

This device is restarted automatically.

User response

No action is required unless this is a persistent condition. If the condition persists, contact the IBM Support Center for assistance.

HCP2720E **The variations of this message are explained below.**

— Variation 1 **Link device *rdev* not found.**

Explanation

The link specified on either the QUERY ISLINK or DEACTIVE ISLINK command is not defined to the local node.

System action

ISFC ignores the command.

User response

Reissue the command using a correct *rdev*.

— Variation 2 **Node *nodeid* not found.**

Explanation

A *nodeid* was specified on a DEACTIVATE ISLINK, QUERY ISLINK or QUERY ISFC TRANSPORT command, but the *nodeid* is not defined on the local node.

System action

ISFC ignores the command.

User response

Reissue the command using a correct *nodeid*.

— Variation 3 **Port *portid* not found.**

Explanation

The port was specified on a QUERY ISFC TRANSPORT command, but is not defined.

System action

ISFC ignores the command.

User response

Reissue the command using a correct *portid*.

HCP2721E **Link unit address *rdev* is a duplicate.**

Explanation

An ACTIVATE command was issued, and a link that uses this *rdev* has already been defined.

System action

The system does not add the link.

User response

Delete the other link, or specify the correct *rdev* and reissue the ACTIVATE command.

HCP2722I **The BUFFERS option is ignored for ACTIVATE ISLINK.**

Explanation

Beginning in z/VM 7.4, the BUFFERS option is ignored when specified on ACTIVATE ISLINK. The number of I/O buffers used by a link device is always 16.

System action

CP displays the informational message and system operation continues to complete processing of the ACTIVATE ISLINK command.

User response

Remove the BUFFERS option from the ACTIVATE ISLINK command. If the link device is connecting to a system earlier than z/VM 7.4, change the ACTIVATE ISLINK commands on that system to specify BUFFERS 16, or to use the default value of BUFFERS 16.

HCP2724E **{Gateway *gateid* | Resource *resid*} is undefined.**

Explanation

The gateway, specified on the QUERY GATEWAY *gateid* command, or the resource, specified on the QUERY RESOURCE *resid* command, is not defined.

System action

ISFC ignores the command.

User response

Correct the *gateid* or *resid* and reissue the command.

HCP2725E **Inter-System Facility for Communication initialization failed: RC = *code*.**

Explanation

This message is issued when ISFC initialization fails. The meaning of the return code displayed is as follows:

Code
Meaning

8
The ISFC address space was not created successfully during the system IPL.

12
The system gateway is currently not identified. This was probably caused by NOSYSGAT being specified on either the SYSTEM_IDENTIFIER or SYSTEM_IDENTIFIER_DEFAULT statement.

System action

RC = 8 or 12. The ACTIVATE ISLINK command fails.

User response

Depending upon the return code displayed, contact one of the following for assistance:

Code
Response

8
Contact your IBM Support Center personnel for assistance.

12
Check whether NOSYSGAT was specified in the system configuration file (for the SYSTEM_IDENTIFIER or

SYSTEM_IDENTIFIER_DEFAULT statement). If ISFC activity is desired, do not specify NOSYSGAT because the Communication Services (CS) collection requires a system gateway for routing purposes. For more information on CS collections and the use of the system gateway, refer to *z/VM: Connectivity*.

If a specification NOSYSGAT was not found, contact your IBM Support Center personnel for assistance.

HCP2726E Node *nodeid* is not directly connected.

Explanation

The node specified in the QUERY COLLECT *nodeid* or QUERY ISFC ACTIVITY NODE *nodeid* command is not directly linked to the local node.

System action

ISFC ignores the command.

User response

Enter the command without the node specification to get information on all nodes. Correct the *nodeid* and reissue the command.

HCP2727E *Mailboxname* message *msgaddr* contains invalid {ISFC | mailbox} function *function*.

Explanation

A message contains invalid information.

System action

None. Processing continues.

User response

If the problem persists, record the error messages and contact your IBM Support Center personnel.

HCP2728E Conversation *convid* does not exist.

Explanation

The conversation specified on either the DEACTIVE CONV command or on the QUERY CONV command does not exist.

System action

ISFC ignores the command.

User response

Enter the QUERY CONV DETAIL command to get the correct conversation ID. Then reissue DEACTIVE CONV if appropriate.

HCP2729E Conversation *convid* is for collection management. Conversation not deactivated.

Explanation

The conversation specified on the DEACTIVE CONV command is a collection management conversation (conversation between systems). These conversations cannot be deactivated.

System action

ISFC ignores the command.

User response

Issue the QUERY CONV command to find the remote node associated with the conversation, then issue QUERY ISLINK NODE *nodeid* to find the ISLINK(s) to deactivate.

HCP2730E System gateway *gateid* revoked.

Explanation

Ownership of the gateway was revoked.

System action

Connections through the system gateway are revoked by the remote node. ISFC will not attempt to reroute the connection to another gateway.

User response

None.

HCP2731E The variations of this message are explained below.

Explanation

- Identify for system gateway *gateid* failed. ISFC maxconn exceeded.
- Identify for system gateway *gateid* failed. IDENT maxconn exceeded.
- Identify for system gateway *gateid* failed. Not authorized for *IDENT.
- Identify for system gateway *gateid* failed. Programming error.

- Identify for system gateway *gateid* failed. I/O error reading directory.
- Identify for system gateway *gateid* failed. Max resource number exceeded.
- Identify for system gateway *gateid* failed. Duplicate gateway exists.

The system gateway could not be identified on the local z/VM system for the reason described.

System action

The gateway is not identified.

User response

Use the reason described to diagnose the problem and issue the DEACTIVE ISLINK command for each active ISFC link. The system will attempt to reidentify the system gateway the next time the ACTIVATE ISLINK command is issued.

HCP2732E **Invalid resource identification message *msgaddr* received from node *nodeid*.**

Explanation

An invalid message has been received from the remote node *nodeid* while the remote system and the local z/VM system were sharing resource information.

System action

Any information received after the invalid message is ignored by the local z/VM system.

User response

Issue the DEACTIVE ISLINK command to delete the link. Then issue the ACTIVATE ISLINK command to reattach the link. If the problem persists, contact your IBM Support Center personnel.

HCP2733E **Identify request from node *nodeid* for {resource *resid* | gateway *gateid*} is a duplicate –– {resource | gateway} rejected.**

Explanation

Either a user at node *nodeid* has attempted to identify a resource (global resource or gateway) that is already defined in the CS collection, or two domains are joining and a resource (global resource or gateway) in each of these domains is identified using the same identifier.

System action

If the user attempts to identify a resource that is already defined in the CS collection, the user's resource is not identified.

If two domains are joining with duplicate resource identifiers, a message is displayed at each system indicating that this error occurred and the resource is revoked at both domains.

User response

If the user should be authorized to identify the resource or the resources are not the same, assign a new and unique resource identifier to either the resource already defined to the CS collection or the resource at the node indicated in the message.

HCP2734E **Link device *rdev* connects to duplicate node *nodeid*.**

Explanation

The specified link device (*rdev*) is attempting to establish a connection with a neighbor in the ISFC collection, but the neighbor presented a *nodeid* value that appears to be a duplicate within the known ISFC collection (the CS collection accessible to the local z/VM system). Every node ID within the ISFC collection must be unique.

System action

On the local z/VM system, the link device (*rdev*) is left disconnected. The remote z/VM system may report this same problem (if both nodes have the same ID) or it may report that its attempt to join the CS collection has failed.

User response

Save the information and notify your system administrator.

Problem determination

Examine the ISFC collection to determine which two z/VM systems are using the same node ID. The CP QUERY GATEWAY and CP QUERY COLLECT commands (from the local z/VM system) can be used to find the instance of "nodeid" accessible to the local z/VM system. Assign a new and unique node ID to one of the systems currently sharing the same node ID.

HCP2735E **Adapter I/O error: ADDR=*rdev*, CMD=*cmdname*, STATUS=*status*, SENSE=*senseid*,**

CC=*condition_code*,
RC=*return_code*

Explanation

An I/O error has been detected by the channel-to-channel adapter.

System action

If the condition persists, the link is brought down and is no longer available for communications.

Operator response

Issue the DEACTIVE ISLINK command to delete the channel-to-channel adapter link, and then, issue the ACTIVATE ISLINK command to reattach the link. If the problem persists, save the information and contact your system programmer.

System programmer response

Verify that the link is in the ready state. When the link is in the ready state, issue the DEACTIVE ISLINK and ACTIVATE ISLINK commands. If the problem persists, call your IBM support representative.

HCP2736E **Paging error occurred while { processing | allocating} virtual page *addr* {of message *msgaddr* on *mailboxname* conversation *convid* (instance *nnnn*) | as a new data area }.**

Explanation

A paging I/O error occurred while VM was fetching a data page.

System action

The data page is purged. If the data page contained an adapter command message, the link goes down. If the data page contained work information, processing continues.

Operator response

Issue the DEACTIVE ISLINK command to delete the channel-to-channel link, and then, issue the ACTIVATE ISLINK command to reattach the link. If the problem persists, save the information and contact your system programmer.

System programmer response

Verify that the link is in the ready state. When the link is in the ready state, issue the DEACTIVE ISLINK and ACTIVATE ISLINK commands. If the problem persists, call your IBM support representative.

HCP2737E **Configuration error for adapter *addr*: { buffer count mismatch | wrong application or ISFC level }.**

Explanation

The system at the other end of the specified adapter is using a constant, application, or ISFC level that is different from this system.

System action

This link is disabled.

Operator response

The constant on one system must be changed to match the constant on the other system.

HCP2738E **Deactivate in progress for link *linkname* -- command rejected.**

Explanation

A user has attempted to deactivate a link that is currently in the process of being deactivated.

System action

The link is deactivated. The second DEACTIVE ISLINK command (the command that caused the message to be issued) is ignored.

User response

None.

HCP2739E **Message received from domain *domain* for invalid mailbox *mailboxname*.**

Explanation

A message was received for an invalid mailbox.

System action

System processing continues.

User response

If the problem persists, record the error message and contact your IBM Support Center personnel.

HCP2740E **The variations of this message are explained below.**

Explanation

- *Mailboxname* mailbox message received from domain *domain* for unknown domain *domain*.
- *Mailboxname* mailbox message received from unknown domain *domain* for domain *domain*.

A message was received for or from an unknown destination.

System action

System processing continues.

User response

If the problem persists, record the error message and contact the IBM Support Center.

HCP2741E ***Mailboxname* mailbox message received from domain *domain* for invalid conversation *convid* (instance *x*).**

Explanation

A message was received for an invalid conversation.

System action

System processing continues.

User response

If the problem persists, record the error message and contact your IBM Support Center personnel.

HCP2741E ***Mailboxname* mailbox message received from domain *domain* for invalid conversation *convid* (instance *x*).**

Explanation

A message was received for an invalid conversation.

System action

System processing continues.

User response

If the problem persists, record the error message and contact your IBM Support Center personnel.

HCP2742E **The variations of this message are explained below.**

Explanation

- Protocol error (*sense_code*) detected on *mailboxname* conversation *convid* (instance *x*) sending message *msgaddr*.
- Protocol error (*sense_code*) detected on *mailboxname* conversation *convid* (instance *x*) receiving message from domain *partner_domain*.
- Protocol error (*sense_code*) detected on *mailboxname* conversation *convid* (instance *x*) by domain *partner_domain*.

A protocol error was detected.

The following sense codes have been defined:

Code	Description
X'01'	Source node is not in the collection.
X'02'	Invalid mailbox name.
X'03'	Sequence error.
X'04'	Session message sent to a datagram mailbox.
X'05'	Datagram sent to a session mailbox.
X'06'	Open completion message contains an invalid session ID.
X'07'	Invalid source or target session ID.
X'08'	Session not complete.
X'0A'	Target node is not in the collection.
X'0C'	Invalid message size for function.

Operator response

Record the error message and notify your system programmer.

System programmer response

If the problem persists, contact the IBM Support Center.

HCP2743E **{Message | Frame } sequence error on mailboxname conversation *convid* (instance *x*) expected *nnnnn*, received *nnnnn*.**

Explanation

A message sequence error was detected.

Operator response

Record the error message and notify your system programmer.

System programmer response

If the problem persists, call your IBM support representative.

HCP2745E Link device *rdev* rejected. Defined node *nodeid1* conflicts with detected node *nodeid2*.

Explanation

An earlier ACTIVATE ISLINK command or ACTIVATE ISLINK statement in the system configuration file specified device number *rdev* and specifies that it is intended to be connected to node *nodeid1*. When the link was initialized, the device was configured to be connected to a different node, *nodeid2*.

System action

ACTIVATE processing fails for *rdev*.

User response

Use the DEACTIVATE ISLINK command to deactivate the failing link device, and repeat the ACTIVATE command without the NODE option, or specify the correct node name on the NODE option, or correct the ACTIVATE ISLINK statement in the system configuration file.

HCP2746E Deactivate failed. Node *node1* was specified on the command, but link device *rdev* is connected to node *node2*.

Explanation

A DEACTIVATE ISLINK command was issued specifying device number *rdev* and specifying node ID *node1*. However, the device was configured to be connected to a different node, *node2*.

System action

Processing stops for the DEACTIVATE command. If any devices were specified prior to *rdev* in the command invocation, they were successfully deactivated.

User response

Correct the node ID specified in the command, or remove the NODE option.

HCP2748I Unexpected ISFC error *errorcode* on *function description*.

Explanation

The Control Program received an unexpected error.

System action

None.

User response

Use the QUERY ISLINK, QUERY SSI CONNECTIVITY, and QUERY ISFC TRANSPORT commands to gather information about the state of the ISFC collection. Provide this information along with the message text to your IBM Support Center personnel.

HCP2749E Link device *rdev* detected a buffer error and initiated a reset.

Explanation

The ISFC device driver received a message buffer which did not follow the expected protocol.

System action

The ISFC device driver resets device *rdev* and repeats the initialization attempt.

User response

If this is a transient problem (reported once as the link device is being activated) and subsequent messages indicate that the link is activated properly, then no action is required. If this message is persistent, and the link device cannot function, then examine the hardware configuration to verify that the other side of this device is connected to a compatible ISFC device driver.

HCP2750I ISFC ACTIVATE is deferred for offline device *devno*.

Explanation

An ACTIVATE ISLINK command was issued for device number *devno*, which is offline.

System action

CP waits for the device to be varied online or for a DEACT ISLINK command to be issued for the device.

User response

Vary the device online or issue a DEACT ISLINK command for the device.

HCP2751E **Diagnose {code *diag* does|codes *diag1-diag2* do} not exist**

Explanation

An unknown DIAGNOSE code (or a range of unknown DIAGNOSE codes) was specified on one of the following commands:

- DISABLE DIAGNOSE
- ENABLE DIAGNOSE
- LOCATE DGNBK
- MODIFY DIAGNOSE
- QUERY DIAGNOSE.

System action

CP rejects the command; system operation continues.

User response

Enter the command again and specify an existing DIAGNOSE code or a range of existing DIAGNOSE codes.

HCP2752E **Exit { number *exit* does | numbers [*exit1-exit2*] do } not exist**

Explanation

An unknown CP exit point number (or a range of unknown CP exit point numbers) was specified on one of the following commands:

- ASSOCIATE EXIT
- DISABLE EXITS
- DISASSOCIATE
- ENABLE EXITS
- LOCATE XITBK
- QUERY EXITS

Most variations of this message will display the unknown CP exit point numbers that were specified on the command. If this message does not display any numbers, you do not have any CP exit points defined on your system.

System action

CP rejects the command; system operation continues.

User response

Enter the command again and specify an existing CP exit point number or a range of existing CP exit point numbers.

If there are no CP exit points established on your system, which would be done by ASSOCIATE EXIT, then you cannot change or interrogate them or their control blocks.

HCP2753E **The {specified|requested} control entry point caused CPXLOAD to fail *reason***

Explanation

CP did not load the customer-written CP routines because there was a problem with the entry point specified with the CONTROL operand. The problem occurred because of the specified *reason*:

Cannot find the specified entry point
CP tried to locate the entry point name specified by the CONTROL keyword, but could not find it. Perhaps the entry point name was misspelled or had not been loaded.

It is a TEMPORARY entry point
CP did locate the entry point name specified by the CONTROL keyword. Unfortunately, the entry point name was loaded by a prior CPXLOAD that specified TEMPORARY. A TEMPORARY CPXLOAD entry point name may not be used as the control entry point name for a different CPXLOAD request.

The specified entry point was marked for deletion
The entry point name specified by the CONTROL keyword was marked for deletion by a ".DEL" TEXT-file statement or by a CHANGE directive.

Cannot call the specified entry point
CP tried to call the entry point name, but the attempt failed. This could be because there exists a mismatch between the related ICRBK and ICLBK control blocks, or other internal mismatch.

The specified entry point rejected the CPXLOAD request with return code *nn*
CP called the entry point name and the entry point returned a nonzero return code of *nn*. Any nonzero return code directs CP to reject the request.

The call-by-register vector in the HCPENTER macro expansion for the specified entry point was not valid
An incorrect value was specified for the CONTROL operand of the CPXLOAD command or statement, possibly because the entry point name was misspelled or the module name was specified.

System action

CP rejects the command; system operation continues.

User response

Your action depends on the indicated *reason*:

Cannot find the specified entry point
Make sure that the specified entry point name is correct.

It is a TEMPORARY entry point
Make sure that the specified entry point name is loaded PERMANENT.

The specified entry point was marked for deletion
Make sure that the specified entry point name is not marked to be deleted so that CP can call it.

Cannot call the specified entry point
Investigate why CP could not call the entry point. You may need to establish TRSOURCE tracing or even cause a system dump.

The specified entry point rejected the CPXLOAD request with return code *nn*
Investigate why the entry point rejected the request.

The call-by-register vector in the HCPENTER macro expansion for the specified entry point was not valid
Make sure that the entry point name specified for the CONTROL operand is correct.

HCP2754E Language *xxxxx* for Component *yyy* does not exist

Explanation

A language and component was specified on the DISASSOCIATE MESSAGES command that is not already associated with an entry point.

System action

The command is not processed.

User response

Use the QUERY CPLANGUAGE ASSOCIATED command to determine the correct language and component identifier then enter the command again with the corrected information.

HCP2755E Encountered I/O error while loading cards

Explanation

An I/O error occurred while CP was loading cards from the customer-written CP routines into the system execution space.

System action

CP rejects the CPXLOAD command and does not load the customer-written CP routines into the system execution space; system operation continues.

User response

Use EREP, TRSOURCE, or other tracing tools to determine the nature of the I/O error.

HCP2756E Encountered verify card failure

Explanation

One or more VER (verify) cards failed while CP was loading the customer-written CP routines into the system execution space.

System action

CP rejects the CPXLOAD command and does not load the customer-written CP routines into the system execution space; system operation continues.

User response

Message HCP8040E, which shows the ".VER" failed, should also have been displayed. Investigate which bytes failed verification. Correct or remove the faulty cards, and enter the CPXLOAD request again.

HCP2757E This option[, or its opposite,] has already been specified - *option*

Explanation

An option was specified on an OPTIONS directive that duplicates or conflicts with an option specified on a previous OPTIONS directive.

System action

CP rejects the request; system operation continues.

User response

Enter the request again, making sure not to specify duplicate options or their opposites.

HCP2758E External symbol *xxxxxxxx* contains incompatible parser syntax control blocks

Explanation

As CP parses commands and statements, it examines the contents of certain control blocks to make sure that they are of the correct format before using other

data in them. During this process, CP detected a control block that had incorrect internal format.

System action

CP disconnects the control block from the other parser control blocks; system operation continues. If the control blocks that remain can satisfactorily describe the syntax for the input, then the request is accepted. However, if the control blocks that remain cannot describe the syntax for the input, then the request is rejected.

User response

Examine the contents of the parser control blocks located at the external symbol name displayed in the message. Ensure that the control blocks were generated by using the proper MACLIB files for the level of CP.

If there is no intelligible external symbol name in the message, ensure that the parameter registers provided to the parser actually point to the intended data structures.

Note: The message should be of the form HCP*xxxnn*, where *xxx* is the identifier of the module where the parameters are defined and *nn* is a one- or two-digit number.

HCP2759E **Symbol *symbol* is referenced in this file, but was defined in a TEMPORARY CPXLOAD file**

Explanation

A CPXLOAD operation was started. The file being loaded has an address constant to an external symbol. That symbol is in a file that was previously loaded as TEMPORARY. This situation is not allowed because the file containing the symbol can be unloaded with the CPXUNLOAD command at any time.

System action

The CPXLOAD operation does not complete.

User response

A CPXLOAD routine can always have an adcon to a PERMANENT symbol. It can also have an adcon to a symbol in a TEMPORARY file if the file that defines the symbol and the file that has the adcon are loaded as part of the same CPXLOAD operation. They would then exist under the same load ID (so they would both be unloaded together with a CPXUNLOAD). You have two options:

1. Ensure the file that contains the external symbol is reloaded as PERMANENT. You can find the current load ID for that file by specifying QUERY CPXLOAD EPNAME *symbol name*. (Refer to *z/VM: CP Commands and Utilities Reference* and *z/VM: CP Planning and Administration* for QUERY CPXLOAD, CPXUNLOAD, and CPXLOAD command and statement information.)
2. Ensure the file that defines the symbol and all the files that have an address constant for the symbol are loaded with one CPXLOAD operation. You can use the INCLUDE loader directive to accomplish this task (refer to *z/VM: CP Exit Customization*). You could also place all the files to be loaded in a TXTLIB. Loading all the files under one CPXLOAD operation allows you to load these files as TEMPORARY and thus be able to unload them at some point in the future.

HCP2760E **Symbol *symbol* is defined in the TEMPORARY file, but CPXLOAD ID *id* refers to it**

Explanation

A CPXLOAD operation was started. A file is being loaded with the TEMPORARY option. It defines an external symbol that will satisfy an existing unresolved reference from a previous CPXLOAD operation. This situation is not allowed because the file containing the symbol can be unloaded with a CPXUNLOAD command at any time.

System action

The CPXLOAD operation does not complete.

User response

A CPXLOAD routine can always have an adcon to a PERMANENT symbol. It can also have an adcon to a symbol in a TEMPORARY file if the file that defines the symbol and the file that has the adcon are loaded as part of the same CPXLOAD operation. They would then exist under the same load ID (so they would both be unloaded together with a CPXUNLOAD). You have two options:

1. Ensure the file that contains the external symbol is CPXLOADed as PERMANENT. (Refer to *z/VM: CP Commands and Utilities Reference* and *z/VM: CP Planning and Administration* for CPXLOAD command and statement information.)
2. Ensure the file that defines the symbol and all the files that have an address constant for the symbol are loaded with one CPXLOAD operation. You can use the INCLUDE loader directive to accomplish this task (refer to *z/VM: CP Exit Customization*).

You could also place all the files to be loaded in a TXTLIB. Loading all the files under one CPXLOAD operation allows you to load these files as TEMPORARY and thus be able to unload them at some point in the future.

HCP2761E Encountered duplicate member in file *fn ft fm*

Explanation

A CPXLOAD command or configuration file statement is attempting to select the members to load from a file based on a member pattern specified on the CPXLOAD request. An error is reported if a member is selected, but multiple copies of that member are contained within the file.

System action

Processing of the requested function stops. System operation continues.

User response

Use CPLISTFILE to get a list of the members contained in the file. You should not create a file that contains multiple copies of the same member. Correct the problem and enter the command again.

HCP2765E CP Exit *nnnn* [entry point name *epname*] has returned unsupported [exit control] return code *xxxx*

Explanation

CP exit *nnnn* has returned an unsupported return code value of *xxxx* by way of register 15. If the unsupported return code is a control return code, then the entry point name is shown. Otherwise, the unsupported return code is a mainline return code.

System action

System operation continues.

If an unsupported control return code was detected, then soft abend ZXU001 is generated. No further entry points associated with this exit are invoked. Processing continues where the exit was invoked.

If an unsupported mainline return code was detected, then the additional action that CP takes depends on the exit number and how it is coded to handle unsupported mainline return codes.

User response

Investigate why the exit routine returned the unsupported return code. This may require investigation of source code for the exit routine, use of TRSOURCE, or even a system dump. For further information on return codes generated by exit routines, refer to *z/VM: CP Exit Customization*.

HCP2766E Attempt to open file *fn ft fm* failed, return code from open is *nnnn*

Explanation

A command or a configuration file statement that allows you to specify file information (for example, CPXLOAD) is processing. An error was encountered while trying to get information from that file.

System action

Processing of the requested function stops. System operation continues.

User response

Check the return code provided. A complete list of possible return codes is maintained in an internal control block (HCPDRBK COPY).

HCP2767E Nothing was loaded

Explanation

At the conclusion of CPXLOAD processing, there was nothing left to be loaded. This could be because no CSECTs were in the input files, because all CSECTs were of length 0, or because all CSECTs were deleted by ".DEL" TEXT statement or by CHANGE directives.

System action

CP rejects the request; system operation continues.

User response

Make sure that you are actually trying to load something. Enter the request again.

HCP2768E Missing {algorithm type | crypto AP number | crypto domain number | cylinder number | entry point name | file member name | file name | file type | groupname | I/O priority | number | product | product state | record number | ssi_level | ssi_name | switchname | track number | userid | variable name}

Explanation

You specified a statement or command, but did not supply the information that is indicated in the error message.

System action

CP rejects the request; system operation continues.

User response

Enter the request again. Provide all required information.

HCP2769E	The variations of this message are explained below.
— Variation 1	CPXUNLOAD for load ID *loadid* has been rejected; the request was denied by the control entry point

Explanation

A problem occurred while trying to unload the customer-written CP routines associated with load identifier *loadid*. CP called the entry point name, and the entry point returned a nonzero return code. Any nonzero return code directs CP to reject the request.

System action

CP rejects the CPXUNLOAD command. System operation continues.

User response

Investigate why the entry point rejected the request.

— Variation 2	CPXUNLOAD for load ID *loadid* has been rejected; the requested load ID was not found

Explanation

A problem occurred while trying to unload the customer-written CP routines associated with load identifier *loadid*. The routines were not unloaded because CP could not find the load ID to unload; perhaps because it was never loaded in the first place or already unloaded.

System action

CP rejects the CPXUNLOAD command. System operation continues.

User response

Enter the request again, making sure to specify the correct load ID. Use QUERY CPXLOAD to help find the load ID that you want.

— Variation 3	CPXUNLOAD for load ID *loadid* has been rejected; the requested load ID was loaded as PERMANENT

Explanation

A problem occurred while trying to unload the customer-written CP routines associated with load identifier *loadid*. When the CPXLOAD operation for the load ID was performed, option PERMANENT was supplied, directing CP to reject any CPXUNLOAD request for the load ID.

System action

CP rejects the CPXUNLOAD command. System operation continues.

User response

CP may not perform the unload. You must re-IPL your system to remove the external entry points associated with the load ID. If you need to be able to unload the external entry points, then you must specify TEMPORARY when CPXLOAD is requested.

— Variation 4	CPXUNLOAD for load ID *loadid* has been rejected; the requested load ID is still in use by a system service

Explanation

A problem occurred while trying to unload the customer-written CP routines associated with load identifier *loadid*. At least one external entry point associated with the load ID is in use by CP as a message repository or for a TRSOURCE trace entry.

System action

CP rejects the CPXUNLOAD command. System operation continues.

User response

After terminating usage (by DISASSOCIATE MESSAGE or by TRSOURCE DROP), you may enter the request again.

HCP2770I	CPXUNLOAD for load ID *loadid* has been scheduled

Explanation

This is an informational message telling you that CP has accepted your request to unload the customer-written CP routines assigned to load identifier *loadid*, but has not completed unloading all of the routines.

System action

After unloading all the customer-written CP routines, CP issues message HCP2771I; system operation continues.

User response

None.

HCP2771I **CPXUNLOAD for load ID *loadid* has been completed**

Explanation

This is an informational message telling you that CP has finished unloading all the customer-written CP routines assigned to load identifier *loadid*.

System action

CP displays the message text; system operation continues.

User response

None.

HCP2772E **Relocatable address constant is not 4 bytes long**

Explanation

An address constant, requiring address relocation, was found in the file that you tried to load. All relocated address values in CP must be 4 bytes long.

System action

CP rejects the request; system operation continues.

User response

Investigate the source code for the file that you tried to load, looking for any address constants not 4 bytes long that require relocation. These would typically be found in DC (Define Constant) or CCW (Channel Command Word) assembler statements. Expand DC addresses to 4 bytes; convert CCW and CCW0 statements to CCW1 statements.

HCP2773I **Entry point name *name* is unknown at this time; processing continues**

Explanation

This is an informational message that displays the name of an entry point that CP cannot locate at this time. This entry point is associated with a CP command, DIAGNOSE code, CP exit point, or local message repository.

This message can occur during CP initialization as the result of configuration file processing. If the CPXLOAD statement is specified in the configuration file without the NODELAY operand, then the load of the code containing the entry point may be delayed until after the statement that needs the entry point (such as ASSOCIATE EXIT) is processed.

System action

CP displays the message text; system operation continues.

User response

If you misspelled the name of the entry point, use one of the following commands to correct the mistake:

- ASSOCIATE EXIT
- ASSOCIATE MESSAGES or MSGS
- DISASSOCIATE
- MODIFY COMMAND or CMD
- MODIFY DIAGNOSE

If the entry point name is correct, make it known to CP by using the CPXLOAD command to load the file (or files) that contain the specified entry point name.

For more information about any of these commands, refer to *z/VM: CP Commands and Utilities Reference*.

HCP2774E **Multiple commands match this [alias] request (*command1*, *command2*)**

Explanation

You specified a command name abbreviation or alias abbreviation that satisfies more than one entry. The error message shows two names, although there may be more. For example, "DISABLE CMD LOG" could be mistaken for "LOGON" or "LOGIN" or "LOGOFF" or "LOGOUT".

System action

CP rejects the request; system operation continues.

User response

Enter the request again, specifying more of the name that you want to affect in order to be less ambiguous.

HCP2775E External security virtual machine is running. You cannot define new commands at this time

Explanation

CP rejected the request to define a new command because your external security manager (ESM) is enabled. You cannot define new CP commands, subcommands, aliases, or new versions of existing CP commands while the ESM is enabled.

System action

CP does not define the new command; system operation continues.

User response

Disable your ESM, and define the command again.

HCP2777I {Operand|Option|Filemode} {*operand*|DELAY|NODELAY|*filemode*} has been ignored

Explanation

The operand, option, or file mode has been specified at a time when that input is inappropriate. For example:

- Specifying file mode and NODELAY on a CPXLOAD statement in the SYSTEM CONFIG file
- Specifying DELAY on a CPXLOAD command
- Specifying NOIOASSIST on an ATTACH command
- Specifying NOIOASSIST on a DEDICATE statement in the user directory.

System action

CP ignores the datum; processing of the request continues.

User response

Remove the offending datum so that future occurrences will be avoided.

HCP2778E {Language|Component} identifier {*langid*|*compid*} is not valid

Explanation

You entered either:

- An ASSOCIATE MESSAGES or MSGS command to assign entry points and external symbols to a local message repository
- A DISASSOCIATE command to revoke all entry point and external symbol assignments from a local message repository.

If you are assigning entry points and external symbols, CP objected to your component identifier (ID) because it is longer than the maximum three characters. If you are revoking assignments, CP objected to your language or component ID because either it is too long or that ID is not currently assigned to that local message repository.

System action

CP rejects the command; system operation continues.

User response

If assigning entry points and external symbols, enter the ASSOCIATE MESSAGES or MSGS command again and specify a 1- to 3-character component ID.
If revoking assignments, enter the DISASSOCIATE command again and specify a 1- to 3-character ID that is currently assigned as the language or component ID.

HCP2779E CP Exit *exit* has rejected the request

Explanation

The module associated with the CP exit number *nnnn* has returned to CP a return code in register 15 that directs CP to reject whatever you were trying to do.

System action

System operation continues. The action that CP takes depends on which request was rejected.

User response

Investigate why the exit routine rejected your request. This may require investigation of source code for the exit routine, use of TRSOURCE, or even a system dump.

HCP2780I [*token*|*string*]

Explanation

A system configuration file processed a SAY statement, used to write a blank line or text to the operator's console, subsequently issuing this informational message. *token* or *string* is the displayed text.

token is text not delimited by quotation marks, converted to upper case, and displayed. *string* is text delimited by quotation marks, unchanged and displayed without delimiting quotation marks.

System action

None. Processing continues.

User response

None. See the SAY Statement in *z/VM: CP Planning and Administration* for more information.

HCP2781E **NIC *vdev* not created; network devices *base-last* could not be defined**

Explanation

vdev
The base virtual device address of the specified adapter.

base
The virtual device address of the first network interface device that would be required for this adapter.

last
The virtual device address of the last network interface device that would be required for this adapter.

A DEFINE NIC command was rejected because the current virtual device configuration already has at least one device in the range that would be required by this adapter. The adapter requires a range of virtual I/O addresses beginning with the base device, and including every subsequent I/O address until the device count is satisfied.

An implied DEFINE NIC (performed on behalf of a SPECIAL statement) might also encounter this error. A SPECIAL statement might specify a device address or a device count that conflicts with other virtual devices.

System action

The operating system did not create a new virtual adapter.

User response

Remove the conflicting device (or devices), or specify a different base device number or device count to define this network adapter.

HCP2782E **The variations of this message are explained below.**

Explanation

- LAN *ownerid lanname* not created; this name is already in use
- VSWITCH SYSTEM *switchnm* not created; this name is already in use
- LAN *ownerid lanname* not created; a detach is in progress for a VSWITCH with that name
- VSWITCH SYSTEM *switchnm* not created; a detach is in progress for a VSWITCH with that name
- VSWITCH SYSTEM *switchnm* is not created; an IVL virtual switch already exists

A DEFINE VSWITCH or DEFINE LAN command was rejected because the specified virtual switch or LAN already exists. Only one virtual switch can be defined using TYPE IVL on a system running z/VM. A virtual switch is qualified by *switchnm*, and only one virtual switch can exist with this *switchnm*. A guest LAN is fully qualified by *ownerid* and *lanname*, and only one LAN can exist with this combination of *ownerid* and *lanname*.

System action

The operating system did not create a new virtual switch or LAN. The existing virtual switch or LAN is not affected.

User response

This message does not necessarily represent an error. This would be a normal response to a redundant DEFINE VSWITCH or DEFINE LAN command. If you must create a unique virtual switch or LAN, some options are:

- DEFINE this new virtual switch with a different switch name.
- DEFINE this new LAN with a different owner ID, or a different LAN name (and notify potential users of this LAN of the new owner/lanname).
- DETACH the other LAN so you can DEFINE the new one. Note that this would disrupt any existing users of the LAN.

For the "detach in progress" formats of this message, retry the DEFINE command. Detach processing should complete following a brief wait. If the message is issued again, contact the IBM Support Center.

HCP2783E **The variations of this message are explained below.**

Explanation

- Port group *groupname* does not exist
- LAN *ownerid lanname* does not exist

- RDEV *vdev* does not exist
- VSWITCH *switchnm* does not exist
- LAN *ownerid lanname* of type *type* does not exist
- VSWITCH SYSTEM *switchnm* of type *type* does not exist

A command was rejected because the specified group, LAN, device, or virtual switch is not currently defined. Both parts (*ownerid* and *lanname*) are required to fully qualify a guest LAN.

System action

The operating system did not perform the requested function.

User response

Use the QUERY PORT, QUERY LAN, or QUERY VSWITCH command to determine the correct identifier for the requested command.

HCP2784E The variations of this message are explained below.

Explanation

- LAN *ownerid lanname* not created; VMLAN limit has been reached
- VSWITCH *switchnm* not created; VMLAN limit has been reached

A DEFINE VSWITCH or DEFINE LAN command was rejected because a limit has been set on the number of virtual switches or LAN segments, and that limit has already been reached. The system VMLAN limit is set in the SYSTEM CONFIG file by the VMLAN statement. Note that this limit is not imposed on the DEFINE LAN or DEFINE VSWITCH statements in the SYSTEM CONFIG file, so it is possible to find more guest LANs than the limit will allow.

System action

The operating system did not create a new virtual switch or LAN.

User response

To create a new virtual switch or LAN, you need to reduce the number of guest LANs in the system or increase the global system limit. Some options follow:

- If you control other virtual switches or guest LANs that are not needed, you can DETACH those virtual switches or segments and DEFINE new virtual switches or VM LAN segments.
- Update the SYSTEM CONFIG file to increase the number of guest LANs allowed on the system (or request this change through authorized system administration personnel).
- Add a DEFINE LAN or DEFINE VSWITCH statement to the SYSTEM CONFIG file to create this LAN or virtual switch during CP system initialization (or request this change through authorized system administration personnel).

Note that you can use QUERY VMLAN to find out the limits that have been set on this system.

HCP2785E LAN name is missing

Explanation

A CP command was rejected because the LAN name was not specified. Both *ownerid* and *lanname* are required to fully qualify a guest LAN.

System action

The operating system did not perform the command that was issued.

User response

Issue the command, adding the LAN name (and the owning user ID, if that is appropriate for the command).

HCP2786E NIC *vdev* not connected; the LAN name is not valid

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected; therefore the command is rejected. The target LAN was not properly identified.

System action

The operating system did not perform the command that was issued.

User response

Issue the command, adding the correct LAN name (and the owning user ID, if that is appropriate for the command).

HCP2787E NIC *vdev* not connected; LAN *ownerid lanname* does not exist

Explanation

The base virtual device address of the virtual network adapter (NIC) specified for the COUPLE command was not connected and the command is rejected; the target LAN does not exist. Note that both *ownerid* and *lanname* are required to identify a virtual LAN segment.

System action

The virtual network adapter (NIC) is left in an uncoupled state. If it was connected to another LAN prior to this command, that connection is released.

User response

If the LAN is specified correctly, you need to determine why the LAN has not been created (or why it has been destroyed). If you are the LAN owner, you can DEFINE the LAN yourself. Otherwise, you will need help from the LAN owner, or a System Administrator.

HCP2788E **The variations of this message are explained below.**

Explanation

- NIC *vdev* not connected; already connected to LAN *ownerid lanname*
- NIC *vdev* not connected; already connected to VSWITCH *switchname*
- NIC *vdev* not connected; already connected to VSWITCH *ownerid switchname* port *portnum*

A COUPLE command was rejected because your virtual adapter (identified here by *vdev*) is already connected to the specified virtual switch or LAN. This would disrupt your existing connection to the virtual switch or LAN.

System action

The operating system will not disrupt the existing connection between your virtual adapter (NIC) and the virtual switch or LAN.

User response

If this was a redundant command, no action is required. If, instead, you were trying to reset the connection, you should uncouple the virtual adapter and then issue this COUPLE command.

HCP2789E **NIC *vdev* not connected; LAN *ownerid lanname* has reached its [MAXCONN | internal] limit**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected and the command is rejected; the target LAN connection count has reached the limit (determined by the MAXCONN parameter).

System action

The virtual network adapter (NIC) is left in an uncoupled state. If it was connected to another LAN prior to this command, that connection is released.

User response

Retry the connection at a later time, or ask the LAN owner to define the LAN with a higher MAXCONN value.

HCP2790E **NIC *vdev* not connected; LAN *ownerid lanname* has a conflicting adapter**

Explanation

A COUPLE command was rejected because this adapter could not be installed in the target LAN structure. This error is only expected under extreme conditions.

System action

The virtual network adapter (NIC) is left in an uncoupled state. If it was connected to another LAN prior to this command, that connection is released.

User response

Retry the connection at a later time.

HCP2791E **NIC *vdev* was not connected to a LAN**

Explanation

An UNCOUPLE command was rejected because the specified virtual network adapter (NIC) is already in the uncoupled state. It was not connected to a LAN.

System action

The virtual network adapter (NIC) is left in an uncoupled state.

User response

Because the apparent intent of the command was to place the adapter in an uncoupled state, no further

action is required. This message is only intended to alert you to the fact that an UNCOUPLE command was not necessary.

HCP2792E **OSA *vdev* has not been redefined because it is part of a virtual network adapter**

Explanation

A DEFINE command was rejected because it represents an attempt to redefine (change the device address of) a virtual OSA device that is part of a virtual network adapter. The DEFINE NIC command creates a series of virtual OSA devices that cannot be reconfigured (moved) individually.

System action

The operating system did not redefine the subject virtual device.

User response

If you must move the subject virtual device, you will have to detach the adapter first (DETACH NIC) and define the adapter at a new location (DEFINE NIC).

HCP2793E **The variations of this message are explained below.**

Explanation

- Device *vdev* not detached; DETACH NIC *base* to remove network devices *base-last*
- Device *vdev* not detached; SET VSWITCH *switchname* DISCONNECT to remove network devices *base-last*
- Device *vdev* not detached; SET VSWITCH *switchname* BRIDGEPORT DISCONNECT to remove network devices *base-last*

where:

vdev
Is the virtual device address specified on the DETACH command.

switchname
Is the name of the virtual switch.

base
Is the base virtual device in the range owned by the associated network adapter or virtual switch.

last
Is the last virtual device in the range owned by the associated network adapter or virtual switch.

A DETACH command was rejected due to one of the following:

1. It represents an attempt to disconnect a virtual OSA device that is part of a virtual network adapter. The DEFINE command creates a series of virtual OSA devices that cannot be disconnected individually.
2. It represents an attempt to disconnect an OSA device that is in use as an uplink port or bridge port for a virtual switch.

System action

The operating system did not modify the subject device.

User response

If you must modify the subject virtual device, you will have to detach the adapter using the DETACH NIC command.

HCP2794E **NIC *vdev* not created; *devs* is outside the valid range of *mindevs* to *maxdevs***

Explanation

vdev
The base virtual device address of the specified adapter.

devs
The number of network I/O devices allowed.

mindevs
The minimum valid number of devices allowed.

maxdevs
The maximum valid number of devices allowed.

A DEFINE NIC command was rejected because the DEVICES parameter specified a number that was outside the valid range for this adapter. For a virtual HiperSockets adapter, the valid range is 3-3072.

An implied DEFINE NIC (performed on behalf of a SPECIAL statement) might also encounter this error. A SPECIAL statement for a HIPER device type might specify a device count that is not valid on the current CP level.

System action

The operating system did not create a new virtual adapter.

User response

Specify a device count via the DEVICES parameter that is in the valid range. For a virtual HiperSockets adapter, the valid range is 3-3072.

HCP2795E	The variations of this message are explained below.
— Variation 1	You are not authorized to {DEFINE|DETACH|SET} LAN *lanname* for OWNERID *ownerid*

Explanation

A DEFINE LAN, DETACH LAN, or SET LAN command was rejected because the specified OWNERID did not match your current z/VM user ID, and you are not authorized to operate on a LAN that is owned by another user. Your z/VM user ID must have class B authority to use this form of the command. If you only have class G authority, the OWNERID parameter must resolve to your logon user ID.

System action

The operating system will not act on the DEFINE LAN, DETACH LAN, or SET LAN command.

User response

If your z/VM user ID has class G authority, you should DEFINE, DETACH, or SET attributes for a LAN that you own. If you must operate on a LAN that belongs to another user, you must logon to the other user ID (or use Secondary Console Facility) to issue the command or issue the command from a user ID with class B privileges.

— Variation 2	You are not authorized to override LAN ACCOUNTING

Explanation

This format of the message is produced when a user without class B authority tries to issue a CP DEFINE LAN or CP SET LAN command with the ACCOUNT ON/OFF operand.

System action

The operating system will not act on the DEFINE LAN or SET LAN command.

User response

If your z/VM user ID has class G authority, you should not try to use the ACCOUNT operand. If you must override the default ACCOUNTING status for a guest LAN, you must issue the DEFINE LAN or SET LAN from a user ID with class B privilege.

— Variation 3	Promiscuous Mode must be used on a data device

Explanation

The *vdev* used on the SET NIC command was not a valid data device. Promiscuous mode can only be activated on a data device.

System action

The operating system will not act on the DEFINE LAN or SET LAN command.

User response

Issue QUERY NIC DETAILS for the NIC device you are trying to modify and obtain the correct data device. Make sure the device is initialized with a data device. Try the command again with a data device.

— Variation 4	Promiscuous Mode can not be used with a HiperSockets device

Explanation

The SET NIC command can not be used to activate promiscuous mode on a HiperSockets device.

System action

CP rejects the request. System operation continues.

User response

Try the command again with a QDIO data device. If you need to trace a HiperSockets LAN, use a TRSOURCE TYPE LAN trace.

HCP2796E	LAN *ownerid lanname* not created; user *ownerid* is not logged on

Explanation

The Class B DEFINE LAN command allows the invoker to create a virtual LAN segment belonging to another user. In this case, the DEFINE LAN command was rejected because it would create a TRANSIENT LAN and the designated owner is not online. Note that a TRANSIENT LAN with no coupled adapters would normally be removed from the system when the owner is offline.

System action

The specified guest LAN is not created.

User response

If you need to create a guest LAN belonging to this user, your options are:

- take action to logon the designated owner, or

- DEFINE this LAN in the SYSTEM CONFIG file to make it PERSISTENT.

HCP2797E	The variations of this message are explained below.
— Variation 1	NIC *vdev* not created {SSI cluster mode not stable | Guest relocation active}.

Explanation

The virtual adapter can not be allocated because the SSI cluster mode is unstable or a guest is currently being relocated.

System action

The operating system did not create a new virtual adapter.

User response

Determine why the SSI cluster mode is not stable or wait for relocation to finish.

— Variation 2	NIC *vdev* not created; {No CHPID is available | CHPID *nn* is already in use | No MACID is available | MACID *nn* is already in use [by *userid*] | MACID *nn* is not within USER MACIDRANGE.}

Explanation

Either every available CHPID (channel path ID) or MACID (adapter MAC address) on your virtual machine is being used, or the CHPID number (*nn*) or the MACID number (*nn*) specified in the DEFINE command cannot be allocated to the new device because it is already in use for a device with a different CHPID or MAC type.

For the message format containing "MACID is not within USER MACIDRANGE," the value specified in the NICDEF directory statement for the user is incorrect. It must be within the USER MACIDRANGE specified on the VMLAN statement in the system configuration file.

System action

The operating system did not create a new virtual adapter.

User response

Detach one or more virtual devices to make a CHPID or MACID available, reissue the command and specify a different CHPID or MACID number, or correct the NICDEF directory statement with a valid USER MACIDRANGGE specification.

— Variation 3	NIC *vdev* not created; Unsupported type.

Explanation

The NIC adapter type IEDN or INMN specified in the NICDEF directory statement is incorrect. IEDN and INMN types are no longer supported.

System action

The operating system did not create a new virtual adapter.

User response

Correct the NICDEF directory statement with a valid NIC type.

HCP2799E	{ SET PORT GROUP | VSWITCH } change is not allowed.

Explanation

A request to update a virtual switch or port group cannot complete because the virtual switch is in a state where the change is not allowed.

System action

System operation continues.

System programmer response

Message "HCP2830I" on page 630 is issued to explain the current state of the virtual switch and to display the name of the z/VM TCP/IP virtual machine acting as virtual controller. See message "HCP2830I" on page 630 for more information.

HCP2800E	The variations of this message are explained below.
— Variation 1	One or more targets is not a CF service machine.

Explanation

You tried to manipulate a CFLINK, but one or both of the virtual machines you specified is not a CFVM.

System action

No configuration change.

User response

Ensure that the command nominates two virtual machines that are both CFVMs.

— Variation 2 ***msgprocid*** **is not an authorized CF Service Machine.**

Explanation

A user attempted to define a message processor using the DEFINE MSGPROC command, but the specified user ID is not set up as a CF Service Machine.

System action

The command does not execute. System operation continues

User response

Reissue the command, specifying a valid CF Service Machine user ID. If the problem persists, verify that the user ID is set up in the system directory as a CF Service Machine and has the CFVM operand on an OPTION directory statement in its directory.

HCP2801E **Unable to define consecutive message devices starting with device *nnnn***

Explanation

A user attempted to establish a connection to a message processor using the DEFINE MSGPROC command or the MSGPROC operand of the SPECIAL directory statement, but the virtual device number specified cannot be used.

System action

The message device is not defined. System operation continues.

User response

If the DEFINE MSGPROC command was used, reissue the command specifying the first of four consecutive virtual device numbers that are not used in your configuration. The device number must be a 1-digit to 4-digit hexadecimal number between X'0000' and X'FFFC'.

If the SPECIAL directory statement was used, modify your SPECIAL directory statement to specify the first of four consecutive virtual device numbers that are not used in your configuration.

HCP2802E **The maximum number of connections {to|from} *userid* are already defined.**

Explanation

A user attempted to establish a connection to a message processor using the DEFINE MSGPROC command or the MSGPROC operand of the SPECIAL directory statement, but the connection could not be made. The maximum number of connections allowed either from your virtual machine or the maximum connections to a single CF Service Machine were already established. The *userid* returned in the message determines which connection limit was reached.

If a CF Service Machine user ID was specified in *userid*, then the maximum number of coupled guests that can connect to the specified CF Service Machine was reached. Guest Coupling Facility Support in z/VM will allow up to 32 coupled guests to be connected to a CF Service Machine.

If your user ID was specified in *userid:*, then your user ID has reached the allowed limit for the number of CF Service Machines that can connect. Guest Coupling support in z/VM will only allow a single coupled guest to connect to a maximum of eight different CF Service Machines at one time.

System action

The command does not execute. System operation continues.

User response

None.

HCP2803E **A coupled connection with CF Service Machine *msgprocid* already exists.**

Explanation

The virtual message processor *msgprocid* is already defined within the virtual machine's I/O configuration.

System action

The command does not execute. System operation continues.

User response

Verify that the *msgprocid* specified is the correct message processor user ID that you wish to define. If it is not the intended message processor, then reissue the DEFINE MSGPROC command with the correct *msgprocid*.

HCP2804I **Message devices *range* defined and coupled to *msgprocid*.**

Explanation

A message facility environment has been successfully created and connected to the CF Service Machine specified by *msgprocid*.

System action

System operation continues.

User response

None.

HCP2805E **{Message processor *msgprocid*|One or more message processors} does not exist in your I/O configuration.**

Explanation

Either an attempt was made to perform a function to a message processor that does not exist in your I/O configuration, or you tried to manipulate a CFLINK, but you remain uncoupled to at least one of the CFVMs.

System action

System operation continues and no configuration change occurs.

User response

Verify that the *msgprocid* user ID specified is the CF Service Machine you intend to use, or ensure that you are coupled to both CFVMs and then retry the command.

HCP2806E **The variations of this message are explained below.**

— Variation 1 **The CP directory prohibits this CFLINK.**

Explanation

A DEFINE CFLINK command was entered, but the sending CFVM's CP directory entry prohibits the sending CFVM from coupling to the receiving CFVM.

System action

The link is not created.

User response

Change the sending CFVM's CP directory entry.

— Variation 2 **You are not allowed to define {any message processors|message processor *msgprocid*}.**

Explanation

A user attempted to define a message processor using the DEFINE MSGPROC command, but the user is not set up in the z/VM system directory to define the message processor. If *msgprocid* is returned in the message, then the user is not authorized to define the specific *msgprocid*. If *msgprocid* is not specified, then your user ID is not set up to use z/VM's Guest Coupling Facility Simulation.

System action

The command does not execute. System operation continues.

User response

Verify that the user ID is set up in the system directory as a coupled guest. OPTION CFUSER must be specified in the user ID's directory entry. If a SPECIAL statement is used to define the message processor at logon, ensure that the CF service machine name specified is correct.

— Variation 3 **You are not allowed to control message processors.**

Explanation

You tried to manipulate a coupling facility link, but one or more of the CFVMs you are trying to manipulate is not under your control.

System action

No configuration change occurs.

User response

Acquire the privilege necessary to manipulate both message processors and retry the command, or ask the system operator to perform the command for you.

HCP2807E **Must detach message processor *msgprocid* to remove message device *nnnn*.**

Explanation

A user attempted to detach a message device number that is coupled to a message processor running in a z/VM CF Service Machine. A message device can only be detached from a virtual machine I/O configuration

by either the DETACH MSGPROC or SET MSGFACIL OFF commands.

System action

The command does not execute. System operation continues.

User response

Use the DETACH MSGPROC *msgprocid* or SET MSGFACIL OFF commands to detach the specified message device.

HCP2808E **User ID is a CF Service Machine and may not be started with the LOGON Command.**

Explanation

A user attempted to log on to a virtual machine that is defined in the system directory as a CF Service Machine. A CF Service Machine may only be started by the XAUTOLOG or AUTOLOG CP commands.

System action

The command does not execute; system operation continues.

User response

Use XAUTOLOG or AUTOLOG to start the CF Service Machine.

HCP2809I **Restart of message processor *msgprocid* by *userid* initiated.**

Explanation

User ID *userid* requested that message processor *msgprocid* be restarted by issuing the RESTART MSGPROC command or the MSGPROC operand of the SET VTOD command. Restarting the message processor will cause the specified message processor to be re-IPLed, causing all structures within the Coupling Facility to be lost.

System action

None.

User response

Verify that the message processor restarted by examining the messages on the CF Service Machine's console.

HCP2810E **The coupled connection with message processor *msgprocid* has been removed.**

Explanation

The coupled connection with the specified message processor has been severed. All message devices in your I/O configuration associated with the specified message processor have been deleted. This message will occur when a message processor is logged off.

System action

None.

User response

None.

HCP2811E **Message processor *msgprocid* is not operational.**

Explanation

A user attempted to define or delete a message processor, but the specified message processor is not operational. When CP defines or deletes a coupled connection with the CF Service Machine, a CONFIGURE {*cfr id*} ON or OFF command must be issued to the CFCC. If the CFCC is not able to accept the command, then CP cannot define the coupled connection.

This error usually occurs when the specified message processor has just been started, but it did not have time to complete its IPL or it was busy processing other commands.

System action

The command does not execute; system operation continues.

Operator response

Issue the RESTART MSGP CP command to reload the CF Service Machine. Or, log off the CF Service Machine with the CP FORCE command; then issue the XAUTOLOG command to restart the CF Service Machine.

System programmer response

Verify that the message processor successfully restarted by examining the messages on the CF Service Machine's console. If this message is encountered repeatedly, contact the IBM Support Center for assistance.

User response

Allow time for the specified message processor to complete its IPL and reissue the command.

If the problem persists, issue the RESTART MSGPROC CP command to reload the CF Service Machine. Verify that the message processor successfully restarted by examining the messages on the CF Service Machine's console.

HCP2812E **User *userid* does not have *operand* authorization on *statement* directory statement**

Explanation

The command that you entered requires that you be authorized in order to use it.

System action

System operation continues.

User response

Add the specified operand on the specified directory control statement to the user's directory entry to grant authorization.

HCP2813E **The variations of this message are explained below.**

— Variation 1 **CP is running on a processor that does not support a CFVM virtual machine.**

Explanation

A user attempted to AUTOLOG a virtual machine that is set up to run as a CF Service Machine. However, the processor that does not support the loading of the Coupling Facility Control Code (CFCC). The OPTION statement in the system directory entry for the user ID contains the CFVM operand, which specifies that the virtual machine is a CF Service Machine.

When a CF Service Machine is started, z/VM automatically loads the CFCC (LIC) from the processor's service element. The following conditions cause the error message to be displayed:

- The hardware interface required to load the CFCC (LIC) is not supported by the processor that runs z/VM.
- The CFCC (LIC) is not installed on this processor.
- An attempt was made to load the CFCC (LIC) on an Integrated Facility for Linux® (IFL) processor.

System action

The CF Service Machine is not usable; system operation continues.

User response

None.

— Variation 2 **CP is running on a processor or in a mode that does not support list-directed IPL {from SCSI or ECKD devices | with DUMP to SCSI or ECKD devices}.**

Explanation

A user attempted to perform a function that requires Licensed Internal Code (LIC) that is not available on the processor's service element. These functions include list-directed IPL from a SCSI or ECKD device and list-directed IPL with Dump from a SCSI or ECKD device.

The following conditions cause the error message to be displayed:

- The hardware interface required to load the LIC is not supported by the processor that runs z/VM.
- The LIC is not installed on this processor.

System action

The IPL request is terminated and the current user's virtual machine is reset.

User response

IPL the system again from some other type of disk. Otherwise, if your virtual machine is running in XC architecture mode, use the SET MACHINE command to change to a mode other than XC and retry the IPL command.

— Variation 3 **The message text has several variations, which are listed in the Explanation section.**

Explanation

The message text has the following variations:

- CP is running on a processor that does not support guest secure IPL.
- One or more systems in your relocation domain do not support guest secure IPL.
- CP is running on a processor that does not support list-directed IPL from ECKD devices.

- One or more systems in your relocation domain do not support list-directed IPL from ECKD devices.
- CP is running on a processor that does not support BOOTPROG AUTOMATIC.
- One or more systems in your relocation domain do not support BOOTPROG AUTOMATIC.

This virtual machine does not have access to secure IPL, list-directed IPL from ECKD devices, or the BOOTPROG AUTOMATIC function because of the reason that is indicated in the message text.

When the message indicates CP is running on a processor, a required facility is not available on the underlying machine on which z/VM runs.

When the message indicates relocation domain, the following explanation applies. The virtual machine runs in an SSI cluster in a relocation domain that has at least one member that does not have the necessary facility. The problem can arise because either the machine does not have the facility or the member's VM system does not have the necessary support.

System action

The command is rejected.

User response

If a secure IPL was requested but is not required, reset the IPL parameters by using the **SET LOADDEV** or **SET DUMPDEV** command to specify NOSECURE and then reissue the IPL command.

If a secure IPL is required, any of the following actions might be required:

- Upgrade the machine.
- Add verification certificates to the certificate store.
- Alter the relocation domain so that all members have the secure IPL capability.

If the command was issued to set up an ECKD IPL device, only a CCW type IPL can be used unless one or both of the following tasks are completed:

- Upgrade the machine.
- Alter the relocation domain so that all members have the facility for list-directed IPL from ECKD devices.

If BOOTPROG AUTOMATIC was requested, the **SET LOADDEV** or **SET DUMPDEV** command must be reissued to explicitly specify the boot program number. To use BOOTPROG AUTOMATIC, one or both of the following tasks might be required:

- Upgrade the machine.
- Alter the relocation domain so that all members have the necessary facility.

HCP2815E The variations of this message are explained below.

— Variation 1 The virtual storage size must be greater than *nnnn*M to perform a list-directed IPL.

Explanation

List-directed IPL from a device (for example SCSI or ECKD) requires more guest real storage than is currently defined for the virtual machine.

System action

The IPL request is terminated. The current user's virtual machine is reset.

User response

Increase the virtual storage to at least the minimum amount indicated and reissue the command. Or re-IPL from some other type of disk.

— Variation 2 The virtual storage size of the CF Service Machine must be greater than *nnnn*M to load the message processor.

Explanation

A virtual storage size defined for the CF Service Machine is not sufficient to load the Coupling Facility Control Code (CFCC) from the processor controller.

System action

The CF Service Machine is not usable. System operation continues.

User response

Increase the storage size and issue the command again.

— Variation 3 The virtual storage size must be greater than *nnnn*M to perform a list-directed IPL with the DUMP option.

Explanation

The virtual storage size that is defined for the guest that is performing a list-directed IPL with the DUMP option from a device (for example SCSI or ECKD) is not sufficient.

System action

The IPL request is terminated. The current user's virtual machine is reset.

User response

Increase the virtual storage to at least the minimum amount indicated and reissue the command. Or re-IPL from some other type of disk

HCP2816I	The variations of this message are explained below.
— Variation 1	Loading message processor *msgprocid* from the processor controller.

Explanation

z/VM is currently loading the Coupling Facility Control Code (CFCC) from the processor controller into the CF Service Machine's virtual storage. On completion of the load, z/VM will automatically start the message processor.

System action

System operation continues.

User response

None.

— Variation 2	Acquiring the machine loader from the processor controller.

Explanation

z/VM is currently loading the guest IPL machine loader from the processor controller into the current user's virtual storage. Upon completion of the load, the machine loader will access the specified FCP-attached SCSI disk to complete the IPL request.

System action

System operation continues.

User response

None.

— Variation 3	Attempting IPL via alternate path *vdev hhhhhhhh hhhhhhhh*.

Explanation

A previous IPL attempt was unsuccessful but an alternate path exists. z/VM reinitiates the machine loader to use device *vdev* and port name *hhhhhhhh hhhhhhhh* to access the IPL disk.

System action

System operation continues.

User response

None.

HCP2817I	The variations of this message are explained below.
— Variation 1	Load completed from the processor controller. Now starting message processor *msgprocid*.

Explanation

z/VM has completed the loading of the Coupling Facility Control Code (CFCC) from the processor controller into the CF Service Machine's virtual storage. The specified message processor will be started. Verify that the message processor has been started by examining the messages on the CF Service Machine's console.

System action

System operation continues.

User response

None.

— Variation 2	Load Completed from the processor controller. Now starting the machine loader.

Explanation

z/VM has completed the loading of the guest IPL machine loader from the processor controller into the current user's virtual storage. The machine loader will now access the specified FCP-attached SCSI disk to complete the IPL.

System action

System operation continues.

User response

None.

HCP2818E	The request to load the {*msgprocid* | machine loader} from the processor controller has been cancelled.

Explanation

An active request to load either a CF Service Machine or the machine loader from the processor controller has been terminated by z/VM. In the case of a CF Service Machine, this message is issued when z/VM cancelled a load for the following reasons:

- *msgprocid* is logged off.
- *msgprocid* performs a virtual system reset.
- A user issues a RESTART MSGPROC to a CF Service Machine user ID that is currently loading a file.
- z/VM shutdown processing is occurring.

In the case of a machine loader, this message is issued when z/VM shutdown processing is occurring at the time the request is initiated.

System action

If the CF Service Machine is not usable, system operation continues. For the request to load the machine loader, the IPL is terminated and the user's virtual machine is reset.

User response

Issue the RESTART MSGP CP command to reload the CF Service Machine or log off the CF Service Machine with the CP FORCE command, then issue the XAUTOLOG command to restart the CF Service Machine. If this message occurs repeatedly, contact your IBM Support Center personnel

HCP2819E	**CFLINK must not start and end at same CF service machine.**

Explanation

An attempt was made to couple a coupling facility virtual machine (CFVM) to itself.

System action

The link is not created.

User response

Do not try to couple a CFVM to itself.

HCP2820E	**You are not coupled to any CF service machines.**

Explanation

QUERY CFLINKS ALL was entered, but there are no coupled CFs.

System action

No query information is displayed.

User response

Correct the command and try again.

HCP2821I	**Some SPECIAL MSGP processing was deferred**

Explanation

The coupling facility (CF) virtual machine has one or more SPECIAL MSGP statements for defining CFLINKS in its directory entry and the target CF virtual machine is not logged on yet.

System action

System operation continues.

User response

Verify that all CF virtual machines get logged on as expected.

HCP2824E	**The variations of this message are explained below.**
— Variation 1	**No DUMPDEV parameters are currently defined.**

Explanation

A Guest IPL with dump was requested from an FCP-attached device without previously defining required parameters with the SET DUMPDEV command.

System action

The IPL request is terminated. The current user's virtual machine is reset.

User response

Use the SET DUMPDEV command to identify the location of the program to be loaded. Then reissue the IPL command.

— Variation 2	**No LOADDEV parameters are currently defined.**

Explanation

A Guest IPL was requested from an FCP-attached device without previously defining required parameters with the SET LOADDEV command or LOADDEV directory statement.

System action

The IPL request is terminated. The current user's virtual machine is reset.

User response

Use the SET LOADDEV command or LOADDEV directory statement to identify the location of the program to be loaded. Then reissue the IPL command.

HCP2824I	**The variations of this message are explained below.**
— Variation 1	**No DUMPDEV parameters are currently defined.**

Explanation

A QUERY DUMPDEV command was issued before any SET DUMPDEV command was processed. There is no DUMPDEV information to display.

System action

System operation continues.

User response

None.

— Variation 2	**No LOADDEV parameters are currently defined.**

Explanation

A QUERY LOADDEV command was issued before any SET LOADDEV command was processed. There is no LOADDEV information to display.

System action

System operation continues.

User response

None.

HCP2825E	**SCPDATA format conflicts with previous input**

Explanation

The user attempted to append or overlay data in a format that was different from that specified in a previous SET LOADDEV command. For either parameter, the data must be all hex or all text.

System action

The command is not executed; no LOADDEV data is modified.

User response

Issue the command again using the indicated format to append or overlay existing data, or specify the NEW option to clear the existing data and change to another format.

HCP2826E	**{SCPDATA | *operand*} CONTAINS INVALID UTF-8 DATA: *data* [FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}]**

Explanation

The specified data is not valid UTF-8 encoding. The offending byte string is displayed as *data*.

System action

The command is not executed; no LOADDEV data is modified. If the error is from a directory statement, then the statement is skipped.

User response

Correct the error and issue the command again.

HCP2827E	**SCPDATA offset exceeds current length of data (*nnnn*)**

Explanation

When appending or overlaying data, the offset cannot be greater than the length of the existing data. The offset is the starting point in the existing data where the new data is to be placed. An offset of 0 will overlay data beginning at the first character. If the data format is text, the offset value is expressed in number of characters. For hex data the offset value is in bytes (two characters per byte).

System action

The command is not executed; no LOADDEV data is modified.

User response

Issue the command again with a valid offset.

HCP2828E	**SCPDATA length exceeds maximum allowed (*nnnn*)**

Explanation

The specified data is too long or, in the case of appending or overlaying existing data, the resulting string is too long. *nnnn* is the maximum allowable length.

System action

The command is not executed; no LOADDEV data is modified.

User response

None

HCP2829E **SCPDATA DOES NOT CONTAIN A VALID HEX STRING [FOLLOWING {PROFILE *profname* | USER *userid* | IDENTITY *userid* | SUBCONFIG *id*}]**

Explanation

An odd number of characters was entered or the data contains characters other than 0-F. An even number of characters is required because each byte of data is represented by two hex characters. If hexadecimal data is entered with continuation lines, the quotation-delimited hexadecimal string on each line of the statement must contain an even number of hexadecimal digits.

System action

The command is not executed; no LOADDEV data is modified. If the error is from a directory statement, then the statement is skipped.

User response

Correct the error and issue the command.

HCP2830I **The variations of this message are explained below.**

— Variation 1 **VSWITCH SYSTEM *switchname* status is defined.**

Explanation

The virtual switch is created, but no real OSA Express or HiperSockets device address has been specified.

System action

System operation continues.

User response

If a connection to the network is needed, use the SET VSWITCH RDEV or SET VSWITCH BRIDGEPORT RDEV command to define the real device address.

— Variation 2 **VSWITCH SYSTEM *switchname* [bridge port] status is controller not available.**

Explanation

A TCP/IP virtual switch controller is not available to manage the OSA Express or HiperSockets device. The connection to the network is not operational.

System action

System operation continues.

User response

If CONTROLLER * was used on a DEFINE or SET VSWITCH command, then no virtual switch controller is eligible to control the virtual switch. If a specific user ID was specified on the CONTROLLER option, then the z/VM TCP/IP virtual machine is not eligible.

Use the QUERY CONTROLLER command to display the status of controllers.

A z/VM TCP/IP stack becomes eligible when:

- The TCP/IP MODULE running in the controller is at a release level that supports the function required for the virtual switch.
- An IUCV *VSWITCH statement is included in its CP directory entry.
- The TCP/IP VSWITCH CONTROLLER statement is coded, and has either defaulted to be ON, is explicitly set to ON in the TCP/IP configuration file or through an OBEYFILE command.
- The stack has completed initialization.
- The stack has virtual device addresses available for the Control Program to attach the control device.

  The virtual address range used by the Control Program is specified in the VSWITCH CONTROLLER TCP/IP configuration statement. For more information, see *z/VM: TCP/IP Planning and Customization*. If no VDEV range is specified, CP uses the *vdev* that matches the *rdev* operand specified on the DEFINE VSWITCH or SET VSWITCH command.

  Note: Do not code DEVICE and LINK TCP/IP configuration statements for the device. Do not attach the device to a TCP/IP controller virtual machine. These steps are handled by DEFINE VSWITCH processing when a controller is selected.

— Variation 3 **VSWITCH SYSTEM *switchname* [bridge port] status is disconnected following error.**

Explanation

The virtual switch is created, but the connection to the network is not operational.

System action

System operation continues.

User response

This temporary status is shown during device termination or following an error. Use the QUERY VSWITCH command to show the updated status. If the status does not change, examine the operator console and the z/VM TCP/IP virtual switch controller console for error messages related to the device. Some examples of problems that could result in this status are:

- The device is not an OSA Express or HiperSockets device.
- The device does not exist.
- An error occurred attempting to attach the device to the z/VM TCP/IP virtual switch controller virtual machine.

— Variation 4 **VSWITCH SYSTEM *switchname* [bridge port] status is disconnected requiring operator intervention.**

Explanation

The virtual switch is created, but the connection to the network is not working. The operator must take action to make it operational.

System action

System operation continues.

User response

In general, this is displayed only when the SET VSWITCH command is issued with the DISCONNECT option, but it may be shown for other reasons when the TCP/IP controller or the OSA Express or HiperSockets device is back level. Use the QUERY VSWITCH command to see if the display contains more information about the error.

The message may be displayed if an active device is stopped by a TCP/IP administrator using an OBEYFILE STOP command for the device. Use the SET VSWITCH command with the CONNECT option to reactivate the connection.

This state can also be shown when the connection to the OSA Express or HiperSockets device is lost. Check the connection to the OSA Express or HiperSockets device then use the SET VSWITCH command with the CONNECT option.

Another reason for this state is if the controller stack encountered an error while initializing the OSA Express devices or HiperSockets device. For example, there could be a port name conflict for the device, or an error defining it as the primary router. Examine the console for the TCP/IP stack identified in the message to determine the reason for the error. Use the SET VSWITCH command to correct the problem.

— Variation 5 **VSWITCH SYSTEM *switchname* [bridge port] status is devices attached.**
***userid* is VSWITCH controller for device *device*.**

Explanation

The OSA Express or HiperSockets devices are attached to a virtual switch controller, but the connection to the network is not operational.

System action

System operation continues.

User response

This status is shown while device initialization is in progress, or following an error detected by the virtual switch controller. Use the QUERY VSWITCH command to show the updated status. If the status does not change, find the virtual switch controller name from the message or the QUERY VSWITCH command display and examine the console for that z/VM TCP/IP virtual machine.

— Variation 6 **VSWITCH SYSTEM *switchname* [bridge port] status is initialization in progress.**
***userid* is VSWITCH controller for device *device*.**

Explanation

Initialization of the OSA Express or HiperSockets devices has begun. The connection to the network is not operational.

System action

System operation continues.

User response

This is a temporary status that shows while device initialization is in progress. Use the QUERY VSWITCH command to show the updated status. If the status does not change, find the virtual switch controller name from the message or the QUERY VSWITCH command display and examine the console for that z/VM TCP/IP virtual machine.

— Variation 7 **VSWITCH SYSTEM *switchname* [bridge port] status is device not ready.**
***userid* is VSWITCH controller for device *device*.**

Explanation

Initialization has completed but the virtual switch controller received a response from the device indicating that the device is not ready. The connection to the network is not operational.

System action

System operation continues.

User response

This temporary status shows during device initialization. Use the QUERY VSWITCH command to show the updated status. If the status does not change, it could be that the real device is disconnected from the LAN. Find the virtual switch controller name from the message or the QUERY VSWITCH command display and examine the console for that z/VM TCP/IP virtual machine.

— Variation 8 **VSWITCH SYSTEM *switchname* [bridge port] status is ready.**
***userid* is VSWITCH controller for [backup] device *device*.**

Explanation

The connection to the network is operational. If multiple devices are associated with the virtual switch, additional instances of the second line might be issued.

System action

System operation continues.

User response

No action needed.

— Variation 9 **VSWITCH SYSTEM *switchname* [bridge port] status is device detach in progress.**
***userid* is VSWITCH controller for device *device*.**

Explanation

The connection to the network is not operational.

System action

System operation continues.

User response

This temporary status is shown when OSA Express or HiperSockets devices are being disconnected from the virtual switch controller virtual machine, as a result of the SET VSWITCH command with the DISCONNECT option. Use the QUERY VSWITCH command to show the updated status. If the status does not change, or if a SET VSWITCH DISCONNECT or SET VSWITCH BRIDGEPORT DISCONNECT was not issued, examine the virtual switch controller console for error messages related to the device.

— Variation 10 **VSWITCH SYSTEM *switchname* [bridge port] status is detach VSWITCH pending.**

Explanation

The virtual switch is being removed from the system.

System action

System operation continues.

User response

This temporary status is shown while the virtual switch controller is shutting down OSA Express or HiperSockets devices, as a result of the DETACH VSWITCH command. Use the QUERY VSWITCH command to show the updated status. If you do not receive a message that the virtual switch does not exist, examine the virtual switch controller console for error messages related to the device.

— Variation 11 **VSWITCH SYSTEM *switchname* [bridge port] status is in error recovery.**
***userid* is new VSWITCH controller for device *device*.**

Explanation

An error occurred and the system is attempting to recover by switching to a backup OSA Express or HiperSockets device and virtual switch controller.

System action

System operation continues.

User response

One example of when this temporary status is shown is while the virtual switch connection to the network is being moved from one OSA Express adapter to a backup OSA Express adapter. Use the QUERY VSWITCH command to show the updated status. If the status does not change, examine the Operator console and consoles for the virtual switch controllers for error messages related to the device.

— Variation 12	**VSWITCH SYSTEM *switchname* [bridge port] status is restarting. *userid* is VSWITCH controller for device *device*.**

Explanation

An error occurred but there is no backup device operational for the virtual switch. The system is attempting to restart the failing device.

System action

System operation continues.

User response

This temporary status is shown while the system attempts to restart the virtual switch connection to the network. Use the QUERY VSWITCH command to show the updated status. If the status does not change, examine the console for the virtual switch controller for error messages related to the device.

— Variation 13	**VSWITCH SYSTEM *switchname* status is ready.**

Explanation

The connection to the network is operational.

System action

System operation continues.

User response

No action needed.

HCP2831E	**The variations of this message are explained below.**
— Variation 1	**CP Controller or Manager error code for *userid*.**

Explanation

An unexpected error has occurred.

System action

The connection to the TCP/IP controller or manager might be severed, terminating the virtual switch controller or virtual switch manager operations. System operation continues.

User response

A single instance of this message with an error code of 5 can be ignored when it follows a VSWITCH failure. This typically happens as a result of CP and the virtual switch controller both attempting to clean up following an error.

A message with error code of 3 might indicate that the TCP/IP controller is at a higher service level than CP. Make sure CP and TCPIP MODULE running in the controller are at the same service level.

For all other error codes, contact the IBM Support Center.

— Variation 2	**TCP/IP Controller or Manager error code for *userid*.**

Explanation

An unexpected error has occurred. This message might be displayed following an error such as a TCP/IP controller stall, when the CP receives responses to messages that were sent before the stall, but are no longer relevant.

System action

The connection to the TCP/IP controller or manager might be severed, terminating the virtual switch controller or virtual switch manager operations. System operation continues.

User response

A single instance of this message with an error code of 5 can be ignored when it follows a controller stall message (“HCP2843E” on page 648). For all other error codes, obtain a copy of the operator and *userid* console and contact the IBM Support Center.

— Variation 3	**VSWITCH SYSTEM *switchnm* CP Controller or Manager error code.**

Explanation

An unexpected error has occurred. This message might be displayed following an error such as a TCP/IP controller stall, when the CP receives responses to messages that were sent before the stall, but are no longer relevant.

System action

The connection to the TCP/IP controller or manager may be severed, terminating the virtual switch controller or virtual switch manager operations. System operation continues.

User response

Contact the IBM Support Center.

— Variation 4	**VSWITCH SYSTEM *switchnm* CP Controller or Manager error. Invalid state.**

Explanation

An unexpected error has occurred. This message might be displayed when overlapping requests are issued for the same virtual switch. For example, this message could be displayed if virtual switch initialization is in progress when a SET VSWITCH DISCONNECT is issued.

System action

System operation continues.

User response

Issue the QUERY VSWITCH command to display the current state of the virtual switch.

— Variation 5	**VSWITCH SYSTEM *switchnm* CP Controller or Manager error. IUCV message limit exceeded.**

Explanation

An unexpected error has occurred.

System action

System operation continues.

User response

Increase the MSGLIMIT value on the IUCV *VSWITCH statement in the CP directory entry for the virtual switch controller virtual machine.

— Variation 6	**VSWITCH SYSTEM *switchnm* CP Controller or Manager IUCV error code.**

Explanation

An unexpected error has occurred.

System action

System operation continues.

User response

Contact the IBM Support Center.

— Variation 7	**VSWITCH SYSTEM *switchnm* TCP/CP Controller or Manager error *errcd*.**

Explanation

An unexpected error has occurred. The connection to the TCP/IP controller or manager might be severed, terminating virtual switch controller or virtual switch manager operations.

System action

System operation continues.

User response

Contact the IBM Support Center.

HCP2832E	**The variations of this message are explained below.**
— Variation 1	**Connection *device* for VSWITCH SYSTEM *switchname* is not active. TCP/IP controller *userid* is not available or does not have needed capabilities**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed if the CONTROLLER *userid* option was specified on the DEFINE VSWITCH

command or configuration statement or on the SET VSWITCH command, the named controller is not eligible to control the device.

This message is also seen if the TCP/IP module that is running on the controller is from a release that is earlier than the CP level of code, or if the TCP/IP administrator stops the pseudo-device (VSWITCH-IUCV) that the controller uses to communicate with the CP.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Use the QUERY CONTROLLER command to display the status of controllers.

A z/VM TCP/IP stack becomes eligible when:

- The TCP/IP MODULE running in the controller is at a release level that supports the function required for the virtual switch.
- An IUCV *VSWITCH statement is included in its CP directory entry.
- The TCP/IP VSWITCH CONTROLLER statement has defaulted to ON, or it is explicitly set to ON in the TCP/IP configuration file or through an OBEYFILE command.
- The stack has completed initialization.
- The stack has virtual device addresses available for the CP to attach the control device.

  The virtual address range used by the CP can be specified in the VSWITCH CONTROLLER TCP/IP configuration statement. For more information, refer to *z/VM: TCP/IP Planning and Customization*. If no device addresses are included on the VSWITCH CONTROLLER statement, CP uses the *vdev* that matches the *rdev* operand specified on the DEFINE VSWITCH or SET VSWITCH command.
- The TCP/IP MODULE running in the controller is at a release level that supports the function required for the virtual switch.

Note: Do not code DEVICE and LINK TCP/IP configuration statements for the device and do not attach the device to a TCP/IP controller virtual machine. These steps are handled by DEVICE VSWITCH processing when a controller is selected.

— Variation 2 Connection *device* for VSWITCH SYSTEM *switchname* is not active. No TCP/IP controller is available

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed if CONTROLLER * defaulted or was specified on the DEFINE VSWITCH command or a CONTROLLER list was specified. In this case, no controller is eligible to control the device.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Use the QUERY CONTROLLER command to display the status of controllers.

A z/VM TCP/IP stack becomes eligible when:

- The TCP/IP MODULE running in the controller is at a release level that supports the function required for the virtual switch.
- An IUCV *VSWITCH statement is included in its CP directory entry.
- The TCP/IP VSWITCH CONTROLLER statement has defaulted to ON, or it is explicitly set to ON in the TCP/IP configuration file or through an OBEYFILE command.
- The stack has completed initialization.
- The stack has virtual device addresses available for the CP to attach the control device.

  The virtual address range used by the CP can be specified in the VSWITCH CONTROLLER TCP/IP configuration statement. For more information, refer to *z/VM: TCP/IP Planning and Customization*. If no device addresses are included on the VSWITCH CONTROLLER statement, CP uses the *vdev* that matches the *rdev* operand specified on the DEFINE VSWITCH or SET VSWITCH command.
- The TCP/IP MODULE running in the controller is at a release level that supports the function required for the virtual switch.

Note: Do not code DEVICE and LINK TCP/IP configuration statements for the device and do not attach the device to a TCP/IP controller virtual machine. These steps are handled by DEFINE VSWITCH processing when a controller is selected.

— Variation 3 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. *userid* does not have addresses available to attach OSA**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed when at least one TCP/IP controller was eligible and virtual device addresses were not available for the CP to attach the OSA devices.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Use the QUERY CONTROLLER command to display the status of controllers. If "VDEV Range: *" is not displayed, the virtual address range to be used by the CP was specified in the VSWITCH CONTROLLER TCP/IP configuration statement, restricting the addresses available to attach. For more information, refer to *z/VM: TCP/IP Planning and Customization*.

If no device addresses are included on the VSWITCH CONTROLLER statement, CP uses the *vdev* that matches the *rdev* operand specified on the DEFINE VSWITCH or SET VSWITCH command.

Note: Do not code DEVICE and LINK TCP/IP configuration statements for the device and do not attach the device to a TCP/IP controller virtual machine. These steps are handled by DEFINE VSWITCH processing when a controller is selected.

— Variation 4 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Device does not exist**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This messaged is displayed when the device specified on the RDEV option does not exist.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Examine the operator console for earlier messages that explain any problems with the device addresses associated with the virtual switch. Use the SET PORT GROUP or SET VSWITCH command with the RDEV option to specify the address of one or more different QDIO OSA Express devices, or correct the problem with the current devices.

Issue the SET VSWITCH command with the CONNECT option to reconnect a device to the network.

— Variation 5 **Connection for VSWITCH SYSTEM *switchname* is not active. None of the RDEVs are available working OSA devices**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed if none of the device numbers specified on the SET PORT GROUP command or on the RDEV option of the DEFINE VSWITCH or the SET VSWITCH command could be used to connect the virtual switch to a real LAN segment.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Examine the operator console for earlier messages that explain any problems with the device addresses associated with the virtual switch. Use the SET PORT GROUP or SET VSWITCH command with the RDEV option to specify the address of one or more different OSA devices, or correct the problem with the current devices.

Issue the SET VSWITCH command with the CONNECT option to reconnect a device to the network.

Make sure the proper level of hardware and device driver is used. QUERY VSWITCH might show that the device is missing support for layer 2 or shared link aggregation by showing `No layer 2` or `No Link Aggregate Support` on the line that describes the RDEV.

— Variation 6 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Device would exceed the maximum number of devices allowed for *userid***

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed when a TCP/IP controller was eligible and an attempt to attach the device to the virtual machine exceeded the number of virtual devices allowed.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Define additional TCP/IP controllers or use the SET VSWITCH command to specify a different controller or additional controllers for the virtual switch.

— Variation 7 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Device is already attached**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed when the real device specified on the SET PORT GROUP or on the RDEV option of the DEFINE VSWITCH or the SET VSWITCH command is already attached to a virtual machine.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Issue the QUERY *rdev* command for *rdev*, *rdev+1*, and *rdev+2* to see where one or more devices are attached. This might be the result of a configuration error, for example, if the OSA Express device was configured to be directly attached to a guest host.

— Variation 8 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Error *errorcode* attaching devices to *userid***

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed when an error occurred while attempting to attach the device to the controller virtual machine.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Contact the IBM Support Center.

— Variation 9 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. No eligible controller has addresses available to attach OSA**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed when at least one TCP/IP controller was eligible and virtual device addresses were not available for the CP to attach the OSA devices.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Use the QUERY CONTROLLER command to display the status of controllers. If VDEV Range: * is not displayed, the virtual address range to be used by the CP was specified in the VSWITCH CONTROLLER TCP/IP configuration statement, restricting the addresses available to attach. For more information, refer to *z/VM: TCP/IP Planning and Customization*.

If no device addresses are included on the VSWITCH CONTROLLER statement, CP uses the *vdev* that matches the *rdev* operand specified on the DEFINE VSWITCH or SET VSWITCH command.

Note: Do not code DEVICE and LINK TCP/IP configuration statements for the device and do not attach the device to a TCP/IP controller virtual machine. These steps are handled by DEFINE VSWITCH processing when a controller is selected.

— Variation 10 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. The real device is offline**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed when the real device specified is offline and not available.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Vary the device online, and issue the SET VSWITCH command with the CONNECT option.

— Variation 11 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Device stall detected.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed when the device associated with the virtual switch has stopped responding within the expected time frame.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Determine if any hardware conditions exist that could cause the problem. If any exist, correct them; otherwise, contact the IBM Support Center.

— Variation 12 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. TCP/IP controller *userid* is attempting to restart the device**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed if an error occurred but no operational backup device was available and the system is attempting to restart the failing device.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Use the QUERY VSWITCH command to show the updated status. If the status does not change, examine the virtual switch controller console for error messages related to the device.

— Variation 13 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. TCP/IP controller *userid* reported that the device is not ready.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device addresses. This message is used to report an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed when the real device specified is not ready. It could be that the real device is disconnected from the LAN.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues.

User response

Use the QUERY VSWITCH command to show the updated status. If the status does not change, examine the virtual switch controller console for error messages related to the device. Work with your network administrator to reconnect the device to the LAN.

— Variation 14 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. The port does not have the required attributes**

Explanation

A virtual switch is defined to use a port group with *device* as a port group member, but the port does not have the attributes required. All of the following conditions must be met:

- The port must be Ethernet, Gigabit Ethernet, 10 Gigabit Ethernet, or 25 Gigabit Ethernet configured in QDIO mode.
- The port speed must be valid and match the port speed of other group members.
- The port must be full duplex.
- The port capabilities must support network disablement if the port group is configured as LACP Inactive.

System action

The device remains an inactive connection for the virtual switch.

User response

Use the SET PORT GROUP LEAVE command to remove *device* from the port group definition or correct the configuration. For the LACP Inactive case, change the port group to LACP Active using the SET PORT GROUP LACP command.

— Variation 15 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. State is incorrect on TCP/IP controller *userid***

Explanation

The TCP/IP controller reported that the link representing *device* is in an unexpected state.

System action

The device remains an inactive connection for the virtual switch.

User response

Contact the IBM Support Center.

— Variation 16 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. An exclusive use error was received for the device**

Explanation

An attempt to define *device* as a port group member and activate it for a virtual switch connection has failed.

For an exclusive port group:

- When an OSA port is active in a port group it can have only a single QDIO connection established on the adapter (CHPID/port number). An OSA port with an active QDIO connection on any device on the same CHPID will not be able to join a link aggregated group.

For a shared port group:

- When an OSA port is active in a shared port group there cannot be any other active QDIO connections on the same CHPID/port number that are not part of the shared port group.
- A shared port group has a maximum of 64 members.

System action

The device remains an inactive connection for the virtual switch.

User response

Free all QDIO connections on the adapter to allow *device* to be used in the aggregated group, or remove device from the group definition by issuing the SET PORT GROUP LEAVE command.

— Variation 17 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. A mismatch was found in the LAN transport type**

Explanation

This error occurs in a second-level environment where there is a mismatch between the transport defined for the virtual switch and the simulated OSA-Express device.

System action

The device remains an inactive connection for the virtual switch. The virtual switch connection to the network might be active if other devices are defined, through the RDEV keyword on DEFINE VSWITCH or SET VSWITCH, or by way of SET PORT GROUP.

User response

Make sure the simulated OSA-Express device is coupled to the appropriate LAN or virtual switch on the first level system. For example, if your second-level virtual switch is defined as ETHERNET, the first-level guest LAN or virtual switch that the simulated OSA-Express is coupled to must be ETHERNET as well.

— Variation 18 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. The device does not have the support required for ETHERNET**

Explanation

The OSA-Express device does not contain a level of microcode needed to support an ETHERNET virtual switch.

System action

The device remains an inactive connection for the virtual switch.

User response

Obtain the latest microcode service and apply it to the OSA-Express device.

— Variation 19 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. The device does not have the support required for Link Aggregation**

Explanation

The OSA-Express device does not contain a level of microcode needed to support link aggregation.

System action

The device remains an inactive connection for the virtual switch. If the device was part of a SHARED port group, all devices on the adapter remain reserved for SYSTEM use until the port group is deleted.

User response

Obtain the latest microcode service and apply it to the OSA-Express device.

— Variation 20 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Missing or incorrect portname**

Explanation

A port name was specified for the device, but it does not match the port name used on previous connections to the adapter.

System action

The device remains an inactive connection for the virtual switch.

User response

Use the SET VSWITCH PORTNAME command to define the correct port name for the device.

— Variation 21 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Conflict on TCP/IP controller *userid***

Explanation

Virtual switch controlled connections use names generated by concatenating *switchnm* with *device* and "DEV" or "LINK." An attempt to assign a virtual switch connection to a controller has resulted in a name conflict.

System action

The device remains an inactive connection for the virtual switch.

User response

Examine the TCP/IP configuration file for *userid* to see if a DEVICE or LINK statement uses a name that conflicts with that generated for a virtual switch controlled connection. If a conflict was found, contact the IBM Support Center.

— Variation 22 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Device is detached from *userid***

Explanation

An unexpected error occurred resulting in the failure of an initialized virtual switch device.

System action

The device remains an inactive connection for the virtual switch.

User response

Examine the console for *userid* for an explanation of why the device was detached. If problem persists, contact the IBM Support Center.

— Variation 23 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Unexpected error code received from *userid***

Explanation

An unexpected error occurred resulting in the failure of an initialized virtual switch device.

System action

The device remains an inactive connection for the virtual switch.

User response

Contact the IBM Support Center.

— Variation 24 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. The port number is invalid.**

Explanation

The specified port number is not valid. The number of ports supported on an OSA-Express device is dependant on the feature of the device.

System action

The device remains an inactive connection for the virtual switch.

User response

Examine the operator console for earlier messages that explain any problems with the device number and port number associated with the virtual switch.

Use SET VSWITCH with the RDEV option or SET PORT GROUP with the JOIN option to specify the address of one or more different QDIO OSA-Express devices. You can also correct the problem with the current device, or use a different port number. Issue SET VSWITCH with the CONNECT option to reconnect a device to the network.

— Variation 25 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. No OSA QDIO Connection Isolation Support**

Explanation

The ISOLATION option has been specified on the SET VSWITCH command and the OSA-Express device does not have the correct microcode that supports QDIO connection isolation.

System action

The device remains an inactive connection for the virtual switch.

User response

The ISOLATION option requires a certain level of OSA microcode. Use SET VSWITCH with the RDEV option or SET PORT GROUP with the JOIN option to specify the address of one or more different QDIO OSA-Express devices that has the proper microcode level. You can also correct the problem with the current device by applying the proper microcode. Issue SET VSWITCH with the CONNECT option to reconnect a device to the network.

— Variation 26 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. EQIDs for all OSA-Express devices do not match.**

Explanation

An EQID has been specified for at least one of the OSA-Express devices defined for the virtual switch that does not match EQIDs for all other OSA-Express devices.

System action

The device remains an inactive connection for the virtual switch.

System programmer response

Correct the EQID with the current device using the SET RDEVICE command.

— Variation 27 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. No VEPA Support**

Explanation

The VEPA option has been specified on the SET VSWITCH command and the OSA-Express device does not have the correct microcode that supports VEPA.

System action

The device remains an inactive connection for the virtual switch.

User response

The VEPA option requires a certain level of OSA microcode. Use SET VSWITCH with the RDEV option or SET PORT GROUP with the JOIN option to specify the address of one or more different QDIO OSA-Express devices that has the proper microcode level. You can also correct the problem with the current device by applying the proper microcode. Issue SET VSWITCH with the CONNECT option to reconnect a device to the network.

— Variation 28 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. HiperSockets Bridge is not available at this time.**

Explanation

A virtual switch is defined with the BRIDGEPORT RDEV operand to specify a HiperSockets bridge. This message is used to report an error in activating the Bridge Port.

This message is displayed when there is a conflict with other use of the HiperSockets CHPID:

- An operating system other than z/VM has already established a Bridge Port connection on the same CHPID.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the BRIDGEPORT RDEV is not operational. System operation continues.

User response

Use the SET VSWITCH command to choose another device to be used for the HiperSockets bridge.

— Variation 29 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. A Primary Bridge Port is already active.**

Explanation

A virtual switch is defined with the BRIDGEPORT RDEV operand to specify a HiperSockets bridge. This message is used to report an error in activating the bridge port.

This message is displayed when there already is a primary bridge port active on the HiperSockets CHPID containing the BRIDGEPORT RDEV device.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the BRIDGEPORT RDEV is not operational. System operation continues.

User response

Use the SET VSWITCH command to change the role of the BRIDGEPORT RDEV to secondary or to a device on another HiperSockets CHPID.

— Variation 30 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. The maximum number of Secondary Bridge Ports are currently in use.**

Explanation

A virtual switch is defined with the BRIDGEPORT RDEV operand to specify a HiperSockets bridge as a secondary role (standby). This message is used to report an error in activating the bridge port role.

This message is displayed when there are already the maximum number of secondary bridge ports for the HiperSockets CHPID containing the BRIDGEPORT RDEV device.

System action

If the message is a result of a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created

or modified, but the connection to the BRIDGEPORT RDEV is not operational. System operation continues.

User response

Determine whether some secondary bridge definitions can be removed.

— Variation 31 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Reflective Relay mode has been disabled on the partner switch which is required for VEPA mode.**

Explanation

The VEPA option has been specified on the SET VSWITCH command and the partner switch for the device does not support the necessary capabilities or has encountered an error setting the mode. For VEPA, the partner switch must support and be configured for reflective relay as defined by IEEE Standard 802.1Qbg.

System action

The device remains an inactive connection for the virtual switch.

User response

Use SET VSWITCH with the RDEV option or SET PORT GROUP with the JOIN option to specify the address of one or more different QDIO OSA-Express devices that are connected to a partner switch with the required capabilities.

— Variation 32 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. No Reflective Relay support at partner switch.**

Explanation

The VEPA option has been specified on the SET VSWITCH command and the partner switch for the device does not support the necessary capabilities. For VEPA, the partner switch must support and be configured for reflective relay as defined by IEEE Standard 802.1Qbg.

System action

The device remains an inactive connection for the virtual switch.

User response

Choose another device that is attached to a switch that supports reflective relay or configure the switch for reflective relay.

— Variation 33 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. SET VSWITCH SWITCHOVER issued.**

Explanation

A SET VSWITCH SWITCHOVER command requested that the VSWITCH SYSTEM *switchname* connection using device *device* be moved to a different device.

System action

The system disconnects the VSWITCH connection to the real hardware network using device *device* and attempts to establish it using the device specified in the SET VSWITCH SWITCHOVER command. If there is an error establishing that connection, the system attempts to re-establish the connection using device *device*.

User response

Examine the console for follow-on messages that indicate whether the VSWITCH connection was established using the device specified on the SET VSWITCH SWITCHOVER command. An informational message is issued when the switch over request is successful. An error message is issued if there is a problem with the switch over device.

— Variation 34 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Priority Queuing has not been enabled for OSA device.**

Explanation

The virtual switch (*switchname*) has been configured to use priority queueing, but priority queuing could not be enabled for the device. The I/O configuration program (IOCP) has been generated with PQ_OFF for the named device.

System action

The device remains an inactive connection for the virtual switch.

User response

Configure the device to enable priority queuing via IOCP (with PQ_ON).

— Variation 35 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. OSA Express interface error detected.**

Explanation

The virtual switch device driver in CP encountered an unexpected or undefined status associated with the OSA Express queue buffers. This makes it impossible to continue using the interface without resetting it to a known state.

System action

The system disconnects the virtual switch connection to the real hardware network using device *device* and attempts to establish a network connection to the next usable backup device. If there is an error establishing that connection, the system attempts to re-establish the connection using the original device.

User response

Examine the console for follow-on messages that indicate whether the virtual switch connection was re-established. If this error happens repeatedly, it suggests an error in the virtual switch driver or the OSA Express firmware.

— Variation 36 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. TCP/IP controller *userid* is not able to perform a configuration change at this time.**

Explanation

A virtual switch was defined with the RDEV or GROUP operand to specify one or more real device addresses. This message indicates an error in using those device addresses to activate the virtual switch's connection to the real LAN segment.

This message is displayed if the TCP/IP controller *userid* selected to provide network connectivity for the VSWITCH SYSTEM *switchname* is busy making a virtual device configuration for another device. The TCP/IP controller can only make a single configuration change at a time.

System action

If this error results from issuing a DEFINE VSWITCH or SET VSWITCH command, the virtual switch was created or modified, but the connection to the real hardware LAN is not operational. System operation continues. An attempt will be made to automatically activate the network connection when the controller completes its configuration change.

User response

Use the QUERY CONTROLLER command to display the status of controllers. If the network connection is not activated automatically, issue SET PORT GROUP JOIN to manually add the port back into a port group, or issue SET VSWITCH CONNECT for a single device uplink port VSWITCH configuration.

— Variation 37 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. This device does not match current VSWITCH attributes.**

Explanation

The specified device was being joined to a VSWITCH port group but it does not match one or more of the following current attributes:

- Network adapter type (OSA or OSH)
- Duplex mode
- Speed
- EQID (when specified)

System action:
The specified RDEV cannot be activated by the port group. It remains in the device list with an error code that indicates the nature of the mismatch.

User response

Keep the devices with the preferred attributes in the group and remove the devices that have incompatible attributes. If an unintended device was activated first (which would establish the undesirable attributes for the group), then the active device can be removed. If you remove the active device, then the virtual switch can activate other devices that were previously in conflict with the preferred attributes.

— Variation 38 **Connection *device* for VSWITCH SYSTEM *switchname* is not active. Uplink port device is not compatible with the currently active device. This device does not match current UPLINK OSA devices.**

Explanation

The OSA-Express device does not match the network adapter type (OSA or OSH) of the active virtual switch connection.

System action:

The device remains an inactive connection for the virtual switch.

User response

Make sure all OSA-Express devices have the same network adapter type (OSA or OSH).

— Variation 39	**Connection *device* for VSWITCH SYSTEM *switchname* is not active. IP type VSWITCH is not compatible with the uplink port device.**

Explanation

Network-Express (OSH) devices cannot be used as an uplink port for an IP-transport-type QDIO virtual switch.

System action:
The device remains an inactive connection for the virtual switch.

User response

Make sure IP-transport-type virtual switches do not use Network-Express (OSH) devices.

HCP2833E	**The variations of this message are explained below.**
— Variation 1	**Error *'errcode'*X removing IP address *ipaddr* for VSWITCH SYSTEM *switchnm***

Explanation

The TCP/IP Controller received an unexpected error when attempting to add or remove an IP address.

System action

The IP address table was not changed. System operation continues.

User response

Contact your IBM Support Center personnel.

— Variation 2	**Error *'errcode'*X adding IP address *ipaddr* for VSWITCH SYSTEM *switchnm*.**

Explanation

The TCP/IP Controller received an unexpected error when attempting to add or remove an IP address.

System action

The IP address table was not changed. System operation continues.

User response

Contact your IBM Support Center personnel.

— Variation 3	**Error *'errcode'*X adding IP address *ipaddr* for VSWITCH SYSTEM *switchnm*. Adapter IP address table is full.**

Explanation

The guest hosts coupled to the virtual switch have together used more IP addresses than allowed by the adapter.

System action

The IP address table was not changed. System operation continues.

User response

Examine the IP address assignments for the guest hosts and remove any that are not required. If that is not possible, create an additional virtual switch with a separate connection to the real hardware LAN segment.

— Variation 4	**Error *'errcode'*X adding IP address *ipaddr* for VSWITCH SYSTEM *switchnm*. IP address is already in use on the LAN.**

Explanation

An IP address was provided by a guest host which has coupled to the *switchnm*. However, that IP address is already in use on the real hardware LAN segment to which the virtual switch is connected.

System action

The address is registered for use among guest hosts coupled to the virtual switch. However, it is not registered for use by members of the real hardware LAN segment to which the virtual switch is connected using an OSA Express device.

User response

Check the IP address assignments for the guest hosts connected to the virtual switch for conflicts with those in use on the real hardware LAN segment. Use the QUERY VSWITCH DETAILS command to display the

IP address assignments for the virtual switch, paying particular attention to those marked local or disabled.

— Variation 5 **Error *'errcode'*X adding IP address *ipaddr* for VSWITCH SYSTEM *switchnm*. IP address is already registered.**

Explanation

The TCP/IP Controller received an unexpected error when attempting to add or remove an IP address.

System action

The IP address table was not changed. System operation continues.

User response

Contact your IBM Support Center personnel.

HCP2834E **{Error *'errcode'*X adding IP multicast address *ipaddr* for VSWITCH SYSTEM *switchnm*|Error *'errcode'*X adding IP multicast address *ipaddr* for VSWITCH SYSTEM *switchnm* IP multicast table is full.|Error *'errcode'*X removing IP multicast address *ipaddr* for VSWITCH SYSTEM *switchnm*}**

Explanation

The TCP/IP Controller received an error when attempting to add or remove a multicast IP address in the adapter's IP multicast address table.

- For the message format containing **IP multicast table is full**, the guest hosts coupled to the virtual switch have together used more IP addresses than allowed by the adapter.
- For remaining message formats, an unexpected error was received.

System action

System operation continues, but the IP address table was not changed.

System programmer response

- For the message format containing **IP multicast table is full**, examine the IP address assignments for the guest hosts and remove any that are not required. If that is not possible, create an additional virtual switch with a separate connection to the real hardware LAN segment.
- For remaining message formats, contact the IBM Support Center.

HCP2835E **CONTROLLER *userid* does not exist.**

Explanation

The specified controller *userid* is not currently defined as a controller.

System action

System operation continues.

System programmer response

Correct the controller name and reissue the QUERY CONTROLLER command.

HCP2836E **RDEV | VDEV | USERID was not found.**

Explanation

An active connection was not found matching the specified VLAN ID, RDEV, or VDEV.

System action

System operation continues.

System programmer response

Reissue the QUERY command with the correct option or use the ALL option to see all information.

HCP2837E **The variations of this message are explained below.**

Explanation

- No active groups found.
- No inactive groups found.

The QUERY PORT command did not find any active or inactive port groups on the system.

System action

The command is not executed; system operation continues.

User response

Use the SET PORT GROUP command to define groups.

HCP2838I **The variations of this message are explained below.**

Explanation

- Device *device* specified for port group *groupname* is not the correct type.
- Device *device* specified for {port group *groupname* | VSWITCH *switchname*} {does not exist | is not a QDIO OSA Express device | is offline | is already attached to user *username* | is not configured for priority queuing}.
- Device *device* specified for VSWITCH *switchname* is not compatible with the VSWITCH type.
- Device *device* specified for VSWITCH *switchname* BRIDGEPORT is not a bridge-capable HiperSockets device.
- Network devices do not have equivalent connectivity. EQID mismatch for device *device* for port group *groupname*.
- Port number *portnumber* specified for device *device* is invalid; maximum port number is *maxportnumber*.

One or more devices from the triplet specified by the RDEV operand of the SET PORT GROUP, DEFINE VSWITCH, or SET VSWITCH command cannot be used to connect the virtual switch to either the HiperSockets CHPID or the real LAN segment for the reason given in the message.

If priority queuing is enabled on the virtual switch:

- all OSA-Express features configured to the virtual switch's uplink port must be configured by IOCP to enable the feature within the adapter.
- all OSA-Express features defined in the port group must be configured by IOCP to enable the feature within the adapter.

System action

When the virtual switch is connected, one or more warning messages are issued and system operation continues.

When the virtual switch is connecting, the system attempts to use other devices specified in the port group or on the RDEV operand. If no devices are acceptable, an error message is issued, and the virtual switch operates in local mode only.

User response

For the port group format of the message, correct the problem or use the SET PORT GROUP command with the LEAVE option to remove the failing device from the port group. If priority queuing is enabled, ensure that all devices in the port group are configured to enable priority queuing via IOCP (with PQ_ON). Then retry the command.

For the VSWITCH format of the message, use the SET VSWITCH command to specify a different device number, or correct the problem and reissue the QUERY VSWITCH command. If the display shows a VDEV next to the failing device, the problem has been corrected and the device is now available and initialized. If no VDEV shows in the display for that device, issue the SET VSWITCH *switchname* CONNECT command to refresh the device or obtain a further message about a problem with the device.

If priority queuing is enabled on the virtual switch, and the uplink port is an OSA-Express device, use the SET VSWITCH command to specify a device with priority queuing enabled, or configure the device to enable priority queuing via IOCP (with PQ_ON). Then issue SET VSWITCH CONNECT. If the virtual switch is configured to use a port group, ensure all devices in the port group are configured to enable priority queuing via IOCP (with PQ_ON).

HCP2839E **Invalid operand for specified VSWITCH: *operand*.**

Explanation

A request to update a virtual switch cannot complete because the operand is invalid for the specified VSWITCH. For example, PRIROUTER cannot be specified for a VSWITCH of type ETHERNET.

System action

System operation continues.

User response

Reissue the command with a valid operand.

HCP2840E **Error '*errcode*'X {adding | removing} MAC address for VSWITCH SYSTEM *switchname* [MAC address is already registered. | Adapter MAC address table is full. | MAC address is not authorized. | MAC address is not found.]**

Explanation

The virtual switch controller received an error when attempting to add or remove a MAC address in the adapter's MAC address table.

- For errors X'2005' and X'200A': a MAC address was provided by a guest system which has coupled to the named virtual switch. However, that MAC address was already in use by another host connection sharing the adapter.

- For error X'2006': the guest systems coupled to the virtual switch and/or other network connections sharing the same adapter have together used more MAC addresses than allowed by the adapter.
- For errors x'200C' and X'200D': a MAC address was provided by a guest system which has coupled to the named virtual switch. However, this is an attempt by the guest to override the assigned MAC address of the NIC and this is not allowed by the hypervisor (error X'200C') or the adapter (error X'200D').
- For error X'2010': when attempting to remove a MAC address from the adapter, the adapter had no record of this MAC address.
- For other error codes, an unexpected error was received.

System action

System operation continues, but the MAC address table was not changed.

User response

- For errors X'2005' and X'200A': verify the MAC address assignments for the guest systems connected to the virtual switch. Use the QUERY VSWITCH DETAILS command to display the MAC address assignments for the virtual switch, paying particular attention to those marked Local or Disabled. Use the QUERY VMLAN command to ensure the MACPREFIX is unique across systems that are connected with the virtual switch.
- For error X'2006': examine the MAC address assignments for the guest systems and remove any that are not required. If that is not possible, create an additional virtual switch with a separate connection to the real hardware LAN segment.
- For errors x'200C' and X'200D': if the system administrator has enabled MACPROTECT for the network device, the assigned MAC address cannot be overridden. Otherwise, when overriding the assigned MAC address, ensure the MAC address prefix is not the same as any MAC address prefix used by this z/VM system and that the MAC address has the locally administered bit (X'02') set on.
- For error X'2010': this message can be ignored.
- For other error codes, contact your IBM Support Center personnel.

HCP2841E **Error '*errcode*'X {adding | removing} group MAC address *macaddr* for VSWITCH SYSTEM *switchname* [Group MAC table is full | Group MAC address is not found]**

Explanation

The virtual switch controller received an error when attempting to add or remove a multicast MAC address in the adapter's multicast address table.

- For error X'2006': the guest hosts coupled to the virtual switch and/or other network connections sharing the same adapter have together used more MAC addresses than allowed by the adapter.
- For error X'200B': when attempting to remove a group MAC address from the adapter, the adapter had no record of this MAC address.
- For other error codes, an unexpected error was received.

System action

System operation continues, but the MAC address table was not changed.

User response

- For error X'2006': examine the MAC address assignments for the guest hosts and remove any that are not required. If this is not possible, create an additional virtual switch with a separate connection to the real hardware LAN segment.
- Error X'200B': this message can be ignored.
- For other error codes, contact your IBM Support Center personnel.

HCP2842E **Error '*errcode*'X {adding | removing} VLAN ID *vlan* for VSWITCH SYSTEM *switchname* [VLAN is not found.]**

Explanation

The virtual switch controller received an error when attempting to add or remove a VLAN id in the adapter's VLAN table.

System action

System operation continues, but the VLAN table is not updated.

User response

- For error X'2017': the message can be ignored.
- For other error codes, contact your IBM Support Center personnel.

HCP2843E **{A stall was detected | The path was severed} for TCP/IP {Controller | management stack} *userid*. It was managing {device**

***device* | IP address *ipaddr*} for VSWITCH SYSTEM *switchname*.**

Explanation

userid is a TCP/IP controller for the virtual switch where one of the two following errors occurred.

- A stall was detected. The stack is not responding to communications from CP. The stack virtual machine may be in CP READ, or there may be a defect in the TCP/IP stack operation.
- The path was severed. The *VSWITCH path to the stack was severed. *userid* was logged off or IPLed, or another error occurred.

System action

System operation continues. Where possible, virtual switches under the control of *userid* fail over to a back up controller.

User response

Log on to the stack virtual machine, or use TCP/IP commands such as NETSTAT to examine the status of *userid*.

Examine the TCP/IP configuration file for *userid*. If TRACE OSD or MORETRACE OSD is in effect, make sure the VSWITCH CONTROLLER statement is using the FAILOVER_DISABLED option. This option turns off CP timeout checking to detect a stalled virtual switch controller.

HCP2844E **USER MACIDRANGE must be within SYSTEM MACIDRANGE.**

Explanation

The range specified for the USER MACIDRANGE is not within the range specified for the SYSTEM MACIDRANGE operand. These are specified on the VMLAN configuration statement.

System action

System operation continues, but the default values are used for the SYSTEM and USER MACIDRANGE values.

User response

Correct the values specified on the VMLAN configuration statement.

HCP2845I **Backup device *device* specified for VSWITCH *switchname* is {not initialized | not ready | restarting}. [Disconnected following error.]**

Explanation

A backup RDEV defined for the virtual switch could not be initialized. This occurs because there is a hardware problem, or no controller can handle the backup device. (A controller can be configured so that no virtual device addresses are available to attach the device.)

If "Disconnected following error" is displayed, the backup device was initialized, but had a subsequent failure.

System action

System operation continues.

User response

Use QUERY CONTROLLER to see what controllers have available virtual device addresses. Additional error information might be shown for the RDEV on the QUERY VSWITCH display.

Correct the problem and reissue QUERY VSWITCH. If the display shows a VDEV next to the failing device, the problem has been corrected and the backup device is available and initialized. If no VDEV is shown in the display for that device, issue SET VSWITCH *switchname* CONNECT to refresh the backup or obtain further information about the device problem.

For more information on using QUERY and SET, see *z/VM: CP Commands and Utilities Reference*.

HCP2846E **The variations of this message are explained below.**

Explanation

- The [VLAN | PORTTYPE | GVRP | NATIVE | VLAN_COUNTERS | VLANID] option is not allowed for a VLAN UNAWARE virtual switch.
- The IVLPORT VLAN option is not allowed for a VLAN UNAWARE virtual switch.

When a virtual switch is created with the VLAN UNAWARE option, the use of VLAN, PORTTYPE, GVRP, NATIVE, VLAN_COUNTERS and VLANID options are not permitted on the DEFINE VSWITCH *switchname* command or the SET VSWITCH *switchname* command.

System action

The command terminates. The DEFINE VSWITCH or SET VSWITCH command is unsuccessful.

User response

For DEFINE VSWITCH, remove the invalid option. For SET VSWITCH, remove the invalid option from the command, or DETACH the virtual switch and recreate it without using the VLAN UNAWARE option.

For SET VSWITCH GRANT, remove the VLAN, PORTTYPE or GVRP options from the command, or DETACH the virtual switch and recreate it without using the VLAN UNAWARE option.

HCP2847E **PORTTYPE ACCESS is not allowed when the user is authorized for more than one VLAN.**

Explanation

If the user is given PORTTYPE ACCESS or if the PORTTYPE defaults to ACCESS, the user can be authorized for only one VLAN ID.

System action

The SET VSWITCH GRANT command fails.

User response

Issue the SET VSWITCH GRANT command to use PORTTYPE TRUNK with a list of VLAN IDs, or issue SET VSWITCH GRANT with PORTTYPE ACCESS and a single VLAN ID.

HCP2848E **A VLAN list is not allowed for a [guest LAN | virtual switch with the VLAN UNAWARE attribute | virtual switch when your PORTTYPE is ACCESS].**

Explanation

- You attempted to COUPLE to a guest LAN or a VLAN UNAWARE virtual switch, and you are authorized for one or more VLAN IDs
- You attempted to COUPLE to a virtual switch and you are authorized for two or more VLAN IDs and your PORTTYPE was defined to be ACCESS.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

- For a guest LAN protected by an External Security Manager (ESM), contact the ESM administrator to remove the VLAN list from the guest's authorization.
- For a VLAN UNAWARE virtual switch protected by an ESM, contact the ESM administrator to remove the VLAN list from the guest's authorization.
- For a VLAN AWARE virtual switch, change the VLAN list or the PORTTYPE defined for the guest in one of the following ways:
  - For a virtual switch protected by an ESM, contact the ESM administrator to remove the VLAN list from the guest's authorization
  - For a virtual switch protected by an ESM, use SET VSWITCH to REVOKE the guest's access definition, then use SET VSWITCH GRANT to authorize the guest for PORTTYPE TRUNK
  - For a virtual switch not protected by an ESM, use SET VSWITCH to REVOKE the guest's access definition, then use SET VSWITCH GRANT to authorize the user for a single VLAN ID and PORTTYPE ACCESS
  - For a virtual switch protected by an ESM, use SET VSWITCH to REVOKE the guest's access definition, then use SET VSWITCH GRANT to authorize the user for more than one VLAN ID and PORTTYPE TRUNK.

HCP2849E **ESM VLAN configuration error. [No VLANs were provided for a VLAN AWARE virtual switch | Invalid VLAN ID provided].**

Explanation

An External Security Manager (ESM) such as RACF is controlling the virtual switch and one of the following occurred:

- The ESM failed to provide a list of VLAN IDs
- The ESM provided an invalid VLAN ID.

System action

The COUPLE command fails.

User response

Contact the ESM administrator to correct the authorization profile.

HCP2850E **The variations of this message are explained below.**

— Variation 1 **MACID is not set for VSWITCH *switchname*. MAC address *macaddr* is already in use [by *userid*].**

Explanation

The MAC address *macaddr* shown is already in use by [by *userid*].

System action

The virtual switch MAC ID remains unchanged.

User response

Select a different MACID.

— Variation 2 **MACID not set for VSWITCH *switchname*. Stack *userid* is providing management services.**

Explanation

You are not permitted to change the MACID for a virtual switch while a management interface is active for the virtual switch. SNMP clients may be gathering Bridge MIB information for the virtual switch.

System action

The virtual switch MAC ID remains unchanged.

User response

Contact the administrator of the stack identified by userid to use the OBEYFILE command to remove VSWITCH *switchname* from the HOME statement or to remove the HOME statement itself. This disables management services (including SNMP) for the virtual switch. When the MACID has been changed successfully notify SNMP clients of the MACID change and issue the OBEYFILE command to reestablish the virtual switch association with the IP address. For more information, refer to *z/VM: TCP/IP Planning and Customization*.

— Variation 3 **MACID is not set for VSWITCH *switchname*. Suffix for MAC address *macaddr* is not within USER MACIDRANGE.**

Explanation

The USER MACIDRange specified in the VMLAN MACIDRANGE statement in the System Configuration file identifies the subset of the MACIDs in the SYSTEM range that are reserved for user definitions of MACIDs. The specified MACID is not within that range. For more information, refer to *z/VM: CP Planning and Administration*.

System action

The virtual switch MAC ID remains unchanged.

User response

Use the Query VMLAN command to determine the USER MACIDRANGE and select a different MAC ID.

— Variation 4 **MACID is not set for VSWITCH *switchname*. No MACID is available.**

Explanation

The VMLAN MACIDRange statement in the System Configuration file specifies the range of identifiers available to be used by CP when generating the unique identifier part (last six hexadecimal digits) of a virtual adapter MAC address. No more unique identifiers are available within the specified range. For more information, refer to *z/VM: CP Planning and Administration*.

System action

The virtual switch MAC ID remains unchanged.

User response

Contact the system administrator to change the VMLAN MACIDRange specifications so more MAC addresses are available.

— Variation 5 **MACID is not set for VSWITCH *switchname* connection *device*. No MACID is available.**

Explanation

The VMLAN MACIDRange statement in the System Configuration file specifies the range of identifiers available to be used by CP when generating the unique identifier part (last six hexadecimal digits) of a MAC address. No more unique identifiers are available within the specified range to assign to the virtual switch RDEV connection. For more information, refer to *z/VM: CP Planning and Administration*.

The MAC address is used in LACP (Link Aggregation Control Protocol). It is necessary for proper operation of a virtual switch defined with the GROUP operand.

The MAC address is also used when a z/VM TCP/IP stack is providing management services for a virtual switch (such as acting as an SNMP agent reporting bridge MIB information).

System action

No MAC address is assigned to the virtual switch network connection for *device*.

User response

Contact the system administrator to change the VMLAN MACIDRange specifications so more MAC addresses are available.

— Variation 6 **MACID is not set for *vdev*. MAC address *macaddr* is already in use [by *userid*].**

Explanation

The MAC address *macaddr* is already in use [by *userid*]. Note that MAC address assignments persist across an operation such as DETACH NIC. This allows consistency across device driver restarts.

System action

No MAC address is assigned to the device.

System programmer response

Select a different MAC ID.

— Variation 7 **MACID is not set for *vdev*. Suffix for MAC address *macaddr* is not within USER MACIDRANGE.**

Explanation

The USER MACIDRange specified in the VMLAN MACIDRANGE statement in the System Configuration file identifies the subset of the MACIDs in the SYSTEM range that are reserved for user definitions of MACIDs. The specified MACID is not within that range. For more information, refer to *z/VM: CP Planning and Administration*.

System action

No MAC address is assigned to the device.

System programmer response

Use the Query VMLAN command to determine the USER MACIDRANGE and select a different MAC ID.

— Variation 8 **{SSI cluster mode not stable | Guest relocation active}.**

Explanation

The MAC address cannot be allocated because the SSI cluster mode is not stable or the guest is currently being relocated.

System action

The operating system did not create a MAC address for the virtual adapter or virtual switch.

System programmer response

Determine why the SSI cluster mode is not stable or wait for the relocation to finish.

HCP2851I **Attempting to establish a network connection for VSWITCH *switchname*. Use SET VSWITCH DISCONNECT to stop recovery attempts.**

Explanation

None of the QDIO devices defined for *switchnm* are currently functional. The virtual switch's connection to the real hardware LAN is not operational. However, one or more of the devices reports an error condition that may be recoverable.

System action

The system waits a short period of time for the connection to be established on one of the devices reporting a recoverable error. If that is not successful, the virtual switch attempts to establish the network connection on a different device if one exists that reported a recoverable error condition.

User response

Use QUERY VSWITCH to display the status of individual devices and the reasons they are not operational. Correct the problem or use the SET VSWITCH DISCONNECT command to stop repeated attempts to establish the connection.

HCP2853E **The variations of this message are explained below.**

Explanation

- SET PORT GROUP not performed; device limit exceeded.
- SET VSWITCH not performed; device limit exceeded.
- VSWITCH SYSTEM *switchname* not created; device limit exceeded.

An attempt was made to configure more than eight total devices for a virtual switch/port group combination.

System action

The operating system did not modify the virtual switch or port group.

System programmer response

Use the QUERY VSWITCH command and/or the QUERY PORT command to determine the list of devices currently associated with the group and virtual switch. Determine if any ports can first be removed and then reissue the command.

HCP2854E	The variations of this message are explained below.

Explanation

- VSWITCH SYSTEM *switchname* not created; SSI cluster mode is not stable.
- VSWITCH SYSTEM *switchname* not created; No MACID is available.

A DEFINE VSWITCH command was rejected because the SSI cluster mode is not stable or a MAC address could not be assigned to the virtual switch.

System action

The operating system did not create a new virtual switch.

System programmer response

For the first version of the message, determine why the SSI cluster mode is not stable. When the cluster becomes stable, the virtual switch can be created. For the "no MACID is available" version of the message, all possible MACIDs are assigned on the system. User QUERY NIC MACID to determine if there are any guests or virtual switches that could relinquish their assigned MAC addresses and then attempt to create the virtual switch again.

HCP2855I	Device *device* for VSWITCH *switchname* is {enabled | disabled} for port group *groupname* by LACP.

Explanation

The named device is either enabled or disabled in the named port group. LACP negotiation with the physical switch has resulted in this action.

System action

If other port group members are operational, virtual switch operation continues.

User response

Use the QUERY PORT GROUP command to display status about the port.

HCP2856E	The variations of this message are explained below.

Explanation

- SET VSWITCH not performed; port group already assigned to VSWITCH SYSTEM *switchname*.
- SET VSWITCH not performed; port group *groupname* is already in use.
- VSWITCH SYSTEM *switchname* not created; port group *groupname* is already in use.

A request to set a GROUP for a virtual switch cannot complete because a group is already assigned to another virtual switch or a group is already assigned to this virtual switch.

System action

The operating system did not modify the virtual switch.

System programmer response

If you are attempting to set the group for a virtual switch (through DEFINE VSWITCH or SET VSWITCH), it may be that the group has already been assigned to another virtual switch. Use QUERY PORT GROUP to find out if this is the case.

If you are attempting to change the group for a virtual switch, use the SET VSWITCH with the NOGROUP command to remove the current GROUP association with the virtual switch. Reissue the SET VSWITCH command with the desired GROUP.

HCP2857E	The variations of this message are explained below.
— Variation 1	SET PORT GROUP not performed; device *device* not defined | already defined in port group.
— Variation 2	SET PORT GROUP not performed; group limit exceeded.
— Variation 3	SET PORT GROUP not performed; group is defined to VSWITCH *switchname*.
— Variation 4	SET PORT GROUP not performed; detach is in progress for

associated VSWITCH SYSTEM *switchname*.

Explanation

A SET PORT GROUP command was rejected for one of the following reasons:

- The device identified by *device* is not in the specified group.
- The device identified by *device* already exists in the specified group.
- The number of groups defined in the system has reached the system limit.
- The group is associated with the named virtual switch.
- The device identified by *device* is not in the correct state.

System action

The operating system did not create or modify a port group. Any existing port groups are not affected.

System programmer response

Use the QUERY PORT GROUP to determine the list of devices currently associated with the group and their current status. Reissue the SET PORT GROUP command with the correct device number. For the "limit exceeded" format of this message, determine if any port groups can first be removed and then reissue the SET PORT GROUP command. For the "group is defined" format of this message, remove the association to the virtual switch with the SET VSWITCH command with the NOGROUP option.

HCP2858I	**The variations of this message are explained below.**
— Variation 1	***userid* connection to *lanowner lanname* is not affected by this update.**

Explanation

This unsolicited message is issued to the user who issued a CP SET VSWITCH command to GRANT or REVOKE access to a user who is already coupled by authority of an ESM (External Security Manager). The CP network management information is updated, but will not be applied while the ESM is responsible for this connection.

In a typical system where an ESM controls LAN authorization, the CP SET VSWITCH command would not be used to grant or revoke access to the same networks. In an environment where the ESM is only active part of the time, the CP SET VSWITCH command may be issued by an initialization script. When the ESM is enabled for LAN class controls, the CP commands will not affect resources already permitted by the ESM during CP COUPLE processing.

System action

CP access list is updated but not applied.

User response

Contact the ESM administrator to correct the authorization profile.

— Variation 2	**Guest *userid* is authorized for too many VLAN IDs on SYSTEM *switchname.* VLAN-specific ARP processing is disabled.**

Explanation

User *userid* has been granted access to this network (SYSTEM *switchname)* with more than 2000 VLANs. This means that the VSWITCH will not attempt to use an OSA Express feature that could announce your IP address on every authorized VLAN ID. This is only an informational message because this may not affect connectivity on your network.

When a user is connected to a VSWITCH, an IP address registered on the virtual NIC is also registered on the real OSA Express. The OSA Express will automatically send a gratuitous ARP (with no VLAN tag) to announce this IP address to other hosts, and to check for conflicts in the physical network. The VSWITCH will initiate a gratuitous ARP for each authorized VLAN up to a threshold.

Currently, a threshold of 2000 has been established. When the authorized VLAN ID set is no larger than 2000, the VSWITCH will initiate gratuitous ARP processing for each VLAN.

System action

System operation continues.

System programmer response

- If your physical network is configured to accept untagged frames from the OSA Express, this VLAN-specific gratuitous ARP processing may be unnecessary. An untagged ARP frame is automatically generated when an IP address is registered, or moved to a different OSA card. If untagged frames can be delivered to all of the hosts in your physical broadcast domain, you do not need

VLAN-specific ARP processing. You can ignore this informational message.

- If this user intends to configure a "Global VLAN" for this interface, a single gratuitous ARP will be generated for the Global VLAN ID. In this case, you do not need the VLAN-specific ARP processing. You can ignore this informational message.
- If the set of authorized VLAN IDs is arbitrarily large (for example, 1-4094), consider using a definition that reflects the actual hardware VLAN configuration. For example, "VLAN 1-100" may include all of the VLAN IDs that are configured to the physical ports. When an IP address is registered, the OSA Express only has to generate 100 gratuitous ARP messages. Reducing the authorized VLAN ID set would eliminate this informational message.

— Variation 3 ***userid1*** **connection to** ***lanowner lanname*** **has been {revoked | updated} by** ***userid2*****.**

Explanation

This unsolicited message is issued to the owner of a virtual NIC when authorization is updated (or revoked) while the NIC is coupled to the same network (*lanowner lanname*). This indicated that an authorized user (*userid1*) made a change to the access list controlling this network. For example, a network administrator may have used the CP SET VSWITCH command to add another VLAN to your authorized VID set.

System action

The access for *userid1* will be updated. If the user was revoked, the user will be uncoupled from the network. Depending on the new authorization, connectivity may be affected.

User response

Contact the issuer or a system administrator to handle the authorization issue.

HCP2859I **{Device** ***device*** **| Controller** ***userid*** **| Eligible controllers} for VSWITCH SYSTEM** ***switchname*** **{does | do} not support {gratuitous ARP tagging | GVRP}.**

Explanation

CP determined that a device or the eligible controllers are missing function that is required for the proper operation of the virtual switch.

Connectivity problems can result following a network failure because the virtual switch does not have the support needed to properly VLAN tag the gratuitous ARP for the virtual switch.

The system operation might not be optimal if support for GVRP VLAN Registration is not available. GVRP provides dynamic VLAN registration and VLAN registration removal for networking switches. This eliminates the need to manually configure the individual port VLAN assignments.

System action

System operation continues.

User response

If a device is in error, obtain and apply the latest microcode service to the OSA-Express device. If a controller is in error, obtain and apply the latest TCP/IP service.

HCP2860I **WARNING! IMPROPER USE OF THE XLINK FORMAT COMMAND WILL CAUSE LOSS OF MINIDISK DATA. BE SURE THAT VOLSER** ***volid*** **IS NOT ON-LINE TO ANY ASSOCIATED SYSTEMS.**

Explanation

The XLINK FORMAT command should be used only on DASD volumes that are not currently in use by another system.

System action

None. Command processing continues with prompting as described in message HCP2868I.

User response

Make sure that the volume to be formatted is not in use by another system before replying YES to the prompt.

HCP2861E **MISSING OR INVALID FUNCTION:** ***subcommand***

Explanation

You entered the XLINK command with the subcommand *subcommand*, which is not a valid subcommand.

System action

The command is not processed.

User response

Reenter the XLINK command with a valid subcommand. The XLINK commands and their parameters are described in the CP commands manual.

HCP2862E VOLSER *volid* IS NOT A CP FORMATTED VOLUME

Explanation

Volume *volid* has not been formatted by ICKDSF or the CPFMTXA command. XLINK supports only CP volumes on which you can define minidisks. Cylinder 0 (at least) of these volumes must be formatted with ICKDSF or the CPFMTXA utility before XLINK FORMAT can initialize them.

System action

The command is not processed.

User response

Use ICKDSF or the CPFMTXA utility to make sure the volume is a CP volume. At least cylinder 0 of the volume must be formatted for CP and allocated as PERM.

HCP2863E DIAG-A8 I/O ERROR, CC=*n* R15=*hhhhhhhh* SCSW=*hhhhhhhh* SENSE=*hhhhhhhh*

Explanation

The XLINK utility program received an I/O error when asking CP for I/O services through DIAGNOSE code X'A8'. For more information on condition codes and return codes, see *z/VM: CP Programming Services*.

System action

The command is not processed.

User response

If you are entering an XLINK FORMAT command, check that you have write access to the disk. Otherwise, refer to the DIAGNOSE code X'A8' error information returned in the message.

HCP2864E DEVICE ADDRESS *ccuu* IS INVALID OR NOT OPERATIONAL

Explanation

The device specification *ccuu* is an invalid device specification. The valid device range for extended control (EC) mode virtual machines is X'000' through X'FFF'. If the device specification is a valid one, such as not attached, not linked, or not defined, then the device is not operational.

System action

The command is not processed.

User response

Specify a valid device address and make sure that the device is ready. Then reenter the command.

HCP2865E VOLSER READ IS *volid*, FORMAT NOT DONE

Explanation

The volume ID read from the device is *volid*, but you specified another volume serial on the command line.

System action

The command is not processed.

User response

After checking whether this volume should be formatted for XLINK, reenter the command with the correct volume ID.

HCP2867I VOLSER *volid* NOT IN INCLUDE LIST, DEVTYPE CSE DEFAULTS WILL BE USED.

Explanation

According to the active CSE/SSI system table (HCPSYSTB), the volume ID *volid* is not under XLINK control. It is possible that you have not yet added this new volume to the XLINK include list.

System action

The XLINK utility can continue, but it will use the device type defaults when formatting or displaying the CSE area. This is acceptable if you do not intend to specify a specific format or location for the CSE area on this volume. However, the volume must be defined by an XLINK_VOLUME_INCLUDE configuration statement before the volume can be controlled by XLINK.

- If the XLINK DISPLAY command was issued, the system tries to complete the XLINK DISPLAY command. If the default values for the CSE area location and record length are not correct, an I/O error occurs.

- If the XLINK FORMAT command was issued, message HCP2868I is shown and then the XLINK utility requests a reply to continue.

User response

Use the command XLINK CHECK *volid* to find out if the volume is included in the XLINK include list. For XLINK FORMAT, reply YES or NO to the prompt.

HCP2868I **XLINK FORMAT *volid* - CYL=*ccccc* TRK=*tt* RECL=*lllll* RECS=*rr* SYSTEMS=*ss***

Explanation

This informational message lists the CSE area location, the number of cylinders made available for XLINK use, and the number of map records that will be placed in the area. The information is obtained from the XLINK_VOLUME_INCLUDE *volid* configuration statement or from the device type defaults table.

System action

If this message is followed by message HCP2867I, the XLINK utility requests a reply of YES or NO before it begins formatting. Otherwise, the XLINK utility continues and formats the volumes based on the values displayed.

User response

If this message is followed by HCP2867I, reply YES or NO to the prompt.

HCP2869I **CSE XLINK FORMAT COMPLETE**

Explanation

The XLINK FORMAT command completed without errors.

System action

System processing continues.

User response

None.

HCP2870E **ERROR *nnn* ON CMSSTOR CALL**

Explanation

The XLINK utility could not obtain enough free storage to complete the requested function. The error code *nnn* is the code received from the CMSSTOR macro.

For more information about CMSSTOR error messages, refer to *z/VM: CMS Commands and Utilities Reference*.

System action

The command is not processed.

User response

You may need more available CMS free storage. The XLINK utility needs enough storage to contain all of the XLINK map records at the same time. If you are displaying or formatting a CSE area with many large map records, you may need to increase your available free storage. Some methods of increasing free storage include the following:

- Defining a larger virtual machine with the CP DEFINE STOR command
- Freeing some currently allocated storage by releasing accessed disks
- Using the NUCXDROP command to cancel nucleus extensions and release the storage occupied by the corresponding program.

HCP2871E **INVALID OPTION: *option***

Explanation

The specified option *option* is invalid.

System action

The command is not processed.

User response

Reenter the command with valid options.

HCP2872E **COMMAND LINE IS TOO LONG FOR CP. CP CAN ACCEPT NO MORE THAN 240 CHARACTERS - YOUR COMMAND WAS *nnn* CHARACTERS IN LENGTH**

Explanation

The length of the XLINK command that was entered exceeds 240 characters and cannot be passed from the XLINK utility to CP. The *nnn* variable is the actual length of the command entered.

System action

The command is not processed.

User response

Reenter the command with fewer parameters. If necessary, enter the command more than once.

HCP2873E MISSING OR INVALID PARAMETER OR OPTION

Explanation

One of the parameters or options is missing or invalid.

System action

The command is not processed.

User response

Reenter the command with valid parameters and options.

HCP2874E {DEVICE *vdev* | VOLUME *volid*} IS NOT A CKD OR ECKD DASD DEVICE.

Explanation

The virtual device or volume specified is not a CKD or ECKD DASD. The XLINK utility supports only CKD and ECKD DASD. The requested function cannot be completed.

System action

The command is not processed.

User response

Make sure that the device you want to address is a CKD or ECKD DASD. Then reenter the command.

HCP2876I VOLUME *volid* WAS FORMATTED FOR CSE ON *mm/dd/yy* AT *hh:mm:ss* BY USER *userid* AT SYSTEM *sysname*

Explanation

This message is issued when the XLINK DISPLAY function is requested. It informs you when and by whom the volume was formatted for XLINK use.

System action

The system continues to process the command.

User response

None.

HCP2877E EITHER NOT A CSE VOLUME, OR CSE DATA IS NOT ON CYL *ccccc* TRK *tt*

Explanation

The volume for which you requested an XLINK DISPLAY is not an XLINK-controlled volume. There is no valid XLINK data on cylinder *ccccc*, track *tt*.

System action

The command is not processed.

User response

Make sure that:

- An XLINK_VOLUME_INCLUDE configuration statement exists for this volume
- The volume was correctly formatted for XLINK use
- The parameters specified on the XLINK_VOLUME_INCLUDE configuration statement are the same as those used when the volume was formatted for XLINK.

Then reenter the command.

HCP2880E *userid vaddr* is not linked, CSE LINK I/O error, code *cc*.

Explanation

The minidisk *vaddr*, owned by user *userid*, cannot be linked as requested because the XLINK utility received an I/O error when trying to read or write the CSE area. The error code, *cc*, describes one of the following I/O errors:

Code
Meaning

01
A write error occurred.

02
The CSE area does not contain the expected XLINK format, or the drive presented a real hardware I/O error.

03
The XLINK map record length on the CSE area is smaller than the start or end cylinder for this minidisk. This indicates that an incorrect cylinder was specified on an XLINK_VOLUME_INCLUDE or XLINK_DEVICE_DEFAULTS configuration statement.

04
An I/O error occurred because of invalid channel command words.

05
A hardware error occurred.

System action

The requested link is denied.

User response

Make sure that the device where the minidisk is located is not presenting real hardware I/O errors and that the volume is correctly formatted for XLINK. For error code 03, check the configuration statements for correct cylinder values.

HCP2881E **XLINK RESET is not allowed. There is no CSE LINK control on this system.**

Explanation

An XLINK RESET *sysname* command was entered on a system identified on an XLINK_SYSTEM_EXCLUDE configuration statement.

System action

The command is not processed.

User response

Make sure that you are using the XLINK RESET command on an XLINK-controlled system.

HCP2882E **XLINK RESET is not allowed. There is no CSE LINK control on system *sysname*.**

Explanation

An XLINK RESET *sysname* command was entered, but the specified system is not identified on an XLINK_SYSTEM_INCLUDE configuration statement.

System action

The command is not processed.

User response

Make sure that you are specifying the correct system name and that the correct CSE/SSI system table is active on your system.

HCP2883I **Volume *volidn* is not controlled by CSE LINK.**

Explanation

An XLINK CHECK command was entered. The volume *volidn* is not under XLINK control according to the XLINK_VOLUME_INCLUDE and XLINK_VOLUME_EXCLUDE configuration statements that are currently active on this system.

System action

The command is processed, and system operation continues.

User response

If this volume should be under XLINK control, an XLINK_VOLUME_INCLUDE statement must be added to the system configuration file.

HCP2884I **Volume *volidn* is controlled by CSE LINK.**

Explanation

An XLINK CHECK command was entered. The volume *volidn* is under XLINK control according to the XLINK_VOLUME_INCLUDE and XLINK_VOLUME_EXCLUDE configuration statements that are currently active on this system.

System action

The command is processed, and system operation continues.

User response

If this volume should not be under XLINK control, the XLINK_VOLUME_INCLUDE statement for this volume must be removed from the system configuration file, or an XLINK_VOLUME_EXCLUDE statement must be added.

HCP2885E **Volume *volidn* is offline.**

Explanation

The volume *volidn* is offline and cannot be acted upon by XLINK.

System action

The command is not processed.

User response

Vary the volume online and reenter the command.

HCP2886D **Are you ready for XLINK RESET of system *sysname*, volume *volidn*? Enter YES or NO:**

Explanation

You have entered an XLINK RESET command to reset the link flags for system *sysname* on volume *volidn*.

System action

None until you reply YES or NO.

User response

Before replying YES:

- Make sure you typed the command correctly.
- Make sure the system *sysname* is really down or has no access to volume *volidn* anymore.
- Enter a SYSTEM RESET command and a SYSTEM CLEAR command on the down system to make sure that it will not complete any outstanding I/Os or issue any new I/Os to the volume(s) being RESET.
- If this is a RESET for one volume while another system is still running, make sure that the volume is detached from that system on the system being RESET.

HCP2887I **XLINK RESET complete.**

Explanation

The XLINK RESET command completed.

System action

The command is processed, and system operation continues.

User response

None.

HCP2888I **XLINK RESET ignored.**

Explanation

The XLINK RESET command was ignored because the response to message HCP2886D was NO (or not YES).

System action

The command is not processed.

User response

None.

HCP2889E **XLINK RESET on your own system is not allowed.**

Explanation

You are trying to enter an XLINK RESET command for the system you are working on. Evidently, this system is still running. Since all link flags for a running system would be destroyed, which would result in loss of data on minidisks, the command is not executed.

System action

The command is not processed.

User response

Specify the correct system name.

HCP2890E **CSE I/O error, code *cc*, volume *volser*, device *rdev*; LINK commands may fail.**

Explanation

This message is presented to the operator at IPL, or when a volume is attached to the system. The error occurred on volume *volser*, and the code *cc* identifies the kind of I/O error. The code, *cc*, has the following meaning:

Code
Meaning

01
A write error occurred.

02
The CSE area does not contain the expected XLINK format, or the drive presented a real hardware I/O error.

03
The XLINK map record length on the CSE area is smaller than the start cylinder for this minidisk. This indicates that an incorrect cylinder was specified on an XLINK_VOLUME_INCLUDE or XLINK_DEVICE_DEFAULTS configuration statement.

04
An I/O error occurred because of invalid channel command words.

The error occurred when the XLINK utility tried to clear the map record of this system.

Note: All LINK statements and LINK commands to minidisks on this volume will probably fail.

System action

The system continues to operate, but it denies all links to this volume while the error persists.

User response

If it is a hardware error, have the device repaired. If it is a write error, make sure that the WRITE INHIBIT switch is in the OFF state. Check that the XLINK_SYSTEM_INCLUDE and XLINK_VOLUME_INCLUDE configuration statements are correct. Also, make sure that the CSE area is on volume *volser*.

HCP2891I **CSE system table loaded at address *raddr***

Explanation

The CSE/SSI system table is located at real storage address *raddr*.

System action

System operation continues.

User response

None.

HCP2892I **WARNING! XLINK RESET must be used with extreme caution. Improper use will cause loss of minidisk data.**

Explanation

An XLINK RESET command was entered. This command destroys all records of the links held by a particular system. It must be used only when the specified system is turned off, or has had its storage cleared and reset.

System action

This message is sent to the user who entered the command and to the system operator.

User response

Make sure the specified system in the XLINK RESET command is turned off, or has had its storage reset.

HCP2893D **CAUTION: Are you IPLing from a DASD device that is currently IPLed on another machine? Reply YES or NO:**

Explanation

The checkpoint cylinders on the IPLed DASD indicate that the system was not previously shut down on this machine. This can occur for the following reasons:

- There are newly formatted checkpoint cylinders.

  System Action: The system continues IPL processing.

  User Response: Reply NO.
- The system was previously IPLed on another machine and unsuccessfully shut down.

  System Action: The system continues IPL processing.

  User Response: Reply NO.
- The system is currently IPLed on another machine.

  System Action: Message HCP2894W is displayed, and the system enters a disabled wait state (code 009).

  When replying NO, the system continues IPL processing. However, the system areas (warm start, checkpoint, error recording) may be destroyed.

  User Response: Determine which machine this system should be running on, and enter YES to terminate IPL processing.

HCP2894W **IPL processing terminated.**

Explanation

This message is displayed as a result of replying YES to message HCP2893D.

System action

The system enters a disabled wait state (code 009).

User response

None.

HCP2895I **The variations of this message are explained below.**

— Variation 1 **WARNING! IF ALL SYSTEMS THAT WILL SHARE VOLUME volid ARE NOT AT RELEASE VM/ESA 1.1.1 OR HIGHER, ISSUE XLINK FORMAT FROM AN EARLIER RELEASE OF VM.**

Explanation:
Either the XLINK FORMAT command was entered from release VM/ESA 1.1.1 or higher, or the ATTACH command was entered and the DASD was formatted

with XLINK FORMAT from release VM/ESA 1.1.1 or higher.

System action:
If the warning is the result of the XLINK FORMAT command, you are prompted whether you want to continue, YES or NO. If the warning is the result of the ATTACH command, processing will continue.

User response:
If any of the systems are at a VM release earlier than VM/ESA 1.1.1, the XLINK FORMAT command from the earlier release should be used to format the devices that will be shared between systems. No action is needed if all systems using cross-system link are at release VM/ESA 1.1.1 or higher.

— Variation 2 **WARNING! IF ALL SYSTEMS THAT WILL SHARE THE FOLLOWING VOLUME(S) ARE NOT AT RELEASE VM/ESA 1.1.1 OR HIGHER, ISSUE XLINK FORMAT FROM AN EARLIER RELEASE OF VM. *{volid|volid1... volidn}***

Explanation:
This message was received during an IPL of a system that is using cross-system link and the specified DASD(s) was formatted with XLINK FORMAT from a system at release VM/ESA 1.1.1 or higher.

System action:
The IPL process continues, but any CP LINK commands issued to the devices from a pre-VM/ESA 1.1.1 system will fail.

User response:
If any of the systems are at a VM release earlier than VM/ESA 1.1.1, the XLINK FORMAT command from the earlier release should be used to format the devices that will be shared between systems. No action is needed if all systems using cross-system link are at release VM/ESA 1.1.1 or higher.

HCP2896I **WARNING! XLINK FORMAT command will format cylinders *ccccc - ccccc***

Explanation

An XLINK FORMAT command was issued. This message informs you that the XLINK FORMAT command will use multiple cylinders to contain the XLINK map records for the volume.

System action

The XLINK utility requests a reply of yes or no before it begins formatting,

User response

You are prompted with the following:

```
CONTINUE? ENTER YES OR NO:
```

If the format operation should continue, answer YES. Otherwise, answer NO.

HCP2897E **XLINK FORMAT CANNOT CREATE A CSE AREA STARTING AT CYLINDER *ccccc* FOR *nnnnn* CYLINDERS SINCE THIS IS BEYOND THE END OF THE VOLUME. XLINK FORMAT FUNCTION TERMINATED.**

Explanation

The use of multiple cylinders will cause the XLINK FORMAT command to go beyond the extents on this volume.

System action

The command is not processed.

User response

Change the specification of the CSE area in the XLINK_VOLUME_INCLUDE or XLINK_DEVICE_DEFAULTS configuration statement.

HCP2898E **Message device could not be defined because there are no available CHPID numbers.**

Explanation

Every available CHPID (channel path ID) within your virtual I/O configuration is currently being used by other devices.

System action

The message device is not defined; system operation continues.

Operator response

None

System programmer response

None

User response

Free up a CHPID by detaching some existing virtual devices.

HCP2950E **Unknown function code *fc* was received from *sysname*.**

Explanation

The system you are logged onto received a QITEM request with an unknown function code *fc* from system *sysname*.

System action

System operation continues.

User response

If your system is in a mixed CSE and VM/ISF environment, and *sysname* is a VM/ISF system, make sure that the PTF to VM/ISF Release 1 or Release 2 to allow communication between VM/ISF and CSE has been applied correctly. If the PTF has been applied correctly and the problem persists, contact your IBM Support Center representative.

HCP2951E **An unexpected response to function code *fc* was received from *sysname*.**

Explanation

The system you are logged onto received a response to an unknown QITEM function code *fc* from system *sysname*.

System action

System operation continues.

User response

If your system is in a mixed CSE and VM/ISF environment, and *sysname* is a VM/ISF system, make sure that the PTF to VM/ISF Release 1 or Release 2 to allow communication between VM/ISF and CSE has been applied correctly. If the PTF has been applied correctly and the problem persists, contact your IBM Support Center representative.

HCP2970E **The variations of this message are explained below.**

— Variation 1 **The SSI cluster member name is missing or invalid.**

Explanation

Either the name (system ID) of the member in the SSI cluster on which the command is to be processed was not supplied, or a system ID parameter was supplied that did not match the system ID of any member in the SSI cluster.

Note: The system ID is specified following the AT operand for commands that have an AT operand.

System action

The command is not processed.

User response

Issue QUERY SSI to get the names of the members of the SSI cluster. Then reissue the command with a valid system ID.

— Variation 2 **The CSE system name is missing or invalid.**

Explanation

Either the name of the system in the CSE complex on which the command is to be processed was not supplied, or a system name parameter was supplied that did not match the name of any system in the CSE complex.

Note: The system name is specified following the AT operand for commands that have an AT operand.

System action

The command is not processed.

User response

Reissue the command with a valid system name.

HCP2971I **The variations of this message are explained below.**

Explanation

- A CSE associated system link is inactive.
- Specified SSI cluster member is not joined.

Communications are down to the system that was specified on the command.

System action

The command is not processed.

User response

Enter the command again when communications are established.

HCP2972I All CSE associated system links are inactive.

Explanation

No communication links are functioning between your system and the other systems in the CSE complex.

This message is received only once at the system console, at the time that the loss of communication is detected.

System action

Commands that require CSE communication are not processed.

User response

Determine why this system is not communicating with the associated systems. The CSE communication task or the PVM program in the CSE communication virtual machine may need to be reinitialized.

HCP2973I The CSE communication virtual machine may not send messages to associated systems.

Explanation

The communication virtual machine (CVM) attempted to send a MSG, a MSGNOH, a WNG, or an SMSG to another system in the CSE complex. Because of the role that the CVM plays in CSE message transmission, this is not permitted.

System action

The command is not processed.

User response

Reenter the command from a virtual machine other than the CVM.

HCP2980I The CSE communication virtual machine is not active.

Explanation

The CVM is not logged on, or the CVM communication task in that machine is not running.

System action

The command is not processed.

User response

Reenter the command when the CSE communication task has been started.

HCP2981E *sysname* is not a valid CSE system name.

Explanation

A system name parameter was specified, but it does not match the name of any system in the CSE complex.

System action

The command is not processed.

User response

Reenter the command with a valid system name.

HCP2982I Associated system *sysname* is not active.

Explanation

An XSPOOL QUERY or an XSPOOL QUERY SHARE command was entered.

For XSPOOL QUERY, this message means that CSE communication between your system and associated system *sysname* is not active. System *sysname* may be down, or its CSE communication virtual machine may not be running.

For XSPOOL QUERY SHARE, this message means that your system and associated system *sysname* do not share spool files.

System action

The command is processed, and system operation continues.

User response

None.

HCP2983I User *userid* is not in any spool file exclusion list.

Explanation

The lists of user IDs that do not participate in CSE for input and output spool files were searched for a

match to the user ID specified on the XSPOOL XLIST command. No match was found.

System action

The command is processed, and system operation continues.

User response

None.

HCP2984I **User *userid* is in the input spool file exclusion list only [due to a pattern match].**

Explanation

CP searched the lists of user IDs that do not participate in CSE for input and output spool files for a match to the user ID specified on the XSPOOL XLIST, XSPOOL XLISTADD and XSPOOL XLISTDEL commands. CP found the user ID only in the input list, possibly because of a pattern match.

System action

CP processes the command; system operation continues.

User response

None.

HCP2985I **User *userid* is in the output spool file exclusion list only [due to a pattern match].**

Explanation

CP searched the lists of user IDs that do not participate in CSE for input and output spool files for a match to the user ID specified on the XSPOOL XLIST, XSPOOL XLISTADD, and XSPOOL XLISTDEL commands. CP found the user ID only in the output list, possibly because of a pattern match.

System action

CP processes the command; system operation continues.

User response

None.

HCP2986I **User *userid* is in both the input and output spool file exclusion lists [due to pattern matches].**

Explanation

CP searched the lists of user IDs that do not participate in CSE for input and output spool files for a match to the user ID specified on the XSPOOL XLIST, XSPOOL XLISTADD and XSPOOL XLISTDEL commands. CP found the user ID in the input and the output lists, possibly because of one or two pattern matches.

System action

CP processes the command; system operation continues.

User response

None.

HCP2987I **Associated system *sysname* is active.**

Explanation

An XSPOOL QUERY or an XSPOOL QUERY SHARE command was entered.

For XSPOOL QUERY, this message means that CSE communication between your system and associated system *sysname* is active.

For XSPOOL QUERY SHARE, this message means that your system and associated system *sysname* do share spool files.

System action

The command is processed, and system operation continues.

User response

None.

HCP2988I **CSE communication virtual machine *'cvmid'* is unavailable.**

Explanation

In the course of processing an XSPOOL command, the system determined that virtual machine *cvmid* was not logged on. This virtual machine is required for communication among systems associated in the CSE complex.

System action

The XSPOOL command is not processed.

User response

Determine why virtual machine *cvmid* is not logged on.

HCP2989E VMCF error *rc* during CSE communication.

Explanation

This system communicates with the other systems in the CSE complex through a communication virtual machine (CVM) on each system. Communication occurs through the Virtual Machine Communication Facility (VMCF). An error occurred during a VMCF operation, as detailed by the VMCF return code *rc*. VMCF return codes are listed and explained in *z/VM: CP Programming Services*.

System action

The command is not processed.

User response

Probable failure is in the CSE communication virtual machine, which should be restarted. Users who receive this message should notify their system support personnel.

HCP2991I Function not available; CSE is not in use.

Explanation

An XLINK command was entered, but the function cannot be performed because CSE is not enabled on this system, or this system is not enabled for cross-system link.

System action

The XLINK command is not processed.

User response

None.

HCP3001E Device *device* is defined for both port group *groupname* and VSWITCH SYSTEM *switchname*.

Explanation

An attempt to create or modify the configuration of a virtual switch failed because the same device number was found in the virtual switch RDEV list and defined as a port group member.

System action

Command processing terminates; system operation continues.

User response

Modify the virtual switch or port group configuration to remove the problem device.

- To modify the configuration of a virtual switch, use the QUERY VSWITCH command to determine the list of devices associated with the virtual switch. Use the SET VSWITCH command with the RDEV operand to remove the device from the virtual switch definition.
- To modify the configuration of a port group, use the QUERY PORT GROUP command to determine the list of devices associated with the port group. Use the SET PORT GROUP LEAVE command to remove the device from the port group definition.

Attempt to create or modify the virtual switch or port group configuration again.

For more information on using QUERY and SET commands, see *z/VM: CP Commands and Utilities Reference*.

HCP3002E Unable to establish ISOLATION mode at this time; VSWITCH SYSTEM *switchname* configuration in transition.

Explanation

The VSWITCH configuration is actively being changed at this time. Some of the conditions that can cause this are:

- OSA Initialization in progress
- OSA device in STOPLAN state
- OSA devices being detached
- VSWITCH failover recovery
- AUTORestart in progress
- VSWITCH detach pending

System action

None.

User response

Once the above conditions have completed then issue the SET VSWITCH ISOLATION command again. The QUERY VSWITCH command can be used to determine the current status.

HCP3003E Controller *controllername* for VSWITCH SYSTEM *switchname*

does not support {OSA QDIO Connection Isolation | VEPA}.

Explanation

The controller deployed by the virtual switch does not have the required support for the ISOLATION or VEPA operand.

System action

None.

User response

Ensure that the controller has all required service applied or select one of the pre-installed controllers that are shipped with the product.

HCP3004E **Device *device* for VSWITCH SYSTEM *switchname* does not support {OSA QDIO Connection Isolation | VEPA}.**

Explanation

The active OSA connection for the indicated virtual switch does not support the ISOLATION or VEPA operand. Support for the ISOLATION operand is provided on OSA-Express2 feature and higher only. Support for the VEPA operand is provided on OSA-Express3 feature and higher only on IBM zEnterprise EC12 and later processors.

System action

None.

User response

Verify the OSA device is an OSA-Express2 or higher feature, and has all required service applied.

HCP3005E **Virtual machine network device configuration changes are prohibited.**

Explanation

The system is configured as a member of a single system image (SSI) cluster, and there is a problem communicating with the other members, or the SSI cluster is currently not in a stable operating mode. Until the SSI cluster returns to a stable mode, a network device will not be allowed to be attached or defined in a users virtual I/O configuration.

System action

A network device is not attached or defined in the user's virtual I/O configuration.

System programmer response

Determine and resolve the reason the SSI cluster is not in a stable mode. There should be other messages indicating the reason for this problem.

HCP3006E **An unexpected internal error occurred when activating the *NETWORK socket connection, code = *xx*.**

Explanation

The system is configured as a member of a single system image (SSI) cluster, but a *NETWORK socket connection could not be started on this system. The code returned specifies the reason for the problem.

Code
Description

01
Maximum number of sockets allowed for this system has been reached (SOCKET=RC4)

02
Unsupported internal protocol (SOCKET=RC8)

03
Insufficient storage on this system to create a socket (SOCKET=RC12)

10
Unable to start a *NETWORK socket because it is already active (BIND RC=4)

11
A *NETWORK socket just created is already bound to another port name (BIND RC=8)

System action

A network device will not be allowed to be attached or defined in a users virtual I/O configuration.

System programmer response

Contact IBM Service.

HCP3007I **The variations of this message are explained below.**

— Variation 1 **Ignoring MACIDRANGE VMLAN configuration statement USER setting.**

Explanation

The VMLAN MACIDRANGE statement has been configured with the same SYSTEM and USER range, which is not valid. Because of this setting, CP could not allocate any SYSTEM MAC addresses for use by the networking component.

System action

The USER MACIDRANGE is set to 0s and will not be used.

User response

If a USER range is required, update the VMLAN statement such that sufficient SYSTEM MACIDs are available on the system.

— Variation 2 **Ignoring MACIDRANGE VMLAN configuration statement setting due to USERPREFIX setting.**

Explanation

When the USERPREFIX VMLAN configuration is assigned to a value different from MACPREFIX, or in an SSI cluster where they must be different, the system and user range specified by the MACIDRANGE operand are ignored. When a USERPREFIX value is assigned, the entire MAC address range for the specified prefix value (X'000000' to X'FFFFFF') can be used for user-defined MAC addresses.

System action

MACIDRANGE is set to its maximum range.

User response

None.

HCP3008E ***NETWORK ISFC Socket communication failure code *xx* with *system*.**

Explanation

The *NETWORK system service on this system is unable to communicate with the *NETWORK service on the specified system. The code returned specifies the reason for the problem.

01
*NETWORK service has shutdown on this system. The system may no longer be a member or may be attempting to rejoin a single system image (SSI) cluster.

02
*NETWORK is trying to communicate with the specified system, but it is not responding. The *NETWORK must be able to communicate with all active members of an SSI cluster in order to manage network devices.

System action

A network device is not permitted to be attached or defined in a users virtual I/O configuration until ISFC communication is restored.

System programmer response

Verify that the ISFC link between this and the specified system is operational.

HCP3009E ***prefix1* VMLAN configuration statement for this system conflicts with *prefix2* value *prefixvalue*.**

Explanation

The system is configured as a member of a single system image (SSI) cluster and there is a problem with the current assignment of the three byte prefix (manufacturer ID) used when z/VM generates locally administered MAC addresses on the system.

The system will not be able to join an SSI cluster due to the specified VMLAN configuration statement for this system conflicting with itself or another system in the SSI cluster.

MACPREFIX
Each z/VM system with the SSI cluster must have a unique MACPREFIX value assigned.

USERPREFIX
USERPREFIX value must be set in order to join an SSI cluster. The USERPREFIX value specified must be identical in each z/VM system within the SSI cluster and it cannot be equal to any member's VMLAN MACPREFIX value.

System action

The system will not be allowed to join the SSI cluster until the problem is corrected.

System programmer response

Assign a unique value for this system's MACPREFIX and insure the assigned USERPREFIX value matches the same value used by the other members of the Single System Image. The VMLAN configuration statement is used to set the system's MACPREFIX and USERPREFIX values.

HCP3010I **Virtual machine network device configuration changes are permitted.**

Explanation

The system is now an active member of a stable single system image (SSI) cluster that is successfully communicating with all the other active members using the *NETWORK ISFC Socket.

System action

A network device may now be attached or defined in the I/O configuration of a virtual machine while the SSI cluster remains in a stable mode.

System programmer response

None.

HCP3011E **Network device *device* reset due to MAC Address Protection violation.**

Explanation

A network device has been reset. MAC address protection has been enabled by the system administrator for the device, the coupled guest LAN or virtual switch or the system. The control program has detected that the source MAC address used in packet sent from this guest does not match the assigned MAC address for the device.

System action

The control program resets the network device. Further communication for the device will not occur until the device is re-initialized.

System programmer response

Determine whether there is a configuration error for the device or turn off MAC protection for the device, guest LAN or VSWITCH, or the system.

Note that this failure can occur in a second level environment when using a first level virtual NIC as the connection between first and second level. In this case, turn off MAC protection for the first level device.

HCP3012I **Configuration statement DISTRIBUTE IUCV {NO | TOLERATE | YES} MAXIMUM *remotemax* for this system is inconsistent with node *remotenode* values IUCV {NO | TOLERATE | YES} MAXIMUM *localmax***

Explanation

The system is configured as a member of a single system image (SSI) cluster and the local system is joining the SSI cluster. This message indicates that another SSI member (*remotenode*) is configured with a different Distributed IUCV policy (or a different MAXIMUM buffer size) than the local node. This is not prohibited, but it is unusual to subject an IUCV user to one policy on one member of an SSI cluster and a different policy on another member.

System action

None. This message just documents the inconsistent Distributed IUCV configuration.

User response

If this is an intentional configuration change, no action is necessary. If this is the result of a global change, these messages will appear at each IPL until all SSI members have been restarted to apply the most recent SYSTEM CONFIG file.

HCP3022E **The variations of this message are explained below.**

— Variation 1 **SET VSWITCH not performed; virtual switch *switchname* is defined with NOUPLINK.**

Explanation

When a virtual switch has been defined with NOUPLINK, the use of CONNECT, CONTROLLER, DISCONNECT, GROUP, ISOLATION, NIC, NOGROUP, PORT, RDEV, and VEPA, options are not permitted on the SET VSWITCH command. NOUPLINK indicates the virtual switch will never have connectivity to a physical network through the UPLINK port.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Use QUERY VSWITCH to display the status of the VSWITCH. If NOUPLINK is not desired, DETACH the virtual switch and recreate it without using the NOUPLINK option.

— Variation 2 **SET VSWITCH not performed; user *userid* is not logged on.**

Explanation

SET VSWITCH CONNECT or SET VSWITCH DISCONNECT was specified for a VSWITCH that has an UPLINK NIC defined. The user ID that owns the UPLINK NIC does not exist or is not logged on.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Ensure that the owner of the UPLINK NIC virtual device is logged on and retry the command.

— Variation 3 **SET VSWITCH not performed; device *vdev* does not exist.**

Explanation

SET VSWITCH CONNECT was specified for a VSWITCH that has an UPLINK NIC defined. The UPLINK NIC virtual device does not exist.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Create the virtual device with the DEFINE NIC command and then retry the command.

— Variation 4 **SET VSWITCH not performed; NIC type *nictype* does not match VSWITCH type *vswtype*.**

Explanation

SET VSWITCH CONNECT was specified for a VSWITCH that has an UPLINK NIC defined. The VSWITCH type (*vswtype*) is not compatible with the adapter type of your own simulated NIC (*nictype*). Simulated NIC adapters can be connected only to compatible VSWITCH types. For example, a QDIO NIC can be connected only to a QDIO LAN or a QDIO virtual switch.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Issue QUERY NIC and QUERY VSWITCH commands to find the appropriate network adapter and VSWITCH to connect.

— Variation 5 **SET VSWITCH not performed; NIC *vdev* is already attached to VSWITCH *owner lanname*.**

Explanation

SET VSWITCH CONNECT or SET VSWITCH DISCONNECT was specified for a VSWITCH that has an UPLINK NIC defined. The CONNECT or DISCONNECT cannot complete because the virtual device (*vdev*) specified is already attached to another virtual switch (*owner lanname*).

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Issue QUERY NIC and QUERY VSWITCH commands to find the appropriate network adapter and VSWITCH to connect or disconnect.

— Variation 6 **SET VSWITCH not performed; CONNECT or DISCONNECT is already in progress.**

Explanation

A request to set CONNECT or DISCONNECT for the virtual switch can not complete.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Retry the operation.

— Variation 7 **SET VSWITCH not performed; *userid* is not authorized to COUPLE to VSWITCH *switchname*.**

Explanation

A SET VSWITCH CONNECT command was rejected because the specified user is not authorized to connect to the target virtual switch. The VSWITCH is restricted, and the specified user ID is not found in the access list. The access list is maintained by an External

Security Manager (ESM) or by the virtual switch owner through the use of the SET VSWITCH command with the GRANT and REVOKE parameters.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Request the owner of the virtual switch to add the user ID to the access list using the SET VSWITCH command. If the virtual switch is protected by an ESM you will need to contact the ESM administrator for authorization. After authorization has been granted, repeat the SET VSWITCH command.

— Variation 8 SET VSWITCH not performed; VLAN configuration error.

Explanation

A SET VSWITCH CONNECT command was rejected because of a VLAN configuration problem. One of the following occurred:

- The UPLINK NIC owner has PORTTYPE ACCESS and is authorized for multiple VLAN IDs. If the user is given PORTTYPE ACCESS or if the PORTTYPE defaults to ACCESS, the user can be authorized for only one VLAN ID.
- The ESM provided an invalid VLAN ID.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Change the VLAN list or the PORTTYPE defined for the UPLINK NIC owner (guest) in one of the following ways:

- Contact the ESM administrator to correct the VLAN list for the guest.
- Use the SET VSWITCH command to REVOKE the guest's access definition, then use the SET VSWITCH GRANT command to authorize the guest for PORTTYPE TRUNK.
- Contact the ESM administrator to correct the invalid VLAN ID.

— Variation 9 SET VSWITCH not performed; NIC transport type *transport1* does not match VSWITCH transport type *transport2*.

Explanation

SET VSWITCH CONNECT was specified for a VSWITCH that has an UPLINK NIC defined. The virtual switch and the simulated NIC adapter have different transport types. Simulated NIC adapters can only be connected to matching transport types. For example, a QDIO Ethernet NIC cannot be connected to an IP transport type QDIO virtual switch.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

The transport type of the NIC is set when either it has been coupled to a guest LAN or VSWITCH, or prior to being coupled, a guest operating system (OS) has attempted to activate the NIC. To reset the transport type of the NIC, it must be uncoupled from the guest LAN or VSWITCH and all active OS connections must be terminated.

— Variation 10 SET VSWITCH not performed; internal logic error code *code*.

Explanation

SET VSWITCH CONNECT encountered an unexpected error. The code *code* indicates the error condition.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Contact IBM Support for assistance.

— Variation 11 SET VSWITCH not performed; *vdev* is not the correct device type.

Explanation

SET VSWITCH CONNECT was specified for a VSWITCH that has an UPLINK NIC defined. The device specified (*vdev*) for the UPLINK NIC is not a simulated NIC.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Issue QUERY NIC and QUERY VSWITCH commands to find the appropriate network adapter and VSWITCH to connect.

— Variation 12 SET VSWITCH not performed; VSWITCH does not exist.

Explanation

SET VSWITCH CONNECT was specified for a VSWITCH that has an UPLINK NIC defined. The virtual switch does not exist.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Issue QUERY NIC and QUERY VSWITCH commands to find the appropriate network adapter and VSWITCH to connect.

— Variation 13 SET VSWITCH not performed; ESM error.

Explanation

SET VSWITCH CONNECT was specified for a VSWITCH that has an UPLINK NIC defined. An External Security Manager (ESM) such as RACF is controlling the virtual switch and has returned an error.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Contact the ESM administrator to correct the authorization profile.

— Variation 14 SET VSWITCH not performed; Uplink port error.

Explanation

A SET VSWITCH CONNECT command was rejected because of an uplink port error. An additional message (HCP3034E) describing the specific cause of the failure might also have been issued.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Examine all possibly-related messages issued at the time of failure and take action as appropriate.

— Variation 15 SET VSWITCH not performed; ESM VLAN configuration error.

Explanation

A SET VSWITCH CONNECT command was rejected because of an ESM VLAN configuration error.
An additional message (HCP3044E) describing the specific cause of the failure might also have been issued.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Examine all possibly-related messages issued at the time of failure and take action as appropriate.

— Variation 16 SET {NIC | LAN | VSWITCH} not performed; MACPROTECT is not valid for the IP transport type.

Explanation

When an NIC, VSWITCH, or LAN is operating with the IP transport, MACPROTECT is not valid. Turning MACPROTECT on for such an object is not allowed.

System action

The command terminates. The command is unsuccessful.

User response

Use QUERY NIC, QUERY LAN, or QUERY VSWITCH to display the type of the object. If MAC address protection is required, define the object to use the ETHERNET transport.

— Variation 17 SET VSWITCH not performed; {BRIDGEPORT | VEPA} is not valid when the transport type is IP.

Explanation

When a virtual switch is operating with the IP transport, BRIDGEPORT or VEPA is not valid. Enabling a Bridge Port for such a virtual switch is not allowed.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Use QUERY VSWITCH to display the transport type of the virtual switch. If a Bridge Port is required, define the virtual switch to use the ETHERNET transport.

— Variation 18 **SET VSWITCH not performed; BRIDGEPORT is not valid when the {ISOLATION | VEPA} setting is ON.**

Explanation

When a virtual switch is operating with the ISOLATION or VEPA setting, BRIDGEPORT is not valid. Enabling a Bridge Port for such a virtual switch is not allowed.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Use QUERY VSWITCH DETAILS to display the ISOLATION or VEPA setting for the virtual switch. If a Bridge Port is required, change the virtual switch to ISOLATION OFF and VEPA OFF.

— Variation 19 **SET VSWITCH not performed; {ISOLATION | VEPA} is not valid when a Bridge Port is defined.**

Explanation

A previous DEFINE VSWITCH or SET VSWITCH command has defined a Virtual Switch Bridge Port. In this case, the ISOLATION or VEPA setting cannot be specified.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Verify that ISOLATION or VEPA is required for this virtual switch. If so, the SET VSWITCH BRIDGEPORT NONE command can be used to remove the Virtual Switch Bridge Port followed by changing the ISOLATION or VEPA setting for the virtual switch.

— Variation 20 **SET VSWITCH not performed; BRIDGEPORT RESET requires the virtual switch to be the active Bridge Port connection.**

Explanation

The virtual switch must be the active Bridge Port connection before re-initialization of the Bridge Port configuration is allowed.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Use QUERY VSWITCH DETAILS to display the BRIDGEPORT settings for the virtual switch including which virtual switch is the active Bridge Port connection.

— Variation 21 **{SET | MODIFY} VSWITCH not performed; PATHMTUDISCOVERY is not valid when the virtual switch is defined with the NOUPLINK option.**

Explanation

The MODIFY VSWITCH PATHMTUDISCOVERY configuration statement or the SET VSWITCH PATHMTUDISCOVERY command can not be issued because the DEFINE VSWITCH command or configuration statement that created the virtual switch has specified that an uplink port is not allowed for this virtual switch.

System action

The command terminates. The SET VSWITCH command or the MODIFY VSWITCH configuration statement is unsuccessful.

User response

Verify the virtual switch name is correct. If correct and the PATHMTUDISCOVERY option is required, destroy the virtual switch with the DETACH VSWITCH command and redefine it with an Uplink Port. Then, retry the command.

— Variation 22 SET VSWITCH not performed; PRIQUEUING OFF is not valid for an IVL virtual switch.

Explanation

Priority queuing is required for an IVL virtual switch and cannot be turned off.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

None.

— Variation 23 SET VSWITCH not performed; SWITCHOVER is not valid when the virtual switch is disconnected.

Explanation

A VSWITCH SWITCHOVER from an active UPLINK RDEV to an inactive UPLINK RDEV can only occur when there is an active, connected UPLINK RDEV.

System action

The command terminates. The command is unsuccessful.

User response

The SET VSWITCH UPLINK CONNECT command can be used to activate the configured UPLINK port. Afterwards, the SET VSWITCH SWITCHOVER command can be used to perform a SWITCHOVER.

— Variation 24 SET VSWITCH not performed; SWITCHOVER is not valid when the uplink port is a NIC.

Explanation

A VSWITCH SWITCHOVER from an active UPLINK RDEV to an inactive UPLINK RDEV can only occur when there is an active, connected UPLINK RDEV.

System action

The command terminates. The command is unsuccessful.

User response

The SET VSWITCH DISCONNECT command can be used to disable the uplink port NIC. Follow that with a SET VSWITCH RDEV command to associate devices with the VSWITCH, specifying the desired device first in the list of RDEVs. Resolve any errors if the desired device is not the one that is made active when the SET VSWITCH CONNECT command is issued. Afterwards, the SET VSWITCH SWITCHOVER command can be used to perform a SWITCHOVER.

— Variation 25 SET VSWITCH not performed; SWITCHOVER is allowed only when there is an eligible backup device in the uplink RDEV list.

Explanation

A VSWITCH SWITCHOVER from an active UPLINK RDEV to an inactive UPLINK RDEV can only occur when there is an inactive UPLINK RDEV that is eligible to be activated.

System action

The command terminates. If the virtual switch connection to the real hardware network was active when the command was issued, it remains unchanged.

User response

The SET VSWITCH UPLINK RDEV command can be used to add additional UPLINK RDEVs to the UPLINK RDEV list.

— Variation 26 SET VSWITCH not performed; SWITCHOVER is allowed only when the active device is in the uplink RDEV list.

Explanation

A VSWITCH SWITCHOVER from an active UPLINK RDEV to an inactive UPLINK RDEV can only occur when there is an active, connected UPLINK RDEV.

System action

The command terminates. The command is unsuccessful.

User response

The SET VSWITCH UPLINK RDEV command can be used to add additional UPLINK RDEVs to the UPLINK RDEV list.

— Variation 27 SET VSWITCH not performed; SWITCHOVER is allowed only when the virtual switch is not configured for link aggregation.

Explanation

A VSWITCH SWITCHOVER from an active UPLINK RDEV to an inactive UPLINK RDEV is not supported when the virtual switch is configured to use link aggregation.

System action

The command terminates. The command is unsuccessful.

User response

The SET PORT GROUP LEAVE command or the SET PORT GROUP JOIN command can be used to remove or add a network device to or from an active port group.

— Variation 28 **SET VSWITCH not performed; UPLINK NIC is not valid when the VEPA setting is ON.**

Explanation

When a virtual switch is operating with the VEPA ON setting, UPLINK NIC is not valid. Enabling an UPLINK NIC for such a virtual switch is not allowed.

System action

The command terminates. The command is unsuccessful.

User response

Use QUERY VSWITCH DETAILS to display the VEPA setting for the virtual switch. If an UPLINK NIC is required, change the virtual switch setting to VEPA OFF.

— Variation 29 **SET VSWITCH not performed; VEPA is not valid when an Uplink NIC is defined.**

Explanation

A previous DEFINE VSWITCH or SET VSWITCH command has defined a Virtual Switch with an uplink NIC. In this case, the VEPA setting for the virtual switch cannot be specified.

System action

The command terminates. The command is unsuccessful.

User response

Verify that VEPA is required for this virtual switch. If so, the SET VSWITCH command can be used to change the uplink followed by changing the VEPA setting.

— Variation 30 **SET VSWITCH not performed; [VEPA | ISOLATION] ON is not valid for a GLOBAL virtual switch.**

Explanation

When a GLOBAL virtual switch is created, ISOLATION is off and VEPA is off. Turning ISOLATION or VEPA on is not allowed for a GLOBAL virtual switch.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Use QUERY VSWITCH to display the properties of the virtual switch.

— Variation 31 **SET VSWITCH not performed; UPLINK NIC is not valid for an IVL virtual switch.**

Explanation

The UPLINK NIC option is not valid. The IVL virtual switch must be defined with external connectivity (using the RDEV or GROUP keywords) and its UPLINK connection must remain operational in order to support global networking objects.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Use QUERY VSWITCH to display the properties of the virtual switch.

— Variation 32 **SET VSWITCH not performed; No port is available.**

Explanation

The SET VSWITCH command, using the GRANT option, would have allocated a new port for a guest, but all possible port numbers have been allocated.

System action

The SET VSWITCH command cannot create the new port.

User response

Use SET VSWITCH with the REVOKE option to eliminate an obsolete port, or use SET VSWITCH with the PORTNUMBER option to reserve a specific port number for this guest.

— Variation 33	**{SET | MODIFY} VSWITCH not performed; PQUPLINKTX is not valid for an IVL virtual switch.**

Explanation

For an IVL virtual switch, the prioritization of outbound transmissions to the IVL network is handled by z/VM. The PQUPLINKTX option cannot be specified.

System action

The command terminates. The SET VSWITCH command or MODIFY VSWITCH configuration statement is unsuccessful.

User response

None.

— Variation 34	**SET VSWITCH not performed; {ISOLATION | VEPA} is not valid when {ISOLATION | VEPA} is ON.**

Explanation

The ISOLATION and VEPA operands are mutually exclusive. If a virtual switch is operating with the ISOLATION setting, VEPA cannot be set. Similarly, if a virtual switch is operating with the VEPA setting, ISOLATION cannot be set.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Use SET VSWITCH to change the existing setting to OFF and then reissue the SET VSWITCH command to enable the desired setting.

HCP3031I	**Variations of this message are explained below.**

Explanation

- Port *portnum* cannot join VLAN *vlanid*. The port is not defined.
- Port *portnum* cannot join VLAN *vlanid*. Access ports cannot join more than one VLAN.

SET VSWITCH command with VLANID operand has been issued to add ports to a VLAN. The specified port cannot be added to the VLAN.

System action

SET VSWITCH command continues.

User response

Make sure you specified a valid *portnum* and a valid *vlanid*. If appropriate, correct the error and reissue the command.

HCP3032I	**Variations of this message are explained below.**

Explanation

- Port *portnum* cannot be removed from VLAN *vlanid*. The port is not defined.
- Port *portnum* cannot be removed from VLAN *vlanid*. The port has not joined that VLAN.

SET VSWITCH command with VLANID operand has been issued to remove ports from a VLAN. The specified port cannot be removed from the VLAN.

System action

SET VSWITCH command continues.

User response

Make sure you specified a valid *portnum* and a valid *vlanid*. If appropriate, correct the error and reissue the command.

HCP3033E	**The variations of this message are explained below.**
— Variation 1	**{SET|MODIFY} VSWITCH not performed; Port *portnum* is already defined.**

Explanation

The SET or MODIFY VSWITCH PORTNUMBER command was issued to create a port that is already defined.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER operand to display the existing ports. Then retry the command with an unused port number.

— Variation 2 **{SET|MODIFY} VSWITCH not performed; Port *portnum* is not defined.**

Explanation

The SET or MODIFY VSWITCH PORTNUMBER command was issued to modify or remove a port that does not exist.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER operand to display the existing ports. Then retry the command with the correct port number.

— Variation 3 **{SET|MODIFY} VSWITCH not performed; VLAN *vlanid* is not defined.**

Explanation

The SET or MODIFY VSWITCH VLANID command was issued to delete a VLAN ID that does not exist.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER operand to display the existing ports and their corresponding VLAN IDs. Then retry the command with the correct VLAN ID.

— Variation 4 **{SET|MODIFY} VSWITCH not performed; Port definition conflicts with UPLINK NIC port definition.**

Explanation

The SET or MODIFY VSWITCH PORTNUMBER command was issued to create a port that matches the UPLINK NIC port number, but the user ID specified on the command does not match the UPLINK NIC userid.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER operand to display the existing ports, and UPLINK port information. If defining the port number for the UPLINK port, ensure that the user IDs match.

— Variation 5 **{SET|MODIFY} VSWITCH not performed; UPLINK NIC port conflicts with existing port definition.**

Explanation

The SET or MODIFY VSWITCH command was issued to define the UPLINK NIC and port number, but the port number is already defined with a different user ID.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER operand to display the existing ports. Retry the command with the correct port number.

— Variation 6 **NIC *vdev* not connected; port number was not specified.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected. A port number needs to be specified on the COUPLE command for one of the following reasons:

- The invoker has multiple ports defined on the virtual switch.
- The invoker has a single port defined on the virtual switch. The port defined is the uplink NIC port, but the NIC being coupled is not the uplink NIC.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing ports. Then retry the command as follows:

- If the invoker has multiple ports defined, then retry the COUPLE command with the correct port number.
- If you are attempting to couple the uplink NIC, specify the correct virtual device address on the couple. If you are not coupling the uplink NIC, define a new port number with the SET VSWITCH PORTNUMBER command, and retry the COUPLE command with the new port number.

— Variation 7 **NIC *vdev* not connected; port *portnum* is not defined.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected because the port number specified has not been defined.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Define the port number with the SET VSWITCH PORTNUMBER command, and then retry the COUPLE command.

— Variation 8 **NIC *vdev* not connected; NIC *vdev2* is already connected to VSWITCH SYSTEM *switchname* port *portnum*.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected because a different virtual adapter (identified here by *vdev2*) is already connected to the specified port on the virtual switch.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing ports or with the DETAILS option to display connections. If you specified an incorrect port number, then retry the COUPLE command the with correct port number. If you have the incorrect virtual adapter coupled to this port, you should UNCOUPLE the incorrect virtual adapter and then retry the COUPLE command.

— Variation 9 **NIC *vdev* not connected; Uplink NIC port number *portnum* does not match.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected. The NIC specified is the uplink NIC, but the port number specified on the COUPLE command does not match the port number defined for the uplink NIC port (via the SET VSWITCH UPLINK NIC command).

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing port numbers. If you specified an incorrect port number, then retry the COUPLE command the with correct port number.

— Variation 10 **NIC *vdev* not connected; Uplink NIC port number *portnum* was requested.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected. The NIC specified is not the uplink NIC, but the port number specified on the COUPLE command matches the port number defined for the uplink NIC port (via the SET VSWITCH UPLINK NIC command).

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing port

numbers. If you specified an incorrect port number, then retry the COUPLE command the with correct port number.

— Variation 11 **NIC *vdev* not connected; port *portnum* is already connected.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected because the port number specified already has a connection.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing ports or with the DETAILS option to display connections. If you specified an incorrect port number, then retry the COUPLE command the with correct port number.

HCP3034E **The variations of this message are explained below.**

— Variation 1 **NIC *vdev* not connected; port number was not specified.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected. A port number needs to be specified on the COUPLE command for one of the following reasons:

- The invoker has multiple ports defined on the virtual switch.
- The invoker has a single port defined on the virtual switch. The port defined is the uplink NIC port, but the NIC being coupled is not the uplink NIC.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing ports. Then retry the command as follows:

- If the invoker has multiple ports defined, then retry the COUPLE command with the correct port number.
- If you are attempting to couple the uplink NIC, specify the correct virtual device address on the couple. If you are not coupling the uplink NIC, define a new port number with the SET VSWITCH PORTNUMBER command, and retry the COUPLE command with the new port number.

— Variation 2 **NIC *vdev* not connected; port *portnum* is not defined.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected. A port number needs to be specified on the COUPLE command for one of the following reasons:

- The invoker has multiple ports defined on the virtual switch.
- The invoker has a single port defined on the virtual switch. The port defined is the uplink NIC port, but the NIC being coupled is not the uplink NIC.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing ports. Then retry the command as follows:

- If the invoker has multiple ports defined, then retry the COUPLE command with the correct port number.
- If you are attempting to couple the uplink NIC, specify the correct virtual device address on the couple. If you are not coupling the uplink NIC, define a new port number with the SET VSWITCH PORTNUMBER command, and retry the COUPLE command with the new port number.

— Variation 3 **NIC *vdev* not connected; *userid vdev2* is already connected to VSWITCH SYSTEM *switchname* port *portnum*.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected because a different virtual adapter (identified here by *userid vdev2*) is already connected to the specified port on the virtual switch.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing ports or with the DETAILS option to display connections. If you specified an incorrect port number, then retry the COUPLE command with the correct port number. If an incorrect virtual adapter is coupled to this port, you can UNCOUPLE the incorrect virtual adapter and then retry the COUPLE command. If the correct virtual adapter is coupled to this port, you can temporarily uncouple *userid vdev2*, retry the connection that failed, and then couple *userid vdev2* to the same network again.

— Variation 4 **NIC *vdev* not connected; Uplink NIC port number *portnum* does not match.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected. The NIC specified is the uplink NIC, but the port number specified on the COUPLE command does not match the port number defined for the uplink NIC port (via the SET VSWITCH UPLINK NIC command).

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing port numbers. If you specified an incorrect port number, then retry the COUPLE command the with correct port number.

— Variation 5 **NIC *vdev* not connected; Uplink NIC port number *portnum* was requested.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected. The NIC specified is not the uplink NIC, but the port number specified on the COUPLE command matches the port number defined for the uplink NIC port (via the SET VSWITCH UPLINK NIC command).

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing port numbers. If you specified an incorrect port number, then retry the COUPLE command the with correct port number.

— Variation 6 **NIC *vdev* not connected; Uplink NIC port number *portnum* is already connected.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected because the port number specified already has a connection.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER option to display the existing ports or with the DETAILS option to display connections. If you specified an incorrect port number, then retry the COUPLE command the with correct port number.

— Variation 7 **NIC *vdev* not connected; all system assigned ports are in use.**

Explanation

The virtual device address of the adapter (NIC) specified for the COUPLE command is not connected. All system assigned ports are in use.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Wait for another device to disconnect from the virtual network and try again, or reserve a port for this device with the NICDEF directory statement or the CP SET VSWITCH command.

HCP3039I Variations of this message are explained below.

Explanation

- Port *portnum* has joined VLAN *vlanid*.
- Port *portnum* has been removed from VLAN *vlanid*.

SET VSWITCH command with VLANID operand has been issued to add or remove ports from a VLAN. The specified port number has either joined the VLAN or been removed from the VLAN.

System action

SET VSWITCH command continues.

User response

None.

HCP3040I SET VSWITCH completed with messages.

Explanation

The SET VSWITCH command has completed. One or more additional messages describing the results have been issued.

System action

The SET VSWITCH command completes.

User response

Examine all possibly-related messages issued and take action as appropriate. Issue the QUERY VSWITCH with PORTNUMBER option to verify results.

HCP3041E Port number is missing.

Explanation

The PORTNUMBER operand was issued on the COUPLE command without a port number or the operand AUTO.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Reissue the COUPLE command with a valid port number or AUTO.

HCP3042E Port number is not valid.

Explanation

The port number specified on the COUPLE command is not valid. Valid port numbers are from 1 to 2048.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Reissue the COUPLE command with a valid port number.

HCP3043E AUTO is the only PORTNUMBER option allowed for a Guest LAN.

Explanation

For a Guest LAN, the use of PORTNUMBER *portnumber* is not permitted on the COUPLE command. AUTO is the only permitted option allowed with PORTNUMBER for a Guest LAN.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Reissue the COUPLE command without the PORTNUMBER option or with PORTNUMBER AUTO.

HCP3044E ESM VLAN configuration error. ESM VLAN IDs do not match VLAN IDs for port *portnum*.

Explanation

You attempted to COUPLE to a virtual switch, and the VLANs configured for port *portnum* are not authorized by the ESM for this guest.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command with the PORTNUMBER parameter to determine the VLANs configured for the specified port, then contact the ESM administrator to correct the VLAN list for the guest.

HCP3045E The Bridge facility is not supported by this processor.

Explanation

Without the Bridge facility, the virtual switch cannot use the Bridge function.

System action

The command terminates. The DEFINE or SET VSWITCH command is unsuccessful.

User response

Contact your system programmer to upgrade your processor to support the Bridge facility, if possible.

HCP3046E **Port number conflicts with configured port *portnum*.**

Explanation

The port number specified on the COUPLE command conflicts with the port number configured by the NICDEF user directory statement.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Reissue the COUPLE command with the configured port number.

HCP3047I **MAC address protection for device *device* changed to UNSPECIFIED.**

Explanation

The COUPLE command was issued to a virtual switch or LAN operating with the IP transport. MAC address protection was previously set for the device using the SET NIC command. Because MAC address protection is not valid for the IP transport, the setting is changed to UNSPECIFIED.

System action

The COUPLE command completes successfully.

User response

None.

HCP3048I ***userid* is VSWITCH controller for HiperSockets bridge device *device*. VSWITCH SYSTEM *switchname* {primary | secondary} HiperSockets bridge status is {active | standby | restarting | inactive}.**

Explanation

Initialization of the HiperSockets Bridge device has completed. The current status is indicated in the message.

System action

System operation continues.

User response

None.

HCP3049E **An internal error occurred; the state of the virtual switch *switchname* may be unstable.**

Explanation

While processing the SET VSWITCH BRIDGEPORT NONE, SET VSWITCH BRIDGEPORT CONNECT, SET VSWITCH BRIDGEPORT RESET, or a DETACH VSWITCH command, an internal error occurred when deleting the Bridge Port RDEV device. The virtual switch might now be in an unstable state. A dump has also been taken.

System action

A CP dump was automatically generated when the error occurred. The command terminates. The SET VSWITCH or DETACH VSWITCH command was unsuccessful and the state of the virtual switch might be unstable.

User response

Try recreating the virtual switch, defining a different bridge port device, or issuing the SET VSWITCH BRIDGE RESET command. If the problem persists, have your system administrator process the CP dump and then contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3149I **{From|To}: *controller* Message: *message_type* Length: x*hex_value***
- Device: *rdev*
- *nnnnnnnn nnnnnnnn nnnnnnnn nnnnnnnn*

Explanation

This supplemental message to "HCP2831E" on page 633 is displayed when CP receives a communication with unexpected content.

System action

System operation continues.

User response

See the explanation and response for "HCP2831E" on page 633. Provide the information displayed in this message if you are directed to contact the IBM Support Center.

HCP3150I **The variations of this message are explained below.**

Explanation

- *userid*: Destination system VSWITCH *switchname* is reconfigured to GRANT *userid* for simulated NIC *vdev*.
- *userid*: Destination system VSWITCH *switchname* is reconfigured with PORTTYPE ACCESS for simulated NIC *vdev*.
- *userid*: Destination system VSWITCH *switchname* is reconfigured with PORTTYPE TRUNK for simulated NIC *vdev*.
- *userid*: Destination system VSWITCH *switchname* is reconfigured with PORTTYPE TRUNK for simulated NIC *vdev*.
- *userid*: Destination system VSWITCH *switchname* is reconfigured with PROMISCUOUS for simulated NIC *vdev*.
- *userid*: Destination system VSWITCH *switchname* is reconfigured with the source VLAN set for simulated NIC *vdev*.

The virtual machine (*userid*) has a simulated NIC device (*vdev*) coupled to a VSWITCH (*switchname*) with a different configuration than that of the destination VSWITCH. In this case, the VSWITCH configuration is changed to be consistent with the source VSWITCH. This message alerts the system administrator to the dynamic configuration change on the destination VSWITCH.

System action

The dynamic configuration change is done on the destination system and the relocation continues.

User response

Contact your network administrator to update the appropriate virtual switch configuration to make all instances of the same virtual switch consistent.

HCP3151E **Resource pool *poolname* does not exist**

Explanation

The specified resource pool does not exist because it is currently not defined by the DEFINE RESPOOL/CPUPOOL command.

System action

The command is rejected; system operation continues.

User response

Reissue the command for an existing resource pool, or ensure the pool you need is defined.

HCP3152E **Resource pool *poolname* cannot be deleted as users are still assigned to it**

Explanation

The DELETE RESPOOL/CPUPOOL command was issued against a resource pool that is not empty. It is not possible to delete a pool that still has users assigned to it.

System action

The command is rejected; system operation continues.

User response

Make sure you specified the correct pool name.

If this resource pool is to be deleted, the users in the group must first be removed from the pool. To find out what users are currently assigned to the pool, issue the QUERY RESPOOL/CPUPOOL command with the MEMBERS option. Then use the SCHEDULE command to remove these users from the pool or move them to another pool.

HCP3153E **User *userid* is not eligible for resource pool *poolname***

Explanation

The type of CPU being limited by the resource pool specified on the SCHEDULE command does not match the type of the user's primary CPU. These CPU types must match for a user to be allowed in a resource pool.

System action

The command is rejected; system operation continues.

User response

Reissue the SCHEDULE command with the correct user ID and pool name. For information about the

resource pools available on the system, issue the QUERY RESPOOL/CPUPOOL ALL command.

HCP3154E **Resource pool *poolname* cannot be defined unless SET SRM LIMITHARD CONSUMPTION is in effect**

Explanation

The resource pooling function requires the system to use consumption limiting. That is, the SET SRM LIMITHARD CONSUMPTION command must be in effect when a resource pool is defined. The system currently has SET SRM LIMITHARD DEADLINE in effect, so a resource pool cannot be defined.

System action

The command is rejected; system operation continues.

User response

Issue the SET SRM LIMITHARD CONSUMPTION command, then reissue the DEFINE RESPOOL/CPUPOOL command.

HCP3155E **Resource pool *poolname* is already defined**

Explanation

The resource pool specified on the DEFINE RESPOOL/CPUPOOL command already exists on this system.

System action

The command is rejected; system operation continues.

User response

To get information about the resource pools that are already defined on this system, issue the QUERY RESPOOL/CPUPOOL ALL command. To change an existing resource pool, use the SET RESPOOL/CPUPOOL command. To redefine an existing resource pool, use the DELETE RESPOOL/CPUPOOL command to delete the current pool (all assigned users must be removed first), then use the DEFINE RESPOOL/CPUPOOL command with the name of the pool just deleted to redefine it. DELETE/DEFINE is needed if the CPU TYPE must be changed. Otherwise, use SET to change the limit.

HCP3156E **Resource pool assignment cannot be changed for user *userid* while relocating**

Explanation

The user ID specified on the SCHEDULE command is currently being relocated with the VMRELOCATE MOVE command and cannot be assigned to a different resource pool at this time.

System action

The command is rejected; system operation continues.

User response

Wait until the user ID is relocated, then issue the SCHEDULE command on the system where the user now resides.

HCP3157E **User *userid* must have CPU Affinity ON to be put into a resource pool**

Explanation

A user ID must have CPU Affinity ON to be added to a resource pool. The user ID specified on the SCHEDULE command has CPU Affinity OFF, and therefore cannot be put into a resource pool.

System action

The command is rejected; system operation continues.

User response

Make sure you specified the correct user ID. Issue the SET CPUAFFINITY ON command for the user ID, then reissue the SCHEDULE command to put the user in the desired resource pool.

HCP3160E **The variations of this message are explained below.**

— Variation 1 **Virtual switch *switchnm* cannot be configured with the RDEV operand specifying back up devices.**

Explanation

The RDEV list is not allowed for a virtual switch defined to use a shared port group (a port group configured with the SHARED option). For a shared port group, MAC address takeover is managed by the shared port group to maintain connectivity following a failure, so other members of the IVL domain provide back up connectivity for the port group.

System action

The DEFINE VSWITCH or SET VSWITCH fails.

System programmer response

Configure the virtual switch so that it uses a shared port group and no RDEV list, or configure it so that it uses an Exclusive-use port group with an RDEV list.

— Variation 2	**Virtual switch *switchnm* cannot be configured with a shared port group.**

Explanation

A global virtual switch cannot use a shared port group (a port group configured with the SHARED option) and an RDEV list for backup. For a shared port group, MAC address takeover is managed by the shared port group to maintain connectivity following a failure, so other members of the IVL domain provide back up connectivity for the port group.

System action

The SET VSWITCH fails.

System programmer response

Configure the virtual switch so that it uses a shared port group and no RDEV list, or configure it so that it uses an Exclusive-use port group with an RDEV list.

HCP3161E	**[DEFINE VSWITCH | SET VSWITCH] is not performed; a port group defined with the SHARED option can be used only with a virtual switch defined with the GLOBAL option.**

Explanation

When a port group has been defined with the SHARED option, it can be used with a virtual switch only if the virtual switch has been defined with the GLOBAL option.

System action

The command terminates. The DEFINE or SET VSWITCH or SET PORT GROUP is unsuccessful.

User response

Reissue the command to specify a different port group.

HCP3162E	**The variations of this message are explained below.**
— Variation 1	**SET PORT GROUP is not performed. No changes are permitted to LACP because the port group was defined with the SHARED option.**

Explanation

You attempted to change the LACP setting on a port group that was defined with the SHARED option.

System action

The port group is not changed.

System programmer response

If you wish to make LACP INACTIVE or change the port group to EXCLUSIVE, the port group must be removed using the SET PORT GROUP DELETE command, and recreated with the new attributes.

Note: A SET PORT GROUP DELETE issued for a port group defined with the SHARED option affects each system running z/VM in the IVL domain. Each has a shared port group defined with the same name and ALL port groups with that name are deleted. Use the QUERY PORT GROUP command with the DETAILS option to display all port groups in the IVL domain that will be affected by a SET PORT GROUP DELETE command. Before the port group can be deleted, a SET VSWITCH DISCONNECT must be issued for all virtual switches where the Port Group State is shown to be Active.

— Variation 2	**SET PORT GROUP is not performed. Cannot change port group from EXCLUSIVE to SHARED.**

Explanation

You attempted to change a port group from EXCLUSIVE to SHARED.

System action

The port group is not changed.

System programmer response

If you wish to change the port group to SHARED, the port group must be removed using the SET PORT GROUP DELETE command and recreated with the new attributes.

HCP3163E	**The variations of this message are explained below.**
— Variation 1	**SET VSWITCH is not performed; IVLPORT is valid only for an IVL virtual switch.**

Explanation

The IVLPORT operand may be specified only when the virtual switch has been created using TYPE IVL.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Reissue the command using supported options, or DETACH and DEFINE the virtual switch using TYPE IVL.

— Variation 2 **SET VSWITCH is not performed; system *sysname* is isolated from IVL Domain *domain* due to a configuration problem.**

Explanation

The IVLPORT cannot be changed because the system does not have a network connection to the IVL domain due to a configuration problem. Either the z/VM system name, System MAC prefix value specified by the VMLAN MACPREFIX system configuration statement is the same as another IVL member in the same IVL domain. Each IVL member within an IVL domain must have a unique z/VM system name and VMLAN MACPREFIX value.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Change the System_Identifier, the VMLAN MACPREFIX statements, or both in the z/VM system configuration file to make sure they are unique values with all other IVL members configured to the same IVL domain. After the z/VM system configuration file is changed, the z/VM system must be IPLed for the changes to take effect.

— Variation 3 **SET VSWITCH is not performed; the IVL virtual switch does not exist or its IVL port is not connected.**

Explanation

The IVLPORT cannot be changed because the IVL virtual switch does not exist, or its IVL port is not connected.

System action

The command terminates. The SET VSWITCH command is unsuccessful.

User response

Define an IVL virtual switch with the appropriate connectivity to other members of the IVL domain. See *z/VM: Connectivity* for more information about configuring an IVL network.

HCP3164I **System *sysname* {is connected to | is disconnecting from} IVL Domain *domain* through VSWITCH *switchname* with MAC address *nn-nn-nn-nn-nn-nn*.**

Explanation

The named system either established or disconnected a network connection to or from the specified IVL Domain. The network connection is made through a special purpose IVLPORT on the named VSWITCH. The IVLPORT is an out-of-band network end point to the IVL network, which provides Ethernet connectivity to remote z/VM systems configured within the same IVL domain. This message occurs whenever an IVL VSWITCH is first created or an IVLPORT is reset via the SET VSWITCH IVLPort RESET CP command.

System action

System operation continues.

User response

Use the QUERY VMLAN command to display status about the connected IVL domain.

HCP3165I **Device *device* for VSWITCH *switchname* is now the Active LAG Controller for shared port group *groupname*.**

Explanation

The named device is now responsible for providing the LACP Protocol necessary to maintain the physical port in the named shared port group.

System action

System operation continues.

User response

Use the QUERY PORT GROUP command to display status about the port.

HCP3166E **[DETACH VSWITCH | SET VSWITCH DISCONNECT] for IVL VSWITCH *ivlswitchnm* failed. Virtual switch *switchname* is defined on *systemnm* with the GLOBAL attribute.**

Explanation

An attempt to destroy the IVL VSWITCH or disconnect its UPLINK port failed. The IVL VSWITCH connection must remain operational when global virtual switches are defined on *systemnm*.

System action

The command terminates.

User response

The SET VSWITCH IVLPORT RESET command may be used to disconnect, and then immediately reconnect the IVL UPLINK port if that is desired.

If you want to permanently disconnect the IVL UPLINK port, or DETACH the IVL VSWITCH, issue DETACH VSWITCH *switchnm* for the virtual switch named in the message. Repeat the command issued for the IVL VSWITCH, detaching any additional remaining global virtual switches as their names are reported in the HCP3166E text. Alternatively, issue QUERY VSWITCH to find and detach all virtual switches with the GLOBAL attribute.

HCP3167E **[DEFINE VSWITCH *switchnm* | SET VSWITCH *switchnm* | SET PORT GROUP *groupname*] failed. The IVL virtual switch does not exist or its UPLINK port is not connected.**

Explanation

Creation or a configuration change for a global virtual switch or shared port group failed because the IVL virtual switch does not exist, or its UPLINK port has not connected the system to the IVL domain.

System action

Processing terminates for the command.

User response

Define an IVL virtual switch with the appropriate connectivity to other members of the IVL domain. See *z/VM: Connectivity* for more information about configuring an IVL network.

HCP3168I **Connectivity for MAC address *macid* associated with VSWITCH *[systemnm1].switchnm1* [PCHID *pchid* port *portnumber*] is now provided by VSWITCH *systemnm2.switchnm2*.**

Explanation

Global virtual switch *switchnm1* had a connectivity problem and the local system running z/VM took over the MAC address using *switchnm2*, a global virtual switch using the same port group, to continue to provide connectivity. PCHID *pchid* refers to the Physical CHannel ID associated with the failing device.

System action

The system provides connectivity for the failing virtual switch member using the IVL virtual switch until the outage is repaired.

User response

Issue the QUERY PORT GROUP command specifying the DETAILS option to display the status of the connections for all global virtual switch members using the shared port group.

Contact system support personnel on the appropriate system to repair the connectivity problem with devices on the failing *pchid*.

Message HCP3169I is issued when the connection is repaired or when another global virtual switch member takes ownership of the MAC address.

HCP3169I **Connectivity for MAC address *macid* provided by VSWITCH *systemnm1.switchnm1* has been restored back to VSWITCH *[systemnm2].switchnm2*.**

Explanation

Due to a connectivity problem on a different system running z/VM or a different global virtual switch using the same shared port group, a MAC address associated with a global virtual switch was taken over by the virtual switch *switchnm1* on *systemnm1*. The outage has been repaired or a different global virtual switch member using the port group has taken over the MAC address on system *systemnm2*. The *systemnm2* may be omitted if it cannot be determined (for example if the member left the IVL domain).

System action

The *systemnm1* no longer provides connectivity for the MAC address.

User response

None.

HCP3170E	The variations of this message are explained below.
— Variation 1	**VSWITCH *systemname.switchname* [is not created | is not changed]. The virtual switch defined on *systemname* [conflicts with the [TYPE QDIO | IP | ETHERNET | ISOLATION | VEPA | VLAN AWARE | VLAN UNAWARE | NATIVE VLAN | USERBASED | PORTBASED | EQID] attribute].**

Explanation

An attempt to define or change a global virtual switch failed, because its attributes conflict with another global virtual switch member's attributes.

System action

The command terminates. The DEFINE VSWITCH or SET VSWITCH command is unsuccessful.

User response

Reissue the command to specify different value for the conflicting option.

— Variation 2	**VSWITCH *systemname.switchname* [is not created | is not changed]. An internal error occurred.**

Explanation

An attempt to define or change a global virtual switch failed, because of an internal error.

System action

The command terminates. The DEFINE VSWITCH or SET VSWITCH command is unsuccessful.

User response

None.

— Variation 3	**VSWITCH *systemname.switchname* [is not created | is not changed]. The virtual switch defined on *systemname* [is currently not responding | is currently in synchronization].**

Explanation

An attempt to define or change a global virtual switch failed, because another system is not responding or is currently synchronizing.

System action

The command terminates. The DEFINE VSWITCH or SET VSWITCH command is unsuccessful.

User response

Allow some time for the current synchronization operation to complete and then attempt the command again.

HCP3171E	**NIC *vdev* is not connected; COUPLE to an IVL virtual switch is not allowed.**

Explanation

An attempt was made to couple a virtual NIC to a VSWITCH defined with TYPE IVL.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Issue the QUERY VSWITCH command to display virtual switches defined with TYPEs that are not TYPE IVL.

HCP3172E	**VSWITCH *switchname* received adapter-initiated *event* for device *device*.**

Explanation

The specified network adapter, *device*, provides connectivity for virtual switch *switchname*. The status of the adapter interface that is used by the virtual switch changed or the status of the external network connection changed. The following *event* values are possible:

Deactivate
The network adapter *device* is now deactivated, which suspends data transmission until the interface is activated. The deactivation might

indicate that the adapter detected an internal error or does not have a physical connection to the external network.

Stop LAN
The external network connection is disconnected. The disconnection might indicate that the physical connection is lost or the external switch port is disabled.

Start LAN
The external network connection is started. The event might be reported if the network adapter *device* cannot complete a Start LAN request within the normal time limit.

Activate
The network adapter *device* is now activated. The activation represents transition into normal operating mode for the interface.

System action

When *event* is Deactivate or Stop LAN, the virtual switch *switchname* stops using network adapter *device* and begins using the backup device (if one is available), or any other operational devices (in the case of a port group).

When *event* is Activate or Start LAN, the virtual switch *switchname* continues initialization and can begin to use the device for network connectivity.

User response

In most cases, these messages just provide context in case the adapter does not recover gracefully. If, for example, the adapter generates a Stop LAN event message with no subsequent activity, it is possible that the connection between the adapter and the external switch is broken.

- Check the external switch configuration to verify that the switch port to adapter *device* is still enabled.
- Check the cable between the adapter *device* and the external switch port for issues.
- Disconnect the virtual switch by using the SET VSWITCH command with the DISCONNECT option. Then reconnect the virtual switch by using the SET VSWITCH command with the CONNECT option.

If the error persists after completing the suggested actions, then contact IBM Service.

HCP3173E Device *device* is reserved for system use.

Explanation

An attempt was made to attach an OSA device to a guest, use it on a virtual switch, or add it to a port group, but that device number represents a port on an OSA Express adapter that is reserved for system use in a shared port group.

System action

The ATTACH, DEFINE VSWITCH, SET VSWITCH, or SET PORT GROUP fails.

System programmer response

Use the QUERY OSA FREE command to identify an available OSA device.

HCP3174I System *systemname* is not a member of the local system's IVL Domain.

Explanation

The SET VSWITCH IVLPORT PING command was issued using an *systemname* that is not reachable within the IVL domain.

System action

The SET VSWITCH IVLPORT PING command fails.

User response

Use QUERY VSWITCH TYPE IVL to confirm that the IVL virtual switch exists and its UPLINK port state is Ready, indicating the local IVL virtual switch is connected.

Issue a QUERY VMLAN command to identify all active members of the IVL domain and their IVLsystemMACes. If an expected member is not displayed, contact the System Administrator for the remote system to ensure that the remote system's IVL virtual switch is operational and defined to be a member of the same IVL domain, and, for a VLAN-aware IVL virtual switch, is using the same VLAN ID.

HCP3175I System *systemname* has been added to IVL Domain *x*.

Explanation

The named system has been added to the IVL domain, which provides communication infrastructure to exchange control information and data necessary to manage global networking objects that can span multiple systems running z/VM.

System action

Global networking objects such as global virtual switches and shared port groups defined on

systemname can now span systems running z/VM that are members of the domain.

User response

None.

HCP3176I **System *systemname* has left IVL Domain *x*.**

Explanation

The named system has left the IVL domain, which provides communication infrastructure to exchange control information and data necessary to manage global networking objects that can span multiple systems running z/VM.

System action

Global networking objects such as global virtual switches and shared port groups defined on *systemname* can no longer span systems running z/VM that are members of the domain. For example, if a global virtual switch defined on *systemname* has a connectivity problem with its UPLINK port, virtual switch connectivity is not maintained by other domain members.

User response

Contact the system administrator for *systemname* to repair an unexpected problem with IVL connectivity.

HCP3177E **System *systemname* cannot be added to IVL Domain *x* because remote system name *systemname* experienced an internal error.**

Explanation

In this case a remote system has taken an ABEND and has notified the system to be added that it was unable to process its add request.

System action

The system is not permitted to be added to the domain. Attempts to create global networking objects such as shared port groups or global virtual switches will fail.

User response

Once the remote system has recovered from the ABEND it may be able to process an add from the local system.

HCP3178I **[VSWITCH SYSTEM *switchnm* | PORT GROUP *groupname*] creation is deferred. The IVL virtual switch does not exist or its UPLINK port is not connected.**

Explanation

Creation of a global virtual switch or shared port group is deferred until the IVL virtual switch UPLINK port connects the system to the IVL domain.

System action

Processing terminates for the system configuration file statement.

User response

Define an IVL virtual switch with the appropriate connectivity to other members of the IVL domain. See *z/VM: Connectivity* for more information about configuring an IVL network.

HCP3180E **SET PORT GROUP for shared port group *groupname* not performed; device *device* does not exist.**

Explanation

A SET PORT GROUP command failed because the device identified by *device* does not exist on the system.

System action

The command terminates. The named device *device* could not be added to the port group.

User response

Reissue the SET PORT GROUP command with the correct device number.

HCP3181I **The system is initiating IVL Member Discovery on IVL Domain *x*.**

Explanation

The local system has joined the IVL domain, which provides communication infrastructure to exchange control information and data necessary to manage global networking objects that can span multiple systems running z/VM.

System action

Global networking objects such as Global virtual switches and shared port groups can now span systems running z/VM that are members of the domain.

User response

None.

HCP3183E **SET PORT GROUP for shared port group *groupname* not performed; device *device* is not a real OSA-Express device.**

Explanation

An attempt to change a shared port group failed, because the device identified by *device* is not a real OSA-Express device.

System action

The command terminates. The SET PORT GROUP command is unsuccessful.

User response

Reissue the command to specify the correct device.

HCP3184E **SET PORT GROUP for shared port group *groupname* not performed; all available devices on OSA PCHID *pchid* are already in use.**

Explanation

An attempt to define or change a shared port group failed, because the device specified on the SET PORT GROUP JOIN command is associated with an OSA feature that is not configured with the number of devices that must be reserved for system use for use in a shared port group on all members of the IVL domain.

System action

The command terminates. The SET PORT GROUP command is unsuccessful.

User response

Issue the QUERY PORT GROUP command with the DETAILS option to see the complete shared port group configuration. Reduce the number of system reserved devices required by removing the shared port group from a global virtual switch when multiple global virtual switches are configured to use it.

HCP3185I **The displayed response may be incomplete. The system is not joined with the IVL Domain.**

Explanation

A QUERY for an object with global scope may be incomplete because the system does not have an IVL virtual switch defined, or the UPLINK port for the IVL virtual switch is not operational.

System action

The command displays information known by the local system.

User response

Issue the QUERY VSWITCH command specifying TYPE IVL to determine if an IVL virtual switch exists. If one does not exist, create it with the DEFINE VSWITCH command using TYPE IVL. If one exists but does not have an UPLINK port defined or the UPLINK port is not Ready, correct the IVL connectivity problem and reissue the command.

See *z/VM: Connectivity* for more information about defining an IVL virtual switch.

HCP3186E **[SET PORT GROUP | DEFINE VSWITCH GROUP | SET VSWITCH GROUP] for shared port group *groupname* not performed; devices on OSA PCHID *pchid* do not exist or are not available.**

Explanation

An attempt to update or use the shared port group failed because there are no available devices on the PCHID listed.

System action

The port group is not updated.

User response

Reissue the command with the correct device specification.

HCP3187I **{Pinging | Reply from} MAC *nn-nn-nn-nn-nn-nn* : bytes=*nnnn* {of data. | time=*ms* | timed out.}**

Explanation

Different versions of this message are displayed when a SET VSWITCH IVLPORT PING CP command is

issued by a system administrator. When the command is issued, the "Pinging MAC *nn-nn-nn-nn-nn-nn* : bytes=*nnnn* of data." version of the message is displayed when the PING initially transmitted to the MAC address or system name specified by the SET VSWITCH IVLPORT PING command.

Whenever the target host replies to the transmitted PING, the "Reply from MAC *nn-nn-nn-nn-nn-nn* : bytes=*nnnn* time=*ms*" version of the message is displayed. This reply indicates the target system is active within the IVL domain. If a response is not received in an appropriate time, the "Reply from MAC *nn-nn-nn-nn-nn-nn* : bytes=*nnnn* timed out." is displayed instead. This informs the system administrator the target system is currently not available within the IVL domain.

System action

None.

User response

None.

HCP3188E **System *systemname* cannot join IVL Domain *x* because the IVL VSWITCH does not exist, the IVL UPLINK Port is not connected or the system is isolated due to a misconfiguration.**

Explanation

An attempt was made by this system to join an IVL domain. The ability to join requires an instantiated IVL VSwitch with an UPlink Port that is connected to the desired IVL domain. In addition, the system attempting the join cannot be currently isolated because of a previous join configuration error.

System action

The host is not permitted to join the IVL domain.

User response

Insure that the system has defined an IVL VSwitch and it has an active UPlink Port. All reported IVL join errors must be corrected and the system reIPLed before the system will be permitted to attempt to join the IVL domain.

HCP3189E **System *systemname* cannot be added to IVL Domain *x* because its MAC prefix *macprefix* is the same as system *systemname*.**

Explanation

An attempt was made by this system to join IVL domain *x* and its MAC prefix was found to already be in use by another system in the target domain. A requirement for membership in an IVL domain is each system must be configured with a unique MAC prefix.

System action

The system is not permitted to be added to the domain. Attempts to create global networking objects such as shared port groups or global virtual switches will fail.

User response

Resolve the MAC prefix conflict by updating the appropriate SYSTEM CONFIG file (VMLAN MACPREFIX) to correct the MAC prefix conflict within the target IVL domain.

HCP3190E **System *systemname* cannot be added to IVL Domain *x* due to a conflict with an existing system named *systemname*.**

Explanation

An attempt was made by this system to join IVL domain *x* and its SYSTEM NAME (ID) was found to already be in use by another system in the target Domain. A requirement for membership in an IVL domain is each system must be configured with a unique SYSTEM NAME.

System action

The system is not permitted to be added to the domain. Attempts to create global networking objects such as shared port groups or global virtual switches will fail.

User response

Resolve the system name conflict so that the system can join the original IVL, or change the configuration for the IVL virtual switch so that it belongs to a different IVL domain where there is no conflict.

HCP3191E **System *systemname* cannot be added to IVL Domain *x* because the IVL Member Table is full.**

Explanation

IVL domain *x* has the maximum number of systems supported and it is not possible to add this system to this IVL domain.

System action

The system was not added to the IVL member table for the target domain. This system is not able to communicate on this IVL domain. Attempts to create global networking objects such as shared port groups or global virtual switches will fail.

User response

The IVL member table supports 16 members per IVL domain. Verify the currency of the members in the IVL domain removing those members that are not required or active members by performing a DETACH of their IVL VSwitch.

HCP3192E **Duplicate MAC address detected: *macaddress* on IVL Domain *x* between local system *systemname* and remote system *systemname*. IVL JOIN process is terminated.**

Explanation

The systems identified in the message have been configured with a duplicate unicast MAC address. This is a serious networking configuration problem that cannot be tolerated once detected.

System action

One of the systems with the duplicate MAC address has been fenced from the IVL domain. This system is not able to communicate on this IVL domain. Attempts to create global networking objects such as shared port groups or global virtual switches will fail.

User response

The system that has been fenced needs to have its system reconfigured with a unique MAC prefix for the IVL domain. The MAC prefix is changed in the SYSTEM CONFIG file.

HCP3193I **All deferred VSWITCHes and PORT GROUPs have been removed.**

Explanation

The global virtual switch and shared port group defined by system configuration statements, could not be defined during the z/VM system IPL, because the IVL virtual switch did not exist or its UPLINK port was not connected. The IVL virtual switch has been detached from the system, so all deferred global virtual switch and shared port group are being removed from the system.

System action

All deferred global virtual switch and shared port group are being removed from the system.

User response

None. See *z/VM: Connectivity* for more information about the IVL network.

HCP3194I **Creating [VSWITCH *switchnm* | PORT GROUP *groupname*] now that the IVL Virtual switch is connected.**

Explanation

The *switchnm* virtual switch or *groupname* port group, defined by a system configuration statement, could not be defined during the z/VM system IPL, because the IVL virtual switch did not exist or its UPLINK port was not connected. Connectivity to the IVL network is now available, and thus allows z/VM to create the virtual switch or port group.

System action

The named vswitch or port group is defined.

User response

None.

HCP3195E **SET [VMLAN | VSWITCH] not performed; trace table can not be allocated.**

Explanation

The system has insufficient storage to allocate the trace table with the number of pages requested.

System action

System operation continues. The SET VMLAN or SET VSWITCH is unsuccessful.

User response

Reissue the command with a smaller number of pages.

HCP3196E **The variations of this message are explained below.**

— Variation 1 **VSWITCH *vswname* is not created; the port group must be defined before creating the associated GLOBAL vswitch.**

Explanation

The port group must be defined using the SET PORT GROUP command before creating a GLOBAL vswitch.

System action

The DEFINE VSWITCH fails.

System programmer response

Define the port group using SET PORT GROUP command, and then retry the DEFINE VSWITCH command.

— Variation 2 **SET VSWITCH not performed; the port group must be defined before associating it with a GLOBAL vswitch.**

Explanation

The port group must be defined using the SET PORT GROUP command before it can be associated with a GLOBAL vswitch.

System action

The SET VSWITCH fails.

System programmer response

Define the port group using SET PORT GROUP command, and then retry the SET VSWITCH command.

HCP3197E **[SET PORT GROUP] | [Port Group Discovery] not performed; system *systemname* is busy executing a cross IVL Domain CP command.**

Explanation

The cross IVL domain CP command or operation can't be executed at this time. The issued CP command needs to be executed on multiple z/VM systems currently connected to the same IVL domain. At this time IVL member *systemname* is unable to execute this command.

System action

Processing terminates for the issued CP command or operation.

User response

Allow some time for *systemname* to finish its current CP command or operation and retry the CP command.

If unable to retry the CP command after a reasonable amount of time, it's possible *systemname* is out of synchronization with other members of the IVL. To synchronize *systemname*, disconnect and connect *systemname's* IVL VSWITCH's UpLink Port by issuing SET VSWITCH *switchname* UPLINK DISCON followed immediately with SET VSWITCH *switchname* UPLINK CONNECT command on system *systemname*.

HCP3198E **SET PORT GROUP not performed; an unexpected internal error occurred.**

Explanation

The CP command or operation can't be executed at this time due to an unexpected internal error. Either this z/VM system or another z/VM system connected to the same IVL domain encountered an error while processing the command.

System action

Processing terminates for the issued CP command.

User response

A soft system ABEND occurred on this or another z/VM system connected to the same IVL domain. See *z/VM: Diagnosis Guide* for information on gathering the documentation you need to assist IBM in diagnosing the problem; then contact your IBM Support Center personnel

HCP3199E **[DEFINE VSWITCH | SET VSWITCH] not performed; uplink port group *portgroup* on this system is not equivalent to other IVL members sharing the same port group.**

Explanation

z/VM maintains an instance of a shared port group in every IVL member within the same domain. Each shared port group instance must maintain the same characteristics and number of OSA Ports. Whenever a port group change is made on one system, it is automatically propagated to all members within the same domain. Only a shared port group that is in synchronization with all of its instances throughout the IVL domain may be configured to a global virtual switch.

If z/VM is unable to synchronize all the instances of a shared port group, the failing instance's port group state will be changed from Synchronized to Error. Usually the reason is a required resource or OSA

Adapter is not available for use within this LPAR or z/VM.

System action

Processing terminates for the issued CP command.

User response

Issue a QUERY PORT GROUP *portgroup* DETAILS CP command to determine the reason for this condition. Locate the local system's member view of the shared port group in the response. The member will be in the Error state. Located on the same line will be an error message number for the reason the port group is in this state.

Make sure all OSA Adapters comprising the port group are available and ON-LINE to z/VM. If necessary, issue the appropriate QUERY PORT GROUP *portgroup* JOIN or LEAVE command to get the shared port group back in synchronization.

HCP3200E SET PORT GROUP for shared port group *groupname* not performed; port groups cannot span CPCs

Explanation

An attempt to define or change a shared port group failed, because the target shared port group spans more than one central processor complex (CPC) and cannot be used for link aggregation. All devices in a shared port group must reside within the same CPC.

System action

The command terminates. The SET PORT GROUP command is unsuccessful.

User response

Issue the QUERY PORT GROUP command with the DETAILS option to see the complete shared port group configuration.

HCP3201E The variations of this message are explained below.

Explanation

- DASD Error: Bus-out Parity Check
- DASD Error: Correctable Data Check
- DASD Error: Data Check
- DASD Error: End of Cylinder
- DASD Error: Environmental Data Present
- DASD Error: Equipment Check
- DASD Error: File Protected
- DASD Error: First Error Log
- DASD Error: Imprecise Ending
- DASD Error: Incomplete Domain
- DASD Error: Intervention Required
- DASD Error: Invalid Track Format
- DASD Error: Message to Operator
- DASD Error: No Record Found
- DASD Error: Overrun
- DASD Error: Permanent Error
- DASD Error: Request Inhibit Write
- DASD Error: Sense Information for Remote Copy Services Volume
- DASD Error: Write inhibited
- DASD Error: Command Reject Message 0: No specific message code
- DASD Error: Command Reject Message 1: Invalid command
- DASD Error: Command Reject Message 2: Invalid command sequence
- DASD Error: Command Reject Message 3: CCW count less than required
- DASD Error: Command Reject Message 4: Invalid parameter (Reason Code=*pp qqqq rr ss*)
- DASD Error: Command Reject Message 5: Diagnostic or special command violates file mask
- DASD Error: Command Reject Message 6: Unknown Reason Code from Hardware
- DASD Error: Command Reject Message 7: Channel returned with incorrect retry CCW
- DASD Error: Command Reject Message 8: Reset notification
- DASD Error: Command Reject Message 9: Storage Control restart
- DASD Error: Command Reject Message A: Channel problem
- DASD Error: Command Reject Message B: Invalid defective/alternate track pointer
- DASD Error: Command Reject Message C: Unexpected message code from hardware
- DASD Error: Command Reject Message D: Summary unit check
- DASD Error: Command Reject Message E: Command invalid on PPRC secondary address
- DASD Error: Command Reject Message F: Status not as required Reason 05: The addressed volume size is greater than the maximum allowed for the operation.

- DASD Error: Command Reject Message F: Status not as required Reason 0D: Operation requires nonvolatile storage and nonvolatile storage is not available.
- DASD Error: Command Reject Message F: Status not as required Reason 22: A specified device is unconfigured, in CE Mode, or status cannot be determined.
- DASD Error: Command Reject Message F: Status not as required Reason 37: A command was received while the subsystem was attempting to install a new microcode load.
- DASD Error: Command Reject Message F: Status not as required Reason 56: The source or the target volume has pinned data.
- DASD Error: Command Reject Message F: Status not as required Reason 57: A specified device is in a suspended Peer-to-Peer Remote Copy state. All write commands with normal authorization indicated are rejected.
- DASD Error: Command Reject Message F: Status not as required Reason 58: An operation was received that conflicts with an established Peer-to-Peer Remote Copy state for the device.
- DASD Error: Command Reject Message F: Status not as required Reason 60: The target volume for a FlashCopy operation has grouped paths (that is, online to host) which conflicts with the setting that disallows the operation if the volume is online.
- DASD Error: Command Reject Message F: Status not as required Reason 65: A FlashCopy or Peer-to-Peer Remote Copy operation could not complete because the target is reserved to another initiator or the target is not ready.
- DASD Error: Command Reject Message F: Status not as required Reason 66: A volume with the requested track format could not be allocated.
- DASD Error: Command Reject Message F: Status not as required Reason 6B: The operation cannot be executed when the channel is operating in Transport Mode and the Service Action Code is X'1FFE'.
- DASD Error: Command Reject Message F: Status not as required Reason 6C: The operation cannot be executed when the channel is operating in Transport Mode and the Service Action Code is X'1FFF'.
- DASD Error: Command Reject Message F: Status not as required Reason 82: No resources available to create relationships for the FlashCopy operation or the number of relationships will exceed the maximum allowed.
- DASD Error: Command Reject Message F: Status not as required Reason 83: The battery feature is unavailable or not installed. FlashCopy requires the battery for proper operation.
- DASD Error: Command Reject Message F: Status not as required Reason 84: The FlashCopy volumes specified are not the same track type, the target volume has fewer tracks than the source, the number of target extents does not equal the number of source, or the source and target are not in the same logical subsystem (on some early FlashCopy Version 1 hardware).
- DASD Error: Command Reject Message F: Status not as required Reason 85: The target FlashCopy volume is a Peer-to-Peer Remote Copy primary or secondary or is an XRC primary volume.
  -DASD Error: Command Reject Message F: Status not as required Reason 86: The feature that the operation references is not installed or enabled for the subsystem.
- DASD Error: Command Reject Message F: Status not as required Reason 89: Establish FlashCopy specified a preserve mirror operation. A condition prevents the preserve mirror operation from being successful. Reason Code Qualifier: *qr*.
- DASD Error: Command Reject Message F: Status not as required Reason 8A: A Resync FlashCopy operation was received and the volumes were not in a persistent relationship whose background copy had completed.
- DASD Error: Command Reject Message F: Status not as required Reason 8E: A FlashCopy operation specified a target volume that is an Asynchronous Peer-to-Peer Remote Copy primary volume.
- DASD Error: Command Reject Message F: Status not as required Reason 98: The target volume of a FlashCopy operation is a Peer-to-Peer Remote Copy primary volume and is not in the correct Peer-to-Peer Remote Copy state.
- DASD Error: Command Reject Message F: Status not as required Reason 99: An operation was received that is not supported by the hardware or software level of the DASD subsystem.
- DASD Error: Command Reject Message F: Status not as required Reason 9B: A FlashCopy or Peer-to-Peer Remote Copy Pair operation was rejected because the target is reserved to another initiator.
- DASD Error: Command Reject Message F: Status not as required Reason 9C: A FlashCopy operation cannot complete due to internal hardware conditions or lack of resources to manage the relationships.
- DASD Error: Command Reject Message F: Status not as required Reason 9D: A FlashCopy operation cannot complete because the maximum number of relationships for the volume has been exceeded; FlashCopy Version 2 (Data Set level) only.
- DASD Error: Command Reject Message F: Status not as required Reason A5: The FlashCopy operation

does not allow the specification of extents; it is only valid for full volumes.

- DASD Error: Command Reject Message F: Status not as required Reason A6: A FlashCopy operation cannot complete because the maximum number of FlashCopy target relationships has been exceeded for one or more of the specified source tracks.
- DASD Error: Command Reject Message F: Status not as required Reason A7: A FlashCopy operation cannot complete because it has specified that an existing target track become a source track. Any single track must not be both a source and a target and a target track can only have one source.
- DASD Error: Command Reject Message F: Status not as required Reason A8: A FlashCopy operation cannot complete because the maximum number of relationships for the volume has been exceeded.
- DASD Error: Command Reject Message F: Status not as required Reason A9: A FlashCopy operation was received while a volume was inhibited for FlashCopy relationships.
- DASD Error: Command Reject Message F: Status not as required Reason AB: A FlashCopy Version 1 (Full Volume) operation was received on a volume that has FlashCopy Version 2 (Data Set Level) relationships.
- DASD Error: Command Reject Message F: Status not as required Reason AC: A FlashCopy operation was received that is no longer supported.
- DASD Error: Command Reject Message F: Status not as required Reason AD: A FlashCopy operation cannot be completed because the specified volumes have no grouped paths (that is, offline to host) or is in an inaccessible state.
- DASD Error: Command Reject Message F: Status not as required Reason AE: A FlashCopy operation cannot complete because it has specified that an existing target track become a target track. Any single track must not be both a source and a target and a target track can only have one source.
- DASD Error: Command Reject Message F: Status not as required Reason AF: A FlashCopy operation cannot complete because it has specified that an existing source track become a target track. Any single track must not be both a source and a target and a target track can only have one source.
- DASD Error: Command Reject Message F: Status not as required Reason B4: A FlashCopy operation attempted to reverse the order of the FlashCopy relationship and the target bitmap was not all zeros (that is, changes pending).
- DASD Error: Command Reject Message F: Status not as required Reason B6: The state of an existing FlashCopy relationship does not allow the specified FlashCopy operation.
- DASD Error: Command Reject Message F: Status not as required Reason B7: A FlashCopy operation was received and VM minidisk mode was specified, but an existing FlashCopy relationship does not have VM minidisk mode specified, or vice versa.
- DASD Error: Command Reject Message F: Status not as required Reason B9: A FlashCopy operation attempted to split an existing full volume incremental relationship.
- DASD Error: Command Reject Message F: Status not as required Reason BA: Change Recording has been specified by a FlashCopy operation, but Change Recording is already active and was not previously activated by the same operation type.
- DASD Error: Command Reject Message F: Status not as required Reason BB: A FlashCopy operation indicated Terminate All Relationships but the specified extents contain an existing full volume source relationship.
- DASD Error: Command Reject Message F: Status not as required Reason BC: A FlashCopy operation specifying Fast Reverse Restore was received while a previous Fast Reverse Restore operation was in progress.
- DASD Error: Command Reject Message F: Status not as required Reason BD: A FlashCopy operation specified an option that is not valid with a space efficient volume.
- DASD Error: Command Reject Message F: Status not as required Reason BE: A FlashCopy operation failed because the specified repository was offline.
- DASD Error: Command Reject Message F: Status not as required Reason EF: Reserved for software - Subchannel ID mismatch.

An error was detected by the hardware in response to a FlashCopy I/O operation that was issued by z/VM command processing.

System action

The associated z/VM command is not executed.

User response

Correct any user errors identified in the error message. Typically, errors occur in one of two cases:

1. There are no existing or relevant FlashCopy relationships and the error is indicating that a set of conflicting operands is present.
2. FlashCopy relationships already exist and there was an attempt to create a new relationship or modify an existing one in a way that is not valid.

To help diagnose the current state of FlashCopy relationships, issue the QUERY FLASHCOPY or QUERY VIRTUAL FLASHCOPY command.

Note: The HARDWARE option of the QUERY FLASHCOPY command reads the current state of all relationships on the specified *rdev*.

If no correctable user error is apparent, wait a few minutes and issue the command again, because the error could be the result of a temporary storage controller condition. If the error persists, contact the IBM Support Center.

HCP3202E **System *sysname* has limited connectivity to IVL Domain *domain* through VSWITCH *switchname*.**

Explanation

Connectivity to the IVL network for the named system wasn't completely successful due to a MAC address problem. The MAC address assigned by z/VM from the system's MAC prefix pool is either already in use by another adapter on the IVL network or the IVL VSWITCH exceeded the maximum number of connections allowed. Connectivity to other IVL domain members in the specified domain may not be possible.

System action

Limited or no connectivity to the IVL network.

User response

Issue SET VSWITCH IVLPort RESET CP command to the named IVL VSWITCH. The command will force a different MAC address to be assigned to the IVLPORT. Contact IBM Support for assistance.

HCP3203E **System *sysname* is fenced from IVL Domain *domain* through VSWITCH *switchname* due to a configuration or internal error.**

Explanation

The named system is not allowed to establish a network connection to the specified IVL domain due to a configuration problem or an internal error. Either the z/VM system name, System MAC prefix value specified by the VMLAN MACPREFIX system configuration statement is the same as another IVL member in the same IVL domain. Each IVL member within an IVL domain must have a unique z/VM system name and VMLAN MACPREFIX value.

An internal error condition may have been incurred by the IVL manager of this system and/or a SOFT ABEND has been taken.

System action

System is not allowed to join the IVL domain.

User response

When a prior message points to a configuration problem then change the System_Identifier and/or VMLAN MACPREFIX statements in the z/VM system configuration file to insure they are unique values with all other IVL members configured to the same IVL domain. Once the z/VM system configuration file is changed, the z/VM system must be IPLed for the changes to take affect.

When a prior message associated with this condition points to a SOFT ABEND or internal error, then the recovery action required to regain connectivity to the IVL domain is to first DETACH the IVL VSwitch, then DEFINE the IVL VSwitch and finally CONNECT it to the network.

HCP3204E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* due to an internal error on remote System *systemname***

Explanation

An internal error condition may have been incurred by the IVL Global VSWITCH Manager on the remote system and/or a SOFT ABEND has been taken.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSWITCH.

User response

The recovery action required is to first resolve the SOFT ABEND or internal error condition reported on the remote system then DETACH, DEFINE and CONNECT the local VSWITCH.

HCP3205E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* due to a VSWITCH TYPE configuration conflict.**

Explanation

The VSWITCH TYPE operand defined for the local VSWITCH is different than the TYPE defined for the remote VSWITCH member. The VSWITCH TYPE operand is required to be the same for all VSWITCH members of a Global VSWITCH.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Determine the desired VSWITCH TYPE operand for the Global VSWITCH and insure that the local VSWITCH member and the remote(s) are configured correctly.

HCP3206E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* due to a VSWITCH VLAN AWARE or UNAWARE configuration conflict.**

Explanation

The VSWITCH VLAN operand defined for the local VSWITCH is different than the VLAN defined for the remote VSWITCH member. The VSWITCH VLAN operand is required to be the same for all VSWITCH members of a Global VSWITCH.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Determine the desired VSWITCH VLAN operand for the Global VSWITCH and insure that the local VSWITCH member and the remote(s) are configured correctly.

HCP3207E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* due to a VSWITCH USERBASED or PORTBASED configuration conflict.**

Explanation

The VSWITCH USERBASED or PORTBASED operand defined for the local VSWITCH is different than the USERBASED or PORTBASED operand defined for the remote VSWITCH member. The VSWITCH USERBASED or PORTBASED operand is required to be the same for all VSWITCH members of a Global VSWITCH.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Determine the desired VSWITCH USERBASED or PORTBASED operand for the Global VSWITCH and insure that the local VSWITCH member and the remote(s) are configured correctly.

HCP3208E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* due to a VSWITCH EQID configuration conflict.**

Explanation

The VSWITCH EQID operand defined for the local VSWITCH is different than the EQID operand defined for the remote VSWITCH member. The VSWITCH EQID operand is required to be the same for all VSWITCH members of a Global VSWITCH.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Determine the desired VSWITCH EQID operand for the Global VSWITCH and insure that the local VSWITCH member and the remote(s) are configured correctly.

HCP3209E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* due to a VSWITCH NATIVE VLAN ID configuration conflict.**

Explanation

The VSWITCH NATIVE VLAN ID operand defined for the local VSWITCH is different than the NATIVE VLAN ID operand defined for the remote VSWITCH member. The VSWITCH NATIVE VLAN ID operand is required to be the same for all VSWITCH members of a Global VSWITCH.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Determine the desired VSWITCH NATIVE VLAN ID operand for the Global VSWITCH and insure that the local VSWITCH member and the remote(s) are configured correctly.

HCP3210E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* due to a VSWITCH VEPA configuration conflict.**

Explanation

The VSWITCH VEPA operand defined for the local VSWITCH is different than the VEPA operand defined for the remote VSWITCH member. The VSWITCH VEPA operand is required to be the same for all VSWITCH members of a Global VSWITCH.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Determine the desired VSWITCH VEPA operand for the Global VSWITCH and insure that the local VSWITCH member and the remote(s) are configured correctly.

HCP3211E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* due to a VSWITCH ISOLATION configuration conflict.**

Explanation

The VSWITCH ISOLATION operand defined for the local VSWITCH is different than the ISOLATION operand defined for the remote VSWITCH member. The VSWITCH ISOLATION operand is required to be the same for all VSWITCH members of a Global VSWITCH.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Determine the desired VSWITCH ISOLATION operand for the Global VSWITCH and insure that the local VSWITCH member and the remote(s) are configured correctly.

HCP3212E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* due to a VSWITCH IP or ETHERNET configuration conflict.**

Explanation

The VSWITCH IP or ETHERNET operand defined for the local VSWITCH is different than the IP or ETHERNET operand defined for the remote VSWITCH member. The VSWITCH IP or ETHERNET operand is required to be the same for all VSWITCH members of a Global VSWITCH.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Determine the desired VSWITCH IP or ETHERNET operand for the Global VSWITCH and insure that the local VSWITCH member and the remote(s) are configured correctly.

HCP3214E **VSWITCH *systemname.switchname* Synchronization cannot be performed because *systemname* currently does not have access to IVL Domain *x*.**

Explanation

Access to the IVL requires that an IVL VSwitch be defined and connected to the IVL domain. Global VSwitch synchronization requires connectivity to the IVL.

System action

Synchronization of local VSWITCH is terminated.

User response

Correct the condition preventing the local system from having access to the IVL and retry the failing operation.

HCP3215E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* with remote VSWITCH *systemname.switchname* because remote VSWITCH *systemname.switchname* is currently in synchronization.**

Explanation

The remote VSWITCH that this system is attempting to synch with is already in Global VSwitch synchronization. This may occur when Global VSwitch member propagation is occurring.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Allow some time for the current synchronization operation to complete and then attempt the desired operation again.

HCP3216E **VSWITCH *systemname.switchname* cannot be synchronized on IVL Domain *x* because remote System *systemname* is currently not responding.**

Explanation

The remote VSWITCH that this system is attempting to synch with did respond to synchronization request from this system. This may be due to a temporary state of flux on the remote system or a more serious condition is preventing it from responding.

System action

The local VSWITCH is out of synch with Global VSWITCH and is prevented from being a member of the Global VSwitch.

User response

Attempt the desired operation again after resolving the condition causing the target system from responding.

HCP3217E **VSWITCH *systemname.switchname* is unable to respond to a membership request for system *systemname* because there is no connectivity to IVL Domain *x*.**

Explanation

This system is currently unable to respond to a Membership request that was received from a remote system because the system does not have access to the IVL network. The loss of connectivity to the IVL may be due to the detachment of the IVL VSWITCH or its Uplink port.

System action

The local VSWITCH is unable to respond to or initiate any IVL control communications.

User response

Query the IVL VSWITCH to determine and rectify the cause for the loss of connectivity.

HCP3218I **VSWITCH *systemname.switchname* has been removed from membership on system *systemname* in IVL Domain *x*.**

Explanation

The remote VSWITCH has been removed from this system's Global VSwitch membership. This removal was precipitated by a notification from the remote system that this VSWITCH is no longer a member of the Global VSwitch.

System action

This system no longer recognizes the remote system as a member of a Global VSwitch.

User response

None.

HCP3219E **<*system name*>: HCPyyyxxxxE <*msg text*>**

Explanation

A cross IVL domain CP command was issued. The remote *system name* within the domain is reporting a error. The actual error encountered follows the reporting system's name.

System action

Processing terminates for the issued CP command.

User response

Handle the error following the reporting system's name.

HCP3220E **SET PORT GROUP for shared port group *groupname* not performed; OSA PCHID *pchid* is used by another port group.**

Explanation

An attempt to define or change a shared port group failed, because the target device is already used by another shared port group within the IVL domain.

System action

The command terminates. The SET PORT GROUP command is unsuccessful.

User response

Issue the QUERY PORT GROUP command with the DETAILS option to see the complete shared port group configuration.

HCP3221E **[VSWITCH not created; | SET VSWITCH GROUP not performed;] usage of shared port group *groupname* would exceed the maximum number of virtual switches allowed by a single system sharing the same port group.**

Explanation

An attempt to assign a shared port group to a virtual switch failed, because the maximum number of sharing virtual switches for a single port group would be exceeded.

System action

The DEFINE or SET VSWITCH command terminates.

User response

Use the QUERY PORT GROUP *groupname* command to see the list of virtual switches sharing the port group.

HCP3222E **VLAN configuration error. No VLANs were provided for port *portnum***

Explanation

You attempted to COUPLE to a VLAN aware virtual switch, and there are no VLANs configured for port *portnum*.

System action

The command terminates. The COUPLE command is unsuccessful.

User response

Configure VLAN(s) for the specified port using the SET VSWITCH PORTNUMBER command.

HCP3223E **SET PORT GROUP for port group *groupname* not performed; COLLABORATIVE is not allowed for an exclusive port group.**

Explanation

An attempt to update the port group failed because the option is not allowed for an exclusive port group.

System action

The port group is not updated.

User response

None.

HCP3224I **NICDEF network configuration is ignored due to the current setting of VMLAN DNA.**

Explanation

While processing a NICDEF directory statement during LOGON processing, the PORTNUMBER, PORTTYPE, VLAN, PQUPLINKTX, PROMISCUOUS, or NOPROMISCUOUS operands were found. The current VMLAN Dynamic Network Authorization (DNA) setting is disabled. Therefore, the operands are ignored.

System action

The operands are ignored; system operation continues.

User response

If Dynamic Network Authorization is desired, either use the VMLAN DNA system configuration statement or dynamically change the system setting using the privilege class B SET VMLAN command to enable the function.

HCP3225E **IVL DOMAIN does not support Collaborative Load Balancing.**

Explanation

An attempt to update the load balance type on a port group failed because the IVL DOMAIN does not support Collaborative load balance.

System action

The port group is not updated.

User response

Use QUERY VMLAN to check the IVL DOMAIN compatibility. Use QUERY PORT GROUP to display the load balance method in effect for the port group.

HCP3226E **VSWITCH SYSTEM *vswname* not created; IP type VSWITCH is not compatible with the uplink port device.**

Explanation

A Network-Express (OSH) device was specified as an uplink device for a virtual switch that is defined to operate in IP mode. Network-Express devices can operate only in ETHERNET mode.

System action:
The virtual switch was not created.

User response:
Define the virtual switch with the ETHERNET transport type, or remove the Network-Express (OSH) device.

HCP3227I **Device: *device* Command: *operation* RC: *rc* *reason***

Explanation

The system encountered an error while using networking device *device*. For example, an attempt to start a LAN adapter might fail because of a hardware problem. The return code *rc* and reason *reason* should provide some guidance.

The *operation* is the internal command that was sent to device *device*.

System action:
If this is a fatal error, the system is not able to use device *device* without manual intervention. If the system encountered a recoverable error, the device might be able to continue after it is reset.

User response:
If subsequent messages indicate that device *device* is unused or inactive, investigate the source of the problem. If the error persists after completing the suggested actions, then contact IBM Service.

HCP3228I ***devtype rdevno* An operation was terminated by the VSWITCH device driver.**

Explanation

The network device *rdevno* was reset. This usually means that a driver error was encountered while it was providing connectivity for a virtual switch network.

System action:
The current operation is terminated. The affected device might be restarted automatically if the virtual switch is so configured.

User response:
Investigate the circumstances that led to this device reset.

HCP3229E **Error occurred on device *rdevno*.**
Failing CCW: xxxxxxxx xxxxxxxx
SCSW: xxxxxxxx xxxxxxxx xxxxxxxx
Subchannel Logout: xxxxxxxx
ERW: xxxxxxxx
Failing Address: xxxxxxxx xxxxxxxx
Sense Data: xxxxxxxx xxxxxxxx

Explanation

The network device *rdevno* encountered unusual status. The information is provided to assist with problem diagnosis.

System action:
The current I/O operation is terminated. The affected device might be restarted automatically.

User response:
Investigate the circumstances that led to this device reset.

HCP3230I **The variations of this message are explained below.**

— Variation 1 **Priority Queuing is not enabled for device *device* for VSWITCH SYSTEM *switchname*.**

Explanation

Priority queuing could not be enabled for the device used by the IVL virtual switch. The I/O Configuration Program (IOCP) has been generated with PQ_OFF for the named device. Only an OSA-Express Feature configured for priority queuing should be used on an IVL virtual switch's uplink port.

System action

System operation continues without priority queuing.

User response

For the IVL virtual switch, it is recommended that all devices used for the virtual switch be configured with PQ_ON. Update IOCP for any devices used by the IVL virtual switch to specify PQ_ON.

— Variation 2 **Priority Queuing is not enabled for VSWITCH SYSTEM *switchname*. No eligible controllers support Priority Queuing.**

Explanation

The eligible controllers are missing support for priority queuing.

System action

System operation continues without priority queuing.

User response

Obtain and apply the latest TCP/IP service.

HCP3231E **QUERY OSAINFO internal error, *reason***

Explanation

A request for OSA information could not be satisfied. The request timed out or an internal formatting error was detected. If there was an internal formatting error, then the error code is displayed as *reason*.

System action:
The QUERY OSAINFO request is terminated.

User response:
Investigate the circumstances that led to this error.

HCP3233E **Connection *devicenumber* for SWITCH *switchname* is not active. Terminating recovery due to a persistent error condition.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device numbers. This message is displayed when the virtual switch's device recovery is unable to activate the specified device after multiple unsuccessful attempts.

System action

Manual intervention is required for the virtual switch to use the specified device to connect to the real LAN segment. The QUERY VSWITCH *switchname* command displays the following error for the device number that requires manual intervention: `Error: VSWITCH CONNECT Required`

User response

Address any previous error messages that were reported on the operator console for the failing device number. Use the SET VSWITCH *switchname* CONNECT command to start another attempt to activate the device.

HCP3234E **The variations of this message are explained below.**

— Variation 1 **Connection *device* for VSWITCH *vswitchname* is not active. Control plane communications not operational.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device numbers. This message is used to report a configuration or use issue with the specified device number in a Link Aggregation Group (LAG).

Communication with the device's control plane is no longer possible. Most likely the device network interface is no longer operational due to a terminating error.

System action

If the message is a result of a DEFINE VSWITCH, SET VSWITCH or SET PORT GROUP command, then the virtual switch was created or modified, but the device number in error does not have a connection to the real hardware LAN. System operation continues.

User response

The error might be related to a transient condition. Try one or more of the following actions to activate the device in the LAG:

Issue the following CP command to retry activation of the failing device in the LAG:

- SET PORT GROUP *name* JOIN *failingdevice*

Issue the following CP commands to remove and then add back the failing device number to all virtual switches that share the LAG:

1. SET PORT GROUP *groupname* LEAVE *failingdevice*
2. SET PORT GROUP *groupname* JOIN *failingdevice*

Complete the previous steps, but add an extra step to reset the adapter:

1. Remove the failing device from all virtual switches that share the device:
   - SET PORT GROUP *groupname* LEAVE *failingdevice*
2. Reset the adapter by configuring the network adapter's CHPID OFF and then back on-line.
3. When the CHPID is back on-line, issue the following CP command to add back the failing device number to all virtual switches that share the LAG:
   - SET PORT GROUP *groupname* JOIN *failingdevice*

If the error persists after completing these actions, then contact IBM Service.

— Variation 2 **Connection *device* for VSWITCH *vswitchname* is not active. Adapter did not respond in the allotted time.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device numbers. This message is used to report a configuration or use issue with the specified device number in a Link Aggregation Group (LAG).

A response from the network adapter was not received. A control command transmitted to configure the LAG for the reported device number did not complete within a reasonable time.

System action

If the message is a result of a DEFINE VSWITCH, SET VSWITCH or SET PORT GROUP command, then the virtual switch was created or modified, but the device number in error does not have a connection to the real hardware LAN. System operation continues.

User response

The error might be related to a transient condition. Try one or more of the following actions to activate the device in the LAG:

Issue the following CP command to retry activation of the failing device in the LAG:

- SET PORT GROUP *name* JOIN *failingdevice*

Issue the following CP commands to remove and then add back the failing device number to all virtual switches that share the LAG:

1. SET PORT GROUP *groupname* LEAVE *failingdevice*
2. SET PORT GROUP *groupname* JOIN *failingdevice*

Complete the previous steps, but add an extra step to reset the adapter:

1. Remove the failing device from all virtual switches that share the device:
   - SET PORT GROUP *groupname* LEAVE *failingdevice*
2. Reset the adapter by configuring the network adapter's CHPID OFF and then back on-line.
3. When the CHPID is back on-line, issue the following CP command to add back the failing device number to all virtual switches that share the LAG:
   - SET PORT GROUP *groupname* JOIN *failingdevice*

If the error persists after completing these actions, then contact IBM Service.

— Variation 3 **Connection *device* for VSWITCH *vswitchname* is not active. Adapter did not return sufficient or required information to make a LAG configuration change.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device numbers. This message is used to report a configuration or

use issue with the specified device number in a Link Aggregation Group (LAG).

The response to a control command to either initialize or modify a LAG configuration did not return sufficient or expected data to complete the change. The issue could be related to one of the following conditions when the command was processed:

- A corrupted frame was received on the control plane input queue.
- The adapter had an unspecified issue.
- The z/VM virtual switch had an unspecified issue.

System action

If the message is a result of a DEFINE VSWITCH, SET VSWITCH or SET PORT GROUP command, then the virtual switch was created or modified, but the device number in error does not have a connection to the real hardware LAN. System operation continues.

User response

The error might be related to a transient condition. Try one or more of the following actions to activate the device in the LAG:

Issue the following CP command to retry activation of the failing device in the LAG:

- SET PORT GROUP *name* JOIN *failingdevice*

Issue the following CP commands to remove and then add back the failing device number to all virtual switches that share the LAG:

1. SET PORT GROUP *groupname* LEAVE *failingdevice*
2. SET PORT GROUP *groupname* JOIN *failingdevice*

Complete the previous steps, but add an extra step to reset the adapter:

1. Remove the failing device from all virtual switches that share the device:
   - SET PORT GROUP *groupname* LEAVE *failingdevice*
2. Reset the adapter by configuring the network adapter's CHPID OFF and then back on-line.
3. When the CHPID is back on-line, issue the following CP command to add back the failing device number to all virtual switches that share the LAG:
   - SET PORT GROUP *groupname* JOIN *failingdevice*

If the error persists after completing these actions, then contact IBM Service.

— Variation 4 **Connection *device* for VSWITCH *vswitchname* is not active. Unexpected return code received from adapter.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device numbers. This message is used to report a configuration or use issue with the specified device number in a Link Aggregation Group (LAG).

The response to a control command to either initialize or modify a LAG configuration failed with an unexpected return code from the adapter.

System action

If the message is a result of a DEFINE VSWITCH, SET VSWITCH or SET PORT GROUP command, then the virtual switch was created or modified, but the device number in error does not have a connection to the real hardware LAN. System operation continues.

User response:
If the error persists after completing these actions, then contact IBM Service.

— Variation 5 **Connection *device* for VSWITCH *vswitchname* is not active. A different port group is currently being used by the adapter associated with this device.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device numbers. This message is used to report a configuration or use issue with the specified device number in a Link Aggregation Group (LAG).

The adapter is currently active in a different shared LAG group. An adapter can support only one LAG in Group Exclusive Mode at a time.

System action

If the message is a result of a DEFINE VSWITCH, SET VSWITCH or SET PORT GROUP command, then the virtual switch was created or modified, but the device number in error does not have a connection to the real hardware LAN. System operation continues.

User response:
Verify that the correct shared port group name was configured on the GROUP keyword when the virtual

switch was defined or modified by a SET VSWITCH command. If the correct port group is configured, verify that the correct device number is configured in the configured port group. If the configuration is correct, then activate only one apvirtual-switch uplink port at a time.

— Variation 6 **Connection *device* for VSWITCH *vswitchname* is not active. A Group from a different IVL domain has already been established on the same adapter.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device numbers. This message is used to report a configuration or use issue with the specified device number in a Link Aggregation Group (LAG).

The adapter is currently active with the same group name by a system in a different IVL domain. An adapter can support only one LAG in Group Exclusive Mode at a time.

System action

If the message is a result of a DEFINE VSWITCH, SET VSWITCH or SET PORT GROUP command, then the virtual switch was created or modified, but the device number in error does not have a connection to the real hardware LAN. System operation continues.

User response:
Verify that the correct shared port-group name was configured on the GROUP keyword when the virtual switch was defined or modified by a SET VSWITCH command. If the correct port group is configured, verify that the correct device number is configured in the configured port group. If the configuration is correct, then activate only one virtual-switch uplink port at a time.

— Variation 7 **Connection *device* for VSWITCH *vswitchname* is not active. Unable to configure device in a LAG at this time due to other active network connections on the same adapter.**

Explanation

A virtual switch is defined with the RDEV or GROUP operand to specify one or more real device numbers. This message is used to report a configuration or use issue with the specified device number in a Link Aggregation Group (LAG).

There are other users on the system that currently use devices on the same adapter. To activate a shared LAG network connection, all devices that are associated with the adapter must be completely idle.

System action

If the message is a result of a DEFINE VSWITCH, SET VSWITCH or SET PORT GROUP command, then the virtual switch was created or modified, but the device number in error does not have a connection to the real hardware LAN. System operation continues.

User response:
Verify that all devices that are associated with the adapter are not attached or being used by another virtual machine.

HCP3240E **VSWITCH *userid switchname* No compatible network device.**

Explanation

A QUERY OSAINFO command for virtual switch *switchname* could not be completed because the active uplink device does not support a request for information.

System action:
The QUERY OSAINFO command for virtual switch *switchname* fails.

User response:
Activate an uplink device (or port group) that supports the OSAINFO request.

HCP3241E **VSWITCH *userid switchname* RDEV *rdevno* Not an operational EQDIO device.**

Explanation

A QUERY OSAINFO command for RDEV *rdevno* could not be completed because the device is not operational.

System action:
The QUERY OSAINFO command for RDEV *rdevno* fails.

User response:
Investigate the status of RDEV *rdevno* and fix any issues that prevent it from operating normally.

HCP3500E **SCSI driver error log generated for device *device*. Dump follows: *dump***

Explanation

An error condition was detected by a SCSI driver.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3501E **Unable to load component. Seed = *seed*, Index = *index*, RC = *rc*, RSN = *rsn*Function: *function***

Explanation

An entry in the device driver's load list could not be loaded. The component may be identified using the seed value from the load list. The return code and reason code can be used to determine the cause. The return/reason code reflect the completion of load component processing. Index indicates the component's relative position in the load list.

System action

None. Device driver processing continues without the component.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3502E **Failed to unload component, handle = *handle*, index = *index*Function: *function***

Explanation

The device driver failed to unload a component during shutdown processing. The component is associated with the designated handle and index is the relative position of the component in the load list used during container initialization.

System action

None. Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3503I **Core services initialization complete**

Explanation

Device driver initialization has completed successfully. The device driver will now begin to process the load list.

System action

None.

Operator response

None.

Programmer response

None.

HCP3504E **Failed to unload loadlist, handle = *handle*, index = *index*Function: *function***

Explanation

The device driver was unable to unload a previously loaded load list. This message is issued during device driver termination.

System action

None.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3505E **Unable to load loadlist, reference = *reference*Function: *function***

Explanation

The system was unable to load the load list identified by the specified reference.

System action

The device driver will terminate.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3506E **Specified loadlist (*loadlist*) contains no suitable entriesFunction: *function***

Explanation

The specified load list contained no loadable entries.

System action

The device driver will terminate.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3507E **Thread (*thread*) encountered a severe error in *function* at line *line*: EID(*eid*) RC(*rc*) RSN(*rsn*)**

Explanation

The current operation has encountered an unexpected error condition.

System action

None. The condition will be handled by the device driver.

User response

Look for other messages that are issued at the time of the failure that may be related to it. If there are no related messages or if they do not help identify the problem, contact your IBM support personnel for assistance.

HCP3508I **IOSC started**

Explanation

The IOSC component has started. IOSC services are now available.

System action

None.

Operator response

None.

Programmer response

None.

HCP3509I **IOSC closing down**

Explanation

The IOSC component is about to terminate. IOSC services are no longer available and the component may be unloaded.

System action

None.

Operator response

None.

Programmer response

None.

HCP3510E **Unrecognized notify codeFunction: *function***

Explanation

The IOSC main loop has received an event with an unexpected notify code. This indicates some internal error which may be transient.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3511E **Spurious work eventFunction: *function***

Explanation

The IOSC main loop has received notification of an event, but no event was queued. This indicates some internal error which may be transient.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3512E **Deallocate latch failedFunction: *function***

Explanation

The deallocation of a latch failed in the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3513E **Deallocate event failedFunction: *function***

Explanation

The deallocation of an event failed in the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3514E **Free failedFunction: *function***

Explanation

The deallocation of memory failed in the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3515E **Destroy cell pool failedFunction: *function***

Explanation

The deallocation of a cell pool failed in the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3516E **Latch failedFunction: *function***

Explanation

An attempt to obtain a latch failed. Inconsistent results may be produced from queries.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3517E Unlatch failedFunction: *function*

Explanation

An attempt to unlatch a latch failed.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3518E Cell free failedFunction: *function*

Explanation

The deallocation of a cell failed in the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3519E Config close failedFunction: *function*

Explanation

The configuration database failed to close during the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3520E Aset close failedFunction: *function*

Explanation

An attribute set failed to close during the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3521E Device close failedFunction: *function*

Explanation

A device failed to close during the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3522E Internal purge device failedFunction: *function*

Explanation

Resources associated with a specific device failed to be released during the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3523E **CSSC_getPRTI failedFunction: *function***

Explanation

IOSC was unable to obtain a primary resource tracking indicator (PRTI) while opening or loading a device.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3524E **CSSC_getSRTI failedFunction: *function***

Explanation

IOSC was unable to obtain a secondary resource tracking indicator (SRTI) while opening or loading a device.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3525E **Pers purge device failedFunction: *function***

Explanation

A personality component's call to stop and purge a specific device failed during the process of releasing resources.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3526E **Unload PSCM failedFunction: *function***

Explanation

The PSCM component failed to unload during the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3527E **Unload personality failedFunction: *function***

Explanation

A personality component failed to unload during the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3528E **Unload device failedFunction: *function***

Explanation

A personality component's unload device request failed during the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3529E **Unpincode of IOSC failedFunction: *function***

Explanation

The IOSC component code failed to unpin during the process of releasing resources. This indicates an internal error.

System action

None. IOSC continues, ignoring the event.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3531E **Invalid attribute value (*value*) for attribute name=*name*, resource name=*name*. Default assigned.Function: *function***

Explanation

The attribute value in parentheses is not valid for the named attribute of the resource indicated by "resource name=". The attribute is one that is required for the resource to be made available for use by the system.

System action

The resource is not made available to the system.

Operator response

Ask the person responsible for system configuration to check the configuration database and verify that the attribute has been properly specified for the named resource.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3534E **Free of memory failed.Function: *function***

Explanation

A PAIX call to CSSC_free failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3535E **Create cellpool failed.Function: *function***

Explanation

A PAIX call to CSSC_createCellPool failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3537E **Latch deallocation failed.Function: *function***

Explanation

A PAIX call to CSSC_deallocateLatch failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3538E **CSSC_allocateWdog failed.Function: *function***

Explanation

A PAIX call to CSSC_allocateWdog failed.

System action

Processing continues. Allocation will be re-tried by CSSC_startWdog.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3539E **CSSC_allocateWdog retry failed.Function: *function***

Explanation

The PAIX attempt to retry the call to CSSC_allocateWdog during PAIX_w_start processing failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3540E **CSSC_startWdog failed.Function: *function***

Explanation

This message is issued when a PAIX call to CSSC_startWdog fails or when the PAIX_w_start re-try call to CSSC_allocateWdog fails.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3541E **CSSC_stopWdog failed.Function: *function***

Explanation

A PAIX call to CSSC_stopWdog failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3542E **CSSC_deallocateWdog failed.Function: *function***

Explanation

A PAIX call to CSSC_deallocateWdog failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3543E **Bad refcount freeing NDD.Function: *function***

Explanation

During free processing of an NDD, allocation reference count for the NDD was less than zero.

System action

Processing continues. No call to the ndd_close routine of the NDD performed.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem. Extraneous calls to ndd_free result in an incorrectly decremented reference count. Also, investigate possible storage overlays resulting in an invalid reference count for the NDD.

HCP3544E **Unpincode of PAIX failedFunction: *function***

Explanation

During PAIX termination, the call to CSSC_unpincode to unpin PAIX failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3545E **Lock deallocation failed.Function: *function***

Explanation

A PAIX call to CSSC_deallocateLock failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3546E **CSSC_malloc failed.Function: *function***

Explanation

A PAIX call to CSSC_malloc failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3547E **CSSC_getCell failed.Function: *function***

Explanation

A PAIX call to CSSC_getCell failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3548E **CSSC_freeCell failed.Function: *function***

Explanation

A PAIX call to CSSC_freeCell failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3549E CSSC_pincode failed.Function: *function*

Explanation

A PAIX call to CSSC_pincode failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3550E CSSC_unpincode failed.Function: *function*

Explanation

A PAIX call to CSSC_unpincode failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3551E CSSC_pin failed.Function: *function*

Explanation

A PAIX call to CSSC_pin failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3552E CSSC_unpin failed.Function: *function*

Explanation

A PAIX call to CSSC_unpin failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3553E CSSC_xmattach failed.Function: *function*

Explanation

A PAIX call to CSSC_xmattach failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3554E CSSC_xmdetach failed.Function: *function*

Explanation

A PAIX call to CSSC_xmdetach failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3555E **CSSC_copyin failed.Function: *function***

Explanation

A PAIX call to CSSC_copyin failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3556E **CSSC_copyout failed.Function: *function***

Explanation

A PAIX call to CSSC_copyout failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3557E **CSSC_uiomove failed.Function: *function***

Explanation

A PAIX call to CSSC_uiomove failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3558E **Unload of IOSC failed.Function: *function***

Explanation

During PAIX termination the call to CSSC_unloadComponent for IOSC failed.

System action

Processing continues.

Operator response

Notify the system programmer.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3559E **getAttrib failed for attribute=*attribute*, resource name=*name*. RC=*rc*, RSN=*rsn*. Function: *function***

Explanation

The named attribute for the resource indicated could not be retrieved from the configuration database for the reason indicated by the Return (RC) and Reason (RSN) Codes. The attribute is one that is required for the resource to be made available for use by the system.

System action

The resource is not made available to the system.

Operator response

Ask the person responsible for system configuration to check the configuration database and verify that the attribute has been properly specified for the named resource.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3560E **Invalid attribute value (*value*) for attribute name=*name*, resource name=*name*.Function : *function***

Explanation

The attribute value in parentheses is not valid for the named attribute of the resource indicated by "resource name=". The attribute is one that is required for the resource to be made available for use by the system.

System action

The resource is not made available to the system.

Operator response

Ask the person responsible for system configuration to check the configuration database and verify that the attribute has been properly specified for the named resource.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3561E **OpenAttribSet failed for resource name=*name*. RC=*rc*, RSN=*rsn*. Function: *function***

Explanation

The system could not open the attribute set for the named resource for the reason indicated by the Return (RC) and Reason (RSN) Codes.

System action

The resource is not made available to the system.

Operator response

Ask the person responsible for system configuration to check the configuration database and verify that an attribute set exists for the named resource.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3562E **IOSC_loadDevice failed for resource name=*name*. RC=*rc*, RSN=*rsn*.Function: *function***

Explanation

A system loadDevice request for the named resource failed for the reason indicated by the Return (RC) and Reason (RSN) Codes.

System action

The resource is not made available to the system.

Operator response

Examine the Return and Reason Codes and perhaps other related messages issued at the time of the failure. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3563E **PAIX_getDevno failed for resource name=*name*, RC=*rc*, RSN=*rsn*.Function: *function***

Explanation

A system request (PAIX_getDevno) for the devno associated with the named resource failed for the reason indicated by the Return (RC) and Reason (RSN) Codes. The named resource is a parent FCP protocol device for one path to a scsidisk device. This is an operating system software problem.

System action

The affected path is not made available to the system, but the system will attempt to activate the device without all paths active or without multipathing capability.

Operator response

Follow normal procedures for reporting operating system software problems.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3564E **CSSC_malloc failed. RC=*rc*, RSN=*rsn*.Function: *function***

Explanation

A memory allocation (malloc) request failed for the reason indicated by the Return (RC) and Reason (RSN) Codes.

System action

The scsidisk device for which the memory allocation failed will not be made available to the system. The system otherwise continues processing.

Operator response

Examine the Return and Reason Codes. Follow normal procedures for resolving resource shortage problems.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3565E **CSSC_createCellPool failed. RC=*rc*, RSN=*rsn*.Function: *function***

Explanation

Creation of an internal Cell Pool failed for the reason indicated by the Return (RC) and Reason (RSN) Codes.

System action

The scsidisk device for which the Cell Pool creation failed will not be made available to the system. The system otherwise continues processing.

Operator response

Examine the Return and Reason Codes. Follow normal procedures for resolving system problems.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3566E **Path configuration error for device *device*.Function: *function***

Explanation

A serious error has occurred during path configuration for the named device.

System action

The system will attempt to activate the device, but without multipathing capability.

Operator response

Look for other related messages that may have been issued at the time of failure. Follow normal procedures for resolving system problems.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3567E **Wrong parent type (*type*) for device *device*.Function: *function***

Explanation

The SET_TYPE attribute (value in parentheses) of the named parent FCP Protocol device is not valid.

System action

The system will attempt to activate the device, but with not all paths active or without multipathing capability.

Operator response

Ask the person responsible for system configuration to check the configuration database and verify that the SET_TYPE attribute of the named device has been properly specified.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3568E **fp_opendev failed. resource name=*name*, return value=*value*.Function: *function***

Explanation

The internal open (fp_opendev) of the named FCP Protocol device failed for the reason indicated by return value. This is done as part of loadDevice for a scsidisk device. The named device may be an element in one path to the device if multiple paths exist.

System action

If multiple paths exist to the scsidisk device, the system will attempt to activate the device via one or more other paths.

Operator response

Examine the return value and perhaps other related messages issued at the time of the failure. Follow

normal procedures for resolving the problems indicated.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3569E **fp_ioctl for SCIOLSTART failed. resource name=*name*, return value=*value*.Function: *function***

Explanation

An internal request (fp_ioctl)to START the scsidisk device (LUN) failed for the reason indicated by return value. This is done as part of loadDevice for a scsidisk device. If multiple paths to the device exist, resource name will identify a specific failing path. If no paths are defined for the device, resource name will identify the device itself.

System action

If multiple paths exist to the scsidisk device, the system will attempt to activate the device via one or more other paths.

User response

Examine the return value and look for other messages that are issued at the time of the failure that may be related to it. If the return value or related messages do not help, contact your IBM support personnel for assistance.

HCP3570E **fp_ioctl for SCIOLQWWN failed. resource name=*name*, return value=*value*.Function: *function***

Explanation

An internal request (fp_ioctl)to query the Fabric Name Server failed for the reason indicated by return value. This is done as part of loadDevice for a scsidisk device. If multiple paths to the device exist, resource name will identify a specific failing path. If no paths are defined for the device, resource name will identify the device itself.

System action

If multiple paths exist to the scsidisk device, the system will attempt to activate the device via one or more other paths.

Operator response

Examine the return value and perhaps other related messages issued at the time of the failure. Ask the person responsible for system configuration to check the configuration database and verify that the TARGET_WWPN device/path attribute has been properly specified and matches the hardware configuration. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3571E **fp_ioctl for SCIOLINQU failed. resource name=*name*, return value=*value*.Function: *function***

Explanation

An internal request (fp_ioctl) to send a SCSI INQUIRY command to the device (LUN) has failed. This is done as part of loadDevice for a scsidisk device. If multiple paths to the device exist, resource name will identify a specific failing path. If no paths are defined for the device, resource name will identify the device itself.

System action

If multiple paths exist to the scsidisk device, the system will attempt to activate the device via one or more other paths. If no paths are defined for the device, it will not be made available for system use.

Operator response

Examine the return value and perhaps other related messages issued at the time of the failure. Ask the person responsible for system configuration to check the configuration database and verify that the LUN_ID device/path attribute has been properly specified and matches the hardware configuration. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3572E **loadComponent for PCM (*pcm*) failed. RC=*rc*, RSN=*rsn*.Function: *function***

Explanation

loadComponent for the Path Control Module (PCM) has failed for the reason indicated by the Return

(RC) and Reason (RSN) Codes. The name of the PCM component for which loadComponent was attempted is in parenthesis, and was specified in the DRIVER attribute of the attribute set for the PCM Extension named in the scsidisk device's PCM_EXTENSION attribute.

System action

The system will attempt to activate the device without multipathing.

Operator response

Ask the person responsible for system configuration to check the configuration database and verify that all scsidisk device PCM_EXTENSION attributes are correctly specified, and that the DRIVER attribute in all PCM_EXTENSION attribute sets is correct.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3573E **scsidisk_config CFG_INIT failed for device *device*. return value=*value*. Function: *function***

Explanation

The CFG_INIT phase of loadDevice processing for the named scsidisk device has failed for the reason indicated by the return value. This is a possible operating system software problem within the scsidisk driver component.

System action

The device is not made available for system use.

Operator response

Follow normal procedures for reporting operating system software problems.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3574E **scsi_create_init_structure build DDS failed for device *device*.Function: *function***

Explanation

An internal phase of loadDevice process for the named device has failed. One or more additional messages describing the specific cause of the failure will likely also to have been issued.

System action

The device is not made available for system use.

Operator response

Examine all possibly-related messages issued at the time of failure and take action as appropriate.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3575E **MPIO Config PCM add device failed for device *device*. RC=*rc*, RSN=*rsn*.Function: *function***

Explanation

The loadDevice phase of processing during which the PCM is notified of the addition of a new multipath-capable device has failed for the reason indicated in the Return (RC) and Reason (RSN) Codes. This is a possible operating system software problem within the scsidisk driver component or the Path Control Module (PCM).

System action

The device is not made available for system use.

Operator response

Follow normal procedures for reporting operating system software problems.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3576E **MPIO Config get path init data failed for device *device*. RC=*rc*, RSN=*rsn*.Function: *function***

Explanation

An internal multipathing-related phase of loadDevice processing for the named device has failed. One or more additional messages describing the specific cause of the failure will likely also to have been issued.

System action

The system will attempt to activate the device without multipathing.

Operator response

Examine all possibly-related messages issued at the time of failure and take action as appropriate.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3577E **Minor numbers exhausted.Function: *function***

Explanation

The maximum number of minor numbers supported for scsidisk devices has been exhausted. This may be an operating system software problem or an operating system limitation.

System action

The device is not made available for system use.

Operator response

Follow normal procedures for reporting operating system software problems. Restart of the device driver may resolve the problem.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3578E **Config build path dds failed for device *device*. RC=*rc*, RSN=*rsn*.Function: *functio n***

Explanation

An internal multipathing-related phase of loadDevice processing for the named device has failed. One or more additional messages describing the specific cause of the failure will likely also to have been issued.

System action

The system will attempt to activate the device without multipathing.

Operator response

Examine all possibly-related messages issued at the time of failure and take action as appropriate.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3579E **Config PCM add paths failed for device *device*. RC=*rc*, RSN=*rsn*.Function: *function***

Explanation

The loadDevice or resetDevicePaths phase of processing during which the PCM is notified of the addition of a new paths has failed for the reason indicated in the Return (RC) and Reason (RSN) Codes. This is a possible operating system software problem within the scsidisk driver component or the Path Control Module (PCM).

System action

One or more paths may not be made available for system use.

Operator response

Follow normal procedures for reporting operating system software problems.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3580E **CFG_TERM failed for devno=*devno*. return value=*value*.Function: *function***

Explanation

The CFG_TERM phase of unloadDevice processing for the named device has failed for the reason indicated in the return value. This is a possible operating system software problem within the scsidisk driver component.

System action

unLoadDevice did not complete. Some system resources may be lost.

Operator response

Follow normal procedures for reporting operating system software problems.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3581E **unloadDevice for device *device* failed. RC=*rc*, RSN=*rsn*.Function: *function***

Explanation

A system unloadDevice request for the named device has failed for the reason indicated by the Return (RC)and Reason (RSN) Codes. This is a possible operating system software problem within the scsidisk driver component.

System action

unLoadDevice did not complete. Some system resources may be lost.

Operator response

Follow normal procedures for reporting operating system software problems.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3582E **resetDevicePaths failed. Invalid state for device *device*.Function: *function***

Explanation

An attempt was made to delete (via resetDevicePaths) all currently active paths to the named device. This is not allowed for a device in the open state.

System action

The operation is not performed. All currently active paths remain active.

Operator response

Verify with the person responsible for system configuration that the intent is to delete all active paths for this device. Insure that the device is in the CLOSED state and retry the operation.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3583E **PCM not loaded.Function: *function***

Explanation

An attempt was made to add paths (via resetDevicePaths) to a device for which no paths previously existed, and for which a Path Control Module (PCM) was never loaded.

System action

No action is taken.

Operator response

Issue the system command that will result in unloadDevice for the affected device, followed by loadDevice or openDevice.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3584E **scsidisk_config CFG_MPIO failed for {device|path} *{device|path}*, operation=*operation*, return value=*value*.Function: *function***

Explanation

An attempt to add, delete, start, or stop the named path failed for the reason indicated by return value. "operation=" indicates the specific operation that failed.

System action

The requested action is not performed.

Operator response

Examine the reason code and perhaps other related messages issued at the time of the failure. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3585E **Unable to generate UDID for path *path*.Function: *function***

Explanation

The information available via SCSI INQUIRY for the device (LUN) via the named path was insufficient to generate a Universal Device ID (UDID). The device (LUN) is not supported by the implementation.

System action

The named path is not made available.

Operator response

Verify that the failing device is supported by the implementation.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3586E **UDID mismatch for path *path*.Function: *function***

Explanation

The information from a SCSI INQUIRY request to the LUN via the named path -- used to generate a Universal Device ID (UDID) -- does not match the UDID previously generated for this device.

System action

The named path is not made available.

Operator response

Ask the person responsible for system configuration to verify that the named path is a valid one for the device.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3587E **LUN doesn't exist for {device|path} *{device|path}*.Function: *function***

Explanation

The LUN accessed via the named device or path is not a valid scsidisk device.

System action

The device or path is not made available.

Operator response

Ask the person responsible for system configuration to verify the named device or path is of the correct type.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3588E **No saved UDID for device *device*. resetDevicePaths not allowed.Function: *function***

Explanation

An attempt was made to add a path to the named device with the resetDevicePaths function, but a valid universal device ID (UDID) was not generated and stored when the device was initially activated – probably because no paths for the device were defined.

System action

The path was not added. The device will continue to operate without multi-pathing enabled.

Operator response

Ask the person responsible for system configuration to remove the path definitions for the device, which will eliminate generation of this message.

Programmer response

None.

HCP3589E **Problem initializing PCM=*PCM*Function: *function***

Explanation

There was an problem initializing the named path control module (PCM). The problem as indicated in the message is one of the following:

- A request to the PCM to return its version number failed
- The version number is not one supported by the scsidisk device driver
- A request to the PCM to perform its initialization processing failed.

System action

The device will be made available, but without multi-pathing capability.

Operator response

Follow normal procedures for reporting operating system software problems.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3591E **The hardware/software is not at the correct level to support LUN reset. Device *device* Function: *function***

Explanation

The hardware and software combination does not support LUN reset, which is required by the driver.

System action

LoadDevice will fail.

Programmer response

Verify that the hardware and software can support LUN reset.

HCP3593E **fp_ioctl for SCIOLCMD failed. resource name=*name*, return value=*rv*.Function: *function***

Explanation

An internal request (fp_ioctl) to issue a command to the scsidisk device (LUN) failed for the reason indicated by return value. This is done as part of loadDevice for a scsidisk device.

System action

LoadDevice will fail.

Operator response

Examine the return value and perhaps other related messages issued at the time of the failure. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3594E **fp_ioctl for GET_ROUTER_STATE failed. resource name=*name*, return value=*rv*.Function: *function***

Explanation

An internal request (fp_ioctl) to issue a GET_ROUTER_STATE to the scsidisk device (LUN) failed for the reason indicated by return value. This is done as part of loadDevice for a scsidisk device.

System action

LoadDevice will fail.

Operator response

Examine the return value and perhaps other related messages issued at the time of the failure. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3595E **fp_ioctl for SET_ROUTER_STATE failed. resource name=*name*, return value=*rv*.Function: *function***

Explanation

An internal request (fp_ioctl) to issue a SET_ROUTER_STATE to the scsidisk device (LUN) failed for the reason indicated by return value. This is done as part of loadDevice for a scsidisk device.

System action

LoadDevice will fail.

Operator response

Examine the return value and perhaps other related messages issued at the time of the failure. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3597E **fp_ioctl for MODESENSE failed. resource name=*name*, return value=*rv*.Function: *function***

Explanation

An internal request (fp_ioctl) to issue a MODESENSE to the scsidisk device (LUN) failed for the reason

indicated by return value. This is done as part of loadDevice for a scsidisk device.

System action

LoadDevice will fail.

Operator response

Examine the return value and perhaps other related messages issued at the time of the failure. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3598E **fp_ioctl for RTADDPATH failed. resource name=*name*, return value=*rv*.Function: *function***

Explanation

An internal request (fp_ioctl) to issue a RTADDPATH to the scsidisk device (LUN) failed for the reason indicated by return value. This is done as part of loadDevice for a scsidisk device.

System action

LoadDevice will fail.

Operator response

Examine the return value and perhaps other related messages issued at the time of the failure. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3599E **The cache settings for LUN *lun* will allow cached data to be lost if path failover occurs.**

Explanation

A LUN is running with write cache enabled and cache mirroring disabled. This message is issued when:

- The error was detected during loading of the LUN, or
- If the LUN's settings were valid at load time but changed later, then this message will be issued every 24 hours.

System action

The LUN will not be loaded, or if the LUN was already loaded, then it will be disabled for any further I/O.

Programmer response

Enable cache mirroring and reload the device.

HCP3603E **Paths to disk *disk* do not go to same device. Function: *function***

Explanation

The paths specified for this disk do not go to the same device. The paths need to be corrected.

System action

LoadDevice will fail.

Programmer response

Verify that the paths to the device are specified correctly.

HCP3605E **The QDIO-Active FCP subchannel *rdev* has returned a protocol error *error* (pHandle=*pHandle* lHandle=*lHandle*). Data=*data***

Explanation

An error has occurred and reported by the FCP subchannel. *rdev* is the four-digit FCP device number.

System action

The system continues, and may retry the operation.

Operator response

Examine the reason code and perhaps other related messages issued at the time of the failure. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP3606E **The QDIO-Active FCP subchannel *rdev* has returned an FSF error *error* (pHandle=*pHandle* lHandle=*lHandle*). Data=*data***

Explanation

An FSF error has been reported by the FCP subchannel. *rdev* is the four-digit FCP device number.

System action

The system continues, and may retry the operation.

Operator response

Examine the reason code and perhaps other related messages issued at the time of the failure. Follow normal procedures for resolving the problems indicated.

Programmer response

If the problem persists contact your IBM Support Center personnel to diagnose and correct the problem.

HCP4500W I/O error: Enabling the IPL device failed

Explanation

The stand-alone dump IPL tool could not enable the IPL device.

System action

The system enters a disabled wait state (wait state code = 4500).

User response

Check the hardware configuration of your IPL device

HCP4501W I/O error: Disabling the IPL device failed

Explanation

The stand-alone dump IPL tool could not disable the IPL device.

System action

The system enters a disabled wait state (wait state code = 4501).

User response

Check the hardware configuration of your IPL device

HCP4502W I/O error: The start subchannel command failed

Explanation

The stand-alone dump IPL tool could not access the IPL device.

System action

The system enters a disabled wait state (wait state code = 4502).

User response

Check the hardware configuration of your IPL device

HCP4510W Internal error: The IPL type is incorrect

Explanation

This problem is likely to be caused by a programming error in the stand-alone dump IPL program.

System action

The system enters a disabled wait state (wait state code = 4510).

User response

Contact your IBM Support Center personnel.

HCP4520W sadump: No operating system information was found

Explanation

The system to be dumped did not set up storage with the information needed by the stand-alone dump program. Without that information, processing cannot begin. This can occur if the system to be dumped is not supported by the stand-alone program or if you run stand-alone dump a second time. The minimum CP level supported is z/VM Version 6 Release 3.0.

System action

The system enters a disabled wait state (wait state code = 4520).

User response

Ensure the system to be dumped is supported by stand-alone dump. Ensure that this is the first time you are running stand-alone dump. See *z/VM: CP Planning and Administration* for information about installing and using the stand-alone dump utility. If none of these explanations apply, contact your IBM Support Center personnel.

HCP4521W **sadump: The checksum of the operating system information is incorrect**

Explanation

Because of memory corruption, the system to be dumped has no valid operating system information that is required for stand-alone dump.

System action

The system enters a disabled wait state (wait state code = 4521).

User response

This is likely a hardware problem. Contact your IBM Support Center personnel.

HCP4522W **sadump: The major version of the operating system information is too high**

Explanation

The version of z/VM for which you are trying to create a dump is not supported by the stand-alone dump program.

System action

The system enters a disabled wait state (wait state code = 4522).

User response

Update the device containing the stand-alone dump program with a more current version.

HCP4523W **sadump: No crashkernel memory was defined**

Explanation

The system to be dumped did not allocate a storage buffer for the stand-alone dump program to use. This usually happens when running in an LPAR or a virtual machine that doesn't have at least 511 MB of virtual storage. If you plan on IPLing stand-alone dump from FCP (SCSI), define the first storage extent of your virtual machine to be 768 MB or greater.

System action

The system enters a disabled wait state (wait state code = 4523).

User response

Ensure that the LPAR or user ID has at least 511 MB of storage if IPLing from 3390 DASD, and 768 MB if IPLing from FCP (SCSI). If the problem persists, contact your IBM Support Center personnel.

HCP4524W **sadump: HSA copy failed**

Explanation

Copying from HSA storage failed.

System action

The system enters a disabled wait state (wait state code = 4524).

User response

Contact your IBM Support Center personnel.

HCP5768E ***userid*** **Adjunct does not exist**

Explanation

The adjunct configuration has not been created.

System action

The command is not executed. System operation continues.

User response

Issue the ADJUNCT START command to instantiate the adjunct configuration.

HCP5768I ***userid*** **Adjunct does not exist**

Explanation

The adjunct configuration has not been created.

System action

System operation continues.

User response

If you want to bring up the adjunct configuration, issue the ADJUNCT START command.

HCP5769E **The variations of this message are explained below.**

— Variation 1 **CFLINK already exists**

Explanation

You tried to create a coupling facility (CF) link that already exists.

System action

The link remains unchanged.

User response

No action is required, or, reissue the command with a different CF specified to which you are not already linked.

— Variation 2 *userid* Adjunct already exists

Explanation

The adjunct configuration has already been instantiated by using the ADJUNCT START command.

System action

The command is not executed. System operation continues.

User response

If you intend to give control to the adjunct configuration, issue the ADJUNCT RESUME command instead.

HCP5770E *userid* Adjunct is not exploitable

Explanation

The adjunct configuration is being logged off (due to the ADJUNCT END command) or is not runnable.

System action

The command is not executed. System operation continues.

User response

Wait until z/VM finishes ending the adjunct; then issue the command again. Otherwise, try ending and restarting the adjunct to retry the command.

HCP5770I *userid* Adjunct is not exploitable

Explanation

The adjunct configuration is being logged off (due to the ADJUNCT END command) or is not runnable.

System action

System operation continues.

User response

Wait until z/VM finishes ending the adjunct; then issue the command again. Otherwise, try ending and restarting the adjunct to retry the command.

HCP5776I *userid* Adjunct is suspended

Explanation

The adjunct configuration is suspended and ready to resume again. It was put into this state by the ADJUNCT STOP or ADJUNCT SUSPEND command. The principal configuration is in control.

System action

System operation continues.

User response

If you want to give control to the adjunct configuration, issue ADJUNCT RESUME or ADJUNCT BEGIN.

HCP5777I *userid* Adjunct is currently active

Explanation

The adjunct configuration is running. It was put into this state by the ADJUNCT START, ADJUNCT BEGIN, or ADJUNCT RESUME command. The principal configuration is suspended.

System action

System operation continues.

User response

If you want to give control to the principal configuration, issue ADJUNCT STOP, ADJUNCT SUSPEND, or if you also want to deactivate the adjunct, ADJUNCT END.

HCP5780E Adjunct does not support the *command subcommand* command

Explanation

The issued command is not supported in an adjunct configuration.

System action

The command is not executed. System operation continues.

User response

Issue the appropriate command for an adjunct configuration, or direct the command to the principal configuration using CPU *.

HCP6000E **The range of {device numbers | PCI function IDs} cannot exceed 256.**

Explanation

The range of device numbers or PCI function IDs specified are incorrect. The maximum range allowed is 256 devices.

System action

The command does not run; system operation continues.

User response

Reenter the command; specify a valid range.

HCP6001I **TIME IS *hh*:*mm*:*ss timezone weekday mm/dd/yy***

Explanation

This is the midnight message sent to all users logged on to the system at midnight.

System action

System midnight timer values (clock comparator value and midnight constant), system day-of-the-week data, and the system date have been updated for the new day.

User response

None.

HCP6003E **Command *command* is not supported when CP has been IPLed from DVD**

Explanation

The command you entered is a valid command, but is not supported when CP has been IPLed from DVD.

System action

The command is rejected; system operation continues.

HCP6004E **The variations of this message are explained below.**

— Variation 1 **This command is not supported on your system.**

Explanation

The command you entered is not supported because your z/VM system is running in a virtual machine or the processor on which your system is running does not support the command.

System action

CP rejects the command.

User response

If your system is running in a virtual machine, reissue the command on a z/VM system that is running natively.

— Variation 2 **Command *cmd_name* is no longer supported**

Explanation

The command you entered is a valid command on a previous release but it is no longer supported.

System action

CP rejects the command.

User response

See the *z/VM: Migration Guide* for information about discontinued commands.

HCP6005E **Option *option* is not supported by z/VM.**

Explanation

The option you entered is not supported by the current release of z/VM.

System action

CP rejects the command.

User response

The function may be available using another CP command. To determine which CP command might be used instead, refer to *z/VM: CP Commands and Utilities Reference*.

HCP6007I **The variations of this message are explained below.**

Explanation

- Processing on behalf of your virtual machine is consuming excessive system free storage.
- Processing on behalf of user *userid* is consuming excessive system free storage.

CP is using much more host storage in support of this user than most other users on the system. If the virtual machine continues to perform the task or function that is consuming storage, CP might stop running the machine or it might log the user off in order to prevent a system failure.

System action

System operation continues.

Operator response

If the virtual machine indicated in the message is a disconnected service machine, some action might be required to avoid a system failure.

User response

This condition might be caused by any of the following:

- Repeatedly issuing CP commands that consume free storage.
- Performing tasks in a disconnected machine that cause large amounts of console output to be routed to a secondary user.
- Accounting, EREP records, or both are not being retrieved by the accounting/EREP virtual machine. Issue the QUERY RECORDING command (if you are authorized to do so) to check the status of the accounting/EREP virtual machines.

HCP6008E The variations of this message are explained below.

Explanation

- Virtual machine execution has been stopped due to excessive system free storage use.
- Virtual machine execution has been stopped for user *userid* due to excessive system free storage use.

CP is using excessive system free storage in support of the indicated user.

System action

The indicated virtual machine is placed in a stopped state.

Operator response

If further action against this user ID is to be avoided, the SET STGEXEMPT command may be issued for the indicated virtual machine at the risk of an FRF002 abend.

User response

Issue the BEGIN command to recover. Discontinue the action or task that is excessively consuming system free storage.

HCP6009E The variations of this message are explained below.

Explanation

- You are being logged off the system due to excessive system free storage use.
- User *userid* is being logged off by the system due to excessive system free storage use.

CP is using excessive system free storage in support of the indicated user. To avoid system failure, the indicated user has been logged off.

System action

The system displays this message immediately before the indicated user is logged off.

User response

Log back on, but avoid the action or task that is excessively consuming system free storage.

HCP6010I The CPCHECKING setting has been changed to OFF to avoid a possible abend loop. It may be set ON again if desired.

Explanation

The CPCHECKING was turned off to avoid an abend loop if assertion checking caused the last abend.

System action

System operation continues.

User response

Determine the cause of the last abend and if desired, set CPCHECKING on again.

HCP6011E You are not authorized to COUPLE to {*userid vdev* | *ownerid lanname* | *ownerid switchname* |

***ownerid switchname* port *portnum* | *ownerid lanname* with NIC *vdev*}**

Explanation

userid vdev
The owner and virtual address of the target virtual CTCA or LAN.

ownerid lanname
The owner ID and guest LAN to which this adapter is attempting to couple.

ownerid switchname
The system and virtual switch to which this adapter is attempting to couple.

ownerid switchname* port *portnum
The system, virtual switch and port number to which this adapter is attempting to couple.

ownerid lanname* with NIC *vdev
The owner and name of the network to which this adapter (NIC *vdev*) is attempting to couple.

A COUPLE command was rejected because the invoker is not authorized to connect to the target CTCA, LAN, virtual switch, or virtual switch port.

When COUPLE is issued for a virtual CTCA device:

The specified virtual CTCA (*userid vdev*) is restricted to a predefined partner with a different user ID than that of the invoker. The owner can establish this restriction by specifying the expected partner's user ID on the DEFINE command or the SPECIAL directory statement.

When COUPLE is issued for a virtual network adapter (NIC):

The specified LAN (*ownerid lanname*) or virtual switch (*ownerid switchname*) is restricted, and the invoker is not found in the access list or not allowed to use the port number (for virtual network). Network access is controlled by an ESM (External Security Manager), by NICDEF statements in the user directory, or by CP SET LAN or VSWITCH commands issued by the LAN owner or an authorized user. For LANs, the owner or an administrator may use CP SET LAN with GRANT or REVOKE to control access to the network. For virtual switches, an administrator may use CP SET VSWITCH with GRANT, REVOKE, or PORTNUMBER options to control and configure access.

If the user directory NICDEF statement includes a network-specific option (for example, VLAN), any attempt to couple to a different network will fail.

System action

The COUPLE operation is not performed.

User response

Perform one of the following:

- Enter the COUPLE command from an authorized user ID.
- Ask the owner to enter the COUPLE command (assuming you authorized your intended partner to couple when you created your virtual CTCA).
- Ask the owner to detach and redefine the virtual CTCA specifying this invoker's user ID (or no user ID at all). Then repeat the COUPLE command.
- Ask the owner to add your user ID to the access list for the target LAN using the ESM or SET LAN command. Then repeat the COUPLE command.
- Ask the owner to add your user ID to the access list for the virtual switch using the ESM or SET VSWITCH command. If the virtual switch is protected by an External Security Manager (ESM) you will need to contact the ESM administrator to authorize you. Then repeat the COUPLE command.
- For virtual switches, issue the QUERY VSWITCH command with the PORTNUMBER to determine which port numbers are available. If needed issue the SET VSWITCH command with the PORTNUMBER parameter to define a new port number. Then repeat the COUPLE command with the correct port number.
- If your connection to *ownerid lanname* is configured in USER DIRECT by a NICDEF statement, couple to the specified network or contact the directory administrator to change the NICDEF LAN (and any network-specific options).

HCP6012I {CP system initialization in progress|Virtual Machine input not accepted}

Explanation

When using the system console, either your input was not accepted by VM or cannot be accepted by CP until system initialization is complete.

System action

Either VM clears the condition or CP completes the system initialization. Then the system waits for you to enter the command again.

User response

Retry the command after either VM clears the condition or the CP system is initialized.

HCP6013A A {CP|VM} read is pending

Explanation

A console read has been issued by CP or VM while using the system console.

System action

None. The system waits for your input.

User response

Enter a command, or press enter to allow the system to continue processing.

HCP6014I ***command*** **cancelled at user request.**

Explanation

The user has cancelled the command indicated in the message with either another command or with the PA1/BRKKEY key.

System action

The command is not executed.

User response

Enter the command again if desired.

HCP6015E ***command*** **cancelled because of console read error.**

Explanation

The command has been cancelled because an error occurred during a console read.

System action

The command is not executed.

User response

Enter the command again.

HCP6016E **System shutdown is already in progress**

Explanation

A SHUTDOWN command was issued but a previous SHUTDOWN is pending.

System action

Execution continues.

Operator response

Either wait for the previous command to complete or issue a SHUTDOWN command with the IMMEDIATE option to cause the system to shut down without delay.

HCP6017E **System shutdown is not in progress**

Explanation

A SHUTDOWN CANCEL command was issued but a SHUTDOWN is not in progress.

System action

Execution continues.

Operator response

None.

HCP6018I **The processor controller has sent a shutdown signal with a timeout interval of** ***duration*** **seconds**

Explanation

The processor controller has sent a signal to the z/VM system to shut down. Possible causes are a hardware image deactivation or a LOAD being issued on the Hardware Management Console. *duration* indicates the number of seconds z/VM has to complete its shutdown process.

System action

System termination commences.

Operator response

None.

HCP6019E **Guests may not have time to shut down because VM SHUTDOWN requires** ***duration*** **seconds**

Explanation

A SHUTDOWN command was issued but the indicated amount of time is reserved for the VM SHUTDOWN process and not enough time remains to allow guests to terminate.

System action

The SHUTDOWN command is aborted.

Operator response

Increase the amount of time allowed for the shutdown process using the WITHIN or BY options of the SHUTDOWN command, decrease the amount of time reserved for VM SHUTDOWN using the SET SHUTDOWNTIME command, or reduce the amount of time allowed for guests to terminate using the SET SIGNAL SHUTDOWNTIME command.

HCP6019I **Guests may not have time to shut down because VM SHUTDOWN requires *duration* seconds**

Explanation

A deactivation function has caused the processor controller to signal the VM system to shut down. The indicated time is reserved for the VM shutdown process, leaving less than the default shutdown signal interval for guests, which may not be enough time to allow guests to terminate.

System action

Guests are signalled with the remaining interval, after which system termination commences.

Operator response

Increase the amount of time for deactivation specified in the deactivation request, decrease the amount of time reserved for VM SHUTDOWN using the SET SHUTDOWNTIME command, or reduce the amount of time reserved for guests to terminate using the SET SIGNAL SHUTDOWNTIME command.

HCP6020E **Guests do not have time to shut down because VM SHUTDOWN requires *duration* seconds**

Explanation

A SHUTDOWN command was issued but the indicated amount of time is reserved for the VM shutdown process, providing no time to allow guests to terminate.

System action

The SHUTDOWN command is aborted.

Operator response

Increase the amount of time allowed for the shutdown process using the WITHIN or BY options of the SHUTDOWN command, decrease the amount of time reserved for VM SHUTDOWN using the SET SHUTDOWNTIME command, or reduce the amount of time allowed for guests to terminate using the SET SIGNAL SHUTDOWNTIME command.

HCP6020I **Guests do not have time to shut down because VM SHUTDOWN requires *duration* seconds**

Explanation

A deactivation function has caused the processor controller to signal the VM system to shut down. The indicated amount of time is reserved for the CP shutdown process, which is more than the interval allowed by the deactivation request and does not allow time for guests to terminate.

System action

System termination commences immediately without signalling guests.

Operator response

Increase the amount of time specified in the deactivation request, decrease the amount of time reserved for CP SHUTDOWN using the SET SHUTDOWNTIME command, or reduce the amount of time allowed for guests to terminate using the SET SIGNAL SHUTDOWNTIME command.

HCP6021E **Required SYSTEM operand missing on SHUTDOWN command; command rejected**

Explanation

You did not specify the SYSTEM operand. This operand is required because the VALIDATE_SHUTDOWN function is enabled on the FEATURES statement in the system configuration file.

System action

Command processing terminates. System operation continues.

Operator response

Enter the command again and specify the SYSTEM operand with the system ID of the system on which you are running.

HCP6022E **Incorrect value specified for SYSTEM - *sysname***

Explanation

The *sysname* that you specified on the SYSTEM operand does not match the name of the system

on which you are running. You cannot issue the SHUTDOWN command for a different system than the one on which you are running.

System action

Command processing terminates. System operation continues.

Operator response

Enter the command again and specify the SYSTEM operand with the system name of the system on which you are running. The QUERY USERID can be used to determine the system name.

HCP6024E	**The variations of this message are explained below.**
— Variation 1	**Incompatible device - *userid vdev* is a *subclass* device.**

Explanation

The CP COUPLE command was used to couple a channel-to-channel adapter (CTCA) to another CTCA.

userid
The owner of the target virtual channel-to-channel adapter

vdev
The virtual address of the target virtual channel-to-channel adapter

subclass
The specific subclass of the target virtual channel-to-channel adapter

The specified target virtual channel-to-channel adapter (*userid vdev*) has a subclass that is incompatible with the subclass of your own virtual channel-to-channel adapter. The error message includes the subclass of the target channel-to-channel adapter. The QUERY VIRTUAL channel-to-channel adapter command will tell you the subclass of your own channel-to-channel adapter.

Virtual ESCON® devices (defined with subclass SCTC, BCTC, or CNC) cannot be coupled to virtual 3088 devices (defined with subclass CTCA or 3088). Also, a virtual ESCON connection requires one controller (SCTC or BCTC) coupled with one non-control device (the CNC).

System action:
The COUPLE operation is not performed.

User response

Perform one of the following:

- Issue QUERY CTCA commands to find appropriate channel-to-channel devices to connect.
- Issue QUERY NIC and QUERY LAN commands to find appropriate network adapters and LAN segments to connect.
- The transport type of the NIC is set when either it has been coupled to a guest LAN or VSWITCH or prior to being coupled, a guest operating system (OS) has attempted to activate the NIC. To reset the transport type of the NIC, it must be uncoupled from the guest LAN or VSWITCH and all active OS connections must be terminated.

  It is recommended that a NIC be COUPLED to the desired VMLAN segment prior to being initialized by the host device driver.

— Variation 2	**Incompatible device - *userid vaddr* is a *vdevtype* device.**

Explanation

The CP COUPLE command was used to couple a virtual channel-to-channel adapter (CTCA) to another virtual CTCA.

userid
The owner of the target virtual channel-to-channel adapter

vaddr
The virtual address of the target virtual channel-to-channel adapter

vdevtype
Virtual device type (FCTC)

System action:
The COUPLE operation is not performed.

User response

Perform one of the following:

- Issue QUERY CTCA commands to find appropriate channel-to-channel devices to connect.
- Issue QUERY NIC and QUERY LAN commands to find appropriate network adapters and LAN segments to connect.
- The transport type of the NIC is set when either it has been coupled to a guest LAN or VSWITCH or prior to being coupled, a guest operating system (OS) has attempted to activate the NIC. To reset the transport type of the NIC, it must be uncoupled from the guest LAN or VSWITCH and all active OS connections must be terminated.

  It is recommended that a NIC be COUPLED to the desired VMLAN segment prior to being initialized by the host device driver.

— Variation 3 **Incompatible LAN - *ownerid lanname* is a *lantype* LAN.**

Explanation

The CP COUPLE command was used to couple a simulated network interface card (NIC) to a guest LAN.

ownerid
The owner of the target VMLAN segment

lanname
The name of the target VMLAN segment

lantype
The LANTYPE of the target VMLAN segment

The specified target LAN (*ownerid lanname*) has a LANTYPE that is incompatible with the adapter type of your own simulated NIC. The error message includes the LANTYPE of the target LAN.

Simulated NIC adapters can be coupled only to compatible LAN types. For example, a HiperSockets NIC cannot be connected to a QDIO LAN.

System action:
The COUPLE operation is not performed.

User response

Perform one of the following:

- Issue QUERY CTCA commands to find appropriate channel-to-channel devices to connect.
- Issue QUERY NIC and QUERY LAN commands to find appropriate network adapters and LAN segments to connect.
- The transport type of the NIC is set when either it has been coupled to a guest LAN or VSWITCH or prior to being coupled, a guest operating system (OS) has attempted to activate the NIC. To reset the transport type of the NIC, it must be uncoupled from the guest LAN or VSWITCH and all active OS connections must be terminated.

  It is recommended that a NIC be COUPLED to the desired VMLAN segment prior to being initialized by the host device driver.

— Variation 4 **Incompatible Transport - *ownerid lanname* is a *transport* transport.**

Explanation

The CP COUPLE command was used to couple a simulated network interface card (NIC) to a guest LAN that are of different transport types.

ownerid
The owner of the target VMLAN segment

lanname
The name of the target VMLAN segment

transport
The transport type of the target VMLAN segment

The specified target LAN (owner's *lanname*) has a transport type that is incompatible with the adapter transport type of your own simulated NIC. The error message includes the transport type of the target LAN.

Simulated NIC adapters can only be coupled to matching transport types. For example, a QDIO Ethernet NIC cannot be connected to an IP transport type QDIO LAN.

System action:
The COUPLE operation is not performed.

User response

Perform one of the following:

- Issue QUERY CTCA commands to find appropriate channel-to-channel devices to connect.
- Issue QUERY NIC and QUERY LAN commands to find appropriate network adapters and LAN segments to connect.
- The transport type of the NIC is set when either it has been coupled to a guest LAN or VSWITCH or prior to being coupled, a guest operating system (OS) has attempted to activate the NIC. To reset the transport type of the NIC, it must be uncoupled from the guest LAN or VSWITCH and all active OS connections must be terminated.

  It is recommended that a NIC be COUPLED to the desired VMLAN segment prior to being initialized by the host device driver.

HCP6025E **Operand {STATUS|STORE STATUS|RESTART} is invalid because CPU *nn* is in check-stop state.**

Explanation

While the virtual machine was in check-stop state, the SYSTEM command was entered with either the RESTART or STORE STATUS operand, or the STORE STATUS command was entered. (This message is probably preceded by message HCP1459E.)

System action

The virtual machine remains in check-stop state.

User response

Enter the SYSTEM RESET or SYSTEM CLEAR command to leave check-stop state.

HCP6026E **The *command* command for CPU *nn* is invalid because the CPU is in check-stop state.**

Explanation

The command just entered is not allowed while the subject virtual machine is in check-stop state. (This message is probably preceded by message 1459E.)

System action

The virtual machine remains in check-stop state.

User response

Enter the SYSTEM RESET or SYSTEM CLEAR command to leave check-stop state.

HCP6028E **Scheduled system shutdown has already begun.**

Explanation

A SHUTDOWN CANCEL command was issued, but a previously scheduled system shutdown has already begun and is beyond the point where it can be cancelled.

System action

System operation continues.

User response

Wait for the current system shutdown to complete.

HCP6050E **Your userid is not authorized to [automatically] logon userid *userid***

Explanation

For the command:

AUTOLOG-
The user ID entering the command is not on the list of user IDs in the AUTOLOG directory statement of the target user ID shown in the error message.

LOGON-
The user ID following the BY operand in the command is not in the list of user IDs on the LOGONBY directory statement of the target user ID shown in the error message.

If an external security manager (ESM) is installed on your system, you may receive this message if you are not authorized to enter the command.

System action

The command does not run; system operation continues.

User response

Have the desired user ID added to the AUTOLOG or LOGONBY statement for the referenced user ID in the directory. After the online directory is updated, enter the command again. You may also need to contact your system administrator to obtain the necessary authorization.

HCP6051E **Restart the logon procedure because reconnect processing cannot be done.**

Explanation

During LOGON processing, CP determined the user was performing a reconnect, but the virtual machine was logged off before the logon procedure.

System action

The user ID is not logged on. System operation continues.

User response

Restart logon using the CP LOGON command.

HCP6052E **XAUTOLOG command rejected; command format not valid.**

Explanation

A command requiring a password on the command line was entered, but such a command format is not valid for your user ID at this time. It might be for either of the following reasons:

- Your user ID does not have sufficient privileges to enter that format of the command.
- You entered a password on the same line as a command, but your installation prohibits passwords from being entered on the command line.

System action

The command does not run. System operation continues.

User response

To enter the password separate from the XAUTOLOG command, use the PROMPT parameter. Enter the

password in response to the ENTER PASSWORD: prompt.

Note: To enter the password on the SAME line as an XAUTOLOG command using the DIAGNOSE code X'08' interface, set the flag in the Ry register's high-order byte to accept passwords.

HCP6053E [XAUTOLOG failed for *userid*:] You cannot issue the {LOGON | AUTOLOG | XAUTOLOG} command because the maximum number of users allowed is already logged on.

Explanation

Your installation has set a limit on the number of users that may be logged onto the system at one time. At the current time, the system has reached that limit. You are not allowed to enter an AUTOLOG, XAUTOLOG, or LOGON command until the number of users logged on to your system is less than the limit. If the command is an asynchronous XAUTOLOG, then the message indicates which user ID did not get logged on. The *userid* variable in this message is the XAUTOLOG command target user ID, not the one entering of the XAUTOLOG command.

System action

The AUTOLOG, XAUTOLOG, or LOGON command is not accepted; system operation continues.

User response

Enter the AUTOLOG, XAUTOLOG, or LOGON command at a later time.

HCP6054E XAUTOLOG failed for *userid*: Explanatory message to follow.

Explanation

The logon of user ID as a result of an XAUTOLOG command is not successful. A subsequent message gives information on the reason why the user ID was not logged on.

System action

The user ID is not logged on; system operation continues.

User response

No response is necessary.

HCP6056I XAUTOLOG information for *userid*: The IPL command is verified by the IPL command processor.

Explanation

The automatic IPL scheduled as part of the completion of an asynchronous XAUTOLOG command is verified. You will get this message if you entered the XAUTOLOG command with the IPL option, or if the z/VM directory for the user ID contained an IPL statement and the IPL was verified by the IPL command processor.

System action

System operation continues.

User response

No response is necessary.

HCP6061I APPC wait cancelled; virtual machine has been reset.

Explanation

The CP command IPL, LOGOFF, SYSTEM CLEAR, or SYSTEM RESET was entered while the virtual machine was in a wait condition. The wait condition was cleared in order to run the CP command. Successful running on of the CP command would reset the virtual machine. To prevent subsequent program execution should the CP command fail, the virtual machine is reset when the wait condition is cleared.

System action

Any previously entered CP commands including the CP command that triggered the reset are run in the order in which they were entered.

User response

No special action is required if the CP command runs successfully. If the CP command fails, follow the action recommended by its error message.

HCP6065E STORE HOST requires R (real) or L (logical) address type.

Explanation

The CP STORE (Host Storage) command requires that you specify the R operand or the L operand to indicate whether the target address is a host real storage address or a host logical storage address.

System action

CP ignores the command; system operation continues.

User response

Reissue the CP STORE (Host Storage) command and specify either R or L.

HCP6075I The end of volume *seqno* has been reached on TRSAVE tape *rdev* or TRSAVE processing has been suspended.

Explanation

CP reached the end-of-tape or TRSAVE has been turned off or canceled.

System action

If CP reached the end-of-tape, the tape is rewound or rewound and unloaded, depending on the operands from the TRSAVE ON command line. If TRSAVE has been turned off or canceled, the tape is rewound and unloaded.

Operator response

If CP reached the end-of-tape marker and you wish to continue, then mount and ready another tape.

User response

If CP reached the end-of-tape marker and you wish to continue, then mount and ready another tape.

HCP6076E TRSAVE is not active.

Explanation

TRSAVE was not active when you specified the TRSAVE OFF or TRSAVE CANCEL command.

System action

The command does not run; system operation continues.

User response

None.

HCP6077E TRSAVE is [already] active.

Explanation

You will receive this message in one of two cases:

- You entered the CP TRSAVE ON command when the function was currently running or before CP finished processing the CP TRSAVE OFF or CP TRSAVE CANCEL command.
- You entered the SET TRACEFRAMES command and the TRSAVE command is active.

System action

CP does not process the command; system operation continues.

User response

If you want to start a new session, either turn TRSAVE off or wait until the function is complete. If you do not mind losing trace entries saved on tape, you can enter the CP TRSAVE CANCEL command to terminate the function.

HCP6078I The trace table entries were not saved by TRSAVE.

Explanation

Generation of trace-table data is occurring at a rate faster than the TRSAVE function can collect it. One reason that entries could be lost is that trace services can not put entries to a tape that has “intervention required.” Procedures must be in place in your installation so that the tape device does not require intervention.

System action

The TRSAVE function continues. This message reappears every two minutes until the trace entries can again be saved. System operation continues.

Operator response

Ensure that procedures are in place so that the tape device does not require intervention.

User response

1. If you are saving system trace data on tape, ensure that procedures are in place so that the tape device does not require intervention.
2. Use the SET CPTRACE command to filter the system trace table.
3. Consider adding the DEFERIO operand to the TRSAVE command that is controlling the trace. Refer to the description of the TRSAVE command in *z/VM: CP Commands and Utilities Reference* for a discussion of the DEFERIO operand. For more

information, refer to "Factors That Affect Saving Trace Data" in *z/VM: Diagnosis Guide*.

HCP6079E Tape drive *rdev* does not support mode *mode*.

Explanation

A TRSAVE command is entered that requires the use of a real tape drive, but the recording format selected is not supported by the specified tape drive. The variables in this message are as follows:

rdev
Is the real device number of the tape drive.

mode
Is one of the following tape modes: 6250, 62, 1600, 16, 800, 80, 38K, or XF.

System action

The command does not run; system operation continues.

User response

Reenter the command specifying a recording format that is supported by the tape drive selected.

HCP6080E Unrecoverable I/O error has occurred on tape *rdev*.

Explanation

An unrecoverable I/O error occurred on tape drive *rdev* while the TRSAVE function was processing.

System action

The TRSAVE function ends and an attempt is made to rewind and unload the tape.

Operator response

Contact your system support personnel.

Programmer response

This error may occur if the tape features were generated incorrectly in the RDEVICE macro. Compare the tape drive features to those given in the RDEVICE macro. Also, it may occur because of a hardware error. In that case, contact your support personnel.

HCP6081I Ten trace files have been purged for {CP|traceid *traceid[userid]*}. Further warnings are suppressed.

Explanation

Message HCP6084I has been issued ten times, to indicate that a system data file has been purged. No further messages will be issued when it is necessary to purge trace files associated with this trace-recording activity.

System action

System operation continues.

Operator response

If you entered the TRSAVE ON command for CP, you may wish to turn the TRSAVE function off, then reenter the TRSAVE ON command with an increased KEEP limit. If the message appears for a trace ID, you may wish to use the TRSOURCE command to disable the trace, then enter the TRSAVE command with an increased KEEP limit before reenabling the trace. (The SIZE option of the TRSAVE ON command may also have an effect in this situation. Refer to the description of the TRSAVE command in *z/VM: CP Commands and Utilities Reference* for a discussion of both the KEEP and the SIZE options.)

Otherwise, follow your installation's procedures for this situation.

User response

If you entered the TRSAVE ON command for CP, you may wish to turn the TRSAVE function off, then reenter the TRSAVE ON command with an increased KEEP limit. If the message appears for a trace ID, you may wish to use the TRSOURCE command to disable the trace, then enter the TRSAVE command with an increased KEEP limit before reenabling the trace. (The SIZE option of the TRSAVE ON command may also have an effect in this situation. Refer to the description of the TRSAVE command for a discussion of both the KEEP and the SIZE options.)

If you are the owner of a file that was purged, you may wish to contact the person who entered the TRSAVE or TRSOURCE command so that the KEEP (and/or SIZE) limit may be increased.

HCP6083I VMGROUP *sysname* has no members.

Explanation

The VMGROUP system name has no members; that is, no virtual machine has IPLed this named saved system.

System action

The trace ID with this VMGROUP system name will be enabled. When virtual machines IPL this group, tracing will be activated for them.

User response

Check to make sure the correct system name was typed in. If it was not, disable the trace ID with the system name specified. Then enter TRSOURCE ID trace ID FOR VMGROUP system name for the correct group, and enable the trace ID.

HCP6084I **The maximum number of trace files for {CP|traceid *traceid*[*userid*]} has been exceeded. The oldest file is purged.**

Explanation

The maximum number of trace files as specified by the KEEP option of the TRSAVE command has been filled, and a trace record has been generated that requires using an additional trace file. Since the number of trace files created when a trace is active may not exceed the limit specified by the KEEP option, the oldest file has been purged. This allows a new file to be opened and trace recording to continue.

This message is issued a maximum number of ten times for each trace or each user ID in a group trace. The tenth occurrence of this message is followed by message HCP6081I.

System action

System operation continues. The oldest trace file associated with this trace recording activity is purged.

Operator response

If you entered the TRSAVE ON command for CP, you may wish to turn the TRSAVE function off, then reenter the TRSAVE ON command with an increased KEEP limit. If the message appears for a trace ID, you may wish to use the TRSOURCE command to disable the trace, then enter the TRSAVE command with an increased KEEP limit before reenabling the trace. (The SIZE option of the TRSAVE ON command may also have an effect in this situation. Refer to the description of the TRSAVE command in *z/VM: CP Commands and Utilities Reference* for a discussion of both the KEEP and SIZE options.)

Otherwise, follow your installation's procedures for this situation.

User response

If you entered the TRSAVE ON command for CP, you may wish to turn the TRSAVE function off, then reenter the TRSAVE ON command with an increased KEEP limit. If the message appears for a trace ID, you may wish to use the TRSOURCE command to disable the trace, then enter the TRSAVE command with an increased KEEP limit before reenabling the trace. (The SIZE option of the TRSAVE ON command may also have an effect in this situation. Refer to the description of the TRSAVE command in *z/VM: CP Commands and Utilities Reference* for a discussion of both the KEEP and SIZE options.)

If you are the owner of a file that was purged, you may wish to contact the person who entered the TRSAVE or TRSOURCE command so that the KEEP (and/or SIZE) limit may be increased.

HCP6085E **The TRSAVE command cannot be processed because the function is in a transition state.**

Explanation

A previous TRSAVE ON command has not completed initialization, and the TRSAVE function is neither active nor inactive. TRSAVE ON, TRSAVE OFF, and TRSAVE CANCEL are only valid when the function is active or inactive.

The previous TRSAVE ON command may not have completed initialization for the following reasons:

- The tape drive is not ready (TRSAVE FOR CP ON only).
- The function may be initializing normally after waiting for a tape drive to become ready (TRSAVE FOR CP ON only).
- An error occurred, causing a soft abend.

System action

Command not accepted. System operation continues.

User response

Enter the QUERY TRSAVE command to determine the status of the TRSAVE function.

You may enter the TRSAVE OFF or TRSAVE CANCEL commands if the function is active.

You may enter the TRSAVE ON command if the function is inactive.

HCP6086I **Traceid *traceid1* is no longer superseded by VMGROUP trace *traceid2*.**

Explanation

The trace ID had previously been disabled because tracing for the FOR USER trace ID was superseded by the enabling of the FOR VMGROUP trace ID.

System action

The trace ID remains disabled. It is eligible to be enabled.

User response

If you want tracing to resume for the virtual machine specified in the disabled FOR USER trace ID, you must reenable the FOR USER trace ID using the TRSOURCE command.

HCP6087E **DEFERIO FRAMES specified exceeds the amount of frames eligible for DEFERIO traces.**

Explanation

No more than a certain percentage (75%) of the pageable pages in the system dynamic paging area can be used for active or enabled DEFERIO traces. The FRAMES parameter of the TRSAVE command specifies an amount that exceeds the eligible amount of pageable pages in the system dynamic paging area that can be used for DEFERIO traces.

System action

The command is not executed; system operation continues.

User response

Use the QUERY TRSAVE FRAMES command to determine how many frames are eligible for DEFERIO traces. Specify an amount of TRSAVE FRAMES that is within the eligible amount of frames that can be used for DEFERIO traces.

Note: When a DEFERIO trace is enabled, the sum of all frames used by active and enabled DEFERIO traces cannot exceed 75% of the pageable pages in the system dynamic paging area.

HCP6088I **Trace data for traceid *traceid*[*userid*] was not saved by TRSAVE.**

Explanation

Generation of trace data for the trace defined by TRSOURCE *traceid* is occurring at a rate faster than the TRSAVE function can collect it.

System action

The TRSAVE function continues.

User response

Reduce the amount of trace data that you are collecting for this trace.

Consider adding the DEFERIO operand to the TRSAVE command that is controlling the trace. Refer to the description of the TRSAVE command in *z/VM: CP Commands and Utilities Reference* for a discussion of the DEFERIO operand. For more information, refer to "Factors That Affect Saving Trace Data" in *z/VM: Diagnosis Guide*.

HCP6089E **DEFERIO FRAMES specified causes total DEFERIO frames to exceed the amount of frames eligible for all DEFERIO traces.**

Explanation

No more than a certain percentage (75%) of the pageable pages in the system dynamic paging area can be used for active or enabled DEFERIO traces. The FRAMES parameter of the TRSAVE command specifies an amount that, added to already active or enabled DEFERIO traces, exceeds the eligible amount of frames that can be used for all DEFERIO traces.

System action

The command is not executed; system operation continues.

User response

Use the QUERY TRSAVE FRAMES command to determine how many frames are eligible for DEFERIO traces and to determine the sum of frames allocated to already active or enabled DEFERIO traces. Use the TRSAVE command to specify an amount of FRAMES for this trace that does not cause the total amount of frames allocated to active or enabled DEFERIO traces to exceed the total amount of frames eligible to be used for all DEFERIO traces.

HCP6091I **The amount of frames used for DEFERIO trace exceeds the amount of pages that will be saved on DASD.**

Explanation

The amount of FRAMES specified or defaulted on the TRSAVE command exceeds the amount of pages that will be saved on DASD, specified or defaulted via the

SIZE and KEEP operands of the TRSAVE command. When the trace is disabled (or TRSAVE CP OFF for CP trace table recording), then some trace data may be discarded.

System action

The command is accepted; system operation continues.

User response

Use the QUERY TRSAVE command to determine the amount of FRAMES being used for the DEFERIO trace and to determine the SIZE and KEEP values. To change the value of these operands (via TRSAVE) the trace must be disabled.

HCP6092I **A Monitor Call class 10 interface error occurred [for code '*code*'X]; the data is ignored.**

Explanation

The user's program issued a Monitor Call Class 10 instruction with an invalid address. The user program has been coded incorrectly.

System action

The monitor call instruction to trace the event was ignored. Processing continues.

User response

Fix the problem in the user program or report the problem to your system administrator.

HCP6093E **You are not allowed to switch modes for traceid *traceid*.**

Explanation

You have tried to change the specified trace ID from BLOCK mode to EVENT mode, or from EVENT mode to BLOCK mode, after the trace had been enabled and subsequently disabled.

Operator response

If you want to change the mode for this trace, you must first end the trace by entering TRSOURCE DROP, then respecify the trace with the mode you want to use.

User response

To change the mode for this trace, first end the trace by entering TRSOURCE DROP, then respecify the trace with the mode you want to use.

HCP6094I **User *userid* will not be traced by trace *traceid*.**

Explanation

The specified user ID will not be traced, even though the user is still included in the specified trace.

The message issued before this message gives the reason why the user is not traced.

System action

The command runs. System operation continues. The remaining users being traced will continue to be traced.

User response

Your response depends upon the reason why the user is not traced.

If there are too many spool files, purging some spool files should help. If a soft abend occurred, contact your system programmer.

To start the entire trace over again, disable and then enable the entire trace, using the TRSOURCE command.

To start tracing just the specific user again, try the INCLUDE user option of the TRSOURCE command.

If the user has restricted tracing to traces defined in BLOCK mode, verify that the tracing mode is correct for the capabilities of the virtual machine. See Tracing Programs in Your Virtual Machine in *z/VM: Virtual Machine Operation* for more information.

HCP6095I **User *userid* is no longer being traced by trace *traceid*.**

Explanation

The specified user is no longer being traced, even though the user is still included in the specified trace. This could occur for several reasons.

The message entered before this message gives the reason why the user is not traced.

System action

Tracing for the specified user is discontinued. System operation continues. The remaining users being traced continue to be traced.

User response

Your response depends upon the reason why the user is not traced.

If the problem is that there are too many spool files, purging some spool files should help. If the problem is because of a soft abend, contact your system programmer.

To start the entire trace over again, disable and then enable the entire trace, using the TRSOURCE command.

To start tracing just the specific user again, try the INCLUDE user option of the TRSOURCE command.

If the user has restricted tracing to traces defined in BLOCK mode, verify that the tracing mode is correct for the capabilities of the virtual machine. See Tracing Programs in Your Virtual Machine in *z/VM: Virtual Machine Operation* for more information.

HCP6096I Trace *traceid* is being disabled.

Explanation

The specified trace is being disabled. The message issued before this message gives the reason why this occurred.

System action

The trace is disabled. System operation continues.

User response

Your response depends upon the reason why the trace is disabled.

If the problem is that there are too many spool files, purging some spool files should help. If the problem is because of a soft abend, contact your system programmer.

To reenable the trace, use the TRSOURCE command with the ENABLE option.

If the user has restricted tracing to traces defined in BLOCK mode, verify that the tracing mode is correct for the capabilities of the virtual machine. See the trace instructions for tracing in the virtual machine, and follow them.

HCP6097I User *userid* has restricted tracing to traces defined as BLOCK.

Explanation

The specified user ID has issued a request to CP to allow the virtual machine to only be part of a guest trace that is defined in BLOCK mode.

System action

System operation continues. The message issued after this message will give more information about the system action.

User response

None.

HCP6098E Traceid *traceid* cannot be enabled.

Explanation

The specified trace cannot be enabled. The message issued before this message gives the reason why the trace is not enabled.

System action

The command does not run. System operation continues.

User response

If the user has restricted tracing to traces defined in BLOCK mode, verify that the tracing mode is correct for the capabilities of the virtual machine. See Tracing Programs in Your Virtual Machine in *z/VM: Virtual Machine Operation* for more information.

HCP6099E DEFERIO trace is invalid for a TYPE GT BLOCK mode trace.

Explanation

A DEFERIO trace cannot be used for a TYPE GT BLOCK mode trace.

System action

The command is not executed; system operation continues.

User response

If issuing a TRSAVE command, reissue the command without the DEFERIO option. If issuing a TRSOURCE ID command, issue TRSOURCE DROP to delete the ID so that the TRSAVE with the DEFERIO option is removed.

HCP6111I The variations of this message are explained below.

Explanation

- *type rdev* THE ERROR WAS DETECTED ON MACHINE TYPE *xxxx-yy*; {THE DEVICE IS OPERATIONAL (LEVEL=n)} {WITH SPARE PORT(S) AVAILABLE}

- *type rdev* THE ERROR WAS DETECTED ON MACHINE TYPE *xxxx-yy*; {THE DEVICE IS NOT OPERATIONAL (LEVEL=4)} {WITH SPARE PORT(S) AVAILABLE}
- *type rdev* THE ERROR WAS DETECTED ON MACHINE TYPE *xxxx-yy*; {OPERATIONAL LEVEL IS UNKNOWN (LEVEL=5)} {WITH SPARE PORT(S) AVAILABLE}
- FRUs = *cmp1, cmp2, cmp3, cmp4*
- MANUFACTURER AND MACHINE TYPE = *mmm ttttt-lll*
- LIC VER/REL = *vvvv*

This message is displayed when the control unit has detected an equipment failure and servicing may be necessary. The phrase `WITH SPARE PORT(S) AVAILABLE` conditionally appears when a failing port card is being identified. The phrase `FRUs =` conditionally appears when one to four field replaceable units are being identified. (The Maintenance Information Manual describes the levels of operation and the FRUs.) The phrases `MANUFACTURER AND MACHINE TYPE =` and `LIC VER/REL =` appear only for FICON® Director machine types (such as 2032).

The variables in this message are as follows:

type
The type of device

rdev
The failing device

xxxx-yy
The machine type and model number

n
The level of operation, where:

0 = fully operational
1 = fully operational - redundant component failure
2 = operational - minor failure
3 = operational - major failure
4 = not operational - major failure
5 = cannot determine the operational level - major failure

cmp
For a machine type of 9032, the failing components are MXC, CTP, MXS, DVP, DVP2, CLK, FAN, PWR, CON, INT, TKRG, FP, SDVP, SDV2, LBA, FCV, PWR2, MXC2, and UNK.

For a machine type of 9033, the failing components are PLANAR, MXC/MXS, CP, CTP, PORT, PORT2, DVP, DVP2, FAN, PWR, CON, INT, TKRG, FP, and UNKNOWN.

For a machine type of 2032, the possible failing components are dynamically obtained by z/VM and are different for different manufacturers.

mmm ttttt-lll
The manufacturer name, machine type, and model number

vvvv
The LIC version/release code

System action

System operation continues. I/O operations to the control unit might fail. I/O operations to some devices connected through the dynamic switch might fail.

Operator response

Call service personnel.

User response

None.

Programmer response

None.

HCP6149E The address specified is not valid in the current addressing mode.

Explanation

The STORE PSWA command was issued specifying an address that is not valid because it is outside of the bounds established by the current PSW addressing mode.

System action

The system continues to run, but the command entered by the user is not processed.

User response

Enter the STORE PSWA command again, specifying an address that is valid for the current PSW addressing mode.

HCP6150E The variations of this message are explained below.

Explanation

- An option has been specified that is not valid in ESA/390 mode.
- An option has been specified that is not valid in ESA/XC mode.
- The option *option* has been specified but is not valid in z/Architecture mode.

- The option *option* has been specified but is not valid in ESA/XC or z/XC mode.
- An option has been specified that is not valid in z/Architecture mode.
- An option has been specified that is not valid in z/XC mode.
- The option PSW has been specified but is not valid in z/Architecture mode. To enable the use of this option issue the appropriate SET PSWTRANS command or use the PSWG option.

The option cannot be used in the current machine mode.

System action

The system continues to run, but the command issued by the user is not processed.

User response

Set the virtual machine to the correct mode for the option you want to use.

HCP6151E **Storage *operand* is not addressable because of { a protection | an addressing | a segment translation | a page translation | a translation specification | an ASN translation | an AFX translation | an ASX translation | an ALET translation | an ALEN translation | an ALE sequence | an ASTE validity | an ASTE sequence } exception.**

Explanation

A program exception was received during an attempt to translate an address space number (ASN), access register (AR), access list entry token (ALET), or ASN second table entry (ASTE) to a segment table designation. The *operand* variable is optional substitution data that will contain the storage operand(s) that caused the error, as follows:

Addressing exception
(X'0005')

ASN translation exception
(X'0017')

AFX translation exception
(X'0020')

ASX translation exception
(X'0021')

ALET specification exception
(X'0028')

ALEN translation exception
(X'0029')

ALE sequence exception
(X'002A')

ASTE validity exception
(X'002B')

ASTE sequence exception
(X'002C')

System action

The command does not run; system operation continues.

User response

If the problem occurred during translation of an address, verify that the address is valid and try displaying that piece of storage directly. If unable to display the storage, contact a system programmer. If the problem occurred during translation of an address space specification to a segment table designation (STD), verify that your tables are set up correctly.

HCP6155E **Storage is not addressable because of an invalid PSW.**

Explanation

An invalid guest PSW prevented the logical address from being resolved.

System action

The command does not run; system operation continues.

User response

Validate the PSW and reenter the command.

HCP6156E **{ASIT *asit*|Address space identifier *spaceid*|Access register *acc_reg*|ALET *alet*} does not designate an address space to which you have the appropriate access.**

Explanation

The ASIT, SPACE ACCESS REGISTER, or ALET that you specified does not designate an address space, you don't have the type of access you need to perform the current operation on the address space, or your access to the address space expired before you could use it.

System action

The system continues to run, but the command entered by the user is not processed.

User response

Verify that you are using a valid ASIT, SPACE, ACCESS REGISTER, or ALET, then request the appropriate access from the owner of the address space.

HCP6157E Storage is no longer addressable because of an addressing-capability exception.

Explanation

Your access to the address space expired while it was being used. The address space was originally specified in a DISPLAY/DUMP/STORE command using the ALET or AREG operand, or by allowing a logical address space default to AREG.

System action

The system continues to run, but the command entered by the user is stopped while partially complete.

User response

Contact the owner of the address space to reestablish your access. Clean up the partially completed command if necessary.

HCP6158E Your access to this address space has been revoked.

Explanation

Your access to the address space expired while it was being used. The address space was originally specified in a DISPLAY/DUMP/STORE command using the ASIT or SPACE operand.

System action

The system continues to run, but the command entered by the user is stopped while partially complete.

User response

Contact the owner of the address space to reestablish your access. Clean up the partially completed command if necessary.

HCP6159E Address space may not be specified following the {PSWA/FROM/RANGE options|BRANCH operand} of the TRACE command while in ESA/XC or z/XC mode.

Explanation

An address space operand is not valid following the options: PSWA, FROM, or RANGE, or following the BRANCH operand of the TRACE command when the virtual machine is in ESA/XC or z/XC mode.

System action

The command does not run. System operation continues.

User response

Enter the command again, correctly specifying the operand.

HCP6160E The variations of this message are explained below.

Explanation

- *token1* was not expected. 'DL' or 'IF' was expected.
- *token1* was not expected. A datalink string was expected.
- *token1* was not expected. A Boolean operator was expected.
- *token1* was not expected. A datalink string or constant was expected.
- *token1* was not expected. 'THEN' was expected.
- *token1* was not expected. 'DL', 'IF', 'ELSE', or 'ENDIF' was expected.
- *token1* was not expected. 'DL', 'IF', or 'ENDIF' was expected.

The TRSOURCE TYPE DATA command processor unexpectedly encountered *token1*.

System action

The trace ID is not updated with any of the datalink information from this command.

User response

Enter the TRSOURCE command again with the required operands. The QUERY TRSOURCE command can be used to determine the current state of the trace ID.

HCP6161E The variations of this message are explained below.

Explanation

- Constant definition incorrect: Length too long.
- Constant definition incorrect: Missing quote.
- Constant definition incorrect: Null string specified.
- Constant definition incorrect: Non-hexadecimal data specified.
- Constant definition incorrect: Data after second quote.
- Constant definition incorrect: Odd number of hexadecimal digits specified.

The TRSOURCE TYPE DATA command processor found an error while processing a constant definition.

System action

The trace ID is not updated with any of the datalink information from this command.

User response

Enter the TRSOURCE command again with the required constant specified correctly.

HCP6162E Maximum nesting depth of IF statement exceeded.

Explanation

The TRSOURCE TYPE DATA command processor encountered an IF operand while processing the command. This new IF would cause the nesting depth of IF statements within this trace ID to exceed the maximum depth allowed by CP, which is 16.

System action

The trace ID is not updated with any of the datalink information from this command.

User response

Restructure the conditional datalink so it can achieve the desired filtering by satisfying less conditions. It will be necessary to drop this trace ID and start again. Enter the TRSOURCE command again with the required operands. The QUERY TRSOURCE command can be used to determine the current state of the trace ID.

HCP6163E Internal error during command processing: *module* + *offset*

Explanation

The TRSOURCE TYPE DATA command processor encountered an error while processing this command. This message can only occur when abnormal conditions are detected.

System action

The trace is not updated with any of the datalink information from this command.

User response

Enter the command again. The QUERY TRSOURCE can be used to display the trace information that has already been defined. It may be necessary to drop this trace and redefine it. If this message occurs when redefining the trace, call the IBM Support Center. They will need to know the text of the message and the TRSOURCE commands that produce this error message.

HCP6164E PER-3 hardware facility is not installed.

Explanation

The PER-3 hardware facility is not installed on the processor where the system is running.

System action

System operation continues, but the command the user entered is not processed.

User response

Do not attempt to use the BEAR operand if your processor does not include the PER-3 facility.

HCP6186I {Range *xxxxxxxx-xxxxxxxx* of | DCSS or DSS associated with} ASIT *asit*, spaceid *spaceid* was previously dumped; it will not be dumped again.

Explanation

The storage was dumped by a previous VMDUMP command in continuous mode.

System action

Command processing continues. The specified storage is not dumped a second time.

User response

If you specified the range incorrectly, enter another VMDUMP command with the intended range.

HCP6187E **A soft abend occurred during VMDUMP processing.**

Explanation

A soft abend occurred some time during VMDUMP processing. The VMDUMP file has been purged. Refer to the soft abend dump for information about why the failure occurred.

System action

After the soft abend, the system attempts to recover all resources allocated for VMDUMP processing and attempts to destroy the VMDUMP file. A soft abend dump is created to aid in problem determination.

User response

Examine the soft abend dump to determine the cause of the error. Contact your system support personnel to correct the problem.

HCP6189I **VMDUMP command is unable to add more data to the current virtual machine dump.**

Explanation

This VMDUMP command or DIAGNOSE code X'94' cannot be added to the current VMDUMP file because:

- Either you have requested dumps from more than 200 different address spaces
- Or you have requested dumps from a particular address space more than 900 times for ESA/390 mode virtual machines, and more than 500 times for z/Architecture mode virtual machines.

System action

Command processing continues.

User response

Close the current VMDUMP file and open another one. If you received this message for the second reason, specify more than one address range on each VMDUMP or DIAGNOSE code X'94' request.

HCP6190E **VMDUMP processing is unable to complete due to a paging error.**

Explanation

A paging error has occurred on a virtual page containing virtual machine dump information.

System action

The system closes the virtual machine dump file. Command processing ends; system operation continues.

User response

None.

HCP6191I **Storage range *xxxxxxxx-xxxxxxxx* is unaddressable and will not be dumped.**

Explanation

The range specified is not within configured guest storage and does not fall within a discontiguous saved segment.

System action

Command processing continues. The unaddressable range is not dumped.

User response

If you specified the range incorrectly, enter another VMDUMP command with the intended range.

HCP6201E **Volume *volser* cannot be associated with a dump-only CP-owned list entry.**

Explanation

An NVMe device that is being attached to the system is associated with a CP-owned list entry that has the DUMP attribute.

System action

The device is not attached to the system.

User response

Do not attempt to use NVMe EDEVICEs to provide dump space. To attach the NVMe EDEVICE to the system, use the DEFINE CPOWNED command to eliminate the CP-owned list entry DUMP attribute.

HCP6202E **The {spool|temporary disk|directory} cylinders were ignored on system volume *volid*.**

Explanation

A volume attached to the system contains space allocated as a type not supported for that device type. The variables in this message are as follows:

type
The allocation type specified in the allocation map. It will be DIRECTORY, SPOOL, or TEMPORARY DISK. PERM and PAGE are the only types recognized on these devices.

volid
The CP volume label of the DASD on which CP detected the unsupported space.

The system will only accept 3350s connected to the 3880 caching control unit Models 11 or 21 for PAGE or PERM space.

System action

The system ignores other types of space allocated on these device types. The copy of the allocation map maintained by CP will show space allocated as "type" (other than PAGE and PERM) translated to PERM. The allocation map on the DASD itself remains unchanged.

Operator response

No immediate action is required. However, system support personnel should determine whether to change the cylinder allocation of the DASD.

HCP6207E I/O ERROR; DISK *vdev* HAS UNSOLICITED STATUS PENDING

Explanation

The SALIPL command processor encountered an I/O error indicating that the specified device has unsolicited status pending.

System action

The command is not executed. System operation continues.

User response

Enter the SALIPL command again. If the error persists, contact your system support personnel.

HCP6209I INVOKING ICKDSF.

Explanation

CPFMTXA uses ICKDSF to accomplish the function designated from the command input. The messages following this one will be issued by ICKDSF.

System action

None.

User response

None.

HCP6210I DEVICE SUPPORT FACILITIES (5684-042) IS NECESSARY FOR CP VOLUME MAINTENANCE. FILE ICKDSF MODULE CANNOT BE FOUND ON ANY ACCESSED DISK; CPFMTXA PROCESSING ENDED.

Explanation

The CPFMTXA utility uses ICKDSF to accomplish the function requested in the command line input. The ICKDSF MODULE is placed on the CMS system disk at installation.

System action

None.

Operator response

Check if ICKDSF MODULE is on your CMS system disk. If it is not, notify your system support personnel.

User response

The CMS system disk may have been released. Reaccess it.

HCP6211E HCPFER IS NECESSARY FOR THE ERASE FUNCTION. FILE HCPFER MODULE CANNOT BE FOUND.

Explanation

The CPFMTXA utility uses HCPFER to execute the ERASE function. During installation, the HCPFER MODULE file is placed on the same disk as the CPFMTXA utility, but the HCPFER MODULE was not found on that disk. It must have been moved or deleted.

System action

The ERASE function terminates.

Operator response

Contact your IBM Support Center personnel and have them move the HCPFER MODULE file back to the disk where the CPFMTXA utility resides.

User response

Locate the CMS minidisk containing the HCPFER MODULE and re-access it.

HCP6212E UNKNOWN RETURN CODE FROM HCPFER MODULE.

Explanation

The CPFMTXA utility uses HCPFER to execute the ERASE function. An unrecognized return code was sent from HCPFER and returned to CPFMTXA.

System action

The ERASE function did not complete.

User response

Collect any output that was returned and contact your IBM Support Center personnel.

HCP6213E THE DEVICE SPECIFIED DOES NOT SUPPORT THE ERASE FUNCTION.

Explanation

The DASD specified does not support the Locate Record Erase hardware function.

System action

The CPFMTXA ERASE function did not complete.

User response

Use a supported method for the erase action, such as CPFMTXA FORMAT.

HCP6224I {Sample|Event} recording is pending because there are no users connected to *MONITOR for this type of data.

Explanation

No user is connected to *MONITOR for the specified data type because one of following conditions has occurred:

For exclusive or shared mode:

- MONITOR EVENT START, MONITOR SAMPLE START, or MONITOR START was issued, but no user was connected to *MONITOR for the type of data being started.

For shared mode:

- The last (only) user severed its path to *MONITOR.
- The last (only) user's connection was severed by *MONITOR because an application purged the monitor saved segment or the user logged off.

System action

The specified monitor recording will begin when a user connects to *MONITOR for that type of data. If high frequency sampling is enabled, the high frequency counters are maintained. The count of lost event records is not maintained.

User response

If an application connects to *MONITOR for the specified data type, monitoring is activated for that data type.

HCP6225I The current SUBINTERVAL value is incompatible with INTERVAL value and has been reset to the new INTERVAL.

Explanation

The current SUBINTERVAL value is incompatible with the value specified for INTERVAL in the MONITOR command. This message is generated when one of the following is true:

- There would be more than 255 subintervals in an interval.
- The SUBINTERVAL value is not an even divisor of the INTERVAL value in seconds.

System action

The SUBINTERVAL value is set to the new INTERVAL.

Operator response

If necessary, issue a MONITOR SAMPLE SUBINTERVAL command to set the desired SUBINTERVAL value.

HCP6227E Monitor {event|sample} collection is not active.

Explanation

Monitor EVENT or SAMPLE monitoring was inactive at the time the specified MONITOR STOP command was entered.

System action

None.

User response

None.

HCP6228E Monitor sample collection cannot start because DCSS *dcssname* is completely partitioned for event data.

Explanation

A MONITOR SAMPLE START or MONITOR START command was entered when the saved segment was completely partitioned for event monitoring. Because event monitoring is using the whole saved segment, sample monitoring cannot be started.

System action

The command is rejected.

Operator response

To run both sample and event monitoring, enter a MONITOR EVENT STOP command followed by a MONITOR START command specifying a partition size that is less than the size of the saved segment.

HCP6229E Monitor {event|sample} collection is already active.

Explanation

A MONITOR START command was entered, but the type of monitoring specified (event or sample) is already active.

System action

None.

User response

None.

HCP6230E Monitor event collection cannot start because the block size is greater than half the event data area

Explanation

A MONITOR EVENT START or MONITOR START command was entered with the specified BLOCK size was too large as compared with the number of pages in the event data area of the saved segment. If no BLOCK option was used on the start command, a MONITOR EVENT BLOCK command was entered before starting event monitoring. The BLOCK size must be equal to or less than half the number of pages in the event area of the saved segment defined for MONITOR. (The number of pages in the event area is equal to the number of pages in the event partition, minus the number of pages reserved for event configuration records by the MONITOR EVENT CONFIG command.)

System action

The command is rejected.

User response

To display the number of pages currently being reserved for event configuration records, enter the QUERY MONITOR EVENT command. If desired, enter the MONITOR EVENT CONFIG SIZE command to change that number.

Reenter the command entered with valid BLOCK and PARTITION sizes.

HCP6231E Monitor event collection cannot start because the partition size is larger than DCSS *dcssname* size.

Explanation

A MONITOR EVENT START or MONITOR START command was entered with the specified PARTITION size larger than the size of the monitor saved segment currently established by a connection to *MONITOR.

System action

The command is rejected.

Operator response

Reenter the command entered with a valid partition size.

HCP6232E *value* is an invalid monitor SUBINTERVAL value.

Explanation

The value specified for SUBINTERVAL in the MONITOR command is invalid. This message is generated when one of the following is true:

- A nonnumeric value was specified.
- The SUBINTERVAL value is not an even divisor of the INTERVAL value in seconds.
- The SUBINTERVAL value is less than the minimum or greater than the maximum that is supported, as documented for the MONITOR command.

System action

The command is rejected.

Operator response

Determine the reason why the specified value is invalid and reenter the desired command with a valid value.

HCP6233E **Monitor event collection cannot start because the partition size equals the size of DCSS *dcssname*.**

Explanation

A MONITOR EVENT START or MONITOR START command was entered with the specified partition size equal to the size of the saved segment and after sample monitoring had started. Since sample monitoring has been started, the entire saved segment cannot be used for event monitoring. The maximum partition size in this case is the size of the saved segment minus 2.

System action

The command is rejected.

User response

Reenter the command with a partition size that is no larger than the size of the saved segment, minus 1 more than the number of pages currently reserved for sample configuration records.

Note: The QUERY MONITOR SAMPLE command can be used to display the number of pages reserved for sample configuration records.

HCP6234E ***value* is an invalid monitor block value.**

Explanation

The value specified for BLOCK in the MONITOR command is invalid. This message is generated when one of the following is true:

- A nonnumeric value was specified.
- The BLOCK value is less than the minimum value required as documented for the MONITOR command.
- The BLOCK value is greater than the maximum allowable value as documented for the MONITOR command.

System action

The command is rejected.

User response

Determine the reason why the specified value is invalid and reenter the desired command with a valid value.

HCP6235E ***value* is an invalid monitor partition value.**

Explanation

The value specified for PARTITION in the MONITOR command is invalid. This message is generated when one of the following is true:

- A nonnumeric value was specified.
- The PARTITION value is less than the minimum value required as documented for the MONITOR command.
- The PARTITION value is greater than the maximum allowable value as documented for the MONITOR command.

System action

The command is rejected.

User response

Determine the reason why the specified value is invalid, and reenter the desired command with a valid value.

HCP6236E ***value* is an invalid monitor interval value.**

Explanation

The value specified for INTERVAL in the MONITOR command is invalid. This message is generated when one of the following is true:

- A nonnumeric value was specified.
- The INTERVAL value is less than the minimum value or greater than the maximum value required as documented for the MONITOR command.
- The INTERVAL value is less than the rate value (or pending rate if a new rate has been requested).

System action

The command is rejected.

User response

Determine the reason why the specified value is invalid, and reenter the desired command with a valid value.

HCP6237I **Event monitoring will not begin until the event pages in the DCSS are available.**

Explanation

A MONITOR EVENT START command was entered, but the saved segment pages to be used for event recording currently contain sample data. Sample recording has been in progress, and since event monitoring was not active, sample recording was allowed to use the entire saved segment.

Event recording begins when one of the following occurs and causes the event pages to become available:

- All outstanding IUCV REPLYs have been issued for the last IUCV message that was sent for sample data.
- The time allowed for replying to the last sample data message has expired.

  If monitor is running in shared mode, the time allowed expires at the end of the current sample interval.

  If monitor is running in exclusive mode, up to two (consecutive) sample intervals are allowed.
- Sample monitoring is stopped by command.
- The last (only) user connected to *MONITOR for sample data severs his path to *MONITOR.

System action

None.

User response

No response is required. However, if you want event recording to start immediately, you can do one of the following:

- Enter MONITOR EVENT STOP and then reenter MONITOR EVENT START PARTITION with a smaller partition size than is currently in effect.

  Note: Enter QUERY MONITOR PARTITION to display the current partition value.
- Enter the MONITOR SAMPLE STOP command to stop sample monitoring. You can then restart sample monitoring with the MONITOR SAMPLE START command.

  Attention: If sample monitoring is stopped, all sample data for the current interval is lost, and high-frequency data counters are reset to 0.
- Force off each user ID that is connected to *MONITOR for sample data.

Notes:

1. To determine which userid(s) are connected for sample, issue QUERY MONITOR SAMPLE command.
2. If you do not reduce the partition size, the number of saved segment pages left for sample recording may be too small for the sample monitoring that is currently enabled, and therefore subsequent sample data may be incomplete. You may want to stop all monitoring and restart with a larger saved segment.

HCP6238E ***value*** **is an invalid monitor rate value.**

Explanation

The value specified for RATE in the MONITOR command is invalid. This message is generated when one of the following is true:

- A nonnumeric value was specified other than STOP.
- The RATE value is less than the minimum value or greater than the maximum value required as documented for the MONITOR command.
- The RATE value is greater than the interval value (or pending interval if a new interval has been requested).

System action

The command is rejected.

User response

Determine the reason why the specified value is invalid, and reenter the desired command with a valid value.

HCP6239I **{Sample|Event} monitoring has stopped because userid *userid* has not replied to the configuration notification message.**

Explanation

Monitor is running in exclusive mode. The time limit in which a reply is expected for the configuration notification message has expired and the user has not yet replied.

System action

The specified monitoring is stopped, and the application is sent a termination message.

User response

A user with the appropriate privilege, can take the following actions to alleviate the problem:

- Use the MONITOR SAMPLE/EVENT CONFIG LIMIT command to increase the time allowed to reply to configuration messages.
- Enter the SET SHARE command to increase the access priority to system resources of the receiving virtual machine.

The programmer could modify the application program so that it uses the shared interface rather than the exclusive interface. When in shared mode, *MONITOR does not stop when no reply is received for configuration records. Instead, *MONITOR purges the message and releases the saved segment pages for reuse. Refer to *z/VM: CP Planning and Administration* for details on shared mode.

Refer to *z/VM: CP Commands and Utilities Reference* for information about these commands.

Programmer response

Determine why the application was unable to reply to the configuration message within the CONFIG time limit.

HCP6240I	**The variations of this message are explained below.**
— Variation 1	**Device *device* is already enabled for monitoring.**

Explanation

A MONITOR ENABLE command was entered for a device that was already enabled for monitoring.

System action

No new action is taken, since the device is already being monitored.

Operator response

If an incorrect device number was entered, reenter the MONITOR command with the correct device number. To determine which devices are enabled, enter a QUERY MONITOR command.

— Variation 2	**Class *class* is already enabled for monitoring.**

Explanation

A MONITOR ENABLE command was entered for a class that was already enabled for monitoring.

System action

No new action is taken, since the class is already being monitored.

Operator response

If an incorrect class was entered, reenter the MONITOR command with the correct class. To determine which classes are enabled, enter a QUERY MONITOR command.

HCP6241I	**The variations of this message are explained below.**
— Variation 1	**The number of devices successfully enabled for monitoring is *nnnn*. The number of devices enabled but offline is *nnnn*.**

Explanation

A MONITOR ENABLE command was entered for devices of which some were found to be offline.

System action

The devices offline are not monitored until they are varied online.

Operator response

If an incorrect device number was entered, reenter the MONITOR command with the correct device number. To determine which devices are enabled, enter a QUERY MONITOR command.

— Variation 2	**Class *class* is enabled for monitoring.**

Explanation

A MONITOR ENABLE command was entered for a class that is enabled for monitoring.

System action

The specified class is enabled for monitoring.

Operator response

None. To display which classes are enabled, enter a QUERY MONITOR command.

HCP6242I	**The class or type of device *device* is invalid for SEEKS monitoring**

Explanation

A MONITOR EVENT SEEKS command was entered for this device, and the device is either not a DASD, or it is a DASD type 2305.

System action

The device is not monitored for SEEKS.

Operator response

If an invalid device number was entered, reenter the command with the valid device number.

HCP6243I **The new Monitor sample interval is skipped because *userid* has not replied for the previous interval.**

Explanation

A sample interval for monitor has expired while monitor was running in exclusive mode, but there has been no IUCV REPLY to the IUCV SEND for the previous interval.

System action

Sample data is not recorded at this interval. High frequency sampling, if active, continues uninterrupted.

Operator response

If this happens frequently, enter the QUERY MONITOR command to determine the current interval setting. Notify your system support personnel.

Programmer response

Determine why the receiving virtual machine cannot consistently reply within the time allowed by the current interval length. Two possible actions to alleviate the problem are:

- Enter the MONITOR SAMPLE INTERVAL *n* command to make the interval length larger, allowing the application program more time to process the sample data.
- Enter the SET SHARE command to increase the share of the receiving virtual machine and/or the virtual machine running the application program that processes the monitor data.

HCP6244I **No REPLY from *userid* for two consecutive monitor sample intervals - sample monitoring stopped.**

Explanation

CP monitor is running in exclusive mode. Two sample intervals have expired since the last IUCV SEND for sample data, and no IUCV REPLY has been received.

System action

High-frequency sampling and sample data recording are stopped.

Operator response

Enter the QUERY MONITOR command to determine the current interval setting. Notify your system support personnel.

Programmer response

Determine why the receiving virtual machine has not entered the IUCV REPLY, correct the problem, and enter the MONITOR SAMPLE START command to restart sampling.

If more processing time is required by the application program that is processing the data, two possible actions to alleviate the problem are:

- Enter the MONITOR SAMPLE INTERVAL *n* command to set a larger interval time.
- Enter the SET SHARE command to increase the share of the virtual machine running the application program and/or the share of the receiving virtual machine.

If the application program can tolerate missed intervals, the program could be modified to use the shared connect interface rather than the exclusive interface. When in shared mode, *MONITOR does not stop when a reply is late. Instead, *MONITOR purges the message and releases the saved segment pages for reuse. Refer to *z/VM: CP Planning and Administration* for details on shared mode.

HCP6245I **The monitor IUCV path was abnormally severed by userid *userid* with error code *code*.**

Explanation

The virtual machine that was connected to the *MONITOR CP system service has abnormally severed the communications path. A probable cause is that the receiving virtual machine has abended or logged off.

The *code* variable specified in the message comes from the IUCV parameter list first passed by *userid*. Specifically, the code is from the first 2 bytes of the IPUSER field of the IPARML control block.

System action

When in shared mode, monitoring continues. If there are no other active monitor users for the type(s) of data that this user was eligible for, that type of recording enters a pending state, and message HCP6224I is issued.

When in exclusive mode, all monitoring stops.

Operator response

Notify your system support personnel. No action may be necessary if the receiving virtual machine has abended or logged off.

User response

Determine why the receiving virtual machine abnormally severed the communications path and correct the problem if possible.

If the code specified on the message is zero, the problem may be that the receiving virtual machine abended, logged off, or has been reset.

If the code specified on the message is nonzero, the problem may be that the virtual machine did not use the correct protocol to end monitor data retrieval or follow procedures for application program termination.

After the problem is corrected, restart the application by following the application's normal startup procedures.

HCP6246E Monitor has been terminated due to a soft abend.

Explanation

Monitor has been terminated because of an unrecoverable error.

System action

All monitor-related activities are terminated, and the IUCV paths between all connected virtual machines and the *MONITOR CP system service have been severed.

Operator response

Notify your system support personnel. Monitor can be restarted by following normal startup procedures.

HCP6247I Event processing has {suspended|stopped} because the monitor event portion of DCSS *dcssname* is full.

Explanation

CP monitor is running in exclusive mode and needs a record space in the event portion of saved segment *dcssname*, but none is available.

If the event data collection has been suspended, the saved segment has been full for 1 minute.

If the event data collection has been stopped, the saved segment has been full for 6 minutes.

System action

For event suspended: CP monitor stops event data recording and counts the number of lost event records. The event data in the saved segment is not affected.

For event stopped: CP monitor frees the event portion of the saved segment and purges all outstanding IUCV SEND messages for event data. All event data in the saved segment is lost.

Programmer response

For event suspended: The application program should process the data in the event portion of the saved segment and issue IUCV REPLYs for outstanding messages. This will free some of the space in event portion of the saved segment. Therefore, CP monitor can resume event sampling.

For event stopped: Restart monitor event data collection.

Refer to *z/VM: CP Commands and Utilities Reference* for monitor command information.

If event data collection suspends or stops frequently, the possible causes are:

- Slow application processing.
- The size of the saved segment is too small to contain all the event records.
- The user's priority for access to system resources is too low.

Possible solutions are:

- Modify the application program to improve performance.
- Increase the size of the saved segment or decrease the amount of event data being collected.
- Enter the SET SHARE command to increase the share of the receiving virtual machine and/or the virtual machine running the application program that processes the monitor data.
- Modify the application program to use the shared connect interface. When in shared mode, *MONITOR does not suspend or stop when the saved segment becomes full. Instead, it purges the messages of

the user with the highest number of outstanding messages and releases the saved segment pages for reuse. Refer to *z/VM: CP Planning and Administration* for more information on shared mode.

HCP6248I DCSS *dcssname* is not loaded by the user connected to *MONITOR.

Explanation

Monitor is running in exclusive mode, and the user connected to the *MONITOR CP system service has released the saved segment for monitor.

System action

The IUCV path between the receiving virtual machine and the *MONITOR CP system service has been severed, and monitoring that was started goes into pending state.

Operator response

Notify your system support personnel.

Programmer response

Determine why the saved segment was released.

HCP6249I Device *rdev* is enabled for monitoring, but is offline

Explanation

A MONITOR ENABLE command was entered for a device that was offline.

System action

The device is enabled for monitoring; however, no data is collected until it is varied on line.

Operator response

If an incorrect device number was entered, reenter the MONITOR command with the correct device number. Use the VARY command to vary on any offline devices.

HCP6250I A monitor sample interval has been skipped because the IUCV message limit of *limit* to *MONITOR has been reached.

Explanation

A monitor sample interval has expired. Data was copied into the monitor saved segment. The IUCV SEND for the data notification failed because the message limit has been reached for the user.

System action

Data for this interval is discarded, Monitor will attempt to send again at the next sample interval.

Programmer response

Determine why the connected virtual machine has so many outstanding messages. It is possible that:

- A flood of event data notification messages has caused the user's message limit to be reached.
- The user is not replying to messages.

If the problem is caused by a message limit that is too low for the amount of event activities, a higher limit can be specified in a CONNECT parameter (or in the user's directory) and/or the SET SHARE command can be issued to increase the share of the virtual machine so that messages are processed faster by the virtual machine.

When running MONWRITE, the sever is done by issuing the MONWSTOP command from the user ID running the MONWRITE program. The IUCV message limit can be changed by changing MONWRITE's IUCV directory statement for *MONITOR.

HCP6251I Monitor sample recording was active while your path to *MONITOR was quiesced. Data Notification messages have been missed.

Explanation

After receiving configuration records, you missed one or more sample intervals while you were quiesced. Any other eligible users connected for sample intervals received the data notifications you missed.

System action

IUCV SENDs to your virtual machine are resumed.

User response

None.

HCP6252I The {sample|event} configuration records are delayed for *userid* because the configuration area in the DCSS is in use.

Explanation

A request for configuration records for the specified user ID has been generated as a result of one of the following:

- A connection to *MONITOR when recording is already active
- An IUCV RESUME is entered by a user whose virtual machines path to *MONITOR was quiesced when monitoring started for the type of data for which the user was connected.

The records cannot be provided immediately because the configuration area still contains configuration records from a previous request.

System action

The records will be generated when one of the following occurs:

- Each user causing the delay has replied to his configuration notification message.
- The time limit (specified by the MONITOR LIMIT CONFIG command) to reply to the configuration message has expired.
- The paths to *MONITOR of the users causing the delay are severed (either as a result of the user or *MONITOR issuing an IUCV SEVER).

Operator response

If you want to determine which users currently have not replied to the configuration message (and hence are causing the delay), enter QUERY MONITOR SAMPLE/EVENT.

HCP6253I **The {sample|event} configuration message and corresponding records have been purged.**

Explanation

The IUCV message and the corresponding monitor configuration records have been purged because the time limit established by the MONITOR SAMPLE/EVENT CONFIG LIMIT command has expired and a reply has not been received by *MONITOR. Refer to *z/VM: CP Commands and Utilities Reference* for information about the MONITOR SAMPLE/EVENT CONFIG LIMIT command.

System action

The configuration area is cleared (or overwritten), and the IUCV message previously sent is purged.

User response

A user with the appropriate privilege, can take the following actions to alleviate the problem:

- Use the MONITOR SAMPLE/EVENT CONFIG LIMIT command to increase the time allowed to reply to configuration messages.
- Enter the SET SHARE command to increase the access priority to system resources of the receiving virtual machine.

Refer to *z/VM: CP Commands and Utilities Reference* for information about these commands.

Programmer response

Determine why the application was unable to reply to the configuration message within the CONFIG time limit.

HCP6255I **The variations of this message are explained below.**

— Variation 1 ***number*** **monitor sample interval(s) have been skipped because data collection could not complete before the next sample interval.**

Explanation

Data collection for a sample interval did not complete until after the next sample interval was scheduled to start and the sample area of the monitor DCSS was full. One or more sample intervals were skipped. If subinterval sampling is active, multiple subintervals were skipped.

System action

Sample interval(s) were skipped. Monitor continues.

User response

None.

Programmer response

Determine why the data collection was taking so long. Consider the following possibilities:

- The sample interval is too short for the amount of data that is collected.
- There is an I/O problem with a DASD device that causes response delays.
- Another system holds a reserve on a device.
- The monitor DCSS sample area is too small.

If the problem is caused by I/O to a DASD device, the device can be disabled from monitoring.

Increasing the size of the monitor DCSS sample area might alleviate the problem.

— Variation 2 ***number*** **monitor sample subinterval(s) have been skipped because data collection could not complete before the next sample subinterval.**

Explanation

Data collection for a sample subinterval did not complete until after the next sample subinterval was scheduled to start and the sample area of the monitor DCSS was full. One or more sample subintervals were skipped. However, no sample interval was skipped.

System action

Sample subinterval(s) were skipped. Monitor continues.

Programmer response

Determine why the data collection was taking so long. Consider the following possibilities:

- The sample interval is too short for the amount of data that is collected.
- There is an I/O problem with a DASD device that causes response delays.
- Another system holds a reserve on a device.
- The monitor DCSS sample area is too small.

If the problem is caused by I/O to a DASD device, the device can be disabled from monitoring.

Increasing the size of the monitor DCSS sample area might alleviate the problem.

HCP6256I **The Channel-Path-Measurement Facility has failed with internal error code *xx*.**

Explanation

The Channel-Path-Measurement Facility encountered an unexpected error.

System action

A soft abend dump is generated.

Operator response

Contact your IBM Support Center personnel. This is a probable software error.

HCP6257I **The Channel-Path-Measurement Facility encountered an unrecoverable error. The facility is stopped.**

Explanation

The Channel-Path-Measurement Facility encountered an irrecoverable error and is stopped. The condition causing the error cannot be recovered by the channel subsystem.

System action

The Channel-Path-Measurement Facility is stopped. The channel measurement data reported in Monitor records will not be updated.

Operator response

Contact your IBM Support Center personnel. This is a probable hardware error.

HCP6258I **The Channel-Path-Measurement Facility encountered a storage error attempting to update the channel path measurement data. The facility is stopped.**

Explanation

The Channel-Path-Measurement Facility encountered a storage error attempting to update the channel path measurement data.

System action

The Channel-Path-Measurement Facility is stopped. The channel measurement data reported in Monitor records will not be updated.

Operator response

None.

HCP6259I **The Channel-Path-Measurement Facility encountered a recoverable error. The facility is being restarted.**

Explanation

The Channel-Path-Measurement Facility encountered a recoverable error.

System action

The Channel-Path-Measurement Facility is being restarted.

Operator response

None.

HCP6260I **The Channel-Path-Measurement Facility encountered a recoverable error. VM is awaiting channel subsystem recovery.**

Explanation

The Channel-Path-Measurement Facility encountered a recoverable error.

System action

The Channel-Path-Measurement Facility is stopped. The facility will be restarted automatically when channel subsystem recovery is complete. In the interim, there will be no updates to the channel measurement data reported in Monitor records.

Operator response

None.

HCP6261I **The Channel-Path-Measurement Facility was successfully restarted.**

Explanation

The Channel-Path-Measurement Facility was successfully restarted after a recoverable error was detected.

System action

The Channel-Path-Measurement Facility is restarted.

Operator response

None.

HCP6262E ***value*** **is an invalid time limit for monitor {event|sample} CONFIG.**

Explanation

The value specified for CONFIG LIMIT on the MONITOR SAMPLE/EVENT command is invalid. This message is generated when one of the following is true:

- A nonnumeric value was specified.
- The CONFIG value is less than the minimum value or greater than the maximum value required as documented for the MONITOR CONFIG LIMIT command.

System action

The command is rejected.

User response

Reenter the command with a valid value.

HCP6263I **CPU-Measurement Facility counter collection was not enabled because the basic counter set is not authorized.**

Explanation

The system determined that the basic counter set in the CPU-Measurement Counter Facility has not been authorized. If you enable collection of monitor sample records in the PROCESSOR domain (MONITOR SAMPLE ENABLE PROCESSOR command), the system makes no attempt to activate or to collect CPU-Measurement Counter Facility counters requiring activation by CP.

Collection of CPU-Measurement counter sets for the Multithreading Facility is unaffected. Those counter sets are collected when multithreading is enabled and collection of monitor sample records in the PROCESSOR domain is enabled.

System action

CPU-Measurement Counter Facility counters recorded in the Domain 5 (Processor Domain) Record 13 "MRPRCMFC - CPU-Measurement Facility" are not collected.

User response

To authorize the basic counter set, perform authorization in the LPAR activation profile or through the Change LPAR Security task on the Support Element.

HCP6264I ***name*** **domain is not enabled for SAMPLE.**

Explanation

The domain that is being enabled or disabled for SUBINTERVAL samples is not enabled for single samples.

System action

Processing continues.

Operator response

If the domain is to be enabled for subinterval samples then it must also be enabled for single samples. To enable for single samples, issue MONITOR SAMPLE ENABLE *domain-name*.

If the domain is to be disabled for subinterval samples but enabled for single samples, then issue the following commands:

1. MONITOR SAMPLE ENABLE *domain-name*
2. MONITOR SAMPLE DISABLE SUBINTERVAL *domain-name*

If the domain is to be disabled for all samples, then issue MONITOR SAMPLE DISABLE *domain-name*.

HCP6265A Monitor writer connected to *iucvserver action*

Explanation

Monitor writer has connected with the specified *iucvserver*. The writer will transfer any monitor data collected to the output file until it is stopped, using either the #CP EXTERNAL or MONWSTOP command.

Note: The following message text appears only if no monitoring is active when the monitor writer connects to *MONITOR:

action = **START CP MONITOR**.

System action

Monitor writer waits for communication from *iucvserver* to begin.

Operator response

If *iucvserver* is *MONITOR, and the CP monitor is not started, start the CP monitor by entering the CP MONITOR START, CP MONITOR EVENT START, or CP MONITOR SAMPLE START command.

If *iucvserver* is not *MONITOR, follow startup procedures for that application.

HCP6266A End-of-tape encountered for *vdev* mount and ready a new writable tape

Explanation

The end of the tape has been reached by monitor writer for the *vdev* given.

System action

The tape on the real device associated with *vdev* is rewound and unloaded. If only one virtual device was specified or defaulted on the MONWRITE command, monitor writer waits for the new tape to be mounted. If two virtual devices were specified on the MONWRITE command, writing continues on the other tape device.

Operator response

If the tape device has an automatic tape-loading feature (for example, the cartridge stacker loader on the IBM 3480), no action is required unless the stacker is empty. If there is no automatic loading feature or the stacker is empty, mount a new tape on the real device associated with the given virtual device. Make sure the tape can be written to.

User response

If the tape device has an automatic tape loading feature (for example: the cartridge stacker loader on the IBM 3480), no action is required unless the stacker is empty. If there is no automatic loading feature or the stacker is empty, contact the operator and request that a new tape be mounted on the real device associated with the virtual device given in the message.

HCP6267I Monitor writer connection to *iucvserver* ended

Explanation

Monitor writer has ended communications with the given IUCV server.

System action

Monitor writer continues termination activity.

User response

None.

HCP6268E Attempt to connect to monitor writer by *application* has been severed

Explanation

An attempt was made by *application* to make an IUCV connection to the monitor writer function. The connect attempt has been severed.

System action

Monitor writer continues operation.

User response

Contact the system programmer. Determine who attempted the connection. The *application* variable is probably a user ID. The application issued an IUCV CONNECT (probably using the IUCV macro or the CMSIUCV macro) that specified MONWRITE as the target of that connection. Change the application so that this does not occur again. Monitor writer does not

support such connections. If this connect attempt is not an accident or programming error, it could be an attempt to access monitor data without authorization.

HCP6269E Macro *name* failed with *type* code *code*

Explanation

The monitor writer entered the CMS macro *name*, and that macro failed with the unacceptable error given by *code*. This can be either an unacceptable return code or an unacceptable condition code as specified in the message. Additional CMS error messages may precede this message. For some macros additional information may be provided.

System action

The monitor writer function ends; system action continues.

User response

Contact the system programmer, who should look up the macro specified by *name* in the CMS publications and locate the error code given by *code* to determine what error occurred. If more information is required, refer to any other messages that may precede this error message.

Examples of likely errors are:

- SEGMENT LOAD with code = 44 means that the saved segment name given in the error message does not exist.
- SEGMENT LOAD with return code = 449 means the user does not have a NAMESAVE for the specified DCSS in their directory.
- TAPECTL WTM with code = 4 or 5 or 6 means, respectively, that the virtual device is incorrect, the tape is not attached, or the tape is file protected.
- FSSTATE file ID with code = 20 means that the file ID given is invalid.
- IUCV REPLY *iucvserver* with code = 09 means that the contents of the monitor record associated with the last written MONWRITE control records may have been set to zero or replaced with new data.

  MONWRITE will back up over the data and replace it with new data on the next send. No action is necessary unless the program that reduces the monitor output cannot handle skipped sample intervals or missing event data.

  Note: When writing to a CMS disk file, MONWRITE temporarily replaces the bad data with end-of-data records; that is, control records in which IPPRMSG1 and IPPRMSG2 are zero. If monitoring is stopped and restarted using the same disk file before the control records are overwritten with new data, there could potentially be multiple end-of-data records between the monitoring sessions.

HCP6270E The IUCV server severed the IUCV connection, reason code *code*

Explanation

The IUCV server severed the connection with the monitor writer. The reason for the sever can be determined by looking up the reason code in the documentation for the IUCV server.

System action

The monitor writer function terminates.

User response

Contact the system programmer, who should look up the reason code in the documentation for the IUCV server. For *MONITOR, the following are possible explanations of the various reasons codes:

code
Reason

X'04'
The IUCV message limit in the directory for MONWRITE should be changed to be at least six.

X'08'
MONWRITE transmitted a parameter list on the connect that indicated it could not accept data in a parameter list. This probably means that there is an error in the CP-to-MONWRITE communications protocol.

X'0C'
The saved segment used by MONWRITE (default MONDCSS) is not defined correctly. The first page range defined for the saved segment was too small. The saved segment should be purged and then defined and saved again following the procedures for creating the monitor saved segment.

X'10'
The saved segment used by MONWRITE (default MONDCSS) and passed to *MONITOR on the connect was not found. Since MONWRITE has loaded the saved segment name given on the command line, this probably means that there is an error in the CP-to-MONWRITE communications protocol.

X'14'
The saved segment used by MONWRITE (default MONDCSS) is not defined correctly as a “Shared-CP” type of saved segment. The saved segment

should be purged and then defined and saved again, following the procedures for creating the monitor saved segment.

X'18'
The saved segment used by MONWRITE (default MONDCSS) passed to *MONITOR is not loaded by MONWRITE. Since MONWRITE has loaded the saved segment name given on the command line, this probably means that there is an error in the CP-to-MONWRITE communications protocol.

X'1C'
Monitor has soft abended. Determine why monitor soft abended, restart the monitor writer, and then restart the CP monitor.

X'20'
MONWRITE has attempted a second connection to *MONITOR. Probably there is an error in the CP-to-MONWRITE communications protocol.

X'24'
MONWRITE transmitted an invalid version code for the CONNECT parameter list. This probably means that there is an error in the CP-to-MONWRITE communications protocol.

X'28'
The saved segment passed by MONWRITE to *MONITOR on the connect does not match the saved segment already established by another connected user. Since MONWRITE has loaded the saved segment name given on the command line (or by default uses the name MONDCSS segment), MONWRITE should be invoked again, using the name of the currently established saved segment.

X'2C'
The saved segment used by MONWRITE is not large enough to satisfy the event partition or event block values or configuration sizes established by previously entered MONITOR command. Either invoke MONWRITE again with a larger saved segment, or use the MONITOR command to change the PARTITION or BLOCK values or configuration sizes. Then invoke MONWRITE again.

X'30'
MONWRITE transmitted an invalid CONNECT parameter list that did not specify any data type(s). This probably means that there is an error in the CP to MONWRITE communications protocol.

X'34'
MONWRITE attempted to connect to *MONITOR in exclusive mode, when monitor was running in shared mode.

X'38'
MONWRITE attempted to connect to *MONITOR, but there was already a user connected in exclusive mode. Only one user can connect to *MONITOR in exclusive mode.

HCP6271A Warning: output file does not contain initial sample configuration records

Explanation

The monitor writer has started writing sample data, but the configuration data is missing. If connected to *MONITOR, the data is missing because the writer did not reply in time to the configuration data send.

If connected to another IUCV server, the data may be missing because either the IUCV server was already actively receiving notifications for sample data, or because the writer did not reply in time to the configuration notification sent from the IUCV server.

System action

The monitor writer function continues writing data to the output file. However, this output file may not be usable.

User response

If the program that reduces the output from the monitor writer can tolerate the fact that the output file does not have the initial configuration data, then no action is required. If in doubt, contact the system programmer, who should examine the input requirements for the reduction program.

If the program that reduces the output cannot tolerate the fact that the output file does not have initial configuration data, then enter MONWSTOP to end the monitor writer. If it is important to collect data using the monitor writer at this time, then also stop the IUCV server that is connected to *MONITOR. Once all are stopped, restart the monitor writer and the other IUCV server, using each program's startup procedure. Once all are ready, enter CP MONITOR START, and the monitor writer will see the initial configuration data.

HCP6272I The variations of this message are explained below.

— Variation 1 Now recording in file *fileid*

Explanation

Indicates the file name, type and mode of the file being used to record monitor data.

System action

Processing continues.

User response

None.

— Variation 2 Closing file *fileid*

Explanation

When the CLOSE operand is specified on the MONWRITE command the file name, type and mode of the file being closed is displayed at the specified interval.

System action

Processing continues.

User response

None.

HCP6273A WARNING: SAMPLE CONFIGURATION SIZE IS TOO SMALL

Explanation

The MONITOR SAMPLE CONFIG size is too small and might cause missing or incomplete monitor records to be recorded.

System action

Processing continues.

User response

Use the QUERY MONITOR command to determine the current size of the MONITOR sample configuration area. Then use the MONITOR SAMPLE CONFIG SIZE command to increase the size of the MONITOR sample configuration area to avoid this message and potential missing or incomplete monitor records.

HCP6274I The {sample|event} data messages and corresponding records have been purged.

Explanation

You have not replied to data messages as required. IUCV messages and corresponding data records have been purged.

System action

The specified IUCV messages previously sent to the user, or pending for the user, are purged. The corresponding saved segment pages are freed for reuse by monitor.

User response

A user with the appropriate privilege class can take the following actions to alleviate the problem:

- Enter the MONITOR SAMPLE INTERVAL command to make the interval length larger, which will allow the application program more time to process the sample data.
- Stop event monitoring, then restart it with a larger event partition.
- Enter the SET SHARE command to increase the access priority of the receiving virtual machine to system resources.

Refer to *z/VM: CP Commands and Utilities Reference* for more information on the SET SHARE command.

Programmer response

Determine why the application was unable to reply to the data notification messages.

HCP6275E An error occurred writing to the subchannel for device *rdev*, code = *code*.

Explanation

A nonfatal error (specifically, error code *code*) occurred while issuing a channel subsystem call. If this is the result of attempting to attach a device, the device is not attached.

System action

The command is not executed; system operation continues.

User response

Retry the command at a later time. If the problem persists, it is probably a hardware malfunction. Notify your system support personnel.

HCP6276I Device *rdev* cannot be varied online because the subchannel is not operational.

Explanation

The indicated device is not brought online because its associated subchannel is not operational. The Store Subchannel instruction returned condition code 3.

System action

The device is not brought online.

Operator response

This is probably a hardware malfunction. Notify your system support personnel.

User response

None.

HCP6277I **Device *rdev* cannot be varied online because I/O errors occurred.**

Explanation

The indicated device is not brought online because I/O errors occurred while attempting to do I/O.

System action

The device is not brought online.

Operator response

If this error occurs during IPL, try to vary the device online after IPL.

This is probably a hardware malfunction. Notify your system support personnel.

User response

None.

HCP6278W **SEVERE CHANNEL ERROR DETECTED.**

Explanation

The I/O subsystem cannot be initialized because of a severe channel error.

System action

The system enters a disabled wait state (wait-state code = 6278).

Operator response

There is probably a hardware malfunction. Notify your system support personnel.

HCP6279I **MEASUREMENT BLOCK UPDATE MODE HAS BEEN DISABLED ON SUBCHANNEL *rdev* DUE TO A SUBCHANNEL MEASUREMENT BLOCK CHECK.**

Explanation

A subchannel measurement block check occurred on device type *rdev*. The subchannel has disabled the Subchannel Measurement Mode Facility.

System action

System operation continues, but CP discontinues measurement of the subchannel in error.

Operator response

Contact your system administrator. To reestablish the measurement of the subchannel, vary the device offline by entering the VARY OFF command, then vary the device back online by entering the VARY ON command.

HCP6280I **Device *rdev* cannot be varied online because an error occurred while attempting to establish a path group.**

Explanation

The indicated device is not brought online because an error occurred while attempting to establish a path group; or, on a first-level z/VM system a non-CP path group ID was found already established at the control unit for this device.

System action

The device is not brought online.

Operator response

This is probably a hardware malfunction or a problem with the hardware configuration of this device. If this error occurs during system IPL, try to vary the device online after IPL. If you cannot vary the device online, contact your system support personnel.

User response

None.

HCP6281I **{Device *rdev* cannot be varied online because of conflicting device identification information. | DEVICE *rdev* CANNOT BE VARIED ONLINE BECAUSE OF CONFLICTING DEVICE IDENTIFICATION INFORMATION.}**

Explanation

The indicated device is not brought online because identification information received from either the Sense-ID command or the Read Configuration Data command is not identical on all paths.

System action

The device is not brought online.

Operator response

Examine the IOCP listing to ensure the device is properly defined. This is probably a hardware malfunction. Contact your system support personnel.

User response

None.

HCP6282I **Device *rdev* cannot be varied online because the subchannel is invalid.**

Explanation

The indicated device is not brought online because the device valid bit in the subchannel is zero, indicating that the subchannel is not valid. There is no I/O device associated with the subchannel.

System action

The device is not brought online.

Operator response

If you are running on the real machine, examine the IOCP listing to ensure that it was defined properly. There is probably a hardware malfunction. Contact your system support personnel.

User response

None.

HCP6283I **Device *rdev* cannot be varied online because no channel path is available.**

Explanation

The indicated device is not brought online for one of these reasons:

- No operational channel path is available to the device. (Channel paths to Open Systems Adapter devices are not brought online until the adapter has completed its hardware initial microcode load.)
- Hardware malfunction; the device is not responding.

System action

The device is not brought online.

Operator response

Verify that the real I/O configuration matches the hardware. Contact your system support personnel or your IBM Support Center for assistance if it is determined to be a hardware malfunction.

User response

None.

HCP6284I **Device *rdev* cannot be varied online due to conflicting device classification information.**

Explanation

The indicated device is not brought online because the hardware does not match the software (HCPRIO, System Configuration file or from prior dynamic sensing) description for the device. The Sense-ID command provides information that is converted to device class and type values. In this case, the sense-ID and CP internal definition (from HCPRIO, System Configuration file or prior dynamic sensing) values do not match.

System action

The device is not brought online.

Operator response

Verify the hardware (device) and software (HCPRIO or System Configuration file) definitions of the I/O device are the same. If this device has been reconfigured, you may need to clear the software definition with the SET RDEVICE CLEAR command. If the device has not been reconfigured, there is probably a hardware malfunction. Contact your system support personnel or the IBM Support Center for assistance.

User response

None.

HCP6285I **Device *rdev* cannot be varied online due to conflicting device numbers.**

Explanation

The indicated device is not brought online because the device number specified in the hardware (subchannel) is different from the device number specified in the software (*rdev*). A device number is a system-unique value that is assigned to the subchannel when the device is installed.

System action

The device is not brought online.

Operator response

Contact your system support personnel.

User response

None.

HCP6286I **Device *rdev* cannot be varied online because the subchannel cannot be modified.**

Explanation

The indicated device is not brought online because its subchannel cannot be modified.

System action

The device is not brought online.

Operator response

If this message occurs during IPL, try to vary the device online after IPL completes. There is probably a hardware malfunction. Contact your system support personnel.

User response

None.

HCP6287I **Device *rdev* cannot be varied online because it did not respond to a no-op command.**

Explanation

The device cannot be varied online because it did not respond to a no-operation command. A no-operation command is issued to an unsupported device to ensure that the device exists.

System action

The device is not brought online.

Operator response

If this occurs during system IPL, try to vary the device online after IPL completes. There is probably a hardware malfunction. Contact your system support personnel.

User response

None.

HCP6288I **Device *rdev* cannot be varied online because the subchannel is varied offline**

Explanation

You used the CP VARY (Real Device) command to vary the specified device online. CP rejected your command because the device's subchannel is offline. The device's subchannel must be online before you can vary the device online.

System action

CP does not vary on the device and normal processing continues.

User response

Vary the subchannel online using the CP VARY SUBCHANNEL command, and then vary the device online again using the CP VARY (Real Device) command.

HCP6289I **Device *address* cannot be varied online because it is quiesced for maintenance.**

Explanation

You used the CP VARY (Real Device) command to vary the specified device online. CP rejected your command because the subchannel of the device has been quiesced for maintenance from the control unit.

System action

CP does not vary on the device and normal processing continues.

User response

Ensure that the maintenance is complete on the device, and if so, enter the CP VARY (Real Device) command again with the FORCE operand specified. If maintenance is not complete, the device should not be varied online.

Note: Control Unit Initiated Resume (CUIR) is used by the IBM Service Representative to indicate that the service on a quiesced device or set of devices is complete. The CUIR should precipitate the device being varied online by the operating system. If that vary does not complete successfully, the CP VARY (Real Device) command will have to be entered manually with the FORCE option included to vary devices back online.

HCP6290I **Device *rdev* cannot be varied online because it is uninstalled or unsupported**

Explanation

Either there has been a real device block defined for a device that has no real counterpart, or the device is unsupported and was not defined as such.

System action

The device is not brought online.

Operator response

Contact your system support personnel to verify that the real I/O configuration matches the hardware, or to specifically define the device as an unsupported device.

User response

None.

HCP6291I **Device *rdev* cannot be varied online because it is {assigned elsewhere | reserved to another system}**

Explanation

This message is issued for one of the following reasons:

- The VARY command was entered with the ASSIGN option to vary on a tape device, but the device is already assigned to another system.
- The VARY command was entered to vary on a DASD, but the device is currently reserved to another system.

System action

The VARY command fails and system operation continues.

Operator response

If you issued a VARY command with the ASSIGN option, unassign the device from the other system and enter the VARY command again with the ASSIGN option.

If you entered a VARY command to vary on a DASD, note that reserves should not be held for great lengths of time. Reissue the VARY command. If it continues to fail, there might be a problem with the other system holding the reserve.

HCP6292I **Device *rdev* cannot be varied online because the ASSIGN option was specified and the device does not support assign.**

Explanation

The indicated device could not be brought online because the ASSIGN option was specified and the device does not support the assign command.

System action

The device is not brought online.

Operator response

Vary the device online without specifying the ASSIGN option.

User response

None.

HCP6293I **Device *rdev* cannot be varied online because it is a spare volume within the DASD subsystem.**

Explanation

The indicated device could not be brought online because it has been defined as a spare volume for use by the dynamic sparing function of the DASD subsystem.

System action

The device is not brought online.

Operator response

The device cannot be brought online unless it is redefined to the DASD subsystem to no longer be a spare volume. For further assistance, contact your system support personnel.

User response

None.

HCP6295I **Device *rdev* cannot be varied online because {an associated device does not exist in the primary subchannel set | it is a non-DASD device and is not configured in subchannel set zero}.**

Explanation

The user or CP tried to bring the specified device online, but the device did not come online for one of the following reasons:

- It is defined in the standby configuration and there is no device with the same device number in the active configuration.
- It is a 5-digit non-DASD device that is not configured in subchannel set zero.

System action

The device does not come online. System operation continues.

User response

A device defined in the standby configuration set can only come online if there is a device defined with the same device number in the active configuration. If necessary, change your configuration to add a device with this device number to the active configuration. Also, make sure that you specified the correct device address or if necessary, change your configuration to define this device in subchannel set 0.

HCP6297E **Device *rdev* in subchannel set 0 was not brought online due to a non-DASD device with the same device number defined in the same non-zero subchannel set as the IPL device.**

Explanation

The system was IPLed with a device that exists in a non-zero subchannel set. During system initialization a non-DASD device in that same non-zero subchannel set with the specified device number was discovered. Non-DASD devices in non-zero subchannel sets are not supported by z/VM so that device is not brought online. However, a device with the same device number in subchannel set 0 exists and is added to the active configuration, though it will remain offline during system initialization. It can be brought online subsequently with the CP VARY command, if desired.

System action

The device is left offline. System operation continues.

Operator response

Issue the CP VARY command to bring the device in subchannel set 0 online after system initialization.

HCP6300I **SENSE DATA FORMAT = XX MSG CODE = XX**

Explanation

This is an informational message that displays in hexadecimal the sense data format and message code. Refer to the reference manual containing sense byte information for this device to determine the meaning of SENSE DATA FORMAT and MSG CODE. Certain devices may not use sense data format or message code (or both) and this message can be ignored.

System action

System operation continues.

Operator response

None.

HCP6301I **CHANNEL COMMAND WORD COMMAND CODE = {*xx* | INVALID | N/A HPF}**

Explanation

This informational message displays the command code of the channel command word (CCW) in hexadecimal. If the command code is not found, INVALID is substituted for the code. If the channel program is a transport-mode channel program, N/A HPF is substituted for the code.

System action

System operation continues.

Operator response

None.

HCP6302I **SEEK ADDRESS = *bbcchh* LOCATE ADDRESS = *bbbb***

Explanation

This is an informational message that displays in hexadecimal the seek argument (bin, cylinder, and head) for CKD/ECKD DASD. For FBA DASD, the locate argument in terms of the starting block number of the failing channel program will be displayed in hexadecimal. If the seek address is not found, the message will be:

```
SEEK ADDRESS = INVALID
```

If the locate address is not found, the message will be:

```
LOCATE ADDRESS = INVALID
```

System action

System operation continues.

Operator response

None.

HCP6303I **SENSE = *xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx***

Explanation

This is an informational message that displays the sense bytes. If the sense data is not found or is not valid, the message will be:

```
SENSE = INVALID
```

System action

System operation continues.

Operator response

None.

HCP6304I **IRB = *xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx***

Explanation

This is an informational message that displays the first 16 bytes of the interrupt response block (IRB). If the IRB is not found, the message will be:

```
IRB = INVALID
```

System action

System operation continues.

Operator response

None.

HCP6305I **USERID = *userid***

Explanation

This is an informational message that displays the user ID. If the user ID is not found, the message will be:

```
USERID = INVALID
```

System action

System operation continues.

Operator response

None.

HCP6306I ***type rdev* AN EQUIPMENT CHECK WITH PERMANENT ERROR OCCURRED**

Explanation

There is an equipment malfunction on device *rdev*. Storage director retry is exhausted or undesirable.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

This is probably a hardware error. If the problem persists, contact your system support personnel.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP6307I ***type rdev* A PERSISTENT ENVIRONMENTAL DATA PRESENT CONDITION OCCURRED**

Explanation

Two successive environmental data-present conditions occurred on device *rdev*, which indicates one of the following:

- An error counter has overflowed.

- The storage director is in force-error-log mode.
- The channel command word (CCW) read and reset buffered log is run.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

This is probably a hardware error. Contact your system support personnel.

Programmer response

Examine the outboard recorder (OBR) record within LOGREC for specific hardware error conditions and contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP6308I ***type rdev*** **AN ENVIRONMENTAL DATA PRESENT CONDITION OCCURRED**

Explanation

This message will either be displayed alone or in conjunction with one of the following diagnostic informational messages:

- **SENSE DATA LOGGED FOR THE DEVICE**
- **SEEK CHECKS LOGGED FOR THE DEVICE**
- **DATA CHECKS LOGGED FOR THE DEVICE**
- **EQUIPMENT CHECKS LOGGED FOR THE DEVICE**
- **SENSE DATA LOGGED FOR THE CONTROLLER**
- **EQUIPMENT CHECKS LOGGED FOR THE CONTROLLER**
- **EQUIPMENT CHECKS LOGGED FOR THE DEVICE ADAPTER**
- **SENSE DATA LOGGED FOR THE SUBSYSTEM STORAGE**

There exists an environmental data-present condition as well as additional diagnostic information. The device *rdev* sense data dictates which additional message is displayed.

This message may be displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

Note: The definition of "AN ENVIRONMENTAL DATA PRESENT CONDITION" depends on the hardware device in operation. Please refer to the manual of the hardware device in question for a complete description.

System action

System operation continues.

Operator response

None.

HCP6309I ***type rdev*** **A PERMANENT EQUIPMENT MALFUNCTION OF THE ALTERNATE STORAGE DIRECTOR OCCURRED**

Explanation

There exists either a permanent equipment malfunction of the alternate storage director or a state save operation in the reporting storage director on device *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

There is probably a hardware error. Contact your system support personnel.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP6310I ***type rdev*** **AN EQUIPMENT CHECK WITH PERMANENT PATH ERROR OCCURRED**

Explanation

CP detected a permanent equipment check in the logical path from the storage director to the device *rdev*, and the path is now unavailable.

This message is displayed in conjunction with other messages that provide information about channel

command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP6311I ***type rdev*** **AN OPERATION WAS TERMINATED BECAUSE A CHANNEL PROGRAM CHECK OCCURRED**

Explanation

The channel program contained a programming error on device *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP6312I ***type rdev*** **AN OPERATION WAS TERMINATED BECAUSE A CHANNEL PROTECTION CHECK OCCURRED**

Explanation

The channel attempted either to store into or to fetch from protected storage on device *rdev*. This is a programming error.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP6313A ***type rdev*** **IS WRITE INHIBITED**

Explanation

A write command is received for device *rdev* which has its R/W - read only switch in the read only position.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

If write operations are allowed to this device, set the switch to the R/W position. Otherwise, take no action.

HCP6314I ***type rdev*** **A CHANNEL CHAINING CHECK OCCURRED**

Explanation

A channel-chaining check occurred on a channel associated with device *rdev*.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

There is probably a hardware error. Contact your system support personnel.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP6315I ***rdev*** **THE LABEL IS DAMAGED**

Explanation

The DASD error recovery program detected a change in the volume serial number.

System action

System operation continues.

Operator response

Report the problem to your system administrator.

HCP6321I ***type rdev* AN OPERATION WAS TERMINATED BECAUSE RECORD *count* WAS NOT FOUND**

Explanation

CP cannot locate the record at the specified address *count* in the search argument on device *rdev*. This is probably a programming error.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

None.

HCP6322I **Device *rdev* is unavailable and offline.**

Explanation

A real device that once was available is no longer available.

System action

CP has taken the device offline to prevent anyone from using it.

Operator response

None.

HCP6323I ***type{rdev | rdev rdev rdev rdev}* no longer available to system; *{vdev | vdev vdev vdev vdev}* detached.**

Explanation

The real devices listed in the message were deleted dynamically from the real I/O configuration. This means that the corresponding virtual devices (also listed) were detached. If the real devices listed in the message are alias devices, it is possible that the devices still exist. However, the associated virtual devices were detached because PAV alias devices were reassociated with a different PAV base device or HyperPAV alias devices transitioned into PAV alias devices.

System action

The system proceeds to its next task.

User response

None.

HCP6324I **An unexpected condition occurred writing to the subchannel for device *rdev*, code = *code*.**

Explanation

A nonfatal error occurred while issuing a channel subsystem call for a device. If this is the result of attempting to detach a device, the device will still be detached.

System action

The command is executed; system operation continues.

User response

If the problem persists, it is probably a hardware malfunction. Notify your system support personnel.

HCP6351A ***type rdev* INVALID SECTOR FORMAT**

Explanation

The error recovery routine encountered a device with an invalid sector format.

System action

System operation continues.

Operator response

Format device in error for the correct sector size.

HCP6352A ***type rdev* CE MODE, DEVICE IS EXECUTING DIAGNOSTIC ROUTINE**

Explanation

The error recovery routine encountered a device that is executing a diagnostic routine.

System action

System operation continues.

Operator response

The I/O operation that encountered the error will not resume until the diagnostic testing completes. The operator may want to consider terminating the diagnostic routines so that the pending I/O operation can complete.

HCP6353I ***type rdev*** **INVALID BLOCKSIZE SPECIFIED**

Explanation

The error recovery routine encountered an incorrect block size specified in a DEFINE EXTENT command.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Format the device in error for the correct sector size.

HCP6354I ***type rdev*** **ALTERNATE SPACE NEARLY EXHAUSTED**

Explanation

The error recovery routine encountered an environmental data present condition. Alternate space nearly exhausted.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Contact your system support personnel.

HCP6355I ***type rdev*** **SECTOR RETRY THRESHOLD EXCEEDED**

Explanation

The error recovery routine encountered an environmental data present condition. A threshold exceeded condition exists in the device. This condition indicates a particular sector may be degrading and reallocation of the sector may be necessary.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Reallocate the sector.

HCP6356I ***type rdev*** **A PERMANENT I/O ERROR OCCURRED DUE TO THE ALTERNATE AREA BEING EXHAUSTED**

Explanation

The error recovery routine encountered a command reject and operation incomplete condition. A locate command has been issued with a format defective block specified in the operation byte, and space in the alternate area is exhausted.

This message is displayed in conjunction with other messages that provide information about channel command word, sense, user ID, and other variables when necessary.

System action

System operation continues.

Operator response

Contact your system support personnel.

HCP6357I ***dddd*****,TVOL,*****severity*** **ALERT,VOLUME=*****volid*****, MC=*****mc*****,ES=*****es*****,RC=*****rc-medi-fi***

Explanation

The TAPE storage subsystem has detected an abnormal operational condition within the tape cartridge that requires service attention.

The variables in this message are defined as follows:

dddd
The device used to report this condition

severity
Determined from sense format 70, byte 9(0-1): MODERATE, SERIOUS, or ACUTE; interpretation of *severity* is given below.

volid
Determined from sense format 70, byte 16-21, volume ID; this field may be all blanks when the volume ID is unknown to the I/O system.

mc
Determined from sense format 70, byte 6, message code; this field is displayed as hexadecimal digits.

es
Determined from sense format 70, byte 8(0-3), exception message code (*e*), and byte 8(4-7), service message code (*s*); these fields are displayed as hexadecimal digits.

rc-medi-fi
Determined from sense format 70, byte 11, REF code (*rc*), byte 12-13, media identifier (*medi*), and byte 22, format identifier (*fi*); these fields are displayed as hexadecimal digits.

The interpretation of *severity* is as follows:

MODERATE
High temporary read/write errors detected

SERIOUS
Permanent read/write errors detected

ACUTE
Block 0 error (possible VOL1 label error), Length error, or severe Volume Control Region error.

System action

System operation continues.

Operator response

Record all the information displayed in this message and contact your system support personnel.

Programmer response

Examine the EREP records (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data formats and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel and provide them with the information displayed in the message.

HCP6358I ***dddd*,TCU,*typ-mod*,*severity* ALERT, SER=*mmpp-sssss*,MC=*mc*,ES=*es*, REF=*ref1-ref2-ref3***

Explanation

The TAPE storage subsystem has detected an abnormal operational condition within the tape subsystem that requires service attention.

The variables in this message are defined as follows:

dddd
The device used to report this condition

typ-mod
Determined from common sense format, byte 30: machine type and model number (*tttt-mmm*); if there is only one model, the hyphen and the model field may not be shown.

severity
Determined from sense format 71, byte 9(0-1): SERVICE, MODERATE, SERIOUS, or ACUTE; interpretation of *severity* is given below.

mmpp-sssss
Determined from common sense format, byte 25-29: manufacturer (*mm*), plant of manufacture (*pp*), and machine sequence number (*sssss*)

mc
Determined from common sense format, byte 6, message code; this field is displayed as hexadecimal digits.

es
Determined from sense format 71, byte 8(0-3), exception message code (*e*), and byte 8(4-7), service message code (*s*); these fields are displayed as hexadecimal digits.

ref1-ref2-ref3
Determined from sense format 71, bytes 16-21, reference codes; these fields are displayed as hexadecimal digits.

The interpretation of *severity* is as follows:

SERVICE
No performance impact

MODERATE
Error threshold exceeded within subsystem.

SERIOUS
Degraded operation, no loss of device accessibility

ACUTE
Loss of device accessibility.

System action

System operation continues.

Operator response

Record all the information displayed in this message and contact your system support personnel.

Programmer response

Examine the EREP records (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data formats and

descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel and provide them with the information displayed in this message.

HCP6359I ***dddd*,TAPE,*typ-mod*,*severity* ALERT, SER=*mmpp-sssss*,MC=*mc*,ES=*es*, REF=*ref1-ref2-ref3***

Explanation

The TAPE storage subsystem has detected an abnormal operational condition within the device subsystem that requires service attention.

The variables in this message are defined as follows:

dddd
The device used to report this condition

typ-mod
Determined from common sense format, byte 31: machine type and model number (*tttt-mmm*); if there is only one model, the hyphen and the model field may not be shown.

severity
Determined from sense format 71, byte 9(0-1): SERVICE, MODERATE, SERIOUS, or ACUTE; interpretation of *severity* is given below.

mmpp-sssss
Determined from common sense format, byte 25-29: manufacturer (*mm*), plant of manufacture (*pp*), and machine sequence number (*sssss*)

mc
Determined from common sense format, byte 6, message code; this field is displayed as hexadecimal digits.

es
Determined from sense format 71, byte 8(0-3), exception message code (*e*), and byte 8(4-7), service message code (*s*); these fields are displayed as hexadecimal digits.

ref1-ref2-ref3
Determined from sense format 71, bytes 16-21, reference codes; these fields are displayed as hexadecimal digits.

The interpretation of *severity* is as follows:

SERVICE
No performance impact

MODERATE
Degraded operation, high temporary error rate

SERIOUS
Degraded operation, no loss of device accessibility

ACUTE
Loss of device accessibility.

System action

System operation continues.

Operator response

Record all the information displayed in this message and contact your system support personnel.

Programmer response

Examine the EREP records (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data formats and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel and provide them with the information displayed in this message.

HCP6360I ***dddd*,TLIB,*typ-mod*,*severity* ALERT, SER=*mmpp-sssss*,MC=*mc*,ES=*es*, REF=*ref1-ref2-ref3***

Explanation

The TAPE storage subsystem has detected an abnormal operational condition within the tape subsystem that requires service attention.

The variables in this message are defined as follows:

dddd
The device used to report this condition

typ-mod
Determined from common sense format, byte 30: machine type and model number (*tttt-mmm*); if there is only one model, the hyphen and the model field may not be shown.

severity
Determined from sense format 71, byte 9(0-1): SERVICE, MODERATE, SERIOUS, or ACUTE; interpretation of *severity* is given below.

mmpp-sssss
Determined from common sense format, byte 25-29: manufacturer (*mm*), plant of manufacture (*pp*), and machine sequence number (*sssss*)

mc
Determined from common sense format, byte 6, message code; this field is displayed as hexadecimal digits.

es
Determined from sense format 71, byte 8(0-3), exception message code (*e*), and byte 8(4-7), service message code (*s*); these fields are displayed as hexadecimal digits.

ref1-ref2-ref3
Determined from sense format 71, bytes 16-21, reference codes; these fields are displayed as hexadecimal digits.

The interpretation of *severity* is as follows:

SERVICE
No performance impact

MODERATE
Degraded operation, no loss of cartridge accessibility

SERIOUS
Degraded operation, loss of some cartridge accessibility

ACUTE
Loss of data/cartridge access.

System action

System operation continues.

Operator response

Record all the information displayed in this message and contact your system support personnel.

Programmer response

Examine the EREP records (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data formats and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel and provide them with the information displayed in this message.

HCP6365I ***dddd*, TVIR, *type-mod*, *severity***
ALERT, SER=*mmpp-sssss*, MC=*mc*,
ES=*es*, REF=*ref1-ref2-ref3*

Explanation

The Vitual Tape Server subsystem has detected an abnormal operational condition within the subsystem that requires service attention.

The variables in this message are defined as follows:

dddd
The device used to report this condition.

type-mod
Determined from common sense byte 30: machine type and model number (tttt-mmm); if there is only one model, the hyphen and the model field may not be shown.

severity
Determined from sense format 71, byte 9 bits(0-1): SERVICE, MODERATE, SERIOUS, or ACUTE; interpretation of severity is given below.

mmpp-sssss
Determined from common sense bytes 25-29: manufacturer (mm), plant of manufacturer (pp), and machine sequence number (sssss).

mc
Determined from common sense byte 6: message code; this field is displayed as hexadecimal digits.

es
Determined from sense format 71, byte 8: bits(0-3), exception message code (e), and bits(4-7), service message code (s); these fields are displayed as hexadecimal digits.

ref1-ref2-ref3
Determined from sense format 71, bytes 16-21: reference codes 1, 2, and 3; these fields are displayed as hexadecimal digits.

The interpretation of severity is as follows:

SERVICE
No performance impact

MODERATE
Degraded operation, no loss of cartridge accessibility

SERIOUS
Degraded operation, loss of some cartridge accessibility

ACUTE
Loss of all data/cartridge access.

System action

System operation continues.

Operator response

Record all the information displayed in this message and contact your system support personnel.

Programmer response

Examine the EREP records (OBR) for additional details of the failure. Refer to the hardware System Reference Library (SRL) manuals for sense data formats and descriptions. If a hardware problem is indicated, contact the appropriate hardware service personnel and provide them with the information displayed in this message.

HCP6369I **TAPE (*rdev*) allegiance reset**

Explanation

The device has received a Reset Allegiance CCW, and the device has been made available. The Reset Allegiance command was probably issued by a software recovery routine.

This message is displayed in conjunction with other messages that provide information about the channel command word, sense, user ID, and other variables.

System action

System operation continues.

Operator response

None.

HCP6370I **TAPE (*rdev*) medium is not formatted**

Explanation

A data check occurred because the tape cartridge is not formatted. Cartridges that have been bulk erased require hardware initialization.

This message is displayed in conjunction with other messages that provide information about the channel command word, sense, user ID, and other variables.

System action

System operation continues.

Operator response

None.

User response

Initialize tape cartridge.

HCP6372A **TAPE (*rdev*) unsupported medium**

Explanation

The medium inserted in the tape drive is not supported by the drive.

This message is displayed in conjunction with other messages that provide information about the channel command word, sense, user ID, and other variables.

System action

System operation continues.

Operator response

Remove the cartridge and replace it with a supported medium type, or mount the cartridge in a drive that supports that medium type.

HCP6373A **TAPE (*rdev*) volume removed**

Explanation

The tape drive detected that the volume was removed.

This message is displayed in conjunction with other messages that provide information the about channel command word, sense, user ID, and other variables.

System action

System operation continues.

Operator response

Reinsert the volume or stop the application.

HCP6374E **TAPE (*rdev*) a protection exception occurred**

Explanation

A Supervisor, Mode Protect, or Logical Write Protect error occurred. This is probably a software error.

This message is displayed in conjunction with other messages that provide information about the channel command word, sense, user ID, and other variables.

System action

System operation continues.

Operator response

None.

HCP6375E **TAPE (*rdev*) a write length error occurred**

Explanation

A write operation was rejected because a Short, Long, or Intermediate Block error was detected.

This message is displayed in conjunction with other messages that provide information about the channel command word, sense, user ID, and other variables.

System action

System operation continues.

Operator response

None.

HCP6376E **TAPE (*rdev*) DEVICE RETURNED UNSUPPORTED MESSAGE CODE (*xx*)**

Explanation

The tape device has generated a message code not supported by CP.

This message is displayed in conjunction with other messages that provide information about the channel command word, sense, user ID, and other variables.

System action

System operation continues.

Operator response

Use the hardware manuals to determine what action to take based on the message code (*xx*) and the information in the accompanying sense data.

HCP6400I **Quiesce request was successful for path *yy* to device(s) {*rdev*|*rdev rdev..*}**

Explanation

An IBM Service Representative has initiated a quiesce request from a device to quiesce the specified paths so service can be performed. Quiescing paths varies the paths offline (if not already offline). They cannot be varied online and are unavailable for use while a service action is being performed.

The variable definitions are:

yy
The channel path ID of the successful quiesce path request

rdev
The real device number of a device attached to the quiesced path.

System action

System operation continues.

Operator response

None.

Note: This message will be reissued as many times as necessary to show all paths and devices affected by the request. In most cases, it will only be issued once per path, but if there is a list of more than eight *rdevs* affected on the same path, the message can be issued multiple times per path.

HCP6401I **Resume request was successful for path *yy* to device(s) {*rdev*|*rdev rdev..*}**

Explanation

Servicing of the specified path has completed, and the path is varied online for use. The variable definitions are:

yy
The channel path ID of the successful resume path request

rdev
The real device number of a device attached to the quiesced path.

System action

System operation continues.

Operator response

None.

Note: This message will be reissued as many times as necessary to show all paths and devices affected by the request. In most cases, it will only be issued once per path, but if there is a list of more than eight *rdevs* affected on the same path, the message can be issued multiple times per path.

HCP6402I **Quiesce request failed because {of a vary processing failure on path *yy*|an error was detected in the request for path *yy*|path *yy* is the last path} to [online] device(s) {*rdev*|*rdev rdev..*}**

Explanation

Referring to the displayed message text, the attempt to quiesce the path or paths failed for one of these reasons:

- The specified path is reserved.
- A vary command processing failure occurred during the quiesce request.
- An error was detected in the quiesce request.
- The specified path is the last path available to the online devices. Quiesce processing does not have the ability to remove all contact with an online device. To quiesce the last path available to a device, the operator must either vary the last path to the device, or the device itself, offline.

Quiescing paths varies the paths offline (if not already offline). They cannot be varied online and are unavailable for use while a service action is being performed.

The variable definitions are:

yy
The channel path ID of the path that failed the quiesce request

rdev
The real device number of a device attached to the path that caused the quiesce to fail.

System action

Processing for the quiesce request is terminated, but system operation continues.

Operator response

Your action depends on the nature of the failure. In the case of:

The specified path being reserved:
To satisfy the request, you could cancel any task that may have the path reserved, or wait for those tasks to complete.

A vary command processing failure during the quiesce request:
If the vary command processor failed, the service representative should retry the request. If it fails again, notify the system programmer or the IBM Support Center.

An error detected in the quiesce request:
The service representative should retry the request. If it fails again, notify the system programmer or the IBM Support Center.

The problem might persist until the next IPL.

The specified path being the last path available to the online device:
Vary another path online to the devices, vary the last path offline to the devices, or vary the devices offline.

If the problem is resolved, the request may be reinitialized or resubmitted by the service representative.

Note: This message will be reissued as many times as necessary to show all paths and devices affected by the request. In most cases, it will only be issued once per path, but if there is a list of more than eight *rdevs* affected on the same path, then the message can be issued multiple times per path.

HCP6403I Quiesce request failed because guest *userid* {did not respond|issued an unsuccessful response} for path *yy* to device {*rdev*|*rdev rdev..*}

Explanation

Attempt to quiesce the paths failed because one or more guests either:

- Did not respond to a quiesce request within the allotted time.
- Issued a failing response code to a quiesce request.

Quiescing paths varies the paths offline (if not already offline). They cannot be varied online and are unavailable for use while a service action is being performed. The variable definitions are:

userid
The user ID of the guest that failed the quiesce request

yy
The channel path ID of the path that failed the quiesce request

rdev
The real device number of a device attached to the path that caused the quiesce to fail.

System action

Processing for the quiesce request is terminated, but system operation continues.

Operator response

Your action depends on the nature of the failure. In the case of:

One or more guests not responding to a quiesce request within the allotted time:
If I/O timed out during path validation, it could be a hardware error, or a guest does not support quiesce/resume requests.

One or more guests issuing a failing response code to a quiesce request:
Contact the guest system operator for more information.

After the problem is resolved, the request may be re-submitted by the service representative.

Note: This message will be reissued as many times as necessary to show all paths and devices affected by the request. In most cases, it will only be issued once per path, but if there is a list of more than eight *rdevs* affected on the same path, then the message can be issued multiple times per path.

HCP6404I Resume request failed because {of a vary processing failure on|an error was detected in the request

for} path *yy* to device(s) {*rdev*|*rdev rdev..*}

Explanation

Attempt to resume the path(s) failed for one of these reasons:

- A vary command processing failure occurred during the resume request.
- An error was detected in the resume request.

The variable definitions are:

yy
The channel path ID of the path that failed the resume request

rdev
The real device number of a device attached to the path that caused the quiesce to fail.

System action

Processing for the resume request is terminated, but system operation continues.

Operator response

If the vary command processor failed, the service representative should retry the request. If it fails again, notify the system programmer or the IBM Support Center. After the problem is resolved, the request may be resubmitted to the service representative.

If the error was detected in the resume request, vary the affected paths online to each device specified in the message. If the paths come online, they are available for use. Otherwise, the resume request should be retried. The problem might persist until the next IPL.

Note: This message will be reissued as many times as necessary to show all paths and devices affected by the request. In most cases, it will only be issued once per path, but if there is a list of more than eight *rdevs* affected on the same path, then the message can be issued multiple times per path.

HCP6407E {*rdev*|*volid*} cannot be swapped.

Explanation

The SWAP function of the HYPERSWAP command was entered for a RDEV/VOLID pair but the device listed cannot be swapped. Swap processing requires that the device be either quiesced, offline, or online and free. If the device is not quiesced, the error resulted from a failure to vary on an offline device, or the online device was in use.

System action

The command completes. System operation continues.

User response

None.

HCP6408E {*rdev*|*volid*} has I/O active for processing.

Explanation

The SWAP function of the HYPERSWAP command was entered for a pair of RDEVs/VOLIDs but the device listed has active I/O. SWAP processing is cancelled for the device pair.

System action

The command completes. System operation continues.

User response

Reenter the HYPERSWAP SWAP command for the RDEV/VOLID pair that contains the RDEV/VOLID listed.

HCP6409E {*rdev*|*volid*} and {*rdev*|*volid*} are different DASD types.

Explanation

The SWAP function of the HYPERSWAP command was entered for an RDEV/VOLID pair but the devices are not the same DASD type. Swap processing requires the device pair being swapped to be the same DASD type.

System action

The command completes. System operation continues.

User response

None.

HCP6410E The number of extents on {*rdev*|*volid*} exceeds that of {*rdev*|*volid*}.

Explanation

The SWAP function of the HYPERSWAP command was entered for the RDEV/VOLID pair listed but they were not swapped. Swap processing requires the target RDEV/VOLID to be at least the same size as that of the source RDEV/VOLID. Swap processing failed for these devices.

System action

The command completes. System operation continues.

User response

None.

HCP6411E {*rdev*|*volid*} is not quiesced.

Explanation

The RESUME function of the HYPERSWAP command was entered for the RDEV/VOLID listed but the device was not quiesced. Only quiesced devices can be entered with the RESUME function. Resume processing fails for this device.

System action

The command completes. System operation continues.

User response

None.

HCP6412E {*rdev*|*volid*} is not a valid DASD type.

Explanation

The RDEV/VOLID entered on the function of the HYPERSWAP command was not a valid DASD type. Devices entered must be either D/T3380, D/T3390, or D/T9336 DASD. For the ENABLE function, the Control Unit must be an Escon or Ficon attached ECKD D/T3990.

System action

The command completes. System operation continues.

User response

None.

HCP6413E Subclass information for {*rdev*|*volid*} and {*rdev*|*volid*} does not match.

Explanation

The SWAP function of the HYPERSWAP command was entered for an RDEV/VOLID pair but the device pair listed did not have matching subclass information. This prohibits swap processing for the pair from completing successfully.

System action

The command completes. System operation continues.

User response

None.

HCP6414E {*rdev*|*volid*} and {*rdev*|*volid*} cannot be swapped because the target device's VOLID cannot be read or written.

Explanation

The SWAP function of the HYPERSWAP command was entered but the VOLID of the target RDEV/VOLID cannot be read or updated. During SWAP processing the target device's VOLID must be read and possibly updated. SWAP processing is cancelled for the device pair listed.

System action

The command completes. System operation continues.

User response

None.

HCP6415E {*rdev*|*volid*} and {*rdev*|*volid*} cannot be swapped because the subchannels for the device pair cannot be modified.

Explanation

The SWAP function of the HYPERSWAP command was entered but the device pair cannot be swapped. During SWAP processing each device's subchannel must be modified. This process encountered an error which prevents the SWAP function from completing for the pair listed.

System action

The command completes. System operation continues.

User response

None.

HCP6416E **{*rdev*|*volid*} is already in the process of being swapped.**

Explanation

The SWAP function of the HYPERSWAP command was entered but the device listed is currently being swapped as a result of a previously issued HYPERSWAP SWAP command.

System action

The command completes. System operation continues.

User response

None.

HCP6417E **System detected I/O errors were encountered while attempting to release the real reserve on source {*rdev*|*volid*}.**

Explanation

The SWAP function of the HYPERSWAP command was issued but I/O errors were encountered on the indicated source device when an attempt to release the real reserve was made. SWAP requires that the real reserve held on a fullpack, shared minidisk be dropped for the source device. If the real reserve request fails, SWAP processing continues for the device pair. The reserve left on the source device can later be removed with the RESET RESERVE command.

System action

The command completes. System operation continues.

User response

None.

HCP6418E **System detected I/O errors were encountered while attempting to obtain the real reserve on target {*rdev*|*volid*}. The real reserve held on the source RDEV was dropped.**

Explanation

The SWAP function of the HYPERSWAP command was issued but I/O errors were encountered on the indicated target device when an attempt to obtain the real reserve was made. SWAP requires that the real reserve held on a full-pack, shared minidisk be dropped for the source device and then obtained for the target device. If the real reserve request fails for the target, swap processing fails for the device pair and the source device no longer holds the real reserve.

System action

The command completes. System operation continues.

User response

None.

HCP6419E **DASD *rdev* has not been attached because the system requires it to be attached with the VOLID parameter.**

Explanation

The ATTACH command was entered for DASD *rdev* but the device cannot be attached because the system requires it to be attached by its VOLID. The system configuration file has the ENFORCE_BY_VOLid ON statement coded and therefore all DASD devices must be attached by VOLIDs.

System action

The command completes. System operation continues.

User response

Re-enter the command using the VOLID for the device listed..

HCP6420E **Target {*rdev*|*volid*} is holding the real reserve.**

Explanation

The SWAP function of the HYPERSWAP command was entered. Swap processing detected that the indicated target device was holding the real reserve. Swap processing cannot complete on the device pair when the target device holds the real reserve.

System action

The command completes. System operation continues.

User response

None.

HCP6421E **{*rdev*|*volid*} cannot be swapped with itself.**

Explanation

The SWAP function of the HYPERSWAP command was entered with an attempt to swap the indicated device with itself. Swap processing will not allow this request to be processed.

System action

The command completes. System operation continues.

User response

Re-enter the command with a source and target device that are unique.

HCP6425I **{CP TRACE TABLE RECORDING| TRACEID *traceid*} DEFERIO TRACE DATA WILL NOT BE WRITTEN.**

Explanation

The SHUTDOWN command was issued and the trace data for the DEFERIO trace will not be written.

System action

The command is executed; system termination continues.

User response

None.

HCP6426I **{Allocating|Writing} the DEFERIO frames for traceid *traceid*.**

Explanation

This message indicates that the DEFERIO frames are being allocated or written. The allocating version of this message is issued only for DEFERIO traceid traces when the amount of FRAMES specified on the TRSAVE command is greater than 512. The writing version of this message is issued only for DEFERIO traceid traces that have more than 3 pages of trace data to be written.

System action

The command is executed; system operation continues.

User response

None.

HCP6427I ***X*% of the DEFERIO frames for traceid *traceid* have been {allocated|written}.**

Explanation

This message is displayed when 25, 50, 75 and 100 percent of the DEFERIO frames have been allocated or written. The allocating version of this message is issued only for DEFERIO traceid traces when the amount of FRAMES specified on the TRSAVE command is greater than 512. The writing version of this message is issued only for DEFERIO traceid traces that have more than 3 pages of trace data to be written.

System action

The command is executed; system operation continues.

User response

None.

HCP6428I **The variations of this message are explained below.**

— Variation 1 **{*rdev*|*volid*} is an alias HyperPAV device and is not valid for the HYPERSWAP command.**

Explanation

The *rdev/volid*entered on the function of the HYPERSWAP command is an alias HyperPAV device and is not valid for the HYPERSWAP command.

System action

The function is not performed for the *rdev/volid*. The command completes. System operation continues.

User response

None.

— Variation 2 **{*rdev*|*volid*} is an alias PAV device and is not valid for the HYPERSWAP command.**

Explanation

The *rdev/volid* entered on the function of the HYPERSWAP command is an alias PAV device and is not valid for the HYPERSWAP command.

System action

The function is not performed for the *rdev/volid*. The command completes. System operation continues.

User response

None.

HCP6429E	**{*rdev*|*volid*} is part of an unsupported configuration for the HYPERSWAP command.**

Explanation

A Parallel Access Volume (PAV), HyperPAV, or Multiple Subchannel Set (MSS) volume cannot be swapped.

For a base Parallel Access Volume (PAV), the *rdev/volid* entered on the function of the HYPERSWAP command is either dedicated to a guest with at least one alias associated with the base PAV also dedicated to the guest or is system attached and has one or more alias PAVs defined using DEFINE PAVALIAS, DASDOPT PAVALIAS, or MINIOPT PAVALIAS. For a base HyperPAV, the *rdev/volid* entered on the function of the HYPERSWAP command is either dedicated to a guest with at least one alias associated with the base HyperPAV also dedicated to the guest or is system attached and has one or more alias HyperPAVs defined using DEFINE HYPERPAVALIAS. These alias volumes reside in the same pool as the specified base HyperPAV. These configurations are not valid for the ENABLE, INCLUDE, QUIESCE, and SWAP functions.

For an MSS volume, the source and target *rdev*s entered do not have the same low-order four digits.

System action

The function is not performed for the *rdev/volid*. The command completes. System operation continues.

User response

None.

HCP6430E	**The variations of this message are explained below.**
— Variation 1	**ATTACH cannot complete because the associated PAV base is quiesced for Hyperswap.**

Explanation

PAV alias devices cannot be attached to a guest while the associated base device is quiesced for HyperSwap.

System action

No virtual device is created.

User response

Issue the ATTACH command again when the base device is no longer in a quiesced state (after HyperSwap RESUME has been issued to the base).

— Variation 2	**ATTACH cannot complete because there is at least one base device in this HyperPAV pool that is quiesced for Hyperswap.**

Explanation

HyperPAV alias devices cannot be attached to a guest while any base device in the HyperPAV pool is quiesced for HyperSwap.

System action

No virtual device is created.

User response

Issue the ATTACH command again when all base devices in the HyperPAV pool are no longer in a quiesced state (after Hyperswap RESUME has been issued to each base).

— Variation 3	**DEFINE PAVALIAS cannot complete because the associated PAV base is quiesced for Hyperswap.**

Explanation

PAV alias devices cannot be DEFINED for a guest while the associated base device is quiesced for HyperSwap.

System action

No virtual device is created.

User response

Issue the DEFINE command again when the base device is no longer in a quiesced state (after HyperSwap RESUME has been issued to the base).

— Variation 4	**DEFINE HYPERPAVALIAS cannot complete because there is at least one base device in this HyperPAV pool that is quiesced for Hyperswap.**

Explanation

HyperPAV alias devices cannot be DEFINED for a guest while any base device in the HyperPAV pool is quiesced for HyperSwap.

System action

No virtual device is created.

User response

Issue the DEFINE command again when all base devices in the HyperPAV pool are no longer in a quiesced state (after HyperSwap RESUME has been issued to each base).

HCP6431I	**The variations of this message are explained below.**
— Variation 1	**An Extent Space Efficient pool event has occurred for device {*rdev*}**

Explanation

z/VM received an interrupt indicating that an Extent Space Efficient pool event has occurred for the specified device's LSS. This indicates that the pool has reached its warning percentage, become completely exhausted or has a space constraint relieved.

System action

None.

User response

Issue Query DASD SPACE-EFFICIENT for the specified device to determine the current state of space in the Space Efficient pool. More space may need to be added to the pool from the storage controller to allow expanded usage of disks in the pool.

— Variation 2	**An Extent Space Efficient pool event has occurred for device {*rdev*}. The pool has reached the current warning level.**

Explanation

z/VM received an interrupt indicating that an Extent Space Efficient pool event has occurred for the specified device's LSS. This indicates that the pool has reached its warning percentage.

System action

None.

User response

Issue Query DASD SPACE-EFFICIENT for the specified device to determine the current state of space in the Space Efficient pool. More space may need to be added to the pool from the storage controller to allow expanded usage of disks in the pool.

— Variation 3	**An Extent Space Efficient pool event has occurred for device {*rdev*}. The pool is out of space.**

Explanation

z/VM received an interrupt indicating that an Extent Space Efficient pool event has occurred for the specified device's LSS. This indicates that the pool has become completely exhausted. Any usage of disks in the pool that require additional extents to be provisioned will encounter a busy state.

System action

None.

User response

Issue Query DASD SPACE-EFFICIENT for the specified device to determine the current state of space in the Space Efficient pool. Either free space in the pool with the RELSPACE command or add additional space to the pool from the storage controller to allow expanded usage of disks in the pool.

— Variation 4	**An Extent Space Efficient pool event has occurred for device {*rdev*}. A previous space restraint has been relieved.**

Explanation

z/VM received an interrupt indicating that an Extent Space Efficient pool event has occurred for the specified device's LSS. This indicates that the pool has had a space constraint that has been relieved.

System action

None.

User response

Issue QUERY DASD SPACE-EFFICIENT for the specified device to determine the current state of space in the Space Efficient pool.

HCP6432I	**The variations of this message are explained below.**

— Variation 1 **{*vdev*} is not on an Extent Space Efficient Volume and is not valid for the RELSPACE command.**

Explanation

The RELSPACE command has no effect on non-space efficient volumes.

System action

The function is not performed for the specified *vdev*. The command completes. System operation continues.

User response

None.

— Variation 2 **{*vdev*} is a PAV or HyperPAV alias device and is not valid for the RELSPACE command.**

Explanation

The RELSPACE command is not permitted for PAV and HyperPAV alias devices.

System action

The function is not performed for the specified *vdev*. The command completes. System operation continues.

User response

None.

— Variation 3 **{*vdev*} does not have write access and is not valid for the RELSPACE command.**

Explanation

Since the RELSPACE command causes all extents for the specified device to be released and formatted. The specified device must be accessed with write authority.

System action

The function is not performed for the specified *vdev*. The command completes. System operation continues.

User response

None.

HCP6433I **Storage controller health message on device {*rdev*}**
MC = *mc*, TOKEN = *tttt*, SSID = *ssid*, IDENT = *iiii*

Explanation

The storage controller has detected a health condition that affects one or more devices. In the message text:

rdev
is the device name.

mc
is the message code, which indicates the health of the storage controller.

Moderate severity:

01 - Device preemptive reconstruct mode
02 - RAID array rebuild in progress
03 - RAID array rebuild complete
04 - Server offline due to error
05 - Server offline due to service
06 - Dual servers online
07 - Device adapter fenced or quiesced
08 - Device adapter no longer fenced or quiesced
09 - SFI code activation in progress
0A - SFI code activation complete
0B - Host adapter code activation in progress
0C - Host adapter code activation complete
0D - Host adapter code recovery in progress
0E - Host adapter code recovery complete
0F - Last device adapter reset recovery time is excessive
10 - PPRC path degraded
11 - PPRC path no longer degraded
20 - PPRC secondary controller recovery action
21 - PPRC secondary controller warmstart recovery action
22 - PPRC secondary controller failover recovery action
23 - PPRC secondary controller failback recovery action

Serious severity:

40 - IO operations timing out on PPRC secondary controller
41 - Data error during media scrub
42 - Last device adapter reset
80 - Server multiple warmstarts

Critical severity:

C0 - Pinned nonretryable error on device
C1 - One or more devices unavailable due to NVS hardware failure

C2 - One or more devices unavailable due to NVS hardware offline

C3 - RAID rank unavailable

C4 - Last device adapter reset recovery time is excessive

tttt
is the unique value for this logical storage subsystem (LSS). Note that the message issued for each LSS contains the same token.

ssid
is the subsystem ID (SSID) for this LSS.

iiii
is variable identifier data that is based on the message code. *iiii* is:

The rank ID, if *mc* is 01, 02, or 03.

The device adapter ID, if *mc* is 07, 08, or 0F.

The interface ID, if *mc* is 0D, 0E, 10, or 11.

System action

If a HYPERSWAP command is not in progress, this message is propagated to any virtual machine with dedicated or full-pack minidisk access to the affected devices. If any of the affected devices are HYPERSWAP-enabled, this message is also logged in a Special VM Record control block (SVMREC).

User response

None.

HCP6434I **Subchannel offline device *rdev* cannot be enabled for HYPERSWAP.**

Explanation

The specified device (*rdev*) is currently in the subchannel offline state and cannot be enabled for HyperSwap.

System action

The specified device is not enabled for HyperSwap. The command completes. System operation continues.

User response

The specified device needs to be taken out of the subchannel offline state before it can be enabled for HyperSwap.

HCP6501I **The execution of the CP extension routine *routine name* has been scheduled.**

Explanation

The CP extension routine specified has been scheduled for execution.

System action

System operation continues.

User response

No user action is required.

HCP6502E **The CP extension routine name {*routine name* could not be found in the symbol table|consisting only of blanks is not valid}. The request to schedule the execution of this routine was ignored.**

Explanation

A routine name specified on the CPADDON_INITIALIZE_ROUTINES system configuration statement was not found in the system symbol table. This is probably because the routine was not included in the CP module.

System action

The execution of the routine is not scheduled. System operation continues.

User response

Check the CPADDON_INITIALIZE_ROUTINES system configuration statement to ensure the specified routine names are correct. Also ensure the routine is in the load list and was included in the CP module being IPLed.

HCP6503I **The ENABLE VALIDATE_SHUTDOWN operand on the FEATURES system configuration statement requires that the system has a system name – operand ignored**

Explanation

The ENABLE VALIDATE_SHUTDOWN operand was specified on the FEATURES system configuration statement without a system name defined by either the SYSTEM_IDENTIFIER or SYSTEM_IDENTIFIER_DEFAULT statement. If this operand was honored, you would not be able to use the SHUTDOWN command to shut down the system.

System action

VALIDATE_SHUTDOWN is disabled; system operation continues.

User response

To enable VALIDATE_SHUTDOWN, specify a system name using either the SYSTEM_IDENTIFIER or SYSTEM_IDENTIFIER_DEFAULT system configuration statement and re–IPL the system. For more information, see Using Configuration Files in *z/VM: CP Planning and Administration*.

HCP6505W IPL from FCP device and PDVOL= was not specified or was not valid

Explanation

CP has been IPLed from a FCP device and CP requires that the PDVOL= IPL parameter be specified order to build control blocks for the SYSRES/parm disk device. This wait state can occur because:

1. The PDVOL= IPL parameter was not specified
2. The value specified was not a valid device number
3. The value specified was same as the IPL FCP device number.

System action

The system enters a disabled wait state (wait state code 6505).

Operator response

Specify the PDVOL= parameter in the IPL parameters field on the Stand-Alone Program Loader (SAPL) screen. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

For a permanent solution, run the SALIPL utility and specify the PDVOL= parameter as an IPL parameter.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP6506E Secondary processor initialization failed

Explanation

Secondary processor initialization failed.

System action

System operation continues, but real secondary processors are not operative and will not be used. All virtual secondary processors defined by users will be simulated.

User response

Contact your IBM Support Center personnel to diagnose and correct the hardware support.

HCP6507E The variations of this message are explained below.

— Variation 1 Multithreading could not be enabled because horizontal polarization was specified in the system configuration file

Explanation

The system configuration file contains a request to enable multithreading, but this was not possible because horizontal polarization was also requested.

System action

System initialization continues but with multithreading disabled.

User response

Determine which function is more desirable, make appropriate changes in the system configuration file, and IPL again when convenient.

— Variation 2 Multithreading could not be enabled because the Multithreading Facility is not installed

Explanation

The system configuration file contains a request to enable multithreading, but this was not possible because the processor or configuration does not support multithreading.

System action

System initialization continues but with multithreading disabled.

User response

Verify the hardware capabilities of the processor you are using.

— Variation 3 **Multithreading could not be enabled because corequisite facility *nn* is not available**

Explanation

The system configuration file contains a request to enable multithreading, but this was not possible because a required hardware facility is not available. This is likely a hardware problem. The specific facility that is not available is represented by the number *nn*, which might be useful for IBM to diagnose the problem.

System action

System initialization continues but with multithreading disabled.

User response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

— Variation 4 **Multithreading could not be enabled because the IPL processor's core ID value is too high**

Explanation

The system configuration file contains a request to enable multithreading, but this was not possible because the IPL processor's address was too high. This situation could occur if the system had an abend and during restart processing did not successfully restart a primary processor at a lower address.

System action

System initialization continues but with multithreading disabled.

User response

Ensure that processors with addresses less than or equal to X'1F' (if MAX_THREADS is 2) are configured and available on the system. Then issue the SHUTDOWN REIPL command.

— Variation 5 **Multithreading could not be enabled because the logical partition mode is {ESA/390| GENERAL}**

Explanation

The system configuration file contains a request to enable multithreading, but this was not possible because the logical partition mode is {ESA/390| GENERAL}.

System action

System initialization continues but with multithreading disabled.

User response

Verify the mode of the logical partition you are using. If multithreading is desired, change the partition mode to LINUX only or z/VM. Multithreading can be enabled only if the logical partition can include IFL processors.

— Variation 6 **Multithreading could not be enabled because CP is running in a LINUX only logical partition with CP processors**

Explanation

The system configuration file contains a request to enable multithreading, but this was not possible because CP is running in a LINUX only logical partition with CP processors.

System action

System initialization continues but with multithreading disabled.

User response

Verify the mode of the logical partition and the type of processors you are using. Multithreading can be enabled only if the logical partition can include IFL processors. For a LINUX only partition, this is possible only for an all IFL configuration.

— Variation 7 **Multithreading could not be enabled because rebalance was specified in the system configuration file**

Explanation

The system configuration file contains a request to enable multithreading, but this was not possible

because SRM DSPWDMETHOD REBALANCE was also requested.

System action

System initialization continues but with multithreading disabled.

User response

Determine which function is more desirable, make appropriate changes in the system configuration file, and IPL again when convenient.

HCP6508E Enabling of multithreading failed with reason code *rc*

Explanation

CP requested the hardware to enable multithreading but it failed. The specific failure is represented by the reason code, which might be useful for IBM to diagnose the problem.

System action

System initialization continues but with multithreading disabled

User response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP6509I The variations of this message are explained below.

— Variation 1 The requested number *nn* of the operand {MAX_THREADS|ALL|CP|IFL|ICF|ZIIP} in the MULTITHREADING statement is larger than the hardware-supported number *hh* or the CP-supported number *cc* and has been changed to *mm*.

Explanation

The requested number of one of the operands on the MULTITHREADING statement is larger than the number allowed by the hardware or CP.

System action

System initialization continues but the activated number is reduced to the lesser of the hardware-supported number or the CP-supported number.

User response

No user action is required because CP adjusts the number automatically. To eliminate this message, change the MULTITHREADING statement to specify a number allowed by both the hardware and CP.

— Variation 2 The requested number *nn* of the operand {ALL|CP|IFL|ICF|ZIIP} in the SET MULTITHREAD command is larger than the hardware-supported number *hh* or the CP-supported number *cc* and has been changed to *mm*.

Explanation

The requested number of one of the operands on the SET MULTITHREAD command is larger than the number allowed by the hardware or CP.

System action

Command processing continues but the activated number is reduced to the lesser of the hardware-supported number or the CP-supported number.

User response

No user action is required because CP adjusts the number automatically.

HCP6510E The MAX_THREADS value *value1* conflicts with the {ALL|CP|IFL|ICF|ZIIP} value *value2*

Explanation

The value specified for the indicated operand cannot be greater than the value specified for the MAX_THREADS operand. It is not possible to have more threads for the CPU type than the number requested on the MAX_THREADS operand.

System action

CP ignores the statement; system operation continues.

User response

Correct the values specified on the MULTITHREADING statement in the system configuration file.

HCP6511E MULTITHREADING statement was previously specified -- statement ignored.

Explanation

An additional MULTITHREADING statement was found in the system configuration file. Only one statement is allowed. Each subsequent MULTITHREADING statement produces this error and is ignored.

System action

CP ignores the statement; system operation continues.

User response

Correct the statements in the system configuration file by specifying only one statement that includes all the desired operands.

HCP6512E **The requested number *nn* of the operand {ALL|CP|IFL|ICF|ZIIP} is larger than the effective maximum threads value *cc***

Explanation

The requested number of one of the operands on the SET MULTITHREAD command is larger than the number allowed by the current multithreading configuration.

System action

CP does not execute the command; system operation continues.

User response

Modify the command so all requested thread count values are supported by the current multithreading configuration. Reissue the corrected command.

HCP6513E ***command1* not allowed when a multithreading configuration change is already in progress.**

Explanation

The issued command is not allowed while a multithreading configuration change is active.

System action

CP does not execute the command; system operation continues.

User response

After the multithreading configuration change is complete, retry the original command. The QUERY MULTITHREAD command can be used to determine when SET MULTITHREAD processing has completed.

HCP6513I **A multithreading configuration change is in progress.**

Explanation

The issued command cannot provide additional information while a multithreading configuration change is active.

System action

System operation continues.

User response

After the multithreading configuration change is complete, retry the original command.

HCP6514I **Processor reconfiguration for a multithreading configuration change has started.**

Explanation

The SET MULTITHREAD command changes the multithreading configuration in a manner that may require addition or removal of processors associated with threads being activated or deactivated. This message indicates the beginning of the asynchronous processing that handles the processor reconfiguration.

System action

Processing of the multithreading configuration change requested by the SET MULTITHREAD command has started.

User response

No action is required in response to this message. This is a valid and expected message. Completion of the asynchronous processing will be indicated by message HCP6517I.

HCP6515I **Processor *nnnn* online due to thread activation.**

Explanation

The change to the multithreading configuration required the addition of a processor corresponding to the activated thread.

System action

Processing of the multithreading configuration change requested by the SET MULTITHREAD command continues.

User response

No action is required in response to this message. This is a valid and expected message describing the changes to the processor configuration as a result of the issued command.

HCP6516I Processor *nnnn* offline due to thread deactivation.

Explanation

The change to the multithreading configuration required the removal of a processor corresponding to the deactivated thread.

System action

Processing of the multithreading configuration change continues.

User response

No action is required in response to this message. This is a valid and expected message describing the changes to the processor configuration as a result of the issued command.

HCP6517I Processor reconfiguration for a multithreading configuration change has completed.

Explanation

The SET MULTITHREAD command changes the multithreading configuration in a manner that may require addition or removal of processors associated with threads being activated or deactivated. This message indicates the completion of the asynchronous processing that handles the processor reconfiguration.

System action

Processing of the SET MULTITHREAD command has completed.

User response

No action is required in response to this message. This is a valid and expected message.

HCP6522I Recovery Boost is {active | no longer active}

Explanation

The System Recovery Boost function is either active or is no longer active.

- If the message indicates System Recovery Boost is active, on a first-level z/VM system the activation occurs during system initialization and shutdown if the following conditions are true:
  - The FEATURES statement in the system configuration file does not include the DISABLE RECOVERY_BOOST operand.
  - The necessary hardware facility exists.
  - The configuration is eligible for the boost. A configuration is eligible if it includes subcapacity general purpose processors.

  If z/VM is not running as a first-level system, this message indicates that the underlying first-level system has activated the boost.
- If the message indicates System Recovery Boost is no longer active, on a first-level z/VM system CP automatically deactivates the boost 60 minutes after it was activated during system initialization, and after 30 minutes during system termination. If z/VM is not running as a first-level system, this message indicates that the underlying first-level system has deactivated the boost.

System action

Normal operation continues.

Operator response

None.

HCP6523E The variations of this message are explained below.

— Variation 1 Recovery Boost was not activated because the machine facility is not available

Explanation

The system configuration file has a FEATURES statement that specifies ENABLE RECOVERY_BOOST, but the System Recovery Boost was not activated because the machine facility is not available.

System action

System initialization continues but with the System Recovery Boost function disabled.

Operator response

Verify the hardware capabilities of the processor you are using.

— Variation 2	**Recovery Boost was not activated because all processors are full capacity**

Explanation

The system configuration file has a FEATURES statement that specifies ENABLE RECOVERY_BOOST, but the System Recovery Boost was not activated because this function would provide no benefit. The boost applies to only subcapacity general purpose ("CP") engines. Either this partition has no general purpose logical processors, or the CPs on this machine are already at full capacity.

System action

System initialization continues but with the System Recovery Boost function disabled.

Operator response

Verify the hardware capabilities of the processor you are using.

— Variation 3	**Recovery Boost was not activated due to a model-dependent reason**

Explanation

The system configuration file has a FEATURES statement that specifies ENABLE RECOVERY_BOOST, but the System Recovery Boost was not activated due to a model-dependent error.

System action

System initialization continues but with the System Recovery Boost function disabled.

Operator response

Verify the hardware capabilities of the processor you are using.

HCP6525E	**The variations of this message are explained below.**
— Variation 1	**External Security Manager is unavailable.**

Explanation

CP made an external security manager (ESM) request, but the server attached to the ACI interface was unable to process the request.

System action

The command is not executed; system operation continues.

User response

The security server is currently unavailable, so authorization to use the specified command or function cannot be obtained. Retry at a later time or contact your IBM Support Center personnel. This message can also be issued when the system operator does not respond within a reasonable amount of time to a transaction-related prompt, such as RACF ICH302D. In this case, the ESM remains available for other transactions.

— Variation 2	**The External Security Manager on *sysname* is unavailable.**

Explanation

CP made an external security manager (ESM) request, but the server attached to the ACI interface was unable to process the request. This request occurred on another member (*sysname*) of the SSI cluster during processing of a remote request.

System action

The command is not executed; system operation continues.

User response

The security interface on SSI member *sysname* is unavailable. Authorization to run the specified function is temporarily curtailed. Retry at a later time.

— Variation 3	**The External Security Manager on *sysname* returned an unexpected return code.**

Explanation

CP made an external security manager (ESM) request and the request was denied with an unexpected result. This request occurred on another member (*sysname*) of the SSI cluster during processing of a remote request.

System action

The command is not executed; system operation continues.

User response

The security interface on SSI member *sysname* rejected the request unexpectedly. Check the logs of the ESM on *sysname* to determine why this occurred.

HCP6526I TDISK space on device *rdev* is being cleared.

Explanation

The temporary disk space on the device is in the process of being cleared. TDISK space on that device will be cleared with binary zeros and made available in units of 10 cylinders at a time.

System action

System operation continues.

Operator response

None.

HCP6527I TDISK space on device *rdev* is now available.

Explanation

The first 10 cylinders (or fewer, if the first TDISK area on the device does not contain 10 cylinders) of the temporary disk space on the device have been cleared and are available. TDISK space will continue to be cleared and marked available in units of 10 cylinders at a time. However, this message will be issued only once.

System action

System operation continues.

Operator response

None.

HCP6528E The ESM has more than 2000 VLAN entries so the COUPLE command cannot be completed.

Explanation

The COUPLE command cannot be completed because the administrator for the External Security Manager (ESM) has assigned too many VLAN IDs when authority was granted for a specific user ID. A maximum of 2000 VLAN IDs is allowed. The connection fails.

System action

The COUPLE operation is not performed.

User response

Ask your ESM administrator to remove some of the VLANs from the user ID/VLAN permission list. After the problem is fixed, repeat the COUPLE command.

HCP6530I There are no {priority|non-priority} messages currently outstanding.

Explanation

This message is issued in response to a QUERY VMSG or QUERY PVMSG command entered by the virtual machine console operator. The service processor being simulated by z/VM has received no messages of the designated type from the operating system running in the virtual machine. Previous messages received from the guest operating system may have been deleted at the request of either the virtual machine console operator or the guest operating system.

System action

System operation continues.

Operator response

None.

HCP6531E The operating system will not accept commands from the service processor.

Explanation

This message is issued in response to a VINPUT command entered by the virtual machine console operator. The operating system running in an operator's virtual machine (for example, the guest operating system) will not accept commands from the service processor (being simulated by z/VM).

System action

The VINPUT command is rejected. System operation continues.

User response

Commands for the guest operating system must be entered from an operating system console. Verify that the operating system allows use of the system

console as an operating system console. If so, consult the operations manual for the operating system to determine under what conditions the operating system will accept commands entered from the system console.

HCP6532I **There is no {priority|non-priority} message currently outstanding with message number *nnnn* assigned to it.**

Explanation

This message is entered in response to a VDELETE command entered by the virtual machine console operator. The service processor, being simulated by z/VM, has no message of the designated type with message number *nnn* on its queue of messages that it has intercepted from the operating system running in your virtual machine. The message may have been deleted at the request of the operating system running in your virtual machine.

System action

System operation continues.

Operator response

Message numbers are assigned to messages, for deletion purposes, by the QUERY VMSG/PVMSG command. Reenter the QUERY VMSG/PVMSG command followed by the VDELETE command specifying the message number for the message to be deleted.

HCP6533A **Following is a priority message received by the service processor - use the VINPUT command to respond:**

Explanation

This message is displayed on your virtual machine operator's console when CP intercepts a priority message that was sent by the operating system running in your virtual machine to the service processor (simulated by CP) for display on the system console attached to the hardware processor. CP displays this CP message before displaying the intercepted operating system priority message on your virtual machine operator's console so that you will know that the operating system message is a priority message that must be responded to immediately.

System action

CP places the virtual machine operator's console in CP READ mode so that you may respond to the operating system message that follows.

Operator response

None.

User response

Enter the appropriate operating system command using the CP VINPUT command so that z/VM will route the specified operating system command to the operating system running in your virtual machine as though the command originated from the service processor (which provides support for the system console attached to the hardware processor).

HCP6535E **A paging error occurred reading a pageable page table from DASD *rdev* volume *device identifier*. System resources (up to 256 DASD paging slots) may have been lost.**

Explanation

The error was caused by bringing the page into real storage from DASD. This is a probable hardware error.

System action

System operation continues.

Operator response

Examine the console messages or LOGREC, or both, for the DASD involved.

User response

Re-IPL the virtual machine.

Programmer response

Contact your IBM Support Center.

HCP6536E **The variations of this message are explained below.**

— Variation 1 **The link address *xxx* exceeds two digits**

Explanation

A DEFINE CU or MODIFY CU command was issued and the link address specified contained more than two digits. The processor only supports link addresses of two digits or less.

System action

The command failed. System operation continues.

User response

Reissue the command specifying a link address of one or two digits.

— Variation 2 **Number of link addresses does not match the number of channel paths**

Explanation

A DEFINE CU or MODIFY CU command was issued and the number of link addresses specified did not equal the number of channel paths specified.

System action

The command failed. System operation continues.

User response

When you specify link addresses on the DEFINE CU or MODIFY CU command, you must provide a link address for each channel path identifier (CHPID) specified, in the same order. Reissue the command specifying the same number of link addresses and channel paths.

HCP6540I **The I/O configuration is not in a valid state; HCD recovery is required.**

Explanation

During system re-initialization, it was determined that HCD is in control of the hardware I/O configuration and that the current hardware I/O configuration is in an invalid state that does not match a known configuration defined in a production IODF. HCD recovery is required to dynamically change the hardware I/O configuration so that it will match a known configuration defined in a production IODF.

The configuration was probably left in an invalid state because VM was restarted during the processing of an HCD dynamic I/O request.

System action

System re-IPL continues.

User response

If HCD dynamic I/O capabilities are desired, then HCD dynamic I/O recovery must be performed before any other HCD dynamic I/O function can be attempted. Successful recovery will return the hardware I/O configuration to a known state, allowing subsequent HCD dynamic I/O requests.

HCP6543I **The variations of this message are explained below.**

Explanation

- HCD is now disabled, but the machine would not enter configuration mode to allow a VM configuration token to be established.
- HCD is now disabled, but a VM configuration token was not established because HCD was not enabled for dynamic hardware changes.

A DISABLE HCD command was issued to disable HCD's dynamic I/O capability for this VM system. Even though HCD was successful disabled, CP was either unable (could not enter configuration mode) or didn't attempt (because HCD was not currently enabled for dynamic hardware changes on this z/VM system) to establish a z/VM configuration token that would have enabled the use of z/VM's dynamic I/O commands to change the hardware I/O configuration. However, the ability to use CP commands to dynamically change the software I/O configuration is now enabled if HCD was controlling the software I/O configuration.

System action

Command complete; system operation continues.

User response

Re-IPL the system to re-enable HCD dynamic I/O capabilites.

HCP6544E **DISABLE HCD command failed. The machine would not enter configuration mode to allow a VM configuration token to be established.**

Explanation

A DISABLE HCD command that was issued to disable HCD's dynamic I/O capability for this VM system failed. HCD was enabled for dynamic I/O hardware changes, but the attempt to establish a VM configuration token failed because CP was unable to enter configuration mode.

System action

The command was was not executed and HCD is still enabled; system operation continues.

User response

Issue the same command again and see if the error persists. If it does and you still wish to disable HCD dynamic I/O capabilities, then reissue the command with the FORCE parameter (DISABLE HCD FORCE).

DISABLE HCD with the FORCE parameter disables HCD, even though a VM configuration token cannot be established. After the command is executed, HCD will be disabled and VM's dynamic I/O command interface to change the hardware I/O configuration will be unusable, since a VM configuration token could not be established. However, CP's ability to dynamically change the software I/O configuration will be enabled if HCD was controlling the software I/O configuration.

HCP6545E **HCD currently controls the hardware configuration. All CP hardware configuration commands are disabled.**

Explanation

You tried to execute a command that is currently not allowed because HCD controls the hardware I/O configuration.

System action

The command was not executed; system operation continues.

User response

If you want to use VM's dynamic I/O commands to control the hardware I/O configuration instead of HCD, then issue the DISABLE HCD command and the SET DYNAMIC_I/O ON command.

Note: Once HCD is disabled, it can only be re-enabled by re-IPLing the system.

HCP6546E **HCD currently controls the software configuration. All CP software configuration commands are disabled.**

Explanation

You tried to execute a command that is currently not allowed because HCD is controlling the software I/O configuration.

System action

The command was not executed; system operation continues.

User response

If you want VM to control the software I/O configuration instead of HCD, then issue the DISABLE HCD command.

Note: The DISABLE HCD command disables HCD's control of the hardware and software I/O configuration. HCD can be re-enabled only by re-IPLing the system.

HCP6547E **Device *rdev* cannot be brought online because HCD is in the process of dynamically changing this device.**

Explanation

CP is currently processing an HCD dynamic I/O request, which is affecting the device. The device must remain in an offline state until the dynamic I/O request is completed.

System action

The command is failed and system operation continues.

User response

Query the device and if it is still offline, issue the command again.

HCP6548E **CHPID *chpid* cannot be brought online because HCD is in the process of dynamically changing this CHPID.**

Explanation

CP is currently processing an HCD dynamic I/O request, which is affecting the CHPID. The CHPID must remain in an offline state until the dynamic I/O request is completed.

System action

The command was not executed; system operation continues.

User response

Reissue the command.

HCP6549E **The subchannel for device *rdev* cannot be brought online because HCD is in the process of dynamically changing this device.**

Explanation

CP is currently processing an HCD dynamic I/O request, which is affecting the device. The subchannel for the device must remain in an offline state until the dynamic I/O request is completed.

System action

The command was not executed; system operation continues.

User response

Reissue the command.

HCP6550I HCD is currently disabled for hardware changes.

Explanation

HCD is unable to dynamically change the hardware I/O configuration because the configuration token in the active production IODF does not match the current channel subsystem configuration token.

System action

System operation continues.

User response

In order to enable HCD for dynamic I/O hardware changes on this system, the active production IODF must be dynamically changed to a production IODF that contains a configuration token matching the current channel subsystem configuration token.

HCP6551I User *userid* will not be monitored for the APPLDATA domain because it is not authorized

Explanation

A MONITOR SAMPLE/EVENT ENABLE APPLDATA command was entered, but the user specified by *userid* was not authorized. To be eligible for the APPLDATA domain, the directory entry for this user ID must contain the statement OPTION APPLMON. This statement authorizes the user to issue DIAGNOSE code X'DC', which declares/deletes buffers in which application data is placed.

System action

The user ID specified is not enabled for the APPLDATA domain.

User response

Contact your systems programmer to have the OPTION APPLMON statement coded in your directory entry.

HCP6552E The size of the {*event*|*sample*} configuration area cannot be changed because {*event*|*sample*} monitoring has already been started.

Explanation

A MONITOR EVENT CONFIG or MONITOR SAMPLE CONFIG command has been entered, but a monitor command has already been entered to start that type of monitoring. Therefore, the number of pages to be reserved for the configuration records for that type cannot be changed.

System action

The command is rejected.

User response

If you want to change the size of the configuration area, the corresponding type of monitoring must be stopped first. Then you can enter a MONITOR EVENT (or SAMPLE) CONFIG command to specify the number of pages you want reserved for configuration records, and can restart monitoring.

HCP6553E *value* is an invalid size for monitor {event|sample} CONFIG.

Explanation

The value specified for CONFIG SIZE in the MONITOR command is invalid. This message is generated when one of the following is true:

- A nonnumeric value was specified.
- The CONFIG value is less than the minimum value required, or greater than the maximum value allowed, as documented for the MONITOR command.

System action

The command is rejected.

User response

Determine the reason why the specified value is invalid, and reenter the desired command with a valid value.

HCP6554E **The MONITOR EVENT START failed because the event partition size of *n* pages is not large enough. At least *m* pages are currently required.**

Explanation

A MONITOR EVENT START or MONITOR START command has been entered to start event monitoring. The size of the event partition, which was specified on the command or defaulted to 50% of the saved segment, contains only *n* pages, which is not enough pages to contain the pages reserved for event configuration records and the minimum number of pages for event data records (8 pages).

System action

The command is rejected.

User response

There are several actions you can take to make more saved segment pages available for the event partition, or to reduce the number of pages required, or both.

Enter the QUERY MONITOR EVENT command to display the number of pages reserved for configuration records. Then do one or more of the following:

- If the number of pages reserved for event configuration records is larger than required, use the MONITOR EVENT CONFIG command to reduce that number.
- Increase the size of the event partition by using the PARTITION option (when you start event monitoring) to specify a larger number at least as large as 8 plus the number of pages reserved for event configuration records, or use a larger saved segment if defaulting.

Reenter the command to start event monitoring.

HCP6555E **The MONITOR EVENT START failed because even with the largest possible DCSS, the default partition size will not be large enough. At least *n* pages are currently needed.**

Explanation

A MONITOR EVENT START or MONITOR START command has been entered to start event monitoring. No user is currently connected to *MONITOR, so the saved segment to be used is not known to monitor. However, even 50% of the largest possible saved segment will not contain *n* pages, the number of pages needed to contain those pages currently reserved for configuration records and the minimum number of pages (8) needed for event data records.

System action

The command is rejected.

User response

Make more saved segment pages available for the event partition or to reduce the number of pages required, or both.

Enter the QUERY MONITOR EVENT command to display the number of pages reserved for configuration records.

Then do one or more of the following:

- If the number of pages reserved for event configuration records is larger than required, use the MONITOR EVENT CONFIG command to reduce that number.
- Increase the size of the event partition by using the PARTITION option (when you start event monitoring) to specify a larger number at least as large as 8 plus the number of pages reserved for event configuration records.

Reenter the command to start event monitoring.

HCP6556E **{Sample|Event} monitoring cannot start because there are not enough pages available in the DCSS *dcssname*. *n* pages are available.**

Explanation

A MONITOR START command has been entered to start event and/or sample monitoring, and the saved segment *saved segment name* previously established as the monitor saved segment does not have enough unused pages to start the requested type of monitoring.

For sample monitoring, this means that the available space, *n* pages, is not large enough to contain the reserved number of pages for sample configuration records plus at least 1 page for sample data records.

For event monitoring, this means that the available space, *n* pages, is not large enough to contain the number of pages specified for the event partition.

System action

The command is rejected.

User response

Enter QUERY NSS *saved segment name* to determine the number of pages in the saved segment being used by monitor.

If starting event monitoring has failed, you can do one or more of the following:

- Reenter the MONITOR EVENT START command with the PARTITION option specifying fewer than *n* pages.

  Note: The number of pages requested for the event partition must be at least the number of pages reserved for event configuration records plus 8. If not, use the MONITOR EVENT CONFIG command to redefine the number of pages reserved for event configuration records *before* entering the command to start event monitoring.
- In addition to, or instead of the above, you can reduce the size of the sample area before starting event monitoring by the following actions.
  - Enter MONITOR SAMPLE STOP to stop sample monitoring.
  - Use the MONITOR SAMPLE CONFIG command to redefine the number of pages reserved for sample configuration records. The number must not be greater than the size of the saved segment, minus the desired number of pages in the event partition, minus 1 page for sample data records.
  - Restart sample monitoring (MONITOR SAMPLE START command).
  - Enter the MONITOR EVENT START command with the PARTITION option specifying a value that is not greater than the number of pages in the saved segment, minus the minimum number of pages in the sample area (the number of pages reserved for sample configuration records, minus 1).

If starting sample monitoring has failed, you can do one or more of the following actions.

- If event monitoring has *not* been started,
  - Redefine the number of pages reserved for sample configuration records. The number should be not greater than the number of pages in the saved segment minus 1.
  - Reenter the command to start sample monitoring.
- If event monitoring has been started,
  - Use the QUERY MONITOR EVENT command to determine the number of pages currently reserved for event configuration records and for the entire event partition.
  - Do one or more of the following:
    - Redefine the number of pages reserved for sample configuration records. The number should be not greater than the size of the saved segment, minus the size of the event partition, minus 1.
    - Reduce the size of the event partition.
    - Stop event monitoring (MONITOR EVENT STOP command), and restart it specifying a smaller partition size.

      Note: The number of pages requested for the event partition must be not less than the number of pages reserved for event configuration records plus 8. If necessary, use the MONITOR EVENT CONFIG command to redefine the number of pages reserved for event configuration records *before* entering the command to start event monitoring.
- Restart sample monitoring.

If the saved segment is still too small, contact your system programmer and request that the saved segment be enlarged.

Programmer response

To provide a larger saved segment for monitor, enter the MONUSER SEVER ALL command to end all connections to *MONITOR. Then redefine the saved segment to have more pages in the first range of type SC pages (DEFSEG and SAVESEG commands), or use a different saved segment.

HCP6557E **{Sample|Event} monitoring cannot start because even the largest possible DCSS won't have enough pages. At most, *n* pages will be available.**

Explanation

A MONITOR START command has been entered to start event or sample monitoring, or both. No user is currently connected to *MONITOR, so the saved segment to be used is not known to monitor. However, even the largest possible saved segment would not have enough pages to contain the number of pages currently reserved for configuration records and the minimum number of pages needed for data records.

System action

The command is rejected.

User response

Use the DEFSEG command to determine the maximum number of pages that can be contained in a saved segment.

If starting event monitoring has failed, you can do one or more of the following:

- Reenter the MONITOR EVENT START command with the PARTITION option specifying fewer than *n* pages.

  Note: The number of pages requested for the event partition must be at least the number of pages reserved for event configuration records plus 8. If not, use the MONITOR EVENT CONFIG command to redefine the number of pages reserved for event configuration records *before* entering the command to start event monitoring.
- Reduce the size of the sample area before starting event monitoring.
  - Enter MONITOR SAMPLE STOP to stop sample monitoring.
  - Use the MONITOR SAMPLE CONFIG command to redefine the number of pages reserved for sample configuration records. The number must not be greater than the maximum size of a saved segment, minus the desired number of pages in the event partition, minus 1 page for sample data records.
  - Restart sample monitoring (MONITOR SAMPLE START command).
  - Enter the MONITOR EVENT START command with the PARTITION option specifying a value that is not greater than the maximum number of pages in a saved segment, minus the minimum number of pages in the sample area (the number of pages reserved for sample configuration records, minus 1).

If starting sample monitoring has failed:

- Use the QUERY MONITOR EVENT command to determine the number of pages currently reserved for event configuration records and for the entire event partition.
- Do one or more of the following:
  - Use the MONITOR SAMPLE CONFIG command to redefine the number of pages reserved for sample configuration records. The number should not be greater than the maximum size of a saved segment, minus the size of the event partition, minus 1.
  - Reduce the size of the event partition.
  - Stop event monitoring (MONITOR EVENT STOP command), and restart it specifying a smaller partition size.

    Note: The number of pages requested for the event partition must be not less than the number of pages reserved for event configuration records plus 8. If necessary, use the MONITOR EVENT CONFIG command to redefine the number of pages reserved for event configuration records *before* entering the command to start event monitoring.
- Restart sample monitoring

HCP6558E The MONITOR EVENT START failed because the default partition size cannot be allocated. Only *n* pages are available.

Explanation

A MONITOR EVENT START command has been entered to start event monitoring. The PARTITION option was not specified, so monitor attempted to allocate 50% of the saved segment to the event partition. However, sample monitoring has already been started, and the number of pages currently reserved for sample recording is greater than 50% of the saved segment.

System action

The command is rejected.

User response

Either reduce the number of pages reserved for sample recording, or specify an event partition size that is less than *n* pages.

To reduce the number of pages reserved for sample recording:

- Use the QUERY NSS command to determine the number of pages in the first type SC page range of the saved segment.
- Use the QUERY MONITOR SAMPLE command to check the number of pages currently reserved for sample configuration records.

  If larger than necessary, do the following.
  - Enter MONITOR SAMPLE STOP to stop sample monitoring.
  - Use the MONITOR SAMPLE CONFIG command to reserve a smaller number of pages for sample configuration records.
  - Restart sample monitoring (MONITOR SAMPLE START command).

- If the number of pages reserved for sample configuration records plus 1 is not greater than half the size of the saved segment, you can start event monitoring with the partition defaulted to 50% of the saved segment.

  If it is greater, you must specify a partition size no larger than the size of the saved segment, minus the number of pages reserved for sample configuration records, minus 1.

HCP6559E **The MONITOR EVENT START failed because even with the largest possible DCSS, the default partition size could not be allocated. At most, *n* pages are available.**

Explanation

A MONITOR EVENT START or MONITOR START command has been entered to start event monitoring. The PARTITION option was not specified, so monitor will attempt to allocate 50% of the saved segment to the event partition. No user is currently connected to *MONITOR, so the saved segment to be used is not currently known to monitor.

However, sample monitoring has already been started, and the number of pages currently reserved for sample recording requires more than 50% of even the largest possible saved segment.

System action

The command is rejected.

User response

Either reduce the number of pages reserved for sample recording, or specify an event partition size that is less than *n* pages.

To reduce the number of pages reserved for sample recording:

- Use the DEFSEG command to determine the maximum number of pages in a saved segment.
- Use the QUERY MONITOR SAMPLE command to check the number of pages currently reserved for sample configuration records.

  If larger than necessary, do the following.

  – Enter MONITOR SAMPLE STOP to stop sample monitoring.

  – Use the MONITOR SAMPLE CONFIG command to reserve a smaller number of pages for sample configuration records.

  – Restart sample monitoring (MONITOR SAMPLE START command).
- If the number of pages reserved for sample configuration records plus 1 is not greater than half of the maximum size of a saved segment, you can start event monitoring with the partition defaulted to 50% of the saved segment.

  If it is greater, you must specify a partition size no larger than the maximum size of a saved segment, minus the number of pages reserved for sample configuration records, minus 1.

HCP6577E **Invalid ALET - *alet*.**

Explanation

The ALET is invalid because:

- The ALET *alet* is longer than eight hexadecimal characters
- Or the ALET contains non-hexadecimal characters. If *alet* is a valid command operand, the value after the ALET operand is missing.

System action

The command is not executed; system operation continues.

User response

Issue the command with a correctly specified ALET operand.

HCP6578E **Invalid {access register|ASIT| address space identifier} - *option***

Explanation

The access register you have supplied is incorrect for one of the following reasons:

- The operand is longer than 1 hex or 2 decimal characters.
- The operand is greater than 15.
- The operand contains a non-hex character.
- The operand is not followed by a period.

The ASIT you have supplied is incorrect for one of the following reasons:

- The operand is longer than 16 hex characters.
- The operand contains a non-hex character.
- The operand is not followed by a period.

The address space identifier you have supplied is incorrect for one of the following reasons:

- The operand is longer than 33 hex characters.

- The operand is not followed by a period.

System action

The command does not run; system operation continues.

User response

Reenter the command; correctly specify the operand.

HCP6580E Device *rdev* is active.

Explanation

A CP SET RDEVICE command was entered that attempted to change the characteristics of an offline device which is currently processing an I/O request.

System action

CP rejects the request to change the characteristics of the device at *rdev*, but continues to process requests for changes to other devices specified on the same CP SET RDEVICE command.

User response

Verify that the device address is correct. If it is, then enter the CP SET RDEVICE command again for the device because it may be done processing I/O requests.

HCP6600E An error was detected by installation-wide exit {*CP module name*|point 1210} - return code *nnnn*[.]

Explanation

Code has been added to the indicated CP module or CP exit point by your installation. An error was detected by this code and the type of error is indicated by the return code.

System action

Processing of the command ends. System operation continues.

User response

Contact your system support personnel for a description of the return codes issued by the indicated CP module name or CP exit point.

HCP6601E Variations of this message are explained below.

Explanation

- No function specified
- No Persistent Data Record device number specified
- No SSI name specified

A required operand is missing.

System action

The FORMSSI command is not executed.

User response

Consult the FORMSSI documentation and reenter the command. See FORMSSI in *z/VM: CP Commands and Utilities Reference*.

HCP6602E Function *name* not recognized

Explanation

The function specified on a FORMSSI command was not valid.

System action

The command is not executed.

User response

Consult the FORMSSI documentation and reenter the command. See FORMSSI in *z/VM: CP Commands and Utilities Reference*.

HCP6603E Variations of this message are explained below.

Explanation

- "*name*" is not a supported SSI name
- "*vdev1*" is not a supported Persistent Data Record device

FORMSSI processing detected an error with one of the operands that was supplied. This message is displayed if no device exists at the specified virtual device number.

System action

The command is not executed.

User response

Consult the FORMSSI documentation and reenter the command. See FORMSSI in *z/VM: CP Commands and Utilities Reference*.

HCP6604E Parameter "*name*" not expected

Explanation

An extra token was specified on the command line.

System action

The command is not executed.

User response

Consult the FORMSSI documentation and reenter the command. See FORMSSI in *z/VM: CP Commands and Utilities Reference*.

HCP6605E Variations of this message are explained below.

Explanation

- Error *number* reading Persistent Data Record device label
- Error *number* reading/writing Persistent Data Record

The FORMSSI utility program received an I/O error when using DIAGNOSE code X'A8'. This error can occur when a FORMSSI UPGRADE command is issued for a Persistent Data Record (PDR) device associated with an active SSI cluster. In this situation, it is possible for a running member in the SSI cluster to steal the PDR lock held by the FORMSSI utility. If this occurs, the FORMSSI command will receive an I/O error when it attempts to update and unlock the PDR.

System action

The command is not executed.

User response

Check that the disk specified is a CP formatted read/write D/T3390 DASD. Consult the FORMSSI documentation and reenter the command. See FORMSSI in *z/VM: CP Commands and Utilities Reference*.

If the error occurred while attempting to issue FORMSSI UPGRADE, reenter the FORMSSI UPGRADE command. If the problem persists, contact your IBM Support Center personnel.

HCP6606E Variations of this message are explained below.

Explanation

- Device *vdev1* is not CP-formatted
- Cylinder zero is not allocated perm

The FORMSSI utility program received an error using the specified disk.

System action

The command is not executed.

User response

Check that the disk specified is a CP formatted read/write D/T3390 DASD and cylinder zero is allocated as PERM space. Consult the FORMSSI documentation and reenter the command. See FORMSSI in *z/VM: CP Commands and Utilities Reference*.

HCP6607E Device *vdev1* does not contain a Persistent Data Record

Explanation

The FORMSSI utility program was used to display, upgrade, or unlock a Persistent Data Record (PDR). A PDR was not found on the specified disk.

System action

The command is not executed.

User response

Verify that the correct virtual device number was specified in the command. This error can occur if the device is not formatted. Consult the FORMSSI documentation and reenter the command. See FORMSSI in *z/VM: CP Commands and Utilities Reference*.

HCP6608E Persistent Data Record on device *vdev1* is locked, possibly by *system*

Explanation

The FORMSSI utility program was asked to UPGRADE the Persistent Data Record (PDR) but found that it was locked.

System action

The command is not executed.

User response

If the message indicates that FORMSSI owns the lock, use the UNLOCK function of FORMSSI to release the lock. Then reenter the command FORMSSI UPGRADE. See FORMSSI in *z/VM: CP Commands and Utilities Reference*.

HCP6609E **Existing Persistent Data Record cannot be upgraded because a newer PDR version was found on device *vdev***

Explanation

An old FORMSSI utility program attempted to UPGRADE a Persistent Data Record (PDR) that was written by a newer version of FORMSSI or CP.

System action

The command is not executed.

User response

Use the correct version of FORMSSI.

HCP6610E **Device *vdev1* contains Persistent Data Record for *ssi_name***

Explanation

The FORMSSI utility program was asked to UNLOCK or UPGRADE the Persistent Data Record (PDR) and the *ssi_name* in the PDR did not match the *ssi_name* specified on the command.

System action

The command is not executed.

User response

Use FORMSSI DISPLAY to verify that the correct virtual device number was specified in the command.

HCP6611E **Persistent Data Record on device *vdev1* not locked**

Explanation

The FORMSSI utility program was asked to UNLOCK a Persistent Data Record (PDR) on a specified disk and found that FORMSSI did not own the lock on the PDR.

System action

The command is not executed.

User response

None.

HCP6612E **Persistent Data Record on device *vdev1* for *ssi_name* may be in use**

Explanation

The FORMSSI utility program found an existing Persistent Data Record (PDR) on the specified disk and at least one member system is not in the DOWN state.

System action

The command is not executed.

User response

Use FORMSSI DISPLAY to display the contents of the PDR and verify the correct device is being used. If so, verify that all members of the SSI cluster are truly down. Use FORMSSI CREATE with the FORCE operand to force a new PDR to be created on the device.

HCP6613R **Device *vdev1* label is *label* - continue (Yes/No)?**

Explanation

The FORMSSI utility program has verified that a Persistent Data Record (PDR) can be created on the specified device (*vdev1*) and is displaying the volume label (*label*) so that you can ensure that the correct device is being used.

System action

The FORMSSI utility waits for a user response.

User response

Reply "yes" or "no."

HCP6614I **Persistent Data Record created on device *vdev1***

Explanation

The FORMSSI utility program has successfully created a Persistent Data Record (PDR) on the specified device.

System action

None

User response

None

HCP6615I **Persistent Data Record upgraded on device *vdev1***

Explanation

The FORMSSI utility program has successfully upgraded the Persistent Data Record (PDR) on the specified device.

System action

None

User response

None

HCP6616I Persistent Data Record unlocked on device *vdev1*

Explanation

The FORMSSI utility program has successfully unlocked the Persistent Data Record (PDR) on the specified device.

System action

None

User response

None

HCP6617I Persistent Data Record on device *vdev1* not changed

Explanation

The FORMSSI utility program was asked to create a Persistent Data Record (PDR) on a specified disk and the user responded "NO" to the prompting message HCP6613R.

System action

The FORMSSI utility program does not create a PDR.

User response

None

HCP6618I Persistent Data Record on device *vdev1* (label *label*) is for *ssi_name*

Explanation

The FORMSSI utility program was asked to display the Persistent Data Record (PDR) on a device. This message displays the virtual device number (*vdev1*) that user specified and the volume label (*label*) and SSI cluster name (*ssi_name*) that was read from the device.

System action

The FORMSSI utility continues execution.

User response

None

HCP6619I

Explanation

The FORMSSI utility program was asked to display the Persistent Data Record (PDR) on a device. This message displays information that was found in the PDR. The variable fields in the messages are:

state: *state1*
Is the state of the PDR.

time stamp: *timestamp1*
Is the last time the PDR was updated.

cross-system timeouts: Enabled|Disabled
Indicates that timeouts detected at the device and logical link level within the ISFC intersystem communications component are ignored (Enabled) or treated as errors (Disabled).

replacement: None|*volid*
Indicates the replacement PDR volume if one exists. If one exists, a successful PDR relocation has occurred as the result of a SET SSI PDRVOLUME command, and the PDR on this volume is obsolete. If a replacement volume ID is displayed, neither the cross-system timeouts setting nor any of the SSI member slot information is displayed.

slot: *slot*
Indicates the slot number in the SSI member list.

system: *system1*
Is the system in the indicated slot.

state: *state2*
Is the state of *system1* in the indicated slot.

time stamp: *timestamp2*
Indicates the last time the PDR entry for *system1* was updated.

last change: *system2*
Is the member that made the last update to this member's PDR entry. A member can update another member's PDR entry.

System action

The FORMSSI utility completes execution.

User response

None

HCP6620E **Persistent Data Record on device *vdev1* is obsolete**

Explanation

The FORMSSI utility program was asked to UNLOCK or UPGRADE the Persistent Data Record (PDR) but found that it was obsolete. An obsolete PDR cannot be unlocked or upgraded.

System action

The command is not executed; system operation continues.

User response

If you wish to reuse the volume as a PDR volume, use the CREATE function of FORMSSI to reinitialize the PDR. For information about the FORMSSI utility, see *z/VM: CP Commands and Utilities Reference*.

HCP6626W **The variations of this message are explained below.**

— Variation 1 **The CHECKPOINT area for volume *volid* cannot be brought online due to a conflict in volume ownership.**

Explanation

The CHECKPOINT device has ownership information that does not match the present system's SSI cluster name and/or system name.

System action

The system enters a wait state (wait state code = 6626).

User response

Use ICKDSF or CPFMTXA to update the ownership information of the volume, or update the system configuration file to point to the correct device for CHECKPOINT data.

— Variation 2 **The WARMSTART area for volume *volid* cannot be brought online due to a conflict in volume ownership.**

Explanation

The WARMSTART device has ownership information that does not match the present system's SSI cluster name and/or system name.

System action

The system enters a wait state (wait state code = 6626).

User response

Use ICKDSF or CPFMTXA to update the ownership information of the volume, or update the system configuration file to point to the correct device for WARMSTART data.

HCP6627I **User-defined EQID replaced by system-generated identifier for device *rdev*.**

Explanation

An EQID that was previously assigned to a unique device has been overwritten by an identifier generated by the system. This message will occur during device initialization whenever an EQID is assigned to a device that is capable of generating a unique identifier. The following device types will never have their EQID overwritten by the system: CTCA, FCP, HiperSocket, and OSA.

System action

The system continues to initialize the device.

User response

None.

HCP6628E **OWNERSHIP NAME MISSING OR INVALID.**

Explanation

For the CPFMTXA utility, either an operand (ownership name) was missing or an invalid ownership name was specified.

System action

The command is not executed; system operation continues.

User response

Refer to the CPFMTXA help file for the proper input to CPFMTXA. Ensure that both ownership names are specified and that the names are between 1 and 8 characters.

HCP6629I **Ownership of DASD *rdev*, volume *volid* was read as *owning_ssi.owning_system*. No**

extents can be brought online; the device is not attached.

Explanation

During ATTACH to SYSTEM of a CP_OWNED volume, the device ownership information was read and it does not match the name of this system or SSI cluster.

System action

Command processing continues; the device is not attached.

User response

Determine whether the device ownership information is not correct or if the device is meant to be used by another SSI and/or system. If the device ownership information is not correct, use ICKDSF or CPFMTXA to change the ownership information and then attach the device to SYSTEM again.

HCP6630E **Minidisk Cache will be enabled later for *userid vdev*; write links exist in the SSI cluster.**

Explanation

A user entered the SET MDC MDISK command to set MDC ON for the specified user ID and virtual device. A write link to this virtual device exists on one or more systems in the SSI cluster. MDC cannot be set ON at this time.

System action

None.

User response

None. MDC will be set ON automatically when all writes links on other systems in the SSI cluster have been dropped.

HCP6631I **Ownership of DASD *rdev*, volume *volid* was read as *owning_ssi*.*owning_system*. The device will be attached to system for MDISK usage only.**

Explanation

During ATTACH to SYSTEM of a CP_OWNED volume, the device ownership information was read and it does not match the name of this system or SSI cluster. However, because PERM space was found on the disk, the device will still be attached to the system and MDISKS will be allowed on the device.

System action

Command processing continues; the device is attached but only for MDISK usage.

User response

Determine whether the device ownership information is not correct or if the device is meant to be used by another SSI member and/or system. If the device ownership information is not correct, use ICKDSF or CPFMTXA to change the ownership information and then attach the device to SYSTEM again. If this is a REPAIR IPL, the ownership information might be correct and the message is expected; the SSI ownership name is ignored during a REPAIR IPL, so volumes owned by other SSI members will be brought online for MDISK usage only.

HCP6632E **THE * OPERAND IS NOT VALID WHEN THE SPECIFIED SSI NAME DIFFERS FROM THE ACTUAL SSI NAME.**

Explanation

For the CPFMTXA utility, the * operand can only be used to specify "this system name" if the previous operand (the SSI name) matches the current SSI cluster name.

System action

The command is not executed; system operation continues.

User response

Ensure the ownership names provided are correct. If the specified ownership names are the desired values, then replace the * operand with the actual system name to force the ownership assignment.

HCP6633E **THE SPECIFIED COMBINATION OF OPERANDS IS ONLY VALID WHEN NOT CONFIGURED FOR SSI.**

Explanation

For the CPFMTXA utility, when operating in an SSI environment, the * operand cannot be used to specify the owning system name when the owning SSI name has been specified as NOSSI.

System action

The command is not executed; system operation continues.

User response

Ensure that the ownership names provided are correct. If the specified ownership names are the desired values, then replace the * operand with the actual system name to force the ownership assignment.

HCP6634I **CSE spool sharing is not supported. The OWN and SHARED operands are ignored.**

Explanation

The DEFINE CPOWNED command and CP_OWNED configuration statement no longer honor the OWN or SHARED operands. One result of using the SHARED operand was to turn off minidisk caching for the specified volume. If that is desirable, see the information below for other ways to accomplish that. In an SSI environment equivalent information is determined from the ownership information recorded on the volume when it was formatted, and read from the volume at the time the device is attached to the system.

System action

Command processing continues; the operand is ignored.

User response

Remove the SHARED or OWN operand to avoid getting this message. These operands are ignored. If a device is intended to be shared for spool in an SSI cluster, make sure that the appropriate ownership information is on the volume. Use the QUERY CPOWNED command to display the ownership information.

To turn off minidisk caching for a volume being shared through cross-system link (XLINK), which is supported for non-SSI systems, specify SHARED YES on the RDEVICE configuration statement for the device, or specify RDEV OFF for the device on the SET MDCACHE command. SSI clusters include autonomic minidisk cache management.

HCP6635E **Unique self-description data for ECKD virtual DASD is not supported by an underlying layer of CP. As a result, system-generated EQIDs cannot be assigned for all disk devices.**

Explanation

z/VM is being run inside a virtual machine as a guest of z/VM, and the underlying z/VM system does not have the unique self-description for ECKD virtual DASD support applied.

System action

The system will be unable to join the Single System Image cluster.

User response

The underlying z/VM system must include support for unique self-description for ECKD virtual DASD.

HCP6636E **Working allegiance cannot be enabled; *vdev* is in use by another system in the SSI cluster.**

Explanation

Working allegiance for minidisk vdev cannot be enabled because it is already linked on another member in the SSI cluster. Only one member of the SSI cluster can have links to a minidisk when working allegiance is in effect.

System action

Working allegiance is not enabled for the specified vdev.

User response

Issue the SET WRKALLEG command again after the links on the other systems in the SSI cluster have been detached.

HCP6637W **SYSRES volume has conflicting ownership information. Ownership of DASD *rdev*, volume *volid* was read as *owning_ssi.owning_system*. No extents can be brought online; the device is not attached.**

Explanation

During ATTACH to SYSTEM of the SYSRES, the device ownership information was read and it does not match the name of this system or SSI cluster.

System action

The system enters a wait state (wait state code = 6637).

User response

Determine whether the device ownership information is not correct or if the device is meant to be used by

another SSI and/or system. If the device ownership information is not correct, use ICKDSF or CPFMTXA to change the ownership information before IPL of the system again.

HCP6638I	The variations of this message are explained below.
— Variation 1	LINK information has been truncated.

Explanation

A user entered the QUERY LINKS command and the response from other members in the SSI cluster was truncated.

System action

The LINK response is truncated.

User response

Issue the QUERY LINKS command on each member of the SSI cluster to see all response data for the member.

— Variation 2	No LINK information from other systems in the SSI cluster is included in the response.

Explanation

A user entered the QUERY LINKS command and link information could not be obtained from other systems in the SSI cluster. This is due to a loss of communication with the other members of the SSI cluster.

System action

No LINK response information is included for other members in the SSI cluster.

User response

Enter the QUERY LINKS command on each member of the SSI cluster to see all response data for the member.

HCP6639E	UNABLE TO DETERMINE THE SSI CLUSTER NAME. ISSUE THE COMMAND AGAIN WITH CLUSTER NAME SPECIFIED.

Explanation

For the CPFMTXA utility, the * operand can only be used to specify "this system name" if the issuer has the appropriate privilege classes required to issue the QUERY SSI command.

System action

The command is not executed; system operation continues.

User response

Specify the desired SSI name instead of using the * operand.

HCP6640E	The variations of this message are explained below.
— Variation 1	***userid vdev*** **not linked. DASD is a VDISK and is already linked on system *sysname*.**

Explanation

The minidisk *vdev*, owned by user *userid*, cannot be linked because it is a VDISK that is already linked on another member in the SSI cluster. A VDISK can be linked only on one member of an SSI cluster at any given time.

System action

The requested link is denied.

User response

Issue the LINK command again. If the problem persists, contact your local system administrator for access to the requested minidisk.

— Variation 2	***userid vdev*** **not linked. DASD is a VDISK and is defined under a SUBCONFIG for another SSI member.**

Explanation

The *vdev* owned by user *userid* cannot be linked because it is a VDISK that is defined in a subconfiguration entry for another member in the SSI cluster. A VDISK defined in a subconfiguration entry can be linked only on the system associated with that subconfiguration entry.

System action

The requested link is denied.

User response

See your local system administrator for access to the requested minidisk.

— Variation 3 ***userid vdev* not linked. MDISK DEVNO parameter conflicts with minidisk linked by *userid* [at *sysname*].**

Explanation

The minidisk *vdev*, owned by user *userid*, cannot be linked. The minidisk is defined with MDISK DEVNO and is linked on another member in the SSI cluster and not defined with MDISK DEVNO. Minidisks defined with MDISK DEVNO and minidisks that are not defined with MDISK DEVNO cannot be linked on the same DASD.

System action

The requested link is denied.

User response

Issue the LINK command again. If the problem persists, contact your local system administrator for access to the requested minidisk.

— Variation 4 ***userid vdev* not linked. Minidisk has been defined with the V mode suffix and is already linked by *userid* [at *sysname*].**

Explanation

The minidisk *vdev*, owned by user *userid*, cannot be linked. It is defined with the V mode suffix on the MDISK statement in the user's directory which conflicts with an existing link. For information on how link conflicts are handled when virtual reserve/release is authorized and the minidisks have overlapping or matching extents, see the usage notes for the LINK command in *z/VM: CP Commands and Utilities Reference*. The user's user ID and the system name are displayed when the user ID is an instance of a multiconfiguration virtual machine on another system in the SSI cluster.

System action

The requested link is denied.

User response

Issue the LINK command again. If the problem persists, contact your local system administrator for access to the requested minidisk.

— Variation 5 ***userid vdev* not linked. Minidisk has been defined with WRKALLEG and is already linked by *userid* [at *sysname*].**

Explanation

The minidisk *vdev*, owned by user *userid*, cannot be linked. The minidisk has been defined with working allegiance (WRKALLEG on the MINIOPT statement in the directory entry) which conflicts with an existing link. For information on how link conflicts are handled when simulated working allegiance is active and the minidisks have overlapping or matching extents, see the usage notes for the LINK command in *z/VM: CP Commands and Utilities Reference*. The user's user ID and the system name are displayed when the user ID is an instance of a multiconfiguration virtual machine on another system in the SSI cluster.

System action

The requested link is denied.

User response

Issue the LINK command again. If the problem persists, contact your local system administrator for access to the requested minidisk.

— Variation 6 ***userid vdev* not linked. Minidisk is already linked with the V mode suffix by *userid* [at *sysname*].**

Explanation

The minidisk *vdev*, owned by user *userid*, cannot be linked because it conflicts with an existing V mode suffix link. For information on how link conflicts are handled when virtual reserve/release is authorized and the minidisks have overlapping or matching extents, see the usage notes for the LINK command in *z/VM: CP Commands and Utilities Reference*. The user's user ID and the system name are displayed when the user ID is an instance of a multiconfiguration virtual machine on another system in the SSI cluster.

System action

The requested link is denied.

User response

Issue the LINK command again. If the problem persists, contact your local system administrator for access to the requested minidisk.

— Variation 7 ***userid vdev*** **not linked. Minidisk is already linked with WRKALLEG in effect by** ***userid*** **[at** ***sysname***]**.**

Explanation

The minidisk *vdev*, owned by user *userid*, cannot be linked because it conflicts with an existing WRKALLEG link. For information on how link conflicts are handled when simulated working allegiance is active and the minidisks have overlapping or matching extents, see the usage notes for the LINK command in *z/VM: CP Commands and Utilities Reference*. The user's user ID and the system name are displayed when the user ID is an instance of a multiconfiguration virtual machine on another system in the SSI cluster.

System action

The requested link is denied.

User response

Issue the LINK command again. If the problem persists, contact your local system administrator for access to the requested minidisk.

— Variation 8 ***userid vdev*** **not linked. Minidisk is linked with the MDISK DEVNO parameter by** ***userid*** **[at** ***sysname***]**.**

Explanation

The minidisk *vdev*, owned by user *userid*, cannot be linked. The minidisk is linked on another member in the SSI cluster where the minidisk has been defined with MDISK DEVNO. Minidisks defined with MDISK DEVNO and minidisks that are not defined with MDISK DEVNO cannot be linked on the same DASD.

System action

The requested link is denied.

User response

Issue the LINK command again. If the problem persists, contact your local system administrator for access to the requested minidisk.

— Variation 9 ***userid vdev*** **not linked. No EQID exists for RDEV** ***rdev***.

Explanation

The minidisk *vdev*, owned by user *userid*, cannot be linked. The RDEV *rdev* has no equivalency ID (EQID). Minidisks can be linked only on RDEVs that have an EQID assigned.

System action

The requested link is denied.

User response

Assign an EQID to the device via SET RDEVICE.

— Variation 10 ***userid vdev*** **not linked. SSI cluster error, code** ***code***.

Explanation

The minidisk *vdev*, owned by user *userid*, cannot be linked because there was an error communicating with the SSI cluster. The code *code* indicates the SSI cluster communication error.

System action

The requested link is denied.

User response

Issue the LINK command again. If the problem persists, contact your IBM support personnel.

HCP6641E **The variations of this message are explained below.**

— Variation 1 **Slot** ***slot*** **is undefined or does not exist on this system and the SSI cluster contains EQID** ***eqid***, **volser** ***volser*** **in slot** ***slot*** **which contains spool extents.**

Explanation

The CP_OWNED slot on this system is undefined (status is reserved) or does not exist (exceeds the number available in the CP-owned volume list) on this system. This slot contains an online volume with spool extents on the other members in the SSI cluster.

System action

If this message is issued during join processing, the join fails. If this message is issued when returning to stable mode, the return to stable completes with mismatched SPOL volumes.

User response

Correct the mismatch using the CP_OWNED statement in the system configuration file or the DEFINE CPOWNED command.

— Variation 2 **The SSI cluster contains EQID** ***eqid***, **volser** ***volser*** **in slot** ***slot***

and the volume is offline or not attached on this system.

Explanation

The CP_OWNED slot on this system contains the same volume as other members of the SSI cluster, but the volume is offline or not attached to SYSTEM on this system.

System action

If this message is issued during join processing, the join fails. If this message is issued when returning to stable mode, the return to stable completes with mismatched SPOL volumes.

User response

Issue the VARY and/or ATTACH command to bring the SPOL volume online.

— Variation 3 **This system contains EQID *eqid*, volser *volser* in slot *slot* and the SSI cluster contains EQID *eqid*, volser *volser* in this slot.**

Explanation

The volume in the CP_OWNED slot on this system contains SPOL extents and does not match the volume in the same slot on other members of the SSI cluster.

System action

If this message is issued during join processing, the join fails. If this message is issued when returning to stable mode, the return to stable completes with mismatched SPOL volumes.

User response

Correct the mismatch using the CP_OWNED statement in the system configuration file or the DEFINE CPOWNED command.

— Variation 4 **This system contains EQID *eqid*, volser *volser* in slot *slot* and the SSI cluster contains volser *volser* in this slot and the volume is offline.**

Explanation

The CP_OWNED slot on this system contains the same volume as other members of the SSI cluster, but the volume is offline on other members in the SSI cluster.

System action

If this message is issued during join processing, the join fails. If this message is issued when returning to stable mode, the return to stable completes with mismatched SPOL volumes.

User response

Issue the VARY and/or ATTACH command to bring the SPOL volume online.

— Variation 5 **This system contains EQID *eqid*, volser *volser* in slot *slot* and this slot is undefined in the rest of the SSI cluster.**

Explanation

The CP_OWNED slot on this system contains an online volume with spool extents. This slot is undefined (status is reserved) or does not exist (exceeds the number available in the CP-owned volume list) on other members in the SSI cluster.

System action

If this message is issued during join processing, the join fails. If this message is issued when returning to stable mode, the return to stable completes with mismatched SPOL volumes.

User response

Correct the mismatch using the CP_OWNED statement in the system configuration file or the DEFINE CPOWNED command.

— Variation 6 **This system contains volser *volser* in slot *slot* and no EQID has been assigned to this device.**

Explanation

The CP_OWNED slot on this system contains a volume that has no equivalency ID.

System action

If this message is issued during join processing, the join fails. If this message is issued when returning to stable mode, the return to stable completes with mismatched SPOL volumes.

User response

Assign an EQID to the device via SET RDEVICE.

— Variation 7	**The SSI cluster contains EQID *eqid*, volser *volser* in slot *slot* and this system has no online spool volumes.**

Explanation

This system has no online spool volumes, and the SSI cluster has online spool volumes.

System action

If this message was issued during join processing, the join fails. If this message was issued when returning to stable mode, the return to stable mode completes with mismatched spool volumes.

User response

Correct the mismatch by ensuring the matching spool volumes which are in the CP_OWNED slot in the SSI cluster are also in the CP_OWNED slot on this system, and can be brought online.

HCP6642E	**The variations of this message are explained below.**

Explanation

- Device *vdev* detached due to SSI cluster error, code *code*.
- Device *vdev* detached from userid *userid* due to SSI cluster error, code *code*.

These messages are issued when a system is returning to stable mode. The first format of this message is issued to the user who had the *vdev* linked and the second format is issued to the operator. This message is issued when the system is returning to stable mode and an error is found. Values for *code* are:

1
: A minidisk link exists on this system with minidisk cache on and a write link exists on another member of the SSI cluster.

2
: The virtual reserve/release setting for a minidisk on this system and a minidisk on another member of the SSI cluster conflicts.

3
: The WRKALLEG setting for a minidisk on this system and a minidisk on another member of the SSI cluster conflicts.

System action

All *vdevs* associated with the minidisk are detached from all users. Data integrity might be affected with a possible loss of some information.

User response

Issue the LINK command to gain access to the minidisk. All users who receive this message should notify their system administrator. If the problem persists, your system administrator should contact your IBM support personnel.

HCP6643E	**The variations of this message are explained below.**
— Variation 1	**Device *rdev* not attached to SYSTEM. Device contains spool extents and is already attached on system *system*.**

Explanation

The device is attached on another member of the SSI cluster with no spool extents online.

System action

The command is not executed; system operation continues.

User response

DETACH the volume from the other members in the SSI cluster where it is attached and issue the ATTACH command again.

— Variation 2	**Device *rdev* not attached to SYSTEM. Device contains spool extents and is in slot *slot*. System *system* contains volid *volid* in that slot.**

Explanation

The volume in the CP_OWNED slot on this system contains SPOL extents and does not match the volume in the same slot on other members of the SSI cluster.

System action

The command is not executed; system operation continues.

User response

Correct the mismatch using the CP_OWNED statement in the system configuration file or the DEFINE CPOWNED command.

— Variation 3 **Device *rdev* not attached to SYSTEM. Device contains spool extents and is in slot *slot*. This slot does not exist on system *system*.**

Explanation

The CP_OWNED slot does not exist (exceeds the number available in the CP-owned volume list) on another system in the SSI cluster.

System action

The command is not executed; system operation continues.

User response

Correct the mismatch using the CP_OWNED statement in the system configuration file.

— Variation 4 **Device *rdev* not attached to SYSTEM. Device offline on system *system*.**

Explanation

The CP_OWNED slot on this system contains the same volume as other members of the SSI cluster, but the volume is offline on another member in the SSI cluster.

System action

The command is not executed; system operation continues.

User response

Issue the VARY command to bring the SPOL volume online.

— Variation 5 **Device *rdev* not attached to SYSTEM. SSI cluster error, code *code*.**

Explanation

An error occurred communicating with the SSI cluster. The code *code* indicates the SSI cluster communication error.

System action

The command is not executed; system operation continues.

User response

Issue the ATTACH command again. If the problem persists, contact your IBM support personnel.

HCP6644E **Device with EQID *eqid* not attached to SYSTEM. Device contains spool extents and has been attached on other systems in the SSI cluster and could not be attached to this system.**

Explanation

An ATTACH was issued that results in a volume with spool extents being attached on other members of the SSI cluster, and the volume could not be attached on this system.

System action

The command is not executed; system operation continues.

User response

Refer to other messages issued from ATTACH to determine why the volume could not be attached. Correct the problem and issue the ATTACH command again on this system.

HCP6645E **The variations of this message are explained below.**

Explanation

- SSI cluster is in safe mode; command rejected.
- *userid vdev* not linked; SSI cluster is in safe mode.

The command is rejected when the SSI is in safe mode and no communication can take place within the SSI cluster.

System action

The command is not executed; system operation continues.

User response

Issue the command again when the SSI cluster returns to stable mode.

HCP6646E **The variations of this message are explained below.**

— Variation 1 **Spool volume checking could not complete due to SSI cluster error.**

Explanation

There was a problem communicating with the SSI cluster when trying to determine if spool extents on all systems in the SSI cluster match.

System action

If a system is joining the SSI cluster, the join fails. If the SSI cluster is returning to stable mode, the return to stable mode completes.

User response

If the SSI cluster has returned to stable, check the spool volumes on all systems in the SSI cluster to determine if there is a mismatch that should be corrected.

— Variation 2 **SSI cluster has returned to stable and spool volumes do not match.**

Explanation

The SSI cluster has returned to stable mode and online volumes with spool extents do not match for all systems in the SSI cluster.

System action

None; system operation continues.

User response

Refer to the HCP6641E messages to determine why the spool volume mismatch occurred and correct the problem as indicated in the user response for that message.

HCP6648I **The variations of this message are explained below.**

— Variation 1 **MDISK *vdev* has virtual reserve/release support in effect.**

Explanation

The minidisk vdev has been linked with virtual reserve/release support in effect because there is already a link to the same minidisk with virtual reserve/release support.

System action

None. The LINK has been granted.

User response

None.

— Variation 2 **MDISK *vdev* has working allegiance simulation in effect.**

Explanation

The minidisk vdev has been linked with working allegiance simulation in effect because there is already a link to the same minidisk with working allegiance simulation.

System action

None. The LINK has been granted.

User response

None.

HCP6649I **Spool volume *volid* could not be detached on all other members in the SSI.**

Explanation

The owning system detached a volume with spool extents, and the volume could not be detached on all other members in the SSI cluster.

System action

The volume has been detached on the owning system and possibly on some other members in the SSI cluster.

User response

Determine which members still have the spool volume attached, and try to detach the volume from those members.

HCP6650E **Slots above *slot* cannot be defined because the cluster SPOOL_MEMBERS setting on the SSI_CONTROLS statement is set to *slot*.**

Explanation:
An attempt has been made to define a cluster member in a slot that cannot be defined at this time. Slots 5-8 cannot be defined until all joined members of the SSI cluster have been IPLed with the 8-member support and with the 8-member spool ID assignment algorithm in effect as set on the SSI_CONTROLS SPOOL_MEMBERS statement in the system configuration file. This message may be displayed when a SET SSI command was issued, or

during system configuration file syntax checking by the CPSYNTAX EXEC if the SPOOL_MEMBERS setting in this system configuration file is too low for the slot number being defined. This message also may be displayed if there is no SSI_CONTROLS statement in the system configuration file.

System action:
The message is displayed and the command is rejected if this is received due to a SET SSI command and this member's SPOOL_MEMBERS value is set too low to allow the requested slot number. If this member's value would allow this slot but another member rejects the command because its SPOOL_MEMBERS value is too low, message HCP1649E is displayed. If displayed from the CPSYNTAX utility, the message is displayed to indicate the system configuration syntax error.

User response:
Before this slot can be assigned, each current member of the cluster must have its SPOOL_MEMBERS specification changed and be re-IPLed to put the change into effect.

HCP6651E Required privilege is not available for: *command*.

Explanation:
The SFCOUNTR utility was run on a user that does not have the necessary command privileges. This utility issues certain spool commands to display each user's spool files and spool file counts. It also uses the LOCATE and DISPLAY Host commands. The CP command privileges to issue these commands must be available to the user that is running this utility. The IBM CP command privileges needed are: class D for spooling commands and class C or E for the other commands.

System action:
The utility stops without completing its operations.

User response:
Give this user the necessary CP privileges or run this utility on a user that already has the appropriate privileges.

HCP6653A Spool files will be deleted because one or more users have more than *nnnn* spool files. No spool files have been deleted yet. To continue, enter GO. To stop without deleting files, enter STOP.

Explanation:
This message is displayed during IPL when a member is trying to join the SSI cluster with the SSI_CONTROLS SPOOL_MEMBERS setting of its spool ID assignment algorithm changed to allow a higher number of cluster members. When this happens, the limit on the number of spool files each user can have in this system's spool space is decreased. For example, IPLing with the setting at 8 members when it had previously been set to 4 members means the new limit is 1,249 spool files per user rather than the previous limit of 2,499 files. This prompt is displayed during the IPL if one or more users have more than 1,249 spool files.

System action:
If STOP is entered, system initialization is halted with wait state 9031 and no spool files are deleted. However, some files might have been assigned new spool IDs. If GO is entered, system initialization continues, and some user spool files will be deleted.

User response:
If it is acceptable for initialization to delete spool files, enter G0 to complete initialization. Up to 1,249 spool files for each user will be saved and the rest will be deleted. It is unpredictable which files will be deleted. Do not include any leading blanks in your response. If loss of spool files is not acceptable, enter ST0P to stop initialization. No spool files will be purged if this is done. To recover, from another joined member or from this member in REPAIR mode if no other members are up, change the SSI_CONTROLS SPOOL_MEMBERS statement in the system configuration file to put this system's spool ID allocation back to the 4-member setting, then IPL the system. After the system comes up, run the SFCOUNTR utility to determine the users with too many spool files. For those users, reduce the number of spool files until it is below the necessary threshold. After that is done, the spool ID allocation setting can be put back to 8-member and the system restarted without any loss of files.

HCP6654E The SSI_CONTROLS SPOOL_MEMBERS setting in the system configuration file is too low for the slots defined on the SSI statement.

Explanation:
This message is displayed when a member of the SSI cluster was IPLing and joining the cluster with SSI_CONTROLS SPOOL_MEMBERS set to a value that is lower than SSI slot numbers defined. For example, the IPLing member has a member defined in one or more of slots 5-8 and the IPLing member has SPOOL_MEMBERS set to 4. After a member has been defined in any of slots 5-8, all members must be using the 8-member spool file ID algorithm as indicated on the SPOOL_MEMBERS operand of the SSI_CONTROLS statement in the system configuration file. This message indicates that an attempt was made to IPL this system with SSI_CONTROLS SPOOL_MEMBERS set or defaulted to 4 rather than 8. This message is displayed during IPL when a member is trying to join the SSI cluster.

System action:

The system displays message HCP6654E followed by message HCP1682W and then wait state 1682 is loaded.

User response:
The SPOOL_MEMBERS operand of the SSI_CONTROLS statement in the system configuration file for this member must be changed to be compatible with the assigned SSI member slots. This can be done from another member or by IPLing this member in REPAIR mode if no other members are up.

HCP6655E **An SSI_CONTROLS statement cannot be included in the system configuration file if there is no SSI statement.**

Explanation:
There is an SSI_CONTROLS statement in the system configuration file that is not appropriate in a non-SSI environment. If the system configuration file does not have an SSI statement, there should not be an SSI_CONTROLS statement either.

System action:
This message is displayed on the operator's console, initialization of the system continues, and the statement is ignored.

User response:
If this system is supposed to be part of a single system image (SSI) cluster, add the appropriate SSI statement and IPL the system again. Otherwise, remove the SSI_CONTROLS statement and IPL again.

HCP6700E **File *fn ft*, record [*nnnnnnnn* through] *nnnnnnnn*:**

Explanation

CP encountered an error parsing a configuration file statement during IPL or after you entered the REFRESH LOGOINFO command. This message indicates where in the file the error occurred; another message telling you what the error is will follow.

System action

System operation continues.

User response

If the error is in the system configuration file, correct the statement. If it is a serious error, re-IPL; otherwise, you can wait until the next IPL.

If the error is in the logo configuration file, correct the error and enter the REFRESH LOGOINFO command to ensure that CP has the correct logo information.

HCP6701E **The variations of this message are explained below.**

Explanation

- Invalid {logo|system} configuration file statement - *operand*
- Invalid statement - *operand*

A record in a configuration file starts with an operand that is not recognized as a statement name.

System action

CP ignores the statement and continues processing the configuration file.

User response

If the error is in the system configuration file, correct the statement. If it is a serious error, re-IPL; otherwise, you can wait until the next IPL.

If the error is in the logo configuration file, correct the error and issue the REFRESH LOGOINFO command to make sure CP has the correct logo information.

HCP6702E **Error encountered while attempting to read records from *fn ft* [*fm*].**

Explanation

You entered the CPTYPE command or the REFRESH LOGOINFO command and CP has encountered an error in reading the requested file from a minidisk that it has accessed.

System action

CP does not execute the command or process the configuration file.

User response

Contact your system support personnel.

HCP6703E **File *fn ft fm* [member *name*] not found[.]**

Explanation

A command or configuration file statement (such as CPTYPE or CPXLOAD) that allows you to provide file name, file type, and member information is processing. The file specified was not found on a minidisk accessed by CP, or the member name that was requested was not found within the file that was found.

System action

Processing of the requested function stops. System operation continues.

User response

Use the CP QUERY CPDISK command for a list of disks accessed by CP. Use the CP CPLISTFILE command to obtain a list of files and members on CP-accessed disks.

If the message indicates that the member name was not found, check the file. In order for a file to contain members, it must be a CMS partitioned data set (PDS), such as a TXTLIB. Also, note that the file type in that case is expected to have LIB as the last three characters.

If the error occurs as a result of the CPXLOAD configuration file statement, ensure that the files are available on a disk that CP has accessed when the CPXLOAD statement is processed. See the *z/VM: CP Planning and Administration* for details.

HCP6704E Missing {CPU model number | CPU serial number | system ID | lparname | token} at end of line.

Explanation

A requested option or operand was missing. The command or statement ended prematurely.

System action

CP does not execute the command or process the statement; system operation continues.

User response

Correct the error and enter the command again. If the error was in a statement, tell CP to process the configuration file again.

HCP6705E The variations of this message are explained below.

Explanation

- Comment starting on line *linenum* in *fn ft* was never completed.
- Statement starting on line *linenum* in *fn ft* was continued past end of file.

You IPLed the system or entered the REFRESH LOGOINFO command, and the system is trying to use a configuration file that contains the beginning of a comment without the end of one, or has a comma after the last statement.

System action

System operation continues. CP ignores the last statement if it has a comma after it.

User response

The system operator or system programmer must decide if the error is in the system configuration file. If it is a serious error, re-IPL; otherwise, you can wait until the next IPL.

If the error is in the logo configuration file, correct the error and enter the REFRESH LOGOINFO command to ensure that CP has the correct logo information.

HCP6706E The variations of this message are explained below.

Explanation

- Invalid access mode - *mode*
- Invalid account ID - *id*
- Invalid address range - *range*
- Invalid algorithm type - *type*
- Invalid alias name - *alias*
- Invalid BUFFER value - *value*
- Invalid character - *char*
- Invalid command name - *command*
- Invalid CP Exit number - *exit*
- Invalid CPU model number - *modelnum*
- Invalid CPU serial number - *serialnum*
- Invalid crypto AP number
- Invalid crypto domain number
- Invalid cylinder number - *cc*
- Invalid date - *date*
- Invalid device address [or port number] - {*addr*| *portnumber*}
- Invalid Diagnose code - *code*
- Invalid disk mode - *mode*
- Invalid entry point name - *string*
- Invalid file member name - *membername*
- Invalid file mode - *fm*
- Invalid file name - *fn*
- Invalid file type - *ft*
- Invalid form name - *string*
- Invalid groupname - *groupname*
- Invalid HEARTBEAT value - *value*
- Invalid I/O priority - *priority*
- Invalid IBM class - *class*

- Invalid identifier - *id*
- Invalid instruction - *string*
- Invalid line number - *num*
- Invalid MACID - *id*
- Invalid MACIDRANGE value - *value*
- Invalid MACPREFIX - *prefix*
- Invalid model number - *num*
- Invalid number - *num*
- Invalid number of records - *string*
- Invalid number specified for FCP devices - *num*
- Invalid number specified for EDEVICE devices - *num*
- Invalid PATHMTUDISCOVERY value - *id*
- Invalid PING value - *value*
- Invalid port number - *portnumber*
- Invalid portname - *portname*
- Invalid privilege classes - *string*
- Invalid product - *string*
- Invalid product state - *string*
- Invalid RDEV - *rdev*. RDEV not initialized
- Invalid record length - *length*
- Invalid record number - *num*
- Invalid routine name - *routine*
- Invalid screen size - *string*
- Invalid spool file class - *string*
- Invalid SSI level - *ssi_level*
- Invalid SSI name - *ssi_name*
- Invalid string - *string*
- Invalid subcommand name - *subcommand*
- Invalid switchname - *switchname*
- Invalid system alias - *sysalias*
- Invalid system name - *sysname*
- Invalid time - *time*
- Invalid time zone ID - *tzid*
- Invalid time zone offset - *tzoffset*
- Invalid TRACESIZE value - *value*
- Invalid track number - *num*
- Invalid user ID - *userid*
- Invalid USERPREFIX - *prefix*
- Invalid variable name - *name*
- Invalid VLAN id - *vlanid*
- Invalid volume label - *label*

You will receive a version of this message in one of two cases:

1. You entered a command that specified an option that was not valid.
2. CP is processing a system configuration file that contains a statement with an option that is not valid.

System action

CP rejects the command or statement; system operation continues.

User response

If the error is in a command, correct the command and enter it again. If the error is in a statement in the system configuration file, correct the statement. If the error is serious, re-IPL; if not, you can wait until the next IPL.

Note: If you received a message about an invalid command, subcommand, or entry point name and you did not use CP DEFINE COMMAND, CMD, or a configuration file statement, an internal error has occurred and you should contact your IBM support personnel.

HCP6707E Statement exceeded maximum length of 4000 on record *nnnnnnnn* in file *fn ft*.

Explanation

You IPLed or entered the CP REFRESH LOGOINFO command, and the system is trying to use a configuration file containing a statement that either has records that are too long or has too many continuations. When it is processing configuration files, CP only accepts records that are 4000 or fewer characters long.

System action

CP aborts processing of the configuration file.

User response

If the error is in the system configuration file, correct the statement. If it is a serious error, re-IPL; otherwise, you can wait until the next IPL.

If the error is in the logo configuration file, correct the error and enter the REFRESH LOGOINFO command to ensure that CP has the correct logo information.

HCP6708I Insufficient contiguous storage to allocate the SCMBK area, *nnnnnnnnn* pages were requested.

Explanation

You IPLed, and CP cannot obtain sufficient storage for subchannel measurement blocks (SCMBKs).

System action

IPLing continues; the channel subsystem will not make any device measurements. Programs such as the Performance Toolkit for z/VM will find no performance data for individual devices.

User response

Increase the amount of storage available to your machine.

HCP6709E Too many items specified - *token*

Explanation

An option was repeated more than the allowable maximum number of times.

System action

CP does not execute the command or ignores the statement.

User response

If the error is in the system configuration file, correct the statement. If it is a serious error, re-IPL; otherwise, you can wait until the next IPL.

If the error is in the logo configuration file, correct the error and enter the CP REFRESH LOGOINFO command to ensure that CP has the correct logo information.

HCP6710E The variations of this message are explained below.

Explanation

- Imbedding file *fn ft* would cause an imbed loop -- statement ignored.
- File *fn ft* does not exist and cannot be imbedded.
- -SYSTEM- cannot be resolved because system ID is undefined -- file *fn ft* cannot be imbedded.
- Including file *fn ft* would cause an INCLUDE loop -- statement ignored
- You included an IMBED statement in the system configuration file. This statement specifies a file that contains another IMBED statement. The statement in this file may specify the system configuration file itself, or it may specify another file that contains yet another IMBED statement. Somewhere in the chain of files, one of the IMBED statements specifies either the system configuration file or another file that has already been imbedded, thus causing an infinite loop. For example, SYSTEM CONFIG A imbeds LOCAL CONFIG A, which imbeds SYSTEM CONFIG A.
- An IMBED statement in the system configuration file imbeds a file that cannot be found on the parm disk accessed at IPL time.
- An IMBED statement has a file name or file type of -SYSTEM-. The system name has not been identified in HCPSYS or in the system configuration file.
- You specified an INCLUDE directive in the system configuration file. This directive specifies a file that contains another INCLUDE directive or an IMBED statement. Somewhere in the chain of files, one of the INCLUDE directives or IMBED statements specifies either the system configuration file or another file that has already been imbedded, thus causing an infinite (or "include") loop.

System action

CP ignores the IMBED statement or INCLUDE directive; system operation continues.

User response

Edit the system configuration file so that the IMBED statement or INCLUDE directive contains a valid file name and file type. If you received the third version of this message, make sure that your SYSTEM_IDENTIFIER or SYSTEM_IDENTIFIER_DEFAULT statement is at the beginning of your configuration file. IPL again.

HCP6711E The variations of this message are explained below.

Explanation

- Duplicate volume identifier *volser* specified -- statement ignored.
- Slot *slotnum* already contains volume *volser* -- statement ignored.
- Slot *slotnum* already contains volume *sysname* -- statement ignored.
- Duplicate routine name *rtnname* specified -- statement ignored.

You used a CP_OWNED, USER_VOLUME_LIST, XLINK_VOLUME_INCLUDE, or XLINK_VOLUME_EXCLUDE configuration statement to specify a volume ID that was already specified on another such statement, or you entered a slot number already specified on another CP_OWNED or XLINK_SYSTEM_INCLUDE configuration statement. These statements can be specified only once per slot in the system configuration file.

For the duplicate routine name format, you used a CPADDON_INITIALIZE_ROUTINES statement in the system to specify a routine name that was already specified on another such statement.

System action

CP ignores the statement; system operation continues.

User response

Correct the statements in the configuration file. If the incorrect statements have caused a serious error, re-IPL; otherwise, you can wait until the next IPL.

HCP6712E The variations of this message are explained below.

Explanation

- Translate table file *fn ft* does not exist or cannot be opened -- statement ignored.
- Error encountered while attempting to read records from translation table file *fn ft* -- file ignored.
- Token *token* in translation table file *fn ft* has an odd number of characters -- file ignored.
- Invalid hexadecimal token *token* encountered in translation table file *fn ft* -- file ignored.
- Translation table file *fn ft* contained more than 256 hexadecimal characters -- file ignored.
- Translation table file *fn ft* contained less than 256 hexadecimal characters -- file ignored.
- Translation table file *fn ft* contained an incomplete comment -- file ignored.

An error was encountered on the TRANSLATE_TABLE statement or in the translation table file. Errors that might occur are as follows:

- A file specified on the TRANSLATE_TABLE statement could not be found on the parm disk.
- An error was encountered reading a file specified on the TRANSLATE_TABLE statement from the parm disk.
- There were more or fewer than 256 bytes of hexadecimal data in the translation table file. (CP expects to find exactly 256 hexadecimal characters in the file.)
- A token was encountered in the translation table file that contained non-hexadecimal characters.

System action

Statement is ignored; system configuration file processing continues.

User response

Correct the error and IPL again to put the new translation table into effect.

HCP6713E DEVICES statement would cause SYSRES device to {become undefined|remain offline at IPL} -- statement ignored.

Explanation

During post-processing of the system configuration file, results indicate that a DEVICES statement in the system configuration file would cause one of the following things to happen:

- The SYSRES device would be deleted from the I/O configuration.
- The system residence volume would remain offline.

System action

CP ignores the DEVICES statement's request.

User response

Remove the SYSRES device number from the DEVICES statement so that CP does not issue this error message at each IPL.

HCP6713W DEVICES statement would cause SYSRES device to {become undefined|remain offline at IPL} -- statement ignored.

Explanation

The SYSRES device was found in either the DEVICES NOTACCEPTED or the OFFLINE_AT_IPL statement. If this statement was processed, the SYSRES device would become undefined, or it would be offline during system initialization and operation.

System action

System operation continues, but the DEVICES statement is ignored.

User response

Correct the DEVICES statement and re-IPL the system.

HCP6714W The variations of this message are explained below.

Explanation

- XSPOOL_SYSTEM SLOT *n* was not defined.

- XLINK_SYSTEM_INCLUDE SLOT *n* was not defined. Cross System Link protection may be compromised.

This message warns you when a slot in the XSPOOL_SYSTEM list or XLINK_SYSTEM_INCLUDE list has been left empty. You may have removed a system from cross system link and therefore left the slot empty intentionally, but if you have left it open by mistake, you will have trouble maintaining the integrity of your data when more than one user links to a minidisk at the same time.

System action

System operation continues.

User response

If the slot is empty because of an error, correct the problem and re-IPL. Otherwise, code an XSPOOL_SYSTEM or XLINK_SYSTEM_INCLUDE statement with the RESERVED option to leave the slot open, and then re-IPL.

HCP6715E **The variations of this message are explained below.**

Explanation

- Requesting cylinder 0 track 0 for XLINK track on volume *volid* -- statement ignored.
- Requesting cylinder 0 track 0 for XLINK_DEVICE_DEFAULTS -- statement ignored.

On the XLINK_VOLUME_INCLUDE or XLINK_DEVICE_DEFAULTS statement, you specified that track 0 of cylinder 0 should contain the map records used to perform locking of cylinders for XLINK protection. You cannot use track 0 of cylinder 0 for this purpose.

System action

CP ignores the statement and does not activate cross-system link protection for the specified volumes.

User response

Correct the specification of the locking position and re-IPL to activate cross-system link protection.

HCP6716E **Already [not] tolerating configuration file errors -- statement ignored**

Explanation

You specified TOLERATE_CONFIG_ERRORS YES in the system configuration file when CP was already tolerating errors, or you specified TOLERATE_CONFIG_ERRORS NO when CP was already not tolerating errors. If you specified TOLERATE_CONFIG_ERRORS NO, before the IPL process is finished CP will prompt the system operator with message HCP6717A because an error has occurred while CP is not tolerating errors.

System action

The statement is ignored; system configuration file processing continues. You may receive a prompt later in the IPL process.

User response

Correct the error in the system configuration file so you will not see a prompt the next time you IPL.

HCP6717A **One or more errors were encountered in processing sections of the system configuration file that were marked not to tolerate errors. To ignore the errors and continue normally, enter GO. To continue with the IPL without autologging any users, enter NOAUTOLOG. To abort the IPL, enter STOP.**

Explanation

CP has found an error in a section of the system configuration file that was marked by TOLERATE_CONFIG_ERRORS statements not to tolerate errors.

System action

The system operator decides to do one of the following:

- Continue the IPL normally and ignore the errors.
- Continue the IPL without autologging the seven special user IDs (two for EREP, two for accounting, two for symptom records, and one for start-up).
- Cancel the IPL.

User response

Choose one of the options that CP gives you, edit the system configuration file, and re-IPL.

HCP6718I **The variations of this message are explained below.**

Explanation

- Using parm disk *nn* on volume *volid* (device *rdev*). Parm disk resides on cylinders *nnnnn* through *nnnnn*.
- Using parm disk *nn* on volume *volid* (device *rdev*). Parm disk resides on blocks *nnnnn* through *nnnnn*.
- No parm disk found during IPL -- using system generation options.

You receive this message at IPL time to tell you whether CP is using a parm disk during the IPL process. If it is, this message tells you where the parm disk is. If it is not, this message tells you that CP is using the system generation options in HCPSYS, HCPRIO, and HCPBOX.

System action

IPL processing continues.

User response

None.

HCP6719W	System initialization cancelled at operator's request; system restart halted.

Explanation

You receive this message in response to a STOP command, or in response to three invalid responses from the system operator to prompts HCP1661A, HCP6717A, or HCP6738A. This wait state can also occur if three consecutive console I/O errors occur during those operator prompts.

System action

CP loads a disabled wait immediately after issuing this message.

User response

None.

HCP6720I	No items found to satisfy selection criteria.

Explanation

You entered one of the CP LOCATE, CP LOCATEVM, CP QUERY CPXLOAD, or CP QUERY CPSERVICE commands asking CP to locate information that it cannot find. For example, if you entered `CP LOCATE CPREAL 0-1ff DATA XYZ`, and CP could not find any occurrences of the string XYZ in locations X'0000' through X'01FF', you would receive this message.

System action

The CP LOCATE, CP LOCATEVM, CP QUERY CPXLOAD, or CP QUERY CPSERVICE command completes; system operation continues.

User response

None.

HCP6721E	The variations of this message are explained below.
— Variation 1	Device *rdev* was marked not accepted on the DEVICES statement in the system configuration file or on a SET DEVICES command.

Explanation

You entered a CP SET RDEVICE command or CP SET EDEVICE command to define a new device that was marked as an unacceptable device number on either a:

- DEVICES statement in the system configuration file
- CP SET DEVICES command.

System action

CP ignores the request to define the real device control block (RDEV). For the CP SET RDEVICE command, processing for any other device numbers specified on that command continues.

User response

You can either:

- Enter the SET RDEVICE or SET EDEVICE command again and specify a device number that was marked as an acceptable device number.
- Change the unacceptable device number to an acceptable device number (using the ACCEPTED operand of the SET DEVICES command) and enter the SET RDEVICE or SET EDEVICE command again.

— Variation 2	Device *rdev* must be free and online to response to a SET RDEVICE FEATURE command.

Explanation

A CP SET RDEVICE FEATURE command can only be issued to devices that are free and online, so that the device can be communicated with and ensure it supports the requested feature.

System action

The command is not executed; system operation continues.

User response

VARY the device online, or detach it from the guest, and retry the command.

— Variation 3 **Tape device *rdev* must be at Beginning of Tape, or unloaded, to respond to a SET RDEVICE FEATURE command.**

Explanation

A CP SET RDEVICE FEATURE command has been issued to a tape device, probably to enable hardware encryption. This is only supported if the tape drive is unloaded, or if the loaded cartridge is at the beginning of tape.

System action

The command is not executed; system operation continues.

User response

Rewind the tape cartridge, or unload the drive, and retry the command.

HCP6722I **The variations of this message are explained below.**

Explanation

- Created RDEV for device *rdev*.
- Characteristics of device *rdev* were set as requested.

You entered a CP SET RDEVICE command that causes CP to create a new real device block (RDEV), or to modify an existing RDEV for an offline device. You will receive one of the above messages for each device number affected by a CP SET RDEVICE command. You will also receive a message that summarizes the changes caused by the CP SET RDEVICE command.

System action

System operation continues.

User response

None.

HCP6723E **Requested parm disk not found in allocation map.**

Explanation

The CP SHUTDOWN REIPL command was issued with the EXTENT operand specifying a parm disk extent that does not exist in the IPL volume's allocation map.

System action

CP ignores the CP SHUTDOWN command; system operation continues.

User response

If you want to shut down and re-IPL the system with a parm disk other than the one currently being used, enter the CP SHUTDOWN REIPL command with a valid parm disk extent number or specify a parm disk by using the MDISK operand.

HCP6723W **Requested parm disk not found in allocation map.**

Explanation

During system initialization, CP was not able to find the requested parm disk in the allocation map of the IPL volume. The PDNUM, PDOFF, or PDVOL IPL parameter was specified and system initialization determined:

- The volume label could not be read.
- No allocation map was found on the volume. Only CP-formatted volumes contain an allocation map.
- The requested parm disk was not found in the allocation map.

System action

The system enters a wait state (wait state code = 6723).

User response

Use the Stand-Alone Program Loader (SAPL) screen to specify a correct value for the PDNUM, PDOFF, or PDVOL IPL parameter. The SAPL screen can be used to determine if the volume and parm disk that you wish to use are accessible. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP6724W Requested parm disk volume is invalid.

Explanation

You used the PDVOL IPL parameter to pass to CP the real device address of the volume that contains the parm disk you want CP to access. This message tells you that there is no device at the specified address, or that the device at the specified device address is not a supported DASD.

System action

CP loads a disabled wait state (wait state code = 6724) and cancels the IPL.

User response

Re-IPL the system and specify a valid address on the PDVOL IPL parameter, or IPL without specifying the PDVOL IPL parameter.

For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP6725E XLINK system ID *sysID* is a duplicate -- statement ignored.

Explanation

You specified a system ID on one of the following statements in the system configuration file, and an earlier statement of the same type has already specified that system ID.

- XLINK_SYSTEM_INCLUDE
- XLINK_SYSTEM_EXCLUDE

System action

The system uses the first statement, ignores any duplicate statements, and continues processing the system configuration file.

User response

Delete any duplicate statements from the system configuration file before the next IPL.

HCP6726E Could not find any CP-owned volumes that met the specified criteria.

Explanation

You will see this message in one of two cases:

- You entered a CP QUERY CPOWNED DASD command with a range of real device numbers, and CP could not find any DASD within this range.
- You entered a CP QUERY CPOWNED VOLUME command with a volume identifier, and CP could not find a DASD with the volume identifier you specified.

System action

System operation continues.

User response

None.

HCP6727I The variations of this message are explained below.

Explanation

- Disk *fm* not accessed.
- No disks accessed.

You will see this message in one of two cases:

- You entered a CP QUERY CPDISK command with a specific file mode, and CP does not have a disk accessed in that file mode.
- You entered a CP QUERY CPDISK command without any other operands, and CP does not have any disks accessed.

System action

System operation continues.

User response

None.

HCP6728E {File|Member} not found.

Explanation

You entered a CP CPLISTFILE command specifying a file or files that CP cannot find, or the member or members you requested were not found in any of the files that matched your request.

System action

System operation continues.

User response

Enter the CP QUERY CPDISK command to find out which minidisks CP has accessed, and then enter the CP CPLISTFILE command with a correct file name, file type, and member. In order for the file to contain members, it must be a CMS partitioned data set (PDS), such as a TXTLIB.

HCP6729I No files cached.

Explanation

A CP CACHE command was entered. One of two conditions exist:

- CP cannot find any files matching the file name, file type, or file mode you specified on any of the minidisk it has accessed.
- The file was not cached because it has already been cached. CPLISTFILE can be used to verify what may already be cached.

System action

System operation continues.

User response

Check the name, type, and mode of file you want to cache, and reissue the CP CPCACHE command with correct operands.

HCP6730I CPRELEASE request for disk *fm* completed.

Explanation

You entered an asynchronous CPRELEASE command for the disk that CP had accessed at the file mode *fm*, and the disk is now released.

System action

System operation continues.

User response

None.

HCP6731E {CPRELEASE|CPACCESS} request for mode *fm* already active.

Explanation

You issued a CPRELEASE or CPACCESS command for a file mode for which the same command is already active.

System action

CP ignores the second command; system operation continues.

User response

You can issue a QUERY CPDISK command to find out which disks CP has accessed before you try to issue another CPRELEASE or CPACCESS command.

HCP6732I CPACCESS request for *userid*'s *vdev* in mode *fm* completed.

Explanation

You issued an asynchronous CPACCESS command telling CP to access at the file mode *fm* the disk that the user *userid* has accessed at the virtual device number *vdev*, and the command has completed.

System action

System operation continues.

User response

None.

HCP6733E The variations of this message are explained below.

Explanation

- Disk is not a CMS EDF formatted minidisk -- disk not accessed.
- Disk contains invalid control information -- disk not accessed.
- I/O error encountered while attempting to access disk -- disk not accessed.
- Unable to link requested disk -- it cannot be accessed by CP.

You issued a CPACCESS command, and CP cannot access the disk you specified for one of the following reasons:

- The disk is not a CMS-formatted minidisk.
- The minidisk's directory contains information that is not valid.
- CP encountered an I/O error when it tried to read directory information from the minidisk.
- CP has tried and failed to establish a link to the specified minidisk, because a user has an exclusive link to it.

System action

CP ignores the command; system operation continues.

User response

Correct the problem with the minidisk and issue the CPACCESS command again.

HCP6734E The variations of this message are explained below.

Explanation

- Support for file-based LOGMSG is not enabled.
- Support for old-style LOGMSG is disabled.

You receive the first version of this message if all of the following is true:

- You have class B privileges.
- You issued the CP QUERY LOGMSG command with additional operands.
- File-based LOGMSG support is not enabled on the FEATURES statement in the system configuration file. In this case, CP does not accept additional operands on the CP QUERY LOGMSG command.

You receive the second version of this message if you issued the CP SET LOGMSG command and file-based LOGMSG support *is* enabled on the FEATURES statement in the system configuration file.

System action

CP ignores the command; system operation continues.

User response

In the first case, reissue the CP QUERY LOGMSG command without any additional operands. In the second, change the LOGMSG information by editing log message files and placing them on a CP-accessed minidisk.

HCP6735I Error encountered while attempting to cache files -- *userid*'s *vdev* accessed in mode *fm*.

Explanation

You issued a CPACCESS command for a minidisk that CP has accessed successfully, but CP has encountered an error in reading the CPCACHE FILES file on the disk that lists the files that CP should cache automatically at access time.

System action

CP accesses the specified disk normally, but it may not cache some of the files listed in CPCACHE FILES.

User response

To determine which files were cached, issue a CPLISTFILE command. To cache the files listed in CPCACHE FILES immediately, issue a CPCACHE command. To keep from receiving this message again, correct the errors in the CPCACHE FILES file and the disk that contains it, and then reaccess the disk with another CPACCESS command.

HCP6736I Cannot find logo configuration file *fn ft* on parm disk -- using system generation logos.

Explanation

CP could not find the specified system logo configuration file on the parm disk that it accessed at IPL time.

System action

If CP cannot find the specified logo configuration file, it uses the logo information in HCPBOX. The normal IPL process continues.

User response

Before the next IPL, place a logo configuration file on the disk you have specified as the parm disk, and make sure that you are giving CP the correct name and type for each file. If you do not specify otherwise, CP will look for a logo configuration file named LOGO CONFIG.

HCP6736W Cannot find system configuration file *filename filetype* on parm disk.

Explanation

CP could not find the specified system configuration file on the parm disk that it accessed at IPL time.

System action

The system enters a wait state (wait state code 6736).

Operator response

You can use the Stand-Alone Loader (SAL) to pass certain IPL parameters, including the names and types of configuration files, to CP during an IPL.

Specify a configuration file located on the parm disk.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP6737E Cannot find logo configuration file *fn ft*.

Explanation

You issued a CP REFRESH LOGOINFO command, and the file you specified does not exist on any disk that CP has accessed.

System action

CP ignores the command; system operation continues.

User response

You can issue the CP QUERY CPDISK command to see what minidisks CP has accessed, and the CPLISTFILE command to list the files on those minidisks. To refresh the logo configuration information, place a logo configuration file on a CP-accessed minidisk and reissue the CP REFRESH LOGOINFO command with the name and type of that file, or reissue the CP REFRESH LOGOINFO command with the name and type of an existing logo configuration file.

HCP6738A XLINK systems were specified and *system* was in neither the XLINK system inclusion nor the exclusion list. Failure to correct this error may lead to loss of user data.
To ignore the error and continue normally, enter GO.
To continue with the IPL without autologging any users, enter NOAUTOLOG.
To abort the IPL, enter STOP.

Explanation

You used XLINK_SYSTEM_INCLUDE or XLINK_SYSTEM_EXCLUDE statements in the system configuration file to generate lists of systems to be included in or excluded from cross system link functions, and the system being IPLed was not on either list. This error may result in problems with the integrity of your system's minidisk data.

System action

CP prompts the system operator to choose one of the options indicated in the message.

User response

Choose one of the options, edit the system configuration file and re-IPL.

HCP6739E *fn* MODULE not found

Explanation

The command you issued could not find the *fn* module.

This error message could be the result of using CPFMTXA or ICKDSF to move the PARM disk. CP uses the PARM disk location from the previous IPL when processing a SHUTDOWN REIPL or when restarting. This message can also be issued if you attempted an IPL while specifying a module name that does not exist.

System action

The command is ignored and system operation continues.

User response

Correct the command by using the QUERY CPLOAD command to determine the module name that was used for the last IPL or system restart. If you issued a SHUTDOWN command, set the SHUTDOWN MODULE operand to specify a module that exists on the parm disk or the specified minidisk.

When using extents to locate the parm disk on the volume, use CPFMTXA or ICKDSF to confirm that the volume allocation map has the desired parm disk minidisk properly allocated as PARM space.

HCP6739W *fn* MODULE not found

Explanation

The system was being IPLed or restarted and was unable to find the *fn* module that contains CP. This error can occur during a normal IPL or during a system

restart after either a hard abend or SHUTDOWN command with the REIPL operand.

This warning message could be the result of using CPFMTXA or ICKDSF to move the PARM disk. CP uses the PARM disk location from the previous IPL when processing a SHUTDOWN REIPL or when restarting.

System action

When using the Stand-Alone Program Loader (SAPL) to IPL the system, SAPL uses either the default name CPLOAD or the name specified by the MODULE operand when the SALIPL utility was ran. When the system enters this disabled wait state, the registers will contain the following information:

R0
Device number

R1
Subchannel ID of the device

R2
Offset cylinder/block

R3
Extent number

R4-R5
Name of module to load

R12
Base register

R13
Work page address

User response

IPL the system specifying a console address in the load parameter field in order to display the SAPL menu screen. Specify the correct module name on the SAPL menu screen. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

When using extents to locate the parm disk on the volume, use CPFMTXA or ICKDSF to confirm that the volume allocation map has the desired parm disk minidisk properly allocated as PARM space.

HCP6740E **Insufficient storage to complete this request**

Explanation

One of the following occurred:

- You entered a CP SET TRACEFRAMES command that tried to allocate more storage for trace frames than is currently available.
- CP tried to load files as directed by CPXLOAD, but could not find sufficient contiguous free central storage to contain the loaded files.

System action

System operation continues.

For CP SET TRACEFRAMES-
CP ignores the command.

For CPXLOAD-
CP rejects the request.

User response

For CP SET TRACEFRAMES-
You can use the CP QUERY FRAMES command to see how much storage is available for trace frames, and then enter a new CP SET TRACEFRAMES command.

For CPXLOAD-
Trying to find large amounts of contiguous free central storage can become increasingly difficult as continued system operation proceeds. Try to make the CPXLOAD request as early in the system operation as possible, before storage has become heavily used. Or, try to reorganize large CSECTs into smaller CSECTs, which would require smaller amounts of contiguous free storage.

HCP6741E **DISK *vdev* IS NOT CP OR CMS FORMATTED.**

Explanation

You used either the SALIPL utility or the SDINST utility, and the specified volume is not CP- or CMS-formatted.

System action

The system aborts the installation.

User response

Ensure that you have specified the correct virtual address to the utility. If you have, use ICKDSF, CPFMTXA, or the CMS FORMAT command to format the specified volume, and then use the SALIPL utility again. If using the SDINST utility, format the first cylinder of the volume with the CMS FORMAT utility.

HCP6742E **MINIDISK VOLID AT OFFSET *nnnnn* IS *volid1* NOT *volid2*.**

Explanation

You tried to use the SALIPL utility to specify a default offset from the beginning of the disk for the parm disk, and the CMS-formatted minidisk at that offset

has the label *volid1*, not *volid2*, the label specified on the MINIVOL option of the SALIPL invocation.

System action

The system aborts the installation of the Stand-Alone Loader (SAL).

User response

Check the offset for the parm disk, and retry the SALIPL utility.

HCP6743E MINIDISK AT OFFSET *nnnnn* IS NOT CMS FORMATTED.

Explanation

The Stand-Alone Program Loader Creation Utility (SALIPL) was used to specify a default offset for the beginning of the parm disk, from the start of the device, and the offset specified does not point at a CMS-formatted minidisk on the volume.

System action

The system aborts the installation of the SAL.

User response

Check the parm disk offset and run the SALIPL utility specifying the correct offset.

HCP6743W MINIDISK AT OFFSET *nnnnn* IS NOT CMS FORMATTED.

Explanation

One of the following occurred:

- An IPL of the system was attempted and the Stand-Alone Program Loader (SAPL) could not find a CMS-formatted disk at the offset where it was supposed to.
- A SHUTDOWN REIPL of the system was attempted and bounce processing could not find a CMS-formatted disk at the offset where it was supposed to.

System action

The system enters a disabled wait state (wait state code = 6743) and the registers contain the following information:

R0
Device number

R1
Subchannel ID of the device

R2
Offset cylinder/block

R3
Extent number

R4-R5
Name of module to load

R12
Base register

R13
Work page address

User response

Check the parm disk offset and specify the correct offset on the Stand-Alone Program Loader (SAPL) menu screen. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

HCP6744E VOLUME ID IS *volid1* NOT *volid2*.

Explanation

You tried to use the SALIPL utility to install the stand-alone loader on a volume whose volume identifier, *volid1*, does not match *volid2*, the volume identifier specified on the VOLID option of the SALIPL invocation.

System action

The system aborts the installation of the Stand-Alone Loader (SAL).

User response

Check the virtual address you specified, and run the SALIPL utility again.

HCP6745E BLOCK SIZE IS LESS THAN 4096.

Explanation

You tried to use the SALIPL utility to install the stand-alone loader on a volume that is formatted in blocks smaller than 4096 bytes.

System action

The system aborts the installation of the Stand-Alone Loader (SAL).

User response

Check to make sure you specified the correct disk. If you did, use the CMS FORMAT command to format it correctly, and then run the SALIPL utility again.

HCP6746E THE PARAMETER FOR THE IPLPARMS OPTION IS TOO LONG.

Explanation

You tried to use the SALIPL utility to install the stand-alone loader, and you specified default IPL parameters that were more than 240 characters long.

System action

The system aborts the installation of the Stand-Alone Loader. (SAL).

User response

Specify fewer parameters and run the SALIPL utility again.

HCP6747E WWPN and LUN must be specified for an FCP subchannel

Explanation

The WWPN and LUN operands must be specified if the SALIPL command VDEV is an FCP subchannel.

System action

The command is not executed; system operation continues.

User response

Reissue SALIPL with the required operands.

HCP6750E *userid*'s privilege classes are locked.

Explanation

You issued a CP SET PRIVCLASS command to change your privilege classes while they are locked, or to lock a user's privilege classes when they are already locked.

System action

CP ignores the command; system operation continues.

User response

If you want to change your own privilege classes, issue a CP SET PRIVCLASS command to unlock your privilege classes before you try to change them.

HCP6751E The variations of this message are explained below.

Explanation

- Device *rdev* cannot be redefined because it is the SYSRES volume.
- Device *rdev* cannot be redefined because it is the parm disk volume.
- Device *rdev* cannot be redefined because it is the FCP device associated with the SCSI SYSRES device.

You receive this message during the IPL process if you included an EDEVICE or RDEVICE statement in the system configuration file to try to redefine characteristics of one of the following volumes:

- The system residence volume
- The parm disk volume
- The FCP device associated with the SCSI SYSRES device.

In all cases, the device that the statement is trying to redefine has already been initialized.

System action

CP does not change the device definition; the IPL process continues normally.

User response

Edit the system configuration file before the next IPL.

You can include RDEVICE statements that define the system residence and parm disk volumes as TYPE DASD and specify whether they are shared, but you cannot use RDEVICE statements to specify anything else about the system residence and parm disk volumes. You can include an RDEVICE statement that defines the FCP device associated with the SCSI SYSRES device as TYPE FCP and specify that it is sensed, but you cannot use the RDEVICE statement to specify anything else about the FCP device.

You can include an EDEVICE statement that defines the system residence volume, to add paths and to change the attribute name only. You cannot use the EDEVICE statement to change or specify anything else about the system residence volume. The EDEVICE statement must specify the path that is already associated with the system residence volume (passed from SAPL) in order to be valid. By default, a SCSI system residence volume is associated with the general SCSI attributes.

HCP6752A Enter password for *userid* (it will not appear when typed):

Explanation

You issued a SET PRIVCLASS command to unlock the privilege class settings for your own user ID. You must

enter your logon password for the command to take effect.

System action

CP puts up a CP READ and waits for you to issue your logon password. If you enter the correct password, CP unlocks your privilege classes. If you enter an incorrect password, CP issues message 6753, and your privilege classes remain locked.

User response

Enter your logon password.

HCP6753I **An unexpected I/O event occurred.**

Explanation

The system detected that an unexpected I/O event occurred.

System action

The event is ignored and system operation continues.

User response

None.

HCP6754E **Command combination may not be issued by a disconnected user.**

Explanation

A program running in a disconnected virtual machine issued a CP SET PRIVCLASS command to unlock the virtual machine's own privilege classes. This message appears on the spooled console of the command issuer.

System action

CP rejects the command; system operation continues.

User response

Correct the program running in the disconnected virtual machine so that it does not issue the CP SET PRIVCLASS * UNLOCK command.

HCP6755E **User *userid* currently logged on -- request terminated.**

Explanation

You issued a CP XSPOOL XLISTADD or CP XSPOOL XLISTDEL command for a user who is logged on. Only users who are not logged on may be added to or deleted from the XSPOOL exclusion lists.

System action

CP rejects the command; system operation continues.

User response

Have the user log off, and reissue the command before he or she logs back on.

HCP6756E **Userid pattern not allowed for {XLISTADD | XLISTDEL}.**

Explanation

You tried to use a CP XSPOOL XLISTADD or CP XSPOOL XLISTDEL command to add a user ID pattern to the input or output exclusion list, or to delete a user ID pattern from one of them. CP only accepts specific user IDs with these commands.

System action

CP rejects the command; system operation continues.

User response

Issue a separate CP XSPOOL XLISTADD or CP XSPOOL XLISTDEL command for each user ID. Alternatively, before your next IPL, you can add XSPOOL_XLIST_INPUT and XSPOOL_XLIST_OUTPUT statements to the system configuration file to specify the systems you want on the input and output exclusion lists. CP accepts patterns specified on these statements.

HCP6757E **Internal logic error -- function terminated.**

Explanation

You issued a CP XSPOOL XLISTADD or CP XSPOOL XLISTDEL command, and CP has encountered an internal logic error in the XLISTADD or XLISTDEL processing. Incorrect arguments have been passed to the subroutine that was to process your request.

System action

CP rejects the command; system operation continues.

User response

Contact IBM for assistance.

HCP6758W **Error encountered while attempting to access parm disk.**

Explanation

During the IPL process, CP expected to find a parm disk but was unable to access one.

System action

The system enters a disabled wait state (wait state code = 6758).

User response

Make sure that a CMS-formatted minidisk is present at the location specified by PDNUM, PDOFF, or PDVOL on the IPL parameters passed to CP from the Stand-Alone Program Loader (SAPL).

When the PDVOL= parameter is specified or changed, the PDNUM= or PDOFF= parameter usually needs to be specified or changed, because the layout of the new parm disk volume might be different from the IPL volume. If neither PDNUM= nor PDOFF= is specified, CP uses the offset (cylinder or block) of the minidisk that contained the CP module, which is probably not correct for the new parm disk volume. If CP cannot find the parm disk, CP loads a disabled wait 6758.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP6759I The time zone has changed to *zone*.

Explanation

A privileged user issued the CP SET TIMEZONE command to change the system's local time zone. The user who issued the command and all other users logged on to the system will see this message.

System action

CP changes the local time zone and presents the appropriate external interrupt to all the virtual machines that asked CP to notify them of time zone changes.

User response

None.

HCP6760E Device *rdev* is not offline.

Explanation

You issued a CP SET RDEVICE command that tries to change the characteristics of an online device.

System action

CP rejects the request to change the characteristics of the device at *rdev*, but continues to process requests for changes to other devices specified on the same CP SET RDEVICE command.

User response

Verify the device number is correct. If it is correct and not being used, then issue the CP VARY OFFLINE command for the device and issue another CP SET RDEVICE command.

HCP6761E The variations of this message are explained below.

Explanation

- *userid vdev* not linked; volume *volid* marked draining by Operations personnel.
- Device *rdev* unavailable; marked draining by Operations personnel.
- Device *rdev* unavailable; owned by another system in the CSE complex.

You see the first version of this message if you entered a CP LINK command for a minidisk that resides on a volume marked DRAINING for the LINKS category.

You see the second version if you entered the SET DUMP command to a DASD volume that was being drained by the Operations personnel.

You see the third version if you entered the SET DUMP command to a DASD volume that was defined as SHARED on the CP_OWNED statement in the system configuration file.

System action

An error message is issued and command execution stops.

User response

If you receive the first error message, contact Operations personnel to determine when the disk will be restarted.

If you receive the second error message, you can enter the START command to the DASD volume in question and then enter the SET DUMP command against the DASD volume.

If you receive the third error message, the DASD volume specified is not available for allocation of dump space. Select another DASD volume and reissue the SET DUMP command.

HCP6762E Frame table entry is outside the extents of the frame table: *addr1-addr2*.

Explanation

You entered a CP LOCATE FRMTE command with the ENTRY operand specifying a frame table entry address that is outside the address range that the frame table occupies.

System action

CP ignores the command; system operation continues.

User response

Reissue the CP LOCATE FRMTE command with a valid frame table entry address, which must be between *addr1* and *addr2* in host logical storage.

HCP6763E Specified date and time combination is impossible.

Explanation

During the IPL process, you (the system operator) gave CP a time and date that information on the TIMEZONE_BOUNDARY statements says is impossible. For example, if you are on the east coast of the United States, you will receive this message if you tell the system that it is 2:30 AM EST on April 27, 1991, because that is the date when the time changes from 2:00 AM to 3:00 AM.

System action

CP prompts the system operator for the date and time again.

User response

Enter a valid date and time.

HCP6764A Set time zone ID. Select one of these: *zone1 zone2* ⋮

Explanation

You are IPLing the system and have specified a date and time that might occur in more than one time zone. For example, if you are on the east coast of the United States, you will receive this message if you tell CP that the time is 1:30 AM on October 25, 1992, when Eastern Daylight Time (EDT) changes to Eastern Standard Time (EST), because 1:30 AM might be in either time zone. CP will use the information specified on TIMEZONE_BOUNDARY and TIMEZONE_DEFINITION statements in the system configuration file to choose time zones that might be correct. It will display all of the possible zones, and this message will prompt you to choose one of them.

System action

CP suspends the IPL process until you enter a valid time zone. If you enter one that is not valid, CP will prompt the operator for the date and time again.

User response

Choose the correct time zone and press enter.

HCP6765E Device *rdev* cannot be changed because of an old HCPRIO definition.

Explanation

You issued a CP SET RDEVICE command that tried to change the characteristics of an existing device defined in HCPRIO ASSEMBLE. The object deck for this device is out of date, and the size of the real device block in HCPRIO does not match the size of real device blocks in the current system.

System action

CP rejects the request to change the characteristics of the device at *rdev*, but continues to process requests for changes to other devices specified on the same CP SET RDEVICE command.

User response

You cannot change the characteristics of the device while the system is running. Reassemble HCPRIO and regenerate CP so that this problem will not happen the next time you IPL.

HCP6766W SYSRES volume not explicitly defined.

Explanation

The system residence volume was excluded from automatic recognition using its sense data – that is, the volume was included in a system configuration DEVICES NOTSENSED statement – and its class and type were not explicitly defined (for example, by a system configuration RDEVICE statement).

System action

The system enters a wait state (wait state code 6766).

User response

Select a system configuration file that does not exclude the system residence volume from being sensed, or that defines the volume explicitly.

Also, review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP6767W Parm disk volume not explicitly defined.

Explanation

The parm disk volume was excluded from automatic recognition using its sense data – that is, the volume was included in a system configuration DEVICES NOTSENSED statement – and its class and type were not explicitly defined (for example, by a system configuration RDEVICE statement).

System action

The system enters a wait state (wait state code 6767).

User response

Select a system configuration file that does not exclude the system residence volume from being sensed, or that defines the volume explicitly.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP6768I The variations of this message are explained below.

Explanation

- SECUSER of *userid* initiated.
- SECUSER of *userid* initiated for you by *userid*.
- SECUSER for *primaryuserid* of *secuserid* is not functional
- Your SECUSER set to *userid* by *userid*.
- Observation of *userid* initiated
- Observation of *userid* initiated for you by *userid2*
- Observation of *userid* by *observer* is not functional
- Your observation by *userid* set by *userid2*

CP issues these messages in response to a CP SET SECUSER or SET OBSERVER command:

- You see the first version if you issued a CP SET SECUSER command to make your virtual machine the secondary user for another virtual machine. If that virtual machine is disconnected, your user ID will receive copies of all the console messages sent to the disconnected user ID, and you can issue the CP SEND command to send commands to be executed in the target user ID's virtual machine.
- You see the second version if someone else issued a CP SET SECUSER command to make your virtual machine the secondary user ID for another virtual machine.
- You see the third version if a CP SET SECUSER command is issued to define a secondary user for another virtual machine. In this case the seclabel of the secondary user is neither equivalent to nor dominates that of the primary user, and so the secondary user is not functional.
- You see the fourth version if someone has issued a CP SET SECUSER command changing your virtual machine's secondary user ID. In this case, if you disconnect, the user ID that the command issuer specified will receive copies of all the console messages sent to your virtual machine, and it can issue the CP SEND command to send commands to be executed in the your virtual machine.

- In the fifth version, you are now observing the line-mode console output produced by user *userid*.
- In the sixth version, you are now observing the line-mode console output produced by user *userid* as the result of a SET OBSERVER command issued by user *userid2*.
- You see the seventh version if a CP SET SECUSER command is issued to define an observer for another virtual machine. In this case the seclabel of the observer is neither equivalent to nor dominates that of the observed userid, and so the observer is not functional.
- In the eighth version, your line-mode console output is being observed by user *userid* as the result of a SET OBSERVER command issued by user *userid2*.

System action

The system changes the specified virtual machine's secondary or observer user ID according to the parameters specified on the command.

User response

For the third and seventh versions of the message, log the secondary user off and log on again with a seclabel that is either equivalent to or dominates that of the primary user.

For all other versions of the message, no user response is required.

HCP6769I **The variations of this message are explained below.**

Explanation

- SECUSER of *userid* terminated.
- SECUSER of *userid* terminated for you by *userid*.
- Your SECUSER terminated by *userid*.
- Observation of *userid* terminated
- Observation of *userid* terminated for you by *userid2*
- Your observation terminated by *userid*

CP issues this message in response to a CP SET SECUSER or SET OBSERVER command.

- You see the first version of this message if you entered a CP SET SECUSER command to tell CP to stop using your virtual machine as the secondary user ID for another virtual machine.
- You see the second version if someone else has issued a CP SET SECUSER command to tell CP to stop using your virtual machine as the secondary user ID for another virtual machine.
- You see the third if a CP SET SECUSER command told CP to stop using another virtual machine as your secondary user ID.
- In the fourth version, you are no longer observing the line-mode console output produced by user *userid*.
- In the fifth version, you are no longer observing the line-mode console output produced by user *userid* as the result of a SET OBSERVER command issued by user *userid2*.
- In the sixth version, your line-mode console output is no longer being observed as the result of a SET OBSERVER command issued by user *userid2*.

System action

CP stops using the specified virtual machine as another virtual machine's secondary user ID.

CP stops displaying the observed user's line-mode console output on the observer's console.

User response

None.

HCP6770E **The variations of this message are explained below.**

Explanation

- IPL parameters: Expected (not found following *selector*
- IPL parameters: Expected) but found end of string -IPL parameters: Invalid {console address | file name | file type | IPLVAR value | parm disk number | parm disk offset | selector value | storage specification} - *string*
- IPL parameters: No value specified for selector *selector*
- IPL parameters: Option *option* ignored. No longer supported
- IPL parameters: Selector not allowed - *selector*
- IPL parameters: Unrecognized option - *option*
- IPL parameters: Unrecognized selector - *selector*
- IPL parameters: REPAIR overrides CLEARPDR

You IPLed a CP module, and one of the IPL parameters that you passed to CP with the Stand-Alone Loader (SAL) is not valid or conflicts with another parameter.

System action

CP ignores the not-valid or overridden parameter and continues the IPL process.

User response

If the not-valid or overridden IPL parameter was specified when SAL was installed, run the SALIPL utility to correct the default IPL parameters.

HCP6771E LOGMSG support based on {userid | ACI group | account ID} is not enabled.

Explanation

You issued a CP QUERY LOGMSG command with the ACCOUNTID, ACIGROUP, or USERID operand, and LOGMSG support for the category you specified has not been enabled on the FEATURES statement in the system configuration file.

System action

CP ignores the command; system operation continues.

User response

If you want to enable the specified support, edit the system configuration file and specify FEATURES ENABLE LOGMSG_FROM_FILE. Then, re-IPL.

HCP6772E Not authorized to link disk without a password

Explanation

You issued a CPACCESS or CPTYPE command for a minidisk, and you do not have the authority to link to that minidisk without specifying a password. Users who issue CPACCESS commands must be able to establish a link to the specified minidisk in the same mode that they want CP to access it. Users who issue CPTYPE commands must be able to establish an RR link to the minidisk where the specified file resides.

System action

CP ignores the command; system operation continues.

User response

Have Operations personnel update your entry in the user directory so that you have the authority to link to the specified minidisk, and then reissue the command.

HCP6773E Disk *fm* is being released -- command rejected.

Explanation

You entered a CPCACHE command for a disk that CP is releasing because of another user's CPACCESS or CPRELEASE command.

System action

CP rejects the command; system operation continues.

User response

You can issue a QUERY CPDISK command to find out the status of the minidisks that CP has accessed before you issue another CPCACHE command.

HCP6774W NO {WARMSTART|CHECKPOINT} AREA DEFINED.

Explanation

You have not specified a warm start or checkpoint area on the SYSTEM_RESIDENCE statement in the system configuration file.

System action

CP loads a disabled wait state (wait state code = 6774).

User response

Edit the system configuration file and IPL again.

HCP6775W The *type* area is defined on an unsupported device.

Explanation

You specified an NVMe EDEVICE as the location of the warm start or checkpoint area. NVMe EDEVICEs cannot be used to hold warm start or checkpoint data.

System action

CP loads a disabled wait state (wait state code = 6775).

User response

Edit the system configuration file and reIPL.

HCP6776I *userid* {selected|removed} your userid as the system operator ID.

Explanation

The user ID *userid* entered the SET SYSOPER command, and defined either your user ID or another user ID to be the system operator.

System action

System operation continues.

User response

None.

HCP6777E ***userid*** **in IPL, LOGOFF, or FORCE process**

Explanation

You entered a SET SYSOPER command for a user ID that is not fully initialized or that is logging off or being forced off the system, or is in the process of being relocated.

System action

CP ignores the command and does not change the operator ID. System operation continues.

User response

Choose a different user ID that CP should use as the operator ID, and enter the command again.

HCP6778E **User** ***userid*** **does not have required privilege class.**

Explanation

You entered a SET SYSOPER command specifying a user ID that does not meet either of the following criteria:

- It does not have one of the appropriate privilege classes to become the operator ID. These privilege classes are specified on the PRIV_CLASSES statement in the system configuration file.
- It is not the special operator user ID that is specified on the SYSTEM_USERIDS statement in the system configuration file.

System action

CP ignores the command and does not change the operator ID. System operation continues.

User response

Use the CP SET PRIVCLASS command to give the specified operator ID the required class, or choose a different user ID for the new operator ID.

HCP6779E **Volume** ***volid*** **already defined in slot** ***number*****.**

Explanation

The DEFINE CPOWN command was entered to define a volume that is already defined in another slot.

System action

The command is not executed. System operation continues.

User response

If you want to enter the DEFINE CPOWN command, you must detach the device found in the indicated slot *number* from the system. Then enter the DEFINE CPOWN command again.

HCP6780E **Slot number cannot exceed the defined maximum of** ***nnn*****.**

Explanation

You entered a DEFINE CPOWNED command that specified a number larger than the largest slot number defined on the CP_OWNED statement in the system configuration file.

System action

CP rejects the command; system operation continues.

User response

You can use the QUERY CPOWNED command to determine how many slots are available on the list of CP-owned volumes, and then issue another DEFINE CPOWNED command to fill one of the available slots.

HCP6781E **Requested slot occupied by mounted volume** ***volid*****.**

Explanation

You issued a DEFINE CPOWNED command that tried to redefine an occupied slot in the list of CP-owned volumes.

System action

CP rejects the command; system operation continues.

User response

To replace a volume in the list, issue a CP DETACH command to detach the volume already in the list from the system. Only then can you redefine the slot in the list.

HCP6782E Soft ABEND in progress -- command {interrupted|rejected}.

Explanation

You see the first version of this message if you issued a CP SET TRACEFRAMES command just before the system took a soft abend. You see the second version if you issued a CP SET TRACEFRAMES command while a soft abend was in progress.

System action

In the first case, CP has started to change the size of the trace tables before the soft abend begins. CP will issue one copy of this message each second until the soft abend and the CP SET TRACEFRAMES command have completed. In the second case, CP has not started to change the size of the trace tables before the soft abend, and therefore rejects the CP SET TRACEFRAMES command.

User response

You must wait until the soft abend (and the CP SET TRACEFRAMES command, if it took effect before the abend) has completed. If your SET TRACEFRAMES command was rejected, you will be able to reissue it.

HCP6783E Errors encountered processing *fn ft*.

Explanation

You entered a CP REFRESH LOGOINFO command, and CP encountered an error when it tried to read the file you specified on the command. Other messages telling you exactly what the error was will precede this one.

System action

CP ignores the file and does not change any of the logo processing information; system operation continues.

User response

Read the error messages before this one to determine where the problem in the logo configuration file is. Edit the logo configuration file, have CP reaccess the minidisk, and issue the CP REFRESH LOGOINFO command again.

HCP6784E The variations of this message are explained below.

Explanation

- No VSMs logged on.
- No VSMs matching pattern *userid_pattern* logged on.
- VSM *userid* not logged on.

You issued a CP REFRESH LOGOVSM command to change the logo configuration information for terminals logged on through one or more VTAM service machines (VSMs), and the VSMs you specified are not logged on to the system.

System action

CP ignores the command; system operation continues.

User response

Issue a CP QUERY NAMES command to find out which VTAM service machines are logged on to your system. Then enter another CP REFRESH LOGOVSM command.

HCP6785E Unable to identify device *rdev* dynamically.

Explanation

You issued a CP VARY ONLINE command, and one of the following errors occurred:

- You specified a device whose class or type has not been set, and which does not respond with enough information to enable CP to determine its class and type.
- You specified a device that is not powered on.
- You specified a CTCA, and the system on the other side of the CTCA is not activated.

System action

CP rejects the CP VARY ONLINE command; system operation continues.

User response

You can define the device to CP in one of the following ways:

- Use the CP SET RDEVICE command.
- Add an RDEVICE statement to the system configuration file (SYSTEM CONFIG).
- Add an RDEVICE entry to the real I/O configuration file (HCPRIO ASSEMBLE).
- If this is a CTCA, activate the system on the other side of the CTCA.

HCP6786E *system* cannot be resolved because system ID is undefined -- logo configuration file cannot be read.

Explanation

The LOGO_CONFIG statement in the system configuration file contains a statement of the form, *system filetype*. The *system* acts as a variable and takes the value of the system name. Unfortunately, the SYSTEM_IDENTIFIER statement or the SYSTEM_IDENTIFIER_DEFAULT statement or both were not defined in the system configuration file. Therefore, the *system* variable is undefined.

System action

System operation continues, but CP does not read the logo configuration file. Subsequently, all of the logo definitions come from HCPBOX.

User response

Define a system identifier in the system configuration file and re-IPL the system so it can take effect.

HCP6787E **The variations of this message are explained below.**

Explanation

- No VSMs support dynamic logo updates.
- No VSMs matching pattern *userid_pattern* support dynamic logo updates.
- VSM *userid* does not support dynamic logo updates.

A CP REFRESH LOGOVSM command was issued to change the logo configuration information for terminals logged on through one or more VTAM service machines (VSMs). The VSMs specified do not support dynamic logo updates.

System action

CP ignores the command. System operation continues.

User response

Determine which logged on VTAM service machines support dynamic logo updates. Then enter another CP REFRESH LOGOVSM command.

HCP6789E **The variations of this message are explained below.**

Explanation

- Diagnose code *diag* is already defined
- Requested CP Exit number *exit* is already defined

CP rejected the request to define a new DIAGNOSE code or CP Exit because the DIAGNOSE code or CP Exit number you chose is the number of an existing DIAGNOSE code or CP Exit.

System action

CP rejects the command; system operation continues.

User response

If you want to define a new DIAGNOSE code or CP Exit, enter the DEFINE DIAGNOSE or DEFINE EXIT command again and specify a DIAGNOSE code or CP Exit number that does not currently exist on your system. If you want to override an existing DIAGNOSE code or CP Exit, use the MODIFY DIAGNOSE or MODIFY EXIT command instead of the DEFINE command.

HCP6790I ***command*** **processing halted. [The next {device | PCI function | location} that would have been processed is {*dev* | *PCI function* | *address* }.]**

Explanation

The CPHX command was issued to halt the command processing. See CPHX in *z/VM: CP Commands and Utilities Reference* for the list of commands that support CPHX.

System action

CP halts execution of the command or function. System operation continues.

User response

None.

HCP6791I **User *userid1* has halted the *command* command executed by user *userid2*.**

Explanation

The CPHX command was issued by *userid1* to halt the command processing of *userid2*. See CPHX in *z/VM: CP Commands and Utilities Reference* for the list of commands that support CPHX.

System action

CP stops executing the specified command. System operation continues. *userid2*'s virtual machine is free to execute other commands.

User response

None.

HCP6792I **User *userid*'s *command* command halted.**

Explanation

The CPHX command was issued to halt the command processing. See CPHX in *z/VM: CP Commands and Utilities Reference* for the list of commands that support CPHX.

System action

CP stops execution of the specified command. System operation continues.

User response

None.

HCP6793I **User *userid* has halted your *command* command.**

Explanation

The CPHX command was issued by *userid* to halt the command processing. See CPHX in *z/VM: CP Commands and Utilities Reference* for the list of commands that support CPHX.

System action

CP stops executing the specified command. System operation continues.

User response

None.

HCP6794E **NO RECOMP AREA DEFINED ON CMS FORMATTED DISK**

Explanation

You used the SALIPL utility that runs under CMS to install the stand-alone loader on a CMS formatted volume. However, the CMS formatted volume had no recomp area reserved.

System action

The system aborts the installation of the Stand-Alone Loader (SAL).

User response

Ensure you have specified the correct virtual address to the SALIPL utility. If you have, use the CMS FORMAT command to reserve a recomp area of at least one cylinder for Count-Key devices (CKD) or at least 208 blocks for fixed block architecture (FBA) devices.

HCP6795E **RECOMP AREA IS TOO SMALL ON CMS FORMATTED DISK**

Explanation

You used the SALIPL utility that runs under CMS to install the stand-alone loader on a CMS formatted volume. However, the CMS formatted volume had a recomp area reserved that was too small.

System action

The system aborts the installation of the Stand-Alone Loader (SAL).

User response

Ensure you have specified the correct virtual address to the SALIPL utility. If you have, use the CMS FORMAT command to reserve a recomp area of at least one cylinder for Count-Key devices (CKD) or at least 208 blocks for fixed block architecture (FBA) devices.

HCP6796E **IPL PROGRAM AREA NOT ALLOCATED PERM**

Explanation

You used the SALIPL utility that runs under CMS to install the stand-alone loader on a CP formatted volume. However, the CP formatted volume had the area that the stand-alone loader was being written to allocated as other than PERM.

System action

The system aborts the installation of the Stand-Alone Loader (SAL).

User response

Ensure you have specified the correct virtual address to the SALIPL utility. If you have, use ICKDSF or CPFMTXA to allocate cylinder zero as PERM for Count-Key devices (CKD). For FBA devices, allocate pages 4 through 25 as PERM. Note that pages 0 to 3 are never allocated and are therefore already PERM.

HCP6797I **MINIDISK VOLID AT OFFSET *offset* IS *volid***

Explanation

You used the SALIPL utility that runs under CMS to install the stand-alone loader on a volume, but you did not specify the MINIVOL option. Therefore, the volume ID of the minidisk is displayed rather than being verified.

System action

System operation continues.

User response

None.

HCP6798I VOLUME ID IS *volid*

Explanation

You used the SALIPL utility that runs under CMS to install the stand-alone loader on a volume, but you did not specify the VOLID option. Therefore, the volume ID is displayed rather than being verified.

System action

System operation continues.

User response

None.

HCP6799E INVALID EXTENT *extent*

Explanation

You used the SALIPL utility that runs under CMS to install the stand-alone loader on a CP formatted volume, but you specified a parameter to the EXTENT option that was not a single digit from 1 to 9.

System action

The system aborts the installation of the Stand-Alone Loader (SAL).

User response

Retry the command specifying an extent number in the range 1 to 9.

HCP6800E INVALID OFFSET *offset*

Explanation

You used the SALIPL utility that runs under CMS to install the stand-alone loader on a CP formatted volume, but you specified a parameter to the OFFSET option that was not a decimal number in the range 0 to 99999999.

System action

The system aborts the installation of the Stand-Alone Loader (SAL).

User response

Retry the command specifying an offset in the range 0 to 99999999.

HCP6801E EXTENT IS NOT VALID WITH A CMS FORMATTED DISK

Explanation

You used the SALIPL utility that runs under CMS to install the stand-alone loader on a CMS formatted volume, but you specified the EXTENT option. The EXTENT option is valid only with CP formatted volumes.

System action

The system aborts the installation of the Stand-Alone Loader (SAL).

User response

Ensure you have specified the correct virtual address to the SALIPL utility. If you have, use the DSF utility to format and allocate the volume in CP format.

HCP6802E EXTENT NOT FOUND IN ALLOCATION MAP

Explanation

The Stand-Alone Program Loader Creation Utility (SALIPL), which runs under CMS, was used to install the Stand-Alone Program Loader (SAPL) on a CP formatted volume; but, the extent number specified was higher than the number of parm disk extents in the volume's allocation table map.

System action

Installation of the SAPL is aborted.

User response

Ensure you have specified the correct virtual address and extent number to the SALIPL utility. If necessary, use the DSF utility to allocate the appropriate parm disk extents. For more information, refer to the SALIPL utility in *z/VM: CP Commands and Utilities Reference*.

HCP6802W EXTENT NOT FOUND IN ALLOCATION MAP

Explanation

An IPL of the system was attempted and the Stand-Alone Program Loader (SAPL) could not find a parm disk extent in the volume's allocation table map to satisfy the value that it was trying to use.

System action

The system enters a disabled wait state (wait state code = 6802). The registers will contain the following information:

R0
Device number

R1
Subchannel ID of the device

R2
Offset cylinder/block

R3
Extent number

R4-R5
Name of module to load

R12
Base register

R13
Work page address

User response

Use the SAPL screen to override the current extent number or specify an offset for the parm disk. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

HCP6803I ENTER UP TO *n* LINES OF {COMMENTS|IPLPARMS}

Explanation

You used the SALIPL utility that runs under CMS to install the stand-alone loader on a CP formatted volume, and you specified a ? as the parameter to either the COMMENTS or IPLPARMS option. SALIPL is prompting you for the data to be placed in the COMMENTS or IPLPARMS data areas.

System action

SALIPL waits for you to type the number of lines specified by *n* at the console. Then SALIPL continues processing.

User response

Enter the data you want placed in the COMMENTS or IPLPARMS data areas.

HCP6804E UNABLE TO LOAD MODULE, STORAGE FRAME AT *nnnnnnnn* IS UNAVAILABLE

Explanation

Either HCPBOU (bounce processing) or the Stand-Alone Program Loader (SAPL) detected an unavailable frame while trying to load a module at location *nnnnnnnn*.

System action

- If the SAPL was running with a console, the SAPL menu is displayed.
- If HCPBOU was running, the system enters a disabled wait state (wait state code = 6804).
- If the SAPL was running without a console, the system enters a disabled wait state (wait state code = 6804) and the registers will contain the following information:

  R0
  Unavailable page frame address

  R12
  Base register

  R13
  Work page address

User response

There is a storage hardware problem where the CP nucleus is to be loaded. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP6804W UNABLE TO LOAD MODULE, STORAGE FRAME AT *nnnnnnnn* IS UNAVAILABLE

Explanation

Either HCPBOU (bounce processing) or the Stand-Alone Program Loader (SAPL) detected an unavailable frame while trying to load a module at location *nnnnnnnn*.

System action

- If running with a console, message HCP6804E is displayed.

- If HCPBOU was running without a console, the system enters a disabled wait state (wait state code = 6804).
- If the SAPL was running without a console, the system enters a disabled wait state (wait state code = 6804) and the registers will contain the following information:

  R0
  Unavailable page frame address

  R12
  Base register

  R13
  Work page address

User response

There is a storage hardware problem where the CP nucleus is to be loaded. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP6805E The variations of this message are explained below.

Explanation

- Cannot find RDEV for TYPE 1 subchannel
- Cannot determine partition being changed by this dynamic I/O request

You tried to dynamically change your I/O configuration, but CP rejected your request because of an internal hardware error.

System action

CP ignores your dynamic I/O change request and normal processing continues.

User response

The LRECL value for SECTABLE FILE must be from 10 to 141; its RECFM value must be V. Make any necessary corrections.

HCP6806E Dynamic I/O change request [for {channel path | for control unit | for device | for logical partition | for PCI function}] failed with return code *nnnn*

Explanation

You used one of the dynamic I/O commands to dynamically change your I/O configuration, but the command failed with the specified return code (*nnnn*).

System action

CP ignores your dynamic I/O change request and normal processing continues.

User response

Fix the problem associated with the specified return code (*nnnn*) and enter the dynamic I/O command again. For more information about the return code, refer to *z/VM: I/O Configuration*.

HCP6807E Device *rdev* is being throttled and cannot be attached to the system as a CP-owned device.

Explanation

You tried to attach a CP-owned device, but CP rejected your request because the device you specified is currently being throttled. CP does not allow you to throttle CP-owned devices.

System action

CP ignores your dynamic I/O change request and normal processing continues.

User response

Enter a SET THROTTLE *rdev* OFF command to stop throttling the specified device. Then attach that device to the system again. (For more information about the SET THROTTLE command, see *z/VM: CP Commands and Utilities Reference*.)

HCP6808E The variations of this message are explained below.

Explanation

- System disabled for dynamic I/O changes
- The configuration mode setting of the hardware and software do not match
- The dynamic I/O support was disabled at the service console
- Cannot store LPAR data
- The VM configuration token does not match the hardware configuration token
- Cannot find the configuration token on the system

You tried to dynamically change your I/O configuration, but CP rejected your request.

System action

CP ignores your dynamic I/O change request and normal processing continues.

User response

Fix the problem associated with the message text variation and enter the dynamic I/O command again.

HCP6809E This processor does not support the dynamic I/O changes

Explanation

You tried to dynamically change your I/O configuration, but CP rejected your request because the processor that CP is running is not capable of supporting dynamic I/O changes. Only Parallel 390 processors support the dynamic I/O configuration feature.

System action

CP ignores your dynamic I/O change request and normal processing continues.

User response

None, until you switch to a Parallel 390 processor.

HCP6810E The variations of this message are explained below.

— Variation 1 Device *rdev* is not in the I/O throttling list

Explanation

You issued the CP SET THROTTLE command to turn throttling off for this device, but it was not in the I/O throttling list.

System action

Command execution terminates and system operation continues.

User response

Use the CP QUERY THROTTLE command to determine which devices are in the I/O throttling list and reissue the CP SET THROTTLE command to turn throttling off for an appropriate device.

— Variation 2 Device *rdev* is reserved and cannot be throttled

Explanation

You issued the CP SET THROTTLE command to turn throttling on for this device, but it currently is holding a reserve and cannot be throttled.

System action

Command execution terminates and system operation continues.

User response

A reserve should not be held for any great length of time by a device. So reissue the CP SET THROTTLE command to try and throttle this device.

— Variation 3 Device *rdev* is in use by the system and cannot be throttled

Explanation

You issued the CP SET THROTTLE command to turn throttling on for this device, but it is currently in use by the system and cannot be throttled.

System action

Command execution terminates and system operation continues.

User response

If appropriate, detach this device from the system and reissue the CP SET THROTTLE command to try and throttle this device.

— Variation 4 Device *rdev* is offline and cannot be throttled

Explanation

You issued the CP SET THROTTLE command to turn throttling on for this device, but it is currently offline and cannot be throttled.

System action

Command execution terminates and system operation continues.

User response

If appropriate, VARY ON this device and reissue the CP SET THROTTLE command to try and throttle this device.

— Variation 5 Device *rdev* is not allowed to be throttled

Explanation

You issued the CP SET THROTTLE command to turn throttling on for this device, but the device currently cannot be throttled. This resulted from

the device being specified on either the DEVICES NOTTHROTTLED configuration file statement, or on the CP SET DEVICES NOTTHROTTLED command.

System action

Command execution terminates and system operation continues.

User response

If appropriate, issue the SET DEVICES THROTTLED command for this device and then reissue the CP SET THROTTLE command to try and throttle this device.

HCP6811E **Vary {online|offline} CHPID *nn* failed with return code *nnnn*.**

Explanation

You used the VARY CHPID command to vary a channel path online or offline, but the command failed with the specified return code (*nnnn*).

System action

Command execution terminates and system operation continues.

User response

Fix the problem associated with the specified return code (*nnnn*) and enter the VARY CHPID command again. For more information about the return code, refer to *z/VM: I/O Configuration*.

HCP6812E **Set IOCDS_active command failed with return code *nnnn***

Explanation

You used the SET IOCDS_ACTIVE command to switch the active I/O configuration data set (IOCDS) file, but the command failed with the specified return code (*nnnn*).

System action

Command execution terminates and system operation continues.

User response

Fix the problem associated with the specified return code (*nnnn*) and enter the SET IOCDS_ACTIVE command again. For more information about the return code, refer to *z/VM: I/O Configuration*.

HCP6813E **Query CHPIDs command failed with return code *rc***

Explanation

You used the QUERY CHPIDS command to display all 256 of the machine's channel paths and their physical status, but the command failed with the specified return code (*rc*).

System action

Command execution terminates and system operation continues.

User response

Fix the problem associated with the specified return code (*nnnn*) and enter the QUERY CHPIDS command again. For more information about the return code, refer to *z/VM: I/O Configuration*.

HCP6814E **Command is not valid on this processor**

Explanation

A user tried to execute the Query CHPIDS command and the command is not supported on this processor.

System action

Command execution terminates and system operation continues.

User response

None.

HCP6815E **The variations of this message are explained below.**

— Variation 1 **Cannot find configuration token in the channel subsystem**

Explanation

The system has not been set up to use Dynamic I/O configuration because no channel subsystem token has been found.

System action

System operation continues, but dynamic I/O configuration is not allowed.

User response

Follow the procedure outline in *z/VM: I/O Configuration* on how to set up your system for Dynamic I/O. This will place a channel subsystem token into the hardware.

— Variation 2	Command failed in channel subsystem

Explanation

The system has been defined to enable Dynamic I/O Configuration, but an error occurred when doing so.

System action

System operation continues, but dynamic I/O configuration is not allowed.

User response

Enter the Set DYNAMIC_IO command to see if the error persists. If it does, contact your system support staff.

— Variation 3	Cannot find configuration token in the system

Explanation

A user entered a dynamic I/O command on a system with the dynamic I/O support enabled, but no configuration token was found in the system.

System action

The dynamic I/O command is not executed.

System programmer response

Verify that the configuration is still intact and matches the active IOCDS. Examine responses from the last dynamic changes and make sure that they all completed successfully. If everything appears satisfactory, the tokens stored in the system common area might have been overlaid. Try entering the SET DYNAMIC_IO OFF command to disable dynamic I/O support. Then enter the SET DYNAMIC_IO ON command to reinitialize the configuration tokens. You might have to re-IPL the system to solve the problem.

User response

Contact your system programmer.

HCP6816E	The variations of this message are explained below.
— Variation 1	Dynamic I/O changes are not allowed on this system

Explanation

No dynamic changes are allowed on the system because the system does not support dynamic I/O configuration.

System action

System operation continues.

User response

None.

— Variation 2	Dynamic I/O changes are not allowed for device *rdev*

Explanation

Dynamic changes are not allowed for the device as the system has been configured to disallow any dynamic I/O operation on this device.

System action

System operation continues.

User response

If you want to allow dynamic I/O operations on this device, you must remove it from the DEVICES NOTDYNAMIC I/O statement.

— Variation 3	Dynamic I/O changes are not allowed because LPAR information is not available

Explanation

Dynamic I/O configuration is not enabled because the system cannot determine the LPAR definitions.

System action

System operation continues.

User response

Contact your system support staff.

— Variation 4	Dynamic I/O changes are not allowed because the configuration token is not a valid VM token

Explanation

A user entered the SET DYNAMIC I/O ON command or coded the FEATURES ENABLE DYNAMIC I/O statement in the system configuration file. The configuration token found in the channel subsystem while trying to

enable the dynamic I/O support on the system is not a valid z/VM token.

System action

The dynamic I/O support is not enabled on the system.

User response

Run the IOCP source file through the IOCP utility provided on the CMS disk specifying the DYN option. This will add the correct configuration token to the IOCP file. Then write the generated IOCDS to the PCE hard disk. Shutdown and re-IPL the system.

— Variation 5 Dynamic I/O changes are being controlled by HCD

Explanation

A QUERY DYNAMIC_IO command was issued to obtain dynamic I/O status to determine if this z/VM system is enabled for dynamic I/O. However, the system was IPLed with HCD enabled for dynamic I/O and z/VM's dynamic I/O command interface is therefore unavailable for use while HCD is enabled.

System action

System operation continues.

User response

Issue the QUERY HCD command to obtain HCD dynamic I/O information. If you want z/VM to control the dynamic I/O configuration instead of HCD, then issue the DISABLE HCD command. Note that the DISABLE HCD command disables the HCD control of the hardware and software I/O configuration. HCD can be enabled only by re-IPLing the system.

— Variation 6 Hot I/O rates are being controlled by HCD

Explanation

A QUERY HOTIO command was issued to obtain the hot I/O rates for devices in the system. However, this system was IPLed with HCD controlling the software I/O configuration. Therefore, the SET HOTIO and QUERY HOTIO commands are unavailable for use.

System action

System operation continues.

User response

To retrieve the hot I/O recovery rate setting information, either use HCM or the HCD OS device detail report. The hot I/O recovery rate corresponds to the UIRATE device parameter. In HCM, the OS Configuration Parameters dialog allows you to view and modify this setting. For more information about HCM, see z/OS and z/VM: Hardware Configuration Manager User's Guide (https://www.ibm.com/docs/en/SSLTBW_3.2.0/pdf/eequ100_v3r2.pdf).

To print the HCD OS device detail report, the REXX™ utility CBDSREP can be used. For more information about how to print HCD reports, see *z/VM: I/O Configuration*.

If you want z/VM to control the I/O configuration instead of HCD, issue the DISABLE HCD command. Note that the DISABLE HCD command disables HCD's control of the hardware and software I/O configuration. HCD can be re-enabled only by re-IPLing the system.

— Variation 7 Dynamic I/O changes are not allowed for CSS *nn*

Explanation

The dynamic I/O command that was issued failed because a channel-subsystem (CSS) ID specified is for a channel subsystem that does not support dynamic I/O changes.

System action

System operation continues.

User response

Verify the dynamic change you are trying to make and, if appropriate, reissue the command specifying a CSS ID for a channel subsystem that supports dynamic changes.

HCP6817E You must specify an existing CP command for this alias

Explanation

CP rejected the request to define a new alias for an existing CP command because you did not specify which existing CP command.

System action

CP does not define a new alias; system operation continues.

User response

Define the alias again, and remember to identify the existing CP command for which you are creating the alias.

Note: If you did not use the CP DEFINE ALIAS command or configuration file statement to define a new alias, then an internal error has occurred. Contact your IBM software support for programming support.

HCP6818E	**The variations of this message are explained below.**
— Variation 1	**Define command failed. Channel path *path* is a managed channel path**

Explanation

A user entered the DEFINE CU command, but the specified path is a managed channel path.

System action

The CU is not defined.

User response

Managed channel paths can only be defined to a control unit by the OS/390® dynamic-channel-path-management function. Remove the specified CHPID from the list of CHPIDs specified on the command and then enter the command again.

— Variation 2	**Delete command failed. Channel path *path* is physically available**

Explanation

A user entered the DELETE CHPID *chpid* command, but the specified path is physically available to the system.

System action

The CHPID is not deleted.

User response

Enter the VARY CHPID OFF command to vary the CHPID off from the system. Then enter the command again.

— Variation 3	**Delete command failed. Device *rdev* is a base Parallel Access Volume for which an alias exists**

Explanation

A user entered the DELETE DEVICE command, but the specified device is a base Parallel Access Volume with one or more alias Parallel Access Volumes still associated with it.

System action

The device is not deleted.

User response

Enter the QUERY PAV command to see what alias Parallel Access Volumes exist for the specified device. Before you can delete a base Parallel Access Volume, you must first delete all associated alias Parallel Access Volumes.

— Variation 4	**Delete command failed. Device *rdev* is not subchannel offline**

Explanation

A user entered the DELETE DEVICE command, but the device or devices were not varied subchannel offline.

System action

The device or devices are not deleted.

User response

Enter the VARY OFF SUBCHANNEL command to vary the subchannel or subchannels offline. Then enter the command again.

— Variation 5	**Modify command failed. Channel path *path* is a managed channel path**

Explanation

A user entered the MODIFY CU command to add or delete CHPIDs, but the specified path is a managed channel path.

System action

The CHPIDs are not added or deleted.

User response

Managed channel paths can only be added to or deleted from a control unit by the OS/390 dynamic-channel-path-management function. Remove the specified CHPID from the list of CHPIDs specified on the command and then enter the command again.

— Variation 6 **Modify command failed. Channel path *path* is logically online**

Explanation

A user entered the MODIFY DEVICE command to delete control unit access to a device, but the CHPID associated with the control unit that the access is being deleted for is still logically available to the system.

System action

The control unit access to this device is not changed.

User response

Enter the VARY PATH OFF command to logically vary the path offline, then enter the MODIFY DEVICE command again.

— Variation 7 **Modify command failed. Channel path *path* is physically available**

Explanation

A user entered the MODIFY CU command to delete a CHPID, but the specified path is physically available to the system.

System action

The CHPID is not deleted.

User response

Enter the VARY CHPID OFF command to vary the CHPID off from the system. Then enter the command again.

— Variation 8 **Modify command failed. Device *rdev* is a base Parallel Access Volume for which an alias exists**

Explanation

A user entered the MODIFY DEVICE command to delete logical partition access for the specified device, but the device is a base Parallel Access Volume with one or more alias Parallel Access Volumes still associated with it.

System action

The logical partition access for this device is not changed.

User response

Enter the QUERY PAV command to see what alias Parallel Access Volumes exist for the specified device. Before you can modify a base Parallel Access Volume as requested, you must first delete all associated alias Parallel Access Volumes.

— Variation 9 **Modify command failed. Device *rdev* is not subchannel offline**

Explanation

A user entered the MODIFY DEVICE command, but the device or devices were not varied subchannel offline.

System action

The device or devices are not modified.

User response

Enter the VARY OFF SUBCHANNEL command to vary the subchannel or subchannels offline. Then enter the command again.

— Variation 10 **Vary command failed. Channel path *path* is logically online**

Explanation

A user entered the VARY CHPID *chpid* OFF command, but the specified path is logically online to one or more devices.

System action

The CHPID is not varied off.

User response

Enter the VARY PATH OFF command to vary the path off from all devices. Then enter the command again.

— Variation 11 **Modify command failed. PCI function *rpfid* is not offline.**

Explanation

A user entered the MODIFY PCIFUNCTION command to delete logical partition access for the specified PCI function, but the PCI function is still logically online to the system.

System action

The logical partition access for this PCI function is not changed.

User response

Enter the VARY OFFLINE PCIFUNCTION command to logically vary the PCI function offline. Then enter the MODIFY PCIFUNCTION command again.

— Variation 12 Delete command failed. PCI function *rpfid* is not offline.

Explanation

A user entered the DELETE PCIFUNCTION command, but the specified PCI function is still logically online to the system.

System action

The PCI function is not deleted.

User response

Enter the VARY OFFLINE PCIFUNCTION command to logically vary the PCI function offline. Then enter the DELETE PCIFUNCTION command again.

HCP6819E A dynamic I/O command is currently executing for user *userid*

Explanation

A user entered a DYNAMIC I/O command, but a dynamic I/O change was already in progress for user *userid*.

System action

DYNAMIC I/O command is not executed.

User response

Wait for user *userid* to complete the dynamic I/O changes.

HCP6820E Required file name has been omitted.

Explanation

You ran the syntax checker, but you did not specify the name of the file that it should check.

System action

CMS does not run the syntax checker; system operation continues.

User response

Run the syntax checker again, and specify the name of a configuration file for it to check.

HCP6821E Invalid quoted string encountered -- statement ignored.

Explanation

You ran the syntax checker on a configuration file, and the checker found a quoted string that did not have a blank before the opening single quotation mark, or one that did not have a blank after the closing one.

System action

Before it issues this message, the syntax checker tells you which file contains the statement with the error, and also tells you where to find the error in the file.

User response

Edit the system configuration file and fix the statement.

HCP6822W Statement contained only qualifiers.

Explanation

You ran the syntax checker on a configuration file, and the checker found a statement that contained only system qualifiers.

System action

System operation continues.

User response

Edit the system configuration file and fix the statement before you run the syntax checker again.

HCP6823E *fn* MODULE was not found.

Explanation

You ran the syntax checker, and it could not find a required module on any minidisk that CMS had accessed. When it processes a system configuration file, the syntax checker calls on the same modules that a system being IPLed would.

System action

The syntax checker stops checking the specified file; system operation continues.

User response

Check to see whether you have the correct minidisks accessed.

HCP6824E **Unexpected return code *rc* received from module *fn*.**

Explanation

You ran the syntax checker, and it called on a module that sent back a return code that the syntax checker did not expect to receive.

System action

The syntax checker stops running; system operation continues.

User response

If CPSYNCHK is the module that returned the error, then the *rc* is probably the return code from the CMS CSL routine DMSCSR. Refer to *z/VM: CMS Callable Services Reference* for return codes from DMSCSR and for common return codes from calls to CSL routines.

HCP6825E **Unknown conversion type encountered -- may need a different version of *fn* module.**

Explanation

You ran the syntax checker to examine a system configuration file, and the checker called on a module that is of a different version from that of the syntax checker.

System action

The syntax checker stops processing the configuration file; system operation continues.

User response

Contact Operations personnel.

HCP6826E **One or more errors were encountered in processing sections of the system configuration file that were marked not to tolerate errors.**

Explanation

You ran the syntax checker on a configuration file, and the checker has found an error in a section of the file that was marked by TOLERATE_CONFIG_ERRORS statements not to contain errors.

System action

System operation continues.

User response

Edit the system configuration file and correct the error before you run the syntax checker again.

HCP6827E **XLINK systems were specified and *sysname* was in neither the XLINK system inclusion nor the exclusion list. Failure to correct this error may lead to loss of user data.**

Explanation

You ran the syntax checker on a system configuration file. The checker has determined that the system that the file would IPL is not on the lists of systems to be included in or excluded from cross system link. These lists are generated by XLINK_SYSTEM_INCLUDE or XLINK_SYSTEM_EXCLUDE statements.

System action

System operation continues.

User response

Edit the system configuration and correct the statements before you IPL the system; then run the syntax checker again.

HCP6828W **No {CP owned volumes | system residence area | operator consoles} defined in the configuration file.**

Explanation

You ran the syntax checker on a system configuration file, and it found that the file did not contain one of the pieces of information that a system must have to IPL.

System action

System operation continues.

User response

Edit the system configuration file and add the information that the message specified before you run the syntax checker again, unless you have this information specified in HCPSYS ASSEMBLE or HCPRIO ASSEMBLE.

HCP6829I **Configuration file processing complete -- no errors encountered.**

Explanation

You ran the syntax checker to examine a configuration file for errors, and the checker did not find any.

System action

System operation continues.

User response

None.

HCP6830I ***volid*** **is currently attached to** ***system*****. Detach the device from the** ***system*** **and try this command again.**

Explanation

The DEFINE CPOWN command was entered to define a volume that is already attached to the system.

System action

The command was not executed. System operation continues.

User response

If you want to enter the DEFINE CPOWN command, you must detach the device from the system and the enter the DEFINE CPOWN command again.

HCP6831I **The Invalid Configuration bit is on in the hardware. If you do not want to reset the I/O configuration, enter SHUTDOWN. Otherwise, enter one of the following options:**

Explanation

During IPL, the Invalid Configuration bit was found turned on (probably because a system abend or a system re-IPL occurred while the system was in configuration mode and processing a dynamic I/O change).

System action

None.

System programmer response

Verify that the I/O configuration is still valid. If so, select the appropriate IPL start option from the list provided in the next message and the bit that is not valid will be reset. If the configuration is not valid, enter SHUTDOWN to shutdown the system. A machine POR (power on reset) may be necessary to fix the problem.

User response

Contact your system programmer.

HCP6832I **The variations of this message are explained below.**

— Variation 1 ***rdev*** **device(s) added to I/O throttling list starting with device** ***xxx***

Explanation

The throttle *rdev*-*rdev* rate *xx* statement was coded in the system configuration file and out of the range specified. The *rdev* devices were added to the throttle list, starting at device number *xxx*.

System action

None.

User response

None.

— Variation 2 ***rdev*** **device(s) skipped. Rate is** ***xx*** **I/Os per second**

Explanation

The throttle *rdev*-*rdev* rate *xx* statement was coded in the system configuration file and is out of the range specified. The *rdev* devices were not added to the throttle list. This message also displays the I/O rate for the devices which are being throttled.

System action

None.

User response

None.

— Variation 3 **Device** ***rdev*** **added to I/O throttling list. Rate is** ***xx*** **I/Os per second**

Explanation

The throttle *rdev* rate *xx* statement was coded in the system configuration file and the specified device was successfully added to the throttle list at the specified rate. This message also displays the I/O rate at which devices added to the throttle list will be throttled.

System action

None.

User response

None.

HCP6833E Device *rdev* is not subchannel offline

Explanation

A user entered the command DELETE RDEV *rdev*, but the specified device is not varied subchannel offline.

System action

Device is not deleted.

User response

Enter the vary off subchannel command to vary the subchannel offline, and enter the command again.

HCP6834E Command parameter list length is too {small|large}.

Explanation

An internal error has occurred while defining a new command. CP rejects the new command because the value passed for the parameter list length was too small or too large for the necessary information. The value in the length field must be large enough to include the required information, but cannot exceed 4000 bytes.

System action

CP does not define the new command.

Operator response

Contact your IBM Support Center for programming support. They must increase or decrease the value of the length field, as necessary.

HCP6835E Offset to {alias|command|subcommand} name {is negative|is zero|exceeds parameter list length|overlays parameter list fields}.

Explanation

An internal error has occurred while defining a new command. CP rejected the new command because the supplied offset to the command, subcommand, or alias name did not point to the work area of the command parameter list. The command, subcommand, and alias names (if applicable) must be stored in the work area of the parameter list. Then the offset from the beginning of the parameter list to the command, subcommand, or alias name in the work area must be calculated and stored in the appropriate offset field. When you receive one of the messages listed above, the offset is not pointing to the work area. If the message says the offset:

is negative.
The offset points to an area of storage before the parameter list.

is zero.
The offset points to the beginning of the parameter list where the parameter list length is stored.

exceeds parameter list length.
The offset points to an area of storage beyond the end of the parameter list.

overlays parameter list fields.
The offset points somewhere between the start of the parameter list and the start of the work area.

System action

CP does not define the new command.

Operator response

Contact your IBM Support Center for programming support.

HCP6836E {Command|Subcommand|Alias} name extends beyond end of parameter list.

Explanation

An internal error has occurred while defining a new command. CP rejected the attempt because the command, subcommand, or alias name extends beyond the end of the parameter list.

System action

CP does not define the new command.

Operator response

Contact your IBM Support Center for programming support. They must either extend the length of the parameter list, or move the command, subcommand, or alias name so it fits within the parameter list boundaries.

HCP6837E {Command|Subcommand|Alias} name length is too large.

Explanation

An internal error has occurred while defining a new command. CP rejected the new command because the specified command, subcommand, or alias name exceeded the maximum length. New command, subcommand, or alias names cannot be longer than 12 characters.

System action

CP does not define the new command.

Operator response

Contact your IBM Support Center for programming support.

HCP6838E {Command|Subcommand} name abbreviation is too large.

Explanation

CP rejected the request to define a new command or subcommand because you specified a minimum abbreviation that was longer than the number of characters in the command or subcommand name.

System action

CP does not define the new command or subcommand; system operation continues.

User response

Define the command or subcommand again, but specify a minimum abbreviation less than or equal to the number of characters in the command or subcommand name.

Note: If you did not use the CP DEFINE ALIAS command or configuration file statement to define a new alias, then an internal error has occurred. Contact your IBM software support for programming support.

HCP6839E New command or abbreviation duplicates an existing one (*command*)

Explanation

CP rejected the request to define a new CP command for one of these reasons:

- The command name matches an abbreviation of an existing CP command.
- The command matches the name and IBM class of an existing CP command.
- The minimum abbreviation matches that of an existing CP command.
- The minimum abbreviation matches the full command name of an existing CP command.
- You specified a command or subcommand that is an alias of another. Once it is defined, an alias cannot be reused, it can only be disabled. An alias cannot be modified or eliminated until a SHUTDOWN or RESTART IPL is invoked.

System action

CP does not define the new command; system operation continues.

User response

If you want to define a new CP command, enter the DEFINE COMMAND or CMD command again, and specify a name, minimum abbreviation, or IBM class that does not match those of an existing CP command. If you want to modify an existing CP command, use the MODIFY COMMAND or CMD command instead of the DEFINE COMMAND or CMD command.

Note: If you did not use the CP DEFINE ALIAS command or configuration file statement to define a new alias, then an internal error has occurred. Contact your IBM software support for programming support.

HCP6840E The variations of this message are explained below.

— Variation 1 You specified SUBCMD without SET or QUERY

Explanation

CP rejected the request to define a new CP QUERY or SET subcommand because you specified the SUBCMD operand, but did not specify the QUERY or SET operand.

System action

CP does not define the new QUERY or SET subcommand; system operation continues

User response

Define the command again by specifying whether you are defining a QUERY or SET subcommand.

— Variation 2 You specified QUERY VIRTUAL without SUBCMD

Explanation

CP rejected the request to define a new CP QUERY or SET subcommand because you specified the QUERY VIRTUAL operand, but did not specify the SUBCMD operand.

System action

CP does not define the new QUERY or SET subcommand; system operation continues

User response

Define the command again by specifying the name of the QUERY VIRTUAL subcommand that you are defining.

HCP6841E The variations of this message are explained below.

Explanation

- You did not specify an IBM class.
- You specified more than one IBM class.
- You specified IBM class H, which is reserved for IBM use only.
- You did not specify an IBM class for command *command*

CP rejected the request to define a new command because either no IBM class was specified, more than one IBM class was specified, IBM class H was specified, or you attempted to modify the privilege class of a command that had multiple IBM classes defined. You are required to specify the IBM class for the versions to be modified. You can specify more than one privilege class, but you can only specify one IBM class in the range A through G. IBM class H is reserved for IBM use only.

System action

CP does not define the new command; system operation continues. Processing of the MODIFY command terminates when this error is detected.

User response

Define the command again and specify a single IBM class in the range A through G, or respecify the MODIFY command with the IBMCLASS operand.

Note: If you did not use the CP DEFINE ALIAS command or configuration file statement to define a new alias, then an internal error has occurred. Contact your IBM software support for programming support.

HCP6842E Cannot find existing CP command [for new alias]

Explanation

You tried to define a new alias, disable a CP command, or enable a CP command. If you are defining a new alias, CP rejected your DEFINE ALIAS command because CP cannot locate the existing CP command for which you are creating the alias. If you are enabling or disabling a CP command, CP rejected your ENABLE COMMAND or DISABLE COMMAND command because CP cannot find the CP command that you specified.

System action

CP does not define the new alias, disable the CP command, or enable the CP command; system operation continues.

User response

If you are defining a new alias, define the new alias again, and specify the name of an existing CP command to which CP can pair your alias. If you are enabling or disabling a CP command, make sure you specified the correct command or subcommand name, and the correct IBM class if there is more than one version of that CP command. Then enable or disable the CP command again.

Note: If you did not use the CP DEFINE ALIAS command or configuration file statement to define a new alias, then an internal error has occurred. Contact your IBM software support for programming support.

HCP6843E All versions of the command must have the same logon value

Explanation

CP rejected the request to define a new version of an existing CP command (same command name, different IBM class) because the new version did not have the same BEFORE_LOGON value as the existing CP command. You can define several versions of a command with any combination of AFTER_LOGON and ANYTIME values. However, when you define one version of a command with the BEFORE_LOGON operand, you must specify the BEFORE_LOGON operand on all other versions of that command.

System action

CP does not define the new version; system operation continues.

User response

Define the new version again, and specify the same BEFORE_LOGON value as the existing command.

Note: If you did not use the CP DEFINE ALIAS command or configuration file statement to define a new alias, then an internal error has occurred. Contact your IBM software support for programming support.

HCP6844E All versions of the command must have the same {PROC value|entry point name|entry point address|minimum abbreviation|SILENT setting}

Explanation

CP rejected the request to define a new version of an existing CP command (same command name, different IBM class) because the new version did not have the same PROC value, entry point name, entry point address, minimum abbreviation, or SILENT setting as the existing CP command. These respective values must be identical in all versions of a CP command.

System action

CP does not define the new version; system operation continues.

User response

Define the new version again, and either specify the same PROC value, entry point name, entry point address, minimum abbreviation, or SILENT setting as the existing CP command, or do not specify these values and let CP copy them from the existing versions of the command.

Note: If you did not use the CP DEFINE ALIAS command or configuration file statement to define a new alias, then an internal error has occurred. Contact your IBM software support for programming support.

HCP6845E You must specify {an entry point name|a privilege class|an IBM class} [other than 0]}

Explanation

CP rejected the request to define a new CP command because you did not specify some required information about the new command. When you define a new CP command, you must specify the name of the entry point containing the code to process the new command, the privilege class or classes of the new command (which cannot be 0), and the IBM class of the new command (which cannot be 0). The only exception to this rule is if you are defining a new alias to an existing CP command. In this case, the alias uses the same entry point, privilege classes, and IBM class of the existing command. You are not defining an alias, so you must specify the missing information.

System action

CP does not define the new command; system operation continues.

User response

Define the command again, and specify the entry point name, privilege class, or IBM class that you omitted in your last attempt to define the new CP command.

Note: If you did not use the CP DEFINE ALIAS command or configuration file statement to define a new alias, then an internal error has occurred. Contact your IBM software support for programming support.

HCP6846E The variations of this message are explained below.

Explanation

- Requested entry point name is not an external label in the nucleus
- Requested entry point name is not at the address indicated

CP rejected the request to define a new CP command because there was a problem locating the specified entry point name. If you receive the first message, CP cannot locate your entry point name anywhere in the CP nucleus. If you receive the second message, an internal error has occurred while defining the new CP command. CP rejected the new command because an entry point name and address were passed to CP during invocation, and CP located the entry point name, but the entry point address in the CP nucleus did not match the address that was passed during invocation.

System action

CP does not define the new command; system operation continues.

User response

For the first message, define the command again, and make sure you specify an entry point within the CP nucleus. For the second message, contact the IBM Support Center.

HCP6847E You cannot define a command whose alias is itself an alias

Explanation

CP rejected the request to define a new alias for an existing CP command because the existing CP command that was specified is actually an alias for another CP command. CP does not allow you to define an alias for an alias.

System action

CP does not define the new alias; system operation continues.

User response

Find out which existing CP command the existing alias points to. Define the new alias again, specifying the name of the existing CP command instead of the existing alias.

To find out which existing CP command the existing alias points to, enter the following CP commands:

- LOCATE CMDBK to display the command table entry address of the existing command
- DISPLAY (Host Storage) command to see the contents of that storage address.

Note: If you did not use the CP DEFINE ALIAS command or configuration file statement to define a new alias, then an internal error has occurred. Contact your IBM software support for programming support.

HCP6848E The I/O configuration could not be validated. To stop all processing, enter STOP. To continue initialization with the dynamic I/O support disabled, enter GO

Explanation

During a system re-IPL, a user tried to reset the configuration bit that was not valid in the channel subsystem, but the attempt failed. The reason is given by the previous message.

System action

None.

System programmer response

Look at the message issued prior to this message to determine the reason why the configuration bit that was not valid could not be reset. If you want to continue the IPL without the dynamic I/O support, enter GO. Otherwise, enter STOP, and the system will go into a wait state. You may have to power off the machine to fix the problem.

User response

Contact your system programmer.

HCP6849E DEFINE CPU cannot change the type of the base CPU for a user in a resource pool

Explanation

The DEFINE CPU command was issued for a user ID that a system administrator has put into a resource pool, and there are some restrictions on that user ID. That is, the type of the base CPU cannot be changed because the type must be the same type that is specified for the resource pool.

System action

The command is ignored; system operation continues.

User response

If more information about the user's base CPU is needed, issue the QUERY VIRTUAL CPUS command to determine the user's base CPU number and type. You can also remove the user from the resource pool and then define the CPU.

HCP6850E The variations of this message are explained below.

Explanation

- Cannot disable dynamic I/O changes A dynamic I/O change is in progress
- Cannot disable dynamic I/O changes System is in configuration mode
- Cannot set local system name A dynamic I/O change is in progress
- Cannot set local system name System is in configuration mode
- Cannot set system configuration token A dynamic I/O change is in progress
- Cannot set system configuration token System is in configuration mode

The SET DYNAMIC_I/O OFF command was entered to disable dynamic I/O capability in the system, the SET TOKEN command was entered to alter the description fields in the channel subsystem configuration token, or the SET LSYSTEM command was entered to set the machine name of the local system. A user has the machine in configuration mode or a dynamic change is currently in progress. Note that the machine can be in configuration mode either from an earlier, uncompleted dynamic I/O command or because

another logical partition is running z/OS® and is performing a dynamic CHPID management function.

System action

Dynamic I/O capability is not disabled in the system, or the channel subsystem configuration token is not updated, or the machine name of the local system is not set as requested.

User response

Wait for either the machine to be out of configuration mode, and enter the command again, or wait for the dynamic change in progress to complete and enter the command again.

HCP6851E I/O configuration cannot be changed because VM is not the controlling partition

Explanation

The system has been defined to enable Dynamic I/O Configuration at system initialization or by the SET DYNAMIC_I/O command, but it was found that another LPAR had already set up the configuration token.

System action

System operation continues, but dynamic I/O configuration is not allowed.

User response

Determine which partition has been enabled to change the I/O configuration and determine which partition should be performing dynamic I/O changes. If the VM partition should, you must write a new IOCP to the processor controller following the steps outlined in *z/VM: I/O Configuration*.

HCP6852E The variations of this message are explained below.

Explanation

- System is exiting configuration mode because user *userid* is logging off. The I/O configuration is no longer valid
- Logoff processing could not take user *userid* out of configuration mode

A user logged off while in configuration mode. LOGOFF processing either:

- Forced the system out of configuration mode before allowing the user to logoff, or
- Tried to get the system out of configuration mode, but failed.

The message prior to this one will have the cause of the failure.

System action

The system is taken out of configuration mode. For the first variation, the configuration is left not valid. For the second variation, the user is logged off.

System programmer response

Find out what changes were made to the I/O configuration. If the changes are consistent with the current IOCDS, enter the SET CONFIGMODE ON RESET command to reset the valid bit in the channel subsystem. Then enter the SET CONFIGMODE OFF command to get out of configuration mode.

Find out why the system could not be taken out of configuration mode from the error code in the previously issued message. A re-IPL or POWER OFF and then ON of the machine may be necessary to fix the problem.

User response

None.

HCP6853E CHPID *chpid* has been created but is in definition error and will be unusable when varied on

Explanation

A user entered the DEFINE CHPID command, and the type specified for the CHPID does not match the actual physical CHPID type.

System action

CHPID is created, but is unusable when varied on.

User response

Delete the CHPID using the DELETE CHPID command and enter the DEFINE CHPID command again using the correct CHPID type.

HCP6854E CU *cu* has been created but is in definition error. Devices on the CU are not operational and cannot be varied online.

Explanation

The DEFINE CU or MODIFY CU command was entered with specified channel paths that do not match the

physical configuration or are otherwise invalid for this CU.

For the S/390® Multiprise® 2000 Internal Disk, you specified two channel paths that do not correspond to the actual channel paths for the mirrored DASD.

System action

CU is created, but the CU and its devices are unusable.

User response

Delete the CU using the DELETE CU command, and enter the DEFINE CU command using the proper channel paths. Alternatively, use the MODIFY CU command to change the channel paths associated with the CU.

HCP6855E **Command cannot be processed for device *operand* because the subchannel cannot be modified**

Explanation

You have entered an I/O related command, such as SET SCMeasure. As part of the command processing, CP must issue an MSCH to modify the subchannel. If that I/O cannot be done, this message is issued. This often indicates that the device is actively doing some other I/O. There are some types of devices that have a type protocol that makes CP think they always have active I/O. Some examples would be bisync devices, serial channel-to-channel devices, and integrated adapters.

System action

CP rejects the request; system operation continues.

User response

Select a different device, or change the circumstances under which the current device is being used.

HCP6856I **Cannot measure subchannel for device *device* The subchannel cannot be modified**

Explanation

During system initialization, an attempt is made to enable subchannel measurements for the IPL device. As part of that processing, CP must issue an MSCH to modify the subchannel. If that I/O cannot be done, then this message is issued. This often indicates that the device is busy.

System action

CP rejects the request. System operation continues.

User response

After the IPL completes, you can try to enable the device for subchannel measurements by using the SET SCMEASURE command.

HCP6857I **System is {enabled|disabled} for dynamic I/O changes**

Explanation

The FEATURES ENABLE or DISABLE DYNAMIC I/O statement was coded in the system configuration file. This response indicates that the dynamic I/O capability was either enabled or disabled on the system at IPL time.

System action

None.

User response

None.

HCP6858I **RDEV *rdev* has been deleted**

Explanation

A user entered the DELETE DEVICE command, and as a result, the RDEV or RDEVs associated with the specified devices were deleted.

System action

None.

User response

None.

HCP6859E **RDEV *rdev* cannot be changed or deleted because it is a static device definition from HCPRIO**

Explanation

RDEV *rdev* represents a device that was statically defined in the HCPRIO ASSEMBLE file, but this definition is not eligible to be changed or deleted.

System action

RDEV *rdev* remains unchanged.

Operator response

None.

User response

None.

Programmer response

Change or delete the RDEVICE macro specification in HCPRIO and rebuild the system. If changes are needed prior to rebuilding the system, redefine the device dynamically to a device number that is not in HCPRIO.

HCP6860E	**The variations of this message are explained below.**
— Variation 1	**Device *rdev* cannot be attached to the system because it is an alias Parallel Access Volume for which the base is free.**

Explanation

You issued the CP ATTACH command to attach an alias Parallel Access Volume to the system, but the associated base Parallel Access Volume is currently free. An alias Parallel Access Volume can only be attached to the system if its associated base Parallel Access Volume is already attached to the system.

System action

The command failed. System operation continues.

User response

Issue the CP QUERY PAV command to determine the associated base Parallel Access Volume, use the CP ATTACH command to attach it to the system, and then reissue the CP ATTACH command to attach the alias Parallel Access Volume to the system.

— Variation 2	**Device *rdev* cannot be attached to the system because it is an alias Parallel Access Volume for which the base is attached to a user.**

Explanation

You issued the CP ATTACH command to attach an alias Parallel Access Volume to the system, but the associated base Parallel Access Volume is currently dedicated to a guest. An alias Parallel Access Volume can only be attached to the system if its associated base Parallel Access Volume is already attached to the system.

System action

The command failed. System operation continues.

User response

Issue the CP QUERY PAV command to determine the associated base Parallel Access Volume. In order to attach the alias Parallel Access Volume to the system, you must use the CP DETACH command to detach the base Parallel Access Volume from the guest, use the CP ATTACH command to attach the base parallel Access Volume to the system, and then reissue the CP ATTACH command to attach the alias Parallel Access Volume to the system.

HCP6861I	**Device *rdev* cannot be varied online because it is an alias Parallel Access Volume for which the base could not be located.**

Explanation

The indicated device could not be brought online because all alias Parallel Access Volume devices must have an associated base device, and the base for this alias could not be located.

System action

The device is not brought online; system operation continues.

Operator response

Examine the I/O configuration to verify that this device is an alias Parallel Access Volume and that it has an associated base volume. Verify that the base volume exists and is online. For further assistance, contact your system support personnel.

User response

None.

HCP6862E	**Device *rdev* cannot be changed or deleted because it is a base Parallel Access Volume for which an alias exists.**

Explanation

The indicated device, which was specified on the SET RDEVICE or DELETE RDEVICE command, could not be changed or deleted because it is a base Parallel Access Volume with one or more alias volumes still associated with it.

System action

The device is not changed or deleted; system operation continues.

User response

Issue the QUERY PAV command to see what alias Parallel Access Volumes exist for the specified device. Before you can change or delete the base volume, you must delete all the alias volumes associated with it.

HCP6863E	The variations of this message are explained below.
— Variation 1	Device *rdev* has not been attached because it is an alias Parallel Access Volume for which the base is in use by the system.

Explanation

You issued the CP ATTACH command to attach an alias Parallel Access Volume to a guest, but the associated base Parallel Access Volume is currently attached to the system. An alias Parallel Access Volume can only be attached to a guest if its associated base Parallel Access Volume is already attached to that same guest.

System action

The command failed. System operation continues.

User response

Issue the CP QUERY PAV command to determine the associated base Parallel Access Volume. In order to attach the alias Parallel Access Volume to the guest, you must use the CP DETACH command to detach the base Parallel Access Volume from the system, use the CP ATTACH command to attach the base Parallel Access Volume to the guest, and then reissue the CP ATTACH command to attach the alias Parallel Access Volume to the guest.

— Variation 2	Device *rdev* has not been attached because it is an alias Parallel Access Volume for which the base is free.

Explanation

You issued the CP ATTACH command to attach an alias Parallel Access Volume to a guest, but the associated base Parallel Access Volume is currently free. An alias Parallel Access Volume can only be attached to a guest if its associated base Parallel Access Volume is already attached to that same guest.

System action

The command failed. System operation continues.

User response

Issue the CP QUERY PAV command to determine the associated base Parallel Access Volume. In order to attach the alias Parallel Access Volume to the guest, you must use the CP ATTACH command to attach the base Parallel Access Volume to the guest, and then reissue the CP ATTACH command to attach the alias Parallel Access Volume to the guest.

— Variation 3	Device *rdev* has not been attached because it is an alias Parallel Access Volume for which the base is in use by another user.

Explanation

You issued the CP ATTACH command to attach an alias Parallel Access Volume to a guest, but the associated base Parallel Access Volume is currently attached to another guest. An alias Parallel Access Volume can only be attached to a guest if its associated base Parallel Access Volume is already attached to that same guest.

System action

The command failed. System operation continues.

User response

Issue the CP QUERY PAV command to determine the associated base Parallel Access Volume. In order to attach the alias Parallel Access Volume to the guest, you must use the CP DETACH command to detach the base Parallel Access Volume from the other guest, use the CP ATTACH command to attach the base Parallel Access Volume to the guest, and then reissue the CP ATTACH command to attach the alias Parallel Access Volume to the guest.

— Variation 4	Device *rdev* has not been attached because it is a DPS=NO device and CHPIDVirtualization option is specified for the user in the directory

Explanation

The attach failed because unsupported DPS=NO devices are not allowed when CHPID virtualization is on.

System action

None.

User response

Use the SET RDEVICE command to change the DPS characteristic of this device to DPS=YES.

— Variation 5	Device *rdev* has not been attached because it is an EDEVICE alias

Explanation

EDEVICE aliases can only be attached to SYSTEM and cannot be attached to guests.

System action

The device is not attached.

User response

If a guest requires dedicated access to the EDEVICE, attach the base device.

HCP6864I	The variations of this message are explained below.
— Variation 1	The virtual configuration for real device *rdev* has been detached because it is an alias Parallel Access Volume that is now associated with a different base Parallel Access Volume that is not recognized by this system.

Explanation

A state change occurred such that the alias parallel access volume (PAV) is associated with a different base PAV that is not recognized by this system. The virtual configuration associated with the alias volume was detached and the device is BOXed.

System action

The alias PAV is detached from the guest/system and BOXed; system operation continues.

User response

In order to use this alias PAV device you need to determine the new base PAV device with which it is associated. This relationship can be determined in terms of unit addresses at the control unit console. Your IOCP definition will show the correlation between unit addresses and device numbers. If the base PAV device is not defined in your IOCP for the z/VM system, then you need to dynamically define the base PAV device in your configuration. Using the device numbers for the base PAV and alias PAV devices, you can vary the base PAV device online first and then the alias PAV device using the CP VARY command.

— Variation 2	The virtual configuration for real device *rdev* has been detached because it was a dedicated alias Parallel Access Volume that is now associated with a different base Parallel Access Volume that is free.

Explanation

A state change occurred such that the alias parallel access volume (PAV) is associated with a different base PAV. The alias volume was dedicated to a guest, but the new base volume is free. Since this is an invalid configuration, CP detached the alias volume from the guest.

System action

The alias PAV is detached from the guest; system operation continues.

User response

Issue the CP QUERY PAV command to determine the new associated base PAV. In order to attach the alias PAV to the same guest that it was detached from, you must use the CP ATTACH command to attach the new base PAV to that guest, and then issue the CP ATTACH command again to reattach the alias PAV to the guest.

— Variation 3	The virtual configuration for real device *rdev* has been detached because it was a dedicated alias Parallel Access Volume that is now associated with a different base Parallel Access Volume that is system attached.

Explanation

A state change occurred such that the alias parallel access volume (PAV) is associated with a different base PAV. The alias PAV was dedicated to a guest, but the new base PAV is attached to the system. Since this is an invalid configuration, CP detached the alias PAV from the guest.

System action

The alias PAV is detached from the guest; system operation continues.

User response

Issue the CP QUERY PAV command to determine the new associated base PAV. In order to attach the alias PAV to the guest, you must use the CP DETACH command to detach the base PAV from the system, use the CP ATTACH command to attach the base PAV to the guest, and then reissue the CP ATTACH command to attach the alias PAV to the guest.

— Variation 4	**The virtual configuration for real device *rdev* has been detached because it was a dedicated alias Parallel Access Volume that is now associated with a different base Parallel Access Volume that is dedicated to another user.**

Explanation

A state change occurred such that the alias parallel access volume (PAV) is associated with a different base PAV. The alias PAV was dedicated to a guest, but the new base PAV is dedicated to a different guest. Since this is an invalid configuration, CP detached the alias PAV from the guest.

System action

The alias PAV is detached from the guest; system operation continues.

User response

Issue the CP QUERY PAV command to determine the new associated base PAV. In order to attach the alias PAV to the guest, you must use the CP DETACH command to detach the base PAV from the different guest, use the CP ATTACH command to attach the base PAV to the guest, and then reissue the CP ATTACH command to attach the alias PAV to the guest.

— Variation 5	**The virtual configuration for real device *rdev* has been detached because it was a dedicated alias Parallel Access Volume that is now associated with a different base Parallel Access Volume that is dedicated and is in the process of being detached.**

Explanation

A state change occurred such that the alias parallel access volume (PAV) is associated with a different base PAV. The alias PAV was dedicated to a guest, but the new base PAV is dedicated to that same guest and is in the process of being detached from that guest. Since this is an invalid configuration, CP detached the alias PAV from the guest.

System action

The alias PAV is detached from the guest; system operation continues.

User response

Issue the CP QUERY PAV command to determine the new associated base PAV. In order to attach the alias PAV to the guest, you must use the CP ATTACH command to attach the new base PAV to the guest, and then reissue the CP ATTACH command to attach the alias PAV to the guest.

— Variation 6	**The virtual configuration for real device *rdev* has been detached because it was a system attached alias Parallel Access Volume that is now associated with a different base Parallel Access Volume.**

Explanation

A state change occurred such that the alias parallel access volume (PAV) is associated with a different base PAV. The virtual configuration associated with the alias PAV was detached. The alias PAV will remain attached to the system if the new base PAV that it is now associated with is system attached. Otherwise, it will be detached from the system.

System action

The alias PAV is detached from the system if the new associated base PAV is not system attached; system operation continues.

User response

Issue the CP QUERY PAV command to determine the associated base PAV. If the alias PAV is no longer system attached, and you want it to be, you must attach the new associated base PAV to the system first and then issue the CP ATTACH command to attach the alias PAV to the system.

HCP6865E	**Device *rdev* cannot be IPLed because it is an alias Parallel Access Volume.**

Explanation

The IPL disk cannot be an alias Parallel Access Volume.

System action

System initialization fails.

User response

Choose a different volume to IPL.

HCP6866E	The variations of this message are explained below.
— Variation 1	Device *rdev* cannot be detached from the system because it is a base Parallel Access Volume for which one or more alias volumes are attached to the system.

Explanation

You issued the CP DETACH (real) command to detach a base Parallel Access Volume from the system, but one or more associated alias Parallel Access Volumes are currently attached to the system. A base Parallel Access Volume can only be detached from the system if its associated alias Parallel Access Volumes are already detached from the system.

System action

The command failed. System operation continues.

User response

Issue the CP QUERY PAV command to determine the associated alias Parallel Access Volumes, use the CP DETACH command to detach any that are still attached to the system, and then reissue the CP DETACH command to detach the base Parallel Access Volume from the system.

— Variation 2	Device *rdev* cannot be detached from the user because it is a base Parallel Access Volume for which one or more alias volumes are attached.

Explanation

You issued the CP DETACH (real) command to detach a base Parallel Access Volume from a guest, but one or more associated alias Parallel Access Volumes are currently attached to that guest. A base Parallel Access Volume can only be detached from the guest if its associated alias Parallel Access Volumes are already detached from the guest.

System action

The command failed. System operation continues.

User response

Issue the CP QUERY PAV command to determine the associated alias Parallel Access Volumes, use the CP DETACH command to detach any that are still attached to the guest, and then reissue the CP DETACH command to detach the base Parallel Access Volume from the guest.

— Variation 3	Device *rdev* cannot be detached from the user because it is a base Parallel Access Volume for which one or more alias volumes are associated.

Explanation

You issued the CP DETACH (virtual) command to detach a virtual base Parallel Access Volume, but one or more virtual alias Parallel Access Volumes are still associated with it. A virtual base Parallel Access Volume can only be detached if there are no associated alias Parallel Access Volumes.

System action

The command failed. System operation continues.

User response

Enter the CP QUERY VIRTUAL DETAILS command to determine the associated alias Parallel Access Volumes, use the CP DETACH (virtual) command to detach any alias volumes, and then reissue the CP DETACH (virtual) command to detach the base Parallel Access Volume.

HCP6867E	The variations of this message are explained below.
— Variation 1	An internal processing error occurred.

Explanation

You issued a CP DEFINE PAVALIAS command or specified the PAVALIAS parameter on a DASDOPT or MINIOPT directory statement, and a CP internal processing error occurred such that the device could not be defined.

System action

The alias Parallel Access Volume is not defined; system operation continues.

User response

Try the command again. If it still fails with this same error message, contact your IBM Support Center for assistance.

— Variation 2 Device *rdev* is an alias Parallel Access Volume.

Explanation

In the user directory there is an MDISK statement with the DEVNO operand in which the real device number specified is associated with an alias Parallel Access Volume.

System action

The MDISK is not defined; system operation continues.

User response

Use the CP QUERY PAV command to determine the alias Parallel Access Volumes on your system. Change the MDISK statement in your user directory such that the real device number specified after the DEVNO operand is not one that is associated with an alias Parallel Access Volume.

— Variation 3 Device *rdev* is an alias HyperParallel Access Volume.

Explanation

You issued a CP QUERY CACHE command to an alias HyperParallel Access Volume, or in the user directory there is an MDISK statement with the DEVNO operand in which the real device number specified is associated with an alias HyperParallel Access Volume.

System action

The command fails or the MDISK is not defined; system operation continues.

User response

If you issued the CP QUERY CACHE command, reissue it, specifying a device that is not an alias HyperParallel Access Volume. Otherwise, use the CP QUERY PAV command to determine the alias HyperParallel Access Volumes on your system. Change the MDISK statement in your user directory such that the real device number specified after the DEVNO operand is not one that is associated with an alias HyperParallel Access Volume.

— Variation 4 Device *vdev* is not a base Parallel Access Volume.

Explanation

You issued the CP DEFINE PAVALIAS command or specified the PAVALIAS parameter on a DASDOPT or MINIOPT directory statement, and the device that was specified as the base Parallel Access Volume (on the DEFINE PAVALIAS command or MDISK directory statement) is not a base Parallel Access Volume.

System action

The alias Parallel Access Volume is not defined; system operation continues.

User response

Issue the QUERY VIRTUAL PAV ALL command to determine the base Parallel Access Volumes in your configuration and then choose one to specify on the CP DEFINE PAVALIAS command or on the MDISK directory statement.

— Variation 5 Device *vdev* is not a base HyperParallel Access Volume.

Explanation

You issued a CP DEFINE HYPERPAVALIAS command and the device that was specified as the base device is not a base HyperParallel Access Volume.

System action

The alias HyperParallel Access Volume is not defined; system operation continues.

User response

Use the QUERY VIRTUAL PAV ALL command to determine the base HyperParallel Access Volumes in your configuration and then choose one to specify on the CP DEFINE HYPERPAVALIAS command.

— Variation 6 Device *vdev* is not a minidisk.

Explanation

You issued a CP DEFINE PAVALIAS command or a CP DEFINE HYPERPAVALIAS command, and the device that was specified as the base device is not a minidisk.

System action

The alias Parallel Access Volume or alias HyperParallel Access Volume is not defined; system operation continues.

User response

Use the QUERY VIRTUAL PAV ALL command to determine the base Parallel Access Volumes and base HyperParallel Access Volumes in your configuration and then choose one that is a minidisk to specify on the CP DEFINE PAVALIAS or CP DEFINE HYPERPAVALIAS command.

— Variation 7	**There are no available system attached real alias HyperParallel Access Volumes for device *vdev* to be associated.**

Explanation

You issued a CP DEFINE HYPERPAVALIAS command and there were no available system attached real alias HyperParallel Access Volumes to assign to the virtual HyperPAV alias device that was being defined. The number of virtual alias HyperParallel Access Volumes that can be defined in the same HyperPAV pool as the specified virtual base HyperParallel Access Volume cannot exceed the number of system attached real alias HyperParallel Access Volumes that are in the same HyperPAV pool as the real base HyperParallel Access Volume on which the virtual base is defined.

System action

The alias HyperParallel Access Volume is not defined; system operation continues.

User response

Use the CP ATTACH command to attach an additional real alias HyperParallel Access Volume to the system that the virtual alias HyperParallel Access Volume can be assigned. If no more real alias HyperParallel Access Volumes are available to attach to the system, then use the QUERY VIRTUAL PAV command to determine the alias HyperParallel Access Volumes that are in the same pool as the base HyperParallel Access Volume. In order to define the alias HyperParallel Access Volume, one of the existing virtual alias HyperParallel Access Volumes would have to be detached first.

— Variation 8	**There are no available system attached real alias Parallel Access Volumes for device *vdev* to be associated.**

Explanation

You issued a CP DEFINE PAVALIAS command or specified the PAVALIAS parameter on a DASDOPT or MINIOPT directory statement, and there were no available system attached real alias Parallel Access Volumes to assign to the virtual PAV alias device that was being defined. The number of virtual alias Parallel Access Volumes that can be associated with a particular virtual base Parallel Access Volume cannot exceed the number of system attached real alias Parallel Access Volumes that are associated with the real base Parallel Access Volume on which the virtual base is defined.

System action

The alias Parallel Access Volume is not defined; system operation continues.

User response

Use the CP ATTACH command to attach an additional real alias Parallel Access Volume to the system that the virtual alias Parallel Access Volume can be assigned. If no more real alias Parallel Access Volumes are available to attach to the system, then use the QUERY VIRTUAL (device) DETAILS command to determine the alias Parallel Access Volumes that are associated to the base Parallel Access Volume. In order to define the alias Parallel Access Volume, one of the associated virtual alias Parallel Access Volumes would have to be detached first.

HCP6868I	**The variations of this message are explained below.**
— Variation 1	**CU *ssid* does not support HyperPAV. The allowed Parallel Access Volume setting has been lowered to PAV from HyperPAV.**

Explanation

A previous CU system configuration file statement or CP SET CU command indicated that this DASD control unit could operate in HyperPAV mode. However, now that CP is initializing the control unit, it has been determined that the control unit does not support the HyperPAV function.

System action

CP reduces the allowed Parallel Access Volume setting to PAV from HyperPAV for the DASD control unit and system operation continues.

User response

If applicable, upgrade the control unit to support the HyperPAV function and issue the SET CU command to allow the DASD control unit to operate in HyperPAV mode.

— Variation 2	**The channel paths associated with CU *ssid* are not all of**

type FICON. The allowed Parallel Access Volume setting has been lowered to PAV from HyperPAV.

Explanation

CP is initializing the specified DASD control unit and it supports the HyperPAV function. However, HyperPAV mode cannot be established because the channel paths associated with the DASD control unit are not all of type FICON.

System action

CP reduces the allowed Parallel Access Volume setting to PAV from HyperPAV for the DASD control unit and system operation continues.

User response

Use the CP VARY CHPID command to vary off any non-FICON channel paths associated with the specified control unit and issue the SET CU command to allow the DASD control unit to operate in HyperPAV mode.

— Variation 3	**The HyperPAV feature has been removed from CU *ssid*. All associated alias devices have been varied offline and the allowed Parallel Access Volume setting has been lowered to PAV from HyperPAV.**

Explanation

CP received an indication from the DASD control unit that the HyperPAV feature was no longer installed.

System action

All HyperPAV alias devices associated with the DASD control unit are varied offline and the allowed Parallel Access Volume setting for the control unit is lowered to PAV from HyperPAV.

User response

Use the CP VARY command to vary the alias devices online to z/VM as PAV alias devices.

HCP6869E	**The variations of this message are explained below.**
— Variation 1	**DASD CU *ssid* alias *rdev* is attached to a guest**

Explanation

You issued a CP SET CU command, but a PAV alias or HyperPAV alias device associated with the specified control unit is attached to a guest.

System action

The command fails; system operation continues.

User response

Use the CP DETACH command to detach the alias device from the guest, use the CP VARY command to vary the alias device offline, and reissue the SET CU command.

— Variation 2	**DASD CU *ssid* alias *rdev* is attached to the system**

Explanation

You issued a CP SET CU command, but a PAV alias or HyperPAV alias device associated with the specified control unit is attached to the system.

System action

The command fails; system operation continues.

User response

Use the CP DETACH command to detach the alias device from the system, use the CP VARY command to vary the alias device offline, and reissue the SET CU command.

— Variation 3	**DASD CU *ssid* alias *rdev* is not offline**

Explanation

You issued a CP SET CU command, but a PAV alias or HyperPAV alias device associated with the specified control unit is not offline.

System action

The command fails; system operation continues.

User response

Use the CP VARY command to vary the alias device offline and reissue the SET CU command.

— Variation 4	**DASD CU *ssid* HyperPAV mode not allowed because the associated channel paths are not all of type FICON**

Explanation

You issued a CP SET CU command to change a DASD control unit's PAV mode to HyperPAV, but the channel paths associated with the control unit are not all of type FICON.

System action

The command fails; system operation continues.

User response

Use the CP VARY CHPID command to vary off any non-FICON channel paths associated with the specified control unit and reissue the SET CU command.

— Variation 5 DASD CU *ssid* HyperPAV mode not supported

Explanation

You issued a CP SET CU command to change a DASD control unit's PAV mode to HyperPAV, but it does not support the HyperPAV function.

System action

The command fails; system operation continues.

User response

Reissue the command again specifying the PAV_ALLOWED parameter or, if applicable, upgrade the control unit to support the HyperPAV function and reissue the command.

— Variation 6 DASD CU *ssid* no online base devices found

Explanation

You issued a CP SET CU command, but there are no online base (nonalias) devices associated with the specified control unit.

System action

The command fails; system operation continues.

User response

Use the CP QUERY CU command to determine the base devices associated with the specified control unit and then use the CP VARY command to bring at least one base device online. After a base device is successfully brought online, reissue the SET CU command.

— Variation 7 DASD CU *ssid* PAV functions do not apply

Explanation

You issued a CP SET CU command and the DASD control unit specified does not support Parallel Access Volumes.

System action

The command fails; system operation continues.

User response

Use the CP QUERY CU command to determine which control units in your configuration support Parallel Access Volumes and reissue the SET CU command specifying a different DASD control unit.

— Variation 8 DASD CU *ssid* unable to establish new PAV mode

Explanation

You issued a CP SET CU command, but an internal processing error prevented CP from establishing the new PAV mode for the control unit.

System action

The command fails; system operation continues.

User response

Try the command again. If it still fails with this same error message, contact your IBM Support Center personnel.

— Variation 9 DASD CU *ssid* does not support soft fence

Explanation

The control unit does not support the Soft Fence feature, so this command cannot be executed on the input *ssid*.

System action

The command fails; system operation continues.

User response

Issue the SET CU command to a control unit which supports the Soft Fence feature.

— Variation 10 DASD CU *ssid* failed to reset soft fence

Explanation

The storage controller failed to reset soft fence state for all the devices in it.

System action

System operation continues.

User response

Issue the command again. If the condition persists, contact your IBM Support Center personnel.

— Variation 11 **DASD CU *ssid* devices soft fence state could not be determined because I/O error occurred.**

Explanation

The storage controller failed to determine which devices are in soft fence state because an I/O error occurred.

System action

System operation continues.

User response

Issue the command again. If the condition persists, contact your IBM Support Center personnel.

HCP6870E **The variations of this message are explained below.**

Explanation

- Device *rdev* is attached to a guest.
- Device *rdev* is attached to the system.

A CP SET RDEVICE command or CP SET EDEVICE command was entered to change the characteristics of a device at *rdev* that is currently attached to either a guest or to the system. (The device is probably in the BOXed state.) This is not allowed.

System action

CP rejects the request to change the characteristics of the device at *rdev* and the command is failed. In the case where a SET RDEVICE command was issued to more than one device, the command continues to process requests for changes to the other devices specified on the command.

User response

Verify that the device number is correct. If it is correct, detach the device from the guest or from the system and enter another CP SET RDEVICE command or CP SET EDEVICE command.

HCP6871I **IPL parameters: Storage specification exceeds system limit - *option***

Explanation

The STORE= IPL parameters that you passed to CP with the Stand-Alone Loader (SAL) or with the SET IPLPARMS command specifies a value that exceeds the amount of storage that this version of CP can support.

The maximum amount of real storage that z/VM supports is 256 GB.

System action

The STORE= parameter is accepted. When the parameter is used, the limit is the value that is in effect.

User response

Consider using the limit value on the STORE= parameter in the future.

HCP6873E **PCI function *rpfid* has been created but is in definition error and has not been added to the configuration.**

Explanation

The PCI function being defined did not match the type of adapter installed at the PCHID.

System action

The PCI function definition was created, but will not be added to any systems defined to have access to it.

User response

Either check that the expected adapter type is installed at the PCHID or delete the PCI function definition and enter the command again using the correct TYPE operand.

HCP6874E **Loading a named saved system or segment into storage greater than or equal to the start of the second extent of a storage configuration is not permitted.**

Explanation

Your virtual machine's primary address space (base space) was defined using Define Storage Configuration and more than one storage extent was specified. An attempt was made to load a saved segment or IPL a saved system into storage with an address greater than or equal to the starting address of the second defined storage extent. Named saved systems and segments may only be loaded below the starting address of the second extent in a storage configuration.

System action

The IPL or Load operation is not processed. The address space is unchanged.

User response

Enter QUERY VIRTUAL STORAGE to see the storage extents that are defined. Change your storage configuration using Define Storage Configuration so that the start address of the second extent is higher than any segment being loaded.

If necessary, determine where your named saved system or segment is being loaded or contact your support personnel to obtain this information.

HCP6875E **System execution space page management table entry is outside the extents of the SXSTE table: *addr1-addr2*.**

Explanation

You entered a CP LOCATE SXSTE command with the ENTRY operand specifying a page table entry address that is outside the address range that the page table occupies.

System action

CP ignores the command; system operation continues.

User response

Reissue the CP LOCATE SXSTE command with a valid page table entry address, which must be between *addr1* and *addr2* in host logical storage.

HCP6876I **Unable to select a new system operator. The default and alternate operator IDs are not logged on or the alternates do not have sufficient privilege class.**

Explanation

You see this message when you are logging off as the primary system operator and alternate operator IDs have been specified, but neither the default system operator ID or any of the alternates could automatically replace you as the operator.

System action

System operation continues.

User response

None.

HCP6877I **The system operator ID has been changed to *userid*.**

Explanation

You see this message when all of the following are true:

- you are logging off as the primary system operator
- the alternate operator IDs have been specified in the system configuration file
- either the default system operator ID or one of the alternates automatically replaced you as the system operator.

System action

CP changed the operator ID to the one displayed in the message. System operation continues.

User response

None.

HCP6878E **AMODE/RMODE VALUES CONFLICT**

Explanation

You ran the HCPLDR utility, and you specified values for the AMODE and RMODE keywords that conflict with each other. You cannot specify an AMODE of 24 with an RMODE of ANY.

System action

CP rejects the command; system operation continues.

User response

Correct the value of AMODE or RMODE and issue the HCPLDR command again.

HCP6879E THE LENGTH OF THE MODULE TO BE GENERATED IS NON-POSITIVE

Explanation

You ran the HCPLDR utility, and you specified a value on the FROM keyword equal to or larger than the one you specified on the TO keyword.

System action

CP rejects the command; system operation continues.

User response

Correct and reissue the command.

HCP6881E *userid vdev* not in CP directory.

Explanation

You issued a SHUTDOWN REIPL command with the MDISK option, and the minidisk you specified does not exist in the CP directory.

System action

CP ignores the command; normal processing continues.

User response

You can look at entries in the user directory to find out which minidisks you can specify on a SHUTDOWN REIPL command.

HCP6882E *userid vdev* is not a minidisk.

Explanation

You issued a SHUTDOWN REIPL command with the MDISK option, and the virtual device you specified is not a minidisk.

System action

CP ignores the command; system operation continues.

User response

You can look at entries in the user directory to find out which minidisks you can specify on a SHUTDOWN REIPL command.

HCP6883E *userid vdev* not accessible -- volume *volid* not mounted.

Explanation

You issued a CP SHUTDOWN REIPL command with the MDISK option, and the minidisk you specified resides on a volume that is not mounted.

System action

CP ignores the command; system operation continues.

User response

Bring the volume containing the minidisk online and attach it to the system, or issue another CP SHUTDOWN REIPL command specifying another minidisk on a volume that is already mounted. You can find out whether a volume is mounted by issuing a CP QUERY DASD *volid* command.

HCP6884E The variations of this message are explained below.

Explanation

- Unable to access re-IPL minidisk because no free access slot is available.
- Unable to access re-IPL minidisk because of an I/O error.
- Unable to access re-IPL minidisk because the disk is not CMS formatted.

When you issue a CP SHUTDOWN REIPL command, CP looks for a minidisk that contains the information that it needs to re-IPL. This minidisk may be the original minidisk that CP used for its most recent IPL, or it may be another minidisk that you specified on the CP SHUTDOWN REIPL command. The versions of this message tell you that CP has encountered one of the following errors when it tried to access the minidisk:

- CP already has a minidisk accessed in each of the 26 available slots.
- There is an I/O error.
- The minidisk that CP tried to access was not CMS-formatted.

You receive a version of this message only if CP was originally loaded from a module.

System action

CP ignores the SHUTDOWN command; system operation continues.

User response

If you received the first version of this message, issue a CPRELEASE command to free at least one access slot before you issue another SHUTDOWN

REIPL command. If you received the second version, issue HYPERSWAP RESUME on the device and reissue the SHUTDOWN command. If you still receive a message that there is an I/O error, try to access the disk from a regular CMS id. If I/O errors continue, contact Operations personnel. If you received the third version, make sure you have specified the correct minidisk to CP. If you have, issue a CMS FORMAT command to format the disk, and then place the information on it that CP needs for the IPL.

HCP6885E CP will not execute under CMS.

Explanation

You tried to invoke the CP module as a program running under CMS. CP cannot run under another program.

System action

CP ignores the request and returns control to CMS.

User response

If you want to initialize CP, IPL a volume containing the Stand-Alone Loader (SAL), and have SAL load the CP module. For more information on SAL, see *z/VM: System Operation*.

HCP6886I User *userid* {changed|locked|unlocked|reset} *userid*'s privilege classes[from *classes* to *classes*].

Explanation

You receive this message if another user issued a CP SET PRIVCLASS command to change your privilege classes, lock or unlock them, or reset them to the ones specified in your user directory entry.

System action

CP changes the privilege class settings for the specified user ID; system operation continues.

User response

In most cases, none. If another user has locked your privilege classes and you try to enter a CP SET PRIVCLASS command to unlock them, CP will prompt you for a password.

HCP6887I XSTORE is configured but will not be used. Reconfigure XSTORE to central storage for better performance.

Explanation

Expanded storage (XSTORE) is no longer supported.

System action

System operation continues.

User response

Consider configuring XSTORE to central storage.

HCP6888I User *userid* issued a DIAGNOSE X'08' with multiple commands ({LOG|FAIL} mode).

Explanation

The system operator ID receives this message when a user with a D8ONECMD setting of LOG or FAIL has issued a DIAGNOSE code X'08' that contains more than one CP command in its buffer.

System action

If the setting is LOG, CP executes all the commands contained in the buffer; system operation continues. If the setting is FAIL, CP executes the first command in the buffer, but ignores any others; system operation continues.

User response

Change the D8ONECMD setting for the virtual machine, or change the program running in the virtual machine to issue only one command with each DIAGNOSE code X'08'.

HCP6889E *userid*'s DIAGNOSE X'08' options are locked.

Explanation

You entered a SET D8ONECMD command to change your D8ONECMD setting, which is locked.

System action

CP does not allow anyone, even privileged users, to change his or her own D8ONECMD setting if it has been locked. Therefore, CP rejects your command, and system operation continues.

User response

Have Operations personnel change your D8ONECMD setting for you.

HCP6890E **THIS VIRTUAL MACHINE CANNOT ISSUE MULTIPLE COMMANDS USING ONE DIAGNOSE X'08'.**

Explanation

You issued a DIAGNOSE code X'08' containing more than one command, and your D80NECMD setting is FAIL.

System action

CP processes the first command in the DIAGNOSE code X'08' buffer, and rejects the rest. System operation continues.

User response

Have Operations personnel change your D8ONECMD setting before you try to issue another DIAGNOSE code X'08' containing more than one command, or change your program so that it issues only one command in each DIAGNOSE code X'08'.

HCP6891I **The variations of this message are explained below.**

— Variation 1 ***userid*** **issued DRAIN command for volume** ***volid*** **on device** ***rdev*** **for** ***allocationtype1*** **[*allocationtype2*] [...]**

Explanation

The system operator sees a version of this message after a privileged user has issued a DRAIN command to prevent operations on a certain volume. This message tells you that the volume will no longer accept commands asking for new operations in one or more of the following categories:

- Links
- Page
- Spool
- Tdisk

System action:
CP marks the specified volume as DRAINING for the categories the user indicated on the command; system operation continues.

User response:
None.

— Variation 2 ***userid*** **issued DRAIN command with ACTIVE option for volume** ***volid*** **on device** ***rdev*** **for** ***allocationtype1*** **[*allocationtype2*] [...]**

Explanation:
The system operator sees a version of this message after a privileged user has issued a DRAIN command with the ACTIVE option specified to prevent operations on a certain volume and remove all PAGE allocations from a certain volume.

System action:
CP marks the specified volume as active draining for the categories the user indicated on the command. The volume is added to the active drain process; system operation continues.

User response:
None.

— Variation 3 **The DRAIN command with the PAGE ACTIVE option has finished for device** ***rdev1***

Explanation:
The system operator sees this message after the active drain process has finished deallocating all page slots from the volume.

System action:
CP leaves the specified page volume in the passive drain state; system operation continues.

User response:
None.

HCP6892E **Invalid number of buffer positions - *string***

Explanation

You issued a CP SET PF*nn* RETRIEVE FORWARD or BACKWARD command, and the keyword you specified as the number of buffers has one of two things wrong with it:

- It is not a decimal number, or
- It is larger than the maximum number of buffer positions available.

You can set the maximum number of buffer positions with the CP SET RETRIEVE command or with the FEATURES statement in the system configuration file. The largest possible number of buffers is 255.

System action

CP ignores the command; system operation continues.

User response

Issue another SET PF*nn* RETRIEVE command with a valid number of buffers. You can issue the QUERY RETRIEVE command to find out how many buffers are available to your virtual machine.

HCP6893I **The variations of this message are explained below.**

— Variation 1 ***userid* issued START command for volume *volid* on device *rdev* for *allocationtype1* [*allocationtype2*] [...]**

Explanation

The system operator sees a version of this message after a privileged user has issued a START command to restart a certain volume after it has been drained, or to change the volume's processing options. This message tells you that the volume will now accept commands asking for new operations in one or more of the following categories:

- Links
- Page
- Spool
- Tdisk

System action:
CP starts the specified volume for the categories the user indicated on the command; system operation continues.

User response:
None.

— Variation 2 **The START command with the PAGE option has automatically been issued for device *rdev1***

Explanation:
The system operator sees this message if the system's in-use page space percentage rose above the page space in-use warning threshold and the system then choose to START the volume for PAGE to raise the total available paging space for the system.

System action:
CP issues the START command for the specified *rdev* for PAGE. The device will be taken out of any drain state for the PAGE type and will be available for normal paging operations.

User response:
Make sure there is always enough page space available so that the system does not exceed the page space in-use warning percentage. If you are attempting to drain page volumes, consider bringing replacement volumes online before initiating the drain. Also consider draining volumes in smaller batches to limit the page space that is being made unavailable. Logging off guests can reduce the page space in-use. Setting KEEPSLOT to NO can also lower the page space in-use, but it is not recommended.

HCP6894A **Enter data now. To abort the command, press ENTER with no data or press PA1.**

Explanation

You issued a LOCATE CPREAL or LOCATEVM command with the PROMPT option.

System action

CP enters CP READ state and waits for you to enter data.

User response

Enter the data that you want CP to locate.

HCP6895I **Device *rdev* cannot be varied online because the device identification data is inconclusive.**

Explanation

During VARY ON processing, the device did not identify itself. The device type and class could not be determined.

System action

The device is not varied online.

User response

Use the SET RDEVICE command to set the device characteristics. Then, enter the VARY ON command again.

HCP6896E **The data field exceeds the maximum length of *nnn* characters.**

Explanation

You entered a LOCATE CPREAL or LOCATEVM command specifying an amount of data that is too large. The longest a piece of data can be on one of these commands is 255 characters.

System action

CP ignores the command; system operation continues.

User response

Enter the command again with a shorter data string.

HCP6897E **Device *rdev* cannot be varied online because the RDEV is of the incorrect length.**

Explanation

CP is trying to vary a device online at IPL time or in response to a VARY ONLINE command. This device was defined in HCPRIO ASSEMBLE, which has not been reassembled with the current macro libraries.

System action

If you receive this message at IPL time, CP does not vary the device online. If you receive it after you have issued a VARY ONLINE command, CP does not vary the specified device online; instead, it proceeds to the next device specified on the command.

User response

Reassemble HCPRIO and rebuild the CP module. If the device is needed immediately, re-IPL. Otherwise, wait until the next IPL.

HCP6897I **Device *rdev* cannot be varied online because the *rdev* is of the incorrect length.**

Explanation

During VARY ON processing, the length of the real device block was found to be incorrect. This is usually caused by using an old version of HCPRIO that had a different size *rdev*.

System action

The device is not varied online.

User response

Reassemble HCPRIO and generate a new system.

HCP6898E **User *userid* is not executing a command that can be halted.**

Explanation

The CPHX command was issued to halt the command processing. However, *userid* is not running any of the commands supported by CPHX. See CPHX in *z/VM: CP Commands and Utilities Reference* for the list of commands that support CPHX.

System action

CP ignores the CPHX command. System operation continues.

User response

Determine whether the target user ID is in a loop not caused by one of the commands that support CPHX.

HCP6899E **A halt request for user *userid* has already been made by user *userid*.**

Explanation

The CPHX command was issued to halt the command processing. However, another user has already issued a CPHX command for the same user ID. See CPHX in *z/VM: CP Commands and Utilities Reference* for the list of commands that support CPHX.

System action

CP ignores your CPHX command. System operation continues.

User response

None.

HCP8000E **The variations of this message are explained below.**

Explanation

- FILE *fn ft fm* NOT FOUND
- File *fn ft fm* not found

The specified file was not found on the accessed disks. The file you specified has one of the following problems:

- It does not reside on this disk.
- Identification is misspelled.
- Incomplete identification caused the wrong disk to be searched.
- The system disk was not accessed as a read-only extension of the A-disk.

System action

The command does not run; system operation continues.

Operator response

Find or create the desired file. To make sure the file exists, issue STATE *fn ft* * or LISTFILE *fn ft* *. Correct the command and then issue it again.

HCP8001E **The variations of this message are explained below.**

Explanation

- FILE *fn ft fm* IS NOT FIXED, 80 CHAR. RECORDS
- File *fn ft fm* is not fixed, 80 character records

The specified file must have fixed-length, 80-character records in order for the command to run.

System action

The command does not run; system operation continues.

Operator response

It is possible that an incorrect file ID was specified in the command line. In this case, enter the command again. If, however, the file ID was correct, but the file is in the wrong format or does not contain 80-character records, use the COPYFILE or EDIT command to change the file's format or record length or both.

HCP8002W I/O ERROR ENCOUNTERED LOADING CARDS

Explanation

An I/O error has occurred on the load device.

System action

The system enters a wait state (wait-state code = 8002).

Operator response

Try to load again. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP8003E The variations of this message are explained below.

Explanation

- DATA NOT REPLACED: *text*
- Data not replaced: *text*

The requested RP (replace) operation is not performed because the most recent VER (verify) card for the same CSECT failed. The *text* variable refers to the data that was requested to be replaced.

System action

Loading is completed, but the REP card is effectively ignored.

User response

Correct or remove the appropriate VER card or remove the REP card. If the error occurred while loading the system, load the system again. If the error occurred while loading some customer-written CP routines, enter the CPXLOAD command (or configuration file statement) again.

HCP8004W VERIFY FAILURE HAS OCCURRED

Explanation

One or more VER (verify) cards failed.

System action

Loading halts. The system enters a disabled wait-state (wait-state code = 8004).

User response

Examine the load map to determine which VER cards failed. Correct or remove the faulty cards and reload the system. If the wait state occurs during stand-alone generation, you have the option of resuming the loading process using the SYSTEM RESTART command. However, this does not in any way correct or eliminate the verify failures.

HCP8005E The variations of this message are explained below.

Explanation

- DUPLICATE CSECT - *csectname*
- Duplicate CSECT - *csectname*

The specified CSECT name has already been encountered during the loading process.

System action

The CSECT is loaded only once. Any occurrences after the first encounter with a CSECT name is ignored.

User response

Remove any duplicate file names from the LOADLIST EXEC. Remove any duplicate CSECTs from the object files being loaded. If the error occurred while loading the system, load the system again. If the error occurred while loading some customer-written CP routines, enter the CPXLOAD command (or configuration file statement) again.

HCP8006E *fn ft fm* DOES NOT HAVE FIXED, 80-BYTE RECORDS

Explanation

The indicated file must have fixed-length, 80-byte records.

System action

The file is not loaded; the command runs with the next file in the load list.

User response

It is possible that an incorrect file type was specified in the command line or an incorrect file name was listed in the load list. Verify that a proper object deck for the indicated file exists on the accessed disks.

HCP8007E UNEXPECTED ERROR *nnn* — PLIST *plist fn ft fm*

Explanation

An unexpected error occurred during HCPLDR processing. The *plist* indicates one of the following CMS functions: RDBUF, WRBUF, or FINIS. The *nnn* variable indicates one of the following conditions:

For *plist* = RDBUF

Code
Meaning

1
The file was not found.

2
The address of the buffer was not within virtual storage limits.

3
A permanent disk error occurred. This may happen if you link to and access another user's disk, and try to read a file that the owner refiled after you entered the ACCESS command. Reenter the ACCESS command and try to read the file again.

5
The number of records is less than 0 or greater than 32768

7
The fixed/variable flag is not F or V.

8
The record read is longer than the buffer.

9
The specified file is open for writing; it must be closed and opened for reading.

11
The number of records is greater than 1 for a variable-length file.

12
The end of the file was reached.

13
An invalid displacement appears in the AFT of a variable-length file.

14
An invalid character appears in the file name.

15
An invalid character appears in the file type.

For *plist* = WRBUF

Code
Meaning

2
The virtual storage address equals zero.

4
The first character of the file mode is invalid.

5
The second character of the file mode is invalid.

6
The record number or number of records is too long.

7
An attempt was made to skip over an unwritten variable-length record.

8
The number of bytes was not specified.

10
The maximum number of CMS files (3400) was reached.

11
The fixed/variable flag is not F or V.

12
The disk is read-only.

13
The disk is full.

14
The number of bytes to be written is not integrally divisible by the number of records to be written.

15
The length of this record is not the same as that of the previous record.

16
The characteristic of the record, fixed or variable, is not the same as the previous record.

17
A variable-length record is greater than 65K bytes.

18
The number of records is greater than 1 for a variable-length file.

19
The maximum number of data blocks (16060) has been reached.

20
An invalid character appears in the file name.

21
An invalid character appears in the file type.

For *plist* = FINIS

Code
Meaning

6
The file is not open.

System action

The command did not run.

User response

Refer to the PLIST parameter and the *nnn* parameter to determine if an input/output error occurred. If it did, reenter the command. Otherwise, contact your system support personnel for assistance.

HCP8008E PUNCH NOT ATTACHED

Explanation

The punch required to produce the system load deck does not exist.

System action

The command does not run.

Operator response

Provide a virtual punch using the CP DEFINE PUNCH 00D command and reenter the command.

HCP8009E ERROR ON PUNCH

Explanation

An error was encountered while attempting to produce a system load deck on the punch.

System action

The command does not run.

User response

Reenter the command. If the problem persists, notify the system operator of the error condition.

HCP8010W NO STARTING ADDRESS

Explanation

The final LDT card is missing or does not specify a valid starting address at which system execution can begin.

System action

Loading completes, but no execution occurs. The system enters a disabled wait state (wait-state code= 8010).

User response

Inspect the load list. Determine if the LDT card at the end of the load list exists and contains a proper symbol name. Determine if the module containing the symbol name was successfully assembled.

HCP8011E Verify failure:

Explanation

The VER (verify) card verifies data that does not match what is found at the specified location in the CSECT.

System action

Loading completes, but no execution occurs.

User response

VER cards are used in conjunction with REP cards. Examine the loading log to determine which module the VERIFY failure occurred in. It is likely that a module reassembly has changed a module that was patched with a REP card. Determine whether the fix is obsolete or must be adjusted for the new assembly. If IBM supplied the REP card, contact your IBM representative.

HCP8012E The variations of this message are explained below.

Explanation

- ALREADY DEFINED CSECT:
- Already defined CSECT: *text*

The DEL control card data (*text*) specifies a CSECT name for a CSECT that has already been defined.

System action

The requested deletion is not performed. Loading continues.

User response

Change the placement of the DEL card to precede any CSECT that it specifies to be deleted.

HCP8013I Possible overlay:

Explanation

The SLC™ card data will set the location counter to a value below its current value. This message indicates that an error condition could exist.

System action

The SLC card is processed and loading continues.

User response

If this error occurs with an IBM-supplied z/VM CP load list and IBM-supplied object files, contact your IBM representative immediately. It will generally be due to user modifications, for which the user must determine corrective action. Object files have probably exceeded a fixed area that the user set aside for them.

HCP8014E The variations of this message are explained below.

Explanation

- DUPLICATE ENTRY:
- Duplicate ENTRY: *text*

The SYS card data (*text*) is for a subsystem with a name that has already been defined.

System action

All cards through the corresponding LDT card are ignored.

User response

It is likely that a subsystem has been included twice in the same load list. Delete or change the name of one of the occurrences of the specified CSECT name.

HCP8015E The variations of this message are explained below.

Explanation

- INVALID CARD FORMAT:
- Invalid card format:

The DEL card data has more than eight arguments or one of the arguments is more than eight characters long, or both.

System action

The extra arguments and characters are ignored.

User response

A typing error has probably occurred in entering a DEL card. Correct the error, and if it occurred while loading:

The system-
Load the system again.

Some customer-written CP routines-
Enter the CPXLOAD command (or configuration file statement) again.

HCP8016E The variations of this message are explained below.

Explanation

- INVALID CARD:
- Invalid card:

The control card data is not of the required format.

System action

The card is ignored.

User response

Examine the "HCPLDR Command" and "Patch Facility" sections in *z/VM: VMSES/E Introduction and Reference* and correct the indicated control card.

HCP8017E The variations of this message are explained below.

Explanation

- INVALID DATE:
- Invalid date:

The date on the END card could not be translated into the proper month, day, year, and day-of-week. The day-of-year may be beyond the number of days in the specified year.

System action

No date is assigned to the CSECTs in the indicated object file.

User response

None is required.

HCP8018E The variations of this message are explained below.

Explanation

- INVALID FORMAT:
- Invalid format:

The SYS card data has no arguments, more than two arguments, or the second argument is not a valid hexadecimal address.

System action

All input records up to and including the corresponding LDT card are ignored.

User response

A typing error has probably occurred in producing the indicated SYS card. Retype it and reload.

HCP8019E The variations of this message are explained below.

Explanation

- INVALID PLACEMENT:
- Invalid placement:

The PRT control card data specifying the printer address appears after the first buffer has been completed or the indicated ICS control card specifies a CSECT that has already been defined.

System action

The indicated card is ignored.

User response

Move the indicated PRT or ICS card to the front of the load list.

HCP8020E The variations of this message are explained below.

Explanation

- NO ARGUMENT SPECIFIED:
- No argument specified:

The DEL card data has no arguments.

System action

None. The card has no effect.

User response

Determine whether a typing error has occurred.

HCP8021E The variations of this message are explained below.

Explanation

- OPERAND MISSING:
- Operand missing:

The LDT card data has no arguments.

System action

The system is unable to obtain a starting address for system execution. Loading completes, but system execution is not attempted.

User response

The user may have erroneously entered a subsystem using a SYS card that was terminated with more than one LDT card. If this has occurred, there is likely to be a large unresolved cross-reference. The user may have simply forgotten the starting symbol address when typing a final LDT card.

HCP8022E The variations of this message are explained below.

Explanation

- UNDEFINED ENTRY:
- Undefined ENTRY:

The loader control card data specifies a symbol that is undefined.

System action

If it is an LDT card that ends a subsystem, CP ignores the card. If this is the final LDT card in the system load deck, loading continues, but execution does not take place. If it is an SLC card, CP ignores the operand, but continues to process the card.

User response

Determine if a typing error occurred or if the object file where the label is defined is missing.

HCP8023E The variations of this message are explained below.

Explanation

- UNRECOGNIZED CARD
- Unrecognized card

The control card data begins with a 12-2-9 punch (hexadecimal character value 02) in the first column,

but columns 2 to 4 do not contain a recognized identification.

System action

The card is ignored.

User response

A control card has probably been typed incorrectly. Correct it and reload.

HCP8024E NO FILETYPE SPECIFIED FOR *filename*

Explanation

No file type was specified for this file. A file type is required for each file that is to be loaded. The file type may be specified with any file name in the load list or in the command line, but it cannot be omitted.

System action

The object module that has this file name is not loaded. The command runs using the next file in the load list.

User response

Either specify the file type in the load list EXEC and reenter the command, or reenter the command listing at least one file type in the command line.

HCP8025E The variations of this message are explained below.

Explanation

- NO CSECTS DEFINED
- No CSECTs defined

No control sections were loaded; there is no program that could be run.

System action

No system exists to be run. No execution is attempted.

User response

The user has probably entered an HCPLDR command without having accessed the disks containing the required object files. Rebuild the load deck using the object files available.

HCP8026E ERROR *nnn* WRITING TO TAPE

Explanation

The following are the values for *nnn*:

Value
Meaning

001
No device was found at a virtual address of 182.

002
A unit exception occurred (foil marker at end-of-tape has been encountered).

005
A device is busy or there is an interrupt pending from previous I/O operations.

013
A permanent, irrecoverable I/O error occurred.

016
An unsolicited status was pending at the real subchannel or device.

System action

The building of the load deck on tape ends.

User response

Verify that the device at virtual address 182 is a tape. If it is, use another tape for building the load deck. If the value is 005 or 016, retry the command before using another tape.

HCP8027W PERMANENT ERROR ON INPUT

Explanation

An irrecoverable error was encountered on the IPL device. For a data error on tape, 16 retries have been attempted.

System action

Loading ends. The system enters a disabled wait state (wait-state code = 8027).

User response

Attempt to re-IPL from the beginning. Try using another tape drive or card reader when available. If the failure is consistent, create a new tape or card deck.

HCP8028W INSUFFICIENT STORAGE AVAILABLE

Explanation

If the system is being loaded under CMS, the storage required to load the system exceeds the free storage

available from CMS. Otherwise, the system storage required exceeds the real or virtual machine size.

This error also occurs if the relocation data for the module being built exceeds the buffer that HCPLDR allocates. Refer to the STORMAX constant in HCPLDR.

System action

Loading ends. Under CMS, a return code of 8028 is returned to the caller. Loading stand-alone in a real or virtual machine will result in a disabled wait state (wait-state code = 8028).

If using the Stand-Alone Program Loader and the system enters a disabled wait state, the registers will contain the values held at the time the wait state was entered. Register 13 contains the work page address and is the highest page available.

User response

Increase your virtual machine storage size or increase the STORMAX constant in HCPLDR.

HCP8029E The variations of this message are explained below.

Explanation

- DUPLICATE ESDID DEFINITION; MISSING 'END' CARD
- Duplicate ESDID definition; missing 'END' card

An object file was loaded that did not have an END card.

System action

Loading continues, but execution is not attempted.

User response

A severe error in a reassembly has probably resulted in a partial object file. Inspect the indicated object file and reassemble with sufficient read/write DASD file area.

HCP8030E NO OBJECT FILE FOUND FOR *filename*

Explanation

No object file for this module was found on the accessed disks.

System action

No object file for this module is loaded. The command runs using the next file in the load list.

User response

One or more of the following may be necessary before reentering the command:

- Access the proper disks.
- Specify the correct file type in the load list or in the command line.
- Specify the correct control file.
- Specify the correct load list
- Delete the extraneous file name from the load list.
- Specify the correct file name in the load list.

HCP8031W PROGRAM INTERRUPT DURING LOADING OPERATION

Explanation

An error occurred within HCPLDR while loading.

System action

Loading ends. The system enters a disabled wait state (wait-state code = 8031).

User response

Check for any object files assembled with non-IBM assemblers. If there are no such files, notify your IBM Support Center personnel immediately.

HCP8032W ATTEMPT TO LOAD FAULTY STORAGE

Explanation

The storage area being loaded is known to be prone to make errors, correctable or otherwise.

System action

Loading ends. The system enters a disabled wait state (wait-state code = 8032).

User response

Commands exist for reconfiguration of storage using the MSSF to ensure usable storage. Your IBM representative can assist you.

HCP8033E NO LOAD LIST SPECIFIED

Explanation

The loader command input did not identify the exec file containing the names of the object files to be loaded.

System action

The command does not run; system operation continues.

Operator response

Specify or create the desired file and reenter the command.

HCP8034E NO CONTROL FILE SPECIFIED

Explanation

The loader command input did not specify the control file containing the types of object files to be loaded.

System action

The command does not run; system operation continues.

Operator response

Specify or create the desired file and reenter the command.

HCP8035E DUPLICATE FILETYPE SPECIFIED - *filetype*

Explanation

The indicated file type was specified more than once in the command line.

System action

The command does not run; system operation continues.

User response

Reenter the command, deleting all duplicate file types.

HCP8036E TOO MANY FILETYPES SPECIFIED

Explanation

More than 16 file types were specified in the command line.

System action

The command does not run; system operation continues.

User response

Reenter the command, specifying no more than 16 file types.

HCP8037W A PROGRAM CHECK OCCURRED IN HCPLDR WHILE RELOCATING THE TARGET PROGRAM.

Explanation

A program check occurred while HCPLDR was moving the target program to the desired location. For example, a protection exception could occur when the target address points to read-only storage.

System action

The system enters a disabled wait state (wait-state code = 8037).

System programmer response

Contact your IBM hardware representative or reconfigure storage.

HCP8038W A MACHINE CHECK OCCURRED IN HCPLDR WHILE RELOCATING THE TARGET PROGRAM.

Explanation

A machine check occurred while HCPLDR was moving the target program to the desired location.

System action

The system enters a disabled wait state (wait-state code = 8038).

User response

Analyze the system for the cause of the machine check.

HCP8039E ERROR *nnn* WRITING FILE *fn ft fm* ON DISK

Explanation

An irrecoverable error occurred while writing to a disk. The *nnn* is the return code from FSWRITE and indicates the nature of the error.

System action

If HCPLDR issued this message, then HCPLDR processing stops, control is returned to CMS, and system operation continues.

User response

Interpret the return code from FSWRITE. Remedy the condition and enter command again. If the problem persists, contact your system support personnel.

HCP8040E File *fn ft fm* Record *nnn Copy_of_record*

Explanation

While loading some customer-written CP routines, CP discovered an error in one of the records of the specified file. First, CP issues a message telling you what the error is. Then, CP issues this message to tell you where the error is.

System action

CP does not load the customer-written CP routines; system operation continues.

User response

Correct the error in the specified file at the specified record, and enter the CPXLOAD command (or configuration file statement) again.

HCP8042E ESDID value has been incremented beyond 65535 (X'FFFF').

Explanation

You tried to load some customer-written CP routines that included one or more text files. Somewhere within those text files you have defined more than 65,535 external symbols.

System action

CP does not load the customer-written CP routines; system operation continues.

User response

Reduce the number of external symbols defined in your TEXT files and enter the CPXLOAD command (or configuration file statement) again.

HCP8049E ERROR DURING ERASE OF *fn ft fm*. FSERASE RC=*rc*

Explanation

An irrecoverable error occurred while erasing a file during HCPLDR processing. The *fn ft fm* indicates the file that was to be erased. The *rc* is the return code from FSERASE and indicates the nature of the error.

System action

If HCPLDR issues this message, processing stops, control is returned to CMS, and system operation continues.

User response

Interpret the return code from FSERASE by referring to *z/VM: CMS Macros and Functions Reference*. Remedy the condition and enter the command again. If the problem persists, contact your system support personnel or IBM software support.

HCP8049I ERROR DURING ERASE OF *fn ft fm*. FSERASE RC=*nnn*

Explanation

An error occurred while erasing a file.

The specified *fn ft fm* is the file that the program was trying to erase, and is not critical to the generation of the new executable module. The file was either a MAP or SMALLMAP file.

The specified return code *nnn*is from the FSERASE MACRO and indicates the nature of the error.

System action

If HCPLDR issued this message, then HCPLDR processing continues.

User response

Interpret the return code from FSERASE by referring to *z/VM: CMS Macros and Functions Reference*. If you wish to generate the file indicated, remedy the condition and enter command again. If the problem persists, contact your system support personnel or IBM software support.

HCP8055E Recording retrieval cannot be performed to file mode *fm* because it is a directory.

Explanation

The file mode specified is an SFS directory and recording retrieval is not supported to a directory.

System action

The command does not run; system operation continues.

User response

Access a read/write minidisk, instead of a directory, at the specified mode and reenter the original command.

HCP8056I RECORDING RETRIEVAL DISK *nn*% FULL[, USER *userid*]

Explanation

The virtual machine retrieving CP records has filled its A disk beyond the level specified in the warning message. The operator is notified once a 75% threshold has been surpassed and again when a 90% threshold has been exceeded.

System action

System operation continues.

User response

Do one or both of the following: process the accounting files or clear the disk for the virtual machine. Restart the recording retrieval program after clearing the virtual machine's A disk of the processed records. Turn off retrieval of EREP records with the command **RECORDING EREP OFF PURGE QID** *userid*. This will reduce the number of records written to the retrieval disk in the future.

HCP8057E RECORDING RETRIEVAL DISK FULL[, USER *userid*]

Explanation

The disk that the virtual machine uses for retrieval of CP records is full; further retrieval cannot occur. The user ID of the virtual machine is specified in the message.

System action

System operation continues. CP queues records into storage. The retrieval program ends.

Operator response

Do one or both of the following: process the accounting files or clear the disk for the virtual machine. Restart the recording retrieval program after clearing the virtual machine's A disk of the processed records. Turn off retrieval of EREP records with the command **RECORDING EREP OFF PURGE QID** *userid*. This will reduce the number of records written to the retrieval disk in the future.

HCP8058I User *userid* has purged *count* records queue.

Explanation

A CP in-storage queue has been purged by issuing the RECORDING command with the PURGE operand. The recording name, count of records purged, and the user who issued the command are displayed as a part of the message. A record count of greater than 99999999 is indicated by 99999999+.

System action

System operation continues.

User response

None.

HCP8064I Recording data retrieval has been started; recording {*LOGREC | *ACCOUNT | *SYMPTOM | *CONFIG} for userid *userid*.

Explanation

A virtual machine has successfully notified CP to initiate retrieval of CP records.

System action

If any records are available on the recording queue, a CP send as specified by the protocol on the identify is issued to the virtual machine.

Operator response

None.

User response

Periodically verify that record retrieval is in process.

Programmer response

None.

HCP8065I RECORDING RETRIEVAL *recording-name* TERMINATED [, USER *userid*]

Explanation

The CP record retrieval program that was operating in the virtual machine, identified by *userid*, ended. The termination was either user- or error-invoked.

System action

CP records are enqueued in storage; system operation continues.

User response

If the retrieval program ended as a result of an error condition, analyze and correct the error. Restart record retrieval as required. Analyze any previous RET messages to help correct the problem. If the problem persists, contact your system support personnel.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP8066I ***nnnn recording-name*** **RECORDS PROCESSED[, USER** ***userid*****]**

Explanation

The virtual machine program that was retrieving CP records ended, or was asked for summary processing information. The number of records retrieved from CP is noted, as well as the recording queue from which they were retrieved and who retrieved them.

System action

System operation continues.

User response

None.

HCP8067A **ENTER END OR SUMMARY**

Explanation

The virtual machine record retrieval program received an external interrupt through the EXTERNAL command and is now prompting the user for input. If END is entered, the retrieval program ends. If SUMMARY is specified, HCP591I is issued and record retrieval continues.

System action

Processing is suspended until the prompt is answered.

User response

Respond as desired to the prompt.

HCP8069E **RECORDING RETRIEVAL, RECORD** ***recording-name nnnn*** **TOO LARGE[, USER** ***userid*****]**

Explanation

Record retrieval was occurring in the virtual machine, and CP sent a record larger than the record that the virtual machine retrieval program expected. The recording queue and record size are noted in the message.

System action

The recording retrieval program terminates retrieval from the specified recording queue.

User response

Call your system support personnel. Restart the retrieval program as required.

HCP8070E **RECORDING RETRIEVAL** ***recording-name*** **WRITE ERROR** ***rc*****[, USER** ***userid*****]**

Explanation

While a virtual machine was retrieving CP records and writing them to disk, an error occurred on the write. The return code from FSWRITE is displayed in the message.

System action

The record retrieval program ends retrieval of records from the specified recording queue.

User response

Analyze and correct the error condition. Restart record retrieval as required. Call your system support personnel if the error persists.

HCP8071E **CP cannot use VMCF because an error occurred on the VMCF AUTHORIZE request.**

Explanation

During IPL, CP was unable to AUTHORIZE to VMCF.

System action

Initialization continues; however, CP is not able to communicate across nodes using SMSG on behalf of a virtual machine.

Operator response

If desired, re-IPL to attempt to clear the error condition. If the problem persists, call your system support personnel.

Programmer response

Check the VMCPARM parameter list to ensure that it is correct. In particular, make sure it is doubleword aligned and that the subfunction code and length are properly specified.

HCP8072I Recording entry not found

Explanation

The recording entry was not found on the recording entry table.

System action

None.

User response

This message is sent in response to either the QUERY RECORDING or RECORDING command, or the RETRIEVE utility. It is not an error condition. Therefore, no action is required.

HCP8078E CONNECT request to the {*ACCOUNT|*LOGREC| *SYMPTOM| *CONFIG} system service is denied for user *userid*. Recording system service connect limit has been reached.

Explanation

A virtual machine issued an IUCV CONNECT in an attempt to connect to a recording system service. The connect failed because recording system services is already supporting the maximum number of recording entries.

System action

System operation continues.

Operator response

A COLD START IPL may be required to clear inactive entries from CP's internal recording table. This would require all actively recording user IDs that are not specified on the SYSTEM_USERIDS statement with the parameters EREP, ACCOUNT, and SYMPTOM to start their record retrieval again on the subsequent IPL.

User response

None.

Programmer response

None.

HCP8079E Attempt to connect to the {*LOGREC|*ACCOUNT| *SYMPTOM| *CONFIG} system service has failed. User *userid* is already connected.

Explanation

A virtual machine was unable to connect to the named system service through IUCV because it already has a connection to that system service.

System action

System operation continues.

Operator response

None.

User response

None.

Programmer response

Any application that is currently connected to the named recording system service must end (the IUCV path must be severed) before another application may establish a connection.

HCP8080I *userid* is not connected to the {*LOGREC|*ACCOUNT| *SYMPTOM} system service.

Explanation

This message identifies those virtual machines that were not named on the SYSTEM_USERIDS statements in the system configuration file for which recording system services are saving records. The user IDs are specified on the SYSTEM_USERIDS statement with the parameters EREP, ACCOUNT, and SYMPTOM. This message is issued as part of recording system services initialization processing when CP is started with either the WARM or FORCE option.

System action

System initialization continues.

Operator response

The virtual machine indicated in the message must be logged on and must issue the RETRIEVE utility to

collect the records that are currently being queued for it in host storage.

User response

None.

Programmer response

None.

HCP8081E ATTEMPT TO CONNECT TO {*LOGREC|*ACCOUNT| *SYMPTOM} SYSTEM SERVICE HAS FAILED. RETURN CODE *return code*.

Explanation

This message indicates that a virtual machine was unable to connect to the named system service through IUCV.

The *return code* variable identifies the reason for the failure.

Listed below are the return codes and their explanations, and actions a user can take in each case.

- **Return code 4** indicates that the virtual machine was already connected to the system service.

  User Response: IPL CMS to clear the CMSIUCV interface, then try to connect again.
- **Return code 8** indicates that there is a protocol error.

  User Response: Check the IUCV protocol and correct as required, then try to connect again.
- **Return code 12** indicates that system services has reached the limit of 100 users in the recording table.

  User Response: Notify system support. A cold start will be required to clear the recording table of entries.
- **Return code 1***xxx* indicates an IUCV problem. The *xxx* variable is the IPRCODE from the IPARML buffer.

  User Response: Correct the situation that caused the IUCV IPRCODE of *xxx*, then try to connect again.

System action

System operation continues.

HCP8082I {EREP | Accounting | SYMPTOM | CONFIG} records are accumulating for userid *userid*.

Explanation

A record (for example, accounting or EREP) has been enqueued on the recording system services queue for a user who was previously connected through IUCV to receive, and who was retrieving that type of record. The user is not currently retrieving records, although they are accumulating on the recording system service queue. The record type and the user ID are displayed in the message.

System action

System operation continues. CP will enqueue records in storage. The warning is only issued once for each of the following circumstances:

- System IPL
- Designated user LOGOFF
- Transmission error on record retrieval
- User has entered IUCV SEVER.

Operator response

Start CP record retrieval for each installation procedure.

User response

None.

Programmer response

None.

HCP8083I {EREP|Accounting|SYMPTOM} record threshold has been exceeded for userid *userid*. Currently *nnnnn* records are enqueued.

Explanation

The number of EREP, accounting or system records that are enqueued in storage has surpassed predetermined levels. The count of records is indicated as well as the recording queue and the user ID of the user who is permitted to retrieve the records. A record count of greater than 99999999 is indicated by 99999999+.

System action

System operation continues. The message is sent as long as no IUCV SENDs are pending to the designated user.

Operator response

None. If required, initiate installation CP record retrieval procedures. If records are not retrieved during the IPL session, the subsequent IPL should be warm started to ensure that an attempt is made to restore CP recording queues for record retrieval.

User response

None.

Programmer response

None.

HCP8084E **An IUCV IPRCODE of *iprcode* was encountered during an IUCV {ACCEPT|PURGE|SEND|SEVER} function for user *userid*.**

Explanation

Transmission and retrieval of CP records was in process, and a communication error occurred between CP and the retrieving virtual machine. The IUCV function, the IUCV IPRCODE, and the user ID are displayed in the message.

The error occurred as a result of CP-initiated action.

System action

Record transmission to the affected virtual machine is suspended, but records will continue to be queued for it.

Operator response

Investigate the error condition and make the necessary corrections. The virtual machine retrieval program should be checked to assure CP record retrieval protocol is being followed. If the error persists, contact your system support personnel.

User response

None.

HCP8085E **AN IUCV IPRCODE OF *iprcode* WAS ENCOUNTERED DURING AN IUCV {CONNECT| DCLBFR|RECEIVE| REJECT|REPLY |RTRVBFR| SEVER} FUNCTION.**

Explanation

Record retrieval was in progress when a communication error occurred. The IUCV function and IPRCODE are displayed in the message.

System action

System operation continues.

Operator response

Investigate the error condition and make the necessary corrections. The virtual machine retrieval program should be checked to assure CP record retrieval protocol is being followed. If the error persists, contact your system support personnel.

HCP8086E **The attempt to CONNECT to the {*ACCOUNT|*LOGREC| *SYMPTOM| *CONFIG} system service has failed for user *userid* due to a protocol error.**

Explanation

An attempt was made to establish CP-to-virtual-machine communication to retrieve CP records; the IUCV CONNECT was in error. The CONNECT parameter list indicated that the user ID specified will only handle message data contained in a parameter list rather than a buffer. This is a protocol error.

System action

Processing continues.

Operator response

None.

User response

None.

Programmer response

Check the virtual machine retrieval program to ensure proper IUCV-to-CP communication. Correct the situation and retry the operation.

HCP8087I **Records are queued for user *userid* on the {*LOGREC|*ACCOUNT| *SYMPTOM| *CONFIG} recording queue and must be purged or retrieved before recording can be turned on**

Explanation

The ON option of the RECORDING command has been issued, the indicated user's recording status is OFF and the user has a non-zero number of records queued. Recording cannot be turned ON for this user until the existing records are processed.

System action

CP will not change the recording status of the user.

User response

The queued records must be processed by using the PURGE option of the RECORDING command to purge the records from the queue, or by issuing the CMS RETRIEVE command from the user's console to retrieve the system records.

HCP8088I **EREP LOGROUTE RECORDS ROUTED TO *userid* AT *nodeid***

Explanation

This message is displayed when RETRIEVE processing sends error records accumulated in XAEREPSD RECORD to *userid* at *nodeid*.

System action

System operation continues.

Operator response

None.

HCP8089I **LOGROUTE DEACTIVATED TO *userid* AT *nodeid* FOR *time***

Explanation

This informational message is displayed when a CP EXTERNAL command is entered and you choose to end RETRIEVE command processing.

System action

RETRIEVE processing ends. System operation continues.

Operator response

None.

HCP8090I **LOGROUTE ACTIVATED TO *userid* AT *nodeid* FOR *time***

Explanation

This informational message is displayed by RETRIEVE command processing when the LOGROUTE function is successfully activated.

System action

System operation continues.

Operator response

None.

HCP8100I **DEFAULT PRINTER 000E DOES NOT EXIST**

Explanation

DDR uses device number 000E as the default printer when no SYSPRINT control statement is supplied.

System action

The program continues with no printer defined.

User response

As soon as possible, define a valid printer using the SYSPRINT control statement.

Note: When using cards as input, provide a valid SYSPRINT control statement before any function statements. If a valid printer is not defined, the job step ends as soon as printer output is attempted, causing the system to issue error message HCP704E.

HCP8101E **VERIFY PATH *yy* TO DEVICE *xxxx*; A POTENTIAL CONFIGURATION CHANGE WAS DETECTED.**

Explanation

A reset event occurred on this path.

System action

The program ends.

User response

Verify that no configuration changes have occurred and then retry the operation.

HCP8102I **END OF VOLUME ENCOUNTERED ON TAPE *rdev***

Explanation

An end-of-tape condition has been reached during end-of-job processing in DDR.

System action

The job step completed successfully. The tape is rewound and unloaded. System operation continues.

User response

None.

HCP8150I PROCESSING THE DUMP *fileid*

Explanation

The DUMPLOAD command has begun to create CMS dump file *fileid* from a system data file or tape file.

System action

The command is processed; system operation continues.

User response

None.

HCP8156A DO YOU WANT TO PROCESS THIS DUMP? (YES/NO)

Explanation

Message HCP8160I (for a CP abend or stand-alone dump) or message HCP8168I (for a virtual machine dump) has been issued, indicating what dump is being processed. You can verify that you are processing the correct dump.

System action

If you enter an invalid response, this message appears again. If you respond YES, command processing continues. If you respond NO, command processing stops, and no CMS files or printer spool files are created.

User response

Indicate whether you want to continue processing the dump by using the valid responses YES or NO.

HCP8160I DUMP FROM *abend_code* (*dump_type*) *nodeid product_name version.release.modification_level*

Explanation

The dump being processed by the command DUMPLOAD is either a CP system dump or a stand-alone dump. The message lets you know the source of the dump for verification.

The following information is displayed:

abend_code
The abend code for a CP hard, soft or snap dump.

(*dump_type*)
Describes the type of the dump; it will be either (HARD), (SOFT), (SNAPDUMP), or (STANDALONE).

nodeid
The node ID of the system that produced the dump. For a stand-alone dump, *nodeid* is blank.

product_name
The name of the product that produced the dump.

version.release.modification_level
The information associated with the particular release of the product that produced the dump.

System action

System operation continues.

User response

None.

HCP8161E CONFLICT BETWEEN OPERANDS *operand* AND *operand*

Explanation

The two conflicting operands were entered on the command line.

System action

The command does not run; system operation continues.

User response

The command must be reentered correctly.

HCP8162E FATAL I/O ERROR READING DUMP, FSREAD RC = *rc*

Explanation

An irrecoverable I/O error occurred during the reading of the dump from a CMS disk or SFS directory. A CMS error message describing the error that occurred may precede this message.

System action

Command processing is terminated.

User response

Refer to the documentation on the CMS FSREAD macro to determine the error that corresponds to the given return code. Issue the command again after you correct the error.

HCP8164E **DUMP FILE NAME *filename* IS NOT A VALID CMS FILENAME**

Explanation

The dump file name entered is not valid. Valid file names are in the form PRB*xxxxx* where *xxxxx* is a one-to-five character string consisting of 0–9, A–Z, @, $, and #.

System action

The command does not run; system operation continues.

User response

Reenter the DUMPLOAD command using an acceptable file name. If necessary, rename the file before reentering the DUMPLOAD command.

HCP8167I **VIRTUAL MACHINE DUMP FROM *product* V0*n*R0*n*M*n***

Explanation

The dump being processed by the DUMPLOAD command is a virtual machine dump. This message displays the product and release of the VMDUMP that produced the dump.

System action

System operation continues.

User response

None.

HCP8168I **VIRTUAL MACHINE DUMP, FORMAT = *vmtype*, DUMPID = *dumpid***

Explanation

The type and dump ID of the virtual machine dump that DUMPLOAD is currently processing appears at your display device to let you verify that you are processing the correct dump. The dump type and identifier correspond to the first address space dumped. Message HCP8156A then appears to ask if you want to process the dump.

System action

System operation continues.

User response

No response to message number HCP8168I is necessary.

HCP8169I **The variations of this message are explained below.**

— Variation 1 **DUMP IS NOT COMPLETE**

Explanation

The dump in the CMS file is not complete. It is possible that the dump was not completed when it was taken. The dump might not be complete because a user halted processing of a VMDUMP command or a CP DIAGNOSE X'94' instruction.

It is also possible that the dump was completed when it was taken but was not completely loaded by the DUMPLOAD command.

System action

This message is issued and DUMPLOAD ends.

User response

If the dump was not completely loaded because of I/O errors, correct the errors and reload the dump.

— Variation 2 **DUMP IS NOT COMPLETE; IT CONTAINS NO CP STORAGE**

Explanation

The dump in the CMS file is not complete. It was incomplete when it was taken. The spool file name is "NOCPDATA", which indicates that the dump contained no CP storage when it was taken.

System action

Only the dump header records are written to the CMS file.

User response

None.

HCP8170E THERE ARE NO DEFAULT FILE NAMES AVAILABLE.

Explanation

The tape or the spool file dump cannot be processed because dump files with names PRB00000 through PRB99999 already exist on the CMS disk being accessed.

System action

The command is not executed.

User response

- Rename any of the existing dump files using the Dump Viewing Facility DUMPNAME command and reissue the DUMPLOAD command. DUMPLOAD uses the default dump file name you have made available.
- Or rename any of the existing dump files using the CMS RENAME command and reissue the DUMPLOAD command. DUMPLOAD uses the default dump file name you have made available.
- Or reissue the DUMPLOAD command and use the OUTFILE option to specify a file name for the set of new files.

HCP8171I SYSGEN SIZE REACHED, NO EOF ON DUMP FILE

Explanation

CP reached its defined storage size while reading or writing a CMS dump file, but there is more data in the dump.

System action

The CMS dump file is closed.

User response

Notify the system programmer; the dump may be incorrect.

HCP8175E REQUIRED SYSTEM STORAGE NOT AVAILABLE

Explanation

The CMSSTOR OBTAIN macro was issued to obtain needed storage for processing the DUMPLOAD command. The macro did not complete successfully and storage could not be acquired.

System action

System operation continues.

User response

Reenter the command. If the problem persists, increase the storage size of your virtual machine by entering a CP DEFINE STORAGE command.

HCP8177E DUMP FILE *filename* ALREADY EXISTS ON *filemode* DISK

Explanation

A dump file *filename* DUMP*xxxx filemode* already exists. The *xxxx* can be any string valid for a CMS file ID.

System action

DUMPLOAD processing is terminated; system operation continues.

User response

Either erase all the existing *filename* DUMP*xxxx* files or rename the files. Then reissue the DUMPLOAD command.

HCP8178E DUMP FILE MODE *filemode* INVALID

Explanation

The dump file mode is not valid. Refer to *z/VM: CMS Commands and Utilities Reference* for a description of a valid file mode.

System action

The command is not executed; system operation continues.

User response

Reissue the DUMPLOAD command using a valid file mode.

HCP8179I THE OPTION PRINT IS NOT SUPPORTED BY DUMPLOAD COMMAND

Explanation

The print function is no longer part of the DUMPLOAD command.

System action

System operation continues; message HCP8181I is issued.

User response

See message HCP8181I.

HCP8180E DUMPLOAD FAILED BECAUSE NO R/W *filemode* DISK IS AVAILABLE

Explanation

There is no read/write disk at file mode *filemode*.

System action

The command does not run.

User response

Use the CMS ACCESS command to access one of your read/write disks at that file mode. Reenter the DUMPLOAD command.

HCP8181I PLEASE REFER TO THE DUMP VIEWING FACILITY PRTDUMP COMMAND FOR EQUIVALENT FUNCTION

Explanation

The printing function previously provided by the DUMPLOAD command for VMDUMP command dumps of ESA/390 guests is now provided by the PRTDUMP command of the Dump Viewing Facility.

System action

System operation continues.

User response

See the description of the PRTDUMP command in *z/VM: Dump Viewing Facility* for printing VMDUMP command dumps of ESA/390 guests. For any other dumps, use the VM Dump Tool to create a DUMPLOG file that can then be printed.

HCP8182E UNKNOWN DFIR FORMAT

Explanation

The dump being processed by the command DUMPLOAD has a dump information record that has an unknown format. The DFIFMT or DFIZINFO field does not contain a value known to this version of DUMPLOAD.

System action

DUMPLOAD processing is terminated; system operation continues.

System programmer response

Contact your IBM Support Center personnel to diagnose and correct the problem.

User response

None.

HCP8183I DUMPLOAD *product_name* VERSION *number* RELEASE *number*

Explanation

This message displays product and release information about the version of DUMPLOAD that is executing.

System action

System operation continues.

User response

None.

HCP8184E RELEASE OF DUMPLOAD AND DUMP ARE NOT COMPATIBLE

Explanation

DUMPLOAD has determined that it cannot process the dump because the product and release level of DUMPLOAD does not match the product and release level of the dump.

System action

DUMPLOAD processing is terminated. System operation continues.

System programmer response

Locate the DUMPLOAD MODULE that is appropriate for the desired product and release, and ensure that the user has the ability to access it.

User response

Access the disk or directory that contains the release of DUMPLOAD that is appropriate for this dump. Messages HCP8183I and HCP8160I are displayed prior to this message to assist you in determining

product and release information about DUMPLOAD and the dump.

HCP8185I THE NUMBER OF ALTERNATE CPUS FOUND EXCEEDS THE MAXIMUM ALLOWED

Explanation

DUMPLOAD processing has detected that there are more CP prefix pages than the maximum number of CPUs. DUMPLOAD is in the process of filling in DFIR information. As part of this process, it obtains information from each CP prefix page (one prefix page per CPU). The CP prefix page chain (using forward pointer PFXNXTPF) contains more pages than the maximum number of CPUs. This indicates that the chain is corrupted.

System action

DUMPLOAD discontinues processing the CP prefix page chain. DFIR information from the prefix pages that were processed is saved. DUMPLOAD processing then continues loading the rest of the dump.

Operator response

This message indicates a probable system error. Report the problem to IBM support personnel.

Programmer response

Obtain the address of the first CP prefix page and follow the chain of forward pointers (PFXNXTPF). Determine if each page is a CP prefix page, or if the forward pointers are in a loop. Use the dump to determine what system processing was in progress when the dump was taken, and how the prefix pages were created.

HCP8186I THE OPTION DISTILL IS IGNORED; DUMP IS NOT A HARD ABEND OR SNAP DUMP.

Explanation

The DISTILL option was specified on the DUMPLOAD utility but the input dump was not a hard abend dump or a snap dump.

The option to distill a correlation table format dump from an input dump spool file is supported only for hard abend dumps and snap dumps.

System action

DUMPLOAD processing continues as if the DISTILL option was not specified.

User response

None. This message is sent for informational purposes only.

HCP8187I DUMP TAKEN WITH FRMTBL {YES | NO} PGMBKS {ALL | NONE | FAILUSER}.

Explanation

This message is displayed when the dump that is processed is a hard abend dump or a snap dump. This message is followed by message HCP8188I, which confirms the results of the distillation, unless the dump is already abridged. The dump is abridged if the dump was created by using the FRMTBL NO option with either of the PGMBKS NONE or PGMBKS FAILUSER options.

System action

DUMPLOAD processing continues.

User response

None. This message is sent for informational purposes only.

HCP8188I DUMP WILL BE DISTILLED TO FRMTBL NO PGMBKS {NONE | FAILUSER}.

Explanation

This message is displayed when the dump that is processed by the DUMPLOAD utility is a hard abend dump or a snap dump and the DISTILL option was specified.

The message contains PGMBKS NONE if the original dump was taken by using the PGMBKS ALL or the PGMBKS NONE option. All pageable PGMBKs are omitted from the abridged dump.

The message contains PGMBKS FAILUSER if the original dump was taken by using the PGMBKS FAILUSER option.

System action

DUMPLOAD processing continues.

User response

None. This message is sent for informational purposes only.

HCP8210I The variations of this message are explained below.

— Variation 1 ***numfiles fn*** **MDMPxxxx file(s) will be created on VDEV** ***vdev***

Explanation

A number of MDMPxxxx files will be created on the VDEV specified by the user.

System action

System operation continues.

User response

None.

— Variation 2 ***numfiles fn*** **MDMPxxxx file(s) will be created on disk** ***filemode***

Explanation

A number of MDMPxxxx files will be created on the file mode specified by the user.

System action

System operation continues.

User response

None.

HCP8211E Please reset SPOOL READER class to V, D or *

Explanation

The user has indicated the source dump file is in SPOOL; however, the SPOOL READER class is set to a class other than V, D or *. DUMPLD2 will not be able to process the source dump file.

System action

DUMPLD2 execution is terminated.

User response

Reset the SPOOL READER class setting to V for VMDUMPs, D for system dumps, or to * to allow DUMPLD2 to be able to process either.

HCP8212E No unheld class V or class D files exist in SPOOL

Explanation

The user has indicated the source dump file is in SPOOL. However, DUMPLD2 is unable to find a class V (VMDUMP) or class D (system dump) file. This may be because the files are in 'HOLD' status or no dump files exist in SPOOL.

System action

DUMPLD2 execution is terminated.

User response

Determine whether or not the source dump file to be used is in 'HOLD' status in SPOOL. If so, change status to 'NOHOLD' so that DUMPLD2 is able to process the file.

HCP8213I Created ***fileid***

Explanation

The file indicated by the file id, has been created on a VDEV, file mode, or SFS directory specified by the user.

System action

System operation continues.

User response

None.

HCP8214I Duplicate values will be ignored ***duplicates***

Explanation

The user has specified a VDEV, file mode, or SFS directory at least twice, or the user has specified a VDEV value and file mode which both refer to the same disk. Each VDEV, file mode, or SFS directory will only be used once and the duplicate values will be ignored by DUMPLD2.

System action

System operation continues.

User response

None.

HCP8215I DUMPLD2 cannot determine how many files will be written to the SFS directory specified

Explanation

The user has specified an SFS directory to write MDMPxxxx files to. Because DUMPLD2 is unable to determine how much available space exists on the SFS

directory, the utility will be unable to predict how many MDMPxxxx files can be created.

System action

System operation continues.

User response

None.

HCP8216I ***n*** **files have been written to the SFS directory at file mode –** ***mode***

Explanation

A number of MDMPxxxx files *n* have been created on the SFS directory specified by the user.

System action

System operation continues.

User response

None.

HCP8217E **The variations of this message are explained below.**

— Variation 1 **Error in erasing incomplete file – ERASE rc =** ***rc***

Explanation

A MDMPxxxx file was left incomplete because there was insufficient space left on the VDEV, file mode or SFS directory to which it was being written to. DUMPLD2 attempted to copy the incomplete file to a new VDEV, file mode, or SFS directory, but was unable to do so. The error was encountered upon trying to erase the incomplete MDMPxxxx file. The return code from the ERASE command is included in the message.

System action

DUMPLD2 execution is terminated.

User response

Check the return code from ERASE to determine the problem.

— Variation 2 **Error in copying incomplete file to next disk – ERASE rc =** ***rc***

Explanation

A MDMPxxxx file was left incomplete because there was insufficient space left on the VDEV, file mode or SFS directory to which it was being written to. DUMPLD2 attempted to copy the incomplete file to a new VDEV, file mode, or SFS directory, but was unable to do so. The error was encountered upon trying to erase a temporary work file “COPYFILE CMSUT1” from the new VDEV, file mode or SFS directory. The return code from the ERASE command is included in the message.

System action

DUMPLD2 execution is terminated.

User response

Check the return code from ERASE to determine the problem.

HCP8218E **Incorrect mode** ***mode*** **in range -** ***range***

Explanation

The user has specified a file mode as part of a file mode range, which is not an alphabetical character. This range will be ignored and will not be used by DUMPLD2.

System action

DUMPLD2 execution continues and will use the other operands that were specified.

User response

None.

HCP8219E **VDEV must be a hex value -** ***vdev***

Explanation

The user specified a value for *vdev* which is not a hexadecimal value.

System action

If this message is displayed by DUMPLD2, the user is prompted to either continue or to terminate the operation. If this message is displayed by SDINST, the user is prompted to either enter a valid virtual device number or the terminate operation.

User response

For SDINST, either specify a correct value or terminate the operation.

HCP8220E **VDEV must be 3 or 4 digits -** ***vdev***

Explanation

The user has specified a virtual device address which is not of the required three of four character length. This value will be ignored and will not be used by DUMPLD2.

System action

DUMPLD2 execution continues and will use the other operands that were specified.

User response

None.

HCP8221E Incorrect range specified - *range*

Explanation

The user has specified an incorrect file mode range or virtual device address range, in which the ending point of the range is equal to or less than the starting point. This range will be ignored and will not be used by DUMPLD2.

System action

DUMPLD2 execution continues and will use the other operands that were specified.

User response

None.

HCP8223E File mode *mode* is not accessed

Explanation

The user has specified a file mode which is not accessed. This file mode will be ignored and will not be used by DUMPLD2.

System action

DUMPLD2 execution continues and will use the other operands that were specified.

User response

None.

HCP8224E File mode *mode* is not R/W

Explanation

The user has specified a file mode which is not in R/W mode. Because DUMPLD2 will be unable to write any files to this disk, the file mode will be ignored and will not be used.

System action

DUMPLD2 execution continues and will use the other operands that were specified.

User response

None.

HCP8225E Device *vdev* does not exist

Explanation

The user has specified a virtual device address for a device that does not exist.

System action

If this message is displayed by DUMPLD2, the user is prompted to either continue or to terminate the operation. If this message is displayed by SDINST, the user is prompted to enter a valid virtual device number or terminate execution.

User response

For SDINST, specify a correct value.

HCP8226E Device *vdev* is not formatted as CMS DASD

Explanation

The user has specified a virtual device address for a device which is not formatted as a CMS disk and therefore cannot be used to create CMS multiple dump files on. This virtual device address will be ignored and will not be used by DUMPLD2.

System action

DUMPLD2 execution continues and will use the other operands that were specified.

User response

None.

HCP8227E Device *vdev* is not R/W

Explanation

The user has specified a virtual device address for a device which is not R/W. For DUMPLD2, it will not be able to write any files to this device. This virtual device address will be ignored and will not be used.

System action

If this message is displayed by DUMPLD2, the user is prompted to either continue or to terminate the operation. If this message is displayed by SDINST, the user is prompted to either enter a valid virtual device number or terminate the operation.

User response

For SDINST, specify a device that is R/W mode; or, if the device you want to use is currently R/O, link the device as R/W.

HCP8228E **Insufficient space for any files – *device***

Explanation

The user has specified a file mode or virtual device which does not contain enough space for any dump files. This file mode or virtual device address will be ignored by DUMPLD2 and will not be used.

System action

DUMPLD2 execution continues and will use the other operands that were specified.

User response

None.

HCP8229E **The variations of this message are explained below.**

— Variation 1 **Error in writing to file *fileid* – EXECIO rc = *rc***

Explanation

DUMPLD2 encountered an error in writing a record to the MDMPxxxx file. The return code from the 'EXECIO' command is included in the message.

System action

DUMPLD2 execution is terminated.

User response

Check the return code from 'EXECIO' to determine the problem.

— Variation 2 **Error in closing file *fileid* – FINIS rc = *rc***

Explanation

DUMPLD2 encountered an error in closing the MDMPxxxx file. The return code from the 'FINIS' command is included in the message.

System action

DUMPLD2 execution is terminated.

User response

Check the return code from 'FINIS' to determine the problem.

— Variation 3 **Error in opening file *fileid* – EXECIO rc = *rc***

Explanation

DUMPLD2 encountered an error in creating a new MDMPxxxx file. The return code from the 'EXECIO' command is included in the message.

System action

DUMPLD2 execution is terminated.

User response

Check the return code from 'EXECIO' to determine the problem.

HCP8230E **Insufficient disk space to continue.. Exiting**

Explanation

DUMPLD2 has not yet finished creating MDMPxxxx files but has already used all valid VDEVs, file modes and/or SFS directories specified by the user. The dump has not been completely loaded at this point.

System action

DUMPLD2 execution is terminated.

User response

To load the complete dump to MDMPxxxx files, re-invoke DUMPLD2 and specify additional VDEVs, file modes, or SFS directories to write to. The old MDMPxxxx files will be overwritten if the same file name is specified with the re-invocation. Erase any MDMPxxxx files with the same file name before the re-invocation.

HCP8231E **The variations of this message are explained below.**

— Variation 1 **Error in accessing disk – VMLINK rc = *rc***

Explanation

The user has specified a VDEV which is not accessed. DUMPLD2 encountered an error upon attempting to access the VDEV using the 'VMLINK' command. The return code from 'VMLINK' is included in the message.

System action

DUMPLD2 execution is terminated.

User response

Check the return code from 'VMLINK' to determine the problem.

— Variation 2 **Error in releasing disk – VMLINK rc = *rc***

Explanation

The user had specified a VDEV which was not accessed. DUMPLD2 accessed the VDEV using the 'VMLINK' command, but encountered an error in attempting to release the VDEV using 'VMLINK' again. The return code from 'VMLINK' is included in the message.

System action

DUMPLD2 execution is terminated.

User response

Check the return code from 'VMLINK' to determine the problem.

HCP8232E **File name must be specified with the OUTFILE operand**

Explanation

The user has specified 'OUTFILE' but did not specify the file name of the MDMPxxxx files to be created.

System action

DUMPLD2 execution is terminated.

User response

Re-invoke DUMPLD2 and specify a file name following the 'OUTFILE' operand, or omit 'OUTFILE' and allow DUMPLD2 to choose a default file name.

HCP8234E ***Fn*** **DUMP0001** ***mode*** **not found**

Explanation

The source dump file specified by the user was not found. Please note that the source dump file must be of file type 'DUMP0001', in order to be found by DUMPLD2.

System action

DUMPLD2 execution is terminated.

User response

Check to see that the file name and file mode of the source dump file were entered correctly, and that the file exists.

HCP8235E **No usable devices/disks specified**

Explanation

The user has not specified any VDEVs, file modes, or SFS directories on which MDMPxxxx files can be written to. This may be because the devices/disks specified were ignored by DUMPLD2 for not being R/W, accessed, CMS DASD format, or too small.

System action

DUMPLD2 execution is terminated.

User response

Re-invoke DUMPLD2 with usable disks/devices.

HCP8236E **Must specify file modes or VDEVs after the TO operand**

Explanation

The user has specified 'TO' but did not specify any file modes, VDEVs or SFS directories following the operand.

System action

DUMPLD2 execution is terminated.

User response

Re-invoke DUMPLD2 and specify file modes, VDEVs or SFS directories after the 'TO' operand, or omit 'TO' in order to create MDMPxxxx files on file mode A.

HCP8237I **TO operand not specified. MDMPxxxx files will be created on A disk**

Explanation

The user has omitted the 'TO' operand. DUMPLD2 will create all MDMPxxxx files on file mode A.

System action

System operation continues.

User response

None.

HCP8238I System dump not found. Searching for VMDUMP

Explanation

The user has indicated the source dump file exists in SPOOL and the SPOOL READER class is set to '*'. DUMPLD2 first searches for a system dump file in SPOOL, but no system dump file was found. DUMPLD2 will now search for a VMDUMP to process.

System action

System operation continues.

User response

None.

HCP8239A Dump File Name?

Explanation

The user has indicated the source dump file is on an accessed file mode. DUMPLD2 prompts for the file name of the source dump.

System action

The system waits for a response.

User response

Enter the file name of the source dump file.

HCP8240A Dump File Mode?

Explanation

The user has indicated the source dump file is on an accessed file mode. DUMPLD2 prompts for the file mode of the source dump.

System action

The system waits for a response.

User response

Enter the file mode on which the source dump file exists.

HCP8241I Automatic file size chosen – *filesize* records

Explanation

The user did not specify a 'Small', 'Medium' or 'Large' value for the record count of each MDMPxxxx file. DUMPLD2 has automatically chosen a file size, based on the available space on the VDEVs or file modes specified by the user.

System action

System operation continues.

User response

None.

HCP8242I Insufficient disk space to create the remaining *n* files

Explanation

The VDEVs and file modes specified by the user do not contain enough available space for all the MDMPxxxx files to be created from the source dump.

System action

System operation continues.

User response

None.

HCP8243I The variations of this message are explained below.

— Variation 1 Dump is not complete: *records* records written of *totalrecords* expected

Explanation

The source dump was incompletely loaded. The VDEVs, file modes or SFS directories specified by the user did not contain sufficient disk space for all the MDMPxxxx files to be created.

System action

System operation continues.

User response

None.

— Variation 2	**Dump not complete when it was created; it contains no CP storage. Only *number* records were copied from the SPOOL file and written to the CMS file.**

Explanation

The Spool file name of the dump is "NOCPDATA", which indicates that the Frame Table or Correlation Table in the dump is not complete and no CP storage was dumped. DUMPLD2 didn't call the VM Dump Tool to analyze those tables and determine how many records should be in the dump. DUMPLD2 loaded only enough records to ensure that all dump header records are included in the output dump file.

A dump file with no CP storage can be produced if the dump process is ended by re-IPLing the system or deactivating the logical partition before the entire frame table or correlation table is written out. A dump file with no CP storage can also be produced if the system did not allocate sufficient dump space before the dump occurred. Only a few VM Dump Tool subcommands work as expected when a dump file has no CP storage. Commands that display results include SYMPTOM, REGS, and DUMPTYPE.

System action

System operation continues.

User response

None.

— Variation 3	**Dump not complete when it was created; it contains some CP storage. Only *RecsWritten* of expected *number* records were dumped.**

Explanation

The Spool file name of the dump is "PARTIAL". "PARTIAL" indicates that the Frame Table or Correlation Table in the dump is complete but not all CP storage was dumped when the dump was created. DUMPLD2 called the VM Dump Tool to analyze those tables and determine how many records should be in the dump.

A dump file without all CP storage can be produced if the dump process is ended by re-IPLing the system or deactivating the logical partition before the dump is written out. A dump file without all CP storage can also be produced if the system did not allocate sufficient dump space before the dump occurred. Only a few VM Dump Tool subcommands work as expected when a dump file does not have all CP storage. Commands that display results include SYMPTOM, REGS, and DUMPTYPE. Other subcommands might work if the storage that they use is in the dump.

System action

System operation continues.

User response

None.

— Variation 4	**Dump not complete when it was created; it contains some CP storage. *RecsWritten* records written.**

Explanation

The Spool file name of the dump is "PARTIAL". "PARTIAL" indicates that the Frame Table or Correlation Table in the dump is complete but not all CP storage was dumped when the dump was created. DUMPLD2 could not call the VM Dump Tool to analyze those tables and determine how many records should be in the dump because the VM Dump Tool was not available. Accompanying messages HCP8231E or HCP8247E explain why the VM Dump Tool was unavailable.

A dump file without all CP storage can be produced if the dump process is ended by re-IPLing the system or deactivating the logical partition before the dump is written out. A dump file without all CP storage can also be produced if the system did not allocate sufficient dump space before the dump occurred. Only a few VM Dump Tool subcommands work as expected when a dump file does not have all CP storage. Commands that display results include SYMPTOM, REGS, and DUMPTYPE. Other subcommands might work if the storage that they use is in the dump.

System action

System operation continues.

User response

See message HCP8231E or HCP8247E to determine why the VM Dump Tool was unavailable. Start the VM Dump Tool manually. It is not necessary to rerun DUMPLD2 to reload the dump because VM Dump Tool is called after the entire dump is loaded. Start the VM Dump Tool manually and it will analyze the dump when it is started.

HCP8244E DUMPLD2 failed because no R/W File Modes are available

Explanation

The user specified a '*' after the 'TO' operand, indicating that DUMPLD2 search for all accessed, R/W file modes to write to. DUMPLD2 could not find any available R/W file modes.

System action

DUMPLD2 execution is terminated.

User response

The user may re-invoke DUMPLD2 once R/W file modes are available.

HCP8245E File mode incorrect – *mode*

Explanation

The user has specified a file mode which is not an alphabetic character. This file mode will be ignored and will not be used by DUMPLD2.

System action

DUMPLD2 execution continues and will use the other operands that were specified.

User response

None.

HCP8246E DUMPLD2 cannot create more than 9999 files from one dump

Explanation

DUMPLD2 has reached its limit of 9999 MDMPxxxx files.

System action

DUMPLD2 execution is terminated.

User response

If the file size of the MDMPxxxx files being created was 'Small' or 'Medium', the user may change this size to 'Medium' or 'Large' so that more dump file records can be written to the MDMPxxxx files.

HCP8247E HCQ*xxx* MODULE was not found so it could not be used to determine whether the dump is complete.

Explanation

DUMPLD2 could not find a required module on any file mode that CMS had accessed.

After loading the dump, DUMPLD2 calls HCQ*xxx* MODULE, the main VM Dump Tool module, where *xxx* is the version and release level of DUMPLD2, to verify that the dump is complete.

System action

DUMPLD2 execution is terminated.

User response

If DUMPLD2 did not display any other error messages, it is likely that the dump is complete. Access the disk containing VM Dump Tool (usually MAINT 193) and check if the dump is complete by running VM Dump Tool.

HCP8248E QUERY READER spoolid and DIAGNOSE X'14' spoolid mismatch. Make sure the dump spool file is ORDERed to top of READER queue.

Explanation

DUMPLD2 issues DIAGNOSE X'14' in order to validate the size of the dump displayed by the QUERY READER command. During this step, DUMPLD2 also verifies that both functions looked at the same spool file. In this case, the spool IDs were different.

System action

DUMPLD2 execution is terminated.

User response

Ensure that the dump spool file is ordered to the top of readerqueue. Then re-invoke DUMPLD2.

HCP8249I The dump is larger than what QUERY READER command shows. It really has *nnnnnnnnn* records.

Explanation

The number of records in the dump as reported by DIAGNOSE X'14' is different than what the QUERY READER command reported. The value returned by DIAGNOSE X'14' will be used.

System action

DUMPLD2 execution continues.

User response

None.

HCP8250E ***command*** **requires a R/W A-disk**

Explanation:
The CCLOAD, CCDUMP, and SFCOUNTR commands require read/write (R/W) DASD space to create files.

System action:
The command is rejected.

User response:
Provide a R/W A-disk (a minidisk or an SFS directory that is accessed as file mode A) for any user ID that uses the CCLOAD, CCDUMP, or SFCOUNTR commands.

HCP8251E **THE CTLR VIRTUAL DEVICE NUMBER** ***vdev*** **IS INVALID**

Explanation

The device number specified as the CTLR *vdev* is not a valid hexadecimal value.

System action

The command is rejected.

User response

Reenter the command with a correct device number.

HCP8252E **CTLR VIRTUAL DEVICE** ***vdev*** **IS UNDEFINED**

Explanation

Before entering the CCLOAD command, a real communication controller must be attached (or dedicated) to the virtual device specified. Either that was not done, or you specified a different device number.

System action

The command is rejected.

User response

Ensure that the CTLR is dedicated or attached to the user ID and that the virtual device is correctly specified.

HCP8253E **AN EP LOAD MODULE NAME IS REQUIRED**

Explanation

The name of the EP control program load module was not specified on the command.

System action

The command is rejected.

User response

Reenter the command and specify the load module name.

HCP8254E ***lmod*** **IS AN INVALID LOAD MODULE NAME**

Explanation

The specified load module name is longer than 8 characters or not alphanumeric.

System action

The command is rejected.

User response

Reenter the command and specify the correct name of the EP control program load module.

HCP8255E **THE COMMAND HAS AN INVALID USE OF "("**

Explanation

Parentheses were used incorrectly in the command operands.

System action

The command is rejected.

User response

Reenter the command using the correct syntax.

HCP8256E ***parm*** **IS AN UNRECOGNIZED KEYWORD OPERAND**

Explanation

The keyword shown was entered as a command operand, but is not recognized.

System action

The command is rejected.

User response

Reenter the command using the correct operands.

HCP8257E THE *kwd* KEYWORD OPERAND REQUIRES A VALUE

Explanation

A keyword operand was specified that requires a value, but none was entered.

System action

The command is rejected.

User response

Reenter the command and supply a value following the keyword. If the default value is desired, omit the keyword as well.

HCP8258E *parm* IS AN INVALID VALUE FOR THE *kwd* KEYWORD OPERAND

Explanation

The keyword operand shown was specified with a value that is not allowed.

System action

The command is rejected.

User response

Reenter the command and supply an acceptable value following the keyword.

HCP8259E EP LOAD MODULE LIBRARY *fn* LOADLIB WAS NOT FOUND

Explanation

The LOADLIB file, from which CCLOAD is to load the EP control program, cannot be found on any accessed disk.

System action

The command is rejected.

User response

Reenter the command and identify the required file correctly. For CCLOAD, the file is the LOADLIB containing the load module.

HCP8260E DEVICE *vdev* IS NOT A CTLR OR IS OFFLINE

Explanation

If this message is displayed when the command is first entered, the CTLR is not attached or the vdev is that of another device. This message is displayed subsequently if the CTLR is detached or an irrecoverable I/O error is detected.

System action

The command is terminated.

User response

Determine whether the CTLR is attached to the virtual machine. If so, contact support personnel to report a probable hardware problem.

HCP8261I INVOKING *program*

Explanation

One of the following ACF/SSP utility programs is invoked:

- IFLOADRN, which loads an EP control program into the CTLR
- IFLREAD, which dumps the CTLR storage to a disk file
- IFLDUMP, which formats and prints a CTLR dump file.

System action

The command continues to run.

User response

None.

HCP8262I IGNORE *program* MESSAGE *msgno*

Explanation

The ACF/SSP utility program named makes its own determination whether the CTLR is active at the time a load or dump is requested. If it is active, a message is displayed prompting the user for a response. When invoked by CCLOAD, no response is expected.

System action

The command continues to run.

User response

None.

HCP8263D MONITORING CTLR *vdev*. HIT ENTER TO STOP

Explanation

This message indicates that the CTLR is now loaded with the EP control program and that CCLOAD is monitoring the device for a failure that requires dumping and reloading. CCLOAD will suspend monitoring the CTLR if it receives a console attention interrupt.

System action

The command continues to run.

User response

None required (see HCP8265D).

HCP8264D REPLY Y TO DUMP, OTHERWISE N

Explanation

This message is displayed following message HCP8264I if "DUMP PROMPT" was specified as a command operand. It provides the option to dump the CTLR to disk before reloading the control program.

System action

The command waits for a user response.

User response

Reply as indicated, specifying whether the system is to dump the CTLR. You must have A disk space available for the dump file if you reply **Y**.

HCP8264I CTLR *vdev* HAS FAILED

Explanation

This message is displayed when a CTLR failure is detected while monitoring the device.

System action

Command processing continues. Message HCP8264D follows if "RELOAD PROMPT" was specified on the command line.

User response

None.

HCP8265D MONITORING SUSPENDED FOR CTLR *vdev* REPLY [D TO DUMP,] L TO LOAD, Q TO QUIT OR HIT ENTER TO RESUME

Explanation

This message is displayed when a console attention is detected while CCLOAD is monitoring an active CTLR. It provides options to dump the CTLR to disk and reload it, to load the CTLR without dumping it, or to end CCLOAD monitoring. If a null reply is given, the attention is ignored and monitoring continues. DUMP is a valid response only when there is sufficient A disk space for a CTLR dump.

System action

The system waits for a user response.

User response

Reply as indicated. If you request a dump, you must have A disk space for the output file.

HCP8266E UNABLE TO DUMP CTLR *vdev*. ALL DUMP FILES ARE IN USE

Explanation

CCLOAD assigns dump file names from DUMP00 to DUMP99. If all 100 files exist, dumping is bypassed.

System action

The command reloads the CTLR.

User response

You must delete dump files in order to provide dump support. You may end CCLOAD by generating a console attention and replying **Q** to message HCP8265D. Then erase unneeded dump files, copying them to tape or to another disk for archiving, if required. Then resume monitoring the CTLR by reentering the CCLOAD command.

HCP8267I CTLR *vdev* DUMPED TO FILE *fn* CCDUMP A1

Explanation

CP successfully dumped all or part of the CTLR storage to the disk file indicated.

System action

The command reloads the CTLR.

User response

None is required. You may use the CCDUMP command to format and print the dump file. If another user ID has shared access to the dump file, format the dump on that user ID, letting CCLOAD continue to monitor the communication controller.

HCP8268E NO CTLR DUMP FILES WERE FOUND

Explanation

CCDUMP was invoked without a file ID operand, or with an asterisk "*" for one or more parts. No CTLR dump files were found that satisfied the search criteria specified.

System action

The command is rejected.

User response

Access the disk containing the dump file you want to format and print.

HCP8269E *progm* FAILED WITH RETURN CODE *rc*

Explanation

The indicated program returned an error code to the invoking exec.

System action

Command processing continues.

User response

If the program is HCPCCU, contact your service representative concerning a probable software problem. Otherwise, refer to the Network Program Products publications for errors reported by IFLOADRN, IFLREAD, or IFLDUMP.

HCP8270I CTLR DUMP FILE *fn ft fm* HAS NOT BEEN ERASED

Explanation

When IFLDUMP returns an error return code, and the ERASE option was specified, the file is not erased.

System action

Command processing continues.

User response

None is required. Use the ERASE command to delete the input file if you do not expect to rerun CCDUMP for the same file.

HCP8271D REPLY Y TO RELOAD, OTHERWISE N

Explanation

This message is displayed following message HCP8271I if "RELOAD PROMPT" was specified as a command operand. It provides the option to reload an already-active CTLR.

System action

The command waits for a user response.

User response

Reply as indicated. You may want to force a reload if, for example, you have applied maintenance to your EP control program, if the CTLR is possibly loaded with a different control program, or for some other reason.

HCP8271I CTLR *vdev* IS ACTIVE

Explanation

CCLOAD has determined that the CTLR communication controller is already loaded and active.

System action

Command processing continues. Message HCP8271D follows, if "RELOAD PROMPT" was specified on the command line.

User response

Reply as indicated. You may want to force a reload if, for example, you have applied maintenance to your EP control program, or the CTLR is possibly loaded with a different control program.

HCP8272I PROCESSING DUMP FILE *fn ft fm*

Explanation

This message identifies the file being formatted when you do not name a specific file on the CCDUMP command.

System action

Command processing continues.

User response

None.

HCP8273E A-DISK SPACE IS UNAVAILABLE FOR CTLR DUMPS

Explanation

No further dumps of the communications controller can be taken until disk space is made available. This message is followed by message HCP8275I.

System action

Command processing continues. Automatic dumping is bypassed. User dump requests are ignored.

User response

None is required. See message HCP8275I.

HCP8274I A-DISK SPACE IS AVAILABLE FOR ONE CTLR DUMP

Explanation

Limited disk space is available for dumping. This message is followed by message HCP8275I.

System action

Command processing continues.

User response

None is required. See message HCP8275I.

HCP8275I EACH CTLR DUMP REQUIRES *n*K. AVAILABLE SPACE IS *n*K

Explanation

This message follows message HCP8273E or message HCP8274I. It shows the amount of available disk space in relation to the amount required for each additional CTLR dump file.

System action

Command processing continues.

User response

You must delete dump files or otherwise increase available space. You may end CCLOAD by generating a console attention and replying Q to message HCP8265D. Then erase unneeded dump files, copying them to tape or another disk for archiving, if required. Then resume monitoring the CTLR by reentering the CCLOAD command.

HCP8276E CTLR DUMP FILE *fn ft [fm]* WAS NOT FOUND

Explanation

CCDUMP was invoked specifying a CTLR dump file that cannot be found on any accessed disk.

System action

The command is rejected.

User response

Access the disk containing the dump file you want to format and print, or specify a different file.

HCP8280E Error reading *record - reason*

Explanation

An error was encountered when reading a record from a DASD.

System action

The utility terminates.

User response

Contact your IBM Support Center personnel.

HCP8281E Device *vdev* has unexpected format: *format*

Explanation

The user has specified a virtual device address for a device that cannot contain a dump because it is not properly formatted. *format* can be one of the following:

```
CMS formatted
CP Formatted
MBR not found
Not formatted
Not VOL1 format
Unknown format
```

System action

DUMPLD2 execution is terminated.

User response

Run the DUMPLD2 utility again and specify the virtual device address corresponding to the first device that contains the stand-alone dump.

HCP8282E **Device *vdev* appears to be formatted as an additional stand-alone dump DASD and not as the IPL DASD**

Explanation

The user has specified a virtual device address for a device that appears to be formatted as an additional stand-alone dump DASD.

System action

DUMPLD2 execution is terminated.

User response

Run the DUMPLD2 utility again and specify the virtual device address corresponding to the first device that contains the stand-alone dump.

HCP8283E **Error *rc* during *function***

Explanation

An unexpected error occurred when calling a function, where *function* could be one of the following:

CMSSTOR Obtain
CMSSTOR Release
DMSCSR *Setting* DUMPINFO
DMSCGR *Setting* DUMPINFO
HCPDLKGR VOL Label *vdev*
HCPDLKGR VTOC Rec *vdev*
HCPDLKGR DUMP Rec *vdev*
HCPDLKFB MBR Rec *vdev*
HCPDLKFB Dump Rec *vdev*

System action

DUMPLD2 execution is terminated.

User response

In most cases, this error occurs when not all of the stand-alone dump DASD are attached at the virtual device numbers required by the DUMPLD2 utility. Ensure each real device is attached at the correct virtual device number as shown in the table displayed by DUMPLD2 (see below). If a device is attached at the wrong virtual device number, use the CP DEFINE command to correct the virtual device number.

The following are common situations when this message is displayed:

1. You have a stand-alone dump configuration with one real 3390 DASD, and when you ran DUMPLD2, you attached the device to a virtual device number different than the virtual device number that was used when you ran SDINST. For example, you have a 3390 DASD at real device number 888 that you will use for a stand-alone dump. When you ran SDINST, you had the DASD attached as virtual device address 888. Later, you successfully took a stand-alone dump. Then you ran DUMPLD2 and had real device 888 attached at virtual device 977. In this situation you will see the following error message:

```
HCP8283E ERROR 7 DURING HCPDLKGR DUMP REC
0888
```

   As shown below, DUMPLD2 displays a table that shows the virtual device number, under the DUMPLD2 VDEV column, where it expects to find each dump device. Set up your virtual device as shown in the table and rerun DUMPLD2.

```
DUMP ON 0977 WAS CREATED yyyy-mm-dd hh:mm:ss
     TOTAL PAGES 9680  DUMPER RC 0

DASD  DUMPLD2         DUMP PAGES DUMP DUMP
TYPE     VDEV VOL-ID   ON DEVICE RDEV   RC
----  ------- ------  ---------- ---- ----
3390     0888 JR0888       12680 0888    0
```

2. You have more than one DASD defined in your stand-alone dump configuration, and when you ran DUMPLD2, one or more of the devices were not attached, or were not attached at the same virtual device numbers which were used when you ran SDINST. For example, your configuration uses real devices 751, 752 and 753 for a stand-alone dump. When you ran SDINST, you had them attached as virtual device addresses 3101, 3102, and 3103 respectively. Later, you successfully took a stand-alone dump. Then when you ran DUMPLD2, you did not have 752 attached or it was attached at a virtual device number other than 3102. In this situation you will see the following error message:

```
HCP8283E ERROR 7 DURING HCPDLKGR VOL LABEL
3102
```

   As shown below, DUMPLD2 displays a table that shows the virtual device number, under the DUMPLD2 VDEV column, where it expects to find each dump device. Set up your virtual device as shown in the table and rerun DUMPLD2.

```
DASD  DUMPLD2         DUMP PAGES DUMP DUMP
TYPE     VDEV VOL-ID   ON DEVICE RDEV   RC
----  ------- ------  ---------- ---- ----
3390     3101 JR0751        9836 0751    0
3390     3102 JR0752           0 0752    0
3390     3103 JR0753           0 0753    0
```

3. You have more than one DASD defined in your stand-alone dump configuration, and when you ran DUMPLD2, the second or any subsequently

expected virtual device number was not a DASD. Follow the scenario described in Item “2” on page 913, and suppose virtual device 3102 was a printer. Then if you ran DUMPLD2, you will get this error message:

```
HCP8283E ERROR 3 DURING HCPDLKGR VOL LABEL
3102
```

4. You have more than one DASD defined in your stand-alone dump configuration, and when you ran DUMPLD2, the second or any subsequently expected virtual device number was a CP- or CMS-formatted FBA DASD. Follow the scenario described in Item “2” on page 913, and suppose you ran DUMPLD2 and virtual device 3102 was a CP-formatted FBA device. In this situation you will see the following error message:

```
HCP8283E ERROR 2 DURING HCPDLKGR VOL LABEL
3102
```

Refer to CMS documentation if appropriate. If problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP8284E **Format of *item* on device *vdev* was not as expected**

Explanation

An unexpected error occurred while DUMPLD2 was accessing the dump on the indicated device. *item* could be one of the following:
MBR PT
Part 1 VTOC Rec
Part 2 VTOC Rec
VTOC Record 1
VTOC Record 2

System action

DUMPLD2 execution is terminated.

User response

Ensure the correct device is available on the indicated virtual device number. If problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP8285E **Error validating dump data - *data description* Reason code *rc* where *data description* could be one of the following:Symptom Record.
DFMBK Record.
DFIZ Record.
SDXBK Record.
SDSBK Record.
SDWBK On *vdev***

Explanation

The dump on the first device did not contain the expected data.

System action

DUMPLD2 execution is terminated.

User response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP8286E **Device *vdev* does not contain a dump**

Explanation

The user has specified a virtual device address for a device that is properly formatted but does not contain a dump.

System action

DUMPLD2 execution is terminated.

User response

Verify that the correct virtual device address was specified and run the DUMPLD2 utility again.

HCP8287E **Generated VDEV past maximum allowed VDEV**

Explanation

DUMPLD2 generates sequential virtual device addresses based on the first address specified by the user. Based on the number of devices that contain the dump, an invalid address was generated by DUMPLD2.

System action

DUMPLD2 execution is terminated.

User response

Shift all of the virtual device addresses containing the dump to a lower range so that an invalid address won't be generated. Then run the DUMPLD2 utility again.

HCP8288E **Pipe error, rc=*rc*, while putting records into the pipe**

Explanation

While putting records from the dump into a CMS Pipeline, an error occurred. The PIPOUTP macro received the specified return code. One situation in

which RC=12 could occur is if the output devices do not contain enough space to contain the dump.

System action

DUMPLD2 execution is terminated.

User response

To load the complete dump to MDMPxxxx files, run the DUMPLD2 utility again and specify additional VDEVs, file modes, or SFS directories to write to. If problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP8289E No output stream for pipe

Explanation

Entry point HCPDLJFP can only be called as a pipeline stage.

System action

DUMPLD2 execution is terminated.

User response

If problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP8290E Unexpected error. Location *number*

Explanation

An error occurred in HCPDLJ at the location identified.

System action

DUMPLD2 execution is terminated.

User response

Contact your IBM Support Center personnel to diagnose and correct the problem.

HCP8601I All SECTABLE file records were found to be valid.

Explanation

The SECTABLE utility reviewed the records in SECTABLE FILE and found them to be correct.

System action

None.

User response

None.

HCP8602I SECLABEL/HRL correlation table has been successfully stored.

Explanation

The DIAGNOSE X'A0' subcode X'34' issued by the SECTABLE application program successfully transferred an up-to-date working copy of SECTABLE FILE to CP storage.

System action

None.

User response

None.

HCP8603E Invalid operand specification on SECTABLE invocation.

Explanation

The user invoked the SECTABLE utility incorrectly.

System action

The system ignored the command.

User response

There are only two valid ways to invoke this program. Enter one of the following:

```
SECTABLE
SECTABLE STORE
```

HCP8604E Error from CMS *macro* macro with return code *retcode*.

Explanation

The SECTABLE utility invokes several CMS macros, including FSOPEN, FSREAD, FSCLOSE, APPLMSG, ABNEXIT, and CMSSTOR. An error occurred in the macro mentioned in the message.

System action

If the error occurred in the APPLMSG macro, the system delivers erroneous output at the console. If the error occurred in one of the other macros, processing of the utility is terminated.

User response

Refer to macro entry in *z/VM: CMS Callable Services Reference*. You will find the return code defined there.

HCP8605E **SECTABLE FILE must have LRECL not < 10, LRECL not > 141, and RECFM = V.**

Explanation

The logical record length or the record format of SECTABLE FILE is incorrect.

System action

The SECTABLE utility was unable to use SECTABLE FILE in its present form, and the utility.

User response

The LRECL value for SECTABLE FILE must be from 10 to 141; its RECFM value must be V. Make any necessary corrections.

HCP8606E **SECTABLE FILE is too large - CP virtual buffer will be > 64K BYTES.**

Explanation

SECTABLE FILE was too large to fit into the 64K buffer prepared for it by CP.

System action

The utility terminated.

User response

Edit SECTABLE FILE to make it smaller than 64K bytes long.

HCP8607E **Record *record number* causes CP virtual buffer to overflow 64K bytes.**

Explanation

SECTABLE FILE was too large to fit into the 64K buffer prepared for it by CP. The record mentioned in this message is the one that caused the file to exceed the 64K limit.

System action

The utility terminated.

User response

Edit SECTABLE FILE to make it smaller than 64K bytes long.

HCP8608E **The following represent invalid SECTABLE FILE records:**

Explanation

The records listed after this message violate the formatting requirements for SECTABLE FILE.

System action

The SECTABLE utility terminated.

User response

Edit the records in SECTABLE FILE so that they conform to the following format:

Table 8. Record format for SECTABLE FILE.

Column	Content
1 – 8	SECLABEL character string
9	Required blank space
10 – 141	Identification label (1 to 132 characters long)

HCP8609E **A total of *n* records were found to be invalid.**

Explanation

The records listed before this message violate the formatting requirements for SECTABLE FILE.

System action

The SECTABLE utility terminated. If you specified the STORE option, then the number of records mentioned in the message is the total number of format violations in SECTABLE FILE. If you did not specify STORE, then the number of records mentioned indicates the number of format violations before the file began to go over the 64 KB limit.

User response

See message HCP8608E.

HCP8610E **Condition code of *condcode* upon return from DIAGNOSE X'A0' subcode X'34' processing.**

Explanation

The SECTABLE utility invokes DIAGNOSE X'A0' subcode X'34'. An error (probably a paging error) occurred during the DIAGNOSE.

System action

The application terminated.

User response

Report the matter to your system administrator.

HCP8611E Severe error occurred during DIAGNOSE X'A0' SUBCODE X'34' processing.

Explanation

Either a specification exception, privileged operation exception, or a protection exception occurred while the SECTABLE utility was running.

System action

The utility terminated.

System programmer response

If a specification exception occurred, it means that the buffer address in R_x is not within the caller's virtual machine.

If a privileged operation exception occurred, it means that the user who issued the DIAGNOSE X'A0' subcode X'34' was not authorized to do so.

If a protection exception occurred, it means that the buffer whose address is in R_x is fetch-protected against the user who issued the DIAGNOSE.

User response

Report this event to your system programmer.

HCP8612E I/O error occurred on DIAGNOSE X'A8' during Fast Erase function

Explanation

The message text will also include information like the following:

```
CC 1 RC 05 SGIOP follows:
+00 00000000 00000000 ...
+10 00000000 00000000 ...
+20 00000000 00000000 ...
+30 00000000 00000000 ...
+40 00000000 00000000 ...
+50 00000000 00000000
```

An I/O error occurred when the erase utility, called by the CPFMTXA ERASE function, issued a DIAGNOSE X'A8' instruction to erase a DASD.

System action

The command is not executed; system operation continues.

User response

Collect output data and then contact your IBM Support Center personnel. The CC, RC, and SGIOP values in the message are associated with the DIAGNOSE X'A8' instruction.

HCP8625E Image file mismatch.

Explanation

The SDINST utility detected that the level of the SADU74 IMAGE file doesn't match the level of the SSP image files.

System action

The utility terminates.

User response

Ensure that image files on the 191 and 400 disks are from the same release of VM and were consistently updated when service was applied. Note that files on the 191 will override files from the 400 disk. If the problem persists, contact your system support personnel.

HCP8639E This version of the SDINST utility requires hardware features not available on this processor.

Explanation

The version of the SDINST utility has the same server requirements as the z/VM release with which it was shipped. See the information for message HCP9030W.

SDINST uses the CP QUERY CPUID command to obtain the processor model number, and its results depend on the relocation domain of the issuing user. Thus, this error could occur if the issuing user is in a relocation domain that contains an SSI member running on an older processor.

System action

The utility terminates.

User response

Run the version of the SDINST utility that was supplied with the z/VM release currently running. Run SDINST in a relocation domain that is not affected by an SSI member running on an older processor.

HCP8640E Device *vdev* is not a devtype

Explanation

The SDINST utility expects a virtual reader device at virtual device number 00C and a virtual punch device at virtual device number 00D. A device that does not match these specifications was found.

System action

The utility terminates.

User response

Provide a virtual reader using the CP DEFINE READER 00C command and a virtual punch using the CP DEFINE PUNCH 00D command. Then reenter the command.

HCP8641E Insufficient virtual storage to run the program that formats the stand-alone dump DASD. You need at least 512 MB to proceed.

Explanation

The virtual machine executing the SDINST utility does not have enough virtual storage to load the DASD formatting program.

System action

The utility terminates.

User response

Increase your virtual machine storage size.

HCP8642E This process can not proceed if you already have Class N RDR files.

Explanation

The virtual machine executing the SDINST utility already has some class N reader files. These will interfere with SDINST processing.

System action

The utility terminates.

User response

Process the class N reader files or change the class of the reader files by using the CP CHANGE * RDR <spid> CLASS x command. Another alternative would be to run the SDINST utility on a different userid.

HCP8643E STATE error *rc* for required file *file*

Explanation

The CMS STATE command was used to verify the existence of a necessary file.

For the SDINST utility, all required files must be on the disk linked at virtual address 191 or 400. If the file exists on both disks, the 191 disk takes precedence. Also, the disks must be accessed before running SDINST. Any file whose name matches a required file but exists on other disks or SFS directories is ignored. The image files required by the SDINST utility are usually found on the MAINTvrm 400 disk.

System action

The utility terminates.

User response

Refer to the documentation on the CMS STATE command to determine the error that corresponds to the given return code. Run the SDINST utility again after you correct the error.

HCP8644E PUNCH error *rc* for required file *file*

Explanation

The SDINST utility used the CMS PUNCH command and it encountered an error while punching the image files.

System action

The utility terminates.

User response

Refer to the documentation on the CMS PUNCH command to determine the error that corresponds to the given return code. Use CP QUERY VIRTUAL 00D to display the virtual punch settings. Run the SDINST utility again after you correct the error.

HCP8645E Error *rc* for command *command*

Explanation

The utility used the command indicated and encountered an error.

System action

The utility terminates.

User response

Refer to the documentation for the command to determine the error that corresponds to the given return code. Run the utility again after you correct the error.

HCP8647E Device *vdev* must have a label.

Explanation

The SDINST utility uses the volume label to ensure that the correct volume was specified. This verification is not possible if the volume does not have a label.

System action

The utility terminates.

User response

Ensure that you have specified the correct virtual device number to the utility. If it was the correct device number, format the first cylinder of the volume with the CMS FORMAT utility and specify a non-blank label.

HCP8648E THE SDINST UTILITY DOES NOT RUN IN A VIRTUAL MACHINE THAT IS IN ESA/XC OR Z/XC MODE.

Explanation

The SDINST utility was attempted in a machine mode that is not supported. The SDINST utility is not supported in ESA/XC or z/XC mode.

System action

The utility terminates.

User response

Change the machine mode of the virtual machine by using the CP SET MACHINE command and run the utility again.

HCP8649E Error *rc* when obtaining device size.

Explanation

The SDINST utility encountered an error when trying to obtain the size of a SCSI LUN. This error usually indicates a slow network from the processor to the SCSI LUN.

System action

The utility terminates.

User response

Specify a different path to the LUN using a different FCP and WWPN combination. Or use a different LUN.

HCP8650E SDINST requires a 191 minidisk accessed R/W as file mode A.

Explanation

The SDINST utility will write a configuration file to the user's 191 A disk. File mode A must be accessible in write mode. It must be a 3380, 3390, or 9336 device type.

System action

The utility terminates.

User response

Access the appropriate disk as file mode A.

HCP8651E *vdev* is a {3390 | SCSI} DASD, but IPL DASD is {3390 | SCSI}. All DASD must be the same type.

Explanation

The SDINST utility requires that all DASD used for the dump be the same type.

System action

When displayed by SDINST, the user is prompted to enter a valid virtual device address or terminate execution.

User response

Ensure that additional dump devices are the same type as the IPL dump device.

HCP8652E DASD at virtual address *vdev* is not large enough to install stand-alone dump

Explanation

The SDINST utility requires that the IPL dump device be large enough to hold the dump program plus some minimal space for a dump.

System action

The utility terminates.

User response

Obtain a larger device for the IPL dump device.

HCP8653E **Volume ID of *vdev* is *volid1* instead of expected *volid2***

Explanation

The SDINST utility expected a device to have a certain volume ID and it did not.

System action

The utility terminates.

User response

Ensure the proper device number was specified or that the device has the label that was specified.

HCP8654A **Please enter the virtual device address of the {IPL | additional dump} DASD.**

Explanation

The SDINST utility requires that the device to be initialized for stand-alone dump be available.

System action

The utility goes into VM READ and waits for your response.

User response

Enter the virtual device number of the DASD. If the DASD is a SCSI LUN, enter the virtual device address of the FCP device.

HCP8655A **Please enter the real device address for this DASD or enter Y to use *rdev.***

Explanation

The SDINST utility requires the real device number of the DASD at the time when the stand-alone dump is created. That may be a different device number than the virtual device number that is used when SDINST initializes the device. If DASD is a SCSI LUN, enter the real device number of the FCP device that will be used when the dump is created.

System action

The utility goes into VM READ and waits for your response.

User response

Enter the real device number as described above.

HCP8656A **Please enter the 16 digit WWPN for this DASD**

Explanation

When the DASD is a SCSI LUN, the SDINST utility requires the world wide port name for a specific path to the SCSI device.

System action

The utility goes into VM READ and waits for your response.

User response

Enter the WWPN of the SCSI device.

HCP8657A **Please enter the 16 digit LUN for this DASD**

Explanation

When the DASD is a SCSI LUN, the SDINST utility requires the logical unit number for a specific path to the SCSI device. Note that the number of digits recognized by the SCSI device may vary by manufacturer, type and model. You must be careful to specify all 16 digits, using trailing zeros to fill out the 16 digit LUN.

System action

The utility goes into VM READ and waits for your response.

User response

Enter the LUN of the SCSI device.

HCP8658A **Are there any additional dump DASD to specify? (Y/N)**

Explanation

The SDINST utility can continue writing the dump to additional dump devices if required.

System action

The utility goes into VM READ and waits for your response.

User response

Enter Y if there are more dump devices that are to be used. Otherwise enter N.

HCP8659E Attempted to define more than 30 dump devices.

Explanation

The SDINST utility allows a maximum of 30 devices.

System action

The utility terminates.

User response

Specify 30 or fewer devices.

HCP8660I Setting device *rdev* online.

Explanation

The SDINST utility varied the device online.

System action

The utility continues execution.

User response

None.

HCP8661E Could not bring device *rdev* online.

Explanation

The SDINST utility could not vary the device online.

System action

The utility terminates.

User response

An I/O error occurred. Ensure the device exists and is R/W. Retry the command. If the problem persists, contact your system support personnel.

HCP8662I Formatting *cylcount* cylinders on device *devno*.

Explanation

The SDINST utility is formatting the device indicated.

System action

The utility continues execution.

User response

None.

HCP8663E There was a problem formatting device *devno*.

Explanation

The SDINST utility encountered a problem while formatting a device.

System action

The utility terminates.

User response

Analyze any previous messages to help correct the problem. If the problem persists, contact your system support personnel.

HCP8664I Writing partition table to device *devno*.

Explanation

The SDINST utility has finished formatting the device and is initializing the partitions on it.

System action

The utility execution continues.

User response

None.

HCP8665E There was a problem the writing partition table to device *devno*.

Explanation

The SDINST utility encountered a problem while writing a partition table to the device.

System action

The utility terminates.

User response

Analyze any previous messages to help correct the problem. If the problem persists, contact your system support personnel.

HCP8666I Creating file system for IPL partition on device *devno*.

Explanation

The SDINST utility is creating a file system on the IPL partition.

System action

The utility execution continues.

User response

None.

HCP8667E There was a problem creating the file system for the IPL partition on device *devno*.

Explanation

The SDINST utility encountered a problem while making the device IPLable.

System action

The utility terminates.

User response

Contact IBM Support for assistance.

HCP8668I Installing Stand-alone dump to the IPL partition on device *devno*.

Explanation

The SDINST utility is installing Stand-alone dump to the IPL partition.

System action

The utility execution continues.

User response

None.

HCP8669E There was a problem installing Stand-alone dump to the IPL partition on device *devno*.

Explanation

The SDINST utility encountered a problem while making the device IPLable.

System action

The utility terminates.

User response

Contact IBM Support for assistance.

HCP8670I Stand-alone Dump installation is complete. You may re-ipl CMS.

Explanation

The SDINST utility has completed successfully.

System action

The utility terminates.

User response

Re-IPL CMS whenever it is appropriate to do so.

HCP8671A Existing file SDINST DUMPCONF A found. Enter O to overwrite, C to continue using the existing file or anything else to quit.

Explanation

An existing configuration was found on the accessed minidisk.

System action

The utility goes into VM READ and waits for your response.

User response

Enter O to overwrite the existing file with new information. Enter C to use the existing file for stand-alone dump installation. Enter any other response to terminate execution.

HCP8672I Stand-alone Dump installation aborted.

Explanation

The SDINST utility has terminated due to user request.

System action

The utility terminates.

User response

None.

HCP8673E Device type for vdev *vdev* is not as expected.

Explanation

The device type of the virtual device at the device number shown did not match the device specified in the SDINST configuration file.

System action

The utility terminates.

User response

Ensure the existing SDINST DUMPCONF file is correct. If it is, ensure the correct device is attached at the specified device number.

HCP8674A DASD has existing volid *volid*. Do you wish to continue? (Y/N)

Explanation

A different volume ID was found than the one specified by the user or found in the configuration file. This might indicate that an incorrect device is linked or attached. It also might not be a problem. Please indicate whether the stand-alone dump install utility should proceed and format the volume.

System action

The utility goes into VM READ and waits for your response.

User response

Enter Y if the stand-alone dump install utility should proceed and format the volume. Otherwise enter N and correct the volume ID.

HCP8675E SDINST failed because no file modes are available.

Explanation

The user has invoked the SDINST utility. However, there are no file modes available for the utility to continue execution.

System action

The utility terminates.

User response

Free at least one file mode and reissue the SDINST utility.

HCP8676E Existing file *filename* is not a valid Stand-alone dump configuration file.

Explanation

An existing file was found on the accessed minidisk. The file header is missing or is invalid.

System action

The utility terminates.

User response

Ensure the existing file is to be used and if so, correct the file header information.

HCP8677E Existing file *filename* was created with an older version of the SDINST utility and is no longer compatible.

Explanation

An existing file was found on the accessed minidisk. The version of SDINST used to create the file is older than the version of SDINST being run and is no longer compatible.

System action

The utility terminates.

User response

Use the correct version of the SDINST utility that matches the file.

HCP8678E Existing file *filename* was created with a newer version of the SDINST utility. Please use the newest version of SDINST.

Explanation

An existing file was found on the accessed minidisk. The version of SDINST used to create the file is newer than the version of SDINST being run, and the file is not compatible.

System action

The utility terminates.

User response

Use the correct version of the SDINST utility that matches the file.

HCP8679E There was a problem with the DASD specified starting on line *linenum*.

Explanation

The SDINST utility encountered a problem with the configuration file during execution. The error was found on line *linenum*.

System action

The utility terminates.

User response

Analyze the previous message to help correct the problem with the configuration file.

HCP8680E Parsing failed on line *linenum*. Check previous error message.

Explanation

The SDINST utility encountered a problem during execution. The error was found on line *linenum*.

System action

The utility terminates.

User response

Analyze the previous message to help correct the problem.

HCP8681E There can be only one IPLDASD statement in a Stand-alone dump configuration file.

Explanation

An existing file was found on the accessed minidisk and there are multiple IPLDASD statements. The SDINST utility requires that only one IPLDASD statement exists in the file.

System action

The utility terminates.

User response

Ensure there is only one IPLDASD statement in the file.

HCP8682I Stand-alone dump installer V*version* Enter 'QUIT' at any prompt to terminate execution.

Explanation

The SDINST utility has been invoked and execution started.

System action

SDINST execution continues.

User response

Enter "QUIT" to terminate SDINST execution or do nothing to allow execution to continue.

HCP8683E VDEV must be 1 to 4 digits - *vdev*

Explanation

The user specified a virtual device number that is not the required 1 to 4 hexadecimal digits.

System action

If displayed by SDINST, the user is prompted to enter a valid virtual device number.

User response

For SDINST, specify a correct virtual device number.

HCP8684E The variations of this message are explained below.

Explanation

- Size of the SCSI device *devno* can not be larger than 2,147,483,640 512-byte blocks.
- Size of the 3390 device *devno* can not be larger than 65520 cylinders.

The SDINST utility requires that the size of a SCSI device be at most 1 TB minus 1 page and the size of a 3390 device be at most 65520 cylinders.

System action

The utility terminates.

User response

Use SCSI devices with a size not greater than 1 TB minus 1 page or 3390 devices with a size not greater than 65520 cylinders.

HCP8685E *operand* value missing

Explanation

A virtual device number or a real device number was not specified. The SDINST utility requires a virtual device number and a real device number to be 1 to 4 hexadecimal digits.

System action

When displayed by SDINST, the user is prompted to enter a valid device number.

User response

Ensure the virtual or real device number is entered.

HCP8686E RDEV value not valid - *operand*. It must be a 1 to 4 digit hex number.

Explanation

The user specified a real device number that is not the required 1 to 4 hexadecimal digits.

System action

If displayed by SDINST, the user is prompted to enter a valid real device number.

User response

For SDINST, specify a correct real device number.

HCP8687E WWPN must be 16 digits - *operand*

Explanation

When the DASD is a SCSI LUN, the SDINST utility requires the world wide port name for a specific path to the SCSI device to be a 16 hexadecimal digit number.

System action

When displayed by SDINST, the user is prompted to enter a valid 16 hexadecimal digit world wide port name.

User response

Ensure the world wide port name specified is 16 hexadecimal digits.

HCP8688E WWPN must be a hex value - *operand*

Explanation

When the DASD is a SCSI LUN, the SDINST utility requires the world wide port name for a specific path to the SCSI device to be a hexadecimal number.

System action

When displayed by SDINST, the user is prompted to enter a valid 16 hexadecimal digit world wide port name.

User response

Ensure the world wide port name specified is 16 hexadecimal digits.

HCP8689E LUN must be 16 digits - *operand*

Explanation

When the DASD is a SCSI LUN, the SDINST utility requires the logical unit number for a specific path to the SCSI device to be a 16 hexadecimal digit number.

System action

When displayed by SDINST, the user is prompted to enter a valid 16 hexadecimal digit logical unit number.

User response

Ensure the logical unit number specified is 16 hexadecimal digits.

HCP8690E LUN must be a hex value - *operand*

Explanation

When the DASD is a SCSI LUN, the SDINST utility requires the logical unit number for a specific path to the SCSI device to be a hexadecimal number.

System action

When displayed by SDINST, the user is prompted to enter a valid 16 hexadecimal digit logical unit number.

User response

Ensure the logical unit number specified is 16 hexadecimal digits.

HCP8691E VDEV *vdev* cannot be accessed at file mode A

Explanation

The SDINST utility requires that the virtual device number specified on the VDEV statement not be accessed at file mode A.

System action

When displayed by SDINST, the user is prompted to enter a valid virtual device number.

User response

Ensure the virtual device number specified is not accessed at file mode A.

HCP8692E ***operand*** **was already specified**

Explanation

A duplicate VDEV or RDEV statement exists in the SDINST DUMPCONF file. The SDINST utility requires that each VDEV and RDEV statement must have a unique device number.

System action

When displayed by SDINST, the user is prompted to enter a valid device number.

User response

Ensure the virtual or real device number is unique.

HCP8693E **IPLDASD statement must be the first configuration statement in file** ***file*****.**

Explanation

An existing configuration was found on the accessed minidisk and the IPLDASD statement was not the first Configuration statement in the file.

System action

The utility terminates.

User response

Ensure the existing SDINST DUMPCONF file is correct and the IPLDASD statement is the first non-comment line of the file.

HCP8694E **The Stand-alone dump DASD formatting module is incompatible with this version of the SDINST utility.**

Explanation

The formatting module within the SADU74 IMAGE file is incompatible with the version of the SDINST CMSUT1 status file on the 191 disk.

System action

The utility terminates.

User response

Ensure that the SDINST EXEC and the SADU74 IMAGE file are from the same release of VM. If the problem persists, contact your system support personnel.

HCP8695E **Could not read configuration data from 191 disk**

Explanation

The stand-alone dump DASD formatting module encountered an error reading the dump configuration file.

System action

The utility terminates.

User response

Using CMS XEDIT, verify that you can view the contents of the SDINST DUMPCONF file. If you correct an error, run the SDINST utility again. If the problem persists, contact your system support personnel.

HCP8696E **An unexpected error has occurred and Stand-alone Dump installation has been aborted. You may re-IPL CMS.**

Explanation

The stand-alone dump DASD formatting program encountered an error and is terminating.

System action

The utility terminates.

User response

See preceding messages for a description of the error and follow any appropriate user response documented by them.

HCP8697E **The Stand-alone dump DASD formatting module encountered invalid configuration data.**

Explanation

The formatting program within the SADU74 IMAGE file found data that it did not recognize in the SDINST CMSUT1 status file on the 191 disk.

System action

The utility terminates.

User response

Contact IBM Support for assistance.

HCP8698E ***keyword*** **keyword on line** ***line*** **is not valid when device type is** ***devtype*****.**

Explanation

An existing configuration file was found and a keyword that conflicts with the device type was found. The WWPN or LUN keywords can't be specified if the device type is 3390 and the LABEL keyword can't be specified if the device type is SCSI.

System action

The utility terminates.

User response

Remove the keyword and value that conflicts and run the SDINST utility again.

HCP8699E **Found second occurrence of** ***kwd*** **keyword on line** ***linenum1*** **for statement starting on line** ***linenum2*****.**

Explanation

An existing configuration file was found and a keyword was specified more than once for a statement.

System action

The utility terminates.

User response

Ensure that the keyword is specified only once for the statement and run the SDINST utility again.

HCP8700I **The variations of this message are explained below.**

— Variation 1 **Emulated Device** ***rdev*** **cannot be varied online because CP was unable to open the device.**

Explanation

The indicated emulated device is not brought online because CP's attempt to initialize (open) the real SCSI device associated with it failed.

System action

The emulated device is not brought online; system operation continues.

User response

Attempt to bring the emulated device online by issuing the VARY command. If attempts continue to fail, there may be a hardware malfunction with the SCSI device. Contact your system support personnel.

— Variation 2 **Emulated Device** ***rdev*** **cannot be varied online because there are no valid paths defined to the device.**

Explanation

The indicated emulated device is not brought online because there are no valid paths associated with it.

System action

The emulated device is not brought online, and any invalid path definitions are no longer associated with the emulated device; system operation continues.

User response

Examine the device definition for the emulated device (EDEVICE statement or CP SET EDEVICE command), issue a CP SET EDEVICE command to add valid paths to the emulated device definition, and then attempt to bring the emulated device online by issuing the VARY command.

— Variation 3 **Emulated Device** ***rdev*** **cannot be varied online because its size is greater than 2,147,483,640 512-byte blocks.**

Explanation

The indicated emulated device is not brought online because the size of the real SCSI device associated with it is too large.

System action

The emulated device is not brought online; system operation continues.

User response

Contact your system administrator to have the real SCSI device reconfigured to a supported size or associate the emulated device to a different smaller real SCSI device by using the CP SET EDEVICE command.

— Variation 4	**FBA DASD *rdev* cannot be varied online because its size is greater than 2,147,483,640 512-byte blocks.**

Explanation

The indicated FBA DASD is not brought online because its size is too large.

System action

The FBA DASD device is not brought online; system operation continues.

User response

Contact your system administrator to have the FBA DASD device reconfigured to a supported size.

HCP8701I	**The variations of this message are explained below.**
— Variation 1	**LUN *lun* on FCP_DEV *rdev* could not be opened because it is already open by some other connection.**

Explanation

An EDEVICE was being varied online. The LUN on the FCP channel could not be opened because of a LUN sharing violation. The following conditions might have caused this error:

- The LUN is opened on another logical partition.
- There is another EDEVICE defined that uses the same WWPN and FCP CHPID.

System action

The path is deleted from the EDEV and system operation continues.

User response

Look for and remove any EDEVICE definitions using this LUN and FCP CHPID.

— Variation 2	**Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because device *rdev1* is not an FCP Device.**

Explanation

The emulated device was being varied online but the FCP_DEV *rdev1* is not an FCP device.

System action

The path is deleted from the EDEV and system operation continues.

User response

Use the CP QUERY FCP command to find an FCP device that can be used for a path to the emulated device and then issue a CP SET EDEVICE command to add a valid path to the emulated device.

— Variation 3	**Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because FCP device *rdev1* is not online.**

Explanation

The emulated device was being varied online but the FCP device *rdev1* is not online.

System action

The path is deleted from the EDEV and system operation continues.

User response

Try to vary the FCP device online and then add the path back to the emulated device by issuing a CP SET EDEVICE command.

— Variation 4	**Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because FCP device *rdev1* is dedicated.**

Explanation

The emulated device was being varied online but the FCP device *rdev1* is dedicated.

System action

The path is deleted from the EDEV and system operation continues.

User response

Detach the FCP device and then add the path back to the emulated device by issuing a CP SET EDEVICE command.

— Variation 5 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because FCP device *rdev1* does not exist.**

Explanation

The emulated device was being varied online but FCP device *rdev1* does not exist.

System action

The path is deleted from the EDEV and system operation continues.

User response

Use the CP QUERY FCP command to find an FCP device that can be used for a path to the emulated device and then issue a CP SET EDEVICE command to add a valid path to the emulated device.

— Variation 6 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because it conflicts with online EDEV *rdev3*.**

Explanation

The emulated device *rdev2* was being varied online and the specified path (*rdev1, wwpn, lun*) was deleted because the target LUN is already open through EDEV *rdev3*.

System action

The path is deleted from the EDEV and system operation continues.

User response

Remove duplicate EDEV definitions so that each LUN is represented in only one EDEV.

— Variation 7 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was not defined to EDEV *rdev2* because the maximum amount of paths are already defined.**

Explanation

A SET EDEVICE command was issued to add the specified path to an existing emulated device, but the emulated device already has the maximum amount of paths allowed defined to it.

System action

The path is not added to the EDEV and system operation continues.

User response

In order to add the specified path to the emulated device an existing path must be deleted from the emulated device using the CP SET EDEVICE command.

— Variation 8 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was not deleted because it is the last path associated with EDEV *rdev2*.**

Explanation

A SET EDEVICE command was issued to delete the specified path from an existing emulated device, but the path is not deleted from the emulated device because it is the last path associated with the emulated device.

System action

The path is not deleted from the EDEV and system operation continues.

User response

Issue the CP SET EDEVICE command to add another path to the emulated device before trying to delete the specified path or else issue the CP SET EDEVICE CLEAR command/CP DELETE EDEVICE command to clear/delete the emulated device definition.

— Variation 9 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was not deleted because it is not a path associated with EDEV *rdev2*.**

Explanation

A SET EDEVICE command was issued to delete the specified path from an existing emulated device, but the path is not associated with the emulated device.

System action

The path is not deleted from the EDEV and system operation continues.

User response

Issue the CP QUERY EDEVICE DETAILS command to determine the paths associated with the emulated device and issue the SET EDEVICE command again, specifying a valid path.

— Variation 10 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because it is invalid.**

Explanation

The emulated device *rdev2* was being VARYed online and the specified path (*rdev1*, *wwpn*, *lun*) was deleted from this emulated device for one of the following reasons:

- The *wwpn* value is not a valid world wide port name in your configuration.
- The *lun* value is not a valid logical unit number for the specified world wide port name.
- A path using the same FCP channel (that is, the channel associated with the FCP device *rdev1*) and having the same *wwpn* and *lun* values has already been established for this emulated device
- The real SCSI disk associated with this path is different than the real SCSI disk associated with already-established paths for the emulated device.
- An I/O error occurred on the path such that it could not be initialized for use by the emulated device.
- A hardware error was encountered using this path such that it could not be initialized for use by the emulated device.
- An internal CP error was encountered using this path such that it could not be initialized for use by the emulated device.

System action

The path is deleted from the emulated device *rdev2* and system operation continues.

User response

Verify the validity of the path that was deleted and use the CP SET EDEVICE command to add valid paths to the emulated device.

— Variation 11 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because FCP device *rdev1* was deleted.**

Explanation

The specified path was deleted from the emulated device because the FCP device associated with the path was deleted from z/VM's logical partition by a system running in another logical partition.

System action

The path is deleted from the EDEV and system operation continues. If this is the last path associated with the emulated device, then the emulated device is put in a BOXed state.

User response

Use the CP SET EDEVICE command to add valid paths to the emulated device, if appropriate.

— Variation 12 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because the FCP device is currently reserved for the EXPLORE command.**

Explanation

The emulated device was being varied online and the specified path was deleted from the EDEV because FCP_DEV *rdev1* is currently used by the EXPLORE command.

System action

The path is deleted from the EDEV and system operation continues.

User response

Use the CP EXPLORE FCP QUERY command to confirm the FCP devices currently used by the EXPLORE command. After the FCP device is removed from use by EXPLORE, issue a CP SET EDEVICE command to add the path back to the emulated device.

— Variation 13 **Path FCP_DEV *rdev* WWPN *wwpn* LUN *lun* is a duplicate path for EDEV *rdev* and was not added due to the previous definition.**

Explanation

An EDEVICE configuration file statement was being processed by CP or a SET EDEVICE command was issued and the specified path *(rdev1, wwpn, lun)* was not added to the emulated device definition because it is a duplicate of a path that is already defined to the emulated device.

System action

The path is not added to the emulated device definition and system operation continues.

User response

Update the EDEVICE configuration file statement so that unique valid paths are specified and use the CP SET EDEVICE command to add unique valid paths to the emulated device.

— Variation 14 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because it is invalid. The specified LUN could not be found. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online. Validation of the LUN associated with the specified path failed, which suggests that the physical storage device is not connected to the specified logical unit, or that the physical storage device is not a block device.

System action

The path is deleted from the EDEV and system operation continues.

User response

Verify that the desired LUN exists and that it was correctly entered in the EDEV definition. If the problem persists, record the support code and contact your IBM Support Center personnel.

— Variation 15 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because it is invalid. A previously defined path points to a different device. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online, and it was determined that the emulated device points to two or more emulated device definition points. All paths must have the same LUN and must point to the same physical storage device.

System action

The path is deleted from the emulated SCSI device and system operation continues.

User response

Verify that each LUN in the EDEV definition is the same and that each logical unit refers to the same physical storage device. If the problem persists, record the support code and contact your IBM Support Center personnel.

— Variation 16 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during configuration. Support Code = *code***

Explanation

An internal error occurred while the emulated SCSI device (EDEV *rdev2*) was being varied online.

System action

The path is deleted from the EDEV and system operation continues.

User response

Record the support code and contact your IBM Support Center personnel to diagnose the problem.

— Variation 17 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred. The memory required could not be allocated. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the system could not allocate the necessary memory.

System action

The path is deleted from the EDEV and system operation continues.

User response

Ensure the STORAGE EDEVICE statement in the system configuration file is specified to support the number of EDEVs on the system. For further assistance, record the support code and contact your IBM Support Center personnel.

— Variation 18 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. The SCSI device could not be opened. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized for an unknown reason.

System action

The path is deleted from the EDEV and system operation continues.

User response

Check the connection to the storage device and verify the storage device is online. If the problem persists, record the support code and contact your IBM Support Center personnel.

— Variation 19 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. A SCSI I/O operation performed on this path has failed. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized. A SCSI I/O operation failed during initialization for an unknown reason.

System action

The path is deleted from the EDEV and system operation continues

User response

Check the connection to the storage device and verify that the storage device is online. If the problem persists, record the support code and contact your IBM Support Center personnel.

— Variation 20 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. The SCSI device could not be opened because an internal state error has occurred. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but an internal state error occurred.

System action

The path is deleted from the EDEV and system operation continues.

User response

Record the support code and contact your IBM Support Center personnel to diagnose the problem.

— Variation 21 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. The SCSI device could not be opened because CP does not have the authority to open the device. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized due to a required operation being denied.

System action

The path is deleted from the EDEV and system operation continues.

User response

Record the support code and operational characteristics of the storage device and contact your IBM Support Center personnel.

— Variation 22 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. The SCSI device could not be opened because the required memory could not be allocated. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized due to a lack of available memory.

System action

The path is deleted from the EDEV and system operation continues.

User response

Ensure the STORAGE EDEVICE statement in the system configuration file is specified to support the number of EDEVs on the system. For further assistance, record the support code and contact your IBM Support Center personnel.

— Variation 23 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. The SCSI device could not be opened because the operation timed out. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized due to a required operation timing out.

System action

The path is deleted from the EDEV and system operation continues.

User response

Reissue the command. If the command continues to fail, record the support code and contact your IBM Support Center personnel.

— Variation 24 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. The SCSI device could not be opened because the device could not be found. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized because it was unresponsive or was not found.

System action

The path is deleted from the EDEV and system operation continues.

User response

Verify the storage device is still online and reissue the command. If attempts continue to fail, record the support code and contact your IBM Support Center personnel.

— Variation 25 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. A SCSI operation performed on this path failed because an internal state error has occurred. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized. A SCSI I/O operation failed during initialization because an internal state error has occurred.

System action

The path is deleted from the EDEV and system operation continues.

User response

Record the support code and contact your IBM Support Center personnel to diagnose the problem.

— Variation 26 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. A SCSI operation performed on this path failed because the required memory could not be allocated. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized. A SCSI I/O operation failed during initialization due to a lack of available memory.

System action

The path is deleted from the EDEV and system operation continues.

User response

Ensure the STORAGE EDEVICE statement in the system configuration file is specified to support the number of EDEVs on the system. For further assistance, record the support code and contact your IBM Support Center personnel.

— Variation 27 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. A**

SCSI operation performed on this path failed because it timed out. Support Code = *code*

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized. A SCSI I/O operation failed during initialization due to a necessary operation timing out. For example, a SCSI device inquiry command was issued to a selected adapter.

System action

The path is deleted from the EDEV and system operation continues.

User response

Reissue the command. If the command continues to fail, record the support code and contact your IBM Support Center personnel.

— Variation 28 **Path FCP_DEV *rdev1* WWPN *wwpn* LUN *lun* was deleted from EDEV *rdev2* because an unexpected failure occurred during vary on. A SCSI operation performed on this path failed because the device could not be found. Support Code = *code***

Explanation

The emulated SCSI device (EDEV *rdev2*) was being varied online but the device could not be initialized. A SCSI I/O operation failed during initialization due to an unresponsive or missing device. For example, a cable to the device was physically disconnected.

System action

The path is deleted from the EDEV and system operation continues.

User response

Verify the storage device is still online and reissue the command. If attempts continue to fail, record the support code and contact your IBM Support Center personnel.

— Variation 29 **An I/O operation issued on LUN *lun* FCP *rdev* failed at the adapter because the {port | LUN} has already been opened.**

Explanation

An emulated SCSI device (EDEV) *rdev2* was being varied online. An internal state error occurred that prevented the specified port or LUN from being initialized or used.

System action

The path is deleted from the EDEV and system operation continues.

User response

Contact your IBM Support Center personnel to diagnose and correct the software problem.

— Variation 30 **An I/O operation issued on LUN *lun* FCP *rdev* failed at the adapter because the port is not valid.**

Explanation

An internal state error occurred that prevented the specified port from being used. For example, the host issued an I/O command to a port handle that is either corrupted or does not exist.

System action

The I/O operation fails and system operation continues. If an emulated SCSI device (EDEV) is being varied online, the path is deleted from the EDEV.

User response

Verify that the desired WWPN exists and that it was correctly entered in the EDEV definition. If the problem persists, contact your IBM Support Center personnel.

— Variation 31 **An I/O operation issued on LUN *lun* FCP *rdev* failed at the adapter because the rules in the access control table blocked a necessary command.**

Explanation

The hardware adapter blocked the command due to a restricted access on the fabric.

System action

The I/O operation fails and system operation continues. If an emulated SCSI device (EDEV) is being varied online, the path is deleted from the EDEV.

User response

Verify your zoning is correct and that the server is permitted to access the given storage device. If the problem persists, contact your IBM Support Center personnel.

— Variation 32 **An I/O operation issued on LUN *lun* FCP *rdev* failed at the adapter because maximum number of {ports | LUNs} have been exceeded.**

Explanation

An emulated SCSI device (EDEV) was being varied online. The port associated with this path could not be used because the maximum number of ports or the maximum number of LUNs has been exceeded on this FCP channel.

System action

The path is deleted from the EDEV and system operation continues.

User response

Check the operational characteristics of the FICON Express card to determine the number of physical destination ports (target WWPNs) or logical devices (target LUNs) that can be open at the same time, and ensure that the EDEVICE definitions do not exceed this limit for any FCP channel.

— Variation 33 **An I/O operation issued on LUN *lun* FCP *rdev* failed at the adapter because communication with the port is no longer possible. The port has been boxed.**

Explanation

The port on the storage device has been boxed for an unknown reason.

System action

The I/O operation fails and system operation continues. If an emulated SCSI device (EDEV) is being varied online, the path is deleted from the EDEV.

User response

Determine whether or not there is a problem with your hardware and contact your IBM Support Center personnel.

HCP8702E **The variations of this message are explained below.**

— Variation 1 **Device *rdev* is defined as a real device.**

Explanation

An EDEVICE system configuration file statement, a CP SET EDEVICE command or a CP DELETE EDEVICE command specified a device that is already defined to CP as a real device.

System action

The statement is ignored or the command fails; system operation continues.

User response

If you want to change or delete the specified device, issue the CP SET RDEVICE or CP DELETE RDEVICE command. Otherwise, update your system configuration file or issue the CP SET EDEVICE command or the CP DELETE EDEVICE command, specifying a device number that is not associated with a real device.

— Variation 2 **Device *rdev* is defined as an emulated device.**

Explanation

A CP SET EDEVICE command was issued to define a new emulated device, a CP SET RDEVICE command was issued to define a real device, or a CP DELETE RDEVICE command was issue to delete a real device, but an emulated device is already associated with the specified device number.

System action

The command fails; system operation continues.

User response

Check the specified device number and reissue the command with the correct device number. If the device number is correct, issue the correct command to modify or delete the emulated device.

— Variation 3 **Device *rdev* is not a defined emulated device.**

Explanation

A CP SET EDEVICE command was issued to modify or clear an emulated device, but the device number

specified did not represent an already defined emulated device.

System action

The command fails; system operation continues.

User response

Check the specified device number and reissue the command with the correct device number.

— Variation 4	**EDEV *rdev* is an NVMe emulated device and cannot be cleared.**

Explanation

The designated EDEVICE could not be cleared because it is an NVMe emulated device for which this operation does not make sense.

System action

The EDEVICE is not cleared.

User response

None. NVMe EDEVICEs do not have path specifications.

HCP8703E	**The variations of this message are explained below.**
— Variation 1	**The attributes name specified does not match the attributes name that is already associated with EDEV *rdev*.**

Explanation

A CP SET EDEVICE command was issued to modify an existing emulated device, but the emulated device type specified on the command does not match the emulated device type of the existing device.

System action

The command fails; system operation continues.

User response

Issue a CP QUERY EDEVICE command to determine the type of the emulated device that is being modified and then reissue the CP SET EDEVICE command specifying the correct type.

— Variation 2	**The type specified does not match the type that is already associated with EDEV *rdev*.**

Explanation

A CP SET EDEVICE command was issued to modify an existing emulated device, but the attributes name specified on the command does not match the attributes name associated with the existing device.

System action

The command fails; system operation continues.

User response

Issue a CP QUERY EDEVICE command to determine the attributes name of the emulated device that is being modified and then reissue the CP SET EDEVICE command specifying the correct attributes name.

— Variation 3	**The LUN *lun* specified does not match the LUN that is already associated with EDEV *rdev*.**

Explanation

A path was specified with the SET EDEVICE command or EDEVICE system configuration statement and the LUN does not match the LUN that is already associated with the EDEVICE.

System action

The path is not added to the emulated device definition. System operation continues.

User response

Issue a CP QUERY EDEVICE command to determine the LUN associated with the EDEVICE. Issue a CP SET EDEVICE command with the correct LUN. If the EDEVICE was incorrectly defined in the system configuration file, update the LUN in the EDEVICE system configuration statement.

HCP8704E	**The variations of this message are explained below.**
— Variation 1	**EDEV *rdev* was not modified because the device could not be unloaded.**

Explanation

You issued a CP SET EDEVICE command to modify an existing emulated device, but CP was unable to unload the device definition of the real SCSI device associated with it.

System action

The command fails; system operation continues.

User response

Reissue the command. If the command continues to fail, contact your system support personnel.

— Variation 2 **EDEV *rdev* was not cleared because the device could not be unloaded.**

Explanation

You issued a CP SET EDEVICE command to clear an existing emulated device, but CP was unable to unload the device definition of the real SCSI device associated with it.

System action

The command fails; system operation continues.

User response

Reissue the command. If the command continues to fail, contact your system support personnel.

— Variation 3 **EDEV *rdev* was not deleted because the device could not be unloaded.**

Explanation

You issued a CP DELETE EDEVICE command to delete an existing emulated device, but CP was unable to unload the device definition of the real SCSI device associated with it.

System action

The command fails; system operation continues.

User response

Reissue the command. If the command continues to fail, contact your system support personnel.

— Variation 4 **EDEV *rdev* was not deleted because there are alias devices defined**

Explanation

The specified EDEVICE could not be deleted because alias devices are defined in the HyperPAV pool.

System action

The EDEVICE is not deleted.

User response

Use QUERY PAV to identify the aliases in the pool and delete them before you attempt to delete the base EDEVICE.

— Variation 5 **EDEV *rdev* was not deleted because there are other base devices defined**

Explanation

The specified EDEVICE could not be deleted because other base devices are defined in the HyperPAV pool.

System action

The EDEVICE is not deleted.

User response

Use QUERY PAV to identify other base devices in the pool and delete them before you attempt to delete the initial base EDEVICE.

HCP8705E **Emulated Device *rdev* cannot be varied offline because CP was unable to close the device.**

Explanation

The indicated emulated device is not varied offline because CP's attempt to close the real SCSI device associated with it failed.

System action

The emulated device remains online; system operation continues.

User response

Attempt to vary the emulated device offline by issuing the VARY command. If attempts continue to fail, there may be a hardware malfunction in the SCSI device. Contact your system support personnel.

HCP8706E **The variations of this message are explained below.**

— Variation 1 **EDEV *rdev* was not created because an invalid operand was specified in its definition - *operand***

Explanation

An EDEVICE configuration file statement was being processed by CP and an invalid operand was specified on the statement.

System action

The EDEVICE configuration file statement is ignored and system operation continues.

User response

Update the EDEVICE configuration file statement so that it only includes valid operands and use the CP SET DEVICE command to correctly define the emulated device to the current system.

— Variation 2	**EDEV *rdev* was not created because a required operand was missing from its definition - *operand***

Explanation

An EDEVICE configuration file statement was being processed by CP and a required operand was not specified on the statement.

System action

The EDEVICE configuration file statement is ignored and system operation continues.

User response

Update the EDEVICE configuration file statement so that it includes required operands and use the CP SET EDEVICE command to correctly define the emulated device to the current system.

HCP8707E	**Sum of EDEVICE and FCP devices operands (*sum*) exceeds the allowed maximum.**

Explanation

The sum of the values that are specified for the EDEVs and FCP operands of the STORAGE statement in the system configuration file is greater than the allowed maximum. The STORAGE statement cannot specify more than 65,535 combined EDEVs and FCPs.

System action

CP ignores the statement. System operation continues. When CP encounters no STORAGE statement with a valid EDEVICE operand, CP allocates a default pool for 100 EDEVs and 10 FCP subchannels.

User response

Adjust the values that are specified on the STORAGE statement in the system configuration file. The adjusted values become effective at next IPL.

HCP8708I	**The variations of this message are explained below.**
— Variation 1	**Storage statement had no effect. Storage requested is less than the default storage.**

Explanation

The size of the reserved pool for the number of EDEVs and FCP devices that are specified in the STORAGE statement was less than the size of the default storage pool.

System action

The default pool is allocated. System operation continues.

User response

No user action is required because CP automatically adjusts the size of the reserved pool for memory allocations during device configuration.

— Variation 2	**Storage statement had no effect. Storage requested is less than the initial storage requirements.**

Explanation

The size of the reserved pool for the specified number of EDEVs and FCP devices in the STORAGE statement was less than the expected size of the reserved pool for the number of EDEVs and FCP devices that are specified in the EDEVICE statement.

System action

The size of the reserved pool for the total EDEVs and FCP devices will be allocated based on the requested number of EDEVs and FCP devices that are specified in the EDEVICE statement. System operation continues.

User response

No user action is required because CP automatically adjusts the size of the reserved pool for memory allocations during device configuration.

— Variation 3	**The number of EDEVs reserved in your storage statement is less than the number of EDEVs defined on your EDEVICE statements.**

Explanation

The allocated size of the reserved storage pool was large enough for the expected EDEVs and FCP devices. However, the number of EDEVs that are specified in the STORAGE statement of the system configuration file is less than the total number of EDEVs that are defined in the EDEVICE statement.

System action

None.

User response

No user action is required. To eliminate this message, change the STORAGE statement to specify a number of EDEVs that is equal to or greater than the total number of EDEVs that are defined in your EDEVICE statement.

— Variation 4 The number of FCPs reserved in your storage statement is less than the number of FCPs defined on your EDEVICE statements.

Explanation

The allocated size of the reserved storage pool was large enough for the expected EDEVs and FCP devices. However, the number of FCPs specified in the STORAGE statement of the system configuration file is less than the total number of FCPs that are defined in the EDEVICE statement.

System action

None.

User response

No user action is required. To eliminate this message, change the STORAGE statement to specify a number of FCP devices that is equal to or greater than the total number of FCPs that are defined in your EDEVICE statement.

HCP8710E INQUIRY error on EDEV *rdev*

Explanation

CP attempted to issue an INQUIRY to the SCSI LUN being emulated by the specified EDEV. The INQUIRY command failed.

System action

System operation continues.

User response

Reissue the command. If the problem persists, contact the IBM Support Center.

HCP8711E EDEV *rdev* does not support VPD page *page*

Explanation

The Vital Product Data page you requested is not supported by the LUN being emulated by the specified EDEV.

System action

The command is not executed. System operation continues.

User response

Reissue the command, specifying a VPD page supported by the device being queried.

HCP8712E The variations of this message are explained below.

Explanation

- Read Configuration Data failed on RDEV *rdev*
- Read Device Characteristics failed on RDEV *rdev*

CP attempted to issue the specified CCW command to the device. The command failed.

System action

System operation continues.

User response

None.

HCP8713E Duplicate port specified

Explanation

You attempted to add a port that is already in the list managed by EXPLORE FCP.

System action

The command is not executed. System operation continues.

User response

None.

HCP8714E Port cannot be removed while it is active

Explanation

You attempted to remove a port that is currently in an active state.

System action

The command is not executed. System operation continues.

User response

Issue the EXPLORE FCP STOP command to deactivate the port, then reissue the command.

HCP8715E The variations of this message are explained below.

Explanation

- Specified port is not found
- Specified port is already active
- Specified port is not active

You attempted to remove, start, or stop a port, but the port is already in the requested state.

System action

The command is not executed. System operation continues.

User response

None.

HCP8716E The variations of this message are explained below.

Explanation

- Failed to activate device *rdev*
- Failed to deactivate device *rdev*

You attempted to activate or deactivate an FCP device and the command failed.

System action

System operation continues.

User response

None.

HCP8717E The variations of this message are explained below.

Explanation

- Failed to open port *wwpn* on device *rdev*
- Failed to close port *wwpn* on device *rdev*

You attempted to open or close a WWPN on the specified FCP device and the command failed.

System action

System operation continues.

User response

None.

HCP9000W A machine check occurred during system initialization.

Explanation

A machine check occurred during system initialization. This is probably because of a hardware error.

System action

The system enters a disabled wait state (wait-state code = 9000).

User response

Perform another IPL. If the problem continues and you are running a first level system, take a stand-alone dump and contact your system support personnel. If you are running a second level system, take a VMDUMP.

HCP9001W BAD TOD CLOCK DURING SYSTEM INITIALIZATION

Explanation

The time-of-day (TOD) clock is in error state or not operational state.

System action

The system enters a disabled wait state (wait-state code = 9001).

Operator response

Contact your system support personnel.

HCP9002W ALTERNATE PROCESSOR INITIALIZATION UNSUCCESSFUL

Explanation

During system IPL, system termination, or a VARY ONLINE PROCESSOR command, one of the following conditions has occurred:

- The processor address assigned in the prefix page of the alternate processor does not match the processor address that a STOP instruction returned and that the alternate processor issued.
- While the alternate processor was attempting to initialize, a time-of-day (TOD) clock error occurred.
- A machine check occurred during processor initialization.

System action

The alternate processor loads a disabled wait state PSW, code X'9002'. Processing continues on the remaining processor(s).

User response

Enter the VARY ONLINE PROCESSOR command. If the error persists, contact your IBM Support Center personnel for software support. When the problem is resolved, reenter the VARY ONLINE PROCESSOR command.

HCP9003W PROCESSOR QUIESCED — VARY OFFLINE

Explanation

A VARY OFFLINE PROCESSOR command has been received for a processor.

System action

- When the master processor is varied offline, the normal system action is for the master processor to enter a stopped state using a SIGP CPU Reset. If an attempt is made to restart the master processor, it will load a disabled wait-state PSW, wait-state code 9003. Processing continues on the remaining processors.
- A processor being varied offline that is not the master processor loads a disabled wait-state PSW, wait-state code 9003. Processing continues on the remaining processors.

Operator response

None.

User response

None.

HCP9004W FAILING PROCESSOR QUIESCED

Explanation

A processor that has taken a severe machine check has successfully signaled another processor to perform recovery.

System action

The normal system action is for the failing processor to enter a stopped state using a SIGP CPU Reset. If an attempt is made to restart the processor, it loads a disabled wait-state PSW, wait-state code 9004. Processing continues on the remaining processors.

Operator response

When a processor failure occurs, contact your IBM Support Center personnel for software support. When the problem is resolved, reenter the VARY ONLINE PROCESSOR command.

User response

None.

HCP9005W PROCESSOR QUIESCED FOR SYSTEM TERMINATION

Explanation

As a part of system termination, the processor has quiesced in response to another processor's request.

System action

The processor loads a disabled wait-state PSW (wait-state code = 9005). Processing continues on the remaining processors.

Operator response

None.

User response

None.

HCP9006W The SYSTEM VMDBK at HCPSYSVM is formatted incorrectly. The system was generated with an HCPSYS object file that appears to have been compiled for a different release level. Recompile HCPSYS at the proper level and regenerate the system.

Explanation

The SYSTEM VMDBK at HCPSYSVM is formatted incorrectly. The system was generated with an HCPSYS object file that appears to have been compiled for a different release level.

System action

The system enters a disabled wait state (wait-state code = 9006).

User response

Recompile HCPSYS at the proper level and regenerate the system. Then re-IPL the system.

HCP9007W **SYSTEM LOAD FAILURE: SVC processing or HCPABEND processing not initialized**

Explanation

A hard abend, soft abend, snapdump abend or unknown SVC has occurred very early during CP initialization. Normal system termination and dump generation is not possible in this environment.

System action

The system enters a disabled wait state (wait state code 9007).

User response

If you are running a first level system, take a stand-alone dump and contact your system support personnel. If you are running a second level system, take a VMDUMP.

HCP9008W **No operational[, thread 0,] primary processor available to perform system restart**

Explanation

The system termination process has completed successfully. A system restart was attempted, and it was necessary to switch execution to a primary processor when multithreading is not enabled or a thread 0 primary processor when multithreading is enabled. However, no acceptable processor was able to be restarted. System restart will not occur.

System action

The system enters a wait state (wait-state code = 9008).

User response

IPL the system by performing a system reset load from the hardware console.

HCP9009W **The other processor did not indicate that it stopped after restarting a primary processor**

Explanation

The system termination process has completed successfully. A system restart was attempted, and it was necessary to switch execution to a low numbered primary processor. However, the other processor did not indicate that it stopped after restarting the primary processor. This indication is necessary so that only one processor performs system restart processing and the primary processor stops executing and loads the wait state. System restart might still occur if another primary processor is able to be restarted.

System action

The system enters a wait state (wait-state code = 9009).

User response

If the system fails to restart, you must perform a system reset load from the hardware console.

HCP9011W **When trying to restart a primary processor, a nonzero condition code was received in response to the SIGP RESTART order.**

Explanation

The system termination process has completed successfully. A system restart was attempted, and it was necessary to switch execution to a primary processor. When trying to restart a primary processor, a nonzero condition code was received in response to the SIGP RESTART order. System restart will not occur.

System action

The system enters a wait state (wait-state code = 9011).

User response

The operator must IPL the system by performing a load-clear or load-normal from the hardware console.

HCP9012W **Unable to restart the system because reset of the configuration failed with reason code *rc***

Explanation

This message is issued at system restart after a CP system failure or a SHUTDOWN REIPL command. In order to restart, CP must reset the configuration to disable multithreading, but that failed.

System action

The system enters a wait state (wait-state code = 9012).

User response

Perform a system reset load from the hardware console. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the problem.

HCP9014W MACHINE CHECK

Explanation

A hardware error has occurred during stand-alone processing. This occurred while data was being saved from a direct access volume onto a magnetic tape.

System action

After attempting to issue this message, the program loads a disabled wait-state PSW (wait-state code = 9014).

User response

Dump storage and save the dump and all output. Attempt to rerun the job. If the error persists, call IBM for hardware support.

HCP9015W SYSTEM TERMINATION FAILURE; MACHINE MALFUNCTION

Explanation

During system termination processing, a machine malfunction occurred. One of the following has occurred:

- A machine check occurred after the termination lock was acquired.
- An external interrupt was presented even though external interrupts were disabled.
- A processor does not respond correctly to a SIGP instruction (cannot be quiesced) during the termination process.
- An I/O interrupt was presented when I/O interrupts were disabled.

System action

The system enters a disabled wait state (wait-state code = 9015).

User response

The operator must IPL the system by performing a load-clear or load-normal from the hardware console. If the failure persists, it usually indicates hardware problems. Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP9020W SYSTEM LOAD FAILURE; PROGRAM CHECK [, CODE - *abncode*]

Explanation

A program check occurred during the IPL process. If the message appears on the emergency messages console, the module code in the message identifier indicates the module that was running when the program check occurred. If the module code is '??????', then the module code couldn't be identified. In some cases, the message text includes a code (*abncode*), which indicates a CP abend code.

System action

The system enters a disabled wait state (wait-state code = 9020).

If using the Stand-Alone Program Loader, all registers contain the values held at the time the wait state was entered.

Operator response

If the IPL process progressed far enough to successfully allocate dump space, a hard abend dump will be created and will be available after the system is successfully IPLed.

If the IPL process did not create a hard abend dump, manually take a dump of the system. If you are running a first-level system, take a stand-alone dump and contact your system support personnel. If you are running a second-level system, take a VMDUMP. If the failure continues, contact your IBM Support Center personnel for assistance.

HCP9021W SYSTEM LOAD FAILURE; MACHINE CHECK

Explanation

A machine check occurred during the IPL process. If the message appears on the console, the module

code in the message identifier indicates the module executing when the machine check occurred.

System action

The system enters a disabled wait state (wait-state code = 9021). If you are using the Stand-Alone Program Loader (SAPL), all registers will contain the values held at the time the wait state was entered.

Operator response

IPL the system with a WARM start. If that fails, attempt a FORCE start. If that is unsuccessful, attempt a COLD start. If the failure continues and you are running a first level system, take a stand-alone dump and contact your IBM Support Center personnel for hardware support. If you are running a second level system, take a VMDUMP.

HCP9022W SYSTEM LOAD FAILURE; FATAL I/O ERROR

Explanation

An irrecoverable input/output error occurred on the system residence volume during the IPL process. The module code in the message identifier will show the module where the fatal I/O error occurred.

System action

The system enters a disabled wait state (wait-state code = 9022). The codes for this message are as follows:

Code
Explanation

R0
Contains the address of the device in error

R1–R3
Contains the extended status CSW in the interrupt response block

R4–R11
Contains up to 32 bytes of sense information

R12
Base register if using the Stand-Alone Program Loader

R13
Work page address if using the Stand-Alone Program Loader

R14–R15
Contains BBCCHHR if the device is a CKD/ECKD or zero if using the Stand-Alone Program Loader

R14
Contains the hexadecimal block number if the device is an FBA or zero if using the Stand-Alone Program Loader

User response

None.

HCP9023W SYSTEM TERMINATION FAILURE; MULTIPLE INCIDENTS

Explanation

Multiple system incidents have occurred on the same processor during the termination process.

System action

The system enters a wait state (wait-state code = 9023).

User response

The operator must IPL the system by performing a load-clear or load-normal from the hardware console. If the failure persists, contact your IBM Support Center.

HCP9024W CONSOLE I/O ERROR

Explanation

An irrecoverable I/O error occurred while the system was trying to write a message to the operator's console. This is often caused on a second-level system by a console defined as something other than a 3270.

System action

The system enters a wait state (wait-state code = 9024). No message is displayed.

Operator response

Disable the console and attempt to IPL to get an alternate console. If you are running second level, make sure that your console is defined as a 3270.

HCP9025W SYSTEM TERMINATION COMPLETE, ENTERING WAIT STATE *code*

Explanation

The system termination process has completed. The system will not restart for one of the following reasons:

- An error occurred during CP Initialization and a specific disabled wait state was requested to be

loaded. In this case, a wait state code other than 9025 is included on the message.

- An error was detected in the error recovery hardware or software.
- A machine check shows damage to a storage page that the CP nucleus occupies.
- There is severe I/O subsystem damage.
- The system has been successfully shut down and has not been IPLed again. (This wait state will occur if a system restart is attempted after the shutdown command completed.)

System action

The system enters a wait state (wait-state code = 9025 or the wait state code that is shown on the message).

Operator response

If a wait state code other than 9025 is included in the message, a detailed explanation and appropriate response can be found by referring to the CP message that corresponds to the wait state code. For example, if the wait code is 0902, refer to message HCP902W.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

If you attempted to re-IPL the wrong device on a SHUTDOWN REIPL command, IPL the correct device and warm start the system.

HCP9026W	**SYSTEM FAILURE *abend_code* OCCURRED DURING SYSTEM INITIALIZATION**

Explanation

A system failure occurred during system initialization. The system will not restart because a hard abend occurred when dump conditions were set to NOIPL (for example, during system initialization). If the abend code is IIO002, an attempt was made to IPL an alias Parallel Access Volume. See message HCP6865E for more information.

System action

The system enters a wait state (wait-state code = 9026).

User response

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be completed to identify the cause of the problem, a dump of the system is necessary. If the IPL process progressed far enough to successfully allocate dump space, a hard abend dump will be created and will be available after the system is successfully IPLed.

If the IPL process did not create a hard abend dump, manually take a dump of the system. If you are running a first-level system, take a stand-alone dump and contact your system support representative. If you are running a second-level system, take a VMDUMP. If the failure continues, contact your IBM Support Center representative for assistance.

HCP9027W	**SYSTEM TERMINATION COMPLETE WITHOUT CHECKPOINT**

Explanation

The system terminated without taking a checkpoint because the NOCKPT option was specified on the SHUTDOWN command.

System action

The system terminated.

User response

None.

HCP9030W	**The variations of this message are explained below.**
— Variation 1	**{CP|SAPL} REQUIRES HARDWARE FEATURES NOT AVAILABLE ON THIS PROCESSOR[: *rc*]**

Explanation

Hardware requirements for this CP release have not been met.

System action

The system loads a disabled wait state.

System programmer response

z/VM requires an IBM z15 (all models) or later server. For information about supported servers and specific server facilities that are also required, see the information on the z/VM website IBM: z/VM 7.4 Architecture Level Set (https://www.ibm.com/support/pages/zvm/zvm740/architecture).

If the Stand-Alone Program Loader loaded this wait state, no messages are displayed to any console because the wait state occurs before any console is initialized. If CP initialization loaded this wait state, review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If CP initialization loaded the wait state, the reason code (*rc*) value displayed in the message provides the reason code for the failure. When the failure is due to missing required facilities as reported by STFLE, this message may be followed by four instances of the next variation of the message.

If this problem persists, contact your IBM Support Center personnel. To assist with problem determination, capture and retain the Operating System Messages output, specifically the disabled wait state PSW and the output that displays the missing facilities in the STFLE mask. The reason code and STFLE information should be sufficient to identify the cause of the problem. If this is not the case, your system support representative will request a stand-alone dump if you are running a first level system, or a VMDUMP if you are running a second level system.

— Variation 2 **STFLE MISSING FACILITIES *xx-yy ssssssssssssssssssssssssssssssss***

Explanation

This variation of the message is displayed following the first variation when required facilities are missing as reported by STFLE. Four lines of data are displayed.

System action

None.

User response

The four lines of data displayed by this variation, along with the reason code (*rc*) displayed in the first variation, should be provided to your IBM Support Center personnel.

HCP9031W **Spooling initialization cancelled at operator request; system restart halted**

Explanation

The spooling initialization was canceled at the operator's request.

System action

The system enters a disabled wait state (wait-state code = 9031).

Operator response

Attempt to correct any errors reported during spooling initialization, then re-IPL.

HCP9032W **SYSRES volume allocation map error**

Explanation

Incorrect data was found in the allocation map of the SYSRES volume. This is usually caused by copying a volume image from a smaller device to a larger device (such as copying from a single-density 3380 volume to a double- or triple-density 3380 volume) without properly reformatting cylinder zero or pages 0-1 on the larger volume and reallocating. It could also be caused by copying a volume with an extent-based allocation map to a volume that does not use the extent-based allocation map.

System action

The system enters a disabled wait state (wait state code = 9032).

Programmer response

Correct the allocation record on the SYSRES volume by reformatting cylinder zero or pages 0-1 and reallocating the entire volume. If using the wrong type of allocation map, then reallocate the volume without reformatting cylinder zero. Then re-IPL the system.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available,

open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP9033W Insufficient storage to contain the warmstart area; system restart halted.

Explanation

There is not enough available real storage to read the entire warmstart area during system initialization.

System action

Enters wait state 9033.

User response

Increase the amount of available storage or decrease the requirements on storage. For example:

- Define a larger virtual machine.
- Decrease the number of warmstart cylinders or pages. One cylinder should be enough. For example, one cylinder of a 3390 DASD allows for well over 180,000 spool files.

  Note: This action is for test systems only. Once a system is put into production and the spool contains valuable data, the warmstart cylinders must remain intact.
- Decrease the size of the trace tables.

See Host Storage Planning and Administration in *z/VM: CP Planning and Administration* for other real storage requirements.

HCP9034W The Channel-Path-Measurement Facility shutdown failed.

Explanation

During shutdown or hard abend processing, the attempt to stop the Channel-Path-Measurement Facility failed.

System action

The system enters a disabled wait state (wait-state code = 9034).

Operator response

Contact your IBM Support Center personnel. This is a probable hardware error. The system can be re-IPLed.

HCP9035E LOAD ORIGIN address of *hexloc* is not valid

Explanation

The SHUTDOWN command with the ORIGIN option was entered, but the address specified is either zero or not on a page boundary.

System action

The command is not executed. System operation continues.

User response

Enter the command again with the correct parameters.

HCP9035W INVALID LOAD ORIGIN ADDRESS

Explanation

The load origin address specified is not valid for one of the following reasons:

- The load origin address is zero.
- The load origin address is not on a page boundary.

System action

The system enters a wait state (wait state code=9035).

User response

Specify X'2000' as the load origin address. If an address on a page boundary other than X'2000' is specified, CP will reload itself at X'2000'.

HCP9036W System initialization failure; No CP-owned volumes defined

Explanation

During initialization it was determined there were no CP-Owned volumes defined. Some possible causes are:

- There are no CP-owned volume definitions in your system configuration file or your HCPSYS ASSEMBLE file.
- CP encountered errors trying to read the definitions in the system configuration file.

System action

The system enters a wait state (wait state code 9036).

Operator response

Ensure you have CP-owned volumes defined in your system configuration file or in your HCPSYS ASSEMBLE file. If you have CP-owned volumes defined, check the DASD on which the parameter disk resides for hardware problems, verify the parm disk's setup and content.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP9037W The variations of this message are explained below.

Explanation

- **CP requires z/Architecture to be installed. CP also requires support for dynamic address translation.**
- **{SAPL|DDR} requires z/Architecture to be installed.**

Hardware requirements for CP, the Stand-Alone Program Loader (SAPL), or Stand-Alone DDR are not met. CP, SAPL, and DDR run only on z/Architecture hardware. CP also requires support for dynamic address translation.

System action

The system loads a disabled wait state (wait-state code = 9037).

System programmer response

Verify the hardware capabilities of the processor that you are using. If the processor is not z/Architecture capable, you cannot use z/VM version 5 or later.

If you are attempting to IPL a second level system and your virtual machine is running in XC architecture mode, use the SET MACHINE command to change to ESA or Z mode and then reissue the IPL command.

If SAPL loaded this wait state, no messages are displayed to any console because the wait state occurs before any console is initialized. If CP initialization loaded this wait state, review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running. If DDR loaded this wait state, no other messages are displayed to the console.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP9038W Configuration Isolated CRW was received

Explanation

A Configuration Isolated CRW was received by CP, indicating that the system is no longer usable.

System action

The system enters a disabled wait state (wait state code = 9038).

Operator response

Do a system restart to create a dump. If the restart fails or is not possible, create a stand-alone dump. Contact your IBM Support Center to diagnose the dump. When you re-IPL z/VM, do a force start. If that fails, do a cold start.

HCP9039W {CP|SAPL} requires the processor to be in z/Architecture mode

Explanation

The processor responded that z/Architecture mode is available on this processor, but when CP or the Stand-Alone Program Loader (SAPL) tried to enable it, a program specification check or a nonzero condition code was encountered.

System action

The system loads a disabled wait state.

System programmer response

Contact your IBM Support Center personnel for hardware support.

HCP9040W THE CP PREFIX PAGE IS NOT ON AN 8K BOUNDARY

Explanation

During CP initialization, CP verifies that the prefix page defined in the nucleus that will be used by the IPL processor is on an 8K boundary. Because CP has already verified that the load origin is X'2000' and has reloaded itself if it was not, the SPB 2000 loader control statement in HCPPFX should force the prefix page to an 8K boundary.

System action

The system enters a wait state (wait state code = 9040).

System programmer response

Verify that the load origin specified on the SAPL screen is X'2000'. If it is, contact system support and have them verify that no local changes in HCPPFX have removed the SPB 2000 loader control statement in HCPPFX. If the problem persists, contact IBM software support.

HCP9041W UNABLE TO SWITCH BACK TO ESA/390 MODE

Explanation

This wait state indicates a hardware failure. It could occur for one of the following two reasons:

- An IPL of the system was attempted and after loading the desired program into memory, the Stand-Alone Program Loader (SAPL) could not set the architecture mode back to ESA/390 before passing control to the program. The signal processor set architecture instruction failed even though the processor facility data indicated that it was supported.
- The system termination process completed successfully. During system restart processing (HCPBOU), CP tried to set the architecture mode to ESA/390. The signal processor set architecture instruction failed even though the processor facility data indicated that it was supported.

System action

The system enters a wait state (wait-state code = 9041).

Operator response:
To restart the system, the operator must perform a load-clear or load-normal from the hardware console. The hardware system reset operation will set the architecture mode as appropriate for the processor being used. This will allow CP to IPL.

HCP9042W UNEXPECTED SERVICE SIGNAL INTERRUPTION

Explanation

An unexpected service signal external interruption occurred while HCPSAL or HCPDDR was attempting to obtain the IPL load parameter.

System action

The system enters a disabled wait state (wait-state code 9042).

System programmer response

Retry the IPL. If the problem persists, contact your IBM Support Center personnel.

HCP9043W Unable to process IODF file

Explanation

An IODF statement in the system configuration file was being processed during system initialization and one of the following errors was encountered:

- The specified IODF name is not valid
- The IODF could not be opened
- The IODF could not be read
- The data in the IODF was not valid
- An *osconfig* name was specified, but no matching OSR record was found in the IODF.

System action

The system enters a disabled wait state (wait-state code = 9043)

User response

Verify the validity of the IODF specified on the IODF system configuration file statement and re-IPL, or re-IPL using the NOHCD parameter on the SAPL screen to bypass the IODF system configuration file statement.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a

Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP9044W Unexpected Channel Error

Explanation

An unexpected channel error occurred, either during CP initialization or while using DDR.

System action

The system enters a disabled wait state (wait state code 9044).

System programmer response

Retry the operation. If the problem persists, contact your IBM Support Center personnel.

HCP9045W Unexpected SCSI Initialization Error

Explanation

An unexpected SCSI initialization error occurred during CP initialization.

System action

The system enters a disabled wait state (wait state code 9045).

System programmer response

Retry the operation. If the problem persists, contact your IBM Support Center personnel.

Please make note of the following before contacting IBM: Register 1 will contain the return code, and register 2 will contain the reason code from the SCSI initialization. Register 3 may point to a string describing the area where the error was detected.

HCP9046W Incomplete facility list stored.

Explanation

The CP STFLE output buffer is not large enough to contain the entire response returned from the machine.

System action

The system enters a disabled wait state (wait-state code 9046).

User response

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP9047W IPL PROCESSOR TYPE IS NOT VALID

Explanation

The processor type of the IPL processor is not supported by z/VM.

System action

The system loads a disable wait state.

User response

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

Contact your IBM Support Center personnel for hardware support.

HCP9048W Unable to quiesce an active I/O operation during system restart

Explanation

During system termination processing, an attempt was made to quiesce the I/O subsystem by issuing a CSCH operation to all active I/O requests. One or more active I/O operations could not be terminated prior to the system termination process completing.

When a system restart is attempted, active I/O operations from the previous IPL are detected and terminated. However, after initiating numerous clear-subchannel operations, at least one active I/O operation from the previous IPL could not be terminated. A hardware reset is necessary to quiesce the device(s).

System restart processing cannot continue with active I/O operations from a previous IPL. The system can be restarted only by IPLing from the hardware console.

System action

The system enters a wait state (wait state code = 9048).

User response

IPL the system by performing a system reset load from the hardware console. If the problem persists, contact your IBM Support Center personnel.

HCP9049W The Logical Partition Mode on which the z/VM IPL was performed is not valid

Explanation

A z/VM system IPL was attempted in a logical partition with a mode setting that is not supported by z/VM. The IPL cannot complete.

System action

The system enters a wait state (wait-state code = 9049).

User response

Check the mode setting on the General page of the image profile for the logical partition and ensure that it is one of the following: ESA/390, GENERAL, LINUX only, or z/VM. Then retry the IPL.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP9050W CP-OWNED volume is on a Space-Efficient DASD.

Explanation

CP has detected PAGE, SPOOL, DRCT, PARM, TEMP, Checkpoint, or Warmstart extents on a Space-Efficient volume.

System action

The system stops with a disabled wait state.

User response

The following general registers contain diagnostic information:

- R0 - Device Number
- R1 - Allocation Type Code:
  - 1 - PAGE
  - 2 - SPOOL
  - 3 - DRCT
  - 5 - PARM
  - 4 - TEMP (T-disk)
  - 6 - Checkpoint
  - 7 - Warmstart
- R2 - Starting cylinder number
- R3 - Ending cylinder number
- R8 - RDEV address

To correct this situation:

- Consider removing the device from the system configuration.
- Consider changing the allocation of the device to a non-Space-Efficient state.
- Then, IPL the system again.

HCP9052W The variations of this message are explained below.

Explanation

- Error reading PDR from volume *label* for SSI *ssi_name*
- Error updating PDR on volume *label* for SSI *ssi_name*
- PDR volume *label* not online or not in CP-owned or user volume list

- PDR and defined configurations do not match
- SSI level is incompatible with the SSI cluster
- Cross-system timeout setting is incompatible with the SSI cluster
- Error upgrading PDR on volume *label* for SSI *ssi_name*

There is a problem with the persistent data record (PDR). The system cannot initialize and function as part of an SSI cluster.

System action

The system enters a disabled wait state (wait state code = 9052).

User response

Determine what caused the problem. If another member in the SSI cluster is active, make changes to fix the problem from that member. If no other member in the SSI cluster is active, then re-IPL the local system using the REPAIR IPL parameter, fix the problem, and re-IPL the system in order for it to join the SSI cluster. For more information, see Using the Stand-Alone Program Loader in *z/VM: System Operation*.

If this message was issued because an error occurred while trying to upgrade the PDR, use the FORMSSI utility to manually upgrade the PDR. See *z/VM: CP Commands and Utilities Reference* for information on the FORMSSI utility. If necessary, contact your IBM Support Center personnel.

HCP9053W	**The variations of this message are explained below.**
— Variation 1	**PDR on volume *volid1* is obsolete and replacement PDR volume *volid2* is not online**

Explanation

The PDR on the volume specified on the SSI statement in the system configuration file is obsolete because it was relocated by a SET SSI PDRVOLUME command, and the specified replacement PDR volume is not online.

System action

The system enters a disabled wait state (wait state code = 9053).

User response

Make sure the specified replacement PDR volume is online.

— Variation 2	**PDR on volume *volid1* is obsolete and replacement PDR volume *volid2* is not attached to the system**

Explanation

The PDR on the volume specified on the SSI statement in the system configuration file is obsolete because it was relocated by a SET SSI PDRVOLUME command, and the specified replacement PDR volume is not attached to the system.

System action

The system enters a disabled wait state (wait state code = 9053).

User response

Make sure the specified replacement PDR volume is attached to the system.

— Variation 3	**Non-obsolete PDR is not found**

Explanation

The PDR on the volume specified on the SSI statement in the system configuration file is obsolete because it was relocated by a SET SSI PDRVOLUME command, and all PDRs found in the replacement chain are obsolete. This can happen when more than two successful PDR relocations have occurred without any update to the SSI configuration statement.

System action

The system enters a disabled wait state (wait state code = 9053).

User response

Make sure that the SSI statement in the system configuration file is updated with the current PDR volume.

HCP9054W	**The variations of this message are explained below.**

Explanation

- Error reading allocation map for volume *label* containing the PDR
- Cylinder 0 is not allocated PERM for volume *label* containing the PDR
- I/O error clearing PDR on volume *label*

The CLEARPDR IPL parameter was specified, and there was a problem accessing the volume or writing out the new persistent data record (PDR). The system cannot continue if it cannot access the PDR.

System action

The system enters a disabled wait state (wait state code = 9054).

User response

Determine what caused the problem. Check for equipment failures. Check that the volume specified is a CP-formatted read/write D/T3390 DASD. Re-IPL using the REPAIR IPL parameter and verify the volume can be accessed by using the CPFMTXA or ICKDSF utility to display the allocation map. After verifying the volume is functional and is correctly formatted, use the FORMSSI utility to reinitialize the PDR on the volume instead of by using the CLEARPDR IPL parameter.

HCP9060W	**The variations of this message are explained below.**
— Variation 1	**CP ABEND *code* OCCURRED DURING HYPERSWAP**

Explanation

A CP abend occurred after the first device was quiesced and before the last device was resumed. It is unknown how many devices, if any, have been swapped. No dump has been taken, no checkpoint information has been written, and the PDR has not been updated.

System action

The system enters a wait state (wait state code = 9060).

User response

If the system is a member of an SSI cluster, use the SET SSI command to declare the abending system DOWN to allow the SSI cluster to return to the STABLE mode. If there is dedicated dump space, a system restart can be used to obtain a dump. Otherwise, a stand-alone dump must be taken. The system will be restarted by GDPS which will IPL the system with the correct volumes.

— Variation 2	**SHUTDOWN OCCURRED DURING HYPERSWAP**

Explanation

SHUTDOWN occurred after the first device was quiesced and before the last device was resumed. It is unknown how many devices, if any, have been swapped. No dump has been taken, no checkpoint information has been written, and the PDR has not been updated.

System action

The system enters a wait state (wait state code = 9060).

User response

If the system is a member of an SSI cluster which did not return to STABLE modeham, you might need to use the SET SSI command to declare the system DOWN. The system will be restarted by GDPS which will IPL the system with the correct volumes.

HCP9062W	**The program loaded by {SAPL| software restart} experienced a program check.**

Explanation

The Stand-Alone Program Loader (SAPL) or CP's software restart processing (bounce) has finished processing and has passed control to the module that was loaded. If the module was loaded above X'2000', SAPL or bounce processing has set the Program New PSW in both the ESA/390 and z/Architecture locations of the prefix page to load this disabled wait state. If the program experiences a program check before it sets the Program New PSW, this wait state occurs. The most likely reasons for the program check are:

- The program was written to run under CMS and is not capable of running as a stand-alone utility.
- The program received control with z/Architecture architectural mode active and it does not understand that environment.

System action

The system loads a disabled wait state (wait-state code = 9062).

User response

Select an appropriate module for SAPL or CP bounce processing to load.

HCP9090W	**A hard abend, soft abend, snapdump abend or unknown SVC has occurred and CP has been IPLed from the DVD. Normal**

system termination and dump generation is not possible in this environment.

Explanation

An abend occurred during product installation and all CP-owned space is on volatile storage (disk in memory).

System action

The system enters a disabled wait state (wait state code 9090).

Operator response

Take a stand-alone dump. Then contact your system support personnel.

HCP9100I CHANNEL PATH TEMPORARY ERROR ON CHANNEL PATH *xxxx*

Explanation

While attempting to service a request from a device not yet identified, the channel subsystem encountered a malfunction. The *xxxx* variable is the channel path identifier.

System action

System operation continues.

Operator response

Recovery of the device that caused the channel report to be generated may require external action. Use the channel path identifier to locate the source of the error. If the problem continues, call your system support personnel.

Programmer response

Examine the SLH (subchannel logout handler) record within LOGREC for specific hardware error conditions. Contact your IBM Support Center personnel to diagnose and correct the hardware error.

HCP9101I MACHINE CHECK ON CPU *nn*. MCIC = *xxxxxxxx xxxxxxxx* [MACHINE CHECK ON CPU *nn*. USER=*userid*]

Explanation

A machine check has occurred on the specified processor. The MCIC (machine check interrupt code) identifies the type of error. If the machine check affects the operation of a virtual machine, the second line of the message is displayed, which includes the user ID (*userid*) of the affected virtual machine.

Note: CRW-pending machine checks will not issue this message, since they are an architected part of the I/O subsystem and do not necessarily represent errors.

System action

Depending on the severity of the error and what the system happens to be doing at the time the error occurs, the system may or may not be able to continue with normal operation. The possible outcomes are:

- System operation may continue with no impact.
- System operation may continue with the failing processor being varied offline automatically.
- The system may terminate, followed by an automatic software re-IPL.
- The system may terminate without an automatic software re-IPL.

Operator response

Watch for other messages that immediately follow this one. They tell you which of the possible outcomes this incident results in. If the failing processor gets varied offline, or if machine checks occur frequently, notify your system support personnel.

If the system continues normal operation and the failed processor gets varied offline, the operator may consider varying the failed processor back online using the CP VARY command. The machine check may have been an isolated event that will not repeat itself. However, there is a risk in varying the failed processor back online because the error may repeat itself. And if the error does repeat, there is no guarantee that the error will again occur at a point where normal operation can continue; the system might terminate next time.

HCP9102E MACHINE CHECKS: 2ND ERROR WHILE HANDLING 1ST.

Explanation

Before the machine-check handler finished handling one machine check, another machine check (or possibly a check-stop) occurred.

System action

System operation will stop. The termination may or may not be followed by an automatic software re-IPL.

Operator response

Watch for a following message to see if an automatic software re-IPL occurs. If it does not occur, consider notifying system support personnel to look at the problem while the system is down, instead of manually re-IPLing immediately.

Review the conditions that might have led to the wait state by reading the messages displayed on an emergency messages console. If an emergency messages console is not defined or is not available, open the Operating System Messages window on a Hardware Management Console (HMC) for the logical partition where z/VM is running.

If additional problem determination must be performed to identify the cause of the problem, take a stand-alone dump if you are running a first level system and contact your system support representative. If you are running a second level system, take a VMDUMP.

HCP9103E THE MCIC IS NOT VALID. (CAUSE OF INTERRUPTION IS MISSING.)

Explanation

Message HCP9101I describes the machine check that had an invalid MCIC (machine check interrupt code). The bits in the first 2 bytes of the MCIC identify a cause or type of error, and at least one of these bits must be a 1-bit. In this case, however, none of the expected bits was present. The architecture does not permit this; therefore, there is not a proper machine check to work with.

System action

System operation stops. There is not any automatic software re-IPL afterward.

Operator response

Take a stand-alone dump and contact your system support personnel.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP9104I The storage page at *xxxxxxxx* will be taken offline if possible.

Explanation

This message relates to the machine check that message HCP9101I describes.

That machine check identifies a storage error at the page address given in the present message.

Message HCP9101I precedes this message.

System action

The system has noted that the page is in error. If the page is part of the paging pool, it is taken offline as soon as it becomes available and is not used again. However, even if it is a part of the paging pool, there is no guarantee that it can be taken offline any time soon; for example, it may be locked in storage for an indefinite time before becoming available to be varied offline. In the meantime, the page can cause more errors.

Operator response

None.

HCP9105D Machine-check warning: A power or cooling failure is imminent.

Explanation

Message HCP9101I precedes this message and identifies a machine check.

Message HCP9105W indicates there is a machine-check warning condition present in that machine check. This indicates that system power or cooling is failing.

System action

The system action is uncertain. The hardware may fail almost immediately, or in seconds or minutes, or possibly never. Meanwhile, system operation continues. The warning condition is sent to virtual machines to give them a chance to checkpoint themselves, if possible.

Operator response

If the hardware does not fail instantly, send a message to all users warning them to prepare for the failure.

Once this message is issued, the system runs disabled for further warning conditions. If the system is still running after several minutes, you may wish to determine if the problem has gone away or if it is still there. To do so, enter:

```
SET MODE RECORD
```

This will enable the system once again for warning conditions. If the problem is still present, you should immediately receive this same message again.

HCP9106I A machine-check degradation is present. There may be possible buffer or TLB damage.

Explanation

Message HCP9101I precedes this message and identifies a machine check.

Message HCP9106I indicates that there was a machine-check degradation condition present in that machine check.

System action

The system may run more slowly because of the loss of some of the hardware.

Operator response

Notify your system support personnel. Send a message to the users to notify them that performance may decrease.

HCP9107D Recording was disabled for "system recovery" machine check.

Explanation

The system has disabled itself from recording further system-recovery machine checks. It does this after 12 system-recovery type machine checks occur. This is done so that these machine checks will not fill up the error log or flood the operator's console with messages.

System action

Normal system operation continues, but without reporting system recovery errors.

Operator response

If system recovery errors have not been too frequent, and you do want to have them reported to you and recorded in the error log in the future, enter the SET MODE command, as follows, to enable reporting of system recovery errors once again:

```
SET MODE RECORD
```

HCP9108E UNEXPECTED ERROR. POSSIBLY CAUSED BY SOFTWARE.

Explanation

A condition that normally produces an abend has occurred, but it occurred in the machine-check handler, where an abend cannot be safely issued. Therefore, system termination is being initiated directly from the machine-check handler rather than from the abend processor.

System action

The system stops. An automatic software re-IPL will not follow this termination.

Operator response

Notify your system support personnel.

HCP9109I System operation continues.

Explanation

The machine check that message HCP9101I describes, or the check-stop that message HCP610I describes, has been handled successfully. System termination was not required.

System action

System operation continues. If the error was a check-stop, the failed processor will soon be varied offline. If the error was a machine check, the failed processor may or may not be varied offline, depending on the severity of the error.

Operator response

None.

HCP9110I Reporting will be suspended temporarily because machine checks are occurring too frequently.

Explanation

In the past few minutes, machine checks have occurred frequently. In order to avoid tying up the console with error messages, machine-check reporting is being suspended for a few minutes. Recording these errors in the error log for CPEREP is also suspended. The suspension is selective. New types of errors are still reported and recorded. Also, the suspension is only temporary. In a few minutes the system returns (unannounced) to normal operation unless the frequent errors persist.

System action

Normal operation of the system continues, but fewer errors are being reported.

Operator response

If the problem persists, contact your system support personnel.

Programmer response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

HCP9150E	**A(n) {equipment|receiver} check has occurred because the signalling facility for processor *nnnn* is damaged.**

Explanation

A SIGP SENSE showed either an equipment check or a receiver check. These checks indicate that the signal has failed. The unresponsive processor detection function detected this situation.

System action

The message is repeated every ten seconds until the condition is corrected or the failing processor is varied offline.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

User response

None.

HCP9151E	**Processor *nnnn* {has stopped| operator is intervening.}**

Explanation

The unresponsive processor detection function has detected a processor that is unresponsive because of an OPERATOR INTERVENING or STOPPED condition.

System action

The message is repeated every ten seconds until the condition is corrected.

Operator response

Start the processor if the STOPPED condition is indicated. For OPERATOR INTERVENING, stop doing whatever is causing the intervention to be detected.

User response

None.

HCP9152E	**The variations of this message are explained below.**
— Variation 1	**Processor *nnnn* is being varied offline because it is not responsive [during {parking|unparking}].**

Explanation

The unresponsive processor detection function has determined that a processor is unresponsive.

System action

The unresponsive processor is varied offline.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem. You can try to vary the processor back online. The resets involved in varying the processor offline and then back on again might clear the condition.

User response

None.

— Variation 2	**Core *mmmm* is being varied offline because processor *nnnn* is not responsive during {parking| unparking}.**

Explanation

The unresponsive processor detection function has determined that a processor is unresponsive.

System action

The entire core containing the unresponsive processor is varied offline.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem. You can try to vary the core back online. The resets involved in varying the core offline and then back on again might clear the condition.

User response

None.

— Variation 3 **Processor *nnnn* is being restarted because it is not responsive.**

Explanation

The unresponsive processor detection function has determined that a processor is unresponsive.

System action

The unresponsive processor is restarted.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem.

User response

None.

— Variation 4 **Processor *nnnn* is being varied offline because it is not responsive when executing a task while being parked.**

Explanation

The unresponsive processor detection function has determined that a processor is unresponsive.

System action

The unresponsive processor is varied offline.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem. You can try to vary the processor back online. The resets involved in varying the processor offline and then back on again might clear the condition.

User response

None.

— Variation 5 **Core *mmmm* is being varied offline because processor *nnnn* is not responsive when executing a task while being parked.**

Explanation

The unresponsive processor detection function has determined that a processor is unresponsive.

System action

The containing core is varied offline.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the hardware problem. You can try to vary the core back online. The resets involved in varying the core offline and then back on again might clear the condition.

User response

None.

— Variation 6 **Core *mmmm* is being varied offline because processor *nnnn* is not responsive during thread activation.**

Explanation

The unresponsive processor detection function has determined that a processor was unresponsive during an attempt to activate the processor in response to a SET MT command.

System action

The entire core containing the unresponsive processor is varied offline.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the problem. You can try to vary the core back online. The resets involved in varying the core offline and then back on again might clear the condition.

User response

None.

— Variation 7 **Core *mmmm* is being varied offline because processor *nnnn* is not responsive during thread deactivation.**

Explanation

The unresponsive processor detection function has determined that a processor was unresponsive during an attempt to deactivate the processor in response to a SET MT command.

System action

The entire core containing the unresponsive processor is varied offline.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the problem. You can try to vary the core back online. The resets involved in varying the core offline and then back on again might clear the condition.

User response

None.

HCP9155E **{Processor *nnnn*|Core *nnnn*} is being varied offline due to a check-stop.**

Explanation

A processor or a processor of a core has encountered a check-stop that precludes its further operation.

System action

The failed processor or entire core containing the failed processor is varied offline.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the check-stop problem.

HCP9156E **Processor *nnnn* is being restarted due to a severe machine check.**

Explanation

A processor has encountered a severe machine check that might impede its further operation. The system is resetting and restarting the processor.

System action

The failed processor is restarted.

Operator response

Contact your IBM Support Center personnel to diagnose and correct the machine check problem.

HCP9200E **System recovery failure; configuration error**

Explanation

One of these conditions occurred:

- A CP-owned volume that was present in the checkpointed system is not present in the current system.
- A CP-owned volume contained a spooling allocation and is present in a different slot or position in the CP-owned volume list.

System action

Message HCP9205A asks the operator whether a force start is desired.

Operator response

The operator should enter FORCE if a force start is desired. Otherwise, the operator should enter STOP to stop processing.

HCP9200W **System recovery failed; configuration error.**

Explanation

A CP-owned volume that was present in the checkpointed system is not present in the current system, or it contained a spooling allocation and is present in a different position in the CPVOL list.

System action

The system enters a wait state (wait-state code = 9200).

Operator response

Contact your system support personnel or the IBM Support Center for assistance.

Programmer response

If the only change to the CP-OWNED statements was to remove nonspool volumes without changing the relative position of the spool volumes, then a FORCE start will avoid this check. Otherwise, correct your SYSTEM CONFIG file and IPL.

HCP9201I **System recovery failed due to a recording error.**

Explanation

During system warm-start processing, an invalid system data record was encountered.

System action

System warm-start processing continues.

User response

None.

HCP9202I Unit record recovery is incomplete.

Explanation

The unit record devices defined in the checkpointed system do not occur in the configuration of the system currently being IPLed.

System action

Warm-start processing continues with the next logical phase. Any unit record devices remaining to be warm-started will be skipped.

User response

None.

HCP9203W System recovery failed during warm start because the block requested is beyond the checkpoint area.

Explanation

During warm-start processing, an EREP, accounting, or system message block was requested outside the system checkpoint area.

System action

Stop warm-start processing (wait-state code = 9203).

Operator response

Contact your system programmer. To restart, IPL the system and specify a FORCE start.

HCP9204I System recovery failed during a forced start because the block requested is beyond the checkpoint area.

Explanation

During FORCE start processing, an EREP, accounting, or system message block was requested outside the system checkpoint area.

System action

Processing of the EREP, accounting, or system records ends, and the records are lost. The system continues by restoring system spool and data files.

Operator response

Contact your system programmer.

HCP9205A The variations of this message are explained below.

— Variation 1 Invalid warm start data encountered. No files have been deleted yet. To change to a force start, enter FORCE. To stop processing, enter STOP.

Explanation

The operator has specified a warm start, and warm start data that is not valid was encountered.

System action

Wait for operator response.

Operator response

The operator should enter FORCE if a force start is desired. Otherwise, the operator should enter STOP to stop processing.

— Variation 2 Checkpoint data is not valid. System Data file recovery data may not be valid. Continuation of the system IPL could result in the loss of system data files. To continue COLD start and attempt to recover system data files, enter GO. To stop processing, enter STOP.

Explanation

The data in the checkpoint area is not valid. It is possible the warm start data used to recover system data files is also not valid. This may result in the loss of system data files.

Operator response

- Enter STOP if you wish to stop initialization and preserve the previous state of the spooling system.
- Enter GO to continue initialization. The system attempts to read the warm start data and recover system data files.

HCP9210W SYSTEM TERMINATION COMPLETE; ISSUE A SYSTEM RESET LOAD TO RESTART

Explanation

The system termination process has completed. The system will not restart automatically because CP was unable to terminate an active file load from the processor controller into main store.

If CP is unable to stop the processor controller from loading a file into main store, the system cannot be allowed to restart automatically. To restart the system, the operator must perform a system reset load from the hardware console. The hardware system reset operation will terminate the file load, thus allowing CP to IPL without fear of a possible storage overlay from the processor controller.

System action

The system enters a wait state (wait-state code = 9210).

Operator response

Manually re-IPL the system by performing a system reset load from the hardware service console.

User response

None.

Programmer response

None.

HCP9225I SYSTEM RECOVERY FAILURE; CHECKPOINT AREA FULL

Explanation

The area that the checkpoint information is kept in cannot accept any more data (the cylinders (CKD/ECKD devices) or pages (FBA devices) are full. One reason why checkpoint area cylinders may be full is a large number of accounting, EREP, and symptom records could be included in the data checkpointed in those cylinders. Normally these records are retrieved by virtual machines identified in SYSTEM CONFIG or HCPSYS, but if those virtual machines are not actively retrieving the records, the records will accumulate.

System action

CP aborts checkpoint processing.

If SHUTDOWN was entered:
The system stops.

If SHUTDOWN REIPL was entered:
The system continues and then restarts. Message HCP904E is displayed and the user is prompted to change to a FORCE start. All accounting, EREP, and symptom records are lost.

Operator response

Contact your system programmer or the IBM Support Center for assistance. You may need to allocate more checkpoint cylinders (CKD/ECKD) or pages (FBA). To restart, IPL the system and specify a FORCE start.

HCP9250E SYSTEM DUMP FAILURE; <*reason*>

Explanation

The system was unable to generate an abend dump due to one of the following reasons:

```
NO SPOOL FILE OPEN FOR DUMP
INVALID CP VOLUME NUMBER
DEVICE DEDICATED
DEVICE NOT AVAILABLE
DEVICE NOT OPERATIONAL
DEVICE NOT SUPPORTED
NO DUMP UNIT - INSUFFICIENT SPOOL SPACE
NON-DEDICATED DUMP SPACE DURING HYPERSWAP
UNSUPPORTED DASD DEVICE
```

No dump is produced but symptom record is still cut. A field in the symptom record indicates one of the above reasons why the dump was not generated. The customer can later retrieve the symptom record and find out why there was no dump.

System action

No dump is taken. The system continues the system termination process.

User response

None.

HCP9251E SYSTEM DUMP FAILURE; FATAL I/O ERROR

Explanation

An irrecoverable I/O error occurred during a system abend dump. The system abend dump is unable to continue.

System action

The current system dump stops and normal system recovery procedures are continued.

Operator response

No action can be taken at this point to recover the remainder of the system dump.

HCP9252I DUMPING TO *type/rdev*

Explanation

A system dump is being directed to some, any, or all of the specified device types at the specified real devices.

System action

The system is generating a dump; system operation continues.

Operator response

None.

HCP9253A EOR ON DUMP TAPE; MOUNT NEXT VOLUME

Explanation

The system has reached the end of the tape that is receiving the dump, and another tape needs to be mounted.

System action

The system waits for the tape drive to be readied and will continue generating the dump when the tape drive is ready.

Operator response

Mount a tape to receive the next volume of the dump and ready the drive.

HCP9254E INSUFFICIENT DASD SPACE AVAILABLE FOR THE DUMP, A PARTIAL DUMP WAS TAKEN.

Explanation

There was an insufficient amount of DASD space to contain the entire system abend dump.

System action

System operation continues.

Operator response

Notify your system programmer.

Programmer response

Process the spool files on the system, or manipulate the spool space to free clusters to enable DASD dump space to be assigned for a system abend dump.

HCP9255I Excessive fragmentation of DASD dump space; unable to obtain additional clusters.

Explanation

There were too many allocations.

System action

The system has attempted to compress the cluster definitions to reduce the amount of discontinuity of space allocations.

Operator response

Notify your system programmer.

Programmer response

Process the spool files on the system, or manipulate the spool space to free clusters so that DASD dump space can be assigned more efficiently for a system abend dump.

HCP9258I The current dump setting is OFF, therefore no dump will be generated.

Explanation

During abnormal termination, prior to calling to create a dump, the SET DUMP options were checked. The current settings indicated SET DUMP OFF had been specified. Therefore no dump will be generated.

System action

System termination continues.

Operator response

None.

HCP9259I No dump unit is set. No system abend dump will be generated. To assign a device, issue the SET DUMP command.

Explanation

Not enough space was found on the specified DASD to allocate the system dump file.

If the previous dump device was one or more DASD devices, the previous DASD dump devices were deallocated and have not been restored.

If the previous dump setting was OFF, that setting remains in effect.

System action

The system attempts to set the dump device to a specified DASD but is unable to complete the command. No dump unit is set.

Operator response

Enter the SET DUMP command to assign a new dump device. You may need to process the spool files on the system, or manipulate the spool space to free clusters to enable DASD dump space to be assigned for a system abend dump.

HCP9260E ***type rdev* SYSTEM DUMP FAILURE; FATAL I/O ERROR**

Explanation

An irrecoverable I/O error occurred during a system abend dump which was being directed to the specified device type (*type*) at the specified real device (*rdev*). The system abend dump is unable to continue.

System action

The current system dump is terminated, and normal system recovery procedures are continued.

User response

No action can be taken at this point to recover the remainder of the system dump.

HCP9260I ***X*% of the dump has been completed**

Explanation

This message appears when a dump to DASD or TAPE is being taken. It indicates what percentage of the dump has been completed. This message will be displayed when 25, 50, and 75 percent of the dump has been completed.

The variables in this message are as follows:

X
The percentage of the dump that has completed.

System action

Dump processing continues.

User response

None.

HCP9261I **DUMP COMPLETE ON *yyyy-mm-dd*, CODE *mmmccc***

Explanation

This message appears when a dump to DASD has been completed.

System action

Dump processing complete.

User response

None.

HCP9262E **FIBRE CHANNEL ERROR: OPERATION=*function* RETCODE=*rc* FCP DEV=*rdev* WWPN=*wwpn* LUN=*lun***

Explanation

An I/O error occurred while CP was reading or writing to a snap abend or hard abend dump file on a SCSI LUN.

System action

No dump is taken. If this was a snap dump, the system returns to normal operation; if this was an abend dump, system termination continues.

Operator response

Reset the dump space using the SET DUMP command. If the failure occurs again for the same device, consider using an alternate EDEVICE with different SAN connections. If the problem persists, contact your IBM Support Center personnel.

HCP9262I **PSW = *xxxxxxxx xxxxxxxx***

Explanation

The program status word (PSW) displayed is the PSW at the time of the system failure.

System action

System operation continues.

Operator response

None.

HCP9263I **GREGS 0-7 = *xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx***

Explanation

The general purpose registers are displayed at the time of a system failure.

System action

System operation continues.

Operator response

None.

HCP9264I **GREGS 8-15 = *xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx***

Explanation

The general purpose registers are displayed at the time of a system failure.

System action

System operation continues.

Operator response

None.

HCP9265I **{The SNAPDUMP command has been entered, causing|A system error has caused} the non-destructive dump function to be called. The System will be quiesced until the dump is complete.**

Explanation

One of the following occurred:

- A privileged user entered the SNAPDUMP command to request a snapdump system dump.
- A system error requested a snapdump system dump.

The system could request a snapdump if the error:

- Caused it to be specifically requested
- Requested a soft abend that had been set to snapdump with the use of the SET ABEND command.

System action

A snapdump is created to either the dump device defined at system initialization or the dump device specified by the use of the SET DUMP command.

Operator response

None.

HCP9266I **{A system error has caused the non-destructive dump function to be started|The SNAPDUMP command has been entered|A soft abend re-defined as SNAPDUMP has been started}, however the current dump setting is OFF. No dump will be generated.**

Explanation

SNAPDUMP processing was started because of a system error, the SNAPDUMP command, or because a soft abend redefined as snapdump was hit. When the SET DUMP options were checked, the current settings indicated that SET DUMP OFF had been specified. Therefore, no dump will be generated.

System action

SNAPDUMP processing terminates.

Operator response

If you wish to receive future dumps, enter the SET DUMP command again.

HCP9267E **The system is unable to determine the dump device settings following a non-destructive dump. The dump device is now set OFF. To assign a different device, enter the SET DUMP command.**

Explanation

After creating a non-destructive dump, either through entering the SNAPDUMP command or because of a system error, the system was unable to determine the settings specified in the last SET DUMP command.

System action

The dump device is set OFF and no dump will be generated in the future.

Operator response

Enter the SET DUMP command to assign a different dump device if OFF is not desired.

HCP9270E **DUMPING WAS TERMINATED. A PARTIAL DUMP WAS TAKEN**

Explanation

A shutdown signal was received. The shutdown signal typically results when the operator uses the Load function on the HMC or SE or when the partition is deactivated. In response, the system stopped writing the dump and closed out the dump spool file. The partial dump will be available after the system is IPLed.

System action

The dumping process ends and system termination continues. System termination checkpoints the system and then loads the appropriate wait state PSW to signal that VM shutdown is complete.

Operator response

None.

HCP9275I **SYSTEM TERMINATION IN PROGRESS; RESTART IGNORED**

Explanation

A system restart interrupt was presented during the termination process.

System action

The interrupt is ignored and termination continues.

Operator response

None. If you wish to stop the termination process, you must IPL.

HCP9276W **SYSTEM TERMINATION FAILURE; PROGRAM ERROR**

Explanation

A program check or an SVC interrupt occurred during the termination process.

System action

The system enters a wait state (wait-state code = 9276).

Operator response

Take a stand-alone dump and contact IBM for software support.

HCP9277I **SYSTEM TERMINATION COMPLETE, ATTEMPTING RESTART *yyyy-mm-dd* SYSTEM *sysname***

Explanation

The system termination process has completed without further incident.

System action

The system attempts to reload itself.

Operator response

See the preceding messages for the cause of the system termination and use the applicable operator response.

HCP9278W **System termination failure; program error number 2.**

Explanation

A second program check or an SVC interrupt occurred during the termination process.

System action

The system enters a wait state (wait-state code=9278).

Operator response

Take a standalone dump and contact IBM for software support.

HCP9300E **A system {soft|snapdump} abend *code* has occurred on CPU *nnnn* [for user *userid*,] ({where|and} the virtual CPU has been put into stopped state)**

Explanation

The system is generating either a soft or snapdump abend. The *nnnn* variable indicates the processor that the problem occurred on. The *code* variable is a CP soft or snapdump abend code. The *userid* variable is sent to the system operator to indicate the user ID who received the abend. When the soft or snapdump abend puts the CPU into a stopped state, the message will also include that information. If the virtual CPU is put into a stopped state, the virtual machine must be restarted.

System action

The system spools the general-purpose registers, control registers, floating-point registers, clocks, prefix

pages, trace table, and host pages addressed by the general-purpose registers to a reader spool file. The system then continues normal operation.

Operator response

Contact your system support personnel.

Programmer response

Examine the dump or the CP abend code, or both, to determine the error condition. If the problem persists, contact your IBM Support Center personnel to diagnose and correct the software error.

HCP9301E Snap data processing completed unsuccessfully for soft abend *code*

Explanation

This message informs the system operator that some of the data requested to be preserved and dumped by the failing module could not be saved. The *code* variable is a CP soft abend code. Messages HCP9302I, HCP9303I, HCP9304I, HCP9305I, or HCP9306I are subsequently issued to detail why the data could not be saved.

System action

The system continues to take the dump.

Operator response

See the response of the accompanying message.

HCP9302I Invalid snap data parameter list address

Explanation

The system is collecting data areas to be included in a soft abend dump, and the address of the snap data parameter list is invalid.

System action

The system continues to take the dump. The data area cannot be saved in the dump.

Operator response

Contact IBM for software support.

HCP9303I Invalid snap data list

Explanation

The system is processing a list of storage areas to be included in the soft abend dump, and the list does not contain a valid end-of-list indicator.

System action

The system continues to take the dump. Processing of the snap list stops. The storage areas previously specified in the list are preserved and dumped.

Operator response

Contact IBM for software support.

HCP9304I Storage area(s) specified in the snap list not saved

Explanation

The system could not save a storage area specified to be included in the soft abend dump because the frame containing the storage area was not allocated to the control program.

System action

The system continues to take the dump. If the storage starts in a CP-owned page, that portion is saved. Processing of the list continues.

Operator response

Contact IBM for software support.

HCP9305I Invalid starting savearea address

Explanation

The system is collecting save areas to be included in a soft abend dump, and the address of the starting save area is invalid.

System action

The system continues to take the dump. Save areas are not saved in the dump

Operator response

Contact IBM for software support.

HCP9306I Soft abend work area is full.

Explanation

There is no more room in the frames allocated to the soft abend processor to save the data specified by a failing module.

System action

The system continues to take the dump. Collecting snap data stops.

Operator response

Contact IBM for software support.

HCP9307E Spooling error writing soft abend *code*

Explanation

This message informs the system operator that a spooling error has occurred while data was being written to a system data file during a soft abend. The *code* variable is a CP soft abend code. Message HCP400I, HCP439E, or HCP9308I is subsequently issued to detail the spooling error.

System action

The system tries to close the system data file. If the file can be closed successfully, it will be available to the virtual reader of the dump operator that is specified in the system configuration file by the DUMP operand on the SYSTEM_USERID statement. Soft abend processing stops, and normal system operations continue.

Operator response

See the response of the accompanying message.

HCP9308I Spooling I/O error occurred while reading or writing a system data file.

Explanation

An I/O error occurred that prevented data from being read or written to a system data file.

System action

The system tries to close the system data file. If the file can be closed successfully, it is available for processing; otherwise, the file is purged.

Operator response

If spooling errors persist, check to see if the spool DASD space is formatted correctly.

HCP9309E CP was unable to allocate a soft abend dump file.

Explanation

During initialization and after a soft abend is taken, CP allocates resources for a soft abend dump file. While allocating these resources, one of the following conditions occurred:

- CP ran out of system spool IDs
- CP ran out of spool space
- CP encountered a paging error
- The directory was not valid
- The directory was not found
- The user ID that is specified by the DUMP operand on the SYSTEM_USERID statement in the system configuration file was not defined in the directory.

System action

The resources for a soft abend dump file are not allocated. The system continues normal operation.

User response

If error message HCP847E was issued with this message, the system ran out of spool IDs. Reduce the spooling load by purging unnecessary files. In addition, issue SET ABEND commands to reestablish the current settings and allocate resources for the next soft abend dump.

If the problem is caused because the system dump user ID is not defined in the system directory, the user ID must be added to the directory before the system can allocate resources for a soft abend. The system dump user ID is specified in the system configuration file as the user ID of the virtual machine that will receive system dump files.

If this problem persists, contact your system support personnel.

HCP9310E No soft abend dump files exist.

Explanation

Soft abend processing tried to access a previously allocated soft abend dump file, and the file did not exist.

System action

The soft abend information collected is not written to a system data file. The system continues normal operation.

User response

Contact your system support personnel.

HCP9311I **The SNAP data parameter list is full. Some data will not be included in the dump for soft abend *code*.**

Explanation

This message informs the system operator there is no more room in the snap data parameter list to save the data specified by the failing module. The *code* is a CP soft abend code.

System action

Only those data items that were stored in the snap data parameter list will be in the soft abend dump.

Operator response

No action is required.

HCP9423I **Insufficient storage to allocate an SCMBK. Subchannel measurement will not be enabled for device *XXXX***

Explanation

CP ran out of storage allocated for subchannel measurement blocks. Subchannel measurement is not enabled for the device.

System action

System operation continues.

Operator response

Increase the amount of storage that CP allocates for subchannel measurement blocks by adding/updating a STORAGE SCMBK statement in your system configuration file.

HCP9500E **Invalid substitutions in the following messages from *module name***

Explanation

CP attempted to write a message to the console. The message is more than 8 characters long, which is the length limit for a system message. The *module name* variable refers to the module issuing the message.

System action

The erroneous message is typed without substitution, and system operation continues.

User response

Notify the system programmer.

HCP9501E **MSG*PAGING ERROR: CALLER: *mmmmmm+nnnn* DATA = *substitution-data***

Explanation

A paging error has occurred that prevented the proper format presentation of an error message. The variables are as follows:

mmmmmm
The module issuing the message

nnnn
The offset within the module, where the error message was issued.

System action

System operation continues.

Operator response

If the failure persists, notify system support personnel.

Programmer response

If the problem persists, contact your IBM Support Center personnel to diagnose and correct the software problem.

HCP9901I **LKFAC configuration *config_name* Created**

Explanation

When SET LKFAC is specified with a configuration name, it connects a user to a Multi-Path Lock Facility (MPLF) RPQ simulation configuration. This message is issued if the configuration name was not previously defined in the configuration name table.

System action

The configuration name table is updated appropriately. Processing continues.

User response

None.

HCP9902I ***userid* Added to LKFAC configuration *config_name***

Explanation

When SET LKFAC is specified with a configuration name it connects a user to a Multi-Path Lock Facility (MPLF) RPQ simulation configuration. This message is issued if the configuration name is already defined in the configuration name table.

System action

Processing continues.

User response

None.

HCP9903I ***userid*** **Removed from LKFAC configuration** ***config_name***

Explanation

When SET LKFAC is issued without a configuration name it disconnects a user from a Multi-Path Lock Facility (MPLF) RPQ simulation configuration.

System action

The user is removed from the named MPLF simulation configuration.

User response

None.

HCP9904I **LKFAC configuration** ***config_name*** **Deleted**

Explanation

When SET LKFAC is issued without a configuration name it disconnects a user from a Multi-Path Lock Facility (MPLF) RPQ simulation configuration. This message is issued if the user is the last user connected to the configuration. In this case the configuration is deleted.

System action

The configuration name table is updated and processing continues.

User response

None

HCP9951E **Invalid LKFAC configuration name entered**

Explanation

The Multi-Path Lock Facility (MPLF) RPQ simulation configuration name specified on the SET LKFAC command:

- contains more than 8 characters, or
- does not consist of alphanumeric characters in the range A to Z.

System action

The request is ignored.

User response

Re-enter the SET LKFAC command using a 1- to 8-character alphanumeric configuration name.

HCP9952E **Maximum (32) users assigned to LKFAC configuration** ***config_name***

Explanation

The maximum number of users allowed to be connected to the Multi-Path Lock Facility (MPLF) RPQ simulation configuration is already assigned. The maximum number allowed is 32.

System action

The request is ignored.

User response

None.

HCP9954E **Maximum LKFAC configurations defined,** ***config_name*** **not created**

Explanation

The configuration name table does not contain an available entry to hold the new Multi-Path Lock Facility (MPLF) RPQ simulation configuration. The maximum number of configurations is 250.

System action

The request is ignored.

User response

None.

HCP9955I **No change, LKFAC configuration same as entered**

Explanation

There is no difference between the specified name and the name currently in use for the Multi-Path Lock Facility (MPLF) RPQ simulation configuration.

System action

The request is ignored.

User response

Re-enter the SET LKFAC request with a different name to join a new configuration. Otherwise, no response is necessary.

HCP9961E LKFAC CONFIGURATION *config_name* CANNOT BE FOUND

Explanation

The QUERY processor cannot locate the specified Multi-Path Lock Facility (MPLF) RPQ simulation configuration name in the configuration name table.

System action

The request is ignored.

User response

Re-enter the QUERY LKFAC request with the correct configuration name. Use QUERY LKFAC ALL to display a list of active configuration names.

HCP9962E *userid* not attached to a LKFAC configuration

Explanation

The QUERY LKFAC command was issued without a name specified for the Multi-Path Lock Facility (MPLF) RPQ simulation configuration. When no name is specified, the default is normally a display of information for the user's attached configuration. However, in this case the user is not attached to any configuration.

System action

The request is ignored.

User response

Re-enter the QUERY LKFAC request with the correct configuration name. Use QUERY LKFAC ALL to display a list of active configuration names.

HCP9963E No LKFAC configuration defined

Explanation

A QUERY LKFAC was issued, but the configuration name table was not allocated yet. Therefore, the Multi-Path Lock Facility (MPLF) RPQ simulation configuration cannot be added to the table.

System action

The request is ignored.

User response

None.

HCP9964E User not authorized to use LKFAC simulation support

Explanation

A SET LKFAC command was entered, but the user was not authorized to use via the OPTION LKFAC user directory control statement.

System action

The request is ignored.

User response

To use the Multi-Path Lock Facility (MPLF) RPQ simulation support the user must be authorized to use the SET LKFAC command through specification in the OPTION LKFAC statement in their user directory entry.

HCP9965E Unable to write into one of the IUCV/APPC interrupt buffers.

Explanation

A machine check or protection exception was detected while attempting to write into one of the IUCV/APPC interrupt buffers. Possible causes include:

- A DCSS has overlaid one of the interrupt buffers.
- A paging error was detected when attempting to page in one of the interrupt buffers.
- A machine check was detected while trying to write into one of the interrupt buffers.

System action

An IUCV RTRVBFR is issued to clean up all IUCV/APPC paths for the virtual machine. A system damage machine check is presented to the user.

User response

Correct the storage problem and retry the function.

HCP9966E You do not have LKFAC directory authorization

Explanation

The command that you entered requires that you be authorized for lock facility functions.

System action

System operation continues.

Operator response

None.

System programmer response

Add the OPTION LKFAC statement to the user's directory entry.

User response

Request lock facility authorization from your system programmer and enter the command again when it has been granted.

HCP9967E *type vdev* cannot be used - no real MPLF is available

Explanation

The real device that is backing the virtual device does not have real MPLF or there is no real device associated with the virtual device, and therefore real MPLF is not available for use by this virtual device.

The *vdev* variable identifies the virtual device number.

System action

System operation continues.

Operator response

None.

User response

Reenter the command to a virtual device that is backed by an MPLF-capable real device.

HCP9968E The variations of this message are explained below.

Explanation

- Key alias not found: *alias*
- The key alias contains leading or trailing blanks or an empty string
- The key label contains leading or trailing blanks, invalid characters, or an empty string

The key alias name specified on a command does not exist or is not valid.

System action

System operation continues.

User response

Reissue the command with a valid key alias name, key label, or both. Key labels are limited to EBCDIC characters that translate to valid ASCII characters within the range of X'20' through X'7E', inclusive.

HCP9968I No key aliases found

Explanation

The QUERY KEYALIAS ALL command did not find any key aliases.

System action

System operation continues.

User response

None.

IUG8300E **File *filename filetype filemode* [(*userid vdev*) | (*dirID*)] not found**

Explanation:
A file that is needed by an installation EXEC could not be found.

System action:
Processing stops.

User response:
Review available console and log files for additional messages that might pertain to this message. If the reason for this message is not apparent, contact the IBM Support Center.

IUG8300W **File *filename filetype filemode* [(*userid vdev*) | (*dirID*)] not found**

Explanation

A file that is required by an installation EXEC could not be located. Some instances of this message cite the specific minidisk or SFS directory location at which the file was expected.

System action

Processing stops.

User response

Determine why this file could not be found before proceeding with another command or task.

IUG8301E **Address *addr* is not an emulated device**

Explanation

The indicated address is not an emulated device

System action

Processing stops.

User response

Contact your IBM Support Center personnel for assistance.

IUG8301W **An edevice statement could not be added for *vaddr* to *system_config_name* because *vaddr* is not an emulated device.**

Explanation

Install upgrade processing attempted to retrieve EDEVICE information about a specific address (*vaddr*), but it was unable to obtain this information because the address specified is not an emulated device.

System action

This message is placed in the file called *system_config_name* $WRNFILE on the 2CF0 disk

User response

If an EDEVICE statement is needed in the system configuration file, determine the parameters needed for this statement and add it manually to the system configuration file. Or contact your IBM Support Center personnel for assistance.

IUG8302E **Device path error for *rdev* : *reason***

Explanation

An error was returned from the QUERY EDEV command for the specified device address (*rdev*). The error text from the error is displayed as *reason*.

System action

Processing stops.

User response

Contact your IBM Support Center personnel for assistance.

IUG8303E **Error updating *filename1*. Unable to write backout record to *filename1* for upgrade statement: *statement***
Backout record written to *filename2*.

Explanation

There was an error writing to the backout file (*filename1*). The backout record was written to *filename2* instead.

System action

Processing stops.

User response

Contact your IBM Support Center personnel for assistance.

IUG8304E **No record was found for product *prodname* in *filename***

Explanation

A record for the specified product could not be found in the specified file.

System action

Processing stops.

User response

Contact your IBM Support Center personnel for assistance.

IUG8307E **Not enough unused file modes are available to complete command *cmdname***

Explanation

Access to a required minidisk or directory failed because no file modes were available.

System action

Processing stops.

User response

Release one or more minidisks or directories and re-enter the command.

IUG8311I **{Beginning | End} of help file displayed**

Explanation

You were on the first page of a HELP file and pressed the BACK PF key, or you were on the last page of a HELP file and pressed the FORWARD PF key.

System action

None.

User response

None.

IUG8312E **Error displaying HELP file *filename***

Explanation:
There is an error in the HELP file.

System action:
The HELP file is not displayed.

User response:
Contact the IBM Support Center personnel for assistance.

IUG8314E **You cannot run *progname* from this user ID. It must be run from *userid***

Explanation

The program cannot be run from the user ID where you previously tried to run it. the program must be run from *userid*.

System action

Processing stops.

User response

Log on to *userid* and reissue the command.

IUG8315E **Corresponding CTCAs must have the same number of addresses**

Explanation

When installing a multi-member SSI cluster, you must indicate channel-to-channel connections between the members. This includes ensuring that the number of CTCA addresses are the same for each member.

System action

The panel is redisplayed.

User response

Enter the correct the number of CTCA addresses.

IUG8319E **Parameter missing after *cmdname*.**

Explanation

The command was entered without a required parameter.

System action

Processing stops.

User response

Reissue the command with the required parameter.

IUG8323E **You must *action* before running *progname***

Explanation

The specified action must be completed in order to run the program listed.

System action

Processing stops.

User response

Complete the action requested and rerun the program. If the problem persists, contact your IBM Support Center personnel.

IUG8325E ***progname* cannot be run on {a non-SSI system or an SSI cluster with only one member | the first member of the SSI cluster | an SSI cluster with more than one member}.**

Explanation

The indicated program cannot be run in the specified environment.

System action

Processing stops.

User response

Contact your IBM Support Center personnel.

IUG8329E ***progname1* must have completed successfully before running *progname2***

Explanation

progname2 was run prior to *progname1*, or before *progname1* completed successfully.

System action

Processing stops.

User response

Run *progname1* to completion; then rerun *progname2*.

IUG8330E **Device address must be between *rdev1* and *rdev2***

Explanation

You specified a device address that was not within the required address range shown in the message (*rdev1-rdev2*, inclusive).

System action

Processing continues.

User response

Specify a device address within the required range.

IUG8331E **Not enough virtual storage defined to install. A minimum of *size* is required.**

Explanation

Your virtual storage size does not meet the minimum required to perform the install. The minimum is *size*.

System action

Processing ends.

User response

Specify a device address within the required range.

IUG8332I **Unable to receive console listing. It has been left in your reader [as RDR file *filename*]**

Explanation

An error occurred while trying to receive the console listing from the reader. This can happen for various reasons. The console log remains in the user's reader.

System action

None.

User response

Correct the problem so that you can receive the console listing.

IUG8333E **Value returned from character to decimal conversion is not valid**

Explanation

An incorrect value was returned when trying to determine the size of the spool or page volumes.

System action

Processing stops.

User response

Collect any available information regarding the spool or page volumes in question. Then contact your IBM Support Center personnel.

IUG8335E **You cannot run *progname1* after {starting | running} *progname2***

Explanation

progname1 cannot be run at this time because *progname2* has already started processing or has completely finished processing. These commands must be run in order.

System action

Processing stops.

User response

If you did not accidentally enter the wrong command, contact your IBM Support Center personnel.

IUG8336W **'*cmdname*' has already completed**

Explanation

The indicted command has completed processing.

System action

Processing stops.

User response

Contact the your IBM Support Center personnel.

IUG8338I **Now executing: {*stepname* | *cmdname*}**

Explanation

This is an informational message showing the command or step of a command that is running.

System action

None.

User response

None.

IUG8339I **Bypassing *stepname* due to *condition***

Explanation

The indicated step was not run because of the specified condition.

System action

The step is bypassed.

User response

None.

IUG8341I ***functionname* function has completed successfully**

Explanation

The function completed without errors.

System action

None.

User response

None.

IUG8342E **Command *cmdname* failed with RC=*rc* [while processing file *file_ID* (*device info*)] [Command arguments: *data*]**

Explanation:
The command indicated in the message completed with the given return code. For some instances of this message, the arguments used with the command are listed, in order to provide more context and detail to aid with problem diagnosis. In addition, file and file location information might be provided.

System action:
Processing stops.

User response:
Make a note of the information provided in the message, save any existing problem information, and contact the IBM Support Center.

IUG8344I **Restore command failed with rc = *return_code* - reissuing command**

Explanation

An error occurred during the restore of a disk.

System action

The system reissues the command and processing continues.

User response

None.

IUG8345E The installation of the work system did not complete successfully.

Explanation

You can not run INSTUPGR until the installation of the work system has completed successfully.

System action

Processing stops.

User response

Determine why the work system did not complete successfully, and then complete the installation of the work system. If the problem persists, contact your IBM Support Center personnel.

IUG8346I You have already completed *action* processing for member *membername*

Explanation

Processing for the action has already completed successfully.

System action

Processing continues.

User response

None.

IUG8347E The system you logged on to, *sysname*, is already running release *release_number*

Explanation

You are trying to upgrade a system to a specific release, but the system is already at this release level.

System action

Processing stops.

User response

Verify the release number of the system. If the system is not at the release number specified in the message, contact the your IBM Support Center personnel.

IUG8348E Response [*response*] not valid, please re-enter

Explanation

The response you entered is not valid.

System action

The system waits for a valid response.

User response

Enter a valid response.

IUG8350E One or more procedures were not completed

Explanation

At least one of the procedures attempted by INSTALL processing did not complete.

System action

Processing stops.

User response

Some procedures required by the INSTALL command did not complete. These are listed in the INSTALL $DEBUG$ file. Note the procedures which did not complete and contact your IBM Support Center personnel.

IUG8351E You must specify an {option | operand} on the *cmdname* command

Explanation

The command was entered without a required option or operand.

System action

Processing stops.

User response

Reissue the command with the required option or operand.

IUG8352E ***cmdname*** **command: {operand | option}** ***data*** **is not valid**

Explanation

The command was entered without a required option or operand.

System action

Command processing stops.

User response

Review the operands and options used with the indicated command, ensuring that only valid data is specified. Then reissue the command.

IUG8353E **Undefined function key**

Explanation

You pressed an undefined function key.

System action

None.

User response

Press a defined function key.

IUG8354W **Enter key not supported**

Explanation

You pressed the Enter key in a panel in which the Enter key is not supported.

System action

None.

User response

Press a key that is supported.

IUG8356E **Only one {operand | option} may be specified on the** ***cmdname*** **command**

Explanation

You specified two or more operands or options on the command line. You can specify only one.

System action

Processing stops.

User response

Enter the command again and specify the command syntax correctly.

IUG8359I **Expected RSU file not found. No service will be applied.**

Explanation

No RSU SERVLINK was found. Processing will not attempt to run SERVICE or PUT2PROD.

System action

Processing continues.

User response

None.

IUG8361E ***raddr*** **does not exist**

Explanation

You entered an address that is not defined on the system.

System action

The panel is redisplayed.

User response

Enter a valid address.

IUG8365E **Syntax error in file** ***filename*** **Reason for failure -** ***reason***

Explanation

An error was found in the indicated file.

System action

Command processing stops.

User response

Make a note of the file name and contact your IBM Support Center personnel.

IUG8374E **Unable to find member** ***membername*** **in** ***filename***

Explanation

The system was unable to find the indicated *membername* in the given file.

System action

Processing stops.

User response

Contact your IBM Support Center personnel.

IUG8375E **Error reading *filename filetype filemode*. File is empty or does not exist**

Explanation

The file you specified is empty or does not exist. It cannot be read or updated.

System action

Processing stops.

User response

Make a note of the file name, file type, and file mode, and contact your IBM Support Center personnel.

IUG8376E ***cmdname* ended in error [*reason*]**

Explanation

The specified command has ended in error because of the indicated *reason*.

System action

Processing ends.

User response

Note the command that failed and contact your IBM Support Center personnel.

IUG8377I **The variations of this message are shown below.**

Explanation

1. **You have selected to format the following volumes:**
   labels addrs
2. **You have selected not to format the following volumes:**
   This assumes they have already been formatted.
   labels addrs
3. **You have selected the following CTC addresses:**
   addrs

This informational message displays the DASD and CTCA selections that you made during INSTPLAN.

System action:
None.

User response:
Compare the information listed in this message to the information on your installation worksheets and verify that they match.

IUG8380I **{Restoring IIS to *labels* | DDRing cylinders *cylextents* from *label1* to *label2*}**

Explanation

The specified *action* is being performed.

System action

None.

User response

None.

IUG8385W **Cannot migrate segment *segmentname*. Segment name must be changed**

Explanation:
The indicated segment name exists already.

System action:
Processing stops.

User response:
Make a note of the segment name and contact the IBM Support Center.

IUG8391R ***cmdname* has determined you have loaded some minidisks from a previous invocation of *cmdname*. Do you want to pick up loading these disks where you left off (Y), start over (N), or quit (Q)?**

Explanation

Some minidisks were loaded by a previous invocation of the indicated command.

System action

The system waits for a response, and then takes the action specified by the user's response.

User response

Enter an appropriate response.

IUG8392I ***cmdname* ended successfully**

Explanation

The specified command ended successfully.

System action

None.

User response

None.

IUG8393E **The VM SYSSUF table on the *userid* 51D is missing a :PRODID. entry for the prodid *prodid***

Explanation

When INSTPLAN was run, the VM SYSSUF table was found to be missing product identifiers (*prodid*s).

System action

Processing stops.

User response

Review the VM SYSSUF table. After the table has been corrected, run the INSTPLAN command again. If the reason you received this message is not apparent, contact your IBM Support Center personnel.

IUG8394E **The VM SYSSUF table on the *userid* 51D has incorrect system name information on the :PRODLEV. tag for the following prodids:**
Prodid *prodid* is missing system name: *name*
Prodid *prodid* has an unknown system name: *name*

Explanation

When INSTPLAN was run, the VM SYSSUF table was found to have incorrect or missing member names on the :PRODLEV. tag.

System action

Processing stops.

User response

Review the VM SYSSUF table. After the table has been corrected, run the INSTPLAN command again. If the reason you received this message is not apparent, contact your IBM Support Center personnel.

IUG8396E **{No | Multiple} 'system_identifier * *' statement(s) found in SYSTEM CONFIG**

Explanation

Either no "`system_identifier * *`" statement was found in the system configuration file, or multiple "`system_identifier * *`" statements were found in the system configuration file.

System action

Processing stops.

User response

Make sure you have one and only one "`system_identifier * *`" statement in the system configuration file. If the problem persists, contact your IBM Support Center personnel.

IUG8401E ***cmdname* must be run on a full screen terminal with at least *nn* {lines|columns}. [Your terminal contains *nn* lines.]**

Explanation:
You are trying to run an installation command on a terminal with less than the required number of lines or columns (*nn*).

System action:
Processing stops.

User response:
Change your 3270 session emulator to support more lines or columns and then reissue the command. Or, reissue the command from a supported terminal type.

IUG8402E **IP address and gateway must be in the same subnet**

Explanation

The IP address and the gateway must exist in the same subnet.

System action

Processing stops.

User response

Correct the IP address and gateway. If the problem persists, contact your IBM Support Center personnel.

IUG8403I **SYSTEM CONFIG has been updated to allow member *membername* to be IPLed. Member *membername* will be IPLed by**

issuing the command: SHUTDOWN REIPL *resaddr*

Explanation

The system configuration file has been updated as indicated in the message.

System action

The command `SHUTDOWN REIPL resaddr` will be issued in order to allow *membername* to be IPLed.

User response

None.

IUG8404I **SYSTEM CONFIG has been updated to allow all members to be IPLed ONLY from the LPAR/user ID defined for each member at install time.**

Explanation

This system configuration file has been updated such that all members can be IPLed only from the logical partition and user ID defined for each member at install time.

System action

None.

User response

None.

IUG8405E **Volume *addr* is *nnnn* {cylinders | blocks} It must be at least *nnnn* {cylinders | blocks (*n.n* Gig)} [to match the size defined during INSTPLAN].**

Explanation

During INSTPLAN you defined your DASD size. The size of DASD *addr* is smaller than defined.

System action

Processing stops.

User response

Determine the DASD size and addresses you will use for your install and rerun INSTPLAN with the correct information.

IUG8406E **Address *address* is formatted incorrectly. It must be formatted in 4K blocks**

Explanation

The volume address specified was not formatted correctly.

System action

Processing stops.

User response

Use the CMS FORMAT command to reformat the volume address so that it is specified in 4K blocks.

IUG8407E **Not enough free space is available on the *address* disk. There are *num1* blocks available and *num2* blocks are needed**

Explanation

The indicated number of free blocks (*num2*) are needed on a minidisk to load files during installation, but the minidisk has only *num1* free blocks available.

System action

Processing stops.

User response

Clear some space by erasing files from the disk. You can also detach the minidisk and define a new minidisk at the address indicated (*address*) with at least *num2* blocks of free space available. This minidisk cannot be defined on TEMP space

IUG8411E **Attempt to write data to file *filename* failed with RC=*rc***

Explanation

An error was encountered during an attempt to write information to the indicated file. The return code applies to the command used for this operation.

System action

Command processing stops.

User response

Determine whether the disk where the indicated file resides is full. If the disk is full, clear some space

and try the command or action again. If the problem persists, contact your IBM Support Center personnel.

IUG8418E **Not enough space is available in filepool *filepoolname*. Your existing *filepoolname* filepool has *num1* blocks available. You need *num2* blocks in storage group 2 to load the new filespaces**

Explanation

The indicated number of free blocks (*num2*) are needed in *filepoolname* to run a command.

System action

Processing stops.

User response

Increase the amount of free space in the indicated file pool and reissue the command

IUG8418W **Not enough space is available in filepool *filepoolname*. Your existing *filepoolname* filepool has *num1* blocks available. You need *num2* blocks in storage group 2 to load the new filespaces. You must increase your filepool by *num3* blocks before running *cmdname***

Explanation

The indicated number of free blocks (*num2*) are needed in *filepoolname* to run the indicated command.

System action

Processing stops.

User response

Increase the amount of free space in the indicated file pool and reissue the command

IUG8419E **User ID *aparuser* associated with APAR *aparnum* already exists on this system, however APAR *aparnum* is not installed on this system. Change *aparuser* to a new name, or delete it, and then rerun the command INSTPLAN UPGRADE.**

Explanation

If user ID *aparuser* was found on the system that is being upgraded, but the APAR that would have added this ID is not in production on this system or any other member in an SSI, INSTPLAN issues this error message.

System action

Processing stops.

User response

Rename or delete the *aparuser* user ID and then run the INSTPLAN UPGRADE command again.

IUG8419I **User ID *aparuser* associated with APAR *aparnum* already exists on this system and will not be added by upgrade. If ID *aparuser* was not added to support APAR *aparnum* then change *aparuser* to a new name and rerun the command INSTPLAN UPGRADE.**

Explanation

If the *aparuser* user ID already exists on this system, this message is displayed at the end of the INSTPLAN summary message.

System action

Processing continues.

User response

If needed, rename the *aparuser* user ID. If you don't rename *aparuser*, you must run the INSTPLAN UPGRADE command again.

IUG8422E **Attempt to query disk failed with RC=*rc***

Explanation

A command to query a disk failed with indicated return code.

System action

Processing stops.

User response

Contact your IBM Support Center personnel.

IUG8430E **You must have the disk that contains the image files accessed as *filemode* to run *cmdname***

Explanation

The disk which contains the image files must be accessed at the indicated file mode (*filemode*) to run the indicated command.

System action

Processing stops.

User response

Access the disk containing the image files at the indicated file mode.

IUG8431E **The variations of this message are shown below.**

Explanation

1. **The {*vdev* disk|*dir_ID* directory} must be accessed {as filemode *filemode*|in *status* mode} to run *cmdname***
2. **Disk *vdev* must be linked**
3. **A {*vdev* disk|*dir_ID* directory} must be linked in write mode to run *cmdname***

The command in use requires the listed minidisk or SFS directory to be available as stated by the message. The indicated minidisk or SFS directory either is not accessed, is not accessed at the file mode required, or is not linked (for a minidisk) or accessed (for an SFS directory) with the necessary R/W status.

System action:
Command processing stops.

User response:
Use the appropriate CP LINK and CMS ACCESS commands to ensure that the subject minidisk or SFS directory is available with the required Read/Write status, and is accessed as required. Then reissue the command.

IUG8432E **The size of the *vaddr1* disk (*size1*) does not match the size of the *vaddr2* disk (*size2*) from the *tblname*.**

Explanation

The *vaddr1* disk must be the same size as the definition of the *vaddr2* disk as found in *tblname*.

System action

Processing stops.

User response

Correct the disk sizes, and retry the operation. If the problem persists, contact your IBM Support Center personnel.

IUG8436I ***field* cannot be selected for *install_type***

Explanation

The field you selected is not valid for the indicated install type.

System action

The panel is redisplayed.

User response

Select a valid field or specify a different install type, and then retry the operation.

IUG8437E **Too many {operands | options} : *data***

Explanation

You have entered more command operands or options than the syntax calls for.

System action

Processing stops.

User response

Reissue the command with the correct syntax.

IUG8440I **Now loading [*userid*] *addr* disk. Disk *num1* of *num2***

Explanation

Contents of the specified disk are being loaded from the installation media.

System action

Processing continues.

User response

None.

IUG8443E **Space provided does not meet the minimum requirement**

Explanation

The extents you specified on the install panel did not meet the minimum space requirement.

System action

The panel is redisplayed.

User response

Specify additional space and retry the operation.

IUG8444E ***userid* was previously enrolled with *num1* blocks; *num2* blocks are required**

Explanation

The userid specified was previously enrolled in the system filepool with *num1* blocks, but *num2* blocks are required for MOVE2SFS.

System action

Processing stops.

User response

Unenroll the indicated user ID from the system filepool. MOVE2SFS enrolls the user ID with the correct blocks when MOVE2SFS is restarted.

IUG8445E **{filepool | directory | resource} *resource_name* is [unavailable or] unknown**

Explanation

The indicated filepool, directory, or resource is not available.

System action

Processing stops.

User response

Specify the correct resource and reissue the command.

IUG8446I ***compname* was already moved to SFS**

Explanation

The indicated component was previously moved to SFS.

System action

Processing stops.

User response

None.

IUG8449E **Subdirectory *dirname* could not be created**

Explanation

The specified directory could not be created.

System action

Processing stops.

User response

Check whether you received an error message from the CREATE DIRECTORY command. Also, verify that you are using the correct file pool, and that you are enrolled in that file pool. If the problem persists, contact your IBM Support Center personnel.

IUG8450E **Access of {*dirname* | *diskaddr*} at file mode *filemode* failed with RC=*rc***

Explanation

The access of the indicated minidisk or SFS directory at the specified file mode failed with the displayed return code.

System action

Processing stops.

User response

If you received an error message from the CMS ACCESS command, see CMS ACCESS in *z/VM: CMS Commands and Utilities Reference*. Then either correct the command and reissue it, or contact your IBM Support Center personnel.

IUG8452W ***filename* was not updated for the following component: *compname***

Explanation

The indicated file was not updated due to a processing error.

System action

Processing continues.

User response

Make a note of the file name and component name in the message. Then contact your IBM Support Center personnel.

IUG8453I **Move of component *compname* to SFS completed successfully**

Explanation

The indicated component was successfully moved to SFS.

System action

None

User response

None

IUG8454E **{Not enough unused filemodes are available; *num* are required | No free virtual address are available in the range used by INSTUPGR}**

Explanation

There are not enough free file modes or free virtual addresses available for the INSTUPGR command to use. This command uses addresses in the range of 4000-4100.

System action

Command processing stops.

User response

Free up enough file modes to satisfy the number needed, or free up some addresses in the range 4000-4100, and then reissue INSTUPGR.

IUG8455W ***cmdname* ended with warnings**

Explanation

The indicated command ended, but warnings were issued. These are not severe enough to impact installation processing, but should be investigated to ensure system stability.

System action

None

User response

Investigate all warnings before completing installation processing.

IUG8456I **Processing component *compname***

Explanation

The indicated component is being processed.

System action

Processing continues.

User response

None.

IUG8457W ***filename* was already updated for component *compname***

Explanation

The indicated file was already updated.

System action

None.

User response

Contact your IBM Support Center personnel for assistance.

IUG8458W ***compname* is not found in *filename***

Explanation

The indicated component was not found in the specified file.

System action

Processing continues.

User response

Contact your IBM Support Center personnel.

IUG8459W **Move of *compname* component to SFS completed with warnings.**

Explanation

The move of the specified component (*compname*) completed with warnings. Messages documenting the warnings are displayed to the screen and logged to the file MOVE2FS $MSGLOG$ on the 4CC disk.

System action

Processing continues.

User response

Review the file MOVE2FS $MSGLOG$ on the 4CC disk.

IUG8462E **INSTIPL can only be executed from the INSTALL EXEC**

Explanation

The INSTIPL command can be run only from within the INSTALL EXEC. It cannot be run from the command line.

System action

Processing stops.

User response

If you are installing a system and INSTALL was interrupted, reissue the INSTALL command.

IUG8463E **{ *input* [specified] | Command entered } is not valid[{:|.}] [{*input*| *reason*}]**

Explanation:
The command or input entered on an installation panel is not valid due to the indicated *reason*.

System action:
The panel is redisplayed.

User response:
Remove the incorrect data and try the action again.

IUG8465I **The following minidisks for component *compname* have been reclaimed: *disklist***

Explanation

This message tells you which disks were reclaimed for the indicated component.

System action

Processing continues.

User response

None

IUG8466I ***filename* DIRECT has been updated to comment out reclaimed minidisks for the *compname* user IDs**

Explanation

The *filename* directory was updated to create a new directory with the reclaimed minidisks commented out.

System action

The system updates the *filename* directory as indicated in the Explanation.

User response

None

IUG8470E **Overlapping extents on volume *volser***

Explanation

When specifying free extents on the INSTPLAN UPGRADE panel, overlapping extents were specified on volume *volser*.

System action

The panel is re-displayed.

User response

Ensure that the extents specified on the INSTPLAN UPGRADE panel do not overlap for volume *volser*. Then press F5 to continue.

HCP8471E **Only one *field_type* may be selected**

Explanation

You selected multiple fields of type *field_type* on a panel where only one field can be selected.

System action

The panel is redisplayed.

User response

Select only one field and retry the operation.

IUG8472E **You must *action* before pressing [F5 | F8] [to process]**

Explanation

F5 or F8 was pressed before you filled in all required fields.

System action

The panel is redisplayed.

User response

Fill in all required fields and press F5 or F8 to process.

IUG8473E **DASD *rdev1* [*rdev2 rdev3 ...*] not attached**

Explanation

One or more required DASD addresses are not attached to this user ID.

System action

Processing stops.

User response

Use the CP ATTACH command to attach the required DASD addresses and reissue the command.

IUG8474E **The DASD type of the *addr* disk (*type1*) does not match the DASD type on the DVDPRIME command (*type2*)**

Explanation

The DASD type of minidisk *addr* does not match the DASD type specified on the DVDPRIME command.

System action

Processing stops.

User response

The DASD type on the DVDPRIME command must match the DASD type of your installation media. The minidisk in the message must also match the DASD of the installation media. Verify you are installing on the correct DASD type.

IUG8475I **{Final Selections Display | System Upgrade Information}**

Explanation

This message displays the indicated title at the end of INSTPLAN (UPGRADE prior to displaying the final selections made.

System action

The title is displayed.

User response

None.

IUG8477E **A temporary MIGR51D file has been found on the {current| previous} release Software Inventory disk (51D). This disk must be restored prior to restarting MIGR51D.**

Explanation:
A previous instance of MIGR51D failed, leaving the software inventory files stored in temporary files on the disk cited by the message.

System action:
MIGR51D processing stops.

User response:
Replace the existing software inventory files with the temporary copies of the software inventory files before continuing.

IUG8478R **This message is shown below.**

Explanation

Enter the filemode letter of the Software Inventory disk (51D) from the previous release.
Press 'Enter' to Exit.

An INSTALL program needs the file mode of the 51D disk from the previous release.

System action:
The system waits for a response.

User response:
Enter the file mode of the 51D disk from the previous release. If this disk is not accessed, exit the prompt, access the disk, and retry the operation.

IUG8479R **This message is shown below.**

Explanation

No products have been identified that are eligible for MIGR51D data migration; bypassing display of MIGR51D product selection panel
Press 'Enter' to continue

During its evaluation of the content of the old-level and new-level 51D resources, the MIGR51D utility has identified no products for which migration of their respective data is applicable or necessary. Because there are no migration candidate products to display on the MIGR51D **Product Migration** panel, this panel is not displayed. The utility then continues, and displays its **Segment Migration** panel.

This situation could occur if no products, other than those associated with the z/VM deliverable (its "base" components), have been installed on the respective old-level and new-level z/VM systems.

System action:
The system waits for a response.

User response:
Press Enter to allow the system to continue with use of the MIGR51D utility, to manage the migration of selected segments, if appropriate for your installation. Upon completion of the MIGR51D utility, the MIGR51D MSGLOG file can be reviewed to ascertain which products have been excluded from data migration actions.

IUG8480E **The Software Inventory disk for the previous release did not pass validity checking. Please correct and re-issue *cmdname***

Explanation

Either a problem was found with the 51D disk from the previous release, or you entered the wrong file mode for this disk.

System action

Processing stops.

User response

Make sure you entered the correct file mode for the 51D disk from the previous release. Otherwise, investigate the reason why the disk did not pass the validity checking. Then reissue *cmdname*.

IUG8481I **Exiting *cmdname* at user request**

Explanation:
You selected to exit the indicated command.

System action:
Processing stops.

User response:
None.

IUG8482E **A DASD {volume with label *label* | *addr*} is already attached to the system. Choose a new {label | address}.**

Explanation

The address or label entered on the INSTPLAN panel is already in use by the system. You must use a different address or label for your installation.

System action

The panel is redisplayed.

User response

Determine a new address or label for the volume and enter the data on the panel.

IUG8483E **{Label *label* | DASD *addr*} matches the {label | address} of a release volume that is in use. Choose a different {label | address}.**

Explanation

The address or label entered on the INSTPLAN panel is already being used for the release volume. You must use a different address or label for your installation.

System action

The panel is redisplayed.

User response

Determine a new address or label for the volume and enter the data on the panel.

IUG8484R **Please place the "z/VM Product Package for installation on *dasd_type* - DISC 2" DVD in the DVD drive, then type GO to continue or type exit to quit**

Explanation

The z/VM Product Package Disc 2 DVD is required in order to run the installation program.

System action

The system waits for a response.

User response

Place the z/VM Product Package Disc 2 DVD in the drive you are using for installation. Then specify GO and press the Enter key to continue.

IUG8485E {FBA | 3390} DASD must be at least *size*

Explanation

The DASD size specified on the installation panel was less than the minimum required.

System action

The panel is redisplayed.

User response

Specify a DASD size equal to or greater than the size indicated in the error message.

IUG8486E *fieldname* field must be blank for *install_type*

Explanation

The indicated field cannot contain data for the listed install type.

System action

The panel is redisplayed.

User response

Change the field to a blank and continue.

IUG8487E The variations of this message are shown below.

Explanation

1. ***fieldname* must be {hexadecimal|alphanumeric|numeric} and contain no blanks**
2. ***fieldname* cannot contain blanks**
3. ***fieldname* cannot be {hexadecimal|alphanumeric|numeric}**

Data entered into a field on the panel is in an incorrect format.

System action:
The panel is redisplayed.

User response:
Enter the data in the correct format.

IUG8488E Number of members must be from *num1* to *num2*

Explanation

For an SSI install, only *num1* to *num2* members are supported.

System action

The panel is redisplayed.

User response

Enter an allowed number of members.

IUG8489E You must enter at least one valid CTCA for each member

Explanation

Each member must have at least one valid CTCA connection for communication in an SSI environment.

System action

The panel is redisplayed.

User response

Specify a valid CTCA connection (address) for each member.

IUG8490I Now {formatting | labeling | allocating} volume: *addr*

Explanation

This message identifies which DASD volume is being formatted, labeled or allocated.

System action

Processing continues.

User response

None.

IUG8492W Not enough disk space defined to load the {COMMON | RELEASE | MEMBER} volume.

Explanation

The DASD selected during installation planning do not contain sufficient space to define the minidisks required to load the system.

System action

Processing stops.

User response

Contact your IBM Support Center personnel.

IUG8493I Issuing XAUTOLOG for *userid*

Explanation

An XAUTOLOG command is being issued to log on the specified user ID.

System action

Processing continues.

User response

None.

IUG8494E Volume *addr* cannot be used as a release volume. *label* must be a volume that can be attached to the system.

Explanation

The RELEASE type volume must be able to be attached to the system. The volume you specified on the panel to be used as a RELEASE type volume (*addr label*) cannot be attached to the system.

System action

Processing stops.

User response

Review the DASD requirements in *z/VM: Installation Guide*. Select DASD volumes that can be attached to the system. Then rerun INSTPLAN and specify the newly selected DASD volumes.

IUG8495E The release volume(s), defined when the first member was upgraded, are not attached to SYSTEM as required.

Explanation

Once the first member of a multi-member SSI has been upgraded, subsequent members must have the release volumes for the new release attached in order to upgrade. The release volumes defined during the first member upgrade are not attached to this member.

System action

Processing stops.

User response

Attach the release volumes defined during the first member upgrade to this member. Rerun the command that failed.

IUG8496E The following release volume(s), defined when the first member was upgraded, are not attached to SYSTEM as required:
reason
Ensure the new release volumes are attached to SYSTEM.

Explanation

Once the first member of a multi-member SSI has been upgraded, subsequent members must have the release volumes for the new release attached in order to upgrade. The release volumes defined during the first member upgrade are not attached to this system.

System action

Processing stops.

User response

Attach the release volumes defined during the first member upgrade to this member. Rerun the command that failed.

IUG8498E Your *addr* disk does not have enough free blocks to handle *cmdname* processing. You need at least *num* free blocks.

Explanation

The indicated *addr* disk does not have enough free space for the installation process to complete. This disk must have at least *num* total free blocks.

System action

Processing stops.

User response

Free enough space on the disk such that there are at least *num* blocks available. Or define a different disk with at least *num* blocks available. Then reissue the command.

IUG8499E The *table_name* table contains the following duplicate key entries:

Explanation

The indicated table contains duplicate key entries. A key entry is a tag within a VMSES/E file. The entries are listed following this message.

System action

Processing stops.

User response

Contact your IBM Support Center personnel.

IUG8500E **Unable to continue due to {existence of backout file | missing UNLOAD files}**

Explanation

The installation upgrade could not continue due to either the existence of the backout file, or because UNLOAD files are missing.

System action

Processing stops.

User response

Contact your IBM Support Center personnel for assistance.

IUG8501I **The command *cmdname* was entered**

Explanation

This message indicates that *cmdname* was entered.

System action

The system runs the indicated command.

User response

None.

IUG8502E ***search_data* not found in file *filename***

Explanation

The specified search data was not found in the file listed.

System action

Processing stops.

User response

Contact your IBM Support Center personnel.

IUG8503W ***userid* does not have administrator authority for filepool *filepool_name***

Explanation

The specified user ID does not have the proper authority to make changes to the named file pool.

System action

Processing continues.

User response

To give this user administrator authority for the file pool, see the description of the ENROLL ADMINISTRATOR command in *z/VM: CMS File Pool Planning, Administration, and Operation*. If the problem persists, contact your IBM Support Center personnel.

IUG8504W **Unable to link *userid vaddr* in MR mode**

Explanation

The installation code could not link a disk in MR mode. This will need to be changed before continuing further.

System action

Processing continues.

User response

Correct the problem before continuing or contact your IBM Support Center.

IUG8506E **File *filename* contains data that is not valid. {Release number in the file is *rel_num* | Directory manager tags are incorrect | Data: *data* | Unknown keyword: *keyword* | No PRODIDs were found in the file on the work system 51D disk}**

Explanation

The specified file contained data which was not valid.

System action

Processing stops.

User response

Contact your IBM Support Center personnel.

IUG8507I *****
Processing record *num* {in the *stage* section of *file_name* | of *total*}

Explanation

This message is not displayed to the screen but instead is written to one of the installation log files for tracking and debugging purposes.

System action

The system writes in an installation log file that the indicated record processing took place.

User response

None.

IUG8508I **Record: *record_text***

Explanation

This message is not displayed to the screen but instead is written to one of the installation log files for tracking and debugging purposes.

System action

The system writes the indicated record and *record_text* in an installation log file.

User response

None.

IUG8509E **Upgrade to z/VM *relnum1* is not supported from z/VM *relnum2* [because a z/VM *relnum3* member exists] [because both z/VM *relnum2* and z/VM *relnum3* members exist]**

Explanation

You are trying to upgrade from a release combination that is not supported.

System action

Processing stops.

User response

Review the requirements cited in the *z/VM: Installation Guide*, for the type of installation being performed, to determine why this message was received. If the reason why this message was issued still is not apparent, contact your IBM Support Center personnel.

IUG8510I **This is not the {first | last} occurrence of this release in the cluster so this record is not added to *filename***
RACF is enabled so this record is not added to *filename*
The disk to be increased is already the required size so this record is not added to *filename*

Explanation

This message is not displayed on the screen but instead is written to one of the installation log files for tracking and debugging purposes.

System action

The system records release information in an installation log file.

User response

None.

IUG8511E **User ID *userid* {already exists | does not exist}**

Explanation

Either a user ID already exists in the directory but should not be there, or a user ID that is supposed to be in the directory is not there

System action

Processing stops.

User response

None.

IUG8512I **The product was not enabled on the system being upgraded. *Prodname* will not be enabled**

Explanation

This message is not displayed to the screen but instead is written to one of the installation log files for tracking and debugging purposes.

System action

The system logs that *Prodname* was not enabled on the system being upgraded.

User response

None.

IUG8513I {Filespace *name* in *filepool_name* does not need to be created | User ID *userid* does not need to be enrolled in filepool *filepool_name*}

Explanation

This message is not displayed to the screen but instead is written to one of the installation log files for tracking and debugging purposes.

System action

The system writes the given information in one of the installation log files.

User response

None.

IUG8514I Bypassing record that {begins with '*character*'| contains no data}

Explanation

This message is not displayed to the screen but instead is written to one of the installation log files for tracking and debugging purposes.

System action

The system writes the given information in one of the installation log files.

User response

None.

IUG8515E *userid* does not have the proper privilege class to update the user directory

Explanation

The user ID from which you are running the upgrade installation does not have the proper privilege class to issue the DIRECTXA command to update the user directory.

System action

Processing stops.

User response

Grant *userid* the proper authority (by default, Class A, B, or C) to update the user directory. Or update the user directory from a different user ID that does have the proper authority.

IUG8516E Unable to erase *filename*; Erase failed with RC=*rc* Erase *filename* before re-issuing *cmdname*

Explanation

An attempt to erase the specified file was not successful. This file cannot exist for installation processing to continue.

System action

Processing stops.

User response

Erase the file and reissue the command. Or if the file is on a disk that should not be accessed, release the disk.

IUG8517E The variations of this message are shown below.

Explanation

1. **DASD address *addr* is already attached to the system with volid *volid1*. This does not match the volid *volid2* which was supplied during install planning**
2. **DASD volid *volid1* is already attached to the system at address *addr*. This does not match the address *volid2* which was supplied during install planning**

The DASD attached to the system at the specified address does not match the label defined during installation planning. *volid2* is the volume label or address that was specified during installation planning.

System action:
Processing stops.

User response:
Make sure the *volid2* label defined during planning is correct. If the problem persists, contact the IBM Support Center.

IUG8518E **The following error was returned from a call to directory exit *exit_name***

Explanation

The directory exit returned an error condition. (This message is issued in combination with IUG8520E.)

System action

Processing stops.

User response

Contact your IBM Support Center personnel.

IUG8518I **The following information was returned from a call to directory exit *exit_name***

Explanation

The directory exit returned an informational condition. (This message is issued in combination with IUG8520W.)

System action

Processing continues.

User response

None.

IUG8519I **Update supplied was already made to the user directory**

Explanation

The specified update has already been applied.

System action

None.

User response

None.

IUG8520E **Error condition returned from *exit_name***

Explanation

This message is issued in combination with IUG8518E.

IUG8520W **Warning condition returned from *exit_name***

Explanation

This message is issued in combination with IUG8518I.

IUG8521E **File *filename* already contains the following volume labels. These labels were also defined during installation planning to be the labels for the new release volumes: *volume_labels***

Explanation

Your system configuration file already contains the volume labels you designated as the release volume labels during install planning.

System action

Processing stops.

User response

Replace the duplicate volume labels with the correct label names, or contact your IBM Support Center personnel.

IUG8522I **Backout record has been placed in *filename***

Explanation

This message indicates that the Backout record has been placed in *filename*. A Backout record is used by INSTUPGR STAGE1 (BACKOUT to back out any changes which were made during INSTUPGR STAGE1 (COMMIT.

System action

Processing continues.

User response

None.

IUG8523E **Volume *raddr* cannot be detached from the system because minidisks on this volume are linked by one or more users. To identify which user ID's have such links, use the command:**
CP QUERY SYSTEM *raddr*
Detach the listed disks from the appropriate user ID's and then re-issue this command to complete the backout process:
INSTUPGR STAGE1 (BACKOUT

Explanation

When backing out changes made during upgrade installation Stage 1, you need to detach certain volumes from the system. If minidisks on these volumes are in use by other users, this cannot be done.

System action

Processing stops.

User response

Follow the instructions that appear in the message.

IUG8524E **{FORCE | XAUTOLOG} of *userid* did not complete successfully**

Explanation

The indicated command failed for *userid*.

System action

Processing stops. If the FORCE command failed, *userid* is still logged on. If the XAUTOLOG command failed, *userid* is not logged on.

User response

If necessary, log on *userid*. If the problem persists, contact your IBM Support Center personnel.

IUG8525I **No local mods found for product *prodname***

Explanation

During installation, no local modifications were found for *prodname*.

System action

None.

User response

None.

IUG8526E **{File *filename filtetype* not | No files} found on the *userid vaddr* minidisk on your {work | current} system**

Explanation

A file or files needed by installation processing could not be found.

System action

Processing stops.

User response

Check for problems such as using an incorrect *userid* or the wrong *vaddr*. If the problem persists, contact your IBM Support Center personnel.

IUG8527E **Your system does not meet the requirements for upgrade installation. File *filename filetype* does not contain the default value for *value***

Explanation

Values found in the file specified have been changed and are not the default values, which are required for upgrade installation.

System action

Processing stops.

User response

Change back to the default values and retry the operation.

IUG8528W **APAR *aparnum* needs to be applied on the higher release level *level* after upgrade installation has been completed**

Explanation

The APAR specified will need to be applied to the release level specified after you complete your upgrade.

System action

Processing continues.

User response

Apply the APAR after completing the upgrade installation.

IUG8529I **The variations of this message are shown below.**

Explanation

1. **The 190 disk on the current system has been upgraded.**
   You must IPL the 190 disk to access the new

files.
To complete commit processing:
IPL 190 PARM AUTOCR
ACCESS 24CC C
and then re-issue:
INSTUPGR STAGE2 (COMMIT

2. **Rework your local modifications.**
Once you have reworked your local modifications
enter the following commands:
LOGON MIGMAINT
ACCESS 24CC C
and then re-issue:
INSTUPGR STAGE2 (COMMIT

Files on the 190 disk have been upgraded, and you must IPL the 190 disk to access these files. Or, you must rework your local modifications. After you have reworked your local modifications, enter the following commands:

```
LOGON MIGMAINT
ACCESS 24CC C
```

and then re-issue:

```
INSTUPGR STAGE2 (COMMIT
```

System action:
Processing stops.

User response

Enter:

```
IPL 190 PARM AUTOCR
ACCESS 24CC C
```

and then issue the indicated command again.
Or, rework your local modifications and issue the indicated commands.

IUG8530E **Minidisk links for MIGMAINT are incorrect. You must logoff and log back on to obtain the correct links.**

Explanation

The MIGMAINT user ID was unable to link to specific disks that are required in order to complete upgrade installation.

System action

Processing stops.

User response

To ensure that the MIGMAINT user ID is accessing all the correct disks, log off the MIGMAINT user ID and then log it back on. If the problem persists, contact your IBM Support Center personnel.

IUG8531E **You must not user temporary DASD for minidisk *vaddr*. Define *vaddr* as a permanent minidisk.**

Explanation

The disk specified must be defined as a permanent minidisk in the user directory.

System action

Processing stops.

User response

Define the virtual address *vaddr* as a permanent minidisk and reissue the previous command

IUG8532E **Restart this procedure by returning to the step where you issued:**
cmdname
and continue with the instructions in the Installation Guide.

Explanation

The command specified needs to be reissued due to an error condition within the install process. This is usually a recoverable error that is corrected by reissuing the command.

System action

Processing stops.

User response

Return to the step in the *z/VM: Installation Guide* where you issued the specified command and continue from that point.

IUG8533I ***compname* has been loaded to filepool. Disk *userid vaddr* does not need to be {moved | added | deleted}**

Explanation

The component was loaded to the filepool; therefore the specified disk does not have to be moved.

System action

Processing continues.

User response

None.

IUG8534E **You have not designated enough free space to add the *userid vaddr* minidisk**

Explanation

During install planning, free extents were specified where new minidisks could be added. This space was not big enough to hold all the named minidisks.

System action

Processing stops.

User response

Free enough space on the disk, or define a different disk with sufficient space. Then retry the operation.

IUG8535I **Creating temporary work copy of *userid addr* minidisk**

Explanation

A temporary work copy of the indicated minidisk is being created.

System action

Processing continues.

User response

None.

IUG8536W **Customizable file *source_filename source_filetype* was not copied from *source_userid*'s *source_vaddr* to *target_filename target_filetype* on *target_userid*'s *target_vaddr***

Explanation

An upgrade installation command attempted to copy a file from the source disk to the target disk and was unable to obtain the target disk in write mode. An entry is placed in the warning log file (called *member* $WRNFILE or *system_name* $WRNFILE) on the 2CF0 disk.

System action

Processing continues.

User response

Determine why the disk could not be obtained in write mode. Correct the problem and copy the specified file from the source to the target.

IUG8537E ***system_name* $PRODS file found on PMAINT 41D. You must run PUT2PROD for {member|system} *system_name* before running INSTUPGR**

Explanation

The existence of the *system_name* $PRODS file on PMAINT's 41D disk indicates that there is service for *system_name* that has yet to be put into production.

System action

Processing stops.

User response

Log off MIGMAINT and log on to MAINT*vrm* on *system_name* and run PUT2PROD. After PUT2PROD has completed successfully, log back on to MIGMAINT and re-run the INSTUPGR command.

IUG8538W ***source_file* could not be {restored to *target_file* on | erased from} *userID* 's *vaddr*; rc=*return_code***

Explanation

Install processing could not perform a copy, erase, or rename of the *source_file* to the *target_file* on the indicated *userID*'s *vaddr*.

System action

Processing continues.

User response

Investigate why the source file could not be copied, erased, or renamed to the target file, and correct the problem.

IUG8539R **The following user IDs are logged on [the system indicated]. They must be logged off before continuing.**
userid list

Explanation

The user IDs listed can not be logged on while running INSTUPGR.

System action

Processing stops.

User response

Log off the user IDs listed and rerun the command that failed.

IUG8540E **User ID *userid* does not meet the requirements for Upgrade Installation. This user ID must be authorized to issue the command: *command***

Explanation

The user ID used to run installation commands must be authorized for the specified command.

System action

Processing stops.

User response

Review the user ID authorization requirements in *z/VM: Installation Guide*. Verify your installation user ID meets all the requirements. Rerun the command that failed.

IUG8541I **After logging off the users, enter *command* to restart your upgrade.**

Explanation

This message is issued immediately after messages IUG8541W and IUG8541R. The user IDs listed in message IUG8541W might need to be logged off the system to allow the install process to acquire resources needed during the upgrade.

System action

Processing continues.

User response

After the user IDs listed in message IUG8541W are logged off, rerun the command that failed, which is displayed in this message.

IUG8541R **Enter QUIT to exit this exec so you can log off some or all of the users listed above, or enter GO to continue this exec.**

Explanation

This message is issued immediately after message IUG8541W, and is followed by message IUG8514I. The user IDs listed in IUG8541W might need to be logged off the system to allow the install process to acquire resources needed during the upgrade.

System action

Processing continues.

User response

If none of the user IDs listed in IUG8541W need to be logged off, enter GO to continue processing. If there are user IDs that need to be logged off, enter QUIT. The processing will stop to allow you to log off the user IDs. Once the user IDs are logged off, rerun the command that failed, which is displayed in IUG8541I.

IUG8541W **You have users logged on that might need to be logged off before continuing your upgrade. You should consider logging off some or all of the following users. *userid list***

Explanation

This message is followed immediately by message IUG8541R and IUG8541I. The user IDs listed might need to be logged off the system to allow the install process to acquire resources needed during the upgrade.

System action

Processing continues.

User response

If none of the user IDs need to be logged off, enter GO in response to IUG8541R to continue processing. If there are user IDs that need to be logged off, enter QUIT. The processing will stop to allow you to log off the user IDs. Once the user IDs are logged off, rerun the command that failed, which is displayed in IUG854I.

IUG8542W **The *userid* DMSPARMS file for *filepool fpoolid* was not updated because it was not found on the *userid* 191 minidisk. Access the *userid* DMSPARMS file and add these user IDs to the ADMIN statement: *userid list***

Explanation

Installation processing did not find the *userid* DMSPARMS file on the *userid* 191 minidisk. Because the file was unavailable, the user IDs were not added as ADMIN users. You must manually access the *userid* DMSPARMS file and add the user IDs listed as ADMIN users.

System action

Processing continues.

User response

Access the *userid* DMSPARMS file and add the user IDs listed as ADMIN users.

IUG8543W **Unable to determine service history for file *filename filetype* on current system. Check for service will need to be done manually.**

Explanation

During Upgrade Installation, a check is done to determine if there is any service on the files residing on the PMAINT 551 disk on the current release which is not included in the upgrade release. The service history check was unable to be done for the given file. This situation is generally due to a problem with the data in the VMSES PARTCAT file on the current release's PMAINT 551 disk.

System action

Processing continues.

User response

Determine if there is service on the current release which has to be applied to the upgrade release after the upgrade installation completes by doing the following:

1. Logon to the z/VM maintenance user ID for the current release, MAINT*vrm*, where *vrm* is the current release.
2. Using the VMFSETUP command, access the service disks for the component/product to which the file belongs. (Information in the VMSES PARTCAT file on the PMAINT 551 disk can help you determine the product/component. If you cannot determine the product/component, contact your IBM Support Center personnel.)
3. Determine the part(s) built into the file using the following command. This command should be entered on one line, but is shown here on two lines for readability:

   ```
   VMFQOBJ ppfname compname TDATA :OBJECT
   filename filetype :PART
   ```

   The command output will contain a line in this format: `:PART` *`filename ftabbrev`*
4. For each part built into the file, determine the highest service level PTF of the part using the following command. This command should be entered on one line, but is shown here on two lines for readability:

   ```
   VMFSIM GETLVL ppfname compname TDATA :PART
   filename ftabbrev (HISTORY
   ```

   (where *ftabbrv* was reported by the previous VMFQOBJ command). If the command output contains the term "BASE-FILETYPE", there is no IBM service on the part, and no other action is needed for this part. Otherwise, the command output will contain lines in this format:

   ```
   :PART filename ftabbrev||ptfno1
      :VVT VVTVM
      :PTF
            ptfno1.aparno1.update1
            ptfno2.aparno2.update2
   ```

   If instead of ":PTF" the output contains only ":MOD", there is no IBM service on the part, and no other action is needed for this part. Otherwise, make a note of *aparno1* because you will have to verify this APAR is applied to the upgrade release after the upgrade installation is complete. If the APAR is not applied, the APAR will have to be applied to the upgrade release after the upgrade installation is complete

IUG8544E **Error occurred while {reading from | updating} the *filemode1* {(*userid vdev*) | (*dirID*)} {minidisk | directory} [on the work system] [to update the *filemode2* {(*userid2 vdev2*) | (*dirID2*)} {minidisk | directory}] [on the work system]**

Explanation

Installation processing could not read from or write to the minidisk and/or directory indicated.

System action

Processing ends.

User response

Investigate why the minidisk and/or directory could not be read/updated, and correct the problem.

IUG8545I **Review the directory managerlog file, *logfile_name*, for additional details**

Explanation

The directory exit returned an informational or error condition. Review your directory manager log file for additional details. (This message is issued in conjunction with message IUG8518W and message IUG8520W.)

System action

Processing continues.

User response

None.

IUG8546E **Exclude list *filename* UPGREXCL on {(*userid vdev*) | (DIR *dirID*)} cannot contain the character '*'.**

Explanation

At least one file name included in the exclude list (*filename* UPGREXCL) contains the "*" wild card character (an asterisk). These file names cannot contain an asterisk.

System action

Processing stops.

User response

Review the files in the exclude list (*filename* UPGREXCL) and replace any wild card characters with a valid character.

IUG8547E **The DIRMAINT user ID is not logged on. Log DIRMAINT onto the member you are upgrading, *member_upgrade*.**

Explanation

The DIRMAINT user ID is not logged on.

System action

Processing stops.

User response

Log on to DIRMAINT on the member you are upgrading (*member_upgrade*).

IUG8547I **After relocating DIRMAINT to *member_name*, enter *command* to restart your upgrade.**

Explanation

Informational message.

System action

Processing continues.

User response

After logging DIRMAINT on to *member_name*, enter the command shown (*command*) to restart your upgrade.

IUG8547R **To relocate the DIRMAINT server, enter QUIT, or enter GO to continue this exec.**

Explanation

The system is waiting for a response (QUIT or GO).

System action

Processing stops.

User response

To relocate the DIRMAINT server, enter QUIT, or enter GO to continue running the command.

IUG8547W **IBM recommends that the DIRMAINT server should be run on the member being upgraded. The DIRMAINT user ID is currently logged on member *member_dirm*. Before continuing your upgrade you should consider relocating DIRMAINT to the member you are upgrading, *member_upgrade*.**

Explanation

IBM recommends that the DIRMAINT server be run on the member that is being upgraded. The DIRMAINT user ID is currently logged on on member *member_dirm*.

System action

Processing continues.

User response

Before continuing your upgrade, consider relocating DIRMAINT to the member you are upgrading (*member_upgrade*).

IUG8550E **No *prodname MDA_string* resources have been identified**

Explanation

The MDA-string symbolic string could not be found in the product $PPF file. This string is used to identify resources (any minidisks or SFS directories) for the indicated product that pertain to the $PPF file symbolic string cited in the message. These resources comprise a group of minidisks or SFS directories that are used for installation and maintenance of the subject product. Command processing cannot continue because the resources are not available.

System action

Command processing stops.

User response

Corrupt or missing product :MDA. definitions, within the SERVP2P $PPF file, is a possible cause for this error. Make a note of the information provided in the message, save any existing problem information, and contact your IBM Support Center personnel for assistance.

IUG8551E **Resource {*userid vdev* | *dir_ID*} was not successfully acquired**

Explanation

The system encountered an error during an attempt to obtain access to the indicated minidisk or SFS directory resource.

System action

Command processing stops.

User response

Ensure the minidisk or SFS directory can be accessed. Review available console and log files for additional messages that pertain to this message. Take appropriate action to correct any problems, then try the command again.

IUG8553E **System-level changes for part *filename* cannot be evaluated**

Explanation

The system encountered an error condition that prevents the identification of any changes, introduced with the new-level system, which might affect the indicated file. Possible causes for this condition include a problem in linking or accessing a minidisk or SFS directory, or the lack of a file that is required for such processing.

System action

Processing stops.

User response

Review available console and log files for additional messages that pertain to this message. Take appropriate action to correct any problems, then try the operation again. If the reason for this message is not apparent, contact your IBM Support Center personnel.

IUG8553W **System-level changes for part *filename* cannot be evaluated**

Explanation

The system encountered a warning condition that prevents the identification of any changes, introduced with the new-level system, which might affect the indicated file. The lack of a file that is required for such processing is a possible cause for this message.

System action

Command processing continues.

User response

Review available console and log files for additional messages that pertain to this message. Take appropriate action to correct any problems, then try the command again. If the reason for this message is not apparent, contact your IBM Support Center personnel for assistance.

IUG8554W **Product *prodID* file *filename* not found on *MDA_string* resource(s): *resource_list***

Explanation

The subject file, which is associated with the indicated product, could not be located on the set of minidisks or SFS directories that are listed by the message. Whether the absence of this file is problematic is dependent on the type of command processing that is being performed.

System action

Command processing continues.

User response

Review available console and log files for any ensuing error messages that pertain to the indicated file. If the reason for the absence of this file is not apparent, contact your IBM Support Center personnel.

IUG8555W **File *file_ID1* has been updated by IBM with the new system level. It has been copied to *resource* as file *file_ID2*. File *file_ID2* must be reviewed, to determine if the updated content should be incorporated within customized {files that are based on file *file_ID1* | file *file_ID3}***

Explanation

As part of the changes associated with the new-level system, IBM has updated the content of a product sample file (*file_ID1*). This file has been copied to the indicated minidisk or SFS directory (*resource*), with an alternate, unique file name (*file_ID2*) to avoid an overlay of the original instance of the file *file_ID1*. There may be one or more customized files based on the original sample file (*file_ID1*) that might require modification to account for the changes that have been introduced in the updated sample file. When the system can identify a specific, customized file that is subject to such consideration, that file (*file_ID3*) is cited by the second format of this message.

System action

Command processing continues.

User response

Compare the content of the updated sample file (*file_ID2*) with its original sample file counterpart (still named *file_ID1*, and still residing on the indicated *resource*) to identify specific changes, if any, that affect your use of a customized instance of this file. When necessary, consult the appropriate product documentation for more information about the affected file and its content. As needed, update the customized copies of this file that are in production use on your system, to account for any changes that are necessary, or to use new-level functions with which the sample file is associated.

IUG8556I **File *filename* has been deleted from product *prodname***

Explanation

The indicated file no longer is supplied for the product cited in the message. This file was supplied with the level of this product that is installed on the current system. This file is no longer applicable to the new product level.

System action

Command processing continues.

User response

Make a note of the file and product cited in the message. Consult the appropriate product documentation for more information about this file and any actions that are required to account for changes with respect to its use.

IUG8557E **Resource {*userid vdev* | *dir_ID*} (*filemode*) does not have *stat* status**

Explanation

The indicated minidisk or SFS directory (accessed at the listed CMS file mode letter) does not have the status required for the command in use.

System action

Command processing stops.

User response

Use the appropriate CP LINK and CMS ACCESS commands to ensure the subject minidisk or directory is available with the required read/write status, then retry the command.

IUG8558E **The variations of this message are shown below.**

Explanation

1. **The Software Inventory file mode (*filemode*) designated by file *filename* cannot be used; A required resource ({*userid vdev*|*dir_ID*}) is accessed at this file mode**
2. **The Software Inventory disk ({*userid vdev*| *dir_ID*}) designated by file *filename* cannot be used; An unexpected resource ({*userid vdev*| *dir_ID*}) is accessed at the required file mode *filemode***

The VMSES/E configuration file (*filename*) listed in the message defines a specific resource (minidisk or SFS directory) that constitutes the system Software

Inventory, along with a specific CMS file mode that is to be used to access the system Software Inventory disk. Another resource, however, is currently using this file mode.

System action:
Command processing stops.

User response:
If the indicated minidisk or SFS directory is not required, release this resource and then reissue the command. If the subject resource is required, make sure it is accessed with a different file mode before running the command again.

IUG8559E ***cmdname*** **command operand omitted**

Explanation

A required operand has not been supplied for the listed command.

System action

Command processing stops.

User response

Reissue the subject command with the correct number of operands. If necessary, consult the appropriate command documentation for more information.

IUG8560W **Processing for product *prodID1* bypassed; Product *prodID2* is not {enabled | installed}**

Explanation

Changes to customizable or sample files, introduced with the indicated product (*prodID1*), cannot be identified by the system because the corresponding, current-level system product (*prodID2*) is not enabled or is not installed.

System action

Command processing continues.

User response

This message indicates that a discrepancy has been detected between the states of *prodID2* on the current system, and *prodID1* on the new-level work system. The disablement or removal of *prodID2* on the current system, after having begun the upgrade process, is a possible cause for this message. Such an action might prevent upgrade processing for the indicated products to complete as expected. If the problem persists, contact your IBM Support Center personnel.

IUG8561I **{** New work volumes will be used. | ** Reusing first upgrade work volumes.}**

Explanation

This message indicates the type of work volumes that will be used for the installation upgrade. This message is written to the INSTPLAN $DEBUG$ log file.

System action

Processing continues.

User response

None.

IUG8562I **{** Validating work system information. | ** Work system validation passed *** | ** Work system validation information:}**

Explanation

This message indicates the work volumes were validated. This message is written to the INSTPLAN $DEBUG$ log file.

System action

Processing continues.

User response

None.

IUG8562E **** Work system validation failed ****

Explanation

This message indicates that the work system volumes failed validation. Message IUG8563E follows this message and contains information about the work system volumes. This message is written to the INSTPLAN $DEBUG$ log file.

System action

Processing continues.

User response

None.

IUG8563E **The following volumes to be used for the work system did not pass validation: {No volume with**

label *label* was found attached to MIGMAINT or SYSTEM. | Multiple volumes with label *label* were found attached to MIGMAINT or to MIGMAINT and SYSTEM. (*vdev*)}

Explanation

This message displays the reason(s) that the work system volumes failed validation.

System action

Processing ends.

User response

Review the reasons why the work system volumes failed validation, and correct the problem. If the problem persists, contact your IBM Support Center personnel.

IUG8564E **Upgrade is using the work system installed when you upgraded the first member of your SSI. Do not run the INSTALL command.**

Explanation

The installation upgrade process is using the work system installed during the upgrade of the first member of your SSI. You do not need to run the INSTALL command.

System action

Processing ends.

User response

See *z/VM: Installation Guide* for procedures to upgrade the subsequent members of a multi-member SSI.

IUG8565E **The current system being upgraded is managed by Centralized Service Management (CSM). It will need to be deleted from the CSM group before being upgraded.**

Explanation:
The system you are trying to upgrade is being managed by z/VM Centralized Service Management (z/VM CSM). A system cannot be upgraded while under z/VM CSM management.

System action:
Processing stops.

User response:
Remove the system from z/VM CSM management. After the system has been removed from z/VM CSM management, restart the upgrade process.

IUG8566E **A DASD volume with label *label* is not attached or does not exist.**

Explanation:
The DASD volume label entered on the INSTPLAN panel was not found on the system.

System action:
The panel is redisplayed.

User response:
If the label is incorrect, enter the correct label on the panel. If the label is correct, attach the volume to your system.

IUG8990I ***command* processing completed successfully (RC=*rc*)**

Explanation:
The referenced command completed with the return code cited in the message.

System action:
Command processing continues.

User response:
None.

IUG8991W ***command* processing completed with warnings (RC=*rc*)**

Explanation:
The referenced command completed with the return code cited in the message.

System action:
Command processing continues.

User response:
Review the console log and any applicable command log file for other messages to help you determine whether a problem exists. Take corrective action, if necessary. Then, retry the originally-issued command.

IUG8992E ***command* processing completed unsuccessfully (RC=*rc*)**

Explanation:
The referenced command completed with the return code cited in the message.

System action:
Command processing stops.

User response:
Review the console log and any applicable command log file for additional warning or error messages that are related to this message. Consult the appropriate documentation for the reported command and correct any problems. Then, retry the originally-issued command.

IUG8997E **Unexpected error encountered in routine: *routine_name***
Data: *text*

Explanation

An error was detected during operations performed by the (internal) *routine_name*. Pertinent data associated with this error is included at the end of the message.

System action

Command processing stops.

User response

Make a note of the information provided in the message, save any existing problem information, and contact your IBM Support Center personnel.

IUG8998E **Logic error - Contact IBM Support**
NOVALUE error for *variable* on line *num* of *exec*
+++ source_line_text

Explanation

An error occurred during execution of a program. The program source line that is in error, or information about the program section in which the value error was detected, is indicated in the message.

System action

Command processing stops.

User response

Make a note of the information provided in the message, save any existing problem information, and contact your IBM Support Center personnel.

IUG8999I ***text***

Explanation

Contextual information, with variable content, is provided by this message for diagnostic purposes. Such messages are produced only when program diagnostic functions have been activated.

System action

Command processing continues.

User response

None.

VM Dump Tool Messages

HCQ001E **Unrecognized operand - *operand***

Explanation

The indicated operand is not valid or not recognized for the subcommand with which it was issued.

System action

The subcommand terminates.

User response

Enter the subcommand again with a correct operand.

HCQ001W **Unrecognized operand ignored - *operand***

Explanation

The indicated operand is not valid or not recognized for the subcommand with which it was issued.

System action

Processing continues.

User response

Enter the subcommand again with a correct operand.

HCQ002E ***operand* missing**

Explanation

The indicated operand is required for this subcommand or macro, but was not found.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again with the required information.

HCQ003E ***xxxxxxxx* contains non-hex data**

Explanation

The indicated term must be a hexadecimal value, but contains a character other than 0-9 and A-F.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again with hex data.

HCQ004E **Error encountered on address *nnnnnnnn_nnnnnnnn* Error *nn*, *reason***

Explanation

A page was requested either directly via subcommand or macro or indirectly by processing within a subcommand or macro and that page is not present in the dump. The address displayed is a CP address. The error code and reason can be the following:

Table 9. Error codes in message HCQ004E

Error	Reason
01	Page not in dump, unknown reason
02	Absolute pages 0 and 1 not dumped
03	Error reading frame table page from dump
04	Address larger than 2 GB frame table capacity
05	Translation error, use LASTTRAN for details
06	Page not dumped in soft abend dump
07	Page not dumped, frame is offline
08	Page not dumped, V-Disk frame
09	Page not dumped, system virtual frame
10	Page not dumped, CP Utility Address Space frame
11	Page not dumped in VMDUMP
12	Page not dumped, not in configured storage
13	Page not dumped, user frame
14	Frame type *nn*
15	Read error on record *nnnnnn*
16	Address larger than storage size of *nnnnnnnn*
17	Error code *nn*
18	Page not dumped, mini-disk cache data frame

Table 9. Error codes in message HCQ004E (continued)	
Error	**Reason**
19	Page not dumped, frame is on the available list
20	Page not requested to be included in SADUMP
21	Address in Frame Table, Try FRAME AT command
22	Page not in correlation table dump
23	The dump contains no CP storage

Form: The format of the page address when the high order word is zero is controlled by the SET HIWord command. Forms include:

```
yyyyyyyy_yyyyyyyy
        0_yyyyyyyy
         _yyyyyyyy
```

System action

The subcommand or macro terminates.

User response

Request a page that exists in the dump.

HCQ004W **Error encountered on address *nnnnnnnn_nnnnnnnn* Error *nn*, *reason***

Explanation

A page was requested either directly via subcommand or macro or indirectly by processing within a subcommand or macro and that page is not present in the dump. The address displayed is a CP address. See message HCQ004E for the list of error codes that can be displayed.

This message is issued only when the SKIPS option is used on the LOCATE subcommand indicating that the user wishes to be notified of all pages that were not found.

Form: The format of the page address is controlled by the SET HIWord command. Forms include:

```
xxxxxxxx_yyyyyyyy
        0_yyyyyyyy
         _yyyyyyyy
```

System action

Processing continues with the next page.

User response

Request a page that exists in the dump.

HCQ005E ***xxxxxxxx* not *yyyyyyyy* aligned**

Explanation

The address for the *xxxxxxxx* term is required to be aligned to the boundary indicated by *yyyyyyyy*, but was not. Boundaries required can include the following:

- half-word (ends in 0, 2, 4, 6, 8, A or C): instruction
- full-word (ends in 0, 4, 8 or C): many control blocks
- double-word (ends in 0 or 8): CCWs, some control blocks
- quad-word (ends in 0): Frame Table Entry

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using an address with the proper alignment.

HCQ006E **Extra parameter - *parameter***

Explanation

The indicated parameter was found, but no more parameters are expected or allowed for this subcommand or macro.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using the correct parameters.

HCQ006W **Extra parameter ignored - *parameter***

Explanation

The indicated parameter was found, but no more parameters are expected or allowed for this subcommand or macro.

System action

The subcommand or macro continues processing.

User response

Enter the subcommand or macro again using the correct parameters.

HCQ007E **VM Dump Tool command terminated, error in dump size indicator**

Explanation

The value of the indicator of storage size in the dump is zero, which is not a valid value. The VM Dump Tool uses this field to control the sizes of some tables, and can not continue without a valid value.

System action

The VM Dump Tool terminates.

User response

Check to make sure this is a dump file. If the problem persists, contact the IBM Support Center for assistance.

HCQ008W **Wrapped past page 0**

Explanation

The SCROLLUP subcommand parameters would cause the display to continue backward past page 0 of storage.

System action

The subcommand terminates.

User response

Enter the subcommand again with a valid address.

HCQ009E ***parameter* is negative or zero**

Explanation

The indicated parameter is a negative or zero value when a positive value is required.

System action

The subcommand terminates.

User response

Enter the subcommand again with the correct parameters.

HCQ010E **Can SCROLL only after a full length display**

Explanation

The SCROLL subcommand can be used only after a full length display, one for which no length was specified.

System action

The subcommand terminates.

User response

Use the DISPLAY subcommand first with no length parameter.

HCQ011E **Duplicate operand - *operand***

Explanation

The indicated term has been encountered twice and is allowed only once.

System action

The subcommand or macro terminates.

User response

Enter the subcommand again without using duplicate parameters.

HCQ011W **Duplicate operand ignored - *operand***

Explanation

The indicated term has been encountered twice and is allowed only once.

System action

The subcommand or macro continues processing.

User response

Enter the subcommand again without using duplicate parameters.

HCQ012E **Conflicting operand - *operand***

Explanation

The indicated parameter conflicts with another parameter that has already been found.

System action

The subcommand or macro terminates.

User response

Use the manual or HELP to find the conflict, correct it, and enter the subcommand or macro again.

HCQ012W Conflicting operand ignored - *operand*

Explanation

The indicated parameter conflicts with another parameter that has already been found.

System action

Processing continues.

User response

Use the manual or HELP to find the conflict, correct it, and enter the subcommand or macro again.

HCQ013E Base not known - *xxxxxxxx*

Explanation

The base value specified to the GREGBASE subcommand is not recognized. It must be either a named save area or an address.

System action

The subcommand terminates.

User response

Enter the subcommand again with the correct parameters.

HCQ014E File *fn ft* not found

Explanation

The named file is required for the requested function but could not be found.

System action

The subcommand or macro terminates.

User response

Locate the required file, be sure it is accessible to the VM Dump Tool and enter the subcommand or macro again.

HCQ015E Address not a trace entry - *address*

Explanation

The data at the indicated address is not a valid trace table entry.

System action

The subcommand or macro terminates.

User response

Determine the address of a trace table entry and issue the subcommand or macro again. One way to determine the right address is to TRACE FOR 128 FROM the page indicated. This will display all or most of trace entries in the page.

HCQ016E Address not in Frame Table - *addr*

Explanation

The indicated address is not represented in or within the the frame table.

For the FRAME subcommand without the AT parameter, this probably means the address is too large.

For the FRAME subcommand with the AT parameter, or for the RUNFRMTE subcommand, this means that the specified address of the FRMTE is outside the range of the Frame Table.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a correct address.

HCQ017E Address *addr* too large

Explanation

The indicated address is beyond the end of real storage, or it is beyond the 2G line (80000000 or larger).

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a smaller address.

HCQ018E Owning address is not a VMDBK

Explanation

The address indicated as the owner of a page in a frame table entry is not a VMDBK.

System action

The subcommand or macro terminates.

User response

Check the inputs to the subcommand or macro and retry. If the problem persists, contact the IBM Support Center for assistance.

HCQ018I Owning address is not a VMDBK

Explanation

The address indicated as the owner of a page in a frame table entry is not a VMDBK.

System action

The subcommand or macro continues.

User response

Check the inputs to the subcommand or macro and retry. If the problem persists, contact the IBM Support Center for assistance.

HCQ019E Non-hex data in column *nn*

Explanation

Data was found in the indicated input position which is not hexadecimal, and hexadecimal input is required.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again with hexadecimal input.

HCQ020E Operation not known - *xx*

Explanation

The operation indicated is not an allowed operation for this subcommand or macro. Allowed operations include + - * / N (aNd) O (Or) X (eXclusive or) L (shift Left) R (shift Right).

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a correct operation.

HCQ021E Divide Exception

Explanation

An attempt has been made to divide by a value less than 1.

System action

The subcommand terminates.

User response

Enter the subcommand again using a larger value.

HCQ022E Error *xx* reading file *filename*

Explanation

An error occurred in reading the named file, which is required for the requested function.

System action

The subcommand or macro terminates.

User response

Determine the cause for the read error, and enter the subcommand or macro again.

HCQ023E Record *xx* is outside file *filename*

Explanation

A request has been received to read a record which is after the end of the dump file. This is probably a problem internal to the VM Dump Tool.

System action

The subcommand or macro terminates.

User response

Report the problem to the IBM Support Center.

HCQ024E VMDUMPTL does not run in CMS SUBSET mode

Explanation

The VM Dump Tool has been initiated when in CMS Subset mode.

System action

The VM Dump Tool terminates.

User response

Exit from CMS Subset and enter the VMDUMPTL command again.

HCQ025E **Error reading storage at *address***

Explanation

An error was returned from the SETVAR subcommand indicating that the requested storage address could not be read. There was either a problem reading the actual dump file, or the page was not included in the dump.

System action

The subcommand terminates.

User response

Correct the address and enter the macro again.

HCQ026E **Hex string not an even number of digits**

Explanation

The hex string input to the subcommand or macro must consist of an even number of hexadecimal digits.

System action

The subcommand or macro terminates.

User response

Enter the subcommand again using an even number of digits in the search string.

HCQ027E ***value1* must be larger than *value2***

Explanation

The values must be in ascending order. An ending value was found that was larger than the starting value.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again with the correct sequence of addresses.

HCQ028E ***xxxxxxxx* too long <max *nnn*> - *yyyyyyyy***

Explanation

The indicated term is longer than allowed for its meaning in the parameter list. If the term is a storage address, the subcommand may not support long addresses.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again with a shorter address.

HCQ029E **No successful locate to resume**

Explanation

LOCATE with no parameters can be issued only to continue a previous LOCATE. In this case, no previous LOCATE has been issued.

System action

The subcommand or macro terminates.

User response

Enter a LOCATE with parameters, then a LOCATE with no parameters can be used.

HCQ030E **Error *xx* writing file *yyyyyyyy***

Explanation

An error was encountered when writing the indicated file to disk. One source of the problem is if the actions of this subcommand or macro cause a minidisk to fill up.

System action

The subcommand or macro terminates.

User response

Determine the cause of the error, or get more disk space and enter the subcommand again.

HCQ031E ***control block* not found in dump**

Explanation

The *control block* could not be found.

For the MAP subcommand, modules that reside in free space in the low Dynamic Paging Area in releases prior to version 5 release 1.0 can be found only via SYSCM; therefore, information about them will not be available to the MAP subcommand if SYSCM is not available.

For other commands, the indicated control block is required but can not be found.

System action

Processing terminates.

User response

Be sure the dump is complete or obtain the desired information another way.

HCQ032E **You must specify ALL, a user ID, a system service name, or the address of an IUCVBK, CCTBK, or VMDBK**

Explanation

The input address was not one of the items in the list.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using one of the items in the list. If you do not know the name of the specific system service that you want, use *ALL. If you specified a control block address, check that it is the starting address of the right type of control block.

HCQ033E **Fatal VMDUMPTL internal error in *pgmname***

Explanation

An internal error has been found. This is an error in the linkage between sections of the VM Dump Tool program itself, and not from faulty input parameters.

System action

The subcommand or macro terminates.

User response

Report the problem to the IBM Support Center.

HCQ034E ***xxxxxxxx yyyyy* not found**

Explanation

The indicated item has been requested in the subcommand and could not be located in the dump. Possibilities include:

- Real device *nnnnn*
- Subchannel *nnnn*
- Virtual device *nnnn*
- Active radix tree elements
- Device *nnnn* (could be real or virtual)

System action

The subcommand or macro terminates.

User response

Enter the subcommand again using an element number that can be found in the dump.

HCQ035E ***code* not found in file *fn ft***

Explanation

The indicated abend code could not be found in the indicated file.

System action

The subcommand or macro terminates.

User response

If this is a user-defined abend code, you may add it to the file indicated to display the meaning of the abend code and avoid this message. If this is a CP-generated abend code, report the problem to the IBM Support Center.

HCQ036E **Increment must be positive - *incr***

Explanation

An increment must be positive, and a zero or negative value was found.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a positive increment value.

HCQ037W **Too many processors in dump**

Explanation

The number of processors found in the dump exceeds the number of processors that the VM Dump Tool is set up to support.

System action

Processing continues. Only data from the supported number of processors are included in the trace information.

User response

Be aware that some trace data will be missing. If the dump was created by running in a virtual machine, run with fewer virtual processors next time. If this dump was taken on supported hardware, report the problem to your IBM Support Center prsonnel.

HCQ038E **Output plus output length exceeds right margin *xxxxxxxx* offset set to zero**

Explanation

The output being produced by the subcommand or macro has been indented too far to fit on a line. The first 8 characters of the text is displayed.

System action

The subcommand or macro terminates.

User response

Use a smaller INDENT value and enter the subcommand or macro again.

HCQ040E **Not a valid decimal number - *xxxxxxxx***

Explanation

The indicated value is required to be a decimal number, and was not.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a decimal number.

HCQ041W ***control_block* could not be found, some subcommands may fail**

Explanation

This is a warning when the partial dump is entered that SYSCM (SYStem CoMmon), the Frame Table, or some other CP control block could not be located.

System action

Processing continues.

User response

Be aware that some subcommands or macros may produce messages or errors because the given control block was not found.

HCQ042E **Error *nnn* setting variable**

Explanation

CMS returned an error when a REXX variable was being set.

System action

The subcommand or macro terminates.

User response

Consult the explanation of the indicated error in *z/VM: CMS and REXX/VM Messages and Codes* to determine if you have made an error. Enter the subcommand or macro again with the correct parameters.

HCQ043E **Must be issued from a macro**

Explanation

This subcommand can be issued only from within a macro.

System action

The subcommand terminates.

User response

See if there is an alternate subcommand or macro that can supply the required information. If none is found, then write a small macro to issue the required subcommand.

HCQ044W **WARNING: Start time precedes oldest trace entry for *cpuno***

Explanation

An inconsistency may exist in the TOD data in the trace table.

System action

Processing continues.

User response

None.

HCQ045W **WARNING: Trace table end reached for *cpuno***

Explanation

When processing merged output, the end of the trace table indicated was found.

System action

Processing continues with data for the other CPUs.

User response

Be aware that further data from the indicated CPU is not in the dump.

HCQ046I **Trace end or "TO" address reached**

Explanation

The TRACE subcommand has reached the point in processing the trace request that it has satisfied all the requirements specified.

System action

None.

User response

None.

HCQ047E **Trace table for *cpuno* could not be found**

Explanation

The VM Dump Tool could not locate a value for control register 12 for the indicated processor in either the DFIR or the Prefix Page, so it cannot locate the trace table for the indicated processor.

System action

The subcommand terminates.

User response

If you can find the address of a trace entry by other means, use the FROM *nnnn* option to format the desired trace information.

While not guaranteed to always work, one approach to find such a trace entry is to locate the label PFXCPCRC in the prefix page for the indicated processor. This field should contain the address of the last trace page to be filled. Display the trailer information of this page (described by the TTPBK), find the chain pointer to the next page, and search time stamps of the trace entries in that trace page for when the time stamp gets lower in value. The trace entry with the highest time stamp is the most recent.

HCQ047W **Trace table for *cpuno* could not be found**

Explanation

The VM Dump Tool could not locate a value for control register 12 in either the DFIR or the Prefix Page, therefore it cannot locate the trace table for the indicated processor. This problem was encountered during processing of a TRACE subcommand with the MERGE option.

System action

Processing continues.

User response

If you can find the address of a trace entry by other means, use the FROM *nnnn* option to format the desired trace information.

While not guaranteed to always work, one approach to find such a trace entry is to locate the label PFXCPCRC in the prefix page for the indicated processor. This field should contain the address of the last trace page to be filled.

Display the trailer information of this page (described by the TTPBK), find the chain pointer to the next page, and search time stamps of the trace entries in that trace page for when the time stamp gets lower in value. The trace entry with the highest time stamp is the most recent.

HCQ048E **VMDBK is for SYSTEM or SYSTEMMP, use IUCVBK address**

Explanation

The input to the MAPIUCV macro was found to be the address of the VMDBK for SYSTEM or SYSTEMMP. Because these VMDBKs are the logical owner of may different IUCV services, the IUCVBK for the specific service of interest must be specified.

System action

The macro terminates.

User response

Find the IUCVBK for the desired service and enter the macro again. To determine the IUCVBK address for the system services, use MAPIUCV *ALL.

HCQ049E Path *number* is larger than the current max of *maxnum*

Explanation

The path number indicated to the MAPIUCV macro was found to be larger than the maximum number of paths allowed for by the tables in the dump.

System action

The macro terminates.

User response

Use a path number no higher than the maximum value indicated.

HCQ050E Code table overflow

Explanation

There is a fixed-size table in the VM Dump Tool to contain the trace entry codes for all the codes of required trace entries. The subcommand entered is too complicated for this table to contain all the code values needed.

System action

The subcommand or macro terminates.

User response

Enter the subcommand again using fewer parameters after the CODE or TYPE operands.

HCQ051E Reason code *code* on TOD conversion

Explanation

The indicated reason code was received from the DATETIMESUBTRACT CSL routine.

System action

The subcommand or macro terminates.

User response

Examine the meaning of the reason code in *z/VM: CMS Callable Services Reference*; then enter the subcommand again.

HCQ052E Unknown CPU number - *cpuno*

Explanation

The CPU number indicated is not represented in the dump.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again with a correct CPU number.

HCQ053E *xxxxxxxx* is not * or a decimal number

Explanation

The indicated value is not an asterisk or a valid decimal number.

System action

The subcommand or macro terminates.

User response

Enter the subcommand again with an asterisk or decimal number.

HCQ054W Offset incorrect, set to *nnnnn*

Explanation

The absolute offset value is larger than the display area of the screen or zero, or an increased or decreased indentation value has caused output to shift off the left or right side of the viewing area.

System action

Processing continues with the indent offset value set to 0.

User response

Enter the subcommand or macro again with a correct offset value.

HCQ055E *length* too large, *yyy* max

Explanation

The value indicated is greater than the allowed maximum of *yyy*.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again with a value in the right range.

HCQ056E **Must be run in a VMDUMPTL environment**

Explanation

An XEDIT macro was invoked that requires the VM Dump Tool to run, but the VM Dump Tool is not a active.

System action

The macro terminates.

User response

Bring up the VM Dump Tool (VMDUMPTL EXEC) and enter the macro again.

HCQ057E **Address cannot be resolved - *addr***

Explanation

An error was encountered when trying to resolve the indicated symbol or address. If a symbol was found, it is shorter than 6 characters or longer than 8. If an open parenthesis was found, the next character was not G or R or the register number was not between 0 and F or 0 and 15. If a plus sign or dash was found, no value was found after that character.

System action

The subcommand or macro terminates.

User response

Correct the indicated value and enter the subcommand or macro again.

HCQ058E **Error *nn* on STATE for file *fn ft***

Explanation

The indicated error was received from a STATE on the BLOCK library file listed.

System action

The file is not used to find BLOCK definition information.

User response

Refer to the STATE command in *z/VM: CMS Commands and Utilities Reference* for a description of the command and its responses.

HCQ059E **Unknown {real device|subchannel|virtual device}**

Explanation

The real or virtual device or subchannel cannot be located in the dump.

System action

The subcommand or macro terminates.

User response

Locate and correct the item indicated and enter the subcommand or macro again.

HCQ060E ***macroname* supports only CP dumps**

Explanation

Many subcommands and macros reference CP data structures to locate information. The dump currently being processed is not recognized as a CP dump.

System action

The macro terminates.

User response

If this is not a CP dump, then this subcommand or macro cannot be used.

HCQ061E **Unknown <userid|VMDBK address> - *value***

Explanation

The input value was not found to be either a user ID or a VMDBK address.

System action

The subcommand or macro terminates.

User response

Locate the correct user ID or address and enter the subcommand or macro again. You may use the VMDSCAN, VMDBK, and VMDBKS subcommands and macros to find the user IDs and VMDBK addresses that are available in the dump.

HCQ062E **Bad *xxxxxxxx* - *yyyyyyyy***

Explanation

A bad value *yyyyyyyy* has been received by the SETVAR subcommand for the length or register number operand indicated by *xxxxxxxx*.

System action

The subcommand terminates.

User response

Correct the value indicated and enter the subcommand again.

HCQ063E ***xxxxxxxx* not found, *yyyyyyyy* information not available**

Explanation

The requested macro uses data at *xxxxxxxx* to locate information about the *yyyyyyyy* data structure and *xxxxxxxx* could not be found in this dump.

System action

The macro terminates.

User response

The requested information is not available. Try to use another approach to locate the data that you need.

HCQ064E ***macroname* does not support dumps at this level**

Explanation

Many macros depend on displacement values in CP control blocks. The indicated macro does not recognize the release level of the CP dump being processed.

System action

The macro terminates.

User response

See the VerRelMod output of the SYMPTOM macro to determine the level of the CP dump being processed. If the release is not being recognized correctly, consider using the RELEASE parameter when initiating the VM Dump Tool with the VMDUMPTL EXEC.

HCQ065E **Input address is not a CPEBK**

Explanation

This subcommand or macro requires the address of a CPEBK. The frame for the address indicated is not marked as containing CPEBKs.

System action

The subcommand or macro terminates.

User response

Check your calculations or assumptions about this address. Enter the subcommand again with the correct CPEBK address.

HCQ066E **Unrecognized Abend Code - *code***

Explanation

The indicated abend code was not found in the file HCQABEND VMDTDATA. If the abend was added by non-IBM code, then this file can be updated to include the description.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again with a correct abend code.

Contact your IBM Support Center personnel if the indicated abend can be found in "CP Abend Codes" on page 11.

HCQ067E **Unrecognized Release - *release***

Explanation

The VM Dump Tool does not recognize the release level of the dump you have asked it to process.

System action

The EXEC terminates.

User response

If the release level of the dump has not been recognized correctly, then consider using the RELEASE parameter on the VMDUMPTL EXEC.

HCQ068E **Entry for element *nnn* is zero, terminated**

Explanation

In traversing a radix tree, the RADIX macro found that an element needed to continue was zero.

System action

The macro terminates.

User response

This radix tree element is not currently active. Retrace your steps or try to obtain the information you need in another way.

HCQ069E **Input command too long, truncated to 512 bytes**

Explanation

The input string is longer then the maximum allowed (512).

System action

The subcommand or macro terminates.

User response

Try to break the input into smaller pieces. Enter the subcommand or macro again with a smaller number of characters.

HCQ070E **CMS Level 12 (ESA 2.1.0) or later required**

Explanation

The VM Dump Tool must be run on z/VM CMS at a level of ESA 2.1.0 or later. The release that the VM Dump Tool is being run on was not recognized as fitting that criteria.

System action

The EXEC terminates.

User response

Run the VM Dump Tool on a level of CMS that is VM/ESA 2.1.0 or later.

HCQ071E **Definition for *name* not found**

Explanation

The definition for the requested byte, field, or control block could not be found in the definition file.

System action

The subcommand or macro terminates.

User response

Ensure you have specified the correct name of the byte or control block. If this is not an IBM-supplied CP control block, then consider adding the definition to the control block definition file (refer to "Appendix D" in *z/VM: VM Dump Tool*). Contact your IBM support personnel if this is an IBM-supplied CP control block.

HCQ072E **Definition for the following fields not found**

Explanation

The definition of the indicated fields could not be found in the definition file.

System action

The subcommand or macro terminates.

User response

Be sure you have specified the correct names of the fields. If this is not an IBM-supplied CP control block, then consider adding the definition of the fields to the control block definition file (refer to "Appendix D" in *z/VM: VM Dump Tool*). Contact your IBM support personnel if these fields are part of an IBM-supplied CP control block.

HCQ073E ***blockname* not found, CP EXIT information not available**

Explanation

The control block indicated by *blockname* is required to find the CP EXIT information in the dump and could not be located. If this is a soft abend dump, then probably the required part of storage was not included in the dump.

System action

The subcommand or macro terminates.

User response

The information is not available. Try another approach to find the information you are looking for.

HCQ074E **Trace entry at *address* is non-standard**

Explanation

A trace entry other than types 74 or 75 has been encountered. This trace entry is most likely produced by non-IBM code and cannot be interpreted by the VM Dump Tool.

System action

The subcommand or macro terminates.

User response

Look at the data in the vicinity of the failing address. Then determine the address of the next valid trace entry (it will start with 74 or 75). Reissue the TRACE subcommand starting with that address.

HCQ075E Error getting *blockname*

Explanation

The MAPIUCV macro encountered an error in trying to fetch the control block indicated by *blockname* from the dump. This probably indicates an error in either the requested subcommand or macro, or in the CP tables used to control IUCV.

System action

The subcommand or macro terminates.

User response

Try to find the required information from another source. If the problem persists, contact your IBM Support Center.

HCQ076E Error in byte definition - *xxxxxxxx yyyyyyyy*

Explanation

A structural error was found in the control block definition file for the requested byte indicated by *xxxxxxxx*. The data indicated by *yyyyyyyy* should have been '*BITS' or '*CODE' but was not.

System action

The subcommand or macro terminates.

User response

Be sure you have specified the correct name of the byte. If this is not an IBM-supplied CP control block, then consider adding the definition of the fields to the control block definition file (refer to "Appendix D" in *z/VM: VM Dump Tool*). Contact your IBM support personnel if these fields are part of an IBM-supplied CP control block.

HCQ077E Length 0 not allowed

Explanation

A length value of zero was found while processing a trace definition file, but zero is not allowed for length. This message will be accompanied by message HCQ135I which will contain the line in error, the name of the file and the line number in that file.

System action

The rest of this trace entry definition is bypassed.

User response

Fix the trace definition file entry and issue VMDTSET TRACE NEW to reload it.

HCQ077W Length 0 not allowed, set to *n*

Explanation

A length value of zero was found but is not allowed.

System action

The length value is set to the value indicated and processing continues.

User response

Enter the subcommand again with a proper length value.

HCQ078E Error getting storage

Explanation

An error was returned when the VM Dump Tool tried to acquire storage to hold an internal data structure.

System action

The subcommand or macro terminates.

User response

Try running the VM Dump Tool in a larger virtual machine. If the problem persists, contact your IBM Support Center.

HCQ079E VMDBK at *xxxxxxxx* has a zero chain pointer

Explanation

In following the chain of VMDBKs, a zero forward pointer was found in the indicated VMDBK. This should not happen in the VMDBK chain. The information requested is not available from this subcommand or macro.

System action

The subcommand or macro terminates.

User response

Try identifying another way to find the information you need.

HCQ080E Unrecognized system service name, use *ALL for a list

Explanation

The system service name is not valid. The *ALL parameter produces a list of all of the system services available.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using the correct system service name.

HCQ081E Unknown *xxxx*

Explanation

The requested input could not be resolved as the indicated item (CP command, CMS command, XEDIT commands, VM Dump Tool command or Subset command).

System action

The subcommand or macro terminates.

User response

Be sure you have specified a correct CP, CMS, XEDIT, VM Dump Tool or Subset command. If the command is for CP, CMS or XEDIT, try using the CP, CMS, or XEDIT VM Dump Tool subcommand as a prefix for the desired command.

HCQ082W Dump not complete when it was created

Explanation

The information inside the dump file indicates that when the dump was taken it did not complete successfully.

System action

Processing continues. Some areas of the dump may not be available, which could cause warnings or errors from some subcommands or macros.

User response

Try to determine why the dump did not complete. Be sure enough dump space is allocated. If the problem persists, contact your IBM Support Center.

HCQ083W Dump not completely loaded by the DUMPLOAD command

Explanation

The information inside the dump file indicates that when the dump was processed by DUMPLOAD, it did not complete successfully.

System action

Processing continues. Some areas of the dump may not be available, which could cause warnings or errors from some subcommands or macros.

User response

Try to determine why the dump was not loaded completely. Be sure enough space is allocated in which to read in the dump file. If the problem persists, contact your IBM Support Center.

HCQ084W Dump not completely loaded, unknown reason

Explanation

The information inside the dump file indicates that when the dump was processed by DUMPLOAD, it did not complete successfully, but the reasons for this are unclear in the dump.

System action

Processing continues. Some areas of the dump may not be available, which could cause warnings or errors from some subcommands or macros.

User response

See if any errors occurred during the DUMPLOAD. Be sure enough space is allocated in which to read in the dump file. If the problem persists, contact your IBM Support Center.

HCQ085E **Invalid bit on in *table* at *address* - *yy***

Explanation

A possible error may exist in either the requested subcommand or macro, or in the CP tables in the dump, used for address translation. The bit indicated by *yy* was found to be set to 1 in the indicated table at the indicated address. This condition was not anticipated and is not meaningful.

System action

The subcommand or macro terminates.

User response

Be sure the requested address is correct. If the problem persists, contact your IBM Support Center.

HCQ086E **Name not found in dump - *name***

Explanation

The module or entry point name could not be located in the dump.

System action

The subcommand or macro terminates.

User response

Be sure the name is correct and retry the subcommand.

HCQ087E **Overflow**

Explanation

The output of the HEX subcommand is too large to fit into 32 bits.

System action

The subcommand or macro terminates.

User response

Ensure the input values are correct. Use smaller values.

HCQ088E **Not within a module - *address***

Explanation

The address given to the MAP subcommand could not be associated with any CP module in the dump.

System action

The subcommand or macro terminates.

User response

Be sure the address is correct and retry the subcommand.

HCQ089E **High order part of *fieldname* not zero - *yyyyyyyy***

Explanation

This probably indicates an error in either the requested subcommand or macro or in the CP tables in the dump used for address translation. The high order part of the field indicated by *fieldname* was not zero. The contents of the byte are indicated by *yy*. This condition was not anticipated and is not meaningful.

System action

The subcommand or macro terminates.

User response

Be sure the requested address is correct. If the problem persists, contact your IBM Support Center.

HCQ090I **No fields found which match this criteria**

Explanation

This is issued when the BLOCK macro is invoked with specific displacements, and no fields were found in this block which reference any of the displacements specified.

System action

The subcommand or macro terminates.

User response

Be sure the requested displacement is correct. To produce a list of all of the fields in a particular control block, invoke the BLOCK macro without the FIELDS option.

HCQ091E **Not a user ID - *xxxxxxxx***

Explanation

The requested subcommand or macro accepts only a user ID as input. The input value indicated by *xxxxxxxx* could not be identified as a user ID.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a correct user ID.

HCQ092E **Unrecognized type | code | term - *subs***

Explanation

The input was expected to be a trace type, code, or term request, but was not recognized.

System action

The subcommand or macro terminates.

User response

If a code was entered, then retry the command with a valid, four-digit hexadecimal trace entry code. If a type was entered, issue VMDTQRY TRACE TYPE for a list of the types available to you. If a term was entered, issue VMDTQRY TRACE TERM for a list of the terms available to you.

HCQ093E **Bad Entry Point name or address - *xxxxxxxx***

Explanation

The input was expected to be a module or entry point name, but such a module or entry point could not be located in the dump. If the dump is a soft abend dump, the storage containing this module or entry point was probably not included in the dump.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a correct module or entry point name.

HCQ094E **Address cannot be above FC0 in page - *addr***

Explanation

The last X'40' bytes in a trace table page are linkage, so a starting or ending address above X'FC0' in a trace table page is not allowed.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a smaller displacement in the trace table page.

HCQ095E ***addrtype* address cannot be 0**

Explanation

A value of zero specified to the TRACE subcommand as an address is not meaningful and is not allowed.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a correct address.

HCQ096E **Not a valid VMDBK address or userid - *xxxxxxxx***

Explanation

The indicated input was expected to be the address of a VMDBK or the user ID of a logged on user, but was found to be neither.

System action

The subcommand or macro terminates.

User response

Enter the subcommand or macro again using a correct VMDBK address or user ID.

HCQ097E **Unexpected response received from CPU subcommand**

Explanation

Some subcommands and macros depend on the output of the CPU subcommand to determine information about the CPUs represented in the dump. In this case, the response was not in the expected format.

System action

The subcommand or macro terminates.

User response

Enter the CPU subcommand directly and see if produces normal output. If the problem persists, contact your IBM Support Center.

HCQ098E **Index *xxx* beyond table size of *yyyyyy***

Explanation

This probably indicates an error in either the requested subcommand or macro or in the CP tables in the dump used for address translation. An index value from one level to the next being used to translate a CP address was found to be out of range.

System action

The subcommand or macro terminates.

User response

Contact your IBM Support Center.

HCQ099E **Index *index* within table offset *offset*, below actual table start address - *address***

Explanation

This probably indicates an error in either the requested subcommand or macro or in the CP tables in the dump used for address translation. An index value from one level to the next being used to translate a CP address was found to be out of range.

System action

The subcommand or macro terminates.

User response

Contact your IBM Support Center.

HCQ100I **ASCE is a real space designation, no translation applies**

Explanation

The address provided as input is mapped 1–1 in real space. Thus, the translated address is the same as the input address.

System action

Processing continues.

User response

No action is required, this is an informational message.

HCQ101E **Region *region* index non-zero**

Explanation

The ASCE for the address provided is an STD, RSTD, or RTTD. The index for the indicated Region table is non-zero, which is inconsistent. The provided input address is not translatable via this ASCE.

System action

Processing terminates.

User response

Issue the subcommand again with a different address.

HCQ102E **ASCE format is not recognized**

Explanation

The ASCE used in the translation of the address provided is not an STD, RSTD, or RTTD. The provided input address is not translatable via this ASCE.

System action

Processing terminates.

User response

Issue the subcommand again with a different address.

HCQ103E **TT bits level mismatch in valid *table* at *address*: *data***

Explanation

The TT bits in the indicated table are inconsistent with the rest of the table structure. The provided input address is not translatable via this ASCE.

System action

Processing terminates.

User response

Issue the subcommand again with a different address.

HCQ104I **Name HCPCPE not found**

Explanation

In trying to create a map of the modules in storage, the last resident module of CP, HCPCPE, could not be found in the dump.

System action

Processing continues.

User response

No action is required. If the problem persists, contact the IBM Support Center.

HCQ105E Error getting *controlblock*

Explanation

An error was encountered when trying to access the indicated control block. This error may have resulted from either reading the actual dump file, or that the required page was not included in the dump.

System action

The subcommand or macro terminates.

User response

If the problem persists, contact the IBM Support Center.

HCQ106E ADDRSCAN is set OFF - *command*

Explanation

The indicated command was received by Address SCAN from a macro, but the Address Scan environment is not active.

System action

The subcommand or macro terminates.

User response

If the macro is intended to use the Address SCAN environment, then it can be enabled with SET DVFMACRO ON.

HCQ107E Address SCAN command not recognized - *command*

Explanation

The indicated command was received by Address SCAN from a macro, but was not recognized as a command which is supported by the Address SCAN environment in the VM Dump Tool.

System action

The subcommand or macro terminates. This could be a valid DVF command, but it is not supported by the VM Dump Tool.

User response

Check the list of DVF commands that are supported by the VM Dump Tool in Appendix B of the VM Dump Tool publication.

HCQ108E Not a stand-alone, CP or VMDUMP

Explanation

The VM Dump Tool supports stand-alone dumps, CP abend or restart dumps, and VMDUMPs. The file it was asked to consider does not appear to be in one of these categories.

System action

The VM Dump Tool terminates.

User response

Be sure the file you specified is a dump.

HCQ109E Record *n* does not contain a *record_type*

Explanation

The first records of a stand-alone, CP abend or restart dump, or a VMDUMP are defined. The indicated record read from this dump does not contain the type of record that was expected.

System action

The VM Dump Tool terminates.

User response

Be sure the file you specified is a dump.

HCQ110E Can not set XEDITPRE to reserved keyword - *keyword*

Explanation

The keywords QUIT, QQUIT, FILE, FFILE, SAVE, SSAVE, and their abbreviations are reserved.

System action

The subcommand terminates.

User response

Issue the subcommand again with another XEDIT Prefix String.

HCQ111E Fields required when SETVAR is specified

Explanation

When the SETVAR parameter is specified on the BLOCK macro, one or more fields must be specified.

System action

The subcommand or macro terminates.

User response

Remove the SETVAR option, or specify FIELDS and names of some fields.

HCQ112I Long running command terminated by HI

Explanation

A long-running command has been terminated by the HI immediate command.

System action

The long-running command terminates. Accumulated output is placed in the dump session with an indicator that it was terminated.

User response

No action is necessary.

HCQ113E VM Dump Tool command terminated, free storage not available

Explanation

The VM Dump Tool received an error return from CMS when it tried to create an output line.

System action

The command is terminated. This message is displayed to the user's console instead of the dump session.

User response

Define more storage for your virtual machine or reduce storage usage by deleting lines from the dump session.

HCQ114E Error *nnnn* from XEDIT, *nnnn* lines of output lost

Explanation

While the VM Dump Tool was passing lines of output to XEDIT to be passed to the dump session, XEDIT returned an error saying that it was out of storage. The indicated number of lines could not be inserted into the dump session and were discarded.

System action

The command is terminated. This message is displayed to the user's console instead of the dump session.

User response

Define more storage for your virtual machine or reduce storage usage by deleting lines from the dump session.

HCQ115E Unable to translate address

Explanation

During the translation of a logical address to a real address, one of the table entries was marked as 'not valid'.

System action

The subcommand or macro terminates.

User response

Verify that you are requesting the correct address. Use the LASTTRAN macro to display the details of the error.

HCQ116W Map Record Index Table is full, map info will be lost

Explanation

While reading in the map file for a dump, more than the allowed number of entries were found.

System action

The subcommand terminates.

User response

Contact the IBM Support Center for assistance.

HCQ117E Bad module name - *input*

Explanation

An input module name does not meet the naming requirements. A module name must be 6-8 characters in length.

System action

The subcommand terminates.

User response

Correct the module or entry point name and try again.

HCQ118E **Previous errors in reading the map file**

Explanation

The operation has been cancelled due to previous errors in reading the map file.

System action

The subcommand terminates.

User response

Erase the *filename* VMDTMAP file and restart the VM Dump Tool.

HCQ120W **Bad ASCE, block address is zero - *asce***

Explanation

The address portion of the displayed non-real ASCE was zero, which is not allowed.

System action

The ASCE for the user-defined address space is set to 00000000_00000020, that of the real address space. Effectively, translation is turned off.

User response

Find the correct ASCE and reissue the command.

HCQ121E **Unknown symbol - *label***

Explanation

The indicated symbol, passed as input to EXTRACT DISPL, could not be found.

System action

The subcommand or macro terminates.

User response

Reissue the subcommand or macro using a known symbol.

HCQ122E **Unable to rename bit file *fn ft fm***

Explanation

The string indicated was passed as a file mode to the HCQGNBIT internal subcommand. Since this is a call from one portion of the VM Dump Tool to another, the problem is probably within the VM Dump Tool.

System action

The command or macro terminates.

User response

Contact the IBM Support Center for assistance.

HCQ123E **Unknown dump type, no map available**

Explanation

The dump was found to be something other than CP, and no VMDTNCPM VMDT macro was found.

System action

The subcommand or macro terminates.

User response

Create a VMDTNCPM macro to be invoked to create the map for this dump.

HCQ124E **Unable to create <map|bit> file**

Explanation

The VM Dump Tool did not find a VMDTMAP or VMDTBITS file for this dump. Errors were encountered in reading out information from the dump or it did not have enough space on the A-disk to write out the map or bit work file.

System action

The command or macro terminates.

User response

Make sure you have enough disk space to create the file. The VM Dump Tool first tries to create the file on the disk where the dump is stored. If this cannot be done, the VM Dump Tool tries to create it on your A-disk. The size required for the bit file can vary widely.

For example, a bit file for a dump of a 1-terabyte system will require approximately 16,000 4096-byte blocks.

If writing the map file failed, the MAP functions will not be available, but most other parts of the VM Dump Tool should continue to function ok.

If writing the bit file failed, the VM Dump Tool will not work on this dump. Free up some space and try again. If the problem persists, contact the IBM Support Center for assistance.

HCQ125E **No R/W mode available to receive bit file**

Explanation

In trying to create the bit map file, no file mode could be found on which the file could be written.

System action

The command or macro terminates.

User response

Access a disk in R/W mode.

HCQ126I **Creating map - may take some time**

Explanation

The VM Dump Tool Map function could not find or could not use the CP symbol table, so it is scanning CP storage in the dump to extract a map of modules. This is a normal condition. This process can run for several minutes and will write the VMDTMAP file for this dump to the disk where the dump was found, or to the A-disk.

System action

Processing continues.

User response

None. The operation should finish soon.

HCQ127I **No frames found which match this criteria**

Explanation

The FRAMES subcommand was issued with options, but no frames were found which match this criteria.

System action

The subcommand or macro terminates.

User response

None.

HCQ128E **Key not available for address *address***

Explanation

The key information for the address requested could not be found in the dump.

System action

The subcommand or macro terminates.

User response

Specify another address which is in the dump.

HCQ129I **Gathering bit map data from the frame table, may take some time**

Explanation

The VM Dump Tool is scanning the frame table from the first part of the dump and creating the bit map tables needed to identify which pages are included in the dump. This will be written out as a *fn* VMDTBITS file so it can be read in next time.

System action

Processing continues.

User response

No action is required. This should finish soon.

HCQ130E **Too many index pages, not supported**

Explanation

The VM Dump Tool found more index pages in a large storage format dump than it supports.

System action

Processing terminates.

User response

Contact your IBM support personnel.

HCQ131E **Bit map table is too small for this dump**

Explanation

The VM Dump Tool found that the bit map for this dump requires more table space than is currently available.

System action

Processing terminates.

User response

Contact the IBM Support Center for assistance.

HCQ132I **LASTTRAN information is not available on a soft abend dump**

Explanation

The LASTTRAN macro is used to read out the details from the translation tables in the dump. In a soft abend, the full tables are not included, so the details of a translation error are not available.

System action

The command or macro terminates.

User response

Avoid the use of LASTTRAN in a soft abend dump.

HCQ133E **Too many *type* libraries specified, max *number* - *libname***

Explanation

The number of libraries specified on the indicated command can not exceed the maximum number indicated.

System action

The command or macro terminates.

User response

Combine some indicated libraries or figure out which ones you don't need. Reissue the command.

HCQ134E **Too many TERMs, max 128**

Explanation

The number of TERMs included in trace definition files has been found to be more than the allowed maximum of 128.

System action

Trace initialization ignores further terms.

User response

Reduce the number of terms in user-defined trace definition files and issue VMDTSET TRACE LIBRARY to reload the trace definition file.

HCQ135I **Error encountered at line *number* in file *fn ft fm***

Explanation

An error has been found on the line number indicated in the current trace definition file.

System action

This message will be followed by another message containing the detail of what error was found. Processing of the current trace definition file is terminated.

User response

Locate and correct the error. Issue VMDTSET TRACE NEW to reload the trace definition files.

HCQ136E **TRACEOUT allowed only from a VMDTTRC trace macro**

Explanation

The TRACEOUT command has been issued from outside a trace macro.

System action

The command terminates.

User response

If you are trying to display output from a VM Dump Tool macro (file type VMDT, XEDIT) use the REXX 'QUEUE' statement or Pipes STACK stage instead.

HCQ137E **Too many TYPEs, max 64**

Explanation

The number of TYPEs included in trace definition files has been found to be more than the allowed maximum of 64.

System action

Trace initialization ignores further types.

User response

Reduce the number of TYPEs defined in the trace table definition files and issue VMDTSET TRACE LIBRARY to reload the trace definition file.

HCQ138E **File *fn ft fm* does not have *TRACE control word**

Explanation

A file referenced as a trace definition file on VMDTSET TRACE LIBRARY must have the *TRACE control in column of the first line. This one does not.

System action

Processing of the current trace definition file is terminated.

User response

If this is the correct file, add *TRACE as the first line. Reissue the VMDTSET TRACE LIBRARY command.

HCQ139E **Too many trace entries to fit in table**

Explanation

More than the maximum of 512 trace entries have been found across all trace definition files.

System action

Processing of the current trace definition file is terminated.

User response

Reduce the number of user-defined trace entry definitions, or identify some trace definition files that are not required. Reissue the VMDTSET TRACE LIBRARY command to reload the table.

HCQ140E **Trace entry format is too large**

Explanation

The trace entry format is too large to fit. The encoded trace format instructions must fit into 4,096 bytes. This one is too complicated.

System action

Processing of the current trace definition file is terminated.

User response

Reduce the amount of formatting required for this trace entry and issue VMDTSET TRACE LIBRARY to reload the table.

HCQ141E **Bad displacement in trace entry format definition**

Explanation

A bad displacement value has been found at the indicated line in the indicated trace definition file.

System action

Processing of the current trace definition file is terminated.

User response

Correct the error and issue VMDTSET TRACE LIBRARY to reload the table.

HCQ142E **Macro name can not be a string - *subs***

Explanation

A reference was found to a macro name in the indicated trace definition file, but the value following it was found to be preceded by a single quote.

System action

Processing of the current trace definition file is terminated.

User response

Correct the error and issue VMDTSET TRACE LIBRARY to reload the table.

HCQ143E **First item must be 4 chars long - *subs***

Explanation

The first element in a trace entry definition must start in column 1 and be either TERM or be the 4-digit hexadecimal trace entry number.

System action

Processing of the current trace entry definition is terminated. Processing continues with the next one.

User response

Correct the error and issue VMDTSET TRACE LIBRARY to reload the table.

HCQ144E **HCQPOP usage error, stack not empty when entered**

Explanation

HCQPUSH is used to save the program stack at entry to a VM Dump Tool macro. HCQPOP is used to restore that information. If a macro has more information to add to the program stack, it must be added after HCQPOP has restored the old data.

System action

Processing of the macro is terminated.

User response

Correct the error and reissue the macro.

HCQ145E **Macro interface level doesn't match in *macname* - *level***

Explanation

The level of the interface is passed to a VMDTTRC macro when it is called. In this instance, the level expected is different from what was received.

System action

Processing of the macro is terminated.

User response

If the macro is not one that is shipped with the VM Dump Tool, fix the problem and reissue the command. If the macro is one that is shipped with the VM Dump Tool, then contact the IBM Support Center for assistance.

HCQ146W **Using alternate PFXPG at addr**

Explanation

The prefix page is required by the VM Dump Tool when looking at a CP dump. In this dump, the prefix page for the failing processor was found to be corrupted or overlaid so another was found for another processor and that one is being used for VM Dump Tool references to the prefix page. Direct references by the user to an address will not be redirected. It is possible that some unexpected results may be encountered.

System action

All required references by the VM Dump Tool to the prefix page are directed to the alternate prefix page.

User response

No direct action is required.

HCQ147W **The PFXPG address for CPU *nn* is zero**

Explanation

The address of the prefix page for the indicated CPU is zero, which could mean that the corresponding CPU was not yet fully initialized. The requested data is not available.

System action

The command or macro terminates.

User response

Try to find another source of the desired information.

HCQ149E ***macname* must be invoked as a function**

Explanation

The indicated macro must be invoked as a function. It does not run as a VM Dump Tool command.

System action

The command or macro terminates.

User response

Invoke the indicated macro as a function or use another command or macro to find the information.

HCQ150W **Prefix character ignored - *prefix***

Explanation

FRT2MAIN will only process a logical address and will assume the address passed in is logical (Function Related trace table entry addresses will always be logical addresses).

System action

Processing continues.

User response

None.

HCQ151E Address too large, max 7FFFFFC0

Explanation

The indicated logical address is too large and is beyond the maximum of 7FFFFFC0.

System action

The macro terminates.

User response

Enter the macro again using a smaller logical address.

HCQ152E Address is not the right boundary for a trace table entry

Explanation

The indicated address is not on a trace table entry boundary.

System action

The macro terminates.

User response

Enter the macro again using an address on the correct trace entry boundary.

HCQ153E SXSTE type not 21 (trace page)

Explanation

The macro was expecting a trace entry address in a trace page. The indicated address does not belong to a trace page.

System action

The macro terminates.

User response

Enter the macro again using a trace entry address in a trace page (the SXSTE type of the page should be 21 to indicate it is a trace page).

HCQ154E Address is not in a function related trace table - *address*

Explanation

The indicated address does not belong to a Function Related trace table.

System action

The macro terminates.

User response

Enter the macro again using a logical address which is within a trace page in a Function Related trace table.

HCQ155E Token in error

Explanation

The indicated token is in error. This may be caused by: (1) a zero or negative token, (2) the token refers to a Function Related trace table which does not exist, (3) the token refers to a Function Related trace table which is not in a valid state of “Open” or “Timeout”.

System action

The command or macro terminates.

User response

Enter the command or macro again using a valid token for a Function Related trace table.

HCQ156E PFXPG for required CPU not found

Explanation

The prefix page (PFXPG) for the CPU indicated in the trace entry address could not be found.

System action

The macro terminates.

User response

Be aware that the PFXPG from the indicated CPU is not available in the dump and further errors or messages may be produced from other subcommands and macros.

HCQ157E **Internal error, trace entry not found in page - *address***

Explanation

The indicated trace entry address could not be found in the Function Related trace table.

System action

The macro terminates.

User response

Check that the Function Related trace table to which this trace entry belongs can be found in the dump.

HCQ158E **Internal error, correct page not found**

Explanation

The indicated trace entry address could not be found within a trace page in the Function Related trace table.

System action

The macro terminates.

User response

Check that the Function Related trace table to which this trace entry belongs can be found in the dump.

HCQ159E **Address is not a TRACG trace entry**

Explanation

Function Related trace tables only contain TRACG type trace entries. The indicated address is not a TRACG type.

System action

The macro terminates.

User response

Enter the macro again using a logical address of a TRACG type trace entry in a Function Related trace table.

HCQ160I **Incomplete map file written**

Explanation

The VM Dump Tool was not able to produce a complete map file. A partial map file was produced with the information that was available from the dump.

System action

The symbols defined during system initialization are processed first, so the likely scenario is that these symbols will be included in the map. However, some or all of the symbols defined later with user exits were not found in the dump. If this is a soft abend dump, then the required part of storage was probably not included in the dump.

User response

None.

HCQ161I **Dump is incomplete**

Explanation

Dump tool initialization has determined that not all files of a multifile dump are on accessed disks.

System action

Dump tool initialization continues.

User response

Ensure that all files of a multifile dump are available prior to invocation of the dump tool. If some parts of a multifile dump are not available, it is possible that some subcommands and macros will have errors while reading the dump.

HCQ162W **Unable to read record *rrrr* from dump**

Explanation

An attempt was made to read record *rrrr* from a multifile dump, but the file the record maps to is missing.

System action

Dump tool execution continues.

User response

Subcommand or macro output may be incomplete due to parts of an incomplete dump being unavailable. This message indicates an internal logic error when reading a complete dump. If you are certain that your multifile dump is complete, contact your IBM Support Center personnel.

HCQ163I **Status of *function* cannot be determined. CP in the dump supports *function* but the block libraries in use do not.**

Explanation

A VM Dump Tool macro or subcommand detected that the dump contained support for the function indicated, but the block libraries currently in use do not have support for that function. Subcommand or macro output might be incomplete because of missing or incorrect control block information.

System action

Dump tool execution continues.

User response

Use the VMDTQRY BLKLIBS subcommand to find out what block libraries are currently in use. On your system, locate block libraries that support the function. Use the VMDTSET BLKLIBS subcommand to cause the VM Dump Tool to use the necessary block libraries, and then retry the failing command. Also, ensure that block libraries internal to the dump are being used. Issue the VMDTQRY INTBLOCK subcommand to determine if internal block libraries are in use, and issue the VMDTSET INTBLOCK ON subcommand to instruct the VM Dump Tool to use them. If the problem persists, contact your IBM Support Center personnel.

HCQ164E **Storage size of system in dump is too large for this level of VMDUMPTL.**

Explanation

The VM Dump Tool cannot handle the storage size of the system in this dump.

System action

Processing terminates.

User response

Contact your IBM Support Center personnel.

HCQ165E **FRMTE at *addr* not in correlation table dump**

Explanation

The FRMTE at the indicated address is not in the dump because the dump contains a correlation table, not the whole CP frame table. The only FRMTEs that are in the dump are those that represent frames that are in the dump.

System action

The subcommand or macro terminates.

User response

Enter the subcommand again using correct parameters.

HCQ167E **Unable to *function*. Dump contains no CP storage.**

Explanation

The message is issued in response to a number of VMDUMPTL subcommands when the requested function cannot be performed because the dump contains no CP storage.

Such a dump file can be produced if the dump process is ended by re-IPLing the system before the entire frame table or correlation table is written out. A dump file with no CP storage can also be produced if the system did not allocate sufficient dump space before the dump occurred. Only a few VM Dump Tool subcommands work as expected when a dump file has no CP storage. Commands that display results include SYMPTOM, REGS, and DUMPTYPE.

System action

Processing continues.

User response

None.

HCQ168W **Dump contains no CP storage**

Explanation

This message is issued by the VM Dump Tool during initialization when the dump file has an incomplete frame table or correlation table and no CP storage.

Such a dump file can be produced if the dump process is ended by re-IPLing the system before the entire frame table or correlation table is written out. A dump file with no CP storage can also be produced if the system did not allocate sufficient dump space before the dump occurred. Only a few VM Dump Tool subcommands work as expected when a dump file has no CP storage. Commands that display results include SYMPTOM, REGS, and DUMPTYPE.

System action

Processing continues.

User response

None.

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Bibliography

This topic lists the publications in the z/VM library. For abstracts of the z/VM publications, see *Abstracts of the z/VM base product publications* and *Abstracts of the z/VM optional feature publications* in *z/VM: General Information*.

Where to get z/VM information

The current z/VM product documentation is available in IBM Documentation - z/VM (https://www.ibm.com/docs/en/zvm).

For lists of additional sources of information about z/VM, see *Where to get information about z/VM* in *z/VM: General Information*.

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- *z/VM: DFSMS/VM Diagnosis Guide*, GC24-6275

- *z/VM: DFSMS/VM Messages and Codes*, GC24-6276
- *z/VM: DFSMS/VM Planning Guide*, SC24-6277
- *z/VM: DFSMS/VM Removable Media Services*, SC24-6278
- *z/VM: DFSMS/VM Storage Administration*, SC24-6279

Directory Maintenance Facility for z/VM

- *z/VM: Directory Maintenance Facility Commands Reference*, SC24-6281
- *z/VM: Directory Maintenance Facility Messages*, GC24-6282
- *z/VM: Directory Maintenance Facility Tailoring and Administration Guide*, SC24-6283

Open Systems Adapter

- Open Systems Adapter-Express Customer's Guide and Reference (https://www.ibm.com/docs/en/SSLTBW_2.3.0/pdf/ioa2z1f0.pdf), SA22-7935
- Open Systems Adapter Integrated Console Controller User's Guide (https://www.ibm.com/docs/en/SSLTBW_2.3.0/pdf/SC27-9003-02.pdf), SC27-9003
- Open Systems Adapter-Express ICC 3215 Support (https://www.ibm.com/docs/en/zos/2.3.0?topic=osa-icc-3215-support), SA23-2247
- Open Systems Adapter/Support Facility on the Hardware Management Console (https://www.ibm.com/docs/en/SSLTBW_2.3.0/pdf/SC14-7580-02.pdf), SC14-7580

Performance Toolkit for z/VM

- *z/VM: Performance Toolkit Guide*, SC24-6302
- *z/VM: Performance Toolkit Reference*, SC24-6303

RACF Security Server for z/VM

- *z/VM: RACF Security Server Auditor's Guide*, SC24-6305
- *z/VM: RACF Security Server Command Language Reference*, SC24-6306
- *z/VM: RACF Security Server Diagnosis Guide*, GC24-6307
- *z/VM: RACF Security Server General User's Guide*, SC24-6308
- *z/VM: RACF Security Server Macros and Interfaces*, SC24-6309
- *z/VM: RACF Security Server Messages and Codes*, GC24-6310
- *z/VM: RACF Security Server Security Administrator's Guide*, SC24-6311
- *z/VM: RACF Security Server System Programmer's Guide*, SC24-6312
- *z/VM: Security Server RACROUTE Macro Reference*, SC24-6324

Remote Spooling Communications Subsystem Networking for z/VM

- *z/VM: RSCS Networking Diagnosis*, GC24-6316
- *z/VM: RSCS Networking Exit Customization*, SC24-6317
- *z/VM: RSCS Networking Messages and Codes*, GC24-6318
- *z/VM: RSCS Networking Operation and Use*, SC24-6319
- *z/VM: RSCS Networking Planning and Configuration*, SC24-6320

TCP/IP for z/VM

- *z/VM: TCP/IP Diagnosis Guide*, GC24-6328

- *z/VM: TCP/IP LDAP Administration Guide*, SC24-6329
- *z/VM: TCP/IP Messages and Codes*, GC24-6330
- *z/VM: TCP/IP Planning and Customization*, SC24-6331
- *z/VM: TCP/IP Programmer's Reference*, SC24-6332
- *z/VM: TCP/IP User's Guide*, SC24-6333

Prerequisite products

Device Support Facilities

- Device Support Facilities (ICKDSF): User's Guide and Reference (https://www.ibm.com/docs/en/SSLTBW_3.2.0/pdf/ickug00_v3r2.pdf), GC35-0033

Related products

XL C++ for z/VM

- *XL C/C++ for z/VM: Runtime Library Reference*, SC09-7624
- *XL C/C++ for z/VM: User's Guide*, SC09-7625

z/OS

IBM Documentation - z/OS (https://www.ibm.com/docs/en/zos)

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