z/OS
2.4

MVS System Codes

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 829.

Contents

Tables

About this document

This document describes the system completion codes and wait state codes issued by components, products, and subsystems of z/OS (5650-ZOS). The document helps you interpret and respond to the system completion codes and wait state codes.

System completion codes are also called *abend codes*.

Who should use this document

z/OS MVS System Codes is for anyone who receives abend and wait state codes from the system. Typically, it is the system operators, system programmers, and application programmers who do any of the following tasks:

- Initialize the operating system and its subsystems.
- Keep the system running correctly.
- Diagnose and correct system problems.
- Diagnose and correct errors in problem programs.

How to use this document

z/OS MVS System Codes contains the following information:

- An introduction to the format of system and user completion codes and of wait state codes
- Descriptions of system completion codes issued by system components, products, and subsystems
- Descriptions of wait state codes loaded during system operation
- Descriptions of wait state codes loaded during operation of a stand-alone dump program

Code descriptions

Each type of code is arranged in hexadecimal order in a chapter. The description of each code:

- Explains why the code was issued.
- Identifies the component, subsystem, or product issuing the code.
- Describes the actions taken by the system.
- Suggests actions that the operator, user, application programmer, or system programmer can take, if appropriate, in response to the code.

The system programmer responses assume that the programmer has performed the customary diagnosis described in the *z/OS Problem Management*.

How system codes are explained

The following information describes the different parts of system code explanations used in this documentation:

Explanation
    The meaning of the abend, including why the system issued the abend.

System action

- What the system did as a result of the system condition reported by the abend. A system condition could include running out of storage, a hardware or software failure, or other situation.
- What the system did as a result of user input. User input can include a system command, a job running on the system, a transaction, a query, or another user-system interaction.

Operator response
Instructions for the system operator, including, as appropriate, decisions to make and actions to take.

Only provided for abends that could appear at the system console.

User response
Instructions for the end user.

Application programmer response
Instructions for an application programmer.

System programmer response
Instructions for the system programmer.

Only provided for abends that require additional action beyond the operator response, user response, or application programmer response.

Storage administrator response
Instructions for the DFSMSdfp storage administrator.

Security Administrator Response
Instructions for the security administrator.

Only provided for security-related abends.

Problem determination
Additional instructions for determining the cause of the problem, searching problem databases, and, if necessary, reporting the problem to the IBM® support center. These instructions are for a customer support person who can troubleshoot problems, such as the system programmer or system administrator, an experienced security administrator, or an experienced storage administrator.

For additional information on performing problem determination procedures, see *z/OS Problem Management* and the appropriate diagnosis guide for the product or element issuing the abend, such as:

- DFSMS/MVS diagnosis guides and references
- *z/OS JES2 Diagnosis*
- *z/OS JES3 Diagnosis*

Source
Element, product, or component that issued the abend.

Detecting module
Name of the module or modules that detected the condition that caused the abend to be issued.

Location of user completion codes

z/OS MVS System Codes does not contain the 4-digit decimal user completion codes that some IBM-provided components, subsystems, or products issue. These codes appear in documents for the component, subsystem, or product that issues the codes. Codes issued by installation-provided programs do not appear in IBM documents.

z/OS information

This information explains how z/OS references information in other documents and on the web.

When possible, this information uses cross document links that go directly to the topic in reference using shortened versions of the document title. For complete titles and order numbers of the documents for all products that are part of z/OS, see *z/OS Information Roadmap*.

To find the complete z/OS® library, go to IBM Knowledge Center (www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

How to send your comments to IBM

We invite you to submit comments about the z/OS product documentation. Your valuable feedback helps to ensure accurate and high-quality information.

Important: If your comment regards a technical question or problem, see instead "If you have a technical problem" on page ix.

Submit your feedback by using the appropriate method for your type of comment or question:

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If your comment or question is about z/OS itself, submit a request through the IBM RFE Community (www.ibm.com/developerworks/rfe/).

Feedback on IBM Knowledge Center function

If your comment or question is about the IBM Knowledge Center functionality, for example search capabilities or how to arrange the browser view, send a detailed email to IBM Knowledge Center Support at ibmkc@us.ibm.com.

Feedback on the z/OS product documentation and content

If your comment is about the information that is provided in the z/OS product documentation library, send a detailed email to mhvrcfs@us.ibm.com. We welcome any feedback that you have, including comments on the clarity, accuracy, or completeness of the information.

To help us better process your submission, include the following information:

- Your name, company/university/institution name, and email address
- The following deliverable title and order number: z/OS MVS System Codes, SA38-0665-50
- The section title of the specific information to which your comment relates
- The text of your comment.

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- Call IBM technical support.

Summary of changes

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.

Summary of changes for z/OS MVS System Codes for Version 2 Release 4

Code changes for z/OS MVS System Codes

The following lists indicate the codes that are new, changed, or no longer issued in z/OS V2R4.

New

The following codes are new.

System completion codes

For system completion code 42, reason codes 00090003-00090007 were added via APAR OA60351.

For system completion code EC6, reason codes 803B and 8040 were added.

For system completion code 422, reason code XXXX01A8 was added. (APAR OA59829)

For system completion code C0D, reason code 80040029 is added. (APAR OA59573)

For system completion code B78, reason code 7C is added.

For system completion code DC2, reason code 0084 is added. (APAR OA58289)

For system completion code B78, reason code 78 is added.

For system completion code 3C4, reason code 0000001D is added.

For system completion code 02A, new reason codes 00000074, 00000078, 0000007C, 00000080, 00000084, 00000088, 0000008C, 00000090, 00000094, 00000098, 0000009C, 000000A0, 000000A4, 000000A8, 000000AC, 000000B0, 000000B4, 000000B8, 000000BC, 000000C0, 000000C4, 000000C8, 000000D4, 000000D8, 000000DC, 000000E0, 000000E4, 000000E8, 000000EC, 000000F0, 000000F4, 000000F8, 000000FC, 00000100, 00000104, 00000108, 0000010C, 00000110, 00000114, and 00000118 have been added.

For system completion code 0F7, new reason codes 1E0, 1E4, 1F0, 1F4, 1F8, 1FC, 200, 204, and 208 have been added.

For system completion code 653, reason code 0C is added.

For system completion code 655, reason code 300 is added.

For system completion code 01A, reason code 30 is added.

For system completion code 01D, new reason codes are added.

For system completion code 08B, new reason code 0057 is added. (APAR OA59306)

For system completion code 08F, a new reason code is added.

For system completion code C0D, new reason codes are added.

For system completion code DC2, reason codes 0024, 0073, 0083, and 2001 are added.

Wait state codes

For wait state code 07C, reason code 09 is added.

For wait state code 0A2, reason code 19C is added.

Changed

The following codes are changed.

System completion codes

For system completion code 01D, reason code xx030Fxx has been updated.
System completion code 024 has been updated.
System completion code 027 has been updated.
System completion code 07D has been updated.
System completion code 0A6 has been updated.
System completion code 0AD has been updated.
System completion code 06F has been updated.
System completion code 09F has been updated.
System completion code 1C2 has been updated.
System completion code 16E has an updated explanation and reason codes (APAR OA53955).
System completion code 2C2 has been updated.
System completion code 3C2 has been updated.
For system completion code 378, reason code 14 has been updated.
System completion code 40D has been updated.
System completion code 435 has an updated explanation and reason codes (APAR OA53955).
For system completion code D22, reason code 24 is removed.
System completion code EC7 has been updated.
Wait state codes
Wait state code 07B has been updated.
Wait state code to module table updates, added A2E

Deleted

The following codes were deleted.

Wait state codes
System completion code 0AF was deleted.

General content changes for z/OS MVS System Codes

The following content is new, changed, or no longer included in z/OS V2R4.

New

The following content is new.

Added "Wait state codes in ESA/390 mode" on page 3.

Changed

None.

Deleted

None.

Summary of changes for z/OS MVS System Codes for Version 2 Release 3

Code changes for z/OS MVS System Codes

The following lists indicate the codes that are new, changed, or no longer issued in z/OS V2R3.

New

The following codes are new.

System completion codes

For system completion code 01D, new reason codes have been added.

For system completion code 026, new reason codes have been added.

For system completion code 042, new reason codes have been added.

For system completion code 08B, reason codes 0055 and 0056 have been added.

For system completion code 08F, a new reason code has been added.

For system completion code 0F7, a new reason code 1EC has been added.

For system completion code 15F, new reason code 30 has been added.

For system completion code 179, new reason code 90 has been added.

For system completion code 18F, new reason codes have been added.

For system completion code 1E0, new reason code 14 has been added.

For system completion code 1FB, reason codes ED, EE, and EF are added.

For system completion code 290, new reason codes have been added.

For system completion code 40D, a new reason code has been added.

For system completion code 6FB, new reason code 2B has been added.

For system completion code 9C4, new reason codes have been added.

For system completion code DC4, new reason code xx052Exx has been added.

For system completion code DC6, new reason codes have been added.

New completion code E22 for WLM group memory management.

For system completion code EC6, a new reason code was added.

Wait state codes

Wait state code 02F has been added.

For wait state code 07B, new reason codes 20 added.

For wait state code 07C, new reason codes 06 and 07 have been added.

For wait state code 07C, new reason codes 08 has been added.

Changed

The following codes are changed.

System completion codes

System completion codes 0C4, 18A, 6C5, B04, B05, B0A, and B78 have new or updated reason codes (APAR OA56180).

System completion code 0A6 has been updated.

System completion code 002 has been updated.

System completion code 07D has been updated.

System completion code 024 has been updated.

System completion code 026 has been updated.

System completion code 027 has been updated.

System completion code 0C4 in the 0Cx section has been updated.

System completion code DC2 with explanation 005D was updated to reflect changes for WLM group.

System completion code 1C2 has been updated.

System completion code 2C2 has been updated.

System completion code 3C2 has been updated.

System completion code 1E0 has been updated.

System completion code 1FB, reason code 1C and 1D are updated.

System completion code 40Dhas been updated.

System completion code 322 has been updated.

Wait state codes

Wait state code 087, reason code 31 is updated. Reason code 33 is deleted. In the table entry code for 087, console services CNZX1MGX and CNZX1MIG are deleted.

Summary of changes for z/OS MVS System Codes for Version 2 Release 2 (V2R2)

Code changes for z/OS MVS System Codes

The following lists indicate the codes that are new, changed, or no longer issued in V2R2.

Codes that have been added, updated, or that are no longer issued in an updated edition are identified by the quarter and year that the code was updated, in parentheses. For example, (4Q2015) indicates that a code was updated in the fourth quarter, 2015.

New

The following codes are new.

System completion codes

For system completion code 00C, new internal and external reason codes have been added.

For system completion code 026, new reason codes have been added to the lists of internal and external XES reason codes.

For system completion code 042, reason codes 00080000, 00080001, and 00080002 have been added. (4Q2016)

System completion code 04D has been added.

For system completion code 05C, reason code 703 has been added.

For system completion code 05E, reason code 28 has been added. (4Q2016)

For system completion code 073, reason code 44 has been added.

For system completion code 077, reason code 0032 has been added.

For system completion code 0B0, reason codes 2C, 30, 38, 40, and 44 have been added.

For system completion code 0F7, reason codes 1B4, 368, 376, 388, 392, 396, 400, 440, 444, 448, 452, 456, 460, 464, and 472 have been added.

For system completion code 0F7, reason codes 164, 170, 174, 184, 188, 18C, 190, 194, 198, 19C, 1A0, 1A4, 1A8, 1AC, 1B0, 1B8, 1BC, 1C0, 1C4, 1C8, 1CC, 1D0, 1D0, 1D4, and 1DC have been added. (4Q2016)

For system completion code 157, new reason codes have been added.

For system completion code 18F, reason codes 47A and 47B have been added.

For system completion code 1D0, reason code 0415 has been added.

For system completion code 1FB, reason codes 77, 78, 7A, 8E, 8F, EA, EB, and EC have been added.

For system completion code 290, several new reason codes have been added.

System completion code 353 has been added. (4Q2016)

For system completion code 3C4, reason code 1C has been added. (3Q2016)

The explanation of system completion code 422 has been updated.

For system completion code 4FB, reason codes 2C, 30, 34, and 38 have been added.

System completion code 753 has been added. (3Q2016)

System completion code 90D has been added.

For system completion code 9C4 reason codes 101-112 have been added.

For system completion code AC7, reason codes 00470001 and 00470003 have been added. (3Q2016)

For system completion code BC3, reason code 09 has been added.

For system completion code C0D, reason code 40000001 has been added.

For system completion code C78, reason codes C0, C4, C8, CC, and D8 have been added.

For system completion code D23, new reason codes have been added.

For system completion code DC2, reason codes 006D and 00AF have been added.

System completion code DC4 has a new xx0429xx reason code. (4Q2015)

System completion code E6D has been added.

For system completion code EC6, reason codes 0796, E04B, and E055 have been added.

Wait state codes

For wait state code 007, reason code 0001 has been added.

Wait state code 02F has been added. (2Q2016)

For wait state code 07B, reason code 1F and 20 have been added.

For wait state code A2C, reason code 03 has been added.

Changed

The following codes are changed.

System completion codes

For system completion code 0F7, the following reason codes were listed as decimal values and have been changed to hexadecimal values: 368, 388, 392, 396, 400, 440, 444, 448, 452, 456, 460, 464, 472. (4Q2016)

For system completion code 1FB, reason code 11 has been updated.

For system completion code 206, the explanation of code 206 and the explanation for reason code 4 have been updated. (4Q2016)

For system completion code 522, the explanation has been updated.

For system completion code EC6, the explanation for reason code 0585 has been updated.

Wait state codes

The information about wait state code 053 has been corrected. (4Q2015)

For wait state code 082, the explanation has been updated. (4Q2016)

Deleted

The following codes were deleted.

For system completion code 077, reason codes 0004, 0008, 000C, and 0018 are no longer issued.

Chapter 1. Introduction

This chapter introduces system and user completion codes and wait state codes.

Completion codes

The system or an application program issues a completion code when abnormally ending processing by a task, address space, or system module. The completion code indicates the reason for the abnormal end. A completion code can be specified by the following:

- ABEND macro
- CALLRTM macro
- SETRP macro

Abend of a task or address space

The abend of a task or address space can be detected at the system, hardware, or application level.

System-detected problems

The system abnormally ends a task or address space when the system determines that the task or address space cannot continue processing and produce valid results.

For example, a task may incorrectly specify a request for a system service. Because the system cannot perform the service with incorrect input, the system abnormally ends the task requesting the service. This task is also referred to as a *caller*.

Hardware-detected problems

The system also abnormally ends a task with a completion code when the system receives control after a hardware-generated interruption that indicates an error in the task.

For example, an instruction in an application running in storage key 7 branches to low central storage, which is always in storage key 0. The difference in storage key causes a protection exception. The system recovers from this hardware problem by ending the application's task with an abend X'0C1'. If the application has a recovery routine, the system gives control to the routine; the routine can clean up resources being used by the application and can request a dump.

Application-detected problems

An application program abnormally ends itself when it determines that it cannot continue processing and produce valid results.

For example, an application may be calculating a total by successive additions. After each addition, the application checks the new total against a limit. If the total exceeds the limit, the application issues an ABEND macro to end abnormally and, perhaps, to ask for an ABEND dump. The ABEND macro specifies a user completion code.

Abend of a system service

If a system service represented by a service request block (SRB) experiences a problem, the system gives control to the recovery routine for the service; the routine can issue a SETRP macro to place a system completion code in the system diagnostic work area (SDWA). The system service stops processing. If the service was processing a request from a task, the system abnormally ends the task with the same system completion code.

Note that another task can request the system service to do processing.

Format

The format of completion codes is:

- System completion code (or abend code): 3 hexadecimal digits
- User completion code: 4 decimal digits

Note: Only system completion codes appear in this documentation; user completion codes do not. User completion codes are documented by the IBM-provided component, subsystem, or product that issues the user completion codes. IPCS user completion codes are documented in Chapter 7, "IPCS user completion codes," on page 809. Codes issued by installation-provided programs do not appear in IBM documentation.

Location

The codes can be obtained from the following:

- Messages accompanying the abend
- The header in any ABEND dump accompanying the abend
- Search arguments and, sometimes, the title in any SVC dump accompanying the abend
- Search arguments in any logrec data set error record written for the abend
- The system diagnostic work area (SDWA)
- Use of the EXTRACT macro with keyword CMC to determine the completion code for the ended task.

Abnormal end of subtasks

When the highest-level task in a job step ends abnormally, the job step ends abnormally.

When a subtask ends abnormally, only the subtask itself and its subtasks end. To get the abend code for an abnormal end of a subtask:

- Examine the event control block (ECB) specified by the task that attached the subtask
- Issue the EXTRACT macro with the CMC keyword

A low-level subtask that ends abnormally has two ways to cause the entire job step to end abnormally:

- Each task in the job step's task chain, including the job step task, must end itself abnormally when it detects an abend code from one of its subtasks. To end the job step with the abend code for the original error, each task must use the abend code from its subtask as its own abend code.
- A subtask can abnormally end the entire job step if it specifies a STEP parameter on the ABEND macro.

Wait state codes in z/Architecture mode

The wait state code appears in the program status word (PSW) when the operating system enters a wait state. A valid PSW for a coded wait state in z/Architecture® mode has one of the following general formats:

- `00020000 x0000000 00000000 0rrrrwww`
- `00020000 x0000000 00000000 0rr00www`
- `00020000 x0000000 00000000 00rrrwww`
- `00020000 x0000000 00000000 0rrr0www`

2
   Bits 12-15 (the CMWP bits, with the 'W' bit being on).

x
   Bits 32-35. Not part of the wait state information.

rrrr, rr00, 0rrr, rrr0
   Bits 100-115, where *r* is the reason code for 8/12/16 bits and 0=zero.

A supplementary code accompanying the wait state code.

The wait state determines the size and position of the supplement code.

Usually the supplementary code is a reason code. Some wait state codes do not provide a supplementary code in the PSW. See the description of the individual wait state code for more information.

www
Bits 116-127.

The wait state code. The IBM-supplied wait state codes appear in this book . Installation-supplied programs can use the wait state codes X'FF0' through X'FFE'; see installation-supplied information for these codes.

No-work wait

If the system hangs because it has no work waiting to be dispatched, either because the work is waiting for a resource or because no work remained on the system queues, the PSW contains:

```
X'07060000 00000000 00000000 00000000'
```

A no-work wait may not reflect an error. See *z/OS Problem Management* for diagnosis of a system hang or wait state.

Wait state codes in ESA/390 mode

The only wait state code that can occur in ESA/390 mode is 00F, and it can only occur on hardware earlier than IBM z14®.

The wait state code appears in the program status word (PSW) when the operating system enters a wait state. A valid PSW for wait state code 00F in ESA/390 mode has the following format:

```
000A0000 xxxxx00F [00000000 00000000]
```

A
Bits 12 - 15: The CMWP bits, with the"C" and 'W' bits on.
xxxxx
Bits 32 - 51: Not part of the wait state information.
00F
Bits 52 - 63: Wait state code 00F. For details, see "00F" on page 660.

Depending on your combination of hardware and software, the information shown in square brackets might or might not appear in displays.

Wait state codes from a stand-alone dump program

See Chapter 6, "Stand-alone dump wait state codes," on page 801 for information about reading stand-alone dump wait state codes.

IPCS user completion codes

IPCS issues a 4 digit decimal user code when it encounters errors in either IBM-provided IPCS code or in installation exit routines. See Chapter 7, "IPCS user completion codes," on page 809 for more information.

Chapter 2. System completion codes

001

Explanation

An I/O error condition was encountered during BDAM, BISAM, BPAM, BSAM, QISAM, or QSAM processing.

The completion code can be issued if CLOSE processing called end-of-volume (EOV), and EOV processing detected an out-of-space condition. See the explanation of message IEC020I in *z/OS MVS System Messages, Vol 7 (IEB-IEE)* for information about the task that was ended.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC020I.

Source

DFSMSdfp

002

Explanation

The error occurred while the control program was processing a sequential data set with BSAM or QSAM, or creating a direct organization data set. This system completion code is accompanied by message IEC036I. Refer to the explanation of message IEC036I for complete information about the task that was ended and for an explanation of the return code found in register 15.

System action

Pertinent control blocks are written to the GTF trace data set, the user's DCB ABEND exit is taken if one is provided, and message IEC036I is issued.

Operator response

Start a generalized trace facility (GTF) trace, and re-create the problem. Reply to message AHL100A with:

```
TRACE=SYS,USR,SLIP
```

On the DD statement for the data set in error, specify:

```
DCB=DIAGNS=TRACE
```

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

See message IEC036I for the appropriate responses for each return code.

Source

DFSMSdfp

003

Explanation

The error occurred during end-of-block processing using either BSAM or QSAM. The error occurred because the I/O macro instructions for a 3525-associated data set were not run in the proper sequence.

The hexadecimal reason code in register 15 indicates the nature of the error:

Code
> **Explanation**

01
> A READ sequence error

02
> A PUNCH sequence error

03
> A PRINT sequence error

System action

The system ends the task.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing for the job.

Programmer response

Specify the I/O macro instructions in the proper sequence, and rerun the job.

Source

DFSMSdfp

004

Explanation

The error occurred during OPEN processing using either BSAM or QSAM because a conflicting or incorrect DCB parameter (FUNC or related parameter) is specified. The hexadecimal reason code in register 15 indicates the nature of the error:

Code
> **Explanation**

01
> Incorrect DCB FUNC parameter specified.

02
> Incorrect combination of DCB FUNC parameter and CNTRL macro specified.

03

    Conflicting access methods specified.

04

    Incorrect DCB specified for 3505 or 3525.

05

    Incorrect format card or an incorrect device specified with Optical Mark Read (OMR).

06

    Data protection image not found in the SYS1.IMAGELIB data set, volume containing SYS1.IMAGELIB not
    mounted, or SYS1.IMAGELIB data set not cataloged.

System action

In all cases, the system ends the task.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information.
Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.
Provide the program listing for the job.

Programmer response

In all cases, correct the incorrect fields of the DCB macro instruction and rerun the job.

Source

DFSMSdfp

005

Explanation

The error occurred because of an incorrect DECB during READ processing using BSAM. This system completion
code is accompanied by message IEC041I. Refer to the explanation of message IEC041I for complete
information about the task that was ended and for an explanation of the return code.

System action

The task is ended.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information.
Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.
Provide the program listing for the job.

Programmer response

Make sure that the RBL type of read is used and that the area address and header address parameters are
specified so that the DECB is valid.

Source

DFSMSdfp

006

Explanation

Predictive Failure Analysis (PFA) detected an unrecoverable error that caused it to terminate abnormally.

The reason code identifies the source of the error. The reason code has the format of X'mmmmrrrr', where mmmm represents the failing entry point's module ID, and rrrr represents the reason code.

Code
>   **Explanation**

0001
>   Unable to find requested entry point.

0002
>   Unable to load requested entry point.

0003
>   Exhausted stack space.

0004
>   Unknown server request.

0005
>   Job step task posted in error.

0006
>   Unable to set an ESTAE.

0007
>   Server task ended.

0008
>   Server task ETXR error.

0009

000A
>   Unable to create name/token pair.

000B
>   Unable to attach task.

000C
>   Unable to establish ENF listener.

000D
>   Unable to create latches.

System action

The system issues an ABEND dump and abnormally ends the PFA address space.

Operator response

Contact your system programmer.

System programmer response

Search the problem reporting databases for a fix for the problem. If no fix exists, collect the ABEND dump, then contact the IBM Support Center.

Source

DFSMSdfp

007

Explanation

An abend occurred in Runtime Diagnostics (HZR component) processing.

Code
    Explanation

xxxxyyyy
    Internal errors.

System action

An SVC dump might be produced.

Operator response

Contact the System Programmer for *xxxxyyyy*.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center for *xxxxyyyy*.

Source

Runtime Diagnostics (HZR is the component name)

008

Explanation

The error occurred during processing of a SYNAD routine. The routine was given control following processing of a BSAM CHECK macro instruction.

The SYNAD routine returned control to the control program for the CHECK macro instruction.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Correct the SYNAD routine so that the control program save area is not destroyed. Then run the job step again.

Source

DFSMSdfp

00A

Explanation

A program attempted to schedule an asynchronous or installation exit by branch-entering the stage 2 exit effector. The stage 2 exit effector detected a problem.

A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

0004

IQETCB did not point to a valid TCB. A program sets up the IQE by putting a TCB address into the IQETCB field. The program then branch-enters the stage 2 exit effector to schedule an asynchronous or installation exit, passing the address of the IQE.

0008

RQETCB did not point to a valid TCB. A program sets up the RQE by putting a TCB address into the RQETCB field. The program then branch-enters the stage 2 exit effector to schedule an asynchronous or installation exit, passing the address of the RQE.

000C

The program branch-entering the stage 2 exit effector did not hold the local lock for the home address space.

0010

The program branch-entering the stage 2 exit effector did not have addressability to the address space in which the asynchronous or installation exit was to be dispatched.

0014

The program branch-entering the stage 2 exit effector was not in primary or secondary address space control (ASC) mode.

System action

The system abends the program that branch-entered the stage 2 exit effector. The system may also write a logrec data set error record and an SVC dump.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=00A,ACTION=SVCD,END
```

System programmer response

Do the following:

- If an SVC dump or a logrec data set error record is not written with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
- Use the address in register 14 at the time of error to identify program that branch-entered the stage 2 exit effector.
  - For an installation-provided module, continue diagnosis with the module.
  - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group for the module at the IBM Support Center. Provide, if available, the SVC dump and the logrec data set error record.

Source

Supervisor control

00B

Explanation

During restart of a checkpointed job, the system detected an error. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) accompanies the abend and explains the error:

Code
  Explanation

001

    The system failed to obtain enough storage from the pre-allocated storage area.

002

    A storage pointer pointed to an area outside the pre-allocated storage area.

1F4

    A parameter list contained an error.

1F5

    An error was detected during initialization of scheduler restart.

1F6

    An error occurred while processing a find request.

1F7

    An error occurred while processing a get request.

1F8

    An error occurred while building a DD names table (DDNT) record for a scheduler work area (SWA) DDNT.

1F9

    An error occurred while building a DD names table (DDNT) record for unallocated step input output tables (SIOTs).

1FA

    An error occurred while building a Type 1 data set descriptor record (DSDR) for a step input output table / job file control block (SIOT/JFCB).

1FB

    An error occurred while building a Type 2 data set descriptor record (DSDR) for a job file control block extension (JFCBX).

1FC

    An error occurred while building a Type 2 data set descriptor record (DSDR) for a job file control block extension (JFCBE).

1FD

    An error occurred while building a Type 3 data set descriptor record (DSDR) for a generation data group name table (GDGNT).

1FE

    An error occurred while writing an updated step input output table (SIOT) to the scheduler work area (SWA).

1FF

    An error occurred when the system tried to end the scheduler JCL facility (SJF).

200

    An error occurred when a program issued the DELETE macro.

201

    An error occurred when a program issued the WTO macro.

202

    The system found an error in the parameter list passed by the routine that reads and writes from data sets.

System action

The system writes an error record to the logrec data set and writes an SVC dump.

Operator response

If the abend recurs, notify the system programmer.

System programmer response

If the error recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Scheduler restart

00C

Explanation

Cross-system coupling facility (XCF) encountered an error. See *z/OS MVS Diagnosis: Reference* for more information on diagnosing sysplex problems.

The reason code in register 15 is:

Code
  Explanation

00000004
  A group member abended another group member using the IXCTERM macro.

0000004C
  Data Space IXCDSCBE cannot be created or accessed.

00000040
  A group member abended another group member using the IXCTERM macro.

00000044
  Data space IXCDSMEM cannot be created or accessed.

00000048
  Data space IXCDSCBD cannot be created or accessed.

0000005C
  Either the system encountered an error while loading an XCF module or an XCF module is missing from the nucleus.

00000100
  Data Space IXCDSLO1 cannot be created or accessed.

00000104
  Data Space IXCDSLK1 cannot be created or accessed.

00000108
  Data Space IXCAP1DS cannot be created or accessed.

00000160
  A member of an XCF group appeared to be causing signalling sympathy sickness and was terminated. Message IXC615I is issued to indicate which member was selected for termination.

02070000
  A non-retryable error occurred and the function is considered complete.

  - If the message exit was not called, the signal has been preserved and will be presented later.
  - If the message exit was called, the exit returned before the error occurred, so the signal was delivered successfully.

  XCF percolates to the task to which the member is associated. The task can retry in its recovery routine. The system issues a LOGREC data set error record and an SVC dump. If the ABEND occurred while XCF was in control, the system issues an SVC dump.

02070001
  A non-retryable error occurred and the signal data might not have been delivered to a member message exit.

  - If the message exit routine was called, the failure occurred before the exit could successfully return to XCF.
  - If the message exit was not called, XCF discarded the message, in which case a signal was lost.

  XCF percolates to the task to which the member is associated. The task can retry in its recovery routine. The system issues a LOGREC data set error record. If the ABEND occurred while XCF was in control, the system issues an SVC dump.

02090004

A control signal for an XCF signal path appears to have been garbled due to a violation of XCF signal transfer protocols. The signal is discarded. However, the signal path that was the subject of the signal or the signal path over which the signal was transmitted (or both) might now be hung. In general, the hang means that the signal path will fail to establish communication as expected. Manual intervention might be needed to resolve the situation. For example, once the relevant signal path is identified, you might need to use the SETXCF operator command to stop and then start the hung path to restore it to service. XCF stalled I/O detection will not necessarily detect the hang.

The logrec entry produced for the abend attempts to identify the signal path that might be hung. The status of the hung path as reported in the detail output produced by the DISPLAY XCF,PATHOUT operator command will likely be LINKING. However, note that the set of all paths in the LINKING state can include signal paths other than the one that might be hung as a result of the discarded control signal.

020F0004

Intentional ABEND in order to enter a recovery environment so that internal XCF verify or repair routines can be invoked.

020F0006

A member of an XCF group appears to be stalled. XCF periodically monitors each active member of an XCF group to determine whether the member is processing its XCF work in a timely fashion. The monitor considers a member to be stalled if any of the following are true:

- A user group exit routine has not returned control to XCF in a timely fashion
- A user message exit routine has not returned control to XCF in a timely fashion
- A user message notify exit routine has not returned control to XCF in a timely fashion
- An SRB scheduled to the member address space to perform internal XCF processing has not returned control in a timely fashion
- Events queued for processing by the user group exit routine have not been processed in a timely fashion
- Signals queued for processing by the user message exit routine have not been processed in a timely fashion
- Signals queued for processing by the user message notify exit routine have not been processed in a timely fashion
- XCF work items queued for processing in the member address space have not been processed in a timely fashion

"Timely" is generally defined as 30 seconds. A member is considered stalled if any of the listed conditions is true, even though it may be processing other XCF work in a timely fashion.

The DISPLAY XCF,GROUP command identifies stalled groups and members with an asterisk (provided the stalled member is active on the system where the command is executed). Message IXC431I is issued to document a stall condition that persists for more than 180 seconds. ABEND 00C reason 020F0006 is issued if the stall condition persists for more than 195 seconds. The ABEND does not impact the processing of the stalled member as it is issued by the monitor while running under a separate work unit in the XCF address space. Message IXC430E is issued if the stall condition persists for more than 300 seconds.

The stall could be due to a user error, an internal XCF error, a system error (such as storage overlay or lost SRB), or could be normal behavior from which the system will recover. The system issues this ABEND to initiate recovery actions to document the problem, and to verify/repair internal XCF control blocks. For signalling related stalls, the system may provide replacement member message delivery cell(s) in hopes that signal delivery can resume. If signal delivery does not resume, signalling resources (for example, MMDCs or SIOCBs) may be consumed/lost for the life of the member. This consumption of signalling resources could surface itself in many ways, such as: common storage growth, degradation of signal delivery (possible to the point where no signals can be delivered), rejected message-out requests, or repeated path restarts.

020F000C

A member of an XCF group appears to be causing signaling sympathy sickness.

The DISPLAY XCF,GROUP command identifies stalled group and member causing signaling sympathy sickness with an exclamation point (in addition to the asterisk, since any member causing signaling sympathy sickness has to be stalled as well).

020F000D

A member of an XCF group appears to be causing signaling sympathy sickness and is about to be terminated. When the MEMSTALLTIME interval expires, XCF determines which member is most responsible for causing the problem and initiates an SVC dump. Message IXC615I indicates which member was selected for termination.

05070000

An error occurred while XCF was processing a Status Exit. XCF continues processing the Status Exit.

XCF tries to end the task that owns the Status Exit. The system writes a LOGREC data set error record. If the ABEND occurred while XCF was in control, the system issues an SVC dump.

05070000

An error occurred while XCF was processing a Status Exit. XCF continues processing the Status Exit.

XCF tries to end the task that owns the Status Exit. The system writes a LOGREC data set error record. If the ABEND occurred while XCF was in control, the system issues an SVC dump.

06010001

Internal error.

060B0001

An error occurred while XCF was processing a Group Exit. Some group event information may have been lost.

XCF tries to end the task that owns the Group Exit. Some group event information may have been lost. The system writes a LOGREC data set error record. If the ABEND occurred while XCF was in control, the system issues an SVC dump.

060C0000

A non-retryable error has occurred on the first invocation of the users Group Exit for this event. The exit will be rescheduled and presented with the same event.

060C0001

Group information may have been lost due to either a non-recoverable error in XCF or the users Group Exit has ABENDed two consecutive times. This code indicates the user may want to issue a IXCQUERY macro to see what may have been lost.

081C0001

XCF forcibly ended processing of a SETXCF STOP command that was stopping a signalling path. This can happen when an operator specifies UNCOND=YES on a SETXCF STOP command.

The XCF signalling service may have lost some messages as a result of this ABEND. There may be unpredictable results for the XCF groups whose messages got lost.

081CFF01

Unconditional stop processing is terminating the task that is currently processing a signaling path START, STOP, or RESTART request.

08800001

XCF completed processing of a signal path start, restart, stop, or rebuild request. The initiator of the request indicated that an XCF dump should be taken upon completion of the path request. XCF issues this abend to drive its recovery processing in order to initiate the requested dump. The logrec entry created as a result of this abend should identify the path in question. If hardware diagnostics were captured by XCF, the logrec entry should also include data to associate the logrec entry with the captured diagnostic data.

08960002

Internal error.

0A1x0001 (x=4,5,6)

A couple data set has been taken over by another sysplex. The data set is removed from service in the sysplex of which the issuing system is a member. The system does not take a dump, but records the error in LOGREC.

0A1x0070 (x=4,5,6)
   I/O interrupt occurred with an invalid CCW address.

0A1x0074 (x=4,5,6)
   XCF detected an I/O error while reading or writing to a couple data set. This may be a hardware error.

   If XCF cannot recover from the I/O error, it may end one or more groups or members using the couple data set, or else stop using the couple data set. XCF writes a LOGREC data set error record.

0A1x0078 (x=4,5,6)
   Failure of a previous write to the couple data set was detected.

11050040
   Data space IXCDSMEX cannot be created.

11050041
   Data space IXCDSMEX cannot be added to the PASN access list.

11050042
   Data space IXCDSMEY cannot be created.

11050043
   Data space IXCDSMEY cannot be added to the PASN access list.

13C00851
   System REXX exec IXCL2XPU is missing from the System REXX library.

13C008xx
   The system encountered an error executing System REXX exec IXCL2XPU.

16140003
   Internal error.

1701xxxx
   Internal error.

17090001
   The system encountered an error executing System REXX exec IXCRXCDS, or System REXX exec IXCRXCDS is missing from the System REXX library.

1801xxxx
   Internal error.

1803xxxx
   Internal error.

1805xxxx
   Internal error.

1808xxxx
   Internal error.

System action

The system might issue a LOGREC data set error record or an SVC dump. Messages explaining the error might precede this ABEND. Depending on the reason code, the system also does the following:

Code
   Explanation

00000004
   XCF ends the group member.

08960002
   The system initiates two MVS™ dumps.

1701xxxx
   The system might issue a LOGREC data set error record or an SVC dump.

1801xxxx
   The system might issue a LOGREC data set error record or an SVC dump.

1803xxxx
    The system might issue a LOGREC data set error record or an SVC dump.

1805xxxx
    The system might issue a LOGREC data set error record or an SVC dump.

1808xxxx
    The system might issue a LOGREC data set error record or an SVC dump.

Others
    XCF tries to end a member of a group in the sysplex. The system may issue a LOGREC data set error record or an SVC dump. Messages explaining the error might precede this ABEND.

Operator response

Depending on the reason code, do the following:

Code
    Explanation

08960002
    Contact your system programmer.

0A1x0074 (x=4,5,6)
    Determine the cause of the I/O error. If the error is caused by a hardware problem, contact hardware support.

Others
    See the operator response for the preceding messages. Obtain the LOGREC data set and SVC dump, if one is issued. Notify the system programmer.

Note: For reason code 08960002, the system initiates two MVS dumps. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. In this case, both dumps should be gathered before contacting the IBM Support Center.

System programmer response

Depending on the reason code, do the following:

Code
    Explanation

02070001
    Make sure that the program that owns the message exit has recovery established for missing messages. The recovery routine might do one of the following:

    • Send a request to other active group members requesting that they resend the message.
    • Back up to a previous point in the program and continue processing from there.
    • End the task if the function cannot tolerate any missing messages.

060B0001
    Determine which program owned the Group Exit. Make sure that the program that owns the Group Exit has recovery established to handle missing group event information. The recovery routine should do one of the following:

    • Issue the IXCQUERY macro to determine whether group event information was lost.
    • Back up to a previous point in the program and continue processing from there.
    • End the task if the function cannot tolerate missing information.

08960002
    Contact your system programmer.

1701xxxx
    Contact your system programmer.

1801xxxx

Contact your system programmer.

1803xxxx

Contact your system programmer.

1805xxxx

Contact your system programmer.

1808xxxx

Contact your system programmer.

Other internal reason codes

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the LOGREC data set and SVC dump, if one is issued.

Programmer response

Depending on the reason code, do the following:

Code
    Explanation

08960002

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide both MVS dumps issued by the system.

Other internal reason codes

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the LOGREC data set and SVC dump, if one is issued.

Non-internal reason codes

See the system programmer response for the messages preceding this abend.

If the problem persists, do the following:

- Format the SVC dump with the IPCS COUPLE subcommand. Include all the reports and the summary, detail, and exception levels for each report.
- Format the SVC dump with the IPCS CTRACE COMP(SYSXCF) subcommand to obtain XCF component trace data.
- Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the formatted SVC dump.

Source

Cross-system coupling facility (XCF)

00D

Explanation

An error occurred during processing of a CTRACE or CTRACEWR macro. Register 15 contains a reason code that further describes the error.

Code
    Explanation

00000101

For the CTRACE DEFINE macro, the parameter list version number is incorrect.

00000102

For the CTRACE DEFINE macro, the component name either does not begin with an alphabetic or national character, or it contains one or more characters that are not alphanumeric or national characters.

00000301

The system found either nonzero values in the reserved fields or unused fields for the requested service in the CTRACE DEFINE macro parameter list.

00000302

The system found either nonzero values in the reserved fields or unused fields for the requested service in the CTRACE DELETE macro parameter list.

00000401

For the CTRACE macro, an incorrect service request code was specified. Valid services are DEFINE and DELETE.

00000501

For the CTRACE DEFINE macro, the length of the minimum options string is greater than 256 bytes.

00010100

For the CTRACEWR macro, the parameter list version number is incorrect.

00010200

The system found either nonzero values in the reserved fields or unused fields for the requested service in the CTRACEWR macro parameter list.

00010300

For the CTRACEWR macro, the buffer length was passed was zero or less.

System action

The component trace service abnormally ends.

System programmer response

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Correct the input on the CTRACE or CTRACEWR macro. See the *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN* for the CTRACE and CTRACEWR macros.

Source

Component trace

00F

Explanation

The system detected a logic error in a hardware configuration definition (HCD) module.

System action

The system issues message CBDA099I. The system abends the current task.

Operator response

Notify the system programmer.

System programmer response

For diagnosing abend X'00F', see *z/OS HCD User's Guide*.

Source

Hardware configuration definition (HCD)

012

Explanation

A program incorrectly issued a TIMEUSED macro. A reason code in register 15 explains the error:

Code
   Explanation

4
   The program issued TIMEUSED with LINKAGE=SYSTEM, but the program was not in task control block (TCB) mode.

8
   The program issued TIMEUSED with LINKAGE=SYSTEM, but the program held one or more locks.

C
   The program issued TIMEUSED with LINKAGE=SYSTEM while running with an established enabled unlocked task (EUT) recovery routine.

System action

The system abnormally ends the program that issued the TIMEUSED macro.

Programmer response

Modify the code so that TIMEUSED will be issued in the correct environment. Run the program again.

Source

Timer supervision

013

Explanation

The error occurred during processing of an OPEN macro instruction. This system completion code is accompanied by message IEC141I. Refer to the explanation of message IEC141I for complete information about the task that was ended and for an explanation of the return code in register 15 (which is provided in the IEC141I message text).

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC141I.

Source

DFSMSdfp

014

Explanation

An error occurred during processing of a CLOSE macro instruction for a basic direct access method (BDAM) data set. This completion code is accompanied by message IEC208I. Refer to the explanation of message IEC208I for complete information about the task that was ended and for an explanation of the return code in register 15 (which is provided in the IEC208I message text).

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC208I.

Source

DFSMSdfp

015

Explanation

The print services access facility (PSAF) detected an error condition that is identified by the unique reason code accompanying this abend.

Operator response

For an explanation of the system action, the programmer response, and the reason codes, see *Print Services Access Facility for MVS User's Guide and Reference*

Source

DFSMSdfp

016

Explanation

An error occurred in the sequential access method (SAM) SIO/PAGE FIX or direct access storage device (DASD) end-of-block modules. A reason code (hexadecimal) further explains the error:

Code
    Explanation

04

    The DASD end-of-block modules issued an EXCPVR SVC request on behalf of a user request, but a previous EXCPVR SVC request has not yet completed. One of the following occurred:

- A data event control block (DECB) was used twice.
- Multiple READs or WRITEs were issued, but CHECK macros were not issued for those requests in the same order.

    The SAM SIO/PAGE FIX appendage issued this abend.

08

    An EXCPVR SVC request on behalf of a user request was going to be issued to read a data set that is RACF® EXECUTE access protected, but the user is not in supervisor state. The SAM SIO appendage issued this abend.

System action

The system abnormally ends the task.

System programmer response

If the EXCPVR SVC request was issued before the first request was completed, ensure that the DECB that is created for the READ/WRITE operation is tested for successful completion before it is reused. Also, ensure that the CHECK macros are issued in the same order as the associated READ or WRITE macros.

Otherwise, unless the task is in supervisor state, do not attempt to read a data set that is protected with RACF EXECUTE access authority.

Source

DFSMSdfp

017

Explanation

A program issued the SUSPEND or RESUME macro with an SPTOKEN macro incorrectly. A hexadecimal reason code in register 15 explains the error:

Code
> **Explanation**

0100
> The issuer of a SUSPEND macro with SPTOKEN held a lock other than a local or CML lock.

0104
> The content of access register 1, passed for a SUSPEND macro with SPTOKEN, was not valid.

0108
> The access list entry token (ALET), used to address the SPTOKEN and passed for a SUSPEND macro with SPTOKEN, is not valid.

010C
> The issuer of a SUSPEND macro with SPTOKEN was not running under a service request block (SRB).

0110
> The SUSPEND EXIT (specified by the EXIT keyword on the SUSPEND macro) returned an incorrect return code to the system.

0114
> Recursive errors occurred while processing a SUSPEND macro with SPTOKEN.

0200
> The caller of the RESUME SPTOKEN= service held a lock higher than or equal to the DISP lock in the locking hierarchy.

0204
> The content of access register 1, and passed for a RESUME macro, is not valid.

0208
> The ALET used to address the SPTOKEN, and passed for a RESUME macro, is not valid.

020C
> The SPTOKEN passed for a RESUME macro is not valid.

0300
> The issuer of a RESUME macro with SPTOKEN and PURGE=YES requested that an SRB be purged. This issuer held a lock higher than or equal to the DISP lock. The macro issuer must not hold such a lock.

0304
> The content of access register 1, passed for a RESUME macro with PURGE=YES, is not valid.

0308
　　The ALET, used to address the SPTOKEN and passed for a RESUME macro with SPTOKEN and PURGE=YES, is not valid.

030C
　　The SPTOKEN, passed for a RESUME macro with SPTOKEN and PURGE=YES, is not valid.

System action

For all reason codes, the system abends the issuer of the SUSPEND or RESUME macro.

For reason code X'0114' only, the system writes a logrec data set error record and an SVC dump.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=017,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If an SVC dump is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. For reason code X'0110', look at the registers at the time of error for the following:

   - Register 2 contains the return code from SUSPEND macro processing.
   - Registers 3 and 4 contain the SPTOKEN.

3. Identify the module that issued the SUSPEND or RESUME macro by using the program status word (PSW) of the current entry in the linkage stack.

   - For an installation-provided module, continue diagnosis with the module.
   - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide, if available, the SVC dump and the logrec data set error record. For reason code X'0110', provide the problem data collected in step .

Source

Supervisor control

019

Explanation

With the exception of reason code 00000000, a window services request was made either:

- With an input parameter value that is not valid
- Without a required input parameter value

Reason code 00000000 is applicable to any callable service.

The following hexadecimal reason codes provide further information about the error:

Code
　　Explanation

00000000
　　Request failed. Routine on down-level system.

00000110
　　Identify and access request failed. Operation type is not valid.

00000111
Identify and access request failed. Object type is not valid.

00000112
Identify and access request failed. Scroll area value is not valid.

00000113
Identify and access request failed. Object state is not valid.

00000114
Identify and access request failed. Access mode is not valid.

00000115
Identify and access request failed. Object size is not valid.

00000116
Identify and access request failed. Object identifier is not valid.

00000120
View request failed. Operation type is not valid.

00000121
View request failed. Object identifier is not valid.

00000122
View request failed. Usage type is not valid.

00000123
View request failed. Disposition is not valid.

00000124
View request failed. Specified offset is larger than the maximum size of the object.

00000126
View request failed. Span extends beyond the maximum size of the object.

00000130
Scroll out request failed. Object identifier is not valid.

00000131
Scroll out request failed. Specified offset is larger than the maximum size of the object.

00000132
Scroll out request failed. Cannot perform the SCROLLOUT service because the data object does not have a scroll area.

00000140
Save request failed. Object identifier is not valid.

00000141
Save request failed. Specified offset is larger than the maximum size of the object.

00000142
Save request failed. The SAVE service is not allowed, because the data object was identified and accessed in READ ONLY mode.

00000150
Refresh request failed. Object identifier is not valid.

00000151
Refresh request failed. Specified offset is larger than the maximum size of the object.

00000160
EVW request failed. The operation type must be "BEGIN" or "END".

00000161
EVW request failed. The object ID specified is not valid.

00000162
EVW request failed. The usage type must be "SEQ".

00000163
EVW request failed. The disposition input value must be "REPLACE" or "RETAIN".

00000164
 EVW request failed. Specified offset is larger than the maximum size of the object.

00000166
 EVW request failed. Span extends beyond the maximum size of the object.

System action

The system abnormally ends the task.

System programmer response

If the parameters are correct and the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Check your parameters for valid values and rerun your job.

Source

Callable Services (SCCSR)

01A

Explanation

The system found a problem during TSO/E LOGON processing. The following hexadecimal reason codes provide further information about the error:

Code
 Explanation

04
 The LOGON RACF interface routine received an incorrect function type.

08
 The RACROUTE macro received incorrect parameters for storing logon information in the RACF data base.

10
 The RACROUTE macro received incorrect parameters for obtaining logon information from the RACF data base.

18
 The RACROUTE macro returned an incorrect segment length.

1C
 The LOGON panel load module IKJLPxxx (xxx is the 3-character code for the language in which the panel is written) is in error. The variable recording area (VRA) contains the LOGON panel address and the offset being accessed in the panel.

20
 The LOGON command detected an error in data supplied by either installation exit IKJEFLN1 or installation exit IKJEFLN2. The VRA will contain the parameter number and the parameter entry in error.

24
 The LOGON command detected an error in validated data. One of the following is true:

- Either installation exit IKJEFLN1 or installation exit IKJEFLN2 validated a field by setting the key to X'04'. The LOGON processor has found that this value is not valid. For example, one of the exits may have validated the new password field. However, on the RACROUTE REQUEST=VERIFY that is done by LOGON, RACF may reject the password.

- Either installation exit IKJEFLN1 or installation exit IKJEFLN2 changed the key of a field that was already validated (the key was X'04').

- Either installation exit IKJEFLN1 or installation exit IKJEFLN2 requested that the LOGON processor prompt the user for a field that has already been validated (the key is X'04').

The VRA contains the LOGON panel field number and the parameter entry in error.

28

The LOGON help text load module IKJLHxxx (xxx is the 3-character code for the language in which the help text is written) is in error. The VRA will contain the LOGON help panel address and offset being accessed in the panel.

2C

Either installation exit IKJEFLN1 or installation exit IKJEFLN2 validated the account number field on the LOGON panel for a user defined only in the UADS data set, but the exit did not supply a procedure name.

30

The LOGON prompting took longer than 5 minutes, and the LOGON session was terminated.

System action

The system ends the TSO/E LOGON attempt. The system writes an ABEND dump.

Operator response

Notify the system programmer.

System programmer response

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Time Sharing Option Extensions (TSO/E)

01B

Explanation

An error occurred during RACONVRT processing; the following hexadecimal reason codes provide further information about the error:

Code
    Explanation

04

The RACROUTE macro returned an unexpected return code.

08

The RACONVRT I/O routine received an incorrect data management request.

System action

The system abnormally ends the command.

Operator response

Notify the system programmer.

System programmer response

Obtain the JCL for the job. Obtain the SYSOUT output for the job. Collect all printed output and output data sets related to the problem. If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Time Sharing Option Extensions (TSO/E)

01C

Explanation

The RACROUTE macro returned an unexpected return code.

System action

The system abnormally ends the command.

Operator response

Notify the system programmer.

System programmer response

Obtain the JCL for the job. Obtain the SYSOUT output for the job. Collect all printed output and output data sets related to the problem. If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Time Sharing Option Extensions (TSO/E)

01D

Explanation

During processing of a DSPSERV or HSPSERV macro, the system found a non-environmental error. The macro processing failed. Register 15 contains a hexadecimal reason code.

For the reason codes presented with format xxzzNNxx, *zz* must be one of:

- 07 for CREAD
- 08 for CWRITE
- 09 for SREAD
- 0A for SWRITE
- FE if the service that is requested cannot be determined

When *zz* is not one of those values, such as 00, those reason codes do not apply.

Code
   Explanation

xxzz07xx
   The CREAD or CWRITE request failed because the caller was unauthorized.

xxzz08xx
   The indicated address space does not exist or cannot be accessed by the caller.

xxzz09xx
   The indicated Hiperspace does not exist or cannot be accessed by the caller. This could be caused by the owner of the Hiperspace being swapped out.

xxzz0Axx
   The system does not recognize the macro request.

xxzz0Bxx
   A storage key violation occurred on the specified Hiperspace virtual storage.

xxzz0Cxx

The caller did not issue a GETMAIN macro for the indicated address space virtual storage.

xxzz0Dxx

A storage key violation occurred on the specified address space virtual storage.

xxzz0Exx

The specified address space virtual storage did not start on a 4-kilobyte boundary or was not within the bounds of the private area. For CWRITE requests, the specified address space virtual storage did not start on a 4-kilobyte boundary or was not within the bounds of the private area or the (E)CSA area.

xxzz0Fxx

The specified Hiperspace virtual storage did not start on a 4-kilobyte boundary or was not within the bounds of the Hiperspace.

xxzz10xx

The SREAD or SWRITE request failed because it was issued against address space virtual storage that maps a data-in-virtual object, but the storage is virtual I/O (VIO) storage, fixed, or part of a disabled reference (DREF) subpool.

xxzz11xx

The caller specified a value for NUMRANGE that was not in the acceptable range.

xxzz12xx

The SREAD or SWRITE request failed because the caller was in cross-memory mode.

xxzz13xx

The SREAD or SWRITE request failed because it was issued against an ESO Hiperspace.

xxzz14xx

The request failed because the caller is not in 31-bit addressing mode.

xxzz15xx

The specified parameter list or range list is not accessible.

xxzz16xx

The caller specified an incorrect parameter list version.

xxzz17xx

The parameter list contains inconsistent data or data that is not valid.

xxzz18xx

The SWRITE request failed because the caller issued it against Hiperspace storage while a DIV SAVE macro was active.

xxzz19xx

The HSPSERV macro failed because an unauthorized caller requested it against a shared standard Hiperspace without supplying an access list entry token. (ALET).

xxzz1Axx

The supplied access list entry token (ALET) does not belong to the Hiperspace as indicated by the specified STOKEN.

xx0001xx

A problem-state program with PSW key 8-F attempted either to create a SCOPE=ALL or SCOPE=COMMON data space, a disabled reference (DREF) data space, or a non-fetch protected data space, or to assign ownership of a Hiperspace to another task.

xx0002xx

A supervisor-state caller attempted to create a data space on behalf of an owner that is not in the caller's home or primary address space.

xx0003xx

A service request block (SRB) mode request did not specify the owner of the data space or Hiperspace.

xx0004xx

The caller requested that a storage key be assigned to the data space, but the caller was not in supervisor state.

xx0008xx

The system did not create a data space because the designated owner does not exist.

xx000Axx

The problem-state program with PSW key 8-F attempted to prefix the data space name with "SYS", which is reserved for system use.

xx000Bxx

The caller specified an incorrect number of blocks for the data space size.

xx000Dxx

The specified data space name is not correct. It must be left-justified or non-blank, can contain only alphabetic, numeric and national characters, cannot start with a numeric character, and must be padded on the right with blanks.

xx000Exx

A supervisor-state caller attempted to prefix the data space name with "SYSDS", which is reserved for system use.

xx000Fxx

An unauthorized caller requested creation of an ESO Hiperspace.

xx0011xx

The parameter list is inconsistent.

xx0012xx

An unauthorized caller requested creation of a shared standard Hiperspace.

xx0013xx

An problem-state program with PSW key 8-F tried to create a data space and assign ownership of the data space to a task that is neither the caller's own task nor the caller's job step task.

xx0014xx

The creation of a SCOPE=COMMON data space failed because the caller was swappable or because the system detected that the owner of a SCOPE=COMMON data space has become swappable.

xx0015xx

An attempt was made to create a SCOPE=COMMON data space with a user key (8 - 15).

xx0016xx

HIDEZERO=YES was specified with TYPE=HIPERSPACE.

xx0101xx

The DELETE request failed because a problem program cannot specify TTOKEN.

xx0102xx

An authorized program specified a TTOKEN that is not valid.

xx0103xx

An authorized program attempted to delete a data space on behalf of an owner that is not its home or primary address space.

xx0104xx

A service request block (SRB) mode request failed because it did not specify a TTOKEN, which is required to determine the owner.

xx0105xx

A specified STOKEN does not represent a valid data space.

xx0106xx

The specified STOKEN's owner (as specified by the TTOKEN) is not the owner of the data space.

xx0107xx

The specified data space contains I/O defined pages.

xx0108xx

The specified data space contains pages mapped by the DIV macro.

xx0109xx

The specified data space contained pages for which a DIV SAVE operation was in progress.

xx010Axx
A problem program attempted to delete a SCOPE=ALL or SCOPE=COMMON data space.

xx010Bxx
A problem program attempted to delete a SCOPE=SINGLE data space that has a key different than the caller's key.

xx010Cxx
A problem-state program with PSW key 8-F tried to delete a SCOPE=SINGLE data space, created by the caller's task, that was assigned ownership to a task other than the caller's task or the caller's job step task.

xx010Dxx
The caller attempted to delete a Hiperspace while the Asynchronous Data Mover Facility (ADMF) was still processing a request to transfer data to or from the Hiperspace.

xx010Exx
The caller attempted to delete a data space which has one or more shared segments.

xx0201xx
The RELEASE request failed because the data space does not exist.

xx0202xx
The RELEASE request failed because the start address is not on a page boundary.

xx0203xx
The RELEASE request failed because the input STOKEN is not valid.

xx0204xx
The RELEASE request failed because the number of blocks is not valid.

xx0205xx
The RELEASE request failed because the requested range of blocks is not in the addressable range of the data space.

xx0206xx
The RELEASE request failed because the problem program caller attempted to release a SCOPE=ALL or SCOPE=COMMON data space.

xx0207xx
The RELEASE request failed because the problem-state program tried to release storage in either a Hiperspace it does not own or a SCOPE=SINGLE data space it does not own or did not create, or to release a data space on behalf of an owner that is not in its primary address space or is not the current dispatching task.

xx0208xx
The RELEASE request failed because the supervisor state program attempted to release a private data space on behalf of an owner that is not in the supervisor state's home or primary address space.

xx0209xx
The RELEASE request failed because the caller is not in key 0, and the key for the data space page did not match the caller's key.

xx020Axx
The RELEASE request failed because the data space page is fixed, or fixed in another view of a sharing group.

xx020Bxx
The RELEASE request failed because the caller was disabled and requested release of enabled reference storage.

xx020Cxx
The RELEASE request failed because the caller requested a page that is READONLY.

xx0213xx
The RELEASE request failed because the range list contains a non-zero value in one or more reserved fields.

xx0301xx
The DEFINE IOON request failed because the data space does not exist.

xx0302xx
The DEFINE IOON request failed because the start address is not on a 4-kilobyte boundary.

xx0303xx

The DEFINE IOON request failed because the input STOKEN is not valid.

xx0304xx

The DEFINE IOON request failed because the number of blocks is less than one.

xx0305xx

The DEFINE IOON request failed because the requested addressable range of blocks is not in the range of the data space.

xx0306xx

The DEFINE IOON request failed because the caller was in problem program state and not in system key.

xx0307xx

The DEFINE IOON request failed because the caller attempted to DEFINE IOON for a SCOPE=SINGLE data space on behalf of an owner that is not in the caller's home or primary address space.

xx0308xx

The DEFINE IOON request failed because the data space page has a DIV SAVE operation in progress.

xx0309xx

The DEFINE IOON request failed because it was issued for a hiperspace.

xx030Bxx

The DEFINE IOON request failed because the caller was disabled and specified storage that was neither in a disabled reference (DREF) state or an IOON state.

xx030Cxx

The DEFINE IOON request failed because the input range list contains a non-zero value in one or more reserved fields.

xx030Fxx

The DEFINE IOON request failed because the target page was backed by a one megabyte frame that was already page fixed, and the request was to page fix a subset of the one megabyte page. The one megabyte page could not be demoted.

xx0401xx

The DEFINE IOOFF request failed because the data space does not exist.

xx0402xx

The DEFINE IOOFF request failed because the start address is not on a 4-kilobyte boundary.

xx0403xx

The DEFINE IOOFF request failed because the input STOKEN is not valid.

xx0404xx

The DEFINE IOOFF request failed because the number of blocks is less than one.

xx0405xx

The DEFINE IOOFF request failed because the requested addressable range of blocks is not in the data space.

xx0406xx

The DEFINE IOOFF request failed because the caller was in problem program state and not in system key.

xx0407xx

The DEFINE IOOFF request failed because the caller attempted to DEFINE IOOFF for a SCOPE=SINGLE data space on behalf of an owner that is not in the caller's home or primary address space.

xx0408xx

The DEFINE IOOFF request failed because it was issued for a Hiperspace.

xx040Cxx

The DEFINE IOOFF request failed because the input range list contains a non-zero value in one or more reserved fields.

xx040Fxx

The DEFINE IOOFF failed, caller tried to DEFINE IOOFF (unfix) a partial large page segment.

xx0501xx

The specified STOKEN does not represent a valid data space or represents a data space for which the caller is not authorized.

xx0503xx

The new current size exceeds the maximum size for the data space and Hiperspace.

xx0601xx

The DEFINE DREFON request failed because the data space does not exist.

xx0602xx

The DEFINE DREFON request failed because the start address is not on a 4-kilobyte boundary.

xx0603xx

The DEFINE DREFON request failed because the input STOKEN is not valid.

xx0604xx

The DEFINE DREFON request failed because the number of blocks is less than one.

xx0605xx

The DEFINE DREFON request failed because the requested addressable range of blocks extends beyond the end of the data space.

xx0606xx

The DEFINE DREFON request failed because the caller was not in supervisor state.

xx0607xx

The DEFINE DREFON request failed because the caller attempted to use DREFON against storage in a scope-single data space on behalf of an owner that is not in the home or primary address space.

xx0608xx

The DEFINE DREFON request failed because the data space page has a DIV SAVE operation in progress.

xx0609xx

The DEFINE DREFON request failed because the input STOKEN is for a Hiperspace.

xx060Axx

The DEFINE DREFON request failed because the specified area is part of a data space that was created with a disabled reference (DREF) attribute.

xx060Bxx

The DEFINE DREFON request failed because the caller was disabled and specified storage that was neither in a disabled reference (DREF) state nor an IOON state.

xx060Cxx

The DEFINE DREFON request failed because the input range list contains a non-zero value in one or more reserved fields.

xx060Dxx

The requestor tried to DEFINE DREFON for a data space with shared segments.

xx060Fxx

The DEFINE DREFON failed, caller tried to DEFINE DREFON (fix) a partial large page segment.

xx071Bxx

CREAD processing detected a PGSER fix in progress for the address space virtual storage.

xx0B01xx

An OUT failed because the data space does not exist.

xx0B02xx

An OUT failed because the start address is not on a page boundary.

xx0B03xx

An OUT failed because the input STOKEN is not representing a caller's data space.

xx0B04xx

An OUT failed because the number of blocks is not valid.

xx0B05xx

An OUT failed because the requested range of blocks is not in the range of the data space.

xx0B06xx

An OUT failed because the problem program caller attempted to OUT a SCOPE ALL or SCOPE COMMON data space.

xx0B07xx

An OUT failed because the problem program caller attempted to OUT a data space on behalf of an owner that is not in its primary address space.

xx0B08xx

An OUT failed because the supervisor state program attempted to OUT a scope single data space on behalf of an owner that is not in its home address space.

xx0B09xx

An OUT failed because the data space is a Hiperspace.

xx0C01xx

A LOAD failed because the data space does not exist.

xx0C02xx

A LOAD failed because the start address is not on a page boundary.

xx0C03xx

A LOAD failed because the input STOKEN is not valid.

xx0C04xx

A LOAD failed because the number of blocks is not valid.

xx0C05xx

A LOAD failed because the requested range of blocks is not in the range of the data space.

xx0C06xx

A LOAD failed because the problem program caller attempted to LOAD a SCOPE ALL or SCOPE COMMON data space.

xx0C07xx

A LOAD failed because the problem state program caller attempted to load a data space on behalf of the data space owner, but the data space is not in the owner's primary address space.

xx0C08xx

A LOAD failed because the supervisor state program attempted to load a scope single data space on behalf of the data space owner, but the data space is not in the owner's home address space.

xx0C09xx

A LOAD failed because the data space is a Hiperspace.

xx0D01xx

The DEFINE DREFOFF failed because the data space does not exist.

xx0D02xx

The DEFINE DREFOFF failed because the start address is not on a 4-kilobyte boundary.

xx0D03xx

The DEFINE DREFOFF failed because the input STOKEN is not valid.

xx0D04xx

The DEFINE DREFOFF failed because the number of blocks is less than one.

xx0D05xx

The DEFINE DREFOFF failed because the requested addressable range of blocks is not in the range of the data space.

xx0D06xx

The DEFINE DREFOFF failed because the caller was not processing in supervisor state with a system program status word (PSW) key.

xx0D07xx

The DEFINE DREFOFF failed because the caller attempted to DEFINE DREFOFF a SCOPE SINGLE or data space on behalf of an owner that is not in its home or primary address space.

xx0D09xx

The DEFINE DREFOFF failed because the input STOKEN is for a Hiperspace.

xx0D0Axx

The DEFINE DREFOFF failed because the specified area is part of a data space that was created with the disabled reference attribute.

xx0D0Dxx

The requestor tried to DEFINE DREFOFF for a data space with shared segments.

xx0D0Exx

A DSPSERV DEFINE DREFOFF is issued with FORCE option. The option is no longer supported.

xx0D0Fxx

The DEFINE DREFOFF failed, caller tried to DEFINE DREFOFF (unfix) a partial large page segment.

xxFF01xx

The DSPSERV macro request failed because a secondary address space identifier (ASID) is not valid.

xxFF02xx

The request failed because the caller held locks but indicated DISABLED=NO.

xxFF03xx

The DSPSERV macro request failed because the caller issued a macro version that is not valid.

xxFF04xx

The DSPSERV macro request failed because reserved fields in the macro parameter list are not zeros.

xxFF05xx

The DSPSERV macro request failed because the caller requested an unknown service.

xxFF06xx

The DSPSERV macro request failed because a protection exception occurred while referencing the caller's parameter list.

xxFF07xx

The DSPSERV macro request failed because the caller must be in 31-bit addressing mode to use any service of the DSPSERV macro.

xxFF08xx

The request failed because the caller was disabled but requested a service that requires the caller to be enabled.

xxFF09xx

The request failed because the caller held one or more locks needed by the system to process the request.

xxFF0Axx

The request failed because the caller specified an input range list for a service that does not support a range list.

xxFF0Bxx

The request failed because the caller specified an incorrect value for NUMRANGE. It must be greater than zero.

xxFF0Cxx

The request failed because the caller specified a value for NUMRANGE that exceeded the maximum of 16 for an unauthorized caller.

xxFF0Dxx

The request failed because the caller specified an input range list that is not accessible to the service using the caller's PSW key.

xxFF10xx

The DEFINE request failed because IOON or IOOFF was incorrectly coded.

System action

The system sends messages about the job to the job log, writes an ABEND dump for the failing job step, and writes the JCL and SYSOUT output for the job.

System programmer response

If the caller was provided by the installation, correct it. Look at accompanying messages in the job log, the JCL and the SYSOUT output.

If the caller was an IBM-supplied program, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the messages, the JCL, the SYSOUT output, and the ABEND dump.

Programmer response

If the caller was an application program, correct the program and run the job again.

Source

Real storage manager (RSM)

01F

Explanation

A unit of work attempted to end without removing all its entries from the linkage stack. A hexadecimal reason code in register 15 explains the abend:

Code
  Explanation

04
  The unit of work issued an EXIT macro (SVC 3) without unstacking the linkage stack entries of the corresponding request block (RB).

08
  An RB routine did not unstack the linkage stack entries it had added.

System action

The system abends the task and may write a dump.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=01F,ACTION=SVCD,MATCHLIM=1,END
```

System programmer response

Do the following:

1. If an SVC dump is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. In the system trace, find an SVC D or SVCE D entry for abend X'01F'. Use this entry to determine which address space and task control block (TCB) was active at the time of error. Note the address space identifier (ASID).
3. Look at the linkage stacks for the TCBs associated with the active address space.
4. Determine which linkage stack entries were not unstacked by examining the entries on the stack after the entry with the unstack suppression bit set on. The high-order bit of the linkage stack entry descriptor (LSED) is the unstack suppression bit.
5. Identify the module that failed to remove its linkage stack entries by using the program status word (PSW) address associated with the unstacked linkage stack entry.

   - If the module is not an IBM module, continue diagnosis with the module.

- If the module is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide all data collected and, if available, the logrec data set error record.

Source

Supervisor control

020

Explanation

The error occurred during processing of a BDAM OPEN macro instruction.

The control program found that the DCBMACRF field of the data control block did not contain an A, K, or I, or an attempt was made to open a BDAM data set that contained zero extents.

System action

The system ends the task.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

In the first case, make sure that A, K, or I is specified in the MACRF operand of the DCB macro instruction. Verify that the DCBMACRF field was correctly modified by the problem program before the opening process. After making corrections, reassemble the program and run the job step again.

In the second case, create the data set before attempting to open it as a BDAM file.

Source

DFSMSdfp

021

Explanation

A task management macro passed an address space control block (ASCB) address with an error indicated in the following reason codes:

Code
   Explanation

00
   High order bits are set on in the input ASCB for move or add processing.

04
   ASCBNOQ bit is off in the ASCB for add processing.

08
   Attempt to add, move or delete the master scheduler address space.

0C
   Acronym check for the input ASCB fails.

10
   Incorrect CHAP entry function code.

14

Incorrect EXTENDED MOVE function code.

18

Incorrect EXCNT count passed from the system.

1C

Acronym check for the input enclave control block fails.

System action

The system abnormally ends the program that issued the macro, writes a logrec data set error record, and writes a dump.

System programmer response

Collect all printed output and output data sets related to the problem. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set record and the dump.

Programmer response

When calling the routine, ensure that the high-order byte of the ASCB address is set to zero. Correct the error. Run the job again.

Source

Task management

022

Explanation

The vector processing subsystem support (VPSS) encountered a missing device end condition on control port 0. The VPSS cannot continue processing or respond to operator commands.

System action

The VPSS missing interruption handler exit abnormally ends the VPSS monitor address space with system completion code X'022'. The system issues message IGF991I to identify the 3838 Array Processor that caused the VPSS monitor address space to end. The system writes a logrec data set error record.

Operator response

Contact hardware support.

Programmer response

Determine why the 3838 Array Processor is not responding with a device end. You may let the system operator restart the VPSS so that the operator may enter VPSS commands for other 3838 devices.

Source

Vector processing

023

Explanation

LNKLST or library lookaside (LLA) encountered an error that prevented LLA from completing some processing. LLA issues other contents supervision (CSV) messages with the abend code. When more than one abend has occurred, LLA includes the original abend and reason code in the message or messages it issues for the sequence of abends.

The hexadecimal reason code that describes the cause of the abend is one of the following:

Code
   Explanation

00000001
   While LLA was copying directory entries from a LNKLST library to build a new LLA directory, dynamic allocation or unallocation failed.

00000002
   While LLA was copying directory entries from a LNKLST library to build a new LLA directory, OPEN failed.

00000003
   While LLA was building a new LLA directory, LLA found a partitioned data set (PDS) directory block with a record key equal to X'0000000000000000'.

00000004
   While LLA was building a new LLA directory, LLA found a PDS directory block with an incorrect record key; the PDS directory block that contained the final PDS directory entry did not have the correct record key of X'FFFFFFFFFFFFFFFF'.

00000005
   While LLA was building a new LLA directory, LLA found a PDS directory entry with the name X'0000000000000000'.

00000006
   While LLA was building a new LLA directory, LLA found a PDS directory block whose given length was too small to contain an integral number of PDS directory entries.

00000007
   While LLA was building a new LLA directory, LLA found a PDS directory block for which both of the following were true:

   • The block did not contain the final directory entry in the directory

   • The block's record key differed from the name of the last PDS directory entry in the block.

00000008
   While LLA was building a new LLA directory, LLA had an I/O error.

00000009
   While LLA was building a new LLA directory, LLA reached the physical end of the PDS directory before finding the last PDS directory block. The last block must have a record key of X'FFFFFFFFFFFFFFFF'.

0000000A
   While LLA was building a new LLA directory, the directory for an LLA-managed data set contained too many directory entries for LLA to fit into its available virtual storage.

0000000B
   LLA failed unexpectedly.

00000014
   An I/O error occurred during LLA processing.

00000015
   A media error occurred during LLA processing.

00000016
   An error occurred during data set processing.

00000017
   An error occurred during SMS processing.

00000018

SMS failed to obtain required resources.

00000019

An error occurred during LLA processing.

00000100

During LLA address space initialization processing, the ATTACH of LLA's resource manager subtask failed.

00000101

LLA address space initialization processing determined that the LLA fetch installation exit CSVLLIX1 was not reentrant.

00000102

LLA detected that its resource manager subtask abnormally ended.

00000103

LLA fetch installation exit CSVLLIX1 was AMODE 24.

00000201

While building a new LLA directory, LLA failed while making a table of PDS or PDSE directory entries from the directory of an LLA-managed data set.

00000202

LLA failed while building an index for a new LLA directory.

00000203

While building a new LLA directory, LLA found no modules in the LNKLST.

00000204

LLA directory build processing of the list of data sets to be managed by LLA failed unexpectedly.

00000205

LLA directory build processing failed because incorrect data was detected while parsing the LLA parmlib member CSVLLAxx.

00000206

LLA directory build processing failed because LLA failed unexpectedly while parsing the LLA parmlib member CSVLLAxx.

00000207

LLA directory build processing failed because LLA failed unexpectedly while processing a refresh request for specific members of an LLA-managed data set.

00000208

During LLA MVS operator command processing, the user did not have proper system authorization facility (SAF) and security product (RACF) authorization to an LLA parmlib data set resource.

00000401

Dynamic allocation (SVC 99) failed. LLA may have been:

- Allocating an LLA-managed data set to read its directory to build a new LLA directory.
- Allocating an LLA-managed data set to copy modules from it while staging modules.
- Allocating SYS1.parmlib or another parmlib data set to process an LLA start or update request.
- Unallocating a data set that LLA had previously allocated.

00000500

Dynamic allocation or unallocation failed while LLA was staging modules for an LLA-managed library into the virtual lookaside facility (VLF) data space.

00000501

The LLA staging installation exit CSVLLIX2 was AMODE 24.

00000A00

While LLA was obtaining PDS directory entries for an LLA-managed data set during a selective module refresh, BLDL returned with a return code greater than 4.

00000A01

LLA directory refresh processing could not obtain sufficient storage to hold all the PDS directory entries accumulated from selective LLA directory refreshes.

00000A02

LLA directory update processing failed while reading the LLA parmlib member CSVLLAxx, which contains the control statements needed to perform the LLA directory update. The parmlib read routine detected that the input parameter list contained incorrect data.

00000A03

LLA directory refresh processing failed unexpectedly while reading the LLA parmlib member CSVLLAxx, which contains the control statements needed to perform the LLA directory update.

00000A04

LLA directory refresh processing failed unexpectedly while parsing the LLA parmlib member CSVLLAxx, which contains the control statements needed to perform the LLA directory update.

00000A05

LLA was unable to refresh a PDSE library.

00000A50

LLA's cross memory directory access routine was entered with incorrect parameters.

00000B00

LLA module staging processing did not convert a floating point number to 64-bit unsigned binary because the number was less than one.

00000B01

LLA module staging processing was unable to convert a floating point number to 64-bit unsigned binary because the number was too big to be represented by 64 bits.

00000B02

LLA module staging processing was unable to convert a floating point number to 64-bit unsigned binary because the number was not normalized.

00000B50

An incorrect LLPM parameter area has been passed to the LLA search routine.

00000B51

The LLA search routine was called from a program which was not running under an supervisor request block (SVRB).

00000B52

The LLA search routine was called with an incorrect DEB as input.

00000B53

The LLA search routine was called with an incorrect value in LLPPCNCT.

00000C00

The pointer to LLA's component trace buffer was outside of the projected storage range for the buffer.

00000D00

LLA directory build processing failed unexpectedly while processing the LLA parmlib member CSVLLAxx.

00000D01

LLA directory update processing failed while reading the LLA parmlib member CSVLLAxx, which contains the control statements needed to perform the LLA directory update. The parmlib read routine detected that the input parameter list contained incorrect data.

00000D02

LLA directory refresh processing failed unexpectedly while reading the LLA parmlib member CSVLLAxx, which contains the control statements needed to perform the LLA directory update.

00000D03

LLA directory refresh processing failed unexpectedly while parsing the LLA parmlib member CSVLLAxx, which contains the control statements needed to perform the LLA directory update.

00000D05

LLA directory refresh processing failed unexpectedly while allocating the LLA parmlib member CSVLLAxx, which contains the control statements needed to perform the LLA directory update. The allocation was

performed using the IEFPRMLB service. A previous message issued by the IEFPRMLB service accompanies this ABEND.

00000E01
While LLA was building a new LLA directory, dynamic allocation or unallocation failed.

00000E02
While LLA was building a new LLA directory, OPEN failed.

00000E03
While LLA was building a new LLA directory, LLA found no data sets to manage.

00000E04
While LLA was building a new LLA directory, LLA found that a data set to be managed by LLA was not a PDS.

00000E05
While LLA was building a new LLA directory, LLA found that FREEZE or NOFREEZE was specified for a non-LLA data set.

00000E06
During LLA MVS operator command processing, the user did not have proper SAF and security product (RACF) authorization to an LLA-managed data set resource.

00000E07
While LLA was building a new LLA directory, LLA found that a data set to be managed by LLA was a PDSE that was not known to be a load library. Make sure that the data set was not empty and had at least one program object in it.

00001200
The caller invoked an LLACOPY macro with an incorrect data control block (DCB) parameter.

00001201
The caller invoked an LLACOPY macro with an incorrect DCB parameter. The DCB does not point to a valid DEB.

00001202
The caller invoked an LLACOPY macro whose DCB references a data set for which the user does not have proper SAF security (RACF) authorization.

00001203
The caller invoked an LLACOPY macro with a zero DCB parameter.

00001204
The caller invoked an LLACOPY macro with an incorrect level parameter list or non-zero reserved fields.

00001205
The user invoked an LLACOPY macro while in problem state.

00001206
CSVLLCPY was called with an invalid DCB - data set not PDS(E).

System action

If the LLA address space ends because of this error, the system usually attempts to restart LLA in another address space. LLA issues one or more of the following messages: CSV222I, CSV226E, CSV227I, CSV247I.

If the failed LLA address space had not become active and had been created to recover from a prior LLA address space failure, the system issues message CSV218E without restarting LLA.

Specific system actions for each reason code are as follows:

Code
   System Action

00000001
This error was preceded by an abend for which LLA took an SVC dump and recorded the error in logrec data set. If SVC 99 itself failed, LLA issues abend X'023', reason code X'00000401', and message CSV224I. If this error occurred during an initial LLA directory build, LLA also issues abend X'023', reason code X'00000201', to end its address space.

00000002 through 00000019

DFSMS may take an SVC dump. LLA records this error in the logrec data set. The indicated library will not be processed. LLA issues message CSV221I or CSV247I, which contains this reason code in its message text. If this error occurred during an initial LLA directory build, LLA also issues abend X'023', reason code X'00000201', to end its address space.

00000100

LLA takes an SVC dump and records this error in the logrec data set. The next system action depends on what release you are using; for MVS/SP 3.1, the LLA address space ends. For MVS/SP 3.1.0 or higher, LLA continues processing without its resource management subtask until it determines if the reattach threshold has been reached. If the threshold has not been reached, LLA attempts to reattach the subtask. Otherwise, LLA continues processing without its resource management subtask.

00000101

LLA initialization issues message CSV232I, and continues processing as if CSVLLIX1 was not installed in the LNKLST.

00000102

LLA's resource management subtask abnormally ends, and then the LLA address space also abnormally ends.

00000103

LLA initialization issues message CSV232I, and continues processing as if CSVLLIX1 was not installed in the LNKLST.

00000201

For dynamic allocation errors, LLA issues message CSV224I; for PDS related I/O errors, LLA issues message CSV225I, for PDSE related errors, LLA issues message CSV247I. In any case, LLA issues message CSV221I to show how far the LLA directory build had progressed prior to the error, and includes a reason code that identifies the specific error. Then, if the error occurred during an LLA directory refresh, LLA issues CSV217I and keeps the old directory active. Otherwise, the LLA address space ends.

00000202, 00000204, 00000206, 00000207

For the original abend that LLA detected, LLA takes an SVC dump and records the error in the logrec data set. LLA then issues this abend. If the error occurred during initial build processing, LLA ends its address space. Otherwise, LLA keeps the old directory active.

00000203

LLA takes an SVC dump and records the error in the logrec data set. Then, if the error occurred during an LLA directory refresh, LLA issues CSV217I and keeps the old directory active. Otherwise, the LLA address space ends.

00000205

LLA issues message CSV235I, CSV236I. If the error occurred during an LLA directory refresh, LLA issues message CSV217I and keeps the old directory active. Otherwise, the LLA address space ends.

00000208

If the error occurred during an LLA directory refresh, LLA issues CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code 204, to end its address space.

00000401

LLA issues message CSV224I, which includes dynamic allocation's specific error and information codes. LLA takes an SVC dump and records the error in logrec data set. LLA's subsequent actions depend on the task LLA was performing when the dynamic allocation was requested:

- For MVS/SP 3.1, if LLA was allocating a data set to read its directory to build a new directory, then LLA issues message CSV221I. If the error occurred during an LLA directory refresh, LLA also issues message CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code X'00000201', to end its address space.

- For MVS/SP 3.1.0e or higher, if LLA was allocating a data set to read its directory to build a new directory, then LLA issues message CSV241I. If the error occurred during an LLA directory refresh, LLA also issues message CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code X'00000204', to end its address space.

- If LLA was allocating a data set to copy modules from it while staging modules, then LLA does not stage modules from this library.
- If LLA was allocating a parmlib data set to process a start LLA request, LLA issues message CSV235I, CSV236I, and does not start the LLA address space.
- If LLA was allocating a parmlib data set to process a LLA refresh request, LLA issues message CSV235I, CSV236I and keeps the old directory active.
- If LLA was unallocating a data set that it had previously allocated, then LLA takes no further action.

00000500

If SVC 99 itself failed, LLA issues abend X'023', reason code 401, and message CSV224I. LLA's subsequent actions depend on what release you are using.

For MVS/SP 3.1, this error was preceded by an abend for which LLA took an SVC dump and recorded the error in the logrec data set. LLA's resource manager subtask ends, causing the LLA address space to end.

For MVS/SP 3.1.0e or higher, LLA's resource manager subtask ends and LLA continues processing without its resources management subtask until it determines if the reattach threshold has been reached. If the threshold has not been reached, LLA attempts to reattach the subtask. Otherwise, LLA continues processing without its resource management subtask.

00000501

LLA issues message CSV232I, and continues processing as if CSVLLIX2 was not installed in the LNKLST.

00000A00 through 00000A05

LLA takes an SVC dump and records the error in the logrec data set. Then, LLA issues message CSV217I, and does not perform the requested LLA refresh.

00000A50

If the caller is LLA or BLDL, the caller takes an SVC dump and records the error in the logrec data set. Then, the caller ends the LLA address space with an abend 312.

00000B00 through 00000B02

LLA takes an SVC dump and records the error in the logrec data set. Then, LLA's resource manager subtask ends, and LLA also issues abend X'023', reason code X'00000102', to end its address space.

00000B50, 00000B51, 00000B52, 00000B53

If the caller is BLDL, the caller takes an SVC dump, records the error in the logrec data set. and abends the caller with a X'212' abend. If the caller is LLA, the caller takes an SVC dump, records the error in the logrec data set, and provides the module using program fetch.

00000C00

LLA takes an SVC dump and records the error in the logrec data set. Then, LLA trace is deactivated, and LLA continues without component trace capabilities.

00000D00, 00000D01, 00000D02, 00000D03

LLA takes an SVC dump and records the error in the logrec data set. If the error occurred during an LLA directory refresh, LLA issues message CSV217I and keeps the old directory active. Otherwise, the LLA address space ends.

00000E01

LLA issues message CSV224I, which includes dynamic allocation's specific error and information codes. If the error occurred while allocating the data set, LLA issues message CSV241I which includes the name of the data set which could not be allocated. If the error occurred during an LLA directory refresh, LLA also issues message CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code X'204' to end its address space.

00000E02

LLA issues message CSV240I, which includes the name of the data set which could not be opened. This error is preceded by an abend for which LLA takes an SVC dump and records this error in the logrec data set. If the error occurred during an LLA directory refresh, LLA also issues message CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code X'204' to end its address space.

00000E03
If the error occurred during an LLA directory refresh, LLA also issues message CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code 204 to end its address space.

00000E04
LLA issues message CSV242I, which includes the name of the data set which is not a PDS. If the error occurred during an LLA directory refresh, LLA also issues message CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code X'204' to end its address space.

00000E05
LLA issues message CSV245I, which includes the name of the data set for which FREEZE or NOFREEZE was specified. If the error occurred during an LLA directory refresh, LLA also issues message CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code X'204', to end its address space.

00000E06
If the error occurred during an LLA directory refresh, LLA issues CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code 204, to end its address space.

00000E07
LLA issues message CSV242I which includes the name of the data-only or empty PDSE. If the error occurred during an LLA directory refresh, LLA also issues message CSV217I and keeps the old directory active. If the error occurred during an initial directory build, LLA issues abend X'023', reason code X'00000204' to end the address space.

00001200
LLACOPY abends.

00001201
LLACOPY abends.

00001202
LLACOPY abends.

00001203
LLACOPY abends.

00001204
LLACOPY abends.

00001205
LLACOPY abends.

00001206
LLACOPY abends.

Operator response

Contact hardware support.

System programmer response

Follow the system programmer response for any messages issued to the console or the job log and for any accompanying abends.

If the problem persists and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the following:

- All printed output and output data sets related to the problem.
- The program listing for the job.
- The JCL for the job.
- The Logrec data set error record.

Programmer response

Follow the application programmer response for accompanying CSV messages issued both to the console and the system log (SYSLOG). Follow the application programmer response for any other accompanying abends.

For the following reason codes, perform the indicated action:

Code
> **Response**

00000101
> Make sure that the LLA fetch installation exit, CSVLLIX1, is reentrant, and then link edit the exit again.

00000103
> Make sure that the LLA fetch installation exit, CSVLLIX1, is AMODE 31 or AMODE ANY, and then link edit the exit again.

00000203
> Verify that the catalog for the LNKLST data sets is valid and has not been overlaid.

00000208
> Ensure that the person who issues the LLA operator command has proper RACF authorization (update) to the LLA-managed data sets.

00000501
> Make sure that the LLA staging installation exit, CSVLLIX2, is AMODE 31 or AMODE ANY, and then link edit the exit again.

00000A00
> Follow the programmer response for CSV217I, and see the logrec data set, which may contain information on specific I/O errors. If no specific I/O error is evident, then stop and restart LLA.

00000A01
> Follow the programmer response for CSV217I, and issue a complete LLA refresh.

00000A50 through 00000B02
> Restart LLA.

00000B50, 00000B51, 00000B52, 00000B53
> Respond to any related messages that appear in the system log (SYSLOG) and to any related abends. Follow the programmer response for a X'212' abend.

00000C00
> To regain component trace capabilities, stop and then restart LLA.

00000E03
> Verify that the parmlib members specifying the list of data sets LLA is to manage is correct. Follow the programmer response in for messages CSV217I or CSV218I.

00000E06
> Ensure that the person who issued the LLA operator command has proper RACF authorization (update) to the LLA-managed data sets.

00000E07
> Eliminate the PDSE data-only library from the specified parmlib member.

00001200
> Correct the DCB input parameter for the LLACOPY macro. Make sure that the input DCB has been opened and that the DCB is not being overlaid. Run the job step again.

00001201
> Correct the DCB input parameter for the LLACOPY macro. Make sure that the input DCB has been opened, and that the DCB is not being overlaid and points to a valid DEB. Run the job step again.

00001202
> Ensure that the invoker of the LLACOPY macro has sufficient RACF authority to the data sets described by the LLACOPY input DCB. Run the job step again.

00001203
> Correct the DCB input parameter of the LLACOPY macro. The input DCB must be a valid opened DCB. Run the job step again.

00001204
> Ensure that all reserved fields are zero. Ensure that the macro library used to compile or assemble the program invoking LLACOPY corresponds to the target environment. Run the job step again.

00001205
> Ensure that the invoker of the LLACOPY macro is supervisor state. Run the job step again.

00001206
> Ensure that the input DCB represents a PDS or PDSE. Run the job step again.

Source

Contents supervision (CSV)

024

Explanation

The Print Services Facility (PSF) ESTAE routine detected a PSF functional subsystem application (FSA) error. An FSA is the print driver application that executes within the PSF functional subsystem (FSS).

System action

Depending on the error condition, PSF restarts the FSA or terminates the FSA. PSF issues a message indicating the action taken and may take a SVC dump.

Operator response

Inform your system programmer that this error occurred.

System programmer response

Review the console log for all PSF messages and, if any, the PSF abend reason code. Refer to *PSF for z/OS: Messages and Codes* for more information on the PSF messages, PSF abend reason code, and to determine the appropriate response for the error.

Programmer response

None.

Source

PSF for z/OS

025

Explanation

The system was initiating a piece of work when a system error occurred. The reason code is in register 15 at the time the system issues the abend.

Code
> **Explanation**

0002
> The APPC Asynchronous_Manager callable service returned an error code to the initiator.

0003
> The system found too many parameters on the job used to start the scheduler.

0004
    The user tried to run the initiator under the initiator.

Others
    The system found an internal error.

System action

The system writes an SVC dump, writes the logrec data set error records, and ends initiator processing.

System programmer response

Depending on the reason code, do the following:

Code
    Response

0002
    Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0003
    Check the parameters on the job used to start the scheduler.

0004
    Rename the program that is causing the abend.

For all other reason codes, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump and the logrec data set error records.

Source

Initiator/terminator

026

Explanation

Cross-system extended services (XES) encountered an error. See *z/OS MVS Diagnosis: Reference* for more information on diagnosing sysplex problems.

A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

08110102
    XES has terminated the task or address space associated with a coupling facility structure connector to resolve a hang in a structure-related process, which is caused when the connector failed to provide a required response within the time specified by the CFSTRHANGTIME interval defined in the SFM policy (over and above the time required to determine that the response is overdue, approximately 2 minutes).

    Capture the dump produced by this ABEND and contact the owner of the application with which the terminated connector was associated to determine the cause of the hang.

08118001
    XES has recognized that an overdue connector response has caused a hang in a structure-related process. This ABEND is issued to capture diagnostic data related to the overdue response.

    If the SFM policy specifies a non-zero value for CFSTRHANGTIME to limit the time that an overdue connector response may remain outstanding, this ABEND indicates that XES is about to initiate potentially disruptive action to resolve the hang.

    If the connector does not provide the required response before the interval defined by the CFSTRHANGTIME specification elapses, the system will take progressively more aggressive actions to resolve the hang, which may include terminating the connector. Connector, termination, if required, will be accompanied by a second

ABEND X'026', this time with reason code X'08110102', to collect connector and application data pertaining to the hang.

08118005

XES has recognized that an overdue connector response has caused a delay in a structure-related process. The connector appears to be making progress, but the delay has persisted long enough to warrant collection of diagnostic data.

0A060002

XES processing could not prevent SRB to task percolation however its processing has continued successfully and no action need be taken on the part of the user.

0A190021

Error asynchronously duplexing the structure. Duplexing failure detected by CF.

0C010101

Error in user's Complete Exit. The connector will be terminated. Review the exit processing of the application. The system does not issue a dump.

0C150101

Error in user's Contention Exit. The connector will be terminated. Review the exit processing of the application. The system does not issue a dump.

0C150103

Return code error from user's Contention Exit. The user specified that the Contention Exit was to be deferred during rebuild processing, but the structure was not being rebuilt. The connector will be terminated. Review the exit processing of the application. The system does not issue a dump.

0C340102

Error in user's Complete Exit for a list or cache connection. The connection is terminated.

0C3F0101

Error in user's Notify Exit. The connector will be terminated. Review the exit processing of the application. The system does not issue a dump.

0C5A0003

XES processing could not prevent SRB to task percolation. However, its processing has continued successfully and no action need be taken on the part of the user.

0C5A0004

XES processing could not prevent SRB to task percolation. However, its processing has continued successfully and no action need be taken on the part of the user.

0C680101

Error in user's Notify Exit. The connector will be terminated. Review the exit processing of the application. The system does not issue a dump.

0E0A0101

Error in user's List Transition Exit. The connector will be terminated. Review the exit processing of the application. The system does not issue a dump.

0E0D0001

Unexpected return code from user's Event Exit. Register 0 contains the event code (EEPLevent) presented to the user's Event Exit. Register 2 contains the return code (EEPLretcode) returned by the user's Event Exit. See IXLYEEPL mapping macro for EEPL fields. The connector will be terminated. Review the exit processing of the application. The system does not issue a dump.

0E0D0101

Error in user's Event Exit. The connector will be terminated. Review the exit processing of the application. The system does not issue a dump.

xxxx8020

Error asynchronously duplexing the structure. A stall has been detected.

xxxx8021

Error asynchronously duplexing the structure. Duplexing is inactive.

System action

Additional messages explaining the error may precede the ABEND. If there is a hexadecimal value of '01' in the third byte of the reason code the connector issuing the IXLCONN service will be terminated by the system. The system issues an SVC dump, unless the abend is related to the failure of a user exit. If applicable, CFCC dumps may be requested.

Operator response

Any reason codes not explicitly described above, including but not limited to those in the following list, represent errors internal to the XES component. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

02040001	0A040103	0C2A0009	0C440101	0D010001
020A0001	0A060101	0C2A000A	0C460101	0D010101
020D0001	0A060103	0C2A000B	0C4A0101	0D010102
02120001	0A090101	0C2A000C	0C4A0103	0D010103
03200001	0A0D0001	0C2A000D	0C54xxxx	0D010104
03230001	0A0D0002	0C2A000E	0C560002	0D070101
05010001	0A0D0004	0C2A000F	0C540101	0D070102
05060001	0A060003	0C2A0010	0C560001	0D070103
070B0001	0A0D0101	0C2A0011	0C560003	0D070104
07160001	0A130103	0C2A0012	0C560004	0D070105
08118003	0A130104	0C2A0013	0C560005	0D0C0001
08118004	0A130106	0C2A0014	0C560150	0D0C0150
08118005	0A160001	0C2A0020	0C5A0101	0D120101
081A0001	0A160101	0C2D0001	0C5A0102	0D120102
090Cxxxx	0A160102	0C2F0101	0C5B1013	0D120103
09100001	0C080001	0C2F0102	0C650001	0D120007
09100002	0C090001	0C30xxxx	0C670101	0D120008
09100003	0C090020	0C340001	0C680102	0D120150
09100004	0C0A0001	0C340002	0C6C0001	0D150004
0912xxxx	0C0B0106	0C340101	0C700102	0D150101
0918xxxx	0C0C0105	0C340103	0C740101	0D150102
091Axxxx	0C0D0101	0C340104	0C740103	0D150103
091Cxxxx	0C0E0001	0C340105	0C760102	0D150150
09200001	0C130101	0C340106	0C7C0001	0D180101
0934xxxx	0C170101	0C380001	0C7C0002	0D1C0001
0936xxxx	0C190001	0C380002	0C7C0003	0D1C0150
0938xxxx	0C1Cxxxx	0C380003	0C830001	0E0A0102
0939xxxx	0C1D0101	0C380004	0C830002	0E0B0004
093Cxxxx	0C21xxxx	0C380005	0C830003	0E0C0103
0A010001	0C23xxxx	0C380009	0C890101	0E0D0102
0A010002	0C26xxxx	0C380106	0C890102	0E0F0101
0A010102	0C2A0001	0C380107	0C92xxxx	0E120001
0A020102	0C2A0002	0C380108	0C93xxxx	0E130004
	0C2A0003	0C390001	0C94xxxx	0E130101
	0C2A0004	0C391013	0C950001	0E130102
	0C2A0005	0C3C0107	0C950102	11050001
	0C2A0006	0C3C0108	0C950103	
	0C2A0007	0C400101	0C9E0001	
	0C2A0008	0C41xxxx	0C9E0101	

System programmer response

Format the SVC dump with the following IPCS subcommands:

- XESDATA, including all the reports at all levels - summary, detail, and exception.
- CTRACE COMP(SYSXES) SUB((GLOBAL))
- CTRACE COMP(SYSXES) SUB((*individual-connections*))

  You can determine the individual connections by issuing the CTRACE QUERY command to see the sub name traces associated with SYSXES.

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the formatted SVC dump.

Source

Cross-system extended services (XES)

027

Explanation

The Print Services Facility (PSF) ESTAE routine detected a PSF functional subsystem (FSS) error. An FSS is a PSF address space.

System action

PSF terminates the FSS and issues a message indicating the action taken and may take a SVC dump.

Operator response

Inform your system programmer that this error occurred.

System programmer response

Review the console log for all PSF messages and, if any, the PSF abend reason code. Refer to *PSF for z/OS: Messages and Codes* for more information on the PSF messages, PSF abend reason code, and to determine the appropriate response for this error.

Programmer response

None.

Source

PSF for z/OS

028

Explanation

The system could not complete a paging operation for one of the following reasons:

- A permanent I/O error occurred during a page-in or swap-in operation. The data being paged in or swapped in is lost.
- A page cannot be accessed on auxiliary storage because of a previous I/O error.
- An indeterminable error occurred during management of central storage paging. The system ends processing. Register 15 may contain a reason code.
- The operator canceled a Time Sharing Option Extensions (TSO/E) user before the TSO/E logon completed.
- An address space referred to a pageable link pack area (PLPA) page that contains noncontiguous code or large constant areas. The system had already detected this error and issued message IEA928I. See message IEA928I.
- The system found an unexpected error while processing an in-real swap request. The error is described by a reason code in register 6.
- The only current copy of a page resides in a defective frame on expanded storage. An error occurred when the system tried to bring the page into central storage from the defective expanded frame.
- An I/O error occurred when the system wrote the page to auxiliary storage.

- An I/O error occurred when the system attempted to transfer data from a data-in-virtual object into a mapped window page.
- A reason for the abend code X'028' might be an mmap() failure. Message BPXM122I might be issued to the hardcopy log. Abend code EC6 with reason code 0042 might also be issued.

System action

The system abnormally ends the current task or address space.

Operator response

If the system issued message IEA928I, see the operator response for that message. Otherwise, notify the system programmer.

System programmer response

Look for messages indicating a hardware error. If you find any, contact hardware support. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. The logrec data set error record might not contain information regarding this abend.

Source

Auxiliary storage manager (ASM) and real storage manager (RSM)

029

Explanation

The auxiliary storage manager's (ASM) page operations starter routine detected an incorrect virtual I/O (VIO) request.

The logrec data set error record contains the incorrect VIO request reason code:

Code
    Explanation

0004
    The requested VIO logical group number is greater than the maximum allowable logical group number.

0008
    The requested VIO logical group number is not assigned to any logical group.

000C
    The calling program does not have access to the requested VIO logical group.

0010
    The requested VIO logical group cannot accept new work because work is already pending for that logical group.

0014
    The requested VIO page number is greater than the number of pages in the VIO data set.

0018
    The requested VIO page does not exist.

0020
    The system could not create tables in storage for the requested VIO pages.

0024
    The requested VIO page previously suffered an I/O error.

0028
    The system does not contain a valid auxiliary storage copy of the requested VIO page.

System action

The system abnormally ends the current task. The system writes a logrec data set error record.

System programmer response

If the problem cannot be resolved, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Auxiliary storage manager (ASM) and Allocation

02A

Explanation

An error occurred during execution of a data management request for a spool data set. The hexadecimal reason code in Register 2 indicates the cause of the abend:

Code
    Explanation

00000004
    HASP access method found that a data management control block (ACB or DEB) was not valid.

00000008
    HASP access method found that a JES2 UBUF was not valid.

0000000C
    HASP access method detected a serialization error for a spool data set.

00000010
    HASP access method found that SETPRT failed when printing UBUF.

00000014
    HASP access method found a bad BFDLOC value during GET processing.

0000001C
    HASP access method detected inconsistent temporary protected buffer pointers.

00000020
    HASP access method detected a serialization error for an internal reader data set.

00000024
    HASP access method detected a JES2 internal logic error when processing an internal reader data set.

00000028
    HASP access method detected an invalid extent in MTTR during PUT processing.

0000002C
    HASP access method found a spool control record that is not valid during PUT processing.

00000030
    HASP access method detected an error (loop condition) in HPUTFULL processing.

00000034
    HASP access method detected an error (loop condition) in HAMFIX processing.

00000038
    HASP access method detected an error (loop condition) in HAMSIO processing.

0000003C
    HASP access method detected an error in HCPBUFND processing.

00000040
    HASP access method found unauthorized use of authorized request parameter list (RPL) option during protected PUT processing.

00000044

HASP access method detected a serialization problem for JES2 BAT problem.

00000048

HASP access method detected a JES2 internal logic error in a single-buffer mode.

0000004C

HASP access method detected a JES2 internal logic error; migration processing was invoked when local lock was held.

00000050

BAT with active I/O operation was discovered after HAM access method quiesced all I/O.

00000054

HASP access method detected a corrupted JES2 BAT chain.

0000005C

Corrupted Job Symbol Table (JSMT) was found on SPOOL.

00000060

Internal error detected when performing symbol substitution in instream dataset.

00000064

Internal error detected when performing logging of results of the symbol substitution in instream dataset.

00000068

Unable to allocate storage for the BAT control blocks needed for the SPOOL I/O operations. The I/O operation failed because there is insufficient low storage (below the 16 MB line) to support this subpool 233 request.

00000074

The JES common encryption service (IAZENSER) detected that the cursor is positioned past the end of the logical block.

00000078

The JES common encryption service (IAZENSER) detected an invalid record eye catcher.

0000007C

The JES common encryption service (IAZENSER) detected an improperly spanned record. The tail of the spanned record is not found in logical block 2.

00000080

The JES common encryption service (IAZENSER) detected an improperly spanned record. The length of the record is incorrect.

00000084

The JES common encryption service (IAZENSER) detected a negative record number.

00000088

The JES common encryption service (IAZENSER) detected that logical block #2 is not active.

0000008C

The JES common encryption service (IAZENSER) detected that logical block #2 is active in a PUT object.

00000090

The JES common encryption service (IAZENSER) detected a block 1 underrun. The guard bytes are corrupted.

00000094

The JES common encryption service (IAZENSER) detected a block 1 overrun. The guard bytes are corrupted.

00000098

The JES common encryption service (IAZENSER) detected a block 2 overrun. The guard bytes are corrupted.

0000009C

The JES common encryption service (IAZENSER) detected a block 3 overrun. The guard bytes are corrupted.

000000A0

The JES common encryption service (IAZENSER) detected a block 4 overrun. The guard bytes are corrupted.

000000A4

The JES common encryption service (IAZENSER) detected that logical block 2 is active, but logical block 1 is not active.

000000A8

The JES common encryption service (IAZENSER) failed to wrap an encryption key. The BCFXCRYP service returned an error.

000000AC

The JES common encryption service (IAZENSER) failed to perform an encryption request. The BCFXCRYP service returned an error.

000000B0

The JES common encryption service (IAZENSER) failed to perform a decryption request. The BCFXCRYP service returned an error.

000000B4

The JES common encryption service (IAZENSER) failed to encrypt the verification token. The BCFXCRYP service returned an error.

000000B8

The JES common encryption service (IAZENSER) failed to decrypt the verification token. The BCFXCRYP service returned an error.

000000BC

The JES common encryption service (IAZENSER) detected a GETREC request beyond the number of records available to read in logical blocks #1 and #2.

000000C0

The JES common encryption service (IAZENSER) detected a GETREC request beyond the number of records available to read in logical block #1.

000000C4

The JES common encryption service (IAZENSER) detected that logical block #2 is not active or is active and does not contain any records.

000000C8

The JES common encryption service (IAZENSER) detected that decompression failed. The FPZ4ABC service returned an error.

000000D4

The JES common encryption service (IAZENSER) detected that decompression failed. The size of the data after decompression does not match the size of the data before compression.

000000D8

JES2 access method GET detected an unexpected return code from an IAZENSER OPER=GET request.

000000DC

JES2 access method GET detected an unexpected return code from an IAZENSER OPER=GETBLK request.

000000E0

JES2 access method GET detected an unexpected return code from an IAZENSER OPER=PRIMEBLK request.

000000E4

JES2 access method PUT detected an unexpected return code from an IAZENSER OPER=PUTREC request.

000000E8

JES2 access method PUT detected an unexpected return code from an IAZENSER OPER=RTNBLK request.

000000EC

JES2 access method PUT detected an unexpected return code from an IAZENSER OPER=FLUSH request.

000000F0

JES2 access method PUT detected an unexpected return code from an IAZENSER OPER=ENDREQ request.

000000F4

The JES common encryption service (IAZENSER) detected that the tail end of a spanned record is not in logical block #2 after a POINT to that record.

000000F8
>   The JES common encryption service (IAZENSER) detected a decryption error. The value of the checksum is incorrect.

000000FC
>   The JES common encryption service (IAZENSER) detected a malformed logical block. ENDD1ST was zero, but ENDNUMR was nonzero.

00000100
>   The JES common encryption service (IAZENSER) detected a malformed logical block. ENDD1ST was non-zero, but ENDNUMR was zero.

00000104
>   The JES common encryption service (IAZENSER) detected a malformed logical block. The logical block indicates that it contains a spanned record, but the corresponding data block indicates that it does not contain a spanner record.

00000108
>   The JES common encryption service (IAZENSER) detected record discontinuity after a PRIMEBLK operation. The second logical block correctly starts with the tail end of a spanned record, but the record number is incorrect.

0000010C
>   The JES common encryption service (IAZENSER) detected record discontinuity after a PRIMEBLK operation. The first logical block does not end with a spanned record, but the second logical block starts with the tail end of a spanned record.

00000110
>   The JES common encryption service (IAZENSER) detected record discontinuity after a PRIMEBLK operation. The record number of the first record in the second logical block is incorrect.

00000114
>   The JES common encryption service (IAZENSER) detected a malformed logical block after a PRIMEBLK operation. ENDD1ST was zero, but ENDNUMR was nonzero.

00000118
>   The JES common encryption service (IAZENSER) detected a malformed logical block after a PRIMEBLK operation. ENDD1ST was nonzero, but ENDNUMR was zero.

System action

The system ends the task, and produces a dump. For reason codes X'0000000C' and X'00000020', the system terminates the job step, and produces a dump.

System programmer response

Obtain the program listing for the job. Look at the messages in the job log. If the JOB statement did not specify MSGLEVEL=(1,1), specify it and run the job again.

Verify that the problem program did not modify data management control blocks or the JES2 UBUF control block. For reason codes X'0000000C' and X'00000020', also verify that the problem program used proper serialization techniques for sharing a SYSIN, SYSOUT or internal reader data set among multiple tasks. After making corrections, execute the job step again.

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

In case of reason codes X'00000030' through X'0000003C', contact the IBM Support Center with dump and SYSLOG.

Source

JES2

02B

Explanation

The JES2 user exit effector routine for the user environment diagnosed an error in the processing of the exit routine. The hexadecimal reason code in register 3 indicates the cause of the abend:

Code
> **Explanation**

00000000
> A user exit routine issued a return code that is higher than the maximum return code value specified in the MAXRC parameter of the $EXITnnn macro instruction.

00000004
> The JES2 exit effector determined that the save area has improper format after calling the user exit routine.

System action

The system abnormally ends the user task and issues a dump.

Operator response

Use the $TEXIT command to disable EXITnnn.

System programmer response

Collect all printed output and output data sets related to the problem.

For reason code X'00000000', if the exit routine is issuing an incorrect return code, correct the routine. If the routine is issuing the correct return code, change the maximum return code value specified on the $EXITnnn macro instruction. Then rerun the job.

For reason code X'00000004', determine if the user exit routine overlaid the save area. If not, determine if the user exit routine destroyed register 13, which addresses the save area.

Source

JES2

02C

Explanation

An error occurred in JES2 support of a functional subsystem address space.

When this system completion code appears without a JES2 message, the following information applies:

During a hot start, either:

- HASPWARM found an active Functional Subsystem (FSS) with no active FSA
- JES2 found that the FSS address space was being connected with no active FSA.

System action

HASPWARM uses CALLRTM macros to abnormally end the FSS address space.

Operator response

Enter a $S PRT command to restart the FSS.

Programmer response

This condition occurred because a functional subsystem printer either was drained or started during a JES2 hot start. HASPWARM ended the FSS address space in case the printer initialization parameter was changed across hot start.

One of the following messages may also accompany this system completion code:

- $HASP413
- $HASP415
- $HASP750

See *z/OS JES2 Messages* for more information.

Source

JES2

02D

Explanation

The JES2 main task has abnormally terminated. One of the following events caused the termination.

- The operator issued a $PJES2,ABEND command, which terminated JES2.
- A JES2 catastrophic error/abend has occurred. For further details concerning the abend, see message $HASP095.

System action

The system invokes JES2 recovery/termination processing.

Operator response

Notify the system programmer.

System programmer response

To help you determine the nature of the problem, refer to error messages $HASP08 and $HASP095.

Source

JES2

02E

Explanation

The system found an error during availability manager (AVM) processing. One of the following contains a reason code that explains the error:

- Register 15 in the SDWA or RTM2WA data areas at the time of the error.
- The SDWACRC field in the SDWA data area.
- Message AVM010E.

The reason code is in the form *mmrrssss*.

In the reason code:

mm
    The identifier for the availability manager entry point that issued the abend

rr
> A hexadecimal error indicator, which is one of the following:

> **Indicator**
> > **Explanation**

> **2**
> > The system could not find an entry point in the nucleus.

> **12**
> > The system could not find a load module.

> **18**
> > The primary availability manager load module was not started by started task control (STC).

> **19**
> > Incorrect parameters were received through the START AVM command. The availability manager checks for one of the following values in the AVMMODE parameter: OPERATOR, THINLAYER, or RESTART.

> **28,2A,2B,48**
> > The availability manager continues to run normally. However, no additional subsystems may connect to the availability manager until an equal number of current subsystem users disconnect from it. The availability manager reached the maximum number of subsystems that it can handle.

> **34,35,37**
> > The availability manager received an error return code from the I/O supervisor. The IOS return code is located in the third byte of the availability manager reason code. The fourth byte of the availability manager reason code contains an associated IOS reason code. The error indicator specifies which IOS service the availability manager was trying to use:

> > **34**
> > > PREVENTIO

> > **35**
> > > IOPIDENT- RELEASE

> > **37**
> > > IOPIDENT- OBTAIN

> **39**
> > The availability manager could not access subsystem owned storage to store the results of a CALLAVM request. Most likely, from the time the availability manager verified the CALLAVM request to the time it completed the request, the subsystem has freed the storage.

> The following error indicators specify an internal error in the availability manager and, in most cases, cause abnormal ending of the availability manager address space:

> - 01
> - 03-11
> - 13-17
> - 1A-27
> - 29
> - 2C-33
> - 38
> - 3A-47
> - 49

ssss
> The related system service completion codes

System action

The system abends the current task.

Operator response

Depending on the error indicator *rr*, do one of the following:

Indicator
    Response

18
    Do not try to start the availability manager under an initiator. Use the START command.

19
    When you issue the START AVM command, omit the AVMMODE parameter.

Otherwise, notify the system programmer.

System programmer response

Depending on the error indicator *rr*, do one of the following:

Indicator
    Response

2
    Ensure that the availability manager was installed correctly. Ensure that the availability manager's load modules contain all the correct CSECTs.

12
    Ensure that the availability manager was installed correctly. Ensure that the load libraries contain the correct load modules.

34,35,37
    Correct the failing program.

Source

Availability manager (AVM)

030

Explanation

The error occurred during processing of a basic index sequential access method (BISAM) or queued indexed sequential access method (QISAM) OPEN macro instruction.

The control program found that the DCBMACRF field of the data control block (DCB) did not indicate a valid mode of operation for BISAM or QISAM. The DCBMACRF field is set up by the MACRF operand of the DCB macro instruction or by the problem program before the data control block is opened.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that a valid mode of operation is specified in the MACRF operand of the DCB macro instruction. Verify that the DCBMACRF field was not incorrectly set up or modified by the problem program. After making corrections, reassemble the program and run the job step again.

Source

DFSMSdfp

Explanation

An I/O error occurred during processing using QISAM. The control program attempted to pass control to an error analysis (SYNAD) routine, but found that (1) the DCBSYNAD field of the data control block did not contain the address of a valid SYNAD routine, or (2) the error occurred after a CLOSE macro instruction was run by task end (the problem program returned control to the supervisor without processing a CLOSE macro instruction). The task was abnormally ended. The DCBEXCD1 and DCBEXCD2 fields of the data control block indicate the possible causes of the original error:

DCBEXCD1:

Bit

    Explanation

0

    Record not found.

1

    Incorrect actual address for lower limit.

2

    Space not found.

3

    Incorrect request.

4

    Uncorrectable input error.

5

    Uncorrectable output error.

6

    Block could not be reached (input).

7

    Block could not be reached (update).

DCBEXCD2:

Bit

    Explanation

0

    Sequence check.

1

    Duplicate record.

2

    DCB closed when error detected.

3

    Overflow record.

4

    PUT: length of field greater than length indicated in DCBLRECL field of the data control block.

5-7

    (Reserved bits).

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Examine the DCBEXCD1 and DCBEXCD2 fields of the data control block to determine the cause of the error. Specify the address of an error analysis routine to be given control when an I/O error is detected and, for errors occurring during CLOSE, run a QISAM CLOSE macro instruction prior to returning control to the supervisor. For errors occurring during the processing of a QISAM CLOSE macro instruction, respond as indicated by message IEC011I or IEC203I.

Source

DFSMSdfp

032

Explanation

An error occurred during processing of a basic index sequential access method (BISAM) or queued indexed sequential access method (QISAM) OPEN macro instruction.

The control program found that the DCBMACRF field of the data control block (DCB) did not contain valid information for ISAM.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that valid information is specified in the MACRF operand of the DCB macro instruction. Verify that the DCBMACRF field was not incorrectly modified by the problem program before the opening process.

After making corrections, reassemble the program and run the job step again.

Source

DFSMSdfp

033

Explanation

The error occurred during processing of an OPEN macro instruction for an indexed sequential data set. If the error occurred during the processing of an indexed sequential access method (ISAM) OPEN executor, register 15 contains a hexadecimal reason code:

Code
  Explanation

01
  An I/O error occurred while reading the highest level index.

02
  An I/O error occurred while searching for the end-of-file mark following the last data record in the prime area. The DCBLPDA field of the data control block (DCB) contains the address of the last record in the prime area.

03
  An I/O error occurred while searching for the end-of-file mark following the last data record in the independent overflow area. The DCBLIOV field of the data control block (DCB) contains the address of the last record in the independent overflow area.

04

The DCBMSHIA field of the data control block (DCB) contained an address that either specified a location outside the boundaries of the virtual storage assigned to the task or had a storage protection key other than that specified in the task control block (TCB).

05

An I/O error occurred while reading the last prime data block during open processing for resume load.

06

All volumes of a multivolume ISAM data set were not mounted.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Verify that the DCBLPDA, DCBLIOV, and DCBMSHIA fields were not incorrectly specified or modified by the problem program. At the time of the abnormal end, register 4 contains the address of the DCB. After making corrections, reassemble the program and run the job step again.

Source

DFSMSdfp

034

Explanation

The error occurred during processing of a BISAM OPEN macro instruction. For variable length records, the control program found that the address in DCBMSWA was not valid. Either the address is outside the boundaries of virtual storage or the protection key of that address is not the same as the protection key in the TCB.

The control program found that the fields of the data control block (DCB) indicated a virtual storage area too small to contain the highest level index for the data set. The size of the virtual storage area that should be reserved for the highest level index is placed in the DCBNCRHI field of the data control block at OPEN exit time.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

The error can be corrected by one of the following:

- Specify a valid address in the MSWA operand of the DCB. Verify that this field has not been incorrectly modified.
- Provide a sufficient virtual storage area by proper specification of the DCBSMSI and DCBMSHIA fields.
- Provide no virtual storage area and either do not specify the contents of the DCBSMSI and DCBMSHIA fields or set the fields to zero. The highest level index can then be processed without being loaded into virtual storage.

After making corrections, reassemble the program and run the job step again.

Source

DFSMSdfp

Explanation

The error occurred during processing of a BISAM OPEN macro instruction.

The control program found that new records were to be added to the data set, but the DCBMSWA and DCBSMSW fields of the data control block (DCB) indicated a virtual storage area too small to contain one track from the prime area. The appropriate ISAM-calculated value that you should specify in DCBSMSW is returned in register 15. If this value is greater than 65535, you must let ISAM obtain this work area for you.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

The error can be corrected by one of the following:

- Provide a sufficient area by proper specification of the DCBMSWA and DCBSMSW fields.
- For fixed-length records, provide no virtual storage area. Either do not specify the contents of the DCBMSWA and DCBSMSW fields or set the fields to zero. A virtual storage work area is required only for variable-length records.

After making corrections, reassemble the program and run the job step again.

Source

DFSMSdfp

Explanation

The error occurred during processing of a BISAM or QISAM OPEN macro instruction.

The control program found that no space was allocated on a direct access device as the prime area for the data set:

- In QISAM load mode, during data set generation, the SPACE parameter of the DD statement did not specify a primary quantity.
- The data set control block (DSCB) for the data set was incorrectly modified by the problem program.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

In the first case, the data set should be dumped sequentially and recreated using QISAM load mode. The job should be restarted with a primary quantity specified in the SPACE parameter of the DD statement. If the prime area is to span more than one volume, the number of volumes and the number of units required should be specified.

In the second case, verify that the data set control block was not incorrectly modified by the problem program. After making corrections, reassemble the program and run the job step again.

Source

DFSMSdfp

037

Explanation

The error occurred during processing of a BISAM or QISAM OPEN macro instruction. The control program found that the buffers supplied by the programmer were inadequate for the records to be processed:

- If the buffers were acquired by use of the BUILD macro instruction, either the BUFNO operand of the DCB macro instruction was not specified or the BUFL operand specified too small a value.
- If the buffers were acquired by use of the GETPOOL macro instruction, the buffer length operand specified too small a value.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Specify the buffers correctly. Then run the job step again.

Source

DFSMSdfp

038

Explanation

The error occurred during processing of an OPEN macro instruction for QISAM load mode.

The control program found that the space on a direct access device that had been allocated for the index area was either exhausted or occupied more than one volume. The index for an ISAM data set must reside on one volume.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

If a new data set is being created, the job must be restarted with larger space allocation specified in the SPACE parameter of the DD statement.

If an old data set is being updated, the data set should be dumped sequentially, the old data set scratched, and the data set recreated from the sequential data set using QISAM load mode. The job should be restarted with larger space allocation specified in the SPACE parameter of the DD statement.

Source

DFSMSdfp

039

Explanation

The error occurred in scanning a data set using QISAM.

The end of the data set (EOD) was reached. The control program found that the DCBEODAD field of the data control block (DCB) did not contain an end-of-data-set exit routine address.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that the address of a routine to be given control when the end of the data set is reached is specified either in the EODAD operand of the DCB macro instruction or in the problem program before the end of the data set is reached. Then reassemble the program and run the job step again.

Source

DFSMSdfp

03A

Explanation

The error occurred during processing of a BISAM or QISAM CLOSE macro instruction.

A format 2 data set control block (DSCB), read from a direct access device into virtual storage, was updated from various fields of the data control block (DCB). When an attempt was made to write the updated data set control block back to the direct access device, an I/O error occurred.

When the ISAM interface is used to process a VSAM data set, this system completion code can be accompanied by message IEC251I. If it is, refer to the explanation of message IEC251I for information about the task that ended.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Determine the data set for which the problem occurred and the nature of the problem.

If this system completion code is accompanied by message IEC251I, respond as indicated by message IEC251I.

At the time of the ABEND, register 4 points to the OPEN/CLOSE/END-OF-VOLUME work area. At X'64' in the work area is the address of the job file control block (JFCB) whose contents begin with the 44 character data set name. The address of the unit control block (UCB), which contains the device address for the data set, is located and X'230' in the work area. The address of the user's DCB which contains the address of the data event block (DEB) is located at X'238' in the work area. Correct the problem with the data set and rerun the job.

Source

DFSMSdfp

03B

Explanation

The error occurred during processing of an OPEN macro instruction for an indexed sequential data set. If register 15 does not contain a hexadecimal reason code, then no records could be processed because:

- The block size (DCBBLKSI) is less than the logical record length (DCBLRECL).
- The block size (DCBBLKSI) is not a multiple of the logical record length.

If the error occurred during the processing of an ISAM OPEN executor, register 15 contains a hexadecimal reason code. No records could be processed because:

Code
> **Explanation**

01
> The format-2 data set control block (DSCB) indicated that 1/2 1/21/21/2MSG 8028 1/2 1/21/21/2MSG 8028 the data set had not been created (DS2STIND is not equal to X'20'), or the format-2 DSCB indicated that the data control block (DCB) had not been closed after the data set had been created.

03
> For variable length records, the relative key position (DCBRKP) field in the data control block (DCB) is less than four.

04
> The relative key position (DCBRKP) plus the key length (DCBKEYLE) is greater than the logical record length (DCBLRECL).

05
> The DCBKEYLE field of the data control block contained zero.

06
> The DCBKEYLE field of the data control block (DCB) does not equal the value in the DS1KEYL field of the format-1 DSCB.

07
> A QISAM data control block was being opened in preparation for a PUT operation, but the OPEN macro instruction had not been issued for output.

09
> The logical record length in the data control block (DCBLRECL) is zero.

0A
> The record format in the format-1 DSCB (DS1RECFM) indicates fixed blocked records, but the block size (DCBBLKSI) equals the logical record length (DCBLRECL).

0B
> The block size (DCBBLKSI) differs from the format-1 DSCB block size (DS1BLKL).

0C
> The logical record length (DCBLRECL) differs for the format-1 DSCB logical record length (DS1LRECL).

0D
> QISAM data control block was being opened in preparation for a PUT operation and DISP=SHR was coded in the JCL.

0E
> The value for the record format (DCBRECFM) is zero.

0F
> The value for the record format (DCBRECFM) is not the same as the record format value specified when the data set was created (DS1RECFM).

Register 2 contains the address of the DCB for which the abend was issued.

When the ISAM interface is used to process a VSAM data set, this system completion code can be accompanied by message IEC161I. If it is, refer to message IEC161I for information about the task that ended. The ISAM interface of VSAM issues system completion code 03B for one of the following reasons:

- The access method service's and DCB values for LRECL, KEYLE, RKP do not match.

- DISP=OLD was specified and the DCB was opened for output and the number of logical records is greater than zero (RELOAD is implied).
- An OPEN ACB error code 116 was returned for a request to open a VSAM structure.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Take the following actions depending on the reason code you received:

Code
    Response

01
    Make sure that the data set has been properly created and that the creating task closes the data control block.

03
    If variable length records are used, make sure that the value of the DCBRKP field is not less than four.

04
    Make sure that the value of the DCBRKP field of the data control block, when added to the value of in the DCBKEYLE field, does not exceed the value in the DCBLRECL field.

05, 06
    Correct the DCBKEYLE field. For an existing ISAM data set, omit the KEYLEN operand on the DCB macro instruction. This allows the data set control block to supply the key length value.

07
    Make sure that OUTPUT is specified as option 1 in the OPEN macro instruction.

09, 0A, 0B, 0C
    Make sure that the block size (BLKSIZE) and logical record length (LRECL) have been specified correctly on the data control block (DCB) and that they are compatible.

0D
    Code DISP=OLD in the JCL for the QISAM data control block that is being opened for a PUT operation.

0E, 0F
    Make sure that the record format has been specified correctly. For an existing ISAM data set, list the VTOC to determine the correct format of the data set.

If register 15 does not contain a hexadecimal reason code, then make sure that:

1. the blocksize (BLKSIZE) and logical record length (LRECL) have been specified correctly on the data control block (DCB).
2. the BLKSIZE and LRECL are compatible.

In cases when the ISAM interface issued an ABEND, make sure that a valid mode of operation is specified in the MACRF operand of the DCB macro. Additionally, make sure that the DCB is not being opened for load mode while there are records in the data set.

In all cases, run the job step again.

If message IEC161I accompanies this system completion code, respond as indicated for message IEC161I.

Source

DFSMSdfp

03C

Explanation

A page, a segment, or an ASTE fault occurred. RSM detected one of the following conditions.

Register 15 contains a hexadecimal reason code. In the reason code, the bytes designated *x* contain diagnostic data that may be requested by IBM.

Code
   Explanation

xxxx08xx
   A program disabled for interrupts held the RSM lock, or a higher lock, when a fault occurred.

xxxx0Dxx
   No central storage frames were available to resolve a page fault when the unit of work was running disabled for interrupts.

System action

The system issues an abend to the current task.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

For reason code X'xxxx0Dxx', run the job again. If the error recurs, contact the system programmer.

Source

Real storage manager (RSM)

03D

Explanation

The error occurred during processing of (1) a QISAM or BISAM OPEN macro instruction or (2) a BDAM OPEN macro instruction.

One of the following occurred:

- In case (1), the DD statement did not specify an indexed sequential organization (which can be specified by a DSORG=IS or DSORG=ISU subparameter of the DCB parameter).
- In case (1), if the data set resides on multiple volumes, either the volume serial numbers in the SER subparameter of the VOLUME parameter of the DD statement were not in proper sequence, or not all volume serial numbers were specified. The serial number of the volume containing the index must be listed first. The number of volumes and the number of units allocated must be the same, and all volumes must be mounted.
- In case (2), the volume serial numbers in the SER subparameter of the VOLUME parameter of the DD statement were not in proper sequence.
- In case (2), the DCB DSORG=DA and the DD statement specifies an indexed sequential data set name.

This system completion code is sometimes accompanied by message IEC156I. If so, refer to the explanation of message IEC156I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Correct the DCB parameter or SER subparameter, as necessary, and run the job step again.

If this system completion code is accompanied by message IEC156I, respond as indicated for the message.

Source

DFSMSdfp

03E

Explanation

The error occurred during processing of a QISAM OPEN macro instruction. The position of the last prime data record indicated that there is no room to add records with resume load.

The loading of an indexed sequential data set must be completed during the initial OPEN/PUT/CLOSE cycle for that data set. An indexed sequential data set that has been opened and closed for loading may be subsequently loaded if no data was created.

Possibly, an attempt was made to add records with resume load to the prime area of an ISAM data set that had no space available for additional records.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Either load the data set again with a larger space allocation, or add records using BISAM.

After making corrections, run the job step again.

Source

DFSMSdfp

03F

Explanation

An error has been detected during checkpoint restart processing. This completion code is accompanied by message IHJxxxI and the appropriate reason code.

System action

The job is abnormally ended and a dump is produced.

Programmer response

Respond as indicated in the accompanying message.

Source

DFSMSdfp

040

Explanation

The error occurred during processing of an OPEN macro for a telecommunications access method (TCAM) line group data set.

System action

The error code is inserted into register 0 if the user has coded an address in the EXLST= operand of the line group DCB macro. The exit routine may examine the code in register 0. If no user exit is specified, an indication of the error type may be found in the explanation of console message IED008I.

Programmer response

See the documentation of message IED008I for the appropriate responses.

Source

Teleprocessing

041

Explanation

The error occurred during processing of an OPEN macro for a telecommunications access method (TCAM) message queue data set.

System action

The error code is inserted into register 0 if the user has coded an address in the EXLST= operand of the message queue DCB macro instruction. The exit routine may examine the code in register 0. If no installation exit is specified, an indication of the error type may be found in the explanation of console message IED008I.

Programmer response

See the documentation of message IED008I for the appropriate responses. If your system has the advanced communications function (ACF)/TCAM program product installed, see the appropriate ACF/TCAM messages book.

Source

Teleprocessing

042

Explanation

A call for a base control program internal interface (BCPii) service was issued in an incorrect environment, or BCPii detected an unrecoverable error.

A hexadecimal reason code in register 15 explains the error:

Code
   Explanation
00010000
   For a call to the HWICMD service, the parameters passed by the caller are not in the primary address space.
00010001
   For a call to the HWICMD service, the parameters passed by the caller are not accessible.
00010002
   For a call to the HWICMD service, the number of the parameters passed by the caller is not correct.

00020000

    For a call to the HWICONN service, the parameters passed by the caller are not in the primary address space.

00020001

    For a call to the HWICONN service, the parameters passed by the caller are not accessible.

00020002

    For a call to the HWICONN service, the number of the parameters passed by the caller is not correct.

00030000

    For a call to the HWIDISC service, the parameters passed by the caller are not in the primary address space.

00030001

    For a call to the HWIDISC service, the parameters passed by the caller are not accessible.

00030002

    For a call to the HWIDISC service, the number of the parameters passed by the caller is not correct.

00040000

    For a call to the HWIEVENT service, the parameters passed by the caller are not in the primary address space.

00040001

    For a call to the HWIEVENT service, the parameters passed by the caller are not accessible.

00040002

    For a call to the HWIEVENT service, the number of the parameters passed by the caller is not correct.

00050000

    For a call to the HWILIST service, the parameters passed by the caller are not in the primary address space.

00050001

    For a call to the HWILIST service, the parameters passed by the caller are not accessible.

00050002

    For a call to the HWILIST service, the number of the parameters passed by the caller is not correct.

00060000

    For a call to the HWIQUERY service, the parameters passed by the caller are not in the primary address space.

00060001

    For a call to the HWIQUERY service, the parameters passed by the caller are not accessible.

00060002

    For a call to the HWIQUERY service, the number of the parameters passed by the caller is not correct.

00070000

    For a call to the HWISET service, the parameters passed by the caller are not in the primary address space.

00070001

    For a call to the HWISET service, the parameters passed by the caller are not accessible.

00070002

    For a call to the HWISET service, the number of the parameters passed by the caller is not correct.

00080000

    For a call to the HWICMD2 service, the parameters passed by the caller are not in the primary address space.

00080001

    For a call to the HWICMD2 service, the parameters passed by the caller are not accessible.

00080002

    For a call to the HWICMD2 service, the number of the parameters passed by the caller is not correct.

00090000

    For a call to the HWISET2 service, the parameters passed by the caller are not in the primary address space.

00090001

    For a call to the HWISET2 service, the parameters passed by the caller are not accessible.

00090002

    For a call to the HWISET2 service, the number of the parameters passed by the caller is not correct.

00090003

For a call to the HWIREST service, the parameters passed by the caller are not in the primary address space.

00090004

For a call to the HWIREST service, the parameters passed by the caller are not accessible.

00090005

For a call to the HWIREST service, the number of the parameters passed by the caller is not correct.

00090006

For a call to the HWIREST service, the response parameter passed by the caller is not addressable.

00090007

For a call to the HWIREST service, the parameters passed by the caller are not accessible.

*xxxx***0001**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0002**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0003**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0004**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0005**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0006**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0007**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0008**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0009**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***000A**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***000B**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***000C**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***000D**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***000E**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***000F**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0010**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0011**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0012**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0013**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

*xxxx***0014**

xxxx is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0015**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0016**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0017**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0018**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0019**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*001A**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*001B**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*001C**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*001D**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*001E**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*001F**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0020**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0021**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0022**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0023**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0024**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0025**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0026**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0027**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0028**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0029**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*002A**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*002B**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*002C**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*002D**
>*xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*002E**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*002F**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0030**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0031**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0032**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0033**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0034**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0035**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0036**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0037**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*0039**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*003A**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

***xxxx*003B**
> *xxxx* is greater than or equal to 0100. An internal error occurred in BCPii.

System action

Specific system actions for each reason code are as follows:

Code
> **System Action**

00010000 - 00060002
> The system rejects the service call.

***xxxx*0003, *xxxx*0005, *xxxx*0006, *xxxx*0007, *xxxx*0008, *xxxx*0009,*xxxx*000C,*xxxx*000D, *xxxx*000E, *xxxx*000F, *xxxx*0010, *xxxx*0012,**
***xxxx*0013, *xxxx*0014, *xxxx*0016, *xxxx*0017, *xxxx*0018, *xxxx*0019, *xxxx*001A, *xxxx*001B, *xxxx*001C, *xxxx*001D, *xxxx*001E, *xxxx*001F,**
***xxxx*0020, *xxxx*0021, *xxxx*0022, *xxxx*0023, *xxxx*0024, *xxxx*0025, *xxxx*0026, *xxxx*0027, *xxxx*0028, *xxxx*0029, *xxxx*002A, *xxxx*002B,**
***xxxx*002C, *xxxx*002D, *xxxx*002E,*xxxx*002F, *xxxx*0030, *xxxx*0031, *xxxx*0032, *xxxx*0033, *xxxx*0034, *xxxx*0035, *xxxx*0036, *xxxx*0037**
> BCPii continues processing, but the system does not perform the requested service. The system takes an SVC dump.

***xxxx*0001, *xxxx*0002, *xxxx*0004, *xxxx*000A, *xxxx*000B, *xxxx*0015, *xxxx*0017**
> The system abnormally ends the BCPii address space, and takes an SVC dump. No BCPii callable services are accepted by the system until the address space is manually restarted.

Operator response

If the abend recurs, notify the system programmer.

System programmer response

If the error recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Respond as indicated for the specific reason code:

Code
> **Programmer Response**

00010000 - 00090002
> Check the calling program for a probable coding error; correct the program and run it again.

*xxxx*003B
> Validate that the CPC targeted by the request is running with the highest level of microcode currently available. After applying the necessary microcode updates, retry the request. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

All other codes
> Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

HWIBCPII (BCPii) address space

043

Explanation

The error occurred during processing of an OPEN macro for a telecommunications access method (TCAM) application program data set.

Register 0 contains a hexadecimal reason code that explains the error:

Code
> **Explanation**

01
> An OPEN macro for a TCAM application program data set has been issued but there is no message control program (MCP) active in the system.

02
> The QNAME= parameter of a DD statement associated with an application program is not the name of a process entry defined in the terminal table, or the QUEUES= operand appeared in the TPROCESS macro instruction when an application program data control block (DCB) was being opened for output only, or the QUEUES= operand was not specified when an application program DCB was being opened for input.

03
> A process entry named by the QNAME= parameter of a DD statement associated with an application program is currently being used by another application program.

04
> Insufficient virtual storage was available in the MCP to build internal control blocks, or the PGFN macro failed for the process entry work area.

05
> Insufficient virtual storage was available in the application program area to build internal control blocks.

06
> The application program attempted to open a secured queue. The system operator rejected the request.

07
> The application program is not an authorized program, but the user has either coded AUTHA=YES or taken YES as the default value for AUTHA parameter on the TCAM INTRO macro.

08

Page control block (PCB) error. OPEN was issued for a TPROCESS entry while its PCB was in use by another task.

09

A TCAM job name was not found with the same name as the TCAM job name that was qualified on the DD statement as input to IGG01946 (DCB OPEN).

0A

The number of environmental checkpoint records that can be written is less than the number of environmental checkpoint records requested.

System action

If an ABEND installation exit is provided in the EXLST= operand of the DCB macro for the data set, the system gives control to the routine. If it returns, or if no ABEND installation exit is provided, the system abnormally ends the task. Message IED015I may accompany this system completion code.

Programmer response

No action is required if an ABEND installation exit has been provided in the EXLST= operand of the DCB macro for the application program data set.

The contents of register 0 indicate the action to be taken:

Register 0
  Response

01

Ensure that an MCP is active before attempting to start an application program.

02

Recode the QNAME= parameter specifying the name of a valid process entry.

03

Recode the QNAME= parameter specifying the name of a valid process entry.

04

Specify a larger region or partition size on the JOB statement for the MCP, or restart the system specifying a larger system queue space.

05

Specify a larger partition size on the JOB statement for the application program.

06

Recode the SECURE=YES operand associated with the queue, or instruct the system operator to allow the queue to be opened.

07

Link edit the application program as an authorized program into an authorized library, or specify AUTHA=NO on the TCAM INTRO macro.

08

Open all TPROCESS entries for the PCB in the same application program.

09

Either start the TCAM with the jobname wanted or change the jobname on the QNAME=procname.jobname operand and restart the application program.

0A

Either increase the number of environmental checkpoint records that can be written, or decrease the requested number of environmental checkpoint records.

Source

Teleprocessing

044

Explanation

The error occurred during processing of the FE Common Write (COMWRITE) task. The COMWRITE task has been ended.

The hexadecimal contents of register 3 indicates the nature of the error:

Register 3
   Explanation

01

   Permanent I/O error on output device. Register 7 contains user ID; register 8 contains address of failing DECB.

02

   STAE routine failed. Register 15 contains the return code.

03

   User parameter list is incorrect, and output required was specified. Register 7 contains the address of the parameter list saved in COMWRITE. Register 11 contains the address of the error message.

05

   The output DCB failed to open.

06

   For one of the traces specified, the size of one half of the trace table is larger than the maximum block size specified for the trace data set.

Programmer response

Response depends upon the hexadecimal contents of register 3:

Register 3
   Response

01

   Check the status of the recording medium. If it is valid, call your hardware support personnel.

02

   Call your hardware support personnel.

03

   Check the parameter list.

05

   Missing DD statement. Include the DD statement and rerun the job.

06

   Ensure that the size of one half of the trace table does not exceed the maximum block size specified for the trace data set.

Source

DFSMSdfp

045

Explanation

The error occurred during processing of a telecommunications access method (TCAM) message control program (MCP). The MCP ends.

The low-order byte of register 15 contains a hexadecimal reason code that explains the error:

Code
  Explanation

01

I/O has been requested on a nonreusable disk record that is beyond the capacity of the data set. The nonreusable disk data set cannot be wrapped.

02

Logical read error caused by the reusable disk receiving a heavy burst of new traffic. This traffic causes unsent messages to be overlaid before being copied to the alternate destination queue.

03

Logical read error while trying to fetch a message for transmission to a terminal.

04

The copy subtask needed to copy messages from one data set to another has not been loaded by the disk OPEN. A multiple-route or distribution list message has been enqueued to go to dissimilar message queue types. The copy subtask is needed to put the message on the queue. Caused by failure to open successfully a disk message queue data control block (DCB).

05

I/O has been requested on an unopened disk message queue data set.

06

FEATURE=(,,NOTIMER) has been specified on the INTRO macro, but a function requiring the system timer has been called.

07

A message longer than the reusable disk data set has been entered.

08

A disk read error occurred. It was a hardware error, not a logical read error.

09

Either insufficient space was allocated for the checkpoint data set, or a read error occurred when attempting to read records from the checkpoint data set during a restart.

0A

Either the checkpoint data set is too small, or the number of checkpoint records specified in the INTRO macro is too large.

System action

The system abnormally ends. The system writes an error to the logrec data set.

System programmer response

For return code X'08', look at the messages in the job log for more information. Contact hardware support. Provide the logrec data set error record and the SYSOUT output for the job. For all other return codes, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Except for return code X'08', this is a probable user error. To determine the action for a specific reason code, follow these procedures based on the reason code in register 15:

Code
  Response

01

Either specify a larger data set or request that close down occur at an earlier point.

02,03,07

Specify a larger data set or one that occupies more than one extent.

04,05

Before issuing the OPEN macro for the lines, test for successful open of the message queue data set.

06

Specify FEATURE=(,,TIMER). Assemble and run the MCP again.

09

The message issued to the operator just before ABEND describes the cause of failure, and the message description provides a response.

0A

Either allocate more space for the checkpoint data set, or specify fewer checkpoint records in the INTRO macro.

Source

Teleprocessing

046

Explanation

The telecommunications access method (TCAM) message control program (MCP) has ended but an application program data set is still open. The application program data set is scheduled to be ended with a system completion code of X'046'.

System action

The application program abnormally ends.

Programmer response

See the programmer response for the system completion code provided with the abnormal end of the MCP.

Source

Teleprocessing

047

Explanation

An unauthorized program issued a restricted Supervisor Call (SVC) instruction:

Your program is authorized if it has at least one of the following types of authorization:

- runs in supervisor state
- Has PSW key 0-7
- Is in an APF-authorized environment

System action

The system writes a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=047,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Ask the operator to set a SLIP trap to obtain an SVC dump.

2. In the system trace, look for the SVC D or *SVCE D entry for abend X'047'.

3. Look for an SVC entry preceding the entry found in step . The SVC entry should be for the same TCB and have the same ASID as the entry found in step . The PSW for this SVC entry contains the address of the unauthorized program that issued a restricted SVC.

4. Use the PSW found in step to identify the unauthorized module that issued the restricted SVC.

   - For an installation-provided module, continue diagnosis with the module.

   - For an IBM module whose module prefix is IED or IKJ, the module is most likely a TCAM module. Specify AUTHA=NO on the INTRO macro in the TCAM MCP program and run the job again. If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the TCAM group at the IBM Support Center. Provide the SVC dump and the logrec data set error record.

   - For an IBM module that is not part of TCAM, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide the SVC dump and the logrec data set error record.

Source

Supervisor control

048

Explanation

A subsystem address space supported by advanced communications function/telecommunications access method (ACF/TCAM) had an error condition. An ACF/TCAM subsystem has determined that recovery could not occur. The subsystem abnormally ends. Register 0 contains one of the following failure codes:

Code
    Explanation

001
    The request parameter list (RPL) address was incorrect when the subsystem interface was not running with authorized path.

002
    An abnormal end occurred before the subsystem was notified of function recovery routines (FRR) recovery.

System action

Restart the subsystem.

System programmer response

Format the SVC dump with the interactive problem control system (IPCS). Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Print the SVC dump, which was stored in the SYS1.DUMP data set.

Source

Teleprocessing

049

Explanation

A subsystem address space or telecommunications access method (TCAM) appendage supported by advanced communications function (ACF)/TCAM had an error condition. The FRR was unable to recover the subsystem.

System action

A logrec data set entry has been created that explains why recovery could not occur. An SVC dump was written to SYS1.DUMP.

Operator response

Restart the system.

System programmer response

Format the SVC dump with the interactive problem control system (IPCS). Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Print the dump and logrec entry.

Source

Teleprocessing

04A

Explanation

An MVSSERV program made an incorrect request for data management services. A reason code provides further information:

Code
    Explanation

004
    The program passed an incorrect operation code in a request for a data management service.

008
    The program made an unsupported request for the data management GET macro.

012
    The program made an unsupported request for the data management PUT macro.

System action

The MVSSERV program ends abnormally. The system writes an ABEND dump.

System programmer response

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Source

Time Sharing Option Extensions (TSO/E)

04B

Explanation

An incorrect operation code was passed to a TSO linkage assist routine (LAR). Register 15 contains a hexadecimal code that indicates the reason for the termination.

Code
    Explanation

004
    The LAR for the terminal monitor program received an incorrect function number.

008
    The service routine's LAR was invoked an incorrect service routine entry point.

System action

TSO does not perform the requested service. The system writes an ABEND dump. The system writes a logrec data set error record.

System programmer response

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump and the logrec data set record.

Programmer response

Determine the calling routine and correct the operation code.

Source

Time Sharing Option Extensions (TSO/E)

04C

Explanation

A user invoked the TMP (terminal monitor program) and the TMP detached a program that completed with a nonzero completion code. The nonzero completion code is in register 15.

System action

The system does not change the user return code.

Source

Time Sharing Option Extensions (TSO/E)

04D

Explanation
A call to a z/OS client web enablement toolkit service was either issued in an incorrect environment, or the toolkit detected an unrecoverable error.

A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

00000001
    The caller of the z/OS Client Web Enablement Toolkit specified an invalid service.

00010000
 The parameters passed by the caller to the HWTJCREN service are not in the primary address space.

00010001
 The caller passed an incorrect number of parameters to the HWTJCREN service.

00020000
 The parameters passed by the caller to the HWTJGAEN service are not in the primary address space.

00020001
 The caller passed an incorrect number of parameters to the HWTJGAEN service.

00030000
 The parameters passed by the caller to the HWTJGBOV service are not in the primary address space.

00030001
 The caller passed an incorrect number of parameters to the HWTJGBOV service.

00040000
 The parameters passed by the caller to the HWTJGJST service are not in the primary address space.

00040001
 The caller passed an incorrect number of parameters to the HWTJGJST service.

00050000
 The parameters passed by the caller to the HWTJGNUE service are not in the primary address space.

00050001
 The caller passed an incorrect number of parameters to the HWTJGNUE service.

00060000
 The parameters passed by the caller to the HWTJGOEN service are not in the primary address space.

00060001
 The caller passed an incorrect number of parameters to the HWTJGOEN service.

00070000
 The parameters passed by the caller to the HWTJGVAL service are not in the primary address space.

00070001
 The caller passed an incorrect number of parameters to the HWTJGVAL service.

00080000
 The parameters passed by the caller to the HWTJINIT service are not in the primary address space.

00080001
 The caller passed an incorrect number of parameters to the HWTJINIT service.

00090000
 The parameters passed by the caller to the HWTJPARS service are not in the primary address space.

00090001
 The caller passed an incorrect number of parameters to the HWTJPARS service.

000A0000
 The parameters passed by the caller to the HWTJSERI service are not in the primary address space.

000A0001
 The caller passed an incorrect number of parameters to the HWTJSERI service.

000B0000
 The parameters passed by the caller to the HWTJSRCH service are not in the primary address space.

000B0001
 The caller passed an incorrect number of parameters to the HWTJSRCH service.

000C0000
 The parameters passed by the caller to the HWTJTERM service are not in the primary address space.

000C0001
 The caller passed an incorrect number of parameters to the HWTJTERM service.

000D0000
 The parameters passed by the caller to the HWTJGNUV service are not in the primary address space.

000D0001
　　　The caller passed an incorrect number of parameters to the HWTJGNUV service.

10010000
　　　The parameters passed by the caller to the HWTHCONN service are not in the primary address space.

10010001
　　　The caller passed an incorrect number of parameters to the HWTHCONN service.

10020000
　　　The parameters passed by the caller to the HWTHDISC service are not in the primary address space.

10020001
　　　The caller passed an incorrect number of parameters to the HWTHDISC service.

10030000
　　　The parameters passed by the caller to the HWTHINIT service are not in the primary address space.

10030001
　　　The caller passed an incorrect number of parameters to the HWTHINIT service.

10040000
　　　The parameters passed by the caller to the HWTHRQST service are not in the primary address space.

10040001
　　　The caller passed an incorrect number of parameters to the HWTHRQST service.

10050000
　　　The parameters passed by the caller to the HWTHRSET service are not in the primary address space.

10050001
　　　The caller passed an incorrect number of parameters to the HWTHRSET service.

10060000
　　　The parameters passed by the caller to the HWTHSET service are not in the primary address space.

10060001
　　　The caller passed an incorrect number of parameters to the HWTHSET service.

10070000
　　　The parameters passed by the caller to the HWTHSLST service are not in the primary address space.

10070001
　　　The caller passed an incorrect number of parameters to the HWTHSLST service.

10080000
　　　The parameters passed by the caller to the HWTHTERM service are not in the primary address space.

10080001
　　　The caller passed an incorrect number of parameters to the HWTHTERM service.

Source:
z/OS Client Web Enablement Toolkit

04E

Explanation

When the system detects an error in internal IBM DATABASE 2 (DB2®) processing, it will abnormally end a connected user task (TCB) or one of its own internal tasks. For information about the reason codes associated with this abend code, see Db2 Messages and Codes.

System action

The system abnormally ends the connected user task or the Db2 internal task.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

Check register 15 of the SDWA section "General Purpose Registers at Time of Error", and locate the accompanying reason code. In addition, check the information displayed at the user's terminal, and in the corresponding logrec data set entry.

Source

DFSMSdfp

04F

Explanation

To avoid data integrity problems, the subsystem abnormally ends; one or more 04E system completion codes will usually precede the end. During DATABASE 2 (Db2) abend, a user task with an active Db2 connection can be abended with a X'04F' system completion code; in rare instances, the entire connected address will be abended (MEMTERM). However, if the subsystem ends an address space after numerous cancel attempts, this is not a Db2 internal error.

System action

The subsystem abnormally ends Db2.

Operator response

Message DSNV086E should appear on your console screen. First, copy this message and the accompanying subsystem end reason code. Second, notify the system programmer.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

If the subsystem abnormally ends Db2, then record the subsystem end reason code that is displayed in message DSNV086E. In addition, you should be aware of the following situations.

1. If you received any X'04E' system completion codes prior to this subsystem end, perform the following actions. Check register 15 of the SDWA section "General Purpose Registers at Time of Error", and locate the accompanying reason code. In addition, check the information displayed at the user's terminal, and in the corresponding logrec data set entry.

2. If you did not receive any X'04E' system completion codes prior to the subsystem end, you will need an SVC dump, which is entitled "DB2 SUBSYSTEM TERMINATION REQUESTED - REASON=xxxxxxxx". The reason code in the message and the one found in the MVS operator message will be the same.

Source

DFSMSdfp

050

Explanation

An abend occurred in System REXX processing.

Code
> **Explanation**

xxxx042B
> The job step task of TSO Server address space is ending because the task that created it is terminating.

xxxx0432
> The job step task of a TSO Server address space is terminating because the request timed out.

xxxx0442
> A TSO Server address space is terminated because it is running under the MSTR subsystem and JES is now active.

xxxx044B
> Indicates that the task dispatched to run REXX execs is no longer authorized to do so and must be terminated.

xxxxyyyy
> All other internal errors.

System action

An SVC dump may be produced.

Operator response

Contact the System Programmer for xxxxyyyy.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center for xxxxyyyy.

Source

Sysrexx

051

Explanation

An MVSSERV program made an incorrect request for data management services. A reason code provides further information:

Code
> **Explanation**

004
> The program passed an incorrect operation code in a request for a data management service.

System action

The MVSSERV program ends. The system writes an ABEND dump.

System programmer response

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Source

Time Sharing Option Extensions (TSO/E)

052

Explanation

A program incorrectly issued a macro to request processing by Program Call/authorization (PC/AUTH) service routines.

Register 15 contains a hexadecimal reason code in the form *xxyy*, where *x* identifies the macro that was issued, and yy identifies the error. See the system programmer response for an explanation of these reason codes.

System action

The system abends the program that issued the macro. The system writes an ABEND dump.

System programmer response

Obtain the ABEND dump and find the reason code associated with the abend.

In the system trace table, look for the last *SVCE D entry. The PC entry preceding it gives the address in the program of the failing macro.

If the macro was issued by an installation-provided program, correct the program. If the macro was issued by a system component, or if the problem persists, search problem reporting data bases for a fix. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

The reason codes in register 15 are:

Code
    Explanation

01yy
    The program issued an LXRES macro.

0101
    A reserved field in the parameter list is not 0. Register 5 contains the first word of the parameter list.

0102
    The format number field in the parameter list is not valid. Register 5 contains the first word of the parameter list.

0103
    The request count in the linkage index (LX) list is not valid. Register 5 contains the first word of the parameter list.

0104
    A job step attempted to issue the LXRES macro, but a prior job step owned space-switch entry tables. (Subsequent job steps are not permitted to issue PC/AUTH macros.)

02yy
    The program issued an LXFRE macro.

0201
    A reserved field in the parameter list is not 0. Register 5 contains the first word of the parameter list.

0202
    The format number field in the parameter list is not valid. Register 5 contains the first word of the parameter list.

0203
    The request count in the linkage index (LX) list is not valid. Register 5 contains the first word of the parameter list.

0211
    A linkage index (LX) is incorrect. Register 5 contains the incorrect LX.

0212

A linkage index (LX) is not owned by the home address space. Register 5 contains the incorrect LX.

0213

The program attempted to free a non-reusable system linkage index (LX). Register 5 contains the linkage index.

0214

A linkage index (LX) has one or more entry tables connected and the LXFRE macro did not specify FORCE=YES.

0215

A linkage index (LX) appeared more than once in the LX list.

0216

The sequence number for a linkage index (LX) was incorrect. Register 5 contains the linkage index and register 6 contains the sequence number.

03yy

The program issued an ETCRE macro. Register 2 contains the index of the entry in which the error was found.

0301

A reserved field is not equal to 0 in the header of the entry table description (ETD) specified in the ENTRIES parameter.

0302

The format number field in the entry table description (ETD) is incorrect.

0303

The request count in the ETDNUM field is not valid.

0304

The caller passed a non-zero value in register 1.

0311

A reserved field is not equal to 0 in one of the description elements in the entry table description (ETD). Register 2 contains the entry index associated with the description element.

0312

The program identified in one of the description elements could not be found. Register 2 contains the entry index associated with the description element. If the error occurred during NIP:

- Register 4 bits 32-63 contains the first 4 bytes and Register 5 bits 32-63 contains the last 4 bytes of the name of the program that could not be found.
- There is a build problem. One possible error is that the z/OS release of the nucleus does not match the z/OS release of SYS1.LPALIB because of a catalog error. Another possibility is that the IPL required the CLPA option.

0313

The entry indexes are not in ascending order. Register 2 contains the entry index that was not in ascending order.

0314

A job step attempted to issue an ETCRE macro, but a prior job step owned space-switch entry tables. (Subsequent job steps are not permitted to issue PC/AUTH macros.)

0315

Reserved fields in the extended portion of the entry table description (ETD) are non-zero.

0316

Options that are valid only for a stacking Program Call (PC) were specified for a basic PC.

0317

An incorrect combination of ETDPKMC and ETDPKC was specified. On the ETDEF macro, either:

- PKM=REPLACE was specified without EK.
- EK value was not one of the keys specified in the EKM list.

0318

The extended authorization index (EAX) is not in the range of valid authorization indexes (AXs).

0319

The extended authorization index (EAX) specified was not reserved by the home address space.

0320

The associated recovery routine (ARR) identified in one of the description elements could not be found. Register 2 contains the entry index associated with the description element. If the error occurred during NIP:

- Register 4 bits 32-63 contains the first 4 bytes and Register 5 bits 32-63 contains the last 4 bytes of the name of the ARR that could not be found.

- There is a build problem. One possible error is that the z/OS release of the nucleus does not match the z/OS release of SYS1.LPALIB because of a catalog error. Another possibility is that the IPL required the CLPA option.

0321

An entry table descriptor (ETD) requested that CANCEL/DETACH processing be deferred while the associated recovery routine (ARR) is running. PC/AUTH is not authorized to defer this processing because it might not run in supervisor state or key 0.

0322

An entry table descriptor (ETD) requested that CANCEL/DETACH processing or asynchronous exits be deferred while the ARR is running, but no ARR was specified.

0323

The index specified in the entry table description (ETD) is greater than the maximum index allowed.

04yy

The program issued an ETDES macro.

0401

A reserved input field in the parameter list is not 0.

0402

The format number field in the parameter list is not valid.

0411

The specified token is not valid.

0412

The program specified a token for a system entry table but did not specify PURGE=YES.

0413

The specified token is for an entry table that the home address space does not own.

0414

The program specified a token for an entry table that is in use, but the program did not specify PURGE=YES.

05yy

The program issued an ETCON macro.

0501

A reserved input field is not 0.

0502

The format number field is not valid.

0503

The token list count or the linkage index (LX) list count is not valid.

0511

The token list count and the linkage index (LX) list count are not equal.

0512

A specified linkage index (LX) is already in use. Register 2 contains the incorrect LX.

0513

A specified linkage index (LX) is not reserved. Register 2 contains the incorrect LX.

0514

A specified token is incorrect.

0515

A specified token is for an entry table that is already connected to the home address space's linkage table. Register 2 contains the incorrect token.

0516

A specified token is for an entry table that is not authorized for connection. Register 2 contains the incorrect token.

0517

An entry table and the corresponding linkage index are not owned by the same address space. Register 2 contains the LX.

0519

A token appeared more than once in the token list. Register 2 contains the token.

051A

A linkage index (LX) appeared more than once in the LX list.

051B

The sequence number for a linkage index (LX) was incorrect. Register 5 contains the linkage index and register 6 contains the sequence number.

06yy

The program issued an ETDIS macro.

0603

The token count is not valid. Register 2 contains the incorrect count.

0604

The caller passed a non-zero value in register 1. Register 2 contains the value.

0611

A specified token is incorrect. Register 2 contains the token.

0612

The specified token is for a system entry table. Register 2 contains the token.

0613

A specified token is for an entry table that is not connected. Register 2 contains the token.

0614

A token appears more than once in the token list. Register 2 contains the token.

0615

The LXFRE macro passed an incorrect address space identifier (ASID) to the ETDIS macro. Register 2 contains the incorrect ASID.

07yy

The program issued an AXRES macro.

0703

The request count is not valid. Register 4 contains the request count.

0704

The caller passed a non-zero value in register 1.

0705

A job step attempted to issue an AXRES macro, but a prior job step owned space-switch entry tables. (Subsequent job steps are not permitted to issue PC/AUTH macros.)

08yy

A program issued an AXFRE macro.

0803

The request count is not valid. Register 4 contains the request count.

0804

The caller passed a non-zero value in register 1.

0813

An authorization index (AX) is not reserved by the home address space. Register 4 contains the AX.

0814

An authorization index (AX) is still in use. Register 4 contains the address of the address space control block (ASCB) using the AX. Register 5 contains the AX.

0817

An authorization index (AX) appeared more than once in the authorization index list. Register 4 contains the duplicate AX.

0818

An authorization index (AX) may still be in use as an extended authorization index (EAX).

0823

An authorization index (AX) equal to 0 or 1 appears in the authorization index list. An AX of 0 or 1 cannot be freed. Register 4 contains the AX.

09yy

A program issued an AXEXT macro.

0901

A reserved input field is not 0.

0904

The caller passed a non-zero value in register 1.

0918

The address space identifier (ASID) passed as input is not for an active address space. Register 4 contains the ASID.

0Ayy

The program issued an AXSET macro.

0A01

A reserved input field is not 0.

0A04

The caller passed a non-zero value in register 1.

0A19

The authorization index (AX) is not within the authorization index allocation table (AXAT). Register 4 contains the authorization index.

0A20

The authorization index (AX) is not reserved. Register 4 contains the authorization index.

0A21

The home address space has one or more connected SASN=OLD space switch entry tables that could cause an address space switch.

0A23

The authorization index (AX) for the master address space must be 1. Register 4 contains the requested AX value, which is not valid because it is not 1.

0Byy

The program issued an ATSET macro.

0B01

A reserved input field is not 0.

0B04

The caller passed a non-zero value in register 1.

0B19

The authorization index (AX) specified is not within the authorization index allocation table (AXAT). The second halfword of register 4 contains the AX value. The content of the first halfword of register 4 is undefined and unpredictable.

0B20

The authorization index (AX) specified is not reserved. Register 4 contains the AX.

0B22
> The specified authorization index (AX) is for a predefined authorization table entry. Register 4 contains the AX.

11yy
> The program issued a PCLINK macro with the STACK parameter.

1112
> The program held one or more locks that caused an internal error in PCLINK processing. If SAVE=NO was specified, register 5 contains the caller's return code. If SAVE=YES was specified, register 8 contains the caller's return code.

12yy
> The program issued a PCLINK macro with the UNSTACK parameter.

1211
> The macro included the UNSTACK,THRU or the UNSTACK,TO parameter, but the current PCLINK stack element chain was empty.

1212
> The specified token was for a PCLINK stack element (STKE) that is not on the PCLINK stack element chain. Register 2 contains the token.

13yy
> The program issued a PCLINK macro with the EXTRACT parameter.

1313
> The specified token was for a PCLINK stack element (STKE) that is not the most recently stacked STKE.
>
> Register 2 contains the token of the current element.
>
> This problem can be caused by an application program or the system.

1314
> The specified token is not valid. Register 2 contains the incorrect token.

1416
> The program incorrectly modified either the system function table (SFT) or extended system vector table (SVTX). The sum of the highest extended linkage index (LX) value (an LX value above 2047) in the SFT and the value in the SVTXNSBLX field of the SVTX is greater than decimal 16383, which it should not be. Register 2 contains the highest extended LX value in the SFT. Register 3 contains the value in the SVTXNSBLX field.

Source

Program Call/authorization (PC/AUTH)

053

Explanation

A program requested processing by Program Call/authorization (PC/AUTH) service or a program call linkage service. An error prevented PC/AUTH from processing the macro normally. The system records the registers in field SDWAGRSV in the system diagnostic work area (SDWA).

Register 15 contains a hexadecimal reason code in the form *xxyy*, where xx identifies the macro that was issued and *yy* identifies the error. See the system programmer response for an explanation of the reason codes.

System action

The system abends the program that issued the macro, unless PC/AUTH requests a retry. The system writes an SVC dump and a logrec data set error record.

System programmer response

Look at the explanation of the reason code. If you receive one of the following reason codes, do the following:

- For reason code X'xx97': Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason code and continue diagnosis with that abend.
- For reason code X'xx98': Look at message IEA139E, which PC/AUTH issued at the time of the original failure.
- For reason code X'xx99': Look in the SDWA variable recording area (SDWAVRA) for a PC/AUTH control block that is not valid.
- For reason code X'0112': Change the application program to use fewer linkage indexes (LXs) or change the limit of system LXs with the NSYSLX parameter in the IEASYSxx parmlib member.

If you cannot correct the problem, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump, including the system trace table, and the logrec data set error record.

The reason codes in Register 15 are:

Code
  Explanation

01yy
  The program issued an LXRES macro.

0101
  PC/AUTH requested dynamic work area storage, but the request failed. Register 5 contains the return code from the request.

0105
  PC/AUTH requested storage for a new linkage index allocation table (LXAT) in the pageable storage of (PC/AUTH) address space. The request failed. Register 5 contains the return code from the request.

0109
  PC/AUTH requested that an old linkage index allocation table (LXAT) in the PC/AUTH address space's pageable storage be freed. The request failed. Register 5 contains the return code from the request.

010A
  PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 5 contains the return code from the request.

0111
  PC/AUTH could not reserve one or more linkage indexes (LX) because the maximum number of LXs the system supports would be exceeded. Register 5 contains the number of LXs that are currently unreserved.

0112
  The program tried to reserve more system linkage indexes (system LXs) then were available. The total number of system linkage indexes is the sum of the number of LXs in the system function table and the value of the NSYSLX parameter of the IEASYSxx parmlib member. The default value for NSYSLX is 165.

0197
  An unexpected error occurred. Another abend occurred while PC/AUTH was processing. The system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0198
  PC/AUTH previously failed and cannot process requests.

0199
  The acronym at the beginning of a PC/AUTH control block is incorrect. Register 5 contains the expected acronym.

02yy
  The program issued an LXFRE macro.

0201
  PC/AUTH requested storage for a dynamic work area, but the request failed. Register 5 contains the return code from the request.

0205
  PC/AUTH requested storage for a new force disconnect queue block (FDQB) in the program PC/AUTH address space's pageable storage. The request failed. Register 5 contains the return code from the request.

0209

PC/AUTH requested that a force disconnect queue block (FDQB) in the PC/AUTH address space's pageable storage be freed. The request failed. Register 5 contains the return code from the request.

020A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 5 contains the return code from the request.

0211

PC/AUTH was building the force disconnect queue (FDQ) to process a FORCE request. The service found more than one connection description (ETIXCD) with the same address space identifier(ASID)/linkage index (LX) values while searching the entry table information block (ETIB) chain.

0297

An unexpected error occurred. Another abend occurred while PC/AUTH was processing. The system converted this abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0298

PC/AUTH previously failed and cannot process requests.

0299

The acronym at the beginning of a PC/AUTH control block is incorrect. Register 5 contains the expected acronym.

03yy

The program issued an ETCRE macro.

0301

PC/AUTH requested storage for a dynamic work area, but the request failed. Register 2 contains the return code from the request.

0302

PC/AUTH requested storage in the system queue area (SQA), but the request failed. Register 2 contains the return code from the request.

0303

PC/AUTH requested storage in the PC/AUTH address space's local system queue area (LSQA). The request failed. Register 2 contains the return code from the request.

0305

PC/AUTH requested storage in the PC/AUTH address space's pageable storage. the request failed. Register 2 contains the return code from the request.

0306

PC/AUTH requested that storage in the system queue area (SQA) be freed, but the request failed. Register 2 contains the return code from the request.

0307

PC/AUTH requested that storage in the PC/AUTH address space's local system queue area (LSQA) be freed. The request failed. Register 2 contains the return code from the request.

0309

PC/AUTH requested that storage in the PC/AUTH address space's pageable storage area be freed. The request failed. Register 2 contains the return code from the request.

030A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 2 contains the return code from the request.

0397

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0398

PC/AUTH previously failed and cannot process requests.

0399

The acronym at the beginning of a PC/AUTH control block is incorrect. Register 2 contains the expected acronym.

04yy

The program issued an ETDES macro.

0401

PC/AUTH requested storage for a dynamic work area, but the request failed. Register 2 contains the return code from the request.

0406

PC/AUTH requested that storage in the system queue area (SQA) be freed, but the request failed. Register 2 contains the return code from the request.

0407

PC/AUTH requested that storage in the PC/AUTH address space's local system queue area (LSQA) be freed. The request failed. Register 2 contains the return code from the request.

0409

PC/AUTH requested that storage in the PC/AUTH address space's pageable storage be freed. The request failed. Register 2 contains the return code from the request.

040A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 2 contains the return code from the request.

0497

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0498

PC/AUTH previously failed and cannot process requests.

0499

The acronym at the beginning of a PC/AUTH control block is incorrect. Register 2 contains the expected acronym.

05yy

The program issued an ETCON macro.

0501

PC/AUTH requested storage for a dynamic work area, but the request failed. Register 2 contains the return code from the request.

0503

PC/AUTH requested storage in the PC/AUTH address space's local system queue area (LSQA). The request failed. Register 2 contains the return code from the request..

0505

PC/AUTH requested storage in the PC/AUTH address space's pageable storage. the request failed. Register 2 contains the return code from the request.

0507

PC/AUTH requested that storage in the PC/AUTH address space's local system queue area (LSQA) be freed. The request failed. Register 2 contains the return code from the request.

050A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 2 contains the return code from the request.

0597

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0598

PC/AUTH previously failed and cannot process requests.

0599

The acronym at the beginning of a PC/AUTH control block is incorrect. Register 2 contains the expected acronym.

06yy

The program issued an ETDIS macro.

0601

PC/AUTH requested storage for a dynamic work area, but the request failed. Register 2 contains the return code from the request.

0609

PC/AUTH requested that storage in the PC/AUTH address space's pageable storage area be freed. The request failed. Register 2 contains the return code from the request.

060A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 2 contains the return code from the request.

0697

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0698

PC/AUTH previously failed and cannot process requests.

0699

The acronym at the beginning of a PC/AUTH control block is incorrect. Register 2 contains the expected acronym.

07yy

The program issued an AXRES macro.

0701

PC/AUTH requested storage for a dynamic work area, but the request failed. Register 4 contains the return code from the request.

0705

PC/AUTH requested storage in the PC/AUTH address space's pageable storage. the request failed. Register 4 contains the return code from the request.

0709

PC/AUTH requested that storage in the PC/AUTH address space's pageable storage area be freed. The request failed. Register 4 contains the return code from the request.

070A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 4 contains the return code from the request.

0712

PC/AUTH cannot satisfy the request because the authorization index (AX) count would cause the total number of AXs to exceed the maximum number that the system supports. Register 4 contains the AX count for the request.

0797

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0798

PC/AUTH previously failed and cannot process requests.

0799

The acronym at the beginning of a PC/AUTH control block is incorrect. Register 4 contains the expected acronym.

08yy

The program issued an AXFRE macro.

0801

PC/AUTH requested storage for a dynamic work area, but the request failed. Register 4 contains the return code from the request.

080A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 4 contains the return code from the request.

0897

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0898

PC/AUTH previously failed and cannot process requests.

0899

The acronym at the beginning of program PC/AUTH control block is incorrect. Register 4 contains the expected acronym.

09yy

The program issued an AXEXT macro.

0901

PC/AUTH requested storage for a dynamic work area, but the request failed. Register 4 contains the return code from the request.

090A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 4 contains the return code from the request.

0997

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0998

PC/AUTH previously failed and cannot process requests.

0999

The acronym at the beginning of a PC/AUTH control block is incorrect. Register 4 contains the expected acronym.

0Ayy

The program issued an AXSET macro.

0A01

PC/AUTH requested storage for a dynamic work area, but the request failed. Register 4 contains the return code from the request.

0A0A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 4 contains the return code from the request.

0A30

An unexpected error occurred before the service set the authorization index (AX) of the home address space.

0A31

An unexpected error occurred after the service set the authorization index (AX) of the home address space, but before the bind break routine could break all binds to other address spaces.

0A32

An unexpected error occurred after the service set the authorization index (AX) of the home address space and the bind break routine broke all binds to other address spaces.

0A97

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0A98

PC/AUTH previously failed and cannot process requests.

0A99

The acronym at the beginning of program PC/AUTH control block is incorrect. Register 4 contains the expected acronym.

0Byy

The program issued an ATSET macro.

0B01

PC/AUTH requested storage for a dynamic work area, but the request failed. Register 4 contains the return code from the request.

0B03

PC/AUTH requested storage in the PC/AUTH address space's local system queue area (LSQA). The request failed. Register 4 contains the return code from the request.

0B07

PC/AUTH requested that storage in the PC/AUTH address space's local system queue area (LSQA) be freed. The request failed. Register 4 contains the return code from the request.

0B0A

PC/AUTH requested that a dynamic work area be freed, but the request failed. Register 4 contains the return code from the request.

0B30

An unexpected error occurred before the service set the authorization bits in the authorization table (AT) of the home address space.

0B31

An unexpected error occurred after the service set the authorization bits in the authorization table (AT) of the home address space, but before the bind break routine broke all binds to other address spaces.

0B32

An unexpected error occurred after the service set the authorization bits in the authorization table (AT) of the home address space and the bind break routine broke all binds to other address spaces.

0B97

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0B98

PC/AUTH previously failed and cannot process requests.

0B99

The acronym at the beginning of a PC/AUTH control block is incorrect. Register 4 contains the expected acronym.

0Cyy

PC/AUTH resource manager detected an error.

0C01

The resource manager requested storage for a dynamic work area, but the request failed. Register 2 contains the return code from the request.

0C06

The resource manager requested that storage in the system queue area (SQA) be freed, but the request failed. Register 2 contains the return code from the request.

0C07

The resource manager requested that storage in the PC/AUTH address space's local system queue area (LSQA) be freed. The request failed. Register 2 contains the return code from the request.

0C09

The resource manager requested that storage in the PC/AUTH address space's pageable storage be freed. The request failed. Register 2 contains the return code from the request.

0C0A

The resource manager requested that a dynamic work area be freed, but the request failed. Register 2 contains the return code from the request.

0C97

An unexpected error occurred. Another abend occurred while PC/AUTH was processing and the system converted the abend to X'053'. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes and continue diagnosis with that code.

0C99

The acronym at the beginning of a PC/AUTH control block is incorrect. Register 2 contains the expected acronym.

0CC1

The ASCBAXR count in the address space control block (ASCB) for the ending address space was too low.

0CC2

The ASCBLXR count in the address space control block (ASCB) for the ending address space was too low.

0CC3

The bind break routine issued a non-zero return code.

0Dyy

The Program Call authorization functional recovery routine (PC/AUTH FRR), detected an error. For any yy value except 88 and 89, the PC/AUTH FRR detected an incorrect service-in-control code and cannot determine which PC/AUTH service is running; the dump title contains PCRAEERC =nnnn, where nnnn is the value in the PCRAEERC field of the Program Call recovery area (PCRA) at the time the FRR got control.

0D88

The FRR received return code X'18' after single-threaded queue verification.

0D89

The FRR received return code X'18' after double-threaded queue verification.

11yy

The program issued a PCLINK macro with the STACK parameter.

1110

PC/AUTH requested storage for storage in the common storage area (CSA). the request failed. Register 2 contains the return code from the request.

12yy

The program issued a PCLINK macro with the UNSTACK parameter.

1211

On the stack element queue (STKE), one of the pointers to the next STKE is incorrect. Register 2 contains the incorrect pointer.

1212

On the stack element queue, one of the fields containing the address space identifier (ASID) of the next stack element (STKE) is incorrect. Register 2 contains the incorrect ASID.

1297

The cause of the error is unknown. Look in the SDWA variable recording area (SDWAVRA) for the original abend and reason codes issued by the PCLINK macro. The abend code is in the VRAOA field and the reason code is in the VRAOR15 field.

14yy

An error occurred during PC/AUTH initialization. The system does not write an SVC dump or a logrec data set error record.

1411

A program received a non-zero return code from the system address space creation. Register 2 contains the original return code and register 3 contains the original reason code.

1412

A routine received a non-zero return code from the system address space initialization. Register 2 contains the original return code and register 3 contains the original reason code.

1413

A routine issued the NUCLKUP macro but the system was unable to process the request. Register 2 contains the original return code and register 3 contains the parameter passed to NUCLKUP.

1414

The sum of the highest linkage index (LX) value in the system function table (SFT) and the value in the SVTNSLX field of the system vector table (SVT) is greater than decimal 1023. This condition indicates that the SFT or the SVT was incorrectly modified. Register 2 contains the highest LX value in the SFT, and register 3 contains the value in the SVTNSLX field.

1415

The routine received an incorrect return code from the bind break. Register 2 contains the return code.

15yy

A PC/AUTH service abnormally ended.

1501

An unexpected error occurred while updating the primary address space number (PASN) access list.

Source

Program Call/authorization (PC/AUTH)

054

Explanation

An unrecoverable error occurred when a program requested a scheduler JCL facility (SJF) service.

The error is internal. The valid reason codes, in decimal format, to report to the IBM Support Center are as follows:

Reason Codes:				
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	23	24	25	26
27	29	30	31	32
33	34	35	36	37
38	39	40	41	42
43	100			

System action

The system abnormally ends SJF processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Scheduler JCL facility (SJF)

055

Explanation

The system found an error while processing a listen or signal request for event notification. Register 15 contains a hexadecimal reason code that explains the error:

Code
   Explanation

24

   The storage containing the requestor's event parameter list was overlaid after initial validation.

28

   An error occurred in one of the listen requests waiting to be processed.

30

   An ENF signal pre-processing routine returned a non-valid return code.

34

   During ENF initialization, ENF could not obtain the address of a needed signal pre-processing routine.

38

   The control blocks representing a listen request contain instructions that are not valid for comparing the listener's bit-mapped qualifier with the bit-mapped qualifier associated with the current event.

3C

   The system could not create the IEFSCHAS address space. Time-of-error registers 2 and 3 contain the return and reason codes, respectively, from the ASCRE macro.

40

   The system could not join or create ENF's XCF group. Time-of-error registers 2 and 3 contain the return and reason codes, respectively, from the IXCJOIN macro.

44

   The system could not obtain information about the other members of ENF's XCF group. Time-of-error registers 2 and 3 contain the return and reason codes, respectively, from the IXCQUERY macro.

48

   The system could not send an event notification to other systems in the sysplex. Time-of-error registers 2 and 3 contain the return and reason codes, respectively, from the IXCMSGO macro.

4C

   The system could not receive an event notification from some other system in the sysplex. Time-of-error registers 2 and 3 contain the return and reason codes, respectively, from the IXCMSGI macro.

System action

For reason code X'34', ENF initialization fails. For reason codes X'3C', X'40', and X'44', ENF sysplex-wide notification is not available. For all other reason codes, the system abnormally ends the current task. All other processing continues.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Respecify the data on the event parameter list.

Source

Event notification facility (ENF)

058

Explanation

Supervisor control detected an error when establishing a work unit's cross memory environment. Register 15 contains a hexadecimal reason code to be used when searching problem reporting data bases or when reporting the problem to the IBM Support Center. The reason code in register 15 is one of the following:

Code
Explanation

00
   An attempt to establish a cross memory environment failed. The target ASID was not valid for the cross memory address.

04
   The work unit's primary address space job step task has ended. The low order halfword of register 12 contains the primary ASID number.

08
   The work unit had addressability to an incorrect primary ASID. The low order halfword of register 12 contains the primary ASID number. Termination of the primary address space is the likely cause of this error.

0C
   The work unit's secondary address space job step task has ended. The low order halfword of register 11 contains the secondary ASID number.

10
   The work unit had addressability to an incorrect secondary ASID. The low order halfword of register 11 contains the secondary ASID number. Termination of the secondary address space is the likely cause of this error.

14
   Internal error. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

18
   Internal error. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

1C
   Internal error. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

20
   Internal error. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

24
   Internal error. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

28
   An attempt to establish a cross memory address failed. The ASCB for the target ASID did not pass validity checks. The first four bytes of the target ASCB did not contain the character 'ASCB'. Register 12 contains the address of the invalid ASCB.

2C
   The work unit had addressability to an incorrect primary ASID. The low order halfword of register 12 contains the primary ASID number. Termination of the primary address space is the likely cause of this error.

30
   The work unit had addressability to an incorrect secondary ASID. The low order halfword of register 11 contains the secondary ASID number. Termination of the secondary address space is the likely cause of this error.

34
   Internal error. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

38

Internal error. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

3C

Internal error. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

For the preceding list of reason codes, this abend may be normal. That is, if a work unit's primary or secondary address space ends or if the primary or secondary address space job step task ends, the required cross memory connection cannot be made and the work unit abnormally ends with abend X'058'. Search problem reporting databases for a fix for the problem. If no fix exists, use the reason code to perform a search in the IBM database and indicate the findings when reporting the problem to the IBM Support Center.

System action

The system abnormally ends the program that requested the cross memory service. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=058,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Use the address in register 14 at the time of error to identify the module that requested the cross memory services.
2. Search problem reporting data bases for a fix for the problem. If no fix exists, and the abend is not expected (e.g. the unit of work owning the cross memory resources was not ended), ask the operator to set a SLIP trap to obtain an SVC dump. Contact the component group associated with this module at the IBM Support Center. Provide the SVC dump, the reason code of the failure, and, if available, the logrec data set error record.

Source

Supervisor control

059

Explanation

Supervisor control detected an error during stop or reset processing. A hexadecimal reason code in register 15 explains the error:

Code
   Explanation

00

Stop processing received as input a disabled program status word (PSW).

08

An unrecoverable error occurred during stop/reset processing.

0C

Stop processing detected a request to stop a task with an unlocked task control block (TCB). The task was already stopped.

10

Reset processing detected a request to reset a locked TCB. The task did not hold a local lock or cross memory local (CML) lock.

14

Reset processing detected a request to reset a locked TCB, but the address space control block (ASCB) lockword did not contain a suspend value of X'7FFFFFFF'.

18

A program requested that functional recovery routines (FRR) be deleted from the normal stack, but the program is not currently running with the normal stack.

1C

Stop/reset processing was unable to obtain a linkage stack for a routine running under a service request block (SRB).

20

Reset processing detected a request to reset a locked SRB, but the ASCB lockword did not contain the suspend value X'7FFFFFFF'.

System action

The system abnormally ends the program that requested the stop or reset processing. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=059,ACTION=SVCD,END
```

System programmer response

Do the following:

1. For reason code X'08' or X'1C', ask the operator to set a SLIP trap to obtain an SVC dump. Search problem reporting databases for a fix for the problem. If no fix exists, contact the supervisor control component group at the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.

2. For any other reason code, use the address in register 14 at the time of error to identify which module requested stop or reset processing.

   - For an installation-provided module, continue diagnosis with the module.

   - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the component group associated with this module at the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.

Source

Supervisor control

05A

Explanation

Supervisor control detected an error in a request to free a service request block (SRB) or to free a suspended SRB (SSRB). Register 15 contains a hexadecimal reason code to be used when searching problem reporting data bases or when reporting the problem to the IBM Support Center.

System action

The system abnormally ends the program that tried to free the SRB or SSRB. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=05A,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Use the address in register 14 at the time of error to identify the module that tried to free an SRB or an SSRB.
2. Search problem reporting data bases for a fix for the problem. If no fix exists, and no dump was written with the abend, ask the operator to set a SLIP trap to obtain an SVC dump. Search problem reporting databases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide the dump used, the reason code of the failure, and, if available, the logrec data set error record.

Source

Supervisor control

05B

Explanation

A system service running in service request block (SRB) mode issued an SRBTIMER macro to set a processing time limit. When the time limit expired, timer supervision ended the service.

System action

The system abnormally ends the system service.

Operator response

Retain the logrec data set error records. Contact hardware support.

Source

Timer supervision

05C

Explanation

An error occurred during Device Allocation processing.Register 15 contains a hexadecimal reason code that you should report to the IBM Support Center.

The following are valid hexadecimal reason codes, for cases where the system programmer might or might not be able to take corrective actions. There are other internal reason codes that are not listed here. For any reason code not documenented here, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Code
    Explanation

001

System address space initialization denied the request to create the allocation address space.

002

The allocation address space received a nonzero return code from GETMAIN processing.

003

The display allocation tables manager received a request which, if processed, would cause the DALTUSE count to be less than zero.

004

An allocation module issued the POST macro instruction, and the macro processing has entered the routine specified on the ERRET parameter.

005

An allocation module issued the ESTAE macro instruction, and the return code from ESTAE processing was not zero.

006

An allocation module issued the STIMERM macro instruction, and the macro processing has entered the routine specified on the ERRET parameter.

101

The ATTACH macro instruction was issued for the eligible device table (EDT) verification routine during allocation initialization processing. The return code from the ATTACH routine was not zero.

102

An error occurred during an RESMGR ADD TYPE(ADDRSPC) when establishing the ATS Address Space Resource Manager.

103

An error occurred during an RESMGR ADD TYPE(TASK) when establishing the ATS Task Resource Manager.

200

IEFAB4F7 was called to read a single SWA block, and the SWAREQ was unsuccessful.

201

Allocation was invoked during DDR SWAP to update the unit control block (UCB) pointer list (UPL) so that the UPL would reflect the swapped UCBs. However, one or both of the swapped UCB addresses is not in the UPL.

202

Invalid UCB address.

203

IEFAB4FP discovered that SIOTDDIB does not point to a DDIB.

210

Invalid JCT in the JSCB.

211

Invalid SCT in the JSCB.

212

Invalid ACT in the JCT.

213

Invalid ACT in the SCT.

214

Invalid SVA found in IEFAB4FE.

219

Internal error in Allocation I/O count table.

21A

Internal error in Allocation data set ENQ management.

21C

Allocation found a circular PDB chain when performing pending device processing.

21D

An allocation module issued the ISGENQ macro instruction, and the return code from ISGENQ processing indicates that the token for that particular ENQ was unable to be obtained.

21E

Failed to attach IEFA1HST task.

220

Device is not automatically switchable for a function that requires it.

221

Device is not registered to this system.

224

Device type ENQ not held before requesting more than one Device ENQ on a single request.

225

Device ENQ not held before requesting a function on a device that requires it.

226

Needed device array was not passed to the IEFAB4FX service.

227

Needed device type array was not passed to the IEFAB4FX service.

228

Invalid function request for the IEFAB4FX service.

229

Individual General Device Element (IGDE) not found.

230

NED not found for self-describing device.

231

Invalid Queue Manager Queue Block Chain (used by QMQBLK processing, not IEFAB4FX)

232

Unrecognized return code from IEFOIGDE methods.

233

IGDE was not built when it was expected to be.

234

TCB and/or ASCB address not supplied when requesting clean up for terminating TCB or ASCB.

235

Non-zero return code received from ?IXCMSGO.

236

IGDE not owned when it should have been.

237

Attempt to push a non-AS device.

238

Recovery was entered after an abend or cancel and the ATS Service Routines Recovery block (IEFZATRB) or Allocation Automatic Tape Sharing (ATS) Parameter List (IEFZATSP)was corrupted. The address space has been taken down to clean up ATS ENQs and Latches.

240

An Autoswitchable (AS) device chosen for allocation is not assigned.

241

DDR Swap failed because GRS failed trying to swap Device ENQs.

243

IEFASWAP failed, issued against the target task.

244

IEFASWAP failed, issued against the DDR/SWAP task.

245

ENQ/DEQ for Tape device failed.

246

Allocation Recovery is unable to verify all Automatic Tape Sharing (ATS) Device ENQs have been released.

253

A loop was detected in Queue Manager Queue Control Block.

254

Detected a corrupted hash value.

255

The request attempted to assign ownership to another TCB unconditionally.

257

Error in determining the UCB common extension address by IOS.

301

At the end of processing all allocation requests for a job step, an unsatisfied request is detected. An incorrectly modified eligible device table (EDT) or specifying VSAM parameters for a non-VSAM data set is the probable cause.

303

Error encountered in the EDL storage manager.

304

Unexpected return code for IEFAB480.

305

Either the EDT library section does not exist or an error occurred while obtaining the library names from the current configuration.

306

IEFAB480 found a cost adjustment value of zero which would fail to decrease any transformed costs (TCs).

307

IEFAB480 found an edge with a valid transformed cost (TC), but never adjusted the transformed cost.

308

Two jobs are allocated to the same tape drive.

309

Devices selected by JES3 are not in the Allocation Eligible Device List (EDL). Check the Job Log of the failing job for messages IEF202I/IEF272I. Message IEF202I indicates that a previous step was not run because of:

- condition codes
- COND=even
- COND=only

Message IEF272I indicates that a previous step was not executed.

311

Array bounds were exceeded for an internal control block during Tape Device Allocation. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the dump.

313

Internal error in the allocation dynamic storage manager.

30A

Invalid JCT in the JSCB.

30B

Invalid first SCT in the JCT.

30C

Invalid next SCT in the SCT.

30D

An allocation module called SMS for the Data Set Stacking operation. SMS returned an unrecognized return code.

30E

An allocation module called SMS for the Device Pool Services. SMS returned an unrecognized return code.

30F

SIOT not found for affed DD (UNIT=AFF). Issued from IEFAB4FE.

501

Undefined return code from JES3.

604

IEFAB4MG (called by macro IEFMSGBL) was attempting to build a message, but no message definition was found.

608

IEFAB4MG (called by macro IEFMSGBL) was attempting to build a message, but the SIOT pointer required for this message was not found.

60C

IEFAB4MG (called by macro IEFMSGBL) was attempting to build a message, but an incorrect number of variables was supplied.

610

IEFAB4MG (called by macro IEFMSGBL) was attempting to build a message, but an invalid buffer was passed.

614

IEFAB4MG (called by macro IEFMSGBL) was attempting to build a message, but no storage was defined for the message buffer.

618

IEFAB4MG (called by macro IEFMSGBL) was attempting to build a message, but the message text was too long.

701

The scheduler JCL facility (SJF) returned an unexpected return code or reason code.

702

SVC 99 caller does not hold the SYSZTIOT resource but has not requested that TIOT resource be obtained.

703

SVC 99 caller already holds the SYSZTIOT resource and has requested that TIOT resource be obtained.

704

SIOT to be dechained is not found in the SIOT chain.

804

Allocation tried to remove a DSAB entry from the dynamic communication table, but the entry did not exist.

807

Allocation tried to mark a DSAB entry in the dynamic communication table as eligible for remove in-use processing, but the entry did not exist.

80B

Allocation tried to change the TCB address of a DSAB entry in the dynamic communication table, but the entry did not exist.

8FF

Allocation's dynamic communication table manager was called with an invalid function code.

xxxx0A90

The system could not allocate a request, and the installation has activated a DIAGxx parmlib member to cause this abend and obtain an SDUMP of the problem.

xxxx0A92

The system could not allocate a request, and the installation has activated a DIAGxx parmlib member to cause this abend and obtain an SDUMP of the problem.

xxxx0A93

The system could not allocate a request, and the installation has activated a DIAGxx parmlib member to cause this abend and obtain an SDUMP of the problem. Remote SDUMPs of all systems in the sysplex will be requested.

System action

For job-related errors, the system may issue message IEF197I with the abend code and the reason code. The system may also issue other messages related to the error. The system stops allocation processing for the step. The system ends the job. For errors that are not related to a job, the system may issue other messages related to the error.

In all cases, the system writes an SVC dump, and writes a logrec data set error record.

For reason code 21C, Allocation will search for devices that are pending offline or pending unload and will process them appropriately. However, any commands or services that requested device(s) to be taken offline or unloaded may not be notified that the device(s) have been processed. This may leave the requestor waiting indefinitely.

For reason code 229, if the number of the device can be determined, message IEF707I is issued indicating the device number.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

For reason code 21C, any command or service that requested device(s) be taken offline or unloaded, including VARY OFFLINE or UNLOAD commands or programs that call the IEEVARYD service, may be left waiting indefinitely. It may be necessary to use the CMDS ABEND command to ABEND any VARY command or UNLOAD command that appears to be hung, or to CANCEL any job that may have invoked the IEEVARYD service that appears to be hung.

For reason code 229, message IEF707I might be issued to indicate the number of the device that cannot be found. If IEF707I is issued, see the Operator Response and System Programmer Response for that message.

Source

Allocation/unallocation

05D

Explanation

A program issued a CALLDISP macro that is not valid. A hexadecimal reason code in register 15 explains the error:

Code
  Explanation

00
  The program is disabled and has super bits set.

04
  The current functional recovery routine (FRR) stack is not the normal FRR stack.

08
  The macro specified FRRSTK=SAVE while the program holds a lock, or the macro specified FRRSTK=NOSAVE while the program holds a lock other than the LOCAL lock or the cross memory local (CML) lock.

0C
  The program is the first level of the recovery termination manager (RTM1), a service invoked by RTM1, or an FRR.

10
  The program was not in task control block (TCB) mode.

14

Register 0, on input, contained a function code that is not valid.

18

Register 1, on input, did not contain 0.

System action

The system abnormally ends the program that issued the CALLDISP macro. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=05D,ACTION=SVCD,MATCHLIM=1,END
```

System programmer response

Do the following:

1. Ask the operator to set a SLIP trap to obtain an SVC dump.

2. Analyze the dump to see if the program that abended was entered by a Supervisor Call (SVC) or Branch instruction, as follows. In the system trace, look for an SVC X'74' entry. Routing code 08 will be in the UNIQUE-1 column.

   - If found, the program was entered by an SVC instruction. Use the address in the PSW ADDR column for this SVC entry to identify the module that issued the CALLDISP macro.

   - If not found, the program was entered by a Branch instruction. Register 14 contains the address of the caller. Use the address in register 14 to identify the module that issued the CALLDISP macro.

3. After identifying the module, do one of the following:

   - For an installation-provided module, continue diagnosis with the module.

   - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.

Source

Supervisor control

05E

Explanation

A program issued the SRBSTAT macro, but this program either:

- Is in an environment that is not valid

- Specified parameters that are not valid

A hexadecimal reason code in register 15 explains the error:

Code
   Explanation

00

The program holds a lock.

04

The current functional recovery routine (FRR) stack is not the normal FRR stack.

08

The program has super bits set.

0C

The program is not in service request block (SRB) mode.

10

The program is disabled.

14

The first level of the recovery termination manager (RTM1), a service invoked by RTM1, or an FRR used the RESTORE parameter on the SRBSTAT macro.

18

The PCLINK stack header was not zero on entry to processing for the RESTORE parameter of the macro.

1C

The program specified RESTORE or MODIFY on the macro, and the status save area does not contain valid status.

20

Processing for the RESTORE parameter of the macro scheduled an SRB to obtain correct processor affinity, but the SRB was unable to run.

24

The program specified MODIFY on the macro, but register 0 contains a MODIFY identifier code that is not valid.

28

For an SRBSTAT RESTORE request, the SRB status save area indicated that vector registers were in use, but the restore-to SRB was either non-preemptable or was not the target of an IEAFP START request.

System action

The system abnormally ends the program that issued the SRBSTAT macro. The system may write an error record to the logrec data set.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=05E,ACTION=SVCD,END
```

System programmer response

Use the address in register 14 at the time of error to identify the module that issued the SRBSTAT macro.

• For an installation-provided module, continue diagnosis with the module.

• For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the component group associated with this module at the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.

Source

Supervisor control

05F

Explanation

The VSPC address space encountered an error.

System action

The VSPC address space and all address spaces that depend on the VSPC address space are abnormally ended. The system writes a logrec data set error record.

The system issues messages about the job to the job log. The system writes an ABEND dump for the failing job step.

Operator response

Notify the system programmer.

System programmer response

Look at the messages in the job log. If the JOB statement did not specify MSGLEVEL=(1,1), specify it and run the job again. Obtain the JCL for the job. Obtain the SYSOUT output for the job. Obtain the ABEND dump for the failing job step. Collect all printed output and output data sets related to the problem. Obtain the logrec data set error record.

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Vector processing

060

Explanation

Bulk data transfer (BDT), BDT TQI, or a subtask within either address space is ending. One or more accompanying error messages explain why. Register 15 may contain one of the following reason codes:

Code
   Explanation

3014
   A spool error was detected in BDTINGL.

3024
   There are more than 300 DYNALLOC and CELLPOOL statements (BDTINGL).

8000
   A non-zero code was returned from the master ESTAE for BDTINIT.

9000
   An error was detected in the FAILDAP routine in BDTABMN.

A000
   A non-zero code was returned from the ESTAE is BDTGSC1.

C000
   The ABEND macro was issued by BDTINTK.

D000
   BDT was unable to register both the FTF and NJE features.

E000
   A non-zero code was returned from the ESTAE in BDTTQIAS.

F000
   A non-zero code was returned from the ESTAE in BDTTQMSG.

F800
   A non-zero code was returned from the retry ESTAE in BDTTQMSG.

System action

BDT or its subtask end and may issue a dump. This abend code is accompanied by messages explaining the error.

System programmer response

Use the dump and accompanying codes and messages to determine the cause of the error. For more information, see the *z/OS BDT Messages and Codes*.

Source

Bulk Data Transfer (BDT)

061

Explanation

The error was detected during processing of a CLOSE macro instruction for a graphic data control block.

The graphic CLOSE executor issued a DAR macro instruction for a graphic attention control block (GACB) that was not specified (via a SPAR macro instruction) by the closing task.

System action

An abnormal end occurred for the task that issued the SPAR macro instruction for the graphic attention control block.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Issue a DAR macro instruction, for the graphic attention control block, in the task that issued the SPAR macro instruction, before the closing task issues the CLOSE macro instruction. Then run the job step again.

Source

DFSMSdfp

062

Explanation

The error occurred during processing of a routine of the graphic subroutine package (GSP) for FORTRAN IV, COBOL, and PL/I.

A condition was encountered that produced a return code equal to or greater than the absolute value specified by the programmer as the "null" argument in the call to the INGSP subroutine. The GSPARRAY field in the GSPCB identifies the return code produced, register 2 contains the address of the status table entry last invoked, and register 3 contains the address of the GSPARRAY field.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Determine the condition that caused the job step to be abnormally ended and change the program accordingly. Then, run the job step again.

Source

DFSMSdfp

063

Explanation

During processing of a graphic program, the 2250 operator pressed the CANCEL key on the alphameric keyboard of the display unit. The 2250 operator selected either the TERMINATE option or the DUMP option on the end option display. The problem program was ended either with or without a dump.

Operator response

If you were having a problem, report the conditions that caused you to end the program to the system programmer.

Programmer response

Respond according to the information provided by the 2250 operator.

Source

DFSMSdfp

064

Explanation

An address space that holds a cross memory local lock (CML) ended abnormally before it freed the lock.

Note: This abend is directly related to the address space completion. This abend is informational and does not need to be pursued independent of the address space completion.

System action

The system gives control to recovery for CML lock processing. Other system processing continues.

Source

Supervisor control

065

Explanation

When processing an SSAFF macro, the system detected an error.

Register 15 contains a hexadecimal reason code that explains the error:

Code
   Explanation
04
   The index into the subsystem affinity table (SSAT) is greater than the number of subsystems currently defined.

08

The caller is not in task control block (TCB) mode.

0C

There is insufficient local system queue area (LSQA) storage to build the SSAT.

10

The specified TCB is incorrect. It does not include the TCB acronym.

14

The caller is disabled.

1C

The caller's address did not have addressability to the home address space.

20

The specified TCB is not the currently active TCB or a subtask of the currently active TCB.

24

The caller issued the SSAFF macro while holding locks.

28

Unexpected error percolated to system recovery.

System action

The system abnormally ends the program that issued the SSAFF macro. The system writes a logrec data set error record and a dump.

System programmer response

Collect all printed output and output data sets related to the problem. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set record and the dump.

Programmer response

- Reason codes 04, 08, 10, 14, 1C, 20, 24 and 28 indicate an error in the calling program. Fix the problem using the reason code information and run the job again.
- Reason code 0C indicates a system error. Notify the system programmer.

Source

Task management

066

Explanation

The dispatcher of tasks and service routines detected an error. A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

04

A completed routine that ran under a service request block (SRB) held a system lock when it returned to the dispatcher.

0C

A routine that ran under a suspended service request block (SSRB) held the cross memory local (CML) lock of a failing address space. The ASCBFAIL bit is on. The ASCBFAIL bit is in the address space control block (ASCB) of the failing address space.

10

The SRBASCB field of an SRB or an SSRB points to an ASCB that has an erroneous acronym.

14

A task holds the CML lock of a failing address space. The ASCBFAIL bit for the failing address space is on.

18

Status could not be saved for the current task due to an error in the dispatcher.

1C

A task attempted to reenter the dispatcher through the SRB entry point.

20

A routine that ran under an SRB attempted to reenter the dispatcher through a task entry point.

24

Status could not be saved for the current SRB due to an error in the dispatcher.

28

Task could not be dispatched because the CML lock was stolen.

2C

IEA0DS1B was entered not in wait mode.

System action

The system abends the task or SRB and may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,ENABLE,COMP=066
```

System programmer response

Do the following:

1. For reason code X'04', go to step "3" on page 116.
2. For any other reason code, go to step "6" on page 116.
3. For reason code X'04', if a logrec data set error record is not written with the abend, ask the operator to set a SLIP trap to obtain an SVC dump. Format the dump to see:

   • Register 2 through register 8
   • Register 10 through register 13

   These are the SRB routine's registers at the time it gave up control.
4. Check these registers to see if one looks like a base register, as follows. Look for a group of registers containing addresses near the same place in storage. If you find such a group of registers, look for the register with the lowest address. This is possibly a base register. Identify the module that is using this register as its base register.
5. Determine which lock was held when the problem occurred. The current lock held string can be found in two different places:

   • Register 14 at the time of error
   • In the PSACLHS field of the SVCE D trace entry for abend X'066'
6. Search problem reporting data bases for a fix for the problem. If no fix exists, and an SVC dump has not be obtained, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide:

   • The SVC dump
   • The system trace

- The logrec data set error record, if available

Source

Supervisor control

067

Explanation

An access register translation exception occurred. A hexadecimal reason code in register 15 explains the error; *x* in the reason code contains diagnostic data:

Code
  Explanation

00000004
  A program encountered a page fault, segment fault, or address space secondary entry table (ASTE) validity fault on a data space that was deleted.

00000008
  The target address space was created after the access list entry (ALE) was created.

0000000C
  The interrupted program's extended authority index (EAX) does not have Set Secondary ASN (SSAR) authority to the target address space specified by a private ALE.

00000010
  The EAX in the ALE does not have SSAR authority to the target address space.

00000014
  An ASTE sequence exception occurred while attempting to reference an incorrect or deleted data space.

00000018
  An unexpected error occurred in the access register translation second level interrupt handler (SLIH).

00000020
  An ASTE validity exception occurred when a program tried to access a subspace that had been deleted.

00000024
  An ASTE sequence exception occurred when a program tried to access a subspace that had been deleted.

00000064
  A system error occurred during the fetch of a PR, PTI, or SSAIR instruction.

00000068
  The target PASN or SASN is no longer valid.

00000072
  A system error occurred.

00000076
  The desired target PASN or SASN has a non-matching instance number.

xxxx0Axx
  A program attempted to reference a data space that has been deleted.

xxxx0Bxx
  An unexpected error occurred when the system tried to bring a data space page into real storage.

System action

The system abends the task and writes an ABEND dump for the failing job step.

System programmer response

Do the following:

1. Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add a SYSMDUMP DD statement.
2. Find the reason code in register 15.
3. Use the PSW address at the time of the error to obtain the name of the load module.
4. If the module is installation-provided, correct it and run the job step again.
5. If the module is an IBM module, or if the problem persists, search problem reporting data bases for a fix. If no fix exists, contact the IBM Support Center.

Source

Program Call/authorization (PC/AUTH)

068

Explanation

A JES2 subtask has abnormally terminated. Register 15 contains a hexadecimal reason code which identifies the abending subtask.

Code
   Abending Subtask Name

100
   HASPCKVR - JES2 DEBUG option detected an error building the APPLCOPY.

104
   HASPCKVR - Data integrity error detected.

108
   HASPCKVR - JES2 DEBUG option detected an error building a Checkpoint Version.

200
   HASPSUBS - Subtask work dequeue error has occurred.

300
   HASPSUBS - The Network Path Manager encountered an unexpected return code from the $NATGET service.

304
   HASPSUBS - Error detected in the Network Path Manager full path work queue.

400
   HASPACCT - Error detected in the $SMFBUSY queue.

600
   CFEVENT - JES2 coupling facility exit abnormally ended.

604
   HASPCKCF - A coupling facility write request (IXLLIST REQUEST=WRITE) timed out.

608
   HASPCKCF - An unexpected return code from a coupling facility read request (IXLLIST REQUEST=READ) was encountered.

60C
   HASPCKCF - An unexpected return code from a coupling facility write request (IXLLIST REQUEST=WRITE) was encountered.

610
   HASPCKCF - An incorrect list element control value was detected associated with an element in a JES2 checkpoint structure.

614
   HASPCKCF - An unexpected return code from a coupling facility read request (IXLLIST REQUEST=WRITE) was encountered.

618

HASPCKCF - An unexpected return code from a coupling facility request (IXLLIST) was encountered while processing LIST 0.

61C

HASPCKCF - An unexpected return code from a coupling facility request (IXLLIST) was encountered while processing LIST 0.

700

HASPSPOL - Bad request passed to SPOOL migrator DTE.

704

HASPSPOL - Bad request passed to SPOOL migrator DTE during phase 1 processing.

708

HASPSPOL - Bad request passed to SPOOL migrator DTE during phase 2 processing.

70C

HASPSPOL - Unexpected return code from IXZXIXMC service.

710

HASPSPOL - Bad request passed to SPOOL migrator DTE during cancel processing.

714

HASPSPOL - Unexpected return code from IXZXIXRM service for the MG$VOLSER mailbox.

718

HASPSPOL - Unexpected return code from IXZXIXRM service for the RN$VOLSER mailbox.

71C

HASPSPOL - Unexpected return code from IXZXIXAC service for the RN$VOLSER mailbox.

720

HASPSPOL - Unexpected return code from IXZXIXAC service for the RN$VOLSER mailbox.

System action

Specific system actions for each reason code are as follows:

Code
System Action

100

The subtask will recover and recopy the entire checkpoint data set next time the data set is posted. Application programs looking at the checkpoint data can detect this abend by looking at the bad copy indicator.

104

The subtask will recover and resume normal processing.

108

The subtask will recover and resume normal processing.

200

The subtask will attempt to recover and resume its search for work. One or more requests might be lost. This might result in the temporary loss of the corresponding processor because it will not be posted.

300

JES2 main task will ABEND and recovery will rebuild the network path manager control blocks or disable the network path manager if appropriate.

304

JES2 main task will ABEND and recovery will rebuild the network path manager control blocks or disable the network path manager if appropriate.

400

The JES2 address space will be terminated.

600

The subtask attempts to recover if retry is allowed. If retry is not allowed, JES2 percolates.

604

JES2 treats this as a logical I/O error on the checkpoint and enters checkpoint reconfiguration.

608-61C

JES2 treats this as a logical I/O error on the checkpoint and enters checkpoint reconfiguration.

700-720

Determine the reason for the failure. Search   problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Operator response

Notify the system programmer.

System programmer response

Respond as indicated for the specific reason code:

Code

  Response

100

Determine the reason for the copy failure. If the problem persists, disable the application copy of the checkpoint.

104

Determine the reason for the failure. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

108

Determine the reason for the failure. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

200

Determine the reason for the failure. JES2 should be restarted to recover any lost JES2 processors.

300

Determine the reason for the failure. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

304

Determine the reason for the failure. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

400

Determine the reason for the failure. JES2 should be restarted. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

600

Determine the reason for the failure. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

604

Respond to any reconfiguration messages. Determine the reason for the failure. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

608-61C

Respond to any reconfiguration messages. Determine the reason for the failure. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

700-720

Determine the reason for the failure. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

JES2

069

Explanation

An address space has ended. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) provides an explanation.

Code
  Explanation

00
  An error occurred during the creation of a new address space from one of the following requests:

  • ASCRE macro
  • CALL IEEMB881
  • LOGON command
  • MOUNT command
  • START command

04
  A request by the caller to destroy an ASCRE-created address space has completed.

System action

For reason code 00, the system:

• Ends the new address space
• Writes a dump
• Writes a logrec data set error record
• Issues messages

For reason code 04, the system:

• Ends the new address space

System programmer response

For reason code 00, do the following:

1. Determine why a new address space could not be created:

   • If a module issued the ASCRE macro, check the return and reason codes returned from ASCRE. See the *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN* for a description of the return and reason codes.

   • If a module did a direct call to IEEMB881 or if the operator entered a command to create the new address space, check the return codes returned by module IEEMB881.

2. If you cannot resolve this problem, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and the logrec data error record.

For reason code 04, no action is necessary.

Source

Master scheduler

06A

Explanation

The functional recovery routine (FRR) for a service request block issued a SETRP macro with the SERIAL=YES option. The macro requests serial percolation to the recovery routine for the task with which the SRB is associated. To prepare for percolation, the recovery termination manager (RTM) requested storage in the task's local system queue area (LSQA). The request failed.

System action

RTM abnormally ends the task. The system writes an ABEND dump for the failing job step. Note that this dump contains no time-of-error information for the original problem that caused entry into the FRR. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=06A,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Search problem reporting data bases for a fix for this problem. If no fix exists, obtain the ABEND dump for the abend.
2. Look in the dump for the reason why the GETMAIN macro failed. Check for the possibility of an LSQA GETMAIN loop.
3. If the reason for the failure cannot be determined, and you need further information from a dump, ask the operator to set a SLIP trap to obtain an SVC dump.
4. Contact the IBM Support Center. Provide the dump and, if available, the logrec data set error record.

Source

Recovery termination manager (RTM)

06B

Explanation

At least one of the input parameters to the excessive spin loop notification routine is not valid. This is probably a system error. Register 4 contains the input spin loop reason code, and register 5 contains the target processor identifier.

System action

The system abnormally ends the caller of the excessive spin loop notification routine.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Loadwait/Restart

06C

Explanation

One of the following occurred during SLIP processing:

- While processing a program event recording (PER) interrupt, the program being monitored issued a Move Character Long (MVCL) instruction that would overlay low storage.
- The environmental indicators that control SLIP processing were overlaid or not valid for some other reason.

System action

The system ends SLIP processing for the current event. The status of PER in the system and of the existing SLIP traps is unchanged.

System programmer response

If the program being monitored caused the problem, correct the program. If the problem cannot be resolved, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Recovery termination manager (RTM)

06D

Explanation

SLIP processing found that an incorrect parameter list was passed to SLIP.

System action

The system ends SLIP processing for the current event. The status of program event recording (PER) in the system and of the existing SLIP traps is unchanged. The system sends messages about the problem to the job log.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=06D,ACTION=SVCD,END
```

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, try to obtain the ABEND dump for the abend. If no dump exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide the dump.

Source

Recovery termination manager (RTM)

06E

Explanation

One of the following occurred while SLIP was activating or deactivating a program event recording (PER) trap:

- For a global PER trap, SLIP requested cell pool storage. The request returned a nonzero return code, indicating an error.

- SLIP requested that cell pool storage be freed. The request returned a return code other than 0 or 20, indicating an error.

System action

SLIP processing ends.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=06E,ACTION=SVCD,END
```

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, obtain a dump for the abend. Then contact the IBM Support Center.

Source

Recovery termination manager (RTM)

06F

Explanation

One of the following:

- An active SLIP trap requests ACTION=RECOVERY. SLIP found a match for the program event recording (PER) trap that was defined in the command. For the RECOVERY action, SLIP gives control to the recovery termination manager (RTM).
- A SLIP MSGID=xxx trap matched. This completion code is used to take a dump for SLIP traps which specify "MSGID=" and is considered normal in that case.

System action

For ACTION=RECOVERY, RTM abnormally ends the task being monitored. SLIP processing continues.

For MSGID=xxx, SLIP processing continues.

A reason code in register 15 identifies the event:

Code
   Explanation

08
   A SLIP MSGID=xxx trap matched.

80
   A SLIP ACTION=RECOVERY trap matched.

Source

Recovery termination manager (RTM)

070

Explanation

A program issued the SUSPEND, RESUME, or TCTL macro, but the program issuing the macro either:

- Is in an environment that is not valid

- Specified parameters that are not valid

A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

0C
    The program issued the RESUME macro with the RETURN=N parameter, but the program was not in service request block (SRB) mode.

10
    The program issued the RESUME macro, but the specified task control block (TCB) was not valid.

14
    The program issued the RESUME macro, but could not address the specified address space control block (ASCB).

18
    The program issued the RESUME macro with the RETURN=N parameter, but the program was not in primary address space control mode.

1C
    The program issued the RESUME macro with the RETURN=N parameter while holding one or more locks or while running with a PCLINK stack that was not empty.

20
    The program issued the TCTL macro, but was not in SRB mode.

24
    The program issued the TCTL macro, but was not in primary address space control mode.

28
    The program issued the TCTL macro while holding one or more locks.

2C
    The program issued the RESUME macro with the MODE=UNCOND parameter and the ASYNC=N parameter, but the program held the local lock of an address space other than the target address space.

30
    The program issued the SUSPEND macro, but the request block (RB) suspend count was not 0.

34
    The program issued the SUSPEND macro with the RB=PREVIOUS parameter, but no previous RB existed.

38
    Processing for a RESUME macro detected a request to resume an RB that had a suspend count other than 0 or 1.

3C
    A RESUME macro with unconditional synchronous options required the local lock. The issuer was disabled and did not hold the necessary local lock.

40
    Processing for a RESUME macro detected a request from reset processing to resume an RB. The RB does not exist on the RB chain for the specified TCB.

44
    The program issued the TCTL macro, but the specified task control block (TCB) was not valid.

System action

The system abnormally ends the program that issued the macro. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=070,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If a dump or a logrec data set error record was not written with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. The registers at the time of error contain the following information:
   - Register 14 contains the address of the module that issued the macro.
   - Register 15 contains the reason code and indicates whether the error is a SUSPEND, RESUME, or TCTL error.
3. Use the address in register 14 to identify the module that issued the macro.
   - For an installation-provided module, fix the error described by the reason code and rerun the job.
   - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide the SVC dump, including registers 14 and 15, and, if available, the logrec data set error record.

Source

Supervisor control

071

Explanation

An error occurred when the operator initiated a restart.

Register 15 contains a hexadecimal reason code that explains the error:

Code
   Explanation

00
   The operator replied "ABEND" to message BLW004A.

04
   The operator replied "REPAIR" to message BLW004A.

08
   A programming error caused the program that was currently running to branch directly to the restart interruption handler.

0C
   The operator selected RESTART option 0 on a processor that is in a valid spin waiting for a global resource held by a second processor that is in an erroneous disabled loop. A DSGNL RESTART command, directed to the second processor, failed.

10
   The system started writing logrec data set error records after detecting an excessive spin loop condition. The interrupted unit of work continues to run.

20
   The system abnormally ended the program that was causing a system excessive spin loop. Recovery routines are not allowed to retry because the recovery action for the spin loop was TERM.

30
   The system abnormally ended the program that was causing a system excessive spin-loop condition. Recovery routines are allowed to retry because the recovery action for the spin loop was ABEND.

System action

The system does one of the following:

- For reason code X'00', X'08', X'0C', X'20', or X'30', the system abnormally ends the program currently running.

- For reason code X'04', the system detects and repairs, where possible, errors in critical system areas. The system refreshes selected system control blocks and validates and repairs selected system resources. The system logs the old values of some refreshed control block fields in the variable recording area (VRA) of the system diagnostic work area (SDWA). The system writes these old values in the logrec data set error record. Then the system returns control to the interrupted program.

- For reason code X'10', the system records the excessive spin loop in a logrec data set error record.

Operator response

If requested by the system programmer, set a SLIP trap to obtain a dump.

System programmer response

Depending on the reason code, do the following:

Reason Code X'00'
Message BLW004A should have identified the work that was in progress at the time of the interruption:

1. If a logrec data set error record is not produced with the abend, ask the operator to obtain an SVC dump.

2. Examine the program status word (PSW) at the time of error in the logrec data set error record. The PSW points to the location where RESTART was entered by the operator. If the program was in a loop, the PSW address will be within the loop.

3. Examine the system trace table for evidence of a loop or a wait. If a loop or a wait is suspected, use the address in the PSW to obtain the name of the looping module.

   - If the module is not an IBM module, continue diagnosis with the module.

   - If the module is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and the logrec data set error record.

Reason code X'08'
Determine which program branched incorrectly, as follows:

1. If a logrec data set error record is not produced with the abend, ask the operator to obtain an SVC dump.

2. Look at register 14 at the time of the error. If the illegal branch was made by a BALR 14,15 instruction, register 14 points to the instruction following the instruction that took the bad branch. If this instruction is a branch instruction, then this instruction probably branched directly into the restart interrupt handler.

3. Use the address in register 14 to get the name of the module that issued the bad branch instruction.

   - If the module is not an IBM module, continue diagnosis with the module.

   - If the module is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and the logrec data set error record.

Reason code X'0C', X'10', X'20', or X'30'
Determine why an excessive spin condition occurred, as follows:

1. Get the program status word (PSW) at the time of error as follows:

   - For reason code X'10', X'20', or X'30', obtain the PSW from the logrec data set error record.

   - For reason code X'0C', X'20', or X'30', ask the operator to obtain an SVC dump. Format the dump to see the PSW at the time of error.

2. Use the address in the PSW to obtain the name of the spinning module.

   - If the module is not an IBM module, continue diagnosis with the module.

   - If the module is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and the logrec data set error record.

See *z/OS Problem Management* for information about diagnosing a loop.

Source

Loadwait/Restart

072

Explanation

The system abnormally ended a program that had a processor affinity requirement because no processors on which it can run are online. A hexadecimal reason code in register 15 indicates the type of program:

Code
　　Explanation

0004
　　A task running under a task control block (TCB).

0008
　　A routine running under a service request block (SRB).

System action

The system abnormally ends the program that had a processor affinity requirement.

Programmer response

Resubmit the job when the processor affinity requirements can be met.

Source

Supervisor control

073

Explanation

Supervisor control detected an error while processing a SETLOCK OBTAIN or SETLOCK RELEASE macro. The hexadecimal reason code in register 15 explains the error:

Code
　　Explanation

00
　　While spinning for a disabled spin lock, the system found that the lockword contains a processor identifier that is not valid. Register 10 contains the lockword value that is not valid.

04
　　The system detected serialization that is not valid. The caller was disabled but requested the LOCAL, cross memory local (CML), or cross memory services (CMS) lock unconditionally. The lock was not immediately available.

08
　　The system detected a hierarchy violation.

　　• If a SETLOCK OBTAIN macro was being processed, one of the following occurred:

　　　　– The requested lock was lower in the locking hierarchy than the locks currently held.

　　　　– Another lock of the same type was already held.

　　　　– A CMS lock was requested, but a local lock was not held.

　　　　– A local or CML lock was requested unconditionally, but the PSASUPER field was nonzero.

　　• If a SETLOCK RELEASE macro was being processed, one of the following occurred:

- A local lock was specified while a CMS lock was still held.
- All CMS locks were specified, but not all CMS locks were held.

0C

The caller requested a CML lock. The caller passed an address space control block (ASCB) address that was not valid. Register 11 contains the ASCB address.

10

The caller requested another address space's CML lock but did not establish an active bind to that address space. Register 11 contains the ASCB address.

14

The caller specified an ASCB for an address space that was being ended. Register 11 contains the ASCB address.

1C

The caller requested the CML lock of the master address space or the WAIT address space.

20

The caller requested a lock type that is no longer supported.

24

The caller tried to obtain a SHR/EXCL lock unconditionally EXCL, but the lock was held SHR by the caller.

124

The caller tried to obtain a SHR/EXCL lock conditionally EXCL, but the lock was held SHR by the caller.

224

The caller tried to release a SHR/EXCL lock EXCL, but the lock was held SHR by the caller.

324

The caller tried to obtain a SHR/EXCL lock unconditionally SHR, but the lock was held EXCL by the caller.

424

The caller tried to obtain a SHR/EXCL lock conditionally SHR, but the lock was held EXCL by the caller.

524

The caller tried to release a SHR/EXCL lock SHR, but the lock was held EXCL by the caller.

28

A caller unconditionally requested a class lock that was either:

held by the processor as a class lock at a different level of the lock hierarchy; or
held by the processor for a different lock address.

Information in registers at time of abend

Register 3:

0

held at a different level of the lock hierarchy

1

held for a different lock address

Register 4:

0

When Register 3 is 0, the address of the entry for the different class lock.

1

When Register 3 is 1, the lock address for which the lock is held.

2C

The caller specified release of locks according to a bit string mask in register 11. However, the caller does not hold all the locks that the mask specifies.

30

The system was invoked recursively for an unconditional lock obtain.

34

The caller issued a SETLOCK RELEASE macro to release a lock from PSACLHS, but the caller is not holding the lock.

38

The caller issued a SETLOCK RELEASE macro to release a lock from PSACLHSE, but the caller is not holding the lock.

3C

The caller issued a SETLOCK RELEASE macro to release a spin lock, but the caller is not holding the lock. Lock manager was invoked for a lock obtain, and the caller was enabled but specified DISABLED.

40

While spinning for a disabled spin lock, the system found that global recovery was active.

44

The address space has been marked as not allowing the LOCAL lock to be released. A request to release the LOCAL lock was made (either by SETLOCK RELEASE,TYPE=LOCAL or SETLOCK RELEASE,TYPE=CML). That request is rejected.

140

The caller tried to obtain a SHR/EXCL lock conditionally EXCL, the lock was not held SHR, and an unexpected error occurred.

240

The caller tried to obtain a SHR/EXCL lock conditionally EXCL, the lock was held SHR, and an unexpected error occurred.

340

The caller tried to obtain a SHR/EXCL lock unconditionally EXCL and an unexpected error occurred.

System action

The system abends the program that issued the SETLOCK macro. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=073,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If a dump or a logrec data set error record was not written with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. Identify the module that issued the SETLOCK macro by using the address in register 14 at the time of error.

   - For an installation-provided module, continue diagnosis with the module.
   - For an IBM module, identify lock information as follows:

     – Register 9 contains the current lock held string extension (PSACLHSE).
     – Register 12 contains the PSASUPER bits at the time of abend.
     – Register 13 contains the current locks held string (PSACLHS) that was current when the lock request was made.

     For the bit descriptions in the PSASUPER, PSACLHS, and PSACLHSE fields, see the PSA section in *z/OS MVS Data Areas* in the z/OS Internet library (www.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosInternetLibrary).
3. Search problem reporting data bases for a fix for the problem. Include in the search argument:

- PSASUPER bits at the time of abend: GPR12/hhhhhhhh
- PSACLHS bits at the time of abend: GPR13/hhhhhhhh

If no fix exists, contact component group associated with the module that issued the SETLOCK macro at the IBM Support Center. Provide, if available, the SVC dump and the logrec data set error record.

Source

Supervisor control

074

Explanation

A program issued the SETLOCK macro. Supervisor control could not finish processing the macro for one of these reasons:

- The lockword address specified on the SETLOCK macro is not on a fullword boundary.
- A page fault occurs when the lockword address specified on the SETLOCK macro is used.
- A machine check occurs in the lockword specified on the SETLOCK macro.

System action

The system writes a logrec data set error record and may write messages about the error.

Operator response

Check messages and the logrec data set error record to determine if a machine check occurred just before the abend. If so, the problem is a hardware problem. Contact hardware support. If not, notify the system programmer. If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=074,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Examine messages and the logrec data set error record for previous abend codes. Look at the explanations of any previous abend codes. A previous problem could have caused this problem.

2. If a dump is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump. In the system trace, find the SVC D entry for abend X'074'. In the entry, note the address space identifier (ASID) in the ASID column. Back up to look for a PGM entry with the same ASID. This indicates that a program check occurred.

3. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with the module that took the program check at the IBM Support Center. Provide all problem data collected and the logrec data set error record.

Source

Supervisor control

075

Explanation

A program running in supervisor state, key 0 issued a SCHEDULE macro to schedule a service request block (SRB). The system checked the acronym in the address space control block (ASCB) pointed to by SRBASCB. The acronym failed the check. Possible reasons are:

- The issuer of the SCHEDULE macro put an incorrect address into SRBASCB. Consequently, SRBASCB did not point to a valid ASCB.
- SRBASCB pointed to a valid ASCB, but the ASCB has gone away normally or abnormally.
- SRBASCB pointed to a valid ASCB, but the ASCB was overlaid.

Register 14 contains the value from SRBASCB. Register 15 at the time of error points to the SRB that was being scheduled.

System action

The system ends processing of the SCHEDULE macro. The system may write an SVC dump, a logrec data set error record, or both.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,ENABLE,COMP=075,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If an SVC dump is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. Examine SRBASCB to see if it contains a valid address. Check for an incorrect address in the SRBASCB field. The address in SRBASCB is not valid if:

   - It is all zeros
   - It does not end in X'00' or X'80'
   - It is not an address in the system queue area (SQA)

   If the address in SRBASCB does not look like a valid address, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all problem data collected.

3. If SRBASCB looks like a valid ASCB address, check the address space vector table (ASVT) for this address. The ASVT contains a list of ASCB addresses. The CVTASVT field of the communications vector table (CVT) points to the ASVT. ASVTENTY begins the ASCB addresses. Scan for the address that is in SRBASCB.

4. If the address in SRBASCB is in the ASVT, then the ASCB pointed to by SRBASCB has been overlaid. See if you recognize the overlay by looking for any EBCDIC eye-catchers around the overlay. Search problem reporting data bases for a fix for the problem. Include in the search argument:

   - EBCDIC eye-catcher that is a module name: PIDS/ccccccccc
   - Abend X'075': AB/S075
   - Overlay of the ASCB: OVS/ASCB

   The size and content of the overlay can also be added to the search argument.

   If no fix exists, contact the supervisor control component group at the IBM Support Center. Provide data collected in previous steps and, if available, the logrec data set error record.

5. If the address in SRBASCB cannot be found in the ASVT, then either:

   - The ASCB was deleted when the address space went away abnormally.
   - The ASCB went away normally.
   - The ASCB is not valid. The issuer of the SCHEDULE macro put a bad address into SRBASCB.

   Search problem reporting databases for a fix for the problem. If no fix exists, contact the supervisor control component group at the IBM Support Center. Provide data collected in previous steps and, if available, the logrec data set error record.

Source

Supervisor control

076

Explanation

An error occurred while attempting to create or initialize an address space. One of the following hexadecimal reason codes explain the error:

Code
  Explanation

0004
  Command processing received a nonzero return code from the virtual storage management (VSM). Register 5 contains the return code.

0008
  Command processing requested virtual storage for a service request block (SRB). The request returned a nonzero return code. Register 5 contains the return code.

000C
  Command processing received a nonzero return code from another command processing module. Register 5 contains the return code.

0010
  An unexpected error occurred in a command processing module.

System action

The system:

- Ends the START, MOUNT, or LOGON command
- Deletes the partially created address space
- Issues message IEA890I to identify which command was ended as a result of the failure

System programmer response

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group for command processing at the IBM Support Center.

Source

Supervisor control

077

Explanation

While the system was processing a console service request, an error occurred.

Register 15 contains a hexadecimal error code in the format *xxxxyyyy*. The fields in this error code are the following:

xxxx
  This halfword is for IBM internal use only.

yyyy
  This halfword is the unique reason code identifier.

The following are the *yyyy* values and their meanings:

Code
  Explanation

0000

In a request to start or stop MONITOR JOBNAMES, STATUS, or SESSIONS processing, the caller passed an incorrect console name or address space identifier (ASID).

0010

The parameter list passed was not valid.

0014

A caller was not running in the Console address space.

001C

The system could not process a console request because of conflicting requests in the parameter list.

0020

The system could not process a console request because of incomplete or incorrect data in the parameter list.

0024

The system could not process a console request because the specified console was not dedicated to the requesting component.

0028

The system encountered an error in CommTask processing.

002C

The SMCS logical error exit determined that there was a logical error associated with a SMCS console session.

002D

SMCS could not initialize or a session with an LU could not be established. Message IEE052I or IEE053I has been issued with more specific information.

002E

An unexpected condition has occurred in SMCS attempting to establish a session with an LU. Message IEE053I or IEE057I may be issued with more specific information.

002F

A storage overlay within DIDOCS has been detected.

0030

A storage overlay within SMCS has been detected. SMCS will continue; however, performance may be degraded.

0032

Appropriate ENQ serialization could not be obtained during system partitioning.

0038

UCME look-up error. Either the requested UCME could not be located, or the console ID supplied for the look-up was invalid.

003C

IEEVARYD found a parameter or option that is not valid.

003D

The CnzConv service was unable to process the request made by the caller. The caller invoked a service in AR mode with a non-zero ALET associated with the input parameter list. The service however requires that input parameter list is addressable from the primary address space.

0400 – 3FFF

These codes are for IBM internal use only, with the following exceptions:

0828

All IXCMSGOs failed. IXCMSGO is the method by which Console services use XCF to send information to other systems in the sysplex. The failure is likely due to XCF buffer constraints on one or more systems. Check SYSLOG for message CNZ2202E that might provide additional information about the abend.

0A08

A subsystem console request was made to module IEAVG700 with a subsystem console service routine parameter list (SCSR mapped in macro IEZVG100) with a version value in field SCSVER that is no longer supported.

0F00

An unexpected return code was received from the IXCMSGO service while sending information to other systems in the sysplex.

System action

If the error occurred during MONITOR or STOPMN command processing, the MONITOR function is not changed. Otherwise, the system abnormally ends the calling routine.

The following reason codes also have their respective unique system actions:

Reason code
    System action

003C

The IEEVARYD service returns return code X'10'.

003D

The service called is unable to process the request.

Operator response

If the error occurred during MONITOR command processing, reenter the MONITOR or STOPMN command.

For other errors (including those designated as IBM internal use only), contact the system programmer.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Be prepared to provide any dump or issuance of message CNZ0001I that occurred around the time of the ABEND.

Programmer response

The following reason codes have unique application programmer responses:

Reason code
    Application programmer response

0000

Correct the console name or address space identifier and issue the MONITOR request again.

001C

Correct the function request bits in the subsystem console service routine parameter list so that there are no conflicting requests and issue the subsystem console request again.

0020

Correct the subsystem console service routine parameter list data and issue the subsystem console request again.

0024

Correct the console in the subsystem console service routine parameter list and issue the request again.

0038

Correct the console ID and retry the UCME lookup.

003C

Correct the program invoking the IEEVARYD service. If the VDEV_ENQS_HELD flag (found in the IEEZB833 mapping) is being used, the code must be updated to remove this option (it is no longer supported), and to release the ENQ serialization required to bring the device online (that is, SYSIEFSD.VARYDEV and SYSIEFSD.Q4).

003D
> Correct the program that called the CNZCONV service so that the request can be successfully completed.

0A08
> Update the application to use a Subsystem Console Service Routine Parameter List that is supported and set SCSVER to the current version (constant SCSVERSN as defined in IEZVG100).

For other errors (including those described as IBM internal use only), contact the system programmer.

Source

Console services

078

Explanation

There was an error in one of the following routines invoked by the region control task (RCT):

- ATTACH of the dump task
- ATTACH of started task control (STC) during RCT initialization
- PURGE I/O during QUIESCE processing
- The real storage manager (RSM) swap out routine during QUIESCE processing

RCT received an unacceptable return code from the routine and cannot continue processing. This abend may indicate a storage shortage.

System action

The system gives RCT recovery control. The system:

- Requests that the address space end
- Issues an SVC dump for the address space if the error was unrecoverable or recursive
- Writes a logrec data set error record
- Performs resource clean-up

System programmer response

Look for errors in the logrec data set error record or the SVC dump indicating a prior failure in the same address space. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the SVC dump.

Source

Region control task (RCT)

079

Explanation

An error occurred while the region control task (RCT) attention request was trying to obtain or release the local lock.

System action

The system gives RCT recovery control. The system:

- Issues a Time Sharing Option (TSO) error message to the terminal indicating that the attention request was ignored or requests an SVC dump of the address space
- Performs resource clean-up

- Writes a logrec data set error record
- May request an SVC dump

System programmer response

If a TSO error message is issued to the terminal, you can either regenerate the attention request or continue processing.

Search problem reporting data bases for a fix for the problem. If no fix exists, report the problem to the IBM Support Center. Provide the logrec data set error record and the SVC dump if available.

Source

Region control task (RCT)

07A

Explanation

An unrecoverable error occurred during region control task (RCT) processing such as:

- A system interruption request block (SIRB) failure
- A swap-out processing error

System action

The system gives RCT recovery control. To avoid an address space interlock, RCT abends the address space without cleaning up address space-related resources. The system may or may not write a logrec data set error record.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, report the problem to the IBM Support Center. Provide the logrec data set error records if any were written.

Source

Region control task (RCT)

07B

Explanation

The system detected an error in interprocessor communications (IPC). A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

00
    For a RISGNL macro, the caller passed an incorrect physical configuration communications area (PCCA) address. Registers 2 and 3 contain the values of registers 0 and 1 that were input from the caller.

04
    For a RPSGNL macro, the caller passed an incorrect PCCA address. Registers 2 and 3 contain the values of registers 0 and 1 that were input from the caller.

08
    For a DSGNL macro, the caller passed an incorrect PCCA address. Registers 2 and 3 contain the values of registers 0 and 1 that were input from the caller.

0C

For a RISGNL macro, the caller's serial receiving routine abnormally ended on the processor processing the emergency signal interrupt. Registers 2 and 3 contain the values of registers 0 and 1 that were input from the caller.

10

The emergency signal second level interrupt handler (SLIH) detected second level recursion.

14

For a DSGNL macro, the caller passed an incorrect order code for the SIGP instruction. This order code is not supported.

System action

One of the following:

- For reason code X'00', X'04', X'08', X'0C', or X'14', the system abnormally ends the caller.
- For reason code X'10', the system writes a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=07B,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If a logrec data set error record is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. Use the address in register 14 at the time of error to identify the module that issued the macro or caused the emergency signal interruption.

    - For an installation-provided module, continue diagnosis with the module.
    - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide, if available, the SVC dump and the logrec data set error record.

Source

Supervisor control

07C

Explanation

The system has detected a recursive ABEND macro (SVC 13). Field ASCBARC of the address space control block (ASCB) contains a hexadecimal reason code, as follows:

Code
  Explanation

00

The system abnormally ended the task or the address space.

04

The SVC first level interrupt handler (FLIH) recovery abnormally ended the address space.

System action

The system ends either the current task or the current address space. The system may write an SVC dump, a logrec data set error record, or both.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=07C,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If an SVC dump was not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. In the dump, find the reason code in the ASCBARC field.
3. Search problem reporting data bases for a fix for the problem. If no fix exists, continue with step .
4. Analyze the dump to find the original abend causing the recursive loop, as follows. In the system trace, find the SVC D entry for abend X'07C'. Note the address space identifier (ASID) in the ASID column of this entry.

   Back up to the next SVC D entry with this ASID. Note the abend code in the UNIQUE-3 column. This is the original abend code.
5. Develop a second search argument, using the abend code found in step . If no fix exists, contact the IBM Support Center. Provide all problem data collected in the previous steps and, if available, the logrec data set error record.

Source

Supervisor control

07D

Explanation

The system found an error while adding or deleting a functional recovery routine (FRR) from one of the FRR recovery stacks.

The reason codes are as follows:

Code
  Explanation

00

   The FRR recovery stack could not hold any more FRRs because all of the available slots were filled. This abend is probably caused by an installation-provided program that issued SETFRR incorrectly as follows:

   • Adding FRRs without deleting them.

   • In a loop that includes a SETFRR macro.

   • Adding too many FRRs. The system only guarantees that installations can add two FRRs.

   As system services also need to add FRRs, dump processing and LOGREC recording cannot be performed. S07D is normally followed by an S0DC-8 abend which will contain recursive S07D SVCE entries in the system trace.

04

   The caller of SETFRR DELETE was not in a legal state to be holding FRRs at the time that SETFRR DELETE was issued.

From the time an FRR is established until the time it is deleted, at least one of the following things must be true:

- Some lock is held
- The unit of work is running disabled
- The unit of work is an SRB
- An FRR with EUT=YES exists

System action

The system abnormally ends the unit of work that issued the SETFRR macro. The system may write a logrec data set error record. The unit of work may request a dump.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=07D,ACTION=SVCD,END
SLIP SET,COMP=0DC,RE=8,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Check for the problem in all installation-provided programs that are in protection key 0 and that issue SETFRR. At the time of the abend, register 14 points to the program that invoked SETFRR. This program is likely to have caused the problem.

2. Format the dump for the abend to see the prefixed save area (PSA) for the system on which the abend occurred. The first 3 words in the PSASTAK field should contain the following:

   ```
   00000BB8 00000DB8 00000020
   ```

3. If the PSASTAK field is incorrect, an overlay occurred. Use the following SLIP storage alteration trap to determine which routine caused the overlay:

   ```
   SLIP SET,SA,RANGE=(B80,B8B),A=WAIT,END
   ```

4. For S07D-0, a dump cannot be taken. Trace entries similar to the following will be found in the S0DC-8 dump which follows an S07D-0:

   ```
   01 014E *SVCE    D 040C2000 800003FA  00FF050C
   816A2E88 8007D000
   01 014E *SVCE    D 040C2000 800003FA  00FF050C
   01371EC4 8007D000
   01 014E *SVCE    D 040C2000 800003FA  00FF050C
   816C50F8 8007D000
   01 014E *SVCE    D 040C2000 800003FA  00FF050C
   01371EC4 8007D000
   01 014E *SVCE    D 040C2000 800003FA  00FF050C
   816C50F8 8007D000
   01 014E *SVCE    D 040C2000 800003FA  00FF050C
   01371EC4 8007D000
   01 014E *RCVY ABRT
            3C000304
   01 014E *RCVY MEM              813305A8  840DC000
   00000008 00000000
   ```

   The SVCE D entries with R1=8007D000 indicate that S07D-0 has occurred. Although the FRR stack current pointer will be reset in the S0DC-8 dump, there will be residual data in the FRR stack which can be used to determine the FRR entries that filled the stack.

5. Search problem reporting data bases for a fix for the problem. If you suspect an overlay, include in the search argument:

   - Program identifier: PIDS/5752SCRTM

- System abend code: AB/S007D
- The name of the field that is overlaid: FLDS/PSASTAK

Note: Prior to z/OS the program identifier to search for is PIDS/5752SC1CM. If no fix exists, contact the IBM Support Center. Provide problem data collected in the previous steps.

Source

Recovery termination manager (RTM)

07E

Explanation

A CONFIG or VARY command requested addition or removal of hardware units from a configuration. To process the command, the system checked the availability of device paths. While checking the device paths, the system encountered an error. A hexadecimal reason code in register 15 explains the error:

Code
  Explanation

04
  The unit control block (UCB) address, passed to the device path checking routine, did not point to the common segment of the UCB.

0C
  An incorrect function code was passed to the device path checking routine.

14
  The system received a return code from a device path checking routine indicating that an unrecoverable program or hardware error occurred.

System action

The system ends the CONFIG or VARY command.

Operator response

Depending on the reason code, do the following:

- For reason code X'04' or X'0C', contact the system programmer.
- For reason code X'14', if you entered the VARY or CONFIG command to bring a device online, try to vary the individual paths to the device. If this is unsuccessful, contact hardware support.

System programmer response

Search problem reporting bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Reconfiguration

07F

Explanation

During recovery, the system found that the task control block (TCB) queue associated with the abnormally ended address space was empty.

System action

The system abnormally ends the address space or job. The system writes messages, a logrec data set error record, and a dump.

System programmer response

Collect all printed output and output data sets related to the problem. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set record and dump.

Programmer response

Run the job again. If the error recurs, notify the system programmer.

Source

Task management

080

Explanation

An unexpected error occurred during system processing, except for the following reason codes:

Code
    Explanation

1A000B01
    Indicates that a task which owned PCIE fixed storage terminated without first unfixing the pages.

6B000121
    Indicates that a task which owned high virtual fixed storage terminated without first unfixing the pages.

System action

The system issues an abend to the current address space or to the current unit of work. The system writes an error record to the logrec data set. This abend may be accompanied by additional messages.

For reason codes 1A000B01 and 6B000121, the address space owning the fixed page is terminated.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set record and the SYSOUT output for the job.

For reason code 1A000B01, correct the application so that it calls the appropriate service to unfix the PCIE fixed storage. For reason code 6B000121, correct the application so that it unfixes the high virtual pages that it owns prior to task termination.

Source

Real storage manager (RSM)

081

Explanation

A GETMAIN macro requested virtual storage for the system queue area (SQA) or the local SQA (LSQA). The request passed an incorrect virtual address. This is a problem in the system.

System action

The system denies the request for a central storage frame. The system writes messages and a dump.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the messages and the dump.

Source

Real storage manager (RSM)

083

Explanation

Auxiliary storage manager (ASM) was unable to convert a logical slot identifier (LSID) to a full seek address. The relative byte address (RBA) is outside the range of the extension data block (EDB) entries.

System action

The ASM I/O request area (AIA) being processed is marked in error. The system writes a logrec data set error record containing a copy of the AIA and EDB. Processing continues.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Auxiliary storage manager (ASM)

084

Explanation

For an I/O operation, the auxiliary storage manager (ASM) detected an error.

System action

The system writes a logrec data set error record and attempts to continue processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Auxiliary storage manager (ASM)

085

Explanation

The auxiliary storage manager (ASM) detected an internal error.

System action

The system writes a logrec data set error record. Processing continues.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Auxiliary storage manager (ASM)

086

Explanation

The auxiliary storage manager (ASM) received an error from VSAM during an I/O operation.

Register 15 contains the VSAM return code or feedback code in the first half-word and an ASM return code in the other half-word. The ASM return code identifies the operation that was being attempted when the VSAM error occurred.

Code
 Explanation

00000008
 VSAM did not find the requested record.

00000014
 VIO journaling data set is full.

0000001C
 Could not obtain storage for buffer.

00000030
 Partially retrieved ASPCT for release request.

00xx0050
 VSAM GENCB macro did not build a request parameter list (RPL) on a GET request.

000C0054
 VSAM GET had a physical I/O error.

00140058
 VSAM GET found the record was held exclusively by another requestor. ASM will put the record on the WAIT queue and wait for an ECB to be posted.

0028005C
 VSAM GET had insufficient storage to process the request.

00xx0060
 VSAM GET received a return code from VSAM other than 0 or those listed here.

00400064
 VSAM GET was processing the maximum number of requests already.

00xx0070
 VSAM GENCB macro did not build a request parameter list on a PUT request.

000C0074
 VSAM PUT had a physical I/O error.

00140078
 VSAM PUT found the record was held exclusively by another requestor. ASM will put the record on its WAIT queue and wait for an ECB to be posted.

0028007C
 VSAM PUT had insufficient storage to process the request.

00xx0080
 VSAM PUT received a return code from VSAM other than 0 or those listed here.

00400084
 VSAM PUT was processing the maximum number or request already.

Note:

1. The high-order byte might not be X'00', but it contains the VSAM component code (the component being processed when the error occurred).

2. The *xx* value is the return code or feedback code from VSAM. These codes are documented in *z/OS DFSMS Macro Instructions for Data Sets*.

System action

The system writes a logrec data set error record. Processing continues.

System programmer response

Contact hardware support.

Source

Auxiliary storage manager (ASM)

087

Explanation

The system detected an error while attempting to free virtual storage.

System action

The system writes a logrec data set error record. Processing continues.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Auxiliary storage manager (ASM)

088

Explanation

The auxiliary storage manager (ASM) detected a paging I/O error when attempting to read from or write to storage-class memory (SCM). The error can be caused by either a hardware or a software problem.

System action

ASM writes a logrec data set error record which contains data pertaining to the error.

System programmer response

For a hardware problem, contact hardware support. Otherwise, contact the IBM Support Center.

Source

Auxiliary storage manager (ASM)

089

Explanation

A paging I/O operation for the auxiliary storage manager (ASM) resulted in a permanent I/O error caused by either hardware or software problems.

System action

If the I/O error occurred during a read operation, the system writes a logrec data set error record for abend X'089'. The system then abnormally ends the task that required the page with abend code X'028'.

If the I/O error occurred during a write operation, ASM retries the write to a different location in the page data set. ASM also writes a logrec data set error record.

If the I/O error was caused by hardware problems, logrec data set may contain a second error record, an outboard record (OBR) for the I/O error.

System programmer response

For a hardware problem, contact hardware support. Otherwise, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Auxiliary storage manager (ASM)

08A

Explanation

The auxiliary storage manager (ASM) detected a paging I/O error. The problem may have been caused by either the hardware or the software.

System action

ASM writes a logrec data set error record.

System programmer response

For a hardware problem, contact hardware support. Otherwise, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Auxiliary storage manager (ASM)

08B

Explanation

An error occurred while the system processed a data-in-virtual service request. Either a parameter on the DIV macro or another condition that existed when the DIV macro was issued caused the error. The 2 low-order bytes in register 15 contain a hexadecimal reason code that explains the error:

Code
   Explanation

0001
   The caller requested an unknown service.

0002
   Data-in-virtual does not recognize the parameter list format.

0003

The input parameter list cannot be addressed.

0004

The parameter list specifies storage that data-in-virtual cannot address.

0005

The parameter list contains a reserved field that does not contain binary zeroes.

0006

The caller is not running in task mode.

0007

The primary and home address spaces are not equal.

0008

The macro specified an incorrect TYPE parameter.

0009

The ID parameter is either incorrect or an ID that the caller cannot use.

000A

Data-in-virtual is processing another data-in-virtual request with the specified ID.

000B

The system already accessed an object with the specified ID.

000C

The caller does not have the proper resource access control facility (RACF) authorization to the requested object. (Or, the caller is attempting to use a password-protected data set for an object. Data-in-virtual does not support passwords.)

000D

The specified range exceeds the maximum allowable size for the object.

000E

The system does not have access to an object for the specified ID.

000F

The specified range overlaps with a range already mapped for the ID.

0010

The specified virtual range overlaps with an already mapped virtual range in the current address space or the specified data space.

0011

An undetermined system or caller error occurred while data-in-virtual was attempting to access data from the object; all data was not retained.

0012

The virtual storage specified does not begin on a 4-kilobyte boundary.

0013

The virtual storage specified is not in a pageable private area subpool.

0014

The system cannot use the virtual storage specified to map an object. For example, the virtual storage may contain storage assigned to virtual input output (VIO).

0015

The specified range of virtual storage contains at least one page that was not in a virtual range obtained by a GETMAIN macro.

0016

The specified virtual storage contains at least one page in a range that is specified on a current PAGE FIX request; however, RETAIN=YES was not specified.

0017

Portions of virtual storage that mapped the object were not addressable, and could not be saved. Either a paging error occurred or data occupied a bad central storage frame.

0018

The caller does not have UPDATE ACCESS to the object.

0019

Data-in-virtual marked as non-pageable a page in a range to be saved or reset. That is, a PAGE FIX was outstanding against the page.

001A

The specified range is not in any mapped area of the object.

001B

The virtual storage area specified to be unmapped is not currently mapped.

001C

Data-in-virtual cannot access the object at the current time; the object data set is in use.

001D

The accessed object is not a virtual storage access method (VSAM) linear data set, and thus does not have the correct control interval size that is implicit for a VSAM linear data set.

001E

The length of the DDNAME parameter value exceeds the maximum size allowed.

001F

The caller's storage key is not the same as when data-in-virtual issued the IDENTIFY.

0020

A task that does not own the specified ID issued a DIV macro with an ACCESS parameter.

0021

Data-in-virtual could not access portions of the object on permanent storage; therefore, all data was not retained.

0022

A task issued a DIV macro with an IDENTIFY parameter for an object. The task does not own the virtual storage specified to be mapped. For authorized programs, that task or one of its subtasks does not own the storage.

0023

The caller's storage key does not permit access to part or all of the specified storage to be mapped.

0024

The caller issued a DIV macro while holding the local lock.

0025

The caller issued a DIV macro while in an environment that precludes the use of Supervisor Call (SVC) instructions.

0026

The caller issued a DIV macro, but was not in 31-bit addressing mode.

0027

The specified OFFSET and SPAN parameters describe a range that exceeds the maximum supported object size.

0028

Data-in-virtual attempted to access an empty data set for a DIV macro with MODE=READ.

0029

Data-in-virtual attempted to map into a disabled reference (DREF) data space.

002A

Data-in-virtual attempted to establish a mapped local view into a data space. LOCVIEW=MAP was specified on a previous DIV macro with an ACCESS parameter.

002B

The specified virtual range exceeds the bounds of the specified data space.

002C

The caller requested either:

- A data space map while one or more address space maps were still active under a given ID
- An address space map while one or more data space maps were still active under a given ID

002D

Data-in-virtual deleted the data space. However, the requested operation completed successfully.

002E

Data-in-virtual deleted the data space. The requested operation cannot be performed.

002F

A page to be saved was in the define I/O on (IOON) state.

0030

The virtual range specified contained at least one define I/O on (IOON) page and RETAIN=YES was not specified.

0031

The caller specified an incorrect TTOKEN.

0032

The caller is not authorized.

0036

The DIV macro supplied an STOKEN value that does not represent a valid data space that the requester can use.

0037

The caller accessed an object that was defined with SHAREOPTIONS other than (1,3), and LOCVIEW=YES was not specified.

0038

The caller attempted to access a non-linear data set.

0039

The DIV macro requested a SAVE or RESET on a data space range with DREF pages.

003A

Data-in-virtual attempted to MAP the virtual storage of a ESO type Hiperspace.

003B

Data-in-virtual attempted to UNMAP Hiperspace storage, but RETAIN=YES was not specified.

003C

Data-in-virtual attempted to UNMAP virtual storage that maps a Hiperspace data object, but RETAIN=YES was specified.

003D

The STOKEN for the object associated with the specified ID does not represent a valid Hiperspace that may be used with this request.

003E

The Hiperspace object may not be accessed at this time. Either the maximum for READs has been reached, or there is a violation of SHARE options.

003F

The DIV macro specified LOCVIEW=MAP for an ID associated with a Hiperspace object.

0040

The specified MAP range would cause the Hiperspace object to be extended such that the installation data space limits for the address space would be exceeded.

0041

The DIV macro specified an STOKEN with an ID that represents a Hiperspace data-in-virtual object. Data space virtual storage cannot be mapped into a Hiperspace.

0042

The DIV macro tried to access a Hiperspace, but the ALESERV ADD command already had been entered for this Hiperspace.

0046

The caller issued the DIV macro with the SAVE or the SAVELIST parameter and specified an incorrect LISTSIZE value.

0047

The caller issued a DIV macro with the SAVE parameter with one of the required keywords missing. The missing keyword is either LISTADDR or LISTSIZE.

0048

The caller issued a DIV macro with the SAVE parameter and LISTADDR and LISTSIZE keywords to specify a user list. One of the following problems occurred:

- The ranges specified for the user list do not intersect with a mapped range.
- The user list contains incorrect data.

0049

The caller issued a DIV macro with the SAVE parameter using incorrect keywords. One of the following is true:

- The caller used keyword LISTADDR and LISTSIZE to specify a user list, but also used one or both of the OFFSET or SPAN keywords. The LISTSIZE and LISTADDR keywords are not compatible with the OFFSET and SPAN keywords.
- The caller specified the STOKEN keyword with either the OFFSET or SPAN keywords. The STOKEN keyword is incompatible with the OFFSET and SPAN keywords.

004A

The caller issued a DIV macro with the SAVE parameter but specified incorrect addresses in the user list. Either an address was not on a page boundary or the start address was higher than the end address.

004B

The caller issued the DIV macro with SAVE parameter but specified a range in the user list that spans multiple data spaces or Hiperspaces.

004C

The caller issued the DIV macro with the SAVE parameter for a data space or Hiperspace but did not specify the STOKEN keyword.

004D

The user is not authorized to ACCESS the requested data.

004E

The caller issued the DIV macro with the MAP parameter for a shared data page that does not meet the requirement that it reside in non-swappable storage and have a SHAREDWRITE view mode.

004F

The caller issued the DIV macro with the MAP parameter for another member of the same sharing group.

0050

The caller issued the DIV macro with the MAP parameter for a Hiperspace object into shared storage.

0051

The caller issued the DIV macro with the MAP parameter for one member of a sharing group, but this sharing group contains a member that is currently fixed.

0052

The virtual storage specified contains at least one protected page and RETAIN=YES was not specified.

0053

The caller attempted to DIV MAP a page that is part of an address space view of a shared segment.

0054

The caller attempted to DIV ACCESS an object that is an extended format linear dataset for which the size is greater than 4GB.

0055

For a DIV ACCESS request, the DIV invoker is not authorized to the ICSF service facility class.

0056

For a DIV ACCESS request, the DIV invoker is not authorized to the key label associated with the DIV object.

0057

For a DIV MAP request, the range specified to be mapped is larger than the maximum range allowed for mapping.

0801

The storage available was insufficient for building the necessary data-in-virtual control block structure.

0802

An I/O driver failure occurred.

0803

The system could not read a required page table into central storage.

0804

The catalog update failed.

0805

An undetermined system error occurred.

0806

An I/O error occurred.

0807

Data may be damaged in the allocated space on a direct access storage device (DASD). The space is currently beyond the saved portion of the object.

0808

The system has not completed I/O from a previous request.

System action

The system abends the program that issued the DIV macro. The system writes a logrec data set error record, and it may write a dump. If the reason code is X'0805', data-in-virtual requested an SVC dump with the title COMPON=DATA-IN-VIRTUAL.

System programmer response

Take the appropriate action according to the following reason codes:

Code

> **Action**

0052

Remove the protection status from the protected pages in the specified virtual range. Then issue the DIV macro again. If you want to invoke MAP or UNMAP and want to preserve the protection status, specify RETAIN=YES when you issue the macro.

0054

Change the DDNAME to point to a different dataset, because the current DDNAME points to an extended format linear dataset with a size that is greater than 4GB, which is not support.

0055

Contact the SAF administrator for access to the ICSF service.

0056

Contact the SAF administrator for access to the key label of the DIV object.

All
others

Look in the system trace for the first PC entry with 00307 in the UNIQUE-1 column above the SVC 0D entry for the X'08B' abend. The address column contains the address of the program that issued the DIV macro. Identify this program.

If the program is installation-provided, continue diagnosis with the program. If the program is IBM-provided, search the problem reporting databases for a fix for the problem. If no fix exists, contact the IBM support center for the data-in-virtual component.

Source

Data-in-virtual

08C

Explanation

A program issued a SCHEDULE macro to schedule a service request block (SRB). The system detected an error while processing the macro. Register 2 contains the SRB address. Register 3 contains the return address of the issuing program. A hexadecimal reason code in register 15 explains the error:

Code
 Explanation

04
 The address specified in field SRBASCB of the service request block (SRB) does not point to a valid address space control block (ASCB).

08
 The ASCB specified in the SRB has the ASCBFAIL flag set on. The flag indicates that the address space is ending.

0C
 The specified STOKEN does not represent the same address space as the ASCB specified in the SRB.

10
 A feature was requested using the SCHEDULE macro but there are no online processors with the specified feature.

14
 An entry point was requested using the SCHEDULE macro but an incorrect feature indicator was specified.

18
 A feature was requested using the SCHEDULE macro but an non-valid feature indicator was specified.

1C
 An internal error occurred during schedule processing.

20
 A program issued a SCHEDULE macro to schedule an SRB with the SPTOKEN option while holding a lock higher than or equal to the DISP lock in the locking hierarchy. You cannot use the SPTOKEN option while holding a lock equal to or higher than the DISP lock.

24
 DISABLED was specified on the SCHEDULE macro, but the caller was not disabled.

28
 The caller was in AR ASC mode but did not specify this via the SYSSTATE macro.

2C
 The SRB was not in common storage.

System action

The system abnormally ends the program that issued the SCHEDULE macro. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=08C,ACTION=SVCD,END
```

System programmer response

For reason code 10, resubmit the job on a processor complex that has the feature installed. For reason code 24, you must obtain the CPU lock before using the SCHEDULE macro. For reason code 28, specify SYSSTATE ASCENV=AR prior to issuing the SCHEDULE macro in order to ensure the macro expansion will be correct. For reason code 2C, ensure the SCHEDULE macro is being used with an SRB that is in common storage. For all other reason codes, do the following:

1. Ask the operator to set a SLIP trap to obtain an SVC dump.
2. In the system trace, find the system service event (SSRV) entry for abend X'08C'. Diagnostic data in this entry is as follows:

   - The return address for the issuer of the SCHEDULE macro is in the ADDR column.
   - The input SRB address is in the UNIQUE-1 column.
   - The target address space ASCB address is in the UNIQUE-2 column.
   - The STOKEN representing the target address space is in the UNIQUE-3 column.
3. Use the address in the ADDR column of the SSRV entry to identify the module that issued the SCHEDULE macro.

   - For an installation-provided module, continue diagnosis with the module.
   - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide all problem data collected and, if available, the logrec data set error record.

Source

Supervisor control

08D

Explanation

A system error occurred during converter processing. A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

0001
    The system found a storage management error.

0002
    The system found an error while processing an IF statement.

0003
    The system found an error in the statement ordering routing processing.

0004
    The system could not find more storage for the converter text data space. Either a large amount of JCL or an internal error caused the lack of storage.

0005
    The system found an error in the symbol table processor.

0006
    The system found an error in the build message processor.

0008
    During merge processing, the system found a statement type that is not valid.

020*x*

    The system found an internal error while processing an Advanced Program-to-Program Communications (APPC) transaction program (TP).

Other

    The system found an internal error.

System action

The system ends converter processing and does not run the job.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the group for the converter component at the IBM support center.

Source

Converter

08E

Explanation

The address space was abended by an IMS address space.

System action

The address space is abnormally ended.

Programmer response

If the ending address space is a CCTL that is hooked up to IMS (DBCTL), then the S08E abend is a result of an operator CANCEL request for that address space. CICS® is an example of a CCTL. No further action is needed if the address space ends to completion. If not, then the operator should try the FORCE command, which IMS will internally change to a CANCEL command. If the address space still doesn't end after this first FORCE attempt, then the operator can enter the FORCE command again. IMS will not change this FORCE attempt, and MVS will process the FORCE to end the address space.

Source

DFSMSdfp

08F

Explanation

An error occurred during processing of a CHANGKEY macro.

Register 15 contains a hexadecimal reason code:

Code
    Explanation

04

    One of the following is true:

- The beginning address of the virtual storage range specified on the CHANGKEY macro is greater than the ending address
- At least one page in the specified virtual storage range is in an unauthorized subpool.
- At least one page in the specified virtual storage range is obtained by the system.

The system restores all pages processed by the CHANGKEY macro before the error to their previous key.

0C

The parameter list specified by the LISTAD parameter was in pageable storage.

The system restores all pages processed by the CHANGKEY macro before the error to their previous key.

10

At least one page in the specified virtual storage range is part of a sharing group that has been defined by the IARVSERV macro.

The system restores all storage keys to their previous value.

14

An unexpected internal error occurred.

The system restores all pages processed by the CHANGKEY macro before the error to their previous key.

18

A request was made to change a key to 0.

The system restores all pages processed by the CHANGKEY macro before the error to their previous key.

1C

A request was made to change to a user key (8 - 15) for a range in common storage.

2C

One of the following is true:

- The beginning address of the virtual storage range specified on the CHANGKEY macro is greater than the ending address
- At least one page in the specified virtual storage range is in an unauthorized subpool.

The system does not restore all pages processed by the CHANGKEY macro before the error to their previous key.

34

The parameter list specified by the LISTAD parameter was in pageable storage.

The system does not restore all pages processed by the CHANGKEY macro before the error to their previous key.

38

At least one page in the specified virtual storage range is part of a sharing group.

The system does not restore all pages processed by the CHANGKEY macro before the error to their previous key.

3C

An unexpected internal error occurred.

The system does not restore all pages processed by the CHANGKEY macro before the error to their previous key.

System action

The system issues an abend to the caller of the CHANGKEY macro. The system writes messages, the logrec data set error record, and the SYSOUT output for the job.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the messages, the logrec data set record, and the SYSOUT output for the job.

Programmer response

For return code 04, 18, 0C, 2C, or 34, correct the error condition indicated.

For return code 14 or 3C, run the job step again.

For return code 10 or 38, modify the program to correct the IARVSERV macro with the SHARE parameter for the virtual storage range in error. Return code 10 and 38 are relevant only with a READONLY or SHAREWRITE view. If the program did not issue the IARVSERV macro, contact the system programmer.

Source

Real storage manager (RSM)

090

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. An OPEN routine found that a device other than a communications device was allocated to the data control block (DCB) being opened. That is, the device class code in the unit control block (UCB) for the device allocated to the data control block was not equal to X'40'.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Either the UNIT parameter of the DD statement for the communications device is incorrect or the UCB generated during system generation is incorrect. Check for improper specification of the UNIT parameter or the IODEVICE macro used in generating the system. Also, check for program errors that could have improperly modified control information. After correcting the error, run the job step again.

Source

Teleprocessing

091

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. An OPEN routine found an incorrect or unsupported type of transmission control unit specified in the unit control block (UCB) for the device allocated to the data control block (DCB) being opened.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Check for improper specification of the IODEVICE macro used in generating the system. Also, check for program errors that could have improperly modified control information. After correcting the error, run the job step again.

Source

Teleprocessing

092

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. An OPEN routine found an incorrect or unsupported type of terminal control or terminal adapter specified in the unit control block (UCB) for the device allocated to the data control block (DCB) being opened.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Check for improper specification of the ADAPTER parameter in the IODEVICE macro used in generating the system. Also, check for program errors that could have improperly modified control information. Correct the error, and run the job step again.

Source

Teleprocessing

093

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. An OPEN routine found an incorrect or unsupported type of terminal specified in the unit control block (UCB) for the device allocated to the data control block (DCB) being opened.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Check for improper specification of the UNIT parameter in the IODEVICE macro used in generating the system. Also, check for program errors that could have improperly modified control information. Correct the error, and run the job step again.

Source

Teleprocessing

094

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. An OPEN routine found an incorrect or unsupported optional feature or mode of operation specified in the unit control block (UCB) for the device allocated to the data control block (DCB) being opened.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Check for improper specification of the FEATURE parameter in the IODEVICE macro used in generating the system. Also, check for program errors that could have improperly modified control information. Correct the error, and run the job step again.

Source

Teleprocessing

095

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. An OPEN routine found that the lines allocated to the line group did not have identical terminal types and/or optional features.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL.

Programmer response

Determine which line group contains different terminals and redefine its lines through DD statements.

Source

Teleprocessing

096

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. An OPEN routine found that dynamic buffer allocation had been specified in the DCBBFTEK field of the data control block (DCB). However, the OPEN routine could not dynamically allocate buffers because the data control block specified neither the address of a buffer pool control block (in the DCBBUFCB field) nor the number and length of the buffers (in the DCBBUFNO and DCBBUFL fields).

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Correct the error by doing one of the following:

- Providing a buffer pool and specifying the address of its control block in the DCBBUFCB field.

- Specifying the number and length of the buffers in the DCBBUFNO and DCBBUFL fields.
- Handling buffering in the program and deleting the BFTEK=D operand in the DCB macro or DCB parameter of the DD statement.

Then run the job step again.

Source

Teleprocessing

097

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. The open routine required an additional entry in the device I/O directory. However, the directory was already full. Since the last system start, the maximum number of device types has already been opened. Normally, the maximum number of device types is 30.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Additional space in the device I/O directory can be provided by changing one statement in the read/write routine. The statement following the one labeled IOD must be changed. The duplication factor must be increased to correspond to the number of different device types being used. The new read/write routine must be reassembled and link edited to SVCLIB.

Source

Teleprocessing

098

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. Dual communication interface B or dual code feature B was specified. However, the transmission control unit was not a 2701, the transmission control unit was not the dual communication interface, or the dual code feature was not specified in the unit control block (UCB).

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Correct program errors. Run the job again.

Source

Teleprocessing

Explanation

The error occurred during processing of a basic telecommunications access method (BTAM) OPEN macro. An OPEN routine found that dynamic buffering was being initiated while the BTAM application was running V=V. BTAM dynamic buffering is not supported for V=V.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Add the ADDRSPC=REAL operand to the job statement and initiate the BTAM application again (V=R).

Source

Teleprocessing

09A

Explanation

Global resource serialization encountered an error.

Note: The X'09A' abend code does not propagate to GQSCAN's caller.

The two low-order bytes of register 15 contain a hexadecimal function and reason code:

Code
   Explanation
1208
   Issued when the GRS receives notification for a global resource that is not known to GRS.
1210
   Issued when the GRS receives notification for a global ENQ or DEQ request that is not known to GRS.
1904
   An invalid control block was detected while running in GRS=STAR mode.
2204
   Issued by when the system cannot create the GRS address space.
2505
   GRS could not create a dependent enclave for the GRS EQDQ monitor to use because of an unexpected return or reason code from the WLM IWMECREA service. The IWMECREA return and reason codes were placed in registers 2 and 3 before the abend is issued.
3106
   Issued by the GRS Lock Structure Complete Exit and indicates the resource specified in the exit is not known to GRS.
3705
   Issued when GRS STAR Mode global GQSCAN processing could not add the ISGQSCAN dataspace to the DU-AL.
xxD5
   Issued when the GRS Message Exit failed to receive an incoming message through the IXCMSGI macro.

46FA

Issued by ISGCDSP as part of "DISPLAY GRS" D GRS processing. X'FA' indicates a non-zero return code was received from MSGSERV. This typically occurs when the user issues a form of the command that generates too much output, "D GRS,ALL" or "D GRS,RES=(*,SYSDSN)", for example.

4814

An error occurred in the Queue Merge processing when this system tried to rejoin the GRS ring.

4818

An error occurred in Queue Merge processing when this system tried to rejoin the GRS ring.

6324

Issued when an attempt is made to initiate I/O on a CTC that has I/O still pending.

68C8

Indicates a non-zero return code from an IXCMOD request. GRS issues IXCMOD to change its XCF monitoring interval.

68CA

An IXCPART partition request returned a return code or reason code that is not expected. GRS issues IXCPART to remove a system from the sysplex.

81xx or 85xx

An error occurred in storage manager allocation processing while trying to allocate a cell.

82xx or 87xx

An error occurred in storage manager deallocation processing while trying to deallocate a cell.

A114

Issued when the GQSCAN RESNAME specification contains a QNAME ADDR and QNAME length of 0-7, but with RNAME ADDR, RNAME length, and specific/generic omitted (for example, RESNAME=(QNAME,,,,7)).

A142

Indicates a GQSCAN with SYSNAME was in progress, but the SYSNAME was unknown. This can occur when normal ENQ/DEQ processing changes control blocks while GQSCAN processing is looking at them. A dump is produced because recovery cannot determine the cause the cause of the changing control blocks (for example, if they changed because of normal ENQ/DEQ activity, or if they changed because of an overlay or other serious event).

A2xx

ISGQSCNR, which is the GQSCAN service's functional recovery routine, converted the ABEND.

A220

An undefined error occurred during execution of the GQSCAN service, which is the GQSCAN service routine. The system saves the original completion code in register 2 and the original reason code in register 3.

A22C

An unexpected error occurred when the ISGQSCAN information routine was activated to obtain requestor information from the service address space. GQSCAN recovery will not percolate to the GQSCAN caller's recovery since retry is requested.

C50C

The GRS STAR sysplex wide global resource contention notification server task, ENF 51 issuer, has determined that the length of its processing queue has reached a critical threshold. This indicates that the task can not keep up with the amount of work asked of it. This could be due to dispatch priority, a large amount of sysplex wide contention, or a problem with the server.

C544

Function code C5 is module ISGGCN the contention notification task. Subfunction 44 indicates GQSCAN. This reason code indicates a failure occurred in GQSCAN during contention notification processing.

Others

Internal error. IBM might request this information for diagnosis. The contents of registers 3 through 5 may contain diagnostic data.

System action

System processing continues. The system usually writes a logrec data set error record and issues an SVC dump. For reason codes X'4814' and X'4818', the system will attempt to force a dump on the system in the complex which was assisting with the rejoin process.

For **C50C:** The contention notification task:

1. Takes an SVC dump to identify the instance and to gather diagnostic data.
2. Prevents any more elements from being queued.
3. Informs ENF listeners that the ENF 51 data is temporarily suppressed and that some data could be lost.
4. Purges all queued elements.
5. Gives up ownership of the sysplex wide function. Because ownership is relinquished, another contention notification server on a different sysplex system, who may or may not have more resources, could become the sysplex wide notification server. If there is no other system, the same system will continue being the owner. Use the DISPLAY GRS command, found in *z/OS MVS System Commands* to determine which system is the notification server.
6. The new owner will inform ENF listeners that the data is valid again.

Operator response

For **C50C:** Inform the system programmer.

For some 09A abends, you should obtain a dump of the GRS address space from each system in the global resource serialization complex. The IBM Support Center will request the dumps for diagnosis. The following function and reason codes require a dump from each system in the complex:

- 43*yy*
- 44*yy*
- 45*yy*
- 62*yy*
- 65*yy*
- 66*yy*
- 67*yy*
- 6A*yy*
- 6C*yy*
- C1*yy*
- E1*yy*
- E3*yy*

You do not need to obtain a dump for these codes when *yy* is one of the following:

- 45
- 90
- B2
- B6
- E0
- EC
- FA
- FC

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the function and reason codes, the logrec data set error record, and the dump. For the appropriate reason and function codes, provide a dump of the GRS address space dumps for each system in the global resource serialization complex. Provide all dumps taken by GRS recovery for the ABEND.

For **C50C**, before you contact the IBM support center, use the monitors to determine if an application created an abnormal amount of contention. If so, consider changing the application, or use the following installation exits to suppress notification of specific high frequency contention cases:

- ISGCNFXITSYSTEM
- ISGCNFXITSYSPLEX.

Also, check for any possible dispatch priority issues.

Programmer response

Do one of the following:

- If mmff is 4808, 480C, or 4810, this is probably a user error. Correct the problem and resubmit the job.
- If mmff is 46FA, check to see if the problem was caused by a shortage of WTO buffer space. If not, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the return code in register 2.
- If the reason and function codes are A2xx, the problem is with the GQSCAN macro. Respecify the GQSCAN macro.

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Global resource serialization

09B

Explanation

An abnormal end occurred in IP PrintWay. This system completion code and the IP PrintWay abend reason code are contained in either message ANFM102I or ANFM105I. See *z/OS Infoprint Server Messages and Diagnosis* for an explanation of the abend reason code.

Programmer response

Respond as indicated for message ANFM102I or ANFM105I.

Problem determination

If the error recurs, search problem-reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

Source

IP PrintWay

09D

Explanation

A PTRACE macro was issued requesting the creation of a trace table entry to be placed in the system trace table. A system trace service routine detected an error in the PTRACE macro.

Register 15 contains a hexadecimal reason code that explains the error:

Code
> **Explanation**

1151
> Input register 1 of the PTRACE macro issuer contains an incorrect register range. Register 2 contains the incorrect register range that was input in register 1.

1152
> The parameter area of the PTRACE macro issuer contains more than 1024 words of data to be traced. Register 2 contains the address of the user parameter area (input register 1). Register 3 contains the number of words of data to be traced from the user parameter area.

System action

The system abnormally ends the task associated with the program that issued the PTRACE macro.

Programmer response

Correct the PTRACE macro. Run the job again.

Source

System trace

09E

Explanation

During processing of a system trace routine, the system detected an error.

Register 15 contains a hexadecimal reason code that explains the error:

Code
> **Explanation**

0251
> The system trace address space could not be created. The nonzero return code was placed in register 2. The reason code was placed in register 3.

0252
> The system trace function could not be initialized. The nonzero return code was placed in register 2.

0261
> The ESTAE macro failed to establish a recovery environment. The nonzero return code from ESTAE was placed in register 2.

0351
> An error occurred while waiting for the master address space to complete initialization. A nonzero return code was passed in register 15. A reason code was passed in register 0. The return code was placed in register 2.

0361
> The ESTAE macro failed to establish a recovery environment. The nonzero return code from ESTAE was placed in register 2.

1211
> The system detected an incorrect control block acronym. Register 2 contains the real address of the control block. Register 3 contains the expected acronym.

1212

The system detected an incorrect control block level number. Register 2 contains the real address of the control block. Register 3 contains the acronym of the control block. Register 4 contains the detected and expected level numbers.

2100

The request for a system trace was not issued in task mode.

2101

The system trace request is incorrect because the option is not valid. The request is received in register 1 and placed in register 2.

2102

The trace request is incorrect because the request type is not valid. The request is received in register 0 and placed in register 2.

2201

The trace request is incorrect for one of the following reasons:

- Register 0 did not contain the address of a physical configuration communication area (PCCA) or X'FFFFFFFF'.
- The request type in register 1 was not TRACEON, TRACEOFF, or TRACEFIX.

The request input is received in registers 0 and 1 and the detected request is placed in registers 2 and 3.

2202

Trace requests conflict for one of the following reasons:

- A single processor request specified a change in the trace options or number of buffers.
- Both ON and OFF were requested for the AS, BR, or EX options.
- The reserved bits were not zero.

The request input is received in registers 0 and 1 and the detected request is placed in registers 2 and 3.

2211

The system found an incorrect acronym in the system trace option block (TOB). Register 2 contains the address of the TOB. Register 3 contains the detected acronym.

2212

The system found an incorrect level number in the system trace option block (TOB). Register 2 contains the address of the TOB. Register 3 contains the detected and expected level numbers.

2301

The system found an incorrect acronym in the system trace services parameter list (TRSP). Register 2 contains the address of the TRSP. Register 3 contains the detected acronym.

2302

The system found an incorrect level number in the system trace services parameter list (TRSP). Register 2 contains the address of the TRSP. Register 3 contains the detected and expected level numbers.

2311

The system found an incorrect acronym in the system trace option block (TOB). Register 2 contains the address of the TOB. Register 3 contains the detected acronym.

2312

The system found an incorrect level number in the system trace option block (TOB). Register 2 contains the address of the TOB. Register 3 contains the detected and expected level numbers.

2313

The system found an incorrect acronym in a system trace buffer vector table (TBVT). Register 2 contains the address of the TBVT. Register 3 contains the detected acronym.

2314

The system found an incorrect level number in a system trace buffer vector table (TBVT). Register 2 contains the address of the TBVT. Register 3 contains the detected and expected level numbers.

2401

The trace request could not be recognized. The specified option is not SUSPEND, RESUME, or PSTART. The request was received in register 1 and placed in register 2.

2411

The system found an incorrect acronym in the system trace option block (TOB). Register 2 contains the address of the TOB. Register 3 contains the detected acronym.

2412

The system found an incorrect level number in the system trace option block (TOB). Register 2 contains the address of the TOB. Register 3 contains the detected and expected level numbers.

2413

The system found an incorrect acronym in a system trace buffer vector table (TBVT). Register 2 contains the address of the TBVT. Register 3 contains the detected acronym.

2414

The system found an incorrect level number in a system trace buffer vector table (TBVT). Register 2 contains the address of the TBVT. Register 3 contains the detected and expected level numbers.

2501

The system found an incorrect acronym in the system trace SNAPTRC parameter list (TRSN). Register 2 contains the address of the TRSN. Register 3 contains the detected acronym.

2502

The system found an incorrect level number in the system trace SNAPTRC parameter list (TRSN). Register 2 contains the address of the TRSN. Register 3 contains the detected and expected level numbers.

2503

The system found an incorrect request type in the system trace SNAPTRC parameter list (TRSN). The request type is not one of the expected constants:

- TRSNASFR
- TRSNFREE
- TRSNSNAP
- TRSNTKFR

Register 2 contains the address of the TRSN. Register 3 contains the detected request type.

2601

The system found an incorrect acronym in the system trace services parameter list (TRSP). Register 2 contains the address of the TRSP. Register 3 contains the detected acronym.

2602

The system found an incorrect level number in the system trace services parameter list (TRSP). Register 2 contains the address of the TRSP. Register 3 contains the detected and expected level numbers.

2701

The system found an incorrect acronym in the system trace services parameter list (TRSP). Register 2 contains the address of the TRSP. Register 3 contains the detected acronym.

2702

The system found an incorrect level number in the system trace services parameter list (TRSP). Register 2 contains the address of the TRSP. Register 3 contains the detected and expected level numbers.

2801

The system found an incorrect acronym in the system trace COPYTRC parameter list (TRCT). Register 2 contains the address of the TRCT. Register 3 contains the detected acronym.

2802

The system found an incorrect level number in the system trace COPYTRC parameter list (TRCT). Register 2 contains the address of the TRCT. Register 3 contains the detected and expected level numbers.

2803

ALESERV ADD failed while adding the TRACE address space to the DU-AL of the caller of COPYTRC. Register 2 contains the return code from ALESERV.

2804

ALESERV DELETE failed while deleting the TRACE address space from the DU-AL of the caller of COPYTRC. Register 2 contains the return code from ALESERV.

2811

The system found an incorrect acronym in a system trace table snapshot copy header (TTCH). Register 2 contains the address of the TTCH. Register 3 contains the detected acronym.

2812

The system found an incorrect level number in a system trace table snapshot copy header (TTCH). Register 2 contains the address of the TTCH. Register 3 contains the detected and expected level numbers.

2901

The system found an incorrect acronym in the system trace SNAPTRC parameter list (TRSN). Register 2 contains the address of the TRSN. Register 3 contains the detected acronym.

2902

The system found an incorrect level number in the system trace SNAPTRC parameter list (TRSN). Register 2 contains the address of the TRSN. Register 3 contains the detected and expected level numbers.

2911

The system found an incorrect acronym in a system trace table snapshot copy header (TTCH). Register 2 contains the address of the TTCH. Register 3 contains the detected acronym.

2912

The system found an incorrect level number in a system trace table snapshot copy header (TTCH). Register 2 contains the address of the TTCH. Register 3 contains the detected and expected level numbers.

2A01

Invalid TFWA parameter acronym. Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

2A02

Invalid TFWA parameter level number. Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level number.

4101

The system found an incorrect acronym in a parameter. Register 3 contains the control block address. Register 4 contains the expected acronym. Register 5 contains the detected acronym.

4102

The system found an incorrect level number in a parameter. Register 3 contains the control block address. Register 4 contains the acronym of the control block. Register 5 contains the detected and expected level numbers.

4201

The system found an incorrect acronym in a parameter. Register 3 contains the control block address. Register 4 contains the expected acronym. Register 5 contains the detected acronym.

4202

The system found an incorrect level number in a parameter. Register 3 contains the control block address. Register 4 contains the acronym of the control block. Register 5 contains the detected and expected level numbers.

4203

The system detected an incorrect parameter. Register 3 contains the control block address. Register 4 contains the acronym of the incorrect control block. Register 5 contains the offset into the control block of the error. Register 6 contains the content of the incorrect field.

5101

The system found an incorrect acronym in the system trace table format request parameter list (TRFM). Register 2 contains the address of the TRFM. Register 3 contains the detected acronym.

5102

The system found an incorrect level number in the system trace table format request parameter list (TRFM). Register 2 contains the address of the TRFM. Register 3 contains the detected and expected level numbers.

5151

The address of the current system trace table entry (TTE) is past the expected end of data in the buffer for the current processor. Register 2 contains the address of the TTE. Register 3 contains the address of the expected end of data. Register 4 contains the processor index into the trace formatter work area (TFWA).

5161

An ESTAE macro issued to establish a recovery environment failed. Register 2 contains the ESTAE return code.

5201

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5202

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5301

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5302

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5351

The system has determined that no valid ASID filtering options were specified. Register 2 contains the address of the TFWA. Register 3 contains the contents of TFWAFLG1.

5401

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5402

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5501

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5502

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5601

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5602

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5701

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5702

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5703

The system requested that the work buffer for a processor be refilled while the processor's end of trace data bit was turned on. Register 2 contains the address of the trace formatter work area (TFWA). Register 3 contains the processor index into the TFWA. Register 4 contains the physical address of the processor.

5801

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5802

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5901

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5902

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5A01

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5A02

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5B01

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5B02

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5C01

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5C02

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5D01

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5D02

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5E01

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5E02

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

5F01

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

5F02

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

6101

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

6102

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

6301

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

6302

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

6401

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

6402

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

6501

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

6502

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

6601

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

6602

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

6701

The system found an incorrect acronym in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

6702

The system found an incorrect level number in the trace formatter work area (TFWA). Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

6801

Incorrect TFWA parameter acronym.

6802

Incorrect TFWA parameter level number.

6901

Invalid TFWA parameter acronym. Register 2 contains the address of the TFWA. Register 3 contains the detected acronym.

6902

Invalid TFWA parameter level number. Register 2 contains the address of the TFWA. Register 3 contains the detected and expected level numbers.

7451

The system found an incorrect acronym in the system trace vector table (TRVT). A CALLRTM TYPE=MEMTERM had been issued for the trace address space.

7452

The system found an incorrect level number in the system trace vector table (TRVT). A CALLRTM TYPE=MEMTERM had been issued for the trace address space.

7461

The system found an incorrect acronym in the system trace option block (TOB). A CALLRTM TYPE=MEMTERM had been issued for the trace address space.

7462

The system found an incorrect level number in the system trace option block (TOB). A CALLRTM TYPE=MEMTERM had been issued for the trace address space.

7470

The system found errors in the system trace control blocks or queues. The functional recovery routine (FRR) IEAVETRR, entry point IEAVETFR, records the errors.

7501

The system found an incorrect acronym in the system trace services parameter list (TRSP). Register 2 contains the address of the TRSP. Register 3 contains the detected acronym.

7502

The system found an incorrect level number in the system trace services parameter list (TRSP). Register 2 contains the address of the TRSP. Register 3 contains the detected and expected level numbers.

System action

The system abnormally ends the current task. The system may abnormally end the trace address space. The system writes a logrec data set error record and a dump.

The system may issue message IEA133E.

Operator response

Enter the TRACE command to restart the trace address space. Notify the system programmer.

System programmer response

If the error recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record, the dump, and all printed output and output data sets related to the problem.

Source

System trace

09F

Explanation

A program issued a vector instruction, but the system cannot create the proper environment for the vector operation. The program is running under a task control block (TCB) or service request block (SRB). A hexadecimal reason code in register 15 explains the error:

Code
  Explanation

00

The program issued the vector operation in SRB mode. If the vector operation was issued from a preemptible SRB, it was not preceded by an invocation of IEAFP START.

04

The program issued the vector operation while disabled.

0C

The program cannot create the vector environment. The vector second level interrupt handler (SLIH) detects the error.

10

The vector SLIH failed due to a system error.

14

The system encounters a vector environment that is not valid.

18

A machine check in the Vector Facility causes the vector status for a task to be lost.

1C

The issuing task holds a local lock.

20

The system encounters a secondary task control block (STCB) that is not valid.

2C

The program issued the vector instruction and had established enabled, unlocked task (EUT) mode functional recovery routines (FRR).

System action

The system abnormally ends the program that issued the vector instruction. The system may write an logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=09F,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If a logrec data set error record is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. Use the program status word (PSW) at the time of error to identify the module that issued the vector instruction.

   - For an installation-provided module, continue diagnosis with the module.
   - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide, if available, the SVC dump and the logrec data set error record.

Programmer response

Do the following:

- For reason code X'00', X'04', X'1C', or X'2C', ensure that the program issues vector instructions in the proper mode.
- For reason code X'00' from a preemptible SRB, and for reason codes X'04', X'1C', or X'2C', issue an IEAFP START request before using any vector operations.

Source

Supervisor control

0A0

Explanation

During initial program load (IPL), an error occurred while the system was starting the master scheduler. Register 15 contains a hexadecimal reason code:

Code
  Explanation

01

The system detected a converter, interpreter, or system error during master scheduler initialization.

02

The system detected an allocation error, an OPEN catalog error, or a locked catalog error during master scheduler initialization.

03

The system could not obtain a special region for the master scheduler.

System action

The system does not start the master scheduler. System initialization ends. The system writes an SVC dump. The system may issue message IEE479W.

Operator response

If the system issues message IEE479W, see the operator response for message IEE479W. Otherwise, notify the system programmer.

System programmer response

Examine the SVC dump, looking at the master trace table for messages which will pinpoint the problem with the JCL (for RC=01) or with allocation (for RC=02). If the master JCL data set (MSTJCL*xx*) was updated recently, check that the changes are correct. The messages associated with the processing of MSTJCL*xx* are sent to the console if you specify the L option (,L) on the MSTRJCL system parameter. Respond to messages issued by the converter, interpreter, or allocation.

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump.

Source

Initiator/terminator

0A1

Explanation

An incorrect condition was detected by the Graphics Access Method/System Product (GAM/SP) OPEN executor routine, IGG0193Y. The error occurred in either GAM/SP or the operating system.

System action

A message appears on the system console that identifies the cause of the error; and GAM/SP produces a dump on the system dump data set.

Programmer response

Do the following:

1. Check for messages identifying the cause of the error. If these are GAM/SP messages, (that is, the message number is of the form GAB*nnn*), they are described in *IBM Graphics Access Method/System Product: Messages and Codes.*

2. Get a listing of the system dump.

3. Contact your programming support personnel.

Source

DFSMSdfp

0A2

Explanation

An incorrect condition was detected by the Graphics Access Method/System Product (GAM/SP) CLOSE executor routine, IGG0203Y. The error occurred in either GAM/SP or the operating system.

System action

A message appears on the system console that identifies the cause of the error and GAM/SP produces a dump on the system dump data set.

Programmer response

Do the following:

1. Check for messages identifying the cause of the error. If these are GAM/SP messages, (that is, the message number is of the form GAB*nnn*), they are described in *IBM Graphics Access Method/System Product: Messages and Codes.*
2. Get a listing of the system dump.
3. Contact your programming support personnel.

Source

DFSMSdfp

0A3

Explanation

An error was detected in the Graphics Access Method/System Product (GAM/SP) attention handler module, IGG019OE. The error may have originated in the GAM/SP OPEN executor, IGG0193Y. It could also be caused by modules IGG019OE and IGG0193Y being at inconsistent maintenance levels.

System action

A message appears on the system console that describes the error. In addition, GAM/SP writes a record to the logrec data set data set and produces a dump on the system dump data set.

Programmer response

Do the following:

1. Check for messages identifying the cause of the error. If these are GAM/SP messages, (that is, the message number is of the form GAB*nnn*), they are described in *IBM Graphics Access Method/System Product: Messages and Codes*.
2. Check the module identifiers and PTF levels for modules IGG019OE and IGG0193Y.
3. Get a listing of the system dump.
4. Contact your programming support personnel.

Source

DFSMSdfp

0A4

Explanation

An error occurred either in the Graphics Access Method/System Product (GAM/SP) or in the operating system.

This completion code is issued when:

1. A program check or abnormal end occurs in the Graphics Access Method/System Product (GAM/SP) attention handler module.
2. The GAM/SP attention handler module detects an incorrect condition.

System action

A message appears on the system console, accompanied by a reason code identifying the area of processing in which the error occurred. In addition, GAM/SP writes a record to the logrec data set data set and produces a dump on the system dump data set.

Programmer response

You should take the following actions: Do the following:

1. Check for messages identifying the cause of the error. If these are GAM/SP messages, (that is, the message number is of the form GAB*nnn*), they are described in *IBM Graphics Access Method/System Product: Messages and Codes.*
2. Get a listing of the system dump.
3. Contact your programming support personnel.

Source

DFSMSdfp

0A5

Explanation

A program check or abnormal end occurred within the Graphics Access Method/System Product (GAM/SP) attention handler module, IGG019OE. The recovery routine for IGG019OE determined that the problem was caused by an application error.

System action

Message GAB333 appears on the system console and diagnostic data is provided. The message and the diagnostic data are described in *IBM Graphics Access Method/System Product: Messages and Codes.*

Programmer response

Check for messages identifying the cause of the problem. Using the message and other diagnostic information, correct the application program. *IBM Graphics Access Method/System Product: Messages and Codes* contains information on application recovery from this problem.

Source

DFSMSdfp

0A6

Explanation

The Print Services Facility (PSF) ESTAE routine detected an error in the Page Printer Communications Component (PPCC) of PSF.

System action

Depending on the error condition, PSF restarts the functional subsystem application (FSA) or terminates the FSA. PSF issues a message indicating the action taken and may take a SVC dump.

Operator response

Inform your system programmer that this error occurred.

System programmer response

Review the console log for all PSF messages and, if any, the PSF abend reason code. See *PSF for z/OS: Messages and Codes* for more information on the PSF messages, PSF abend reason code, and to determine the appropriate response for this error.

Programmer response

None.

Source

PSF for z/OS

0A7

Explanation

For information about this system completion code, see VTAM abend codes in *z/OS Communications Server: IP and SNA Codes*.

0A8

Explanation

For information about this system completion code, see VTAM abend codes in *z/OS Communications Server: IP and SNA Codes*.

0A9

Explanation

For information about this system completion code, see VTAM abend codes in *z/OS Communications Server: IP and SNA Codes*.

0AA

Explanation

For information about this system completion code, see VTAM abend codes in *z/OS Communications Server: IP and SNA Codes*.

0AB

Explanation

For information about this system completion code, see VTAM abend codes in *z/OS Communications Server: IP and SNA Codes*.

0AC

Explanation

For information about this system completion code, see VTAM abend codes in *z/OS Communications Server: IP and SNA Codes*.

0AD

Explanation

The Time Sharing Option Extensions (TSO/E) interactive data transmission facility detected a system error during the processing of a TRANSMIT or RECEIVE command. Register 15 contains a reason code:

Code
  Explanation

0025
  The RECEIVE command encountered an error while invoking the Job Entry Subsystem (JES) interface.

  The RECEIVE command was issued to determine if any Interactive Data Transmission Facility files were available for you to receive. The JES subsystem request was not successful. Reason code 0025 is associated with message INMR037I.

002A
  The TRANSMIT command attempted to allocate the SYSPRINT message file for IEBCOPY using SVC 99, and the allocation failed. The SYSPRINT message file is usually allocated to either the terminal or to a SYSOUT class. You can specify where you want it to be allocated in either in CSECT INMXPARM or on the TRANSEC keyword of parmlib member IKJTSO00. Reason code 002A is associated with messages INMX040I and INMX042I.

0043
  The TRANSMIT command was issued with the DATASET or DSNAME keyword and the OBTAIN SVC was issued to get information about the data set. The OBTAIN SVC set a return code other than 0 (successful termination), 8 (data set not on volume), or 12 (VTOC I/O error). Reason code 0043 is associated with message INMX067I.

0053
  The TRANSMIT command attempted to OPEN a data set previously written by the IEBCOPY utility or the AMS REPRO command. The OPEN failed. The data set is a temporary data set the TRANSMIT command allocates to contain intermediate data. Normally, the TRANSMIT command reads, transmits, and deletes the temporary data set. Reason code 0053 is associated with message INMX083I.

007F
  The RECEIVE command attempted to allocate a spool file and the allocation failed. The RECEIVE command obtained the name of the spool file from JES. Reason code X'007F' is associated with message INMR127I.

0084
  The RECEIVE command was issued with the INDATASET or INDSNAME keyword.

  The data set specified with the keyword failed to OPEN. The data set was allocated successfully. Reason code 0084 is associated with message INMR132I.

0085
  The RECEIVE command attempted to OPEN a file for incoming network files from the JES spool, but the OPEN failed. The process sysout subsystem interface successfully selected a name for the spool file and the dynamic allocation SVC successfully allocated the spool file. Reason code 0085 is associated with message INMR133I.

0086
  The RECEIVE command attempted to deallocate a data set using SVC 99, and the unallocation failed. The data set was a JES input file or was specified by an INDATASET or INDSNAME keyword. Reason code 0086 is associated with message INMR134I.

0089
  The RECEIVE command encountered an error while attempting to end the external writer interface with JES. After all files have been processed or after a unrecoverable error, the RECEIVE command invokes the process sysout subsystem interface, specifying that this is the final call to the subsystem interface. The

subsystem returned a nonzero return code indicating an error. Reason code 0089 is associated with message INMR137I.

009C
The TRANSMIT or RECEIVE command processor received an unknown return code from the module IKJSMS1. The reason code 009C is associated with message INMC156I.

00CC
The TRANSMIT command processor encountered an error while opening the JES output file. Reason code 00CC is associated with message INMX204I.

00D2
The TRANSMIT command processor encountered an error while opening the output data set. Reason code 00D2 is associated with message INMX210I.

System action

The system issues one of the following messages: INMC156I, INMR037I, INMX067I, INMX083I, INMR127I, INMR132I, INMR133I, INMR134I, INMR137I, INMX040I, INMX042I, INMX204I, INMX210I.

The system issues an SVC dump.

System programmer response

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump and hardcopy of the TSO session if possible.

Source

Time Sharing Option Extensions (TSO/E)

0AE

Explanation

The system cannot purge a completed I/O request.

System action

The system abnormally ends all tasks in the address space where the system was waiting to purge the I/O request.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Input/output supervisor (IOS)

0B0

Explanation

The scheduler work area (SWA) manager detected an uncorrectable error. Register 15 contains a reason code explaining the error:

Code
  Explanation

04

The routine that called SWA manager requested an incorrect function.

08

The routine that called SWA manager passed an incorrect SVA (SWA virtual address). The SVA does not point to the beginning of a SWA prefix or the SWA prefix was destroyed.

0C

A SWA manager routine tried to read a record not yet written into SWA.

10

The system tried to read or write a block that is not 176 bytes or the system tried to assign a block with a specified length of 0 or a negative number.

14

The routine that called SWA manager specified an incorrect count field. For move mode, an incorrect count is 0 for a READ, WRITE, or ASSIGN function, and 00 for WRITE/ASSIGN.

18

The routine that called SWA manager by issuing the QMNGRIO macro specified both or neither of the READ or WRITE options.

1C

The routine that called SWA manager tried to write into a SWA block for the first time and has either passed a nonexistent ID, or has failed to pass an ID at all and the block does not have an embedded ID.

20

The system tried to write a block using an incorrect pointer to the block.

24

An error occurred while the system was translating an SVA for an SWA block that is above 16 megabytes.

28

The routine that called the SWA manager specified zero on the EPA parameter of the SWAREQ macro. The EPA parameter must be the address of a fullword pointer to the EPA. Check the value specified on the EPA parameter of the SWAREQ macro to ensure that it is the address of a pointer to the EPA and not the EPA itself.

2C

The SWA virtual address (SVA) being reassigned is not an above-the-line SVA.

30

The SWA virtual address (SVA) being reassigned has already been assigned.

34

An attempt has been made to allocate or delete an SWA block in an unauthorized environment.

38

A GETMAIN request for a non-standard size SWA block was unsuccessful. The failure may have been for below-the-line or above-the-line SWA block storage.

3C

While attempting to process an assign request, the SWA manager encountered a zero value as the pointer to the QMPA. The most likely cause of this error condition is that a task running under the master subsystem (SUB=MSTR) attempted a dynamic allocation in its own address space, but that address space is not yet totally established.

Some specific causes are as follows:

1. Attempting to run a started JOB as SUB=MSTR or under a WLM initiator (INIT), when the JOB to be started has an instream procedure (proc). The converter issues a dynamic allocation to create a temporary PDS to hold the procedure being read in.

2. Attempting to run a started task (STC) as SUB=MSTR, but not all of the data sets needed for that started task are cataloged in the MASTER CATALOG. Either a JOBCAT or STEPCAT is included in the JCL, or simply one of the data sets in the JCL is cataloged in a USER catalog (usercat). Allocation issues a dynamic allocation for the required catalog.

3. The device type in the catalog for one of the data sets that is started as SUB=MSTR is incorrect (for example, the information specifies that the data set is on a 3380 device, but the data set is really on a 3390 device.).

Corrective actions are:

1. You cannot run started jobs with PROC statements as SUB=MSTR.

   Do one of the following actions:

   - Remove the PROC statement, or
   - Remove the JOB statement and run it as a started task
   - Run it as SUB=JES2 (or JES3)

2. Ensure that all data sets required by jobs or tasks running SUB=MSTR are cataloged in the master catalog or are directly pointed to by the specification of UNIT and VOL=SER parameters on the DD statement.

3. Ensure that the device types for all required catalogued data sets and any UNIT parameters on DD statements are correct.

40
   All possible SWA virtual addresses (SVAs) have already been assigned.

44
   An IARV64 DETACH request failed. Memory objects for the SWA management infrastructure were not freed.

System action

The task ends and the system writes a dump.

Operator response

Notify the system programmer.

System programmer response

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. It is the responsibility of the caller to SWA manager to take the dump, and if none was taken, then a SLIP would need to be set up to capture the failure. Provide the dump to the IBM Support Center.

Programmer response

If the program that ended was a started task, and the code in register 15 is X'08' or X'0C', check the JCL for this task. For all started tasks, the JCL must either:

- refer to existing data sets that are cataloged in the master catalog; or
- include unit and volume information on the DD statements for existing data sets.

Modify the JCL to meet one of these requirements, and resubmit the job.

Source

Scheduler work area (SWA) manager

0B2

Explanation

The system detected an incorrect statement in the MSTRJCL data set. The system could not convert the MSTRJCL nor start the master scheduler.

System action

The system does not start the master scheduler. The system abnormally ends master scheduler initialization.

System programmer response

If the MSTRJCL data set in the LINKLIB was updated manually, check it for a statement without a // in columns 1 and 2. Ensure that the MSTRJCL is delimited by a /* or a // (null) card. If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Initiator/terminator

0B3

Explanation

A caller of the master subsystem incore access method attempted an incorrect or not serviceable access request.

System action

The system abnormally ends the task using the access method.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Initiator/terminator

0B4

Explanation

The master subsystem could not make use of the SYS1.PROCLIB data set defined by the IEFPDSI statement in the MSTRJCL. This occurred for one of the following reasons:

- The master subsystem was unable to OPEN the PROCLIB data set.
- The blocksize of the opened SYS1.PROCLIB data set was not a multiple of 80.

System action

The system cannot function without an open SYS1.PROCLIB data control block (DCB). The system does not start the requested subsystem.

System programmer response

Check for a valid data set name on the IEFPDSI card in the MSTRJCL data set. Check for a valid blocksize either on the IEFPDSI card or in the data set's format data set control block (DSCB) in the VTOC. If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Initiator/terminator

0B5

Explanation

The master subsystem was unable to attach the converter. It is possible there is conflict between a TSO/E logon procedure and a subsystem name.

System action

The system does not start the requested subsystem.

System programmer response

Check for any conflicts between TSO/E logon procedures and active subsystem names. If so, resolve the conflict. In particular, look for message IKJ601I which contains the name of the logon procedure in use when TSO/E terminated abnormally. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Initiator/terminator

0B6

Explanation

Library automation communication services (LACS) has detected an error condition. The specific error is identified by a reason code in register 15.

Code
    Explanation

04

The return code from the Asynchronous Operations Manager (AOM) LIBSERV service indicates that a parameter error has been detected.

08

The return code and reason code from the AOM AOMQUE service indicate that an invalid request was made.

0C

The return code from the Library Control System (LCS) CBRXVOL service indicates that a parameter error has been detected.

10

The return code from the LCS CBRXLCS service indicates that a parameter error has been detected.

14

A non-zero return code has been received from the OAM message construction service.

18

The return code and reason code from the IEEMIFSV message buffer manager service indicate that a parameter error has been detected.

1C

The return code and reason code from the AOM LIBSERV service indicate that no libraries have been defined to AOM.

20

The return code and reason code from the AOM LIBSERV service indicate that the library configuration has not yet been set to AOM.

24

During the processing of a library mount request, a mount order has been sent to the library. The library has responded with a unit check and an error recovery action (ERA) code. The mount request was for a specific volume, but the ERA code is appropriate only for a scratch volume.

28

During the processing of a library mount request, a mount order has been sent to the library. The library has responded with a unit check and an error recovery action (ERA) code. The mount request was for a scratch volume, but the ERA code is appropriate only for a specific volume.

2C

During the processing of a library mount or demount request, an order has been sent to the library. The library has responded with a unit check and an error recovery action (ERA) code. The ERA code is an unexpected and inappropriate response to the order.

30

During the processing of a library mount request, the library has indicated that the mount operation completed successfully, but the external volume serial number of the mounted volume does not match the requested volume serial number.

34

The return code from the Library Control System (LCS) CBRXLIB service indicates that a parameter error has been detected.

System action

The system abnormally ends the task. An SVC dump is requested and the error is recorded in SYS1.LOGREC. The system resumes processing of the task. LACS sets the permanent error return code and an appropriate reason code, and returns control to the caller. The job for which the LACS service was requested fails.

Operator response

Resubmit the failing job. If the failure persists, notify the system programmer.

System programmer response

For reason codes 04, 08, 0C, 10, 14, and 18, the problem is probably caused by incorrect LACS software. For reason codes 1C and 20, the problem is probably caused by incorrect software in the caller of LACS or in AOM. For reason codes 24, 28, 2C, and 30, the problem is probably caused by incorrect library micro-code. Save the console log and the dump data set, print the contents of SYS1.LOGREC, then search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0B7

Explanation

A CONFIG or VARY command requested addition or removal of hardware units from a configuration. While processing the command, the system detected an error. A hexadecimal reason code in register 15 explains the error:

Code
   Explanation

00000301

The system detected an incorrect parameter.

00000302

The caller was not authorized to use the vary path interface.

00000303

For the processing, the system requested virtual storage but failed to obtain it.

xxyy0304

The vary path interface detected a failing return code from the message buffer service. The message buffer service's return code and reason code are provided in xx and yy respectively.

00000401

The service processor was running a CONFIG STOR ONLINE command. The service processor varied the requested storage physically online, but the system was unable to vary the storage logically online. The service processor then tried unsuccessfully to vary the storage physically offline.

00000402

The system returned an unexpected return code.

00000403

The system tried to vary storage online or offline, but received an unexpected response code from the service processor.

00000404

Processing for vary path reconfiguration received an unexpected response code from the service processor.

00000405

The system tried to obtain storage element information, but received an unexpected response code from the service processor.

00000406

The system failed to establish a recovery environment.

00000501

The system received an unexpected return code from the service processor call SVC routine.

00000502

The system tried to vary a storage element online or offline, but received an unexpected response code from the service processor.

00000503

The system tried to obtain storage element information, but received an unexpected response code from the service processor.

00000504

The system tried to copy and reassign storage, but received an unexpected response code from the service processor.

00000505

The system failed to establish a recovery environment.

00000601

The system returned an unexpected return code.

00000602

The system failed to establish a recovery environment.

00000603

The system received an unexpected return code for reconfiguration message processing.

00000701

The system received an unexpected return code when requesting storage status.

00000702

The system received an unexpected return code when requesting that storage be logically varied online.

00000703

The system received return code 8 when requesting that storage be logically varied offline. This code indicates that the requested storage range contains permanently resident storage.

00000704

The system received an unexpected return code when requesting that storage be logically varied offline.

00000705

The system failed to establish a recovery environment.

00000706

The system received an unexpected response code for a Store Extended Storage Usability Map command from the service processor.

00000707

The system received an unexpected return code for a Store Extended Storage Usability Map command from a service processor routine.

xxxx0B01

Processing for the DISPLAY MATRIX command received a nonzero return code.

xxxx0B02

Processing for the DISPLAY MATRIX command tried to issue a message, but could not find the associated message text.

xxxx0B04

The system received a nonzero return code from the ESTAE macro. *xxxx* is the return code.

xxxx0C01

A command identified a processor on which it is to run. The processor identifier is not in the system table of identifiers.

xxxx0C02

Reconfiguration message processing returned a nonzero return code to reconfiguration.

xxxx0D01

The system could not establish a recovery environment.

xxxx0D02

The system tried to call reconfiguration message processing, but an error occurred.

00000E01

Reconfiguration message processing received an incorrect address for the message buffer.

00041001

Processing for the VARY PATH command received an unidentified or failing return code from reconfiguration message processing. The message text was too long.

00081001

Processing for the VARY PATH command received an unidentified or failing return code from reconfiguration message processing. The return code indicates that reconfiguration message processing was to issue a WTOR macro and await a reply, but no replies exist in the static message area.

000C1001

Processing for the VARY PATH command received an unidentified or failing return code from reconfiguration message processing. The number of message inserts was incorrect.

00101001

Processing for the VARY PATH command received an unidentified or failing return code from reconfiguration message processing. The return code indicates that the system could not establish a recovery environment.

00141001

Processing for the VARY PATH command received an unidentified or failing return code from reconfiguration message processing. The return code indicates that the message buffer area could not be obtained.

00181001

Processing for the VARY PATH command received an unidentified or failing return code from reconfiguration message processing. The return code indicates that the message buffer identifier was incorrect.

001C1001

Processing for the VARY PATH command received an unidentified or failing return code from reconfiguration message processing. The return code indicates that an abend occurred.

xxxx1201

Processing for channel path reconfiguration received a nonzero return code.

xxxx1202

Processing for channel path reconfiguration received a nonzero return code during vary processing.

xxxx1204

Processing for channel path reconfiguration detected an incorrect post code during vary processing.

00001501

Processing for vary path reconfiguration received an unexpected return code.

00001502

Processing for vary path reconfiguration received an unexpected return code. The system was processing a request to bring online a Teleprocessing (TP) device with active I/O.

00001503

Processing for vary path reconfiguration received a nonzero return code indicating one of the following errors:

- The system was unable to obtain enough storage to process the online request.
- The system encountered an unrecoverable program error.

00001504

The operator replied CANCEL to message IEE717D, then one of the following occurred:

- The system encountered a programming error while processing a request to bring a path online.
- Processing for vary path reconfiguration encountered a programming error. The pointer to the current vary request block is 0.

00001505

Processing for vary path reconfiguration received an unidentified or failing return code.

***xxxx*1601**

Reconfiguration requested virtual storage. The request failed.

xxxx

The GETMAIN return code.

***xxxx*1602**

Processing to force a channel path offline encountered an error.

xxxx

The last return code encountered.

***xxxx*1603**

A service processor failure occurred.

xxxx

The last service processor call return code.

00001604

A service processor command is incorrect.

***xxxx*1605**

Processing to force a channel path offline received an unidentified service processor response code.

xxxx

The service processor response code.

***xxxx*1606**

The service processor took more than 45 seconds to process a request.

xxxx

The last service processor call return code.

***xxxx*1701**

Reconfiguration requested virtual storage. The request failed.

xxxx

The GETMAIN return code.

***xxxx*1702**

A service processor failure occurred.

xxxx

The service processor response code.

***xxxx*1801**

Reconfiguration received a nonzero return code from an ESTAE macro.

xxxx

The return code.

***xxxx*1904**

Reconfiguration received a nonzero return code from an ESTAE macro.

xxxx

The return code.

***xxxx*1A01**

Reconfiguration received a nonzero return code from an ESTAE macro.

xxxx

The return code.

***xxxx*1A02**

Reconfiguration called the service processor, but the service processor did not return information.

xxxx

The response code from the service processor.

***xxxx*1B01**

Reconfiguration received a nonzero return code from an ESTAE macro.

xxxx

The return code.

***xxxx*1B02**

Reconfiguration called the service processor, but the service processor did not return CHP information.

xxxx

The response code from the service processor.

***xxxx*1C01**

Reconfiguration received a nonzero return code from an ESTAE macro.

xxxx

The return code.

***xxxx*1C02**

A reconfiguration call to the service processor failed.

xxxx

The response code from the service processor.

xxxx2001

Reconfiguration could not set up an ESTAE environment.

xxxx2002

Reconfiguration message processing could not find a message identifier.

xxxx2003

Reconfiguration message processing found that the number of inserts received in the parameters does not match the message definition.

xxxx2004

Reconfiguration message processing found that the specified message does not fit into the 72-byte buffer.

xxxx2005

Reconfiguration message processing found that the parameters passed to it specified more than 4 bytes for the length of a table insert or a hexadecimal or decimal insert.

xxxx2006

Reconfiguration message processing found that the parameters passed to it specified a table insert that was beyond the insert table in the message definition.

***xxxx*211C**

A reconfiguration call to the service processor did not return information; the reason and response codes were either not recognized or expected. Reconfiguration records diagnostic information in the system

diagnostic work area (SDWA), in the variable recording area (VRA), or for CPU/VF reconfiguration, SYMREC. Reconfiguration returns control to the caller with return code X'1C'.

xxxx
The reason or response code.

_xxxx_2120
Reconfiguration requested virtual storage. The request returned a nonzero return code. Reconfiguration records diagnostic information in the SDWA, in the VRA, or for CPU/VF reconfiguration, SYMREC. Reconfiguration returns control to the caller with return code X'20'.

xxxx
The GETMAIN return code.

00002128
Reconfiguration received an incorrect request. The request is incorrect for one of the following reasons:

- The parameter list control block identifier or version number was incorrect.
- The function code was unrecognized.
- The side information block control block identifier or version number was incorrect.

0000212C
Reconfiguration was running on a central processor that does not support the service processor architecture.

_xxxx_2201
Reconfiguration received a nonzero return code from an ESTAE macro.

xxxx
The ESTAE return code.

_xxxx_2202
Reconfiguration received an incorrect function code.

xxxx
The incorrect function code.

_xxxx_2281
Reconfiguration received a nonzero return code.

xxxx
The return code.

_xxxx_2282
Reconfiguration requested virtual storage. The request returned a nonzero return code.

xxxx
The GETMAIN return code.

_xxxx_22C1
Reconfiguration received a nonzero return code from a service processor call SVC.

xxxx
The return code.

_xxxx_22C2
Reconfiguration received an unexpected response from the service processor.

xxxx
The service processor response.

xxxx2302
The system called reconfiguration message processing; an error occurred.

xxxx2402
The system called reconfiguration message processing; an error occurred.

xxxx2502
The system called reconfiguration message processing; an error occurred.

xxxx2602
> The system called reconfiguration message processing; an error occurred.

xxxx2702
> The system called reconfiguration message processing; an error occurred.

xxxx2802
> The system called reconfiguration message processing; an error occurred.

xxxx2902
> The system called reconfiguration message processing; an error occurred.

xxxx2A02
> The system called reconfiguration message processing; an error occurred.

xxxx3232
> The ESTAE recovery routine cannot be established.

System action

The system:

- Frees all resources related to the reconfiguration command.
- Writes a logrec data set error record.
- May issue message IEE174I or IEE521I.
- Writes a dump.

Operator response

Enter the command again. If the command fails again, look at message IEE521I. Depending on the text of message IEE521I, do the following:

STATUS NOT OBTAINED: SERVICE PROCESSOR FAILURE
> Contact hardware support. Provide the logrec data set error record.

STATUS NOT OBTAINED: SERVICE PROCESSOR CALL FAILED
> Contact the system programmer.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and the logrec data set error record.

Source

Reconfiguration

0B8

Explanation

A START, MOUNT, or LOGON command requested the creation or initialization of a new address space. The system detected an error while processing the command. A hexadecimal reason code in register 15 explains the error:

Code
> **Explanation**

04
> The command code in the command scheduling control block (CSCB) for the START, MOUNT, or LOGON command was incorrect.

08
> The system tried to build a task I/O table (TIOT) for the START, MOUNT, or LOGON processing, but failed.

0C

While processing the START, MOUNT, or LOGON command, the system could not open or write to an internal reader.

10

Processing to initialize the address space returned an undefined return code; the defined codes are 0 and 4.

14

The newly created address space cannot be made nonswappable.

18

To create the requested address space, the system issued a REQSWAP SYSEVENT macro. The macro failed.

1C

The newly created address space did not initialize completely.

20

Dynamic allocation or unallocation failed for an internal reader.

System action

The system:

- Ends the START, MOUNT, or LOGON command.
- Writes a dump.
- Writes a logrec data set error record.
- Issues messages. For a START or MOUNT command, the system issues message IEE824I.

System programmer response

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support Center. Provide the dump and the logrec data set error record.

Source

Master scheduler

0B9

Explanation

A START, MOUNT, or LOGON command requested creation or initialization of an address space. The started task control (STC) queried the master subsystem to determine if a subsystem was started. STC received a return code that was not valid from the master subsystem.

System action

The system:

- Ends the START, MOUNT, or LOGON command.
- Writes a dump.
- Writes a logrec data set error record.
- Issues messages. For a START or MOUNT command, the system issues message IEE824I.

System programmer response

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support Center. Provide the dump and the logrec data set error record.

Source

Master scheduler

0BA

Explanation

Started task control was processing a START, MOUNT, or LOGON command and issued a request to a subsystem. The subsystem or subsystem interface (SSI) returned an incorrect return code, which is contained in Register 15.

Valid return codes are:

- 0 - Request processed by a subsystem.
- 4 - Subsystem does not support the requested function.
- 8 - Subsystem exists, but is not up.
- C - Subsystem does not exist.

Invalid return codes are:

- 10 - Function not completed - disastrous error
  - SSOB unavailable (for example, SSOB pointer invalid)
  - SSIB unavailable (for example, SSIB pointer invalid)
  - The JES detected an abend or other major error

  Note: In most cases, the 0BA abend with return code 10 will have been preceded by another error - usually an abend. If this is the case, then the 0BA should be ignored and the preceding error (or abend) should be researched and resolved. If no preceding abend is found, check to see if anything was written to the logrec data set.

- 14 - Logical error
  - SSOB block identifier not = "SSOB"
  - SSOB length invalid
  - SSIB block identifier not = "SSIB"
  - SSIB length invalid
- Any value other than those previously listed.

Note: In certain cases in which the subsystem **must** be available to process the request, '0' will be considered to be the only valid return code.

System action

In started task control, if the command is START, MOUNT, or LOGON the system issues message IEE824I and ends the START, MOUNT, or LOGON task. In the initiator, the system issues message IEF187I and ends the job. The system writes a logrec data set error record. The system may write an SVC dump.

Operator response

Enter the command again. If it fails again, contact the system programmer.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump, if available, and the logrec data set error record.

Source

Master scheduler or initiator/terminator

Explanation

During initialization of a job step or processing of a START or LOGON command, the initiator issued an ATTACH macro to attach the job step task, the started task, or the LOGON task. The ATTACH failed.

System action

The initiator is abnormally ended causing failure of the job, START or LOGON. Register 15 contains the return code from ATTACH.

Operator response

Retry the command. If the problem persists, tell the system programmer.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center, providing the SVC dump and the logrec data set error records.

Source

Initiator/terminator

0Cx

Explanation

A program interruption occurred, but no routine had been specified to handle this type of interruption. See the instruction description in *Principles of Operation* to find out how the instruction stops processing for the error condition.

The last digit of this completion code is a hexadecimal number that indicates the cause of the program interruption. Each X'0Cx' system completion code has a reason code, which in most cases equals the last digit. X'0C4' however, has several reason codes.

Code
   Explanation

0C1
   Operation exception. The reason code is 1.

0C2
   Privileged-operation exception. The reason code is 2.

0C3
   Execute exception. The reason code is 3.

0C4
   One of the following exceptions or errors occurred:

   4
      Protection exception or software-detected protection error. The key of the storage area that the running program tries to access is different from that of the running program. The key of the running program can be obtained from the PSW key field. The key of the storage can be obtained using the IPCS LIST subcommand if the DISPLAY(MACHINE) option is in effect. The DISPLAY(MACHINE) option is not the IPCS-supplied default and must be enabled by explicitly asking for the data or as a consequence of having used SETDEF to make the DISPLAY(MACHINE) option the default. The programmer should determine whether the program is running with the correct key or whether the storage address is set up correctly.

Software-detected protection errors occur when the system, while processing a program interrupt, detects that the storage key of the allocated storage area being accessed is different from that of the running program. For software-detected protection errors, SDWAOPIC will be a non-zero value other than 4. Unlike protection exceptions, these can occur for storage that is allocated but is still in first-reference state. In this case, IPCS LIST will not be able to display the storage or its storage key. IPCS RSMDATA reports can be used to display the storage key of the allocated storage. Use report types VIRTPAGE for 31-bit storage including data spaces and HIGHVIRT for 64-bit storage.

The protection exception might have occurred when the program referenced a page that is protected with the PGSER PROTECT or IARV64 PROTECT service, or is defined as shared by the IARVSERV or IARV64 service with a view of read-only.

10

Segment-translation exception. This error is caused by one of the following:

- A program that was running disabled attempted to reference storage while the page table for that storage was paged out. To correct the error, page-fix the storage before a program running disabled attempts to reference it.
- A program attempted to reference storage that had not been obtained. To correct the error, allocate the storage before attempting to reference it.
- A program running in a subspace attempted to reference storage that was not accessible to the subspace at the time of error. To correct the error, ensure that the program running in a subspace references only the storage assigned to that subspace, or storage that can be referenced by all subspaces.
- A program attempted to reference restricted use common service area (RUCSA) storage that was not accessible to the address space at the time of the error. For more information, see Restricted use common service area (RUCSA/extended RUCSA) in *z/OS MVS Initialization and Tuning Guide*.

11

Page-translation exception. This error is caused by one of the following:

- A program that was running disabled attempted to reference storage while that storage was paged out. To correct the error, page-fix the storage before a program running disabled attempts to reference it.
- A program attempted to reference storage that had not been obtained. To correct the error, allocate the storage before attempting to reference it.
- A program running in a subspace attempted to reference storage that was not accessible to the subspace at the time of error. To correct the error, ensure that the program running in a subspace references only the storage assigned to that subspace, or storage that can be referenced by all subspaces.
- SMS abend. The reason code is X'12C'.

2B

ASTE-validity exception. This error is caused by one of the following:

- During access-register translation, except as in the case of the following bullet, the access-list entry used designates an ASN-second-table entry in which bit 0 is not zero. The access-list entry is the one designated by the access register used.
- During access-register translation of ALET 1 by BRANCH IN SUBSPACE GROUP, the subspace-ASTE origin (SSASTEO) in the dispatchable-unit control table designates an ASN-second-table entry in which bit 0 is not zero.
- During a subspace-replacement operation, the subspace-ASTE origin (SSASTEO) in the dispatchable-unit control table designates an ASN-second-table entry in which bit 0 is not zero.

38

ASCE Type exception. This error is caused by one of the following:

- A program attempted to reference storage that had not been obtained. To correct the error, allocate the storage before attempting to reference it.
- A program running in 64-bit addressing mode used a 31-bit pointer that had the high order bit on.

Note: Programs running in 31-bit mode using 4-byte pointers often use the high order bit of a 4-byte pointer to indicate 31-bit addressing mode, versus 24-bit mode. Also, certain instructions will set the high order bit on in registers to indicate addressing mode.

- A program running in 64-bit addressing mode loaded a 31-bit pointer into a 64-bit register and did not clear the high half of the register. To correct the error, ensure that the program running in 64-bit addressing mode clears the 33 high-order bits of any register when loading a 31-bit pointer into that register.
- A program that was running disabled attempted to access storage that was not obtained as DREF.

39

Region-First exception. While running in 64-bit addressing mode, one of the following errors occurred:

- A program attempted to reference storage that had not been obtained. To correct the error, allocate the storage before attempting to reference it.
- A program used a 31-bit pointer that had the high order bit on.

  Note: Programs running in 31-bit mode using 4-byte pointers often use the high order bit of a 4-byte pointer to indicate 31-bit addressing mode, versus 24-bit mode. Also, certain instructions will set the high order bit on in registers to indicate addressing mode.

- A program loaded a 31-bit pointer into a 64-bit register and did not clear the high half of the register. To correct the error, ensure that the program running in 64-bit addressing mode clears the 33 high-order bits of any register when loading a 31-bit pointer into that register.
- A program that was running disabled attempted to access storage that was not obtained as DREF.

3A

Region-Second exception. While running in 64-bit addressing mode, one of the following errors occurred:

- A program attempted to reference storage that had not been obtained. To correct the error, allocate the storage before attempting to reference it.
- A program used a 31-bit pointer that had the high order bit on.

  Note: Programs running in 31-bit mode using 4-byte pointers often use the high order bit of a 4-byte pointer to indicate 31-bit addressing mode, versus 24-bit mode. Also, certain instructions will set the high order bit on in registers to indicate addressing mode.

- A program loaded a 31-bit pointer into a 64-bit register and did not clear the high half of the register. To correct the error, ensure that the program running in 64-bit addressing mode clears the 33 high-order bits of any register when loading a 31-bit pointer into that register.
- A program that was running disabled attempted to access storage that was not obtained as DREF.

3B

Region-Third exception. While running in 64-bit addressing mode, one of the following errors occurred:

- A program attempted to reference storage that had not been obtained. To correct the error, allocate the storage before attempting to reference it.
- A program used a 31-bit pointer that had the high order bit on.

  Note: Programs running in 31-bit mode using 4-byte pointers often use the high order bit of a 4-byte pointer to indicate 31-bit addressing mode, versus 24-bit mode. Also, certain instructions will set the high order bit on in registers to indicate addressing mode.

- A program loaded a 31-bit pointer into a 64-bit register and did not clear the high half of the register. To correct the error, ensure that the program running in 64-bit addressing mode clears the 33 high-order bits of any register when loading a 31-bit pointer into that register.
- A program that was running disabled attempted to access storage that was not obtained as DREF.

0C5

Addressing exception. The reason code is 5.

0C6

Specification exception. The reason code is 6.

0C7

Data exception. The reason code is whatever the data exception code is in field SDWADXC in the SDWA (systems diagnostic work area).

0C8

Fixed-point-overflow exception. The reason code is 8.

0C9

Fixed-point-divide exception. The reason code is 9.

0CA

Decimal-overflow exception. The reason code is A.

0CB

Decimal-divide exception. The reason code is B.

0CC

Exponent-overflow exception. The reason code is C.

0CD

Exponent-underflow exception. The reason code is D.

0CE

Significance exception. The reason code is E.

0CF

Floating-point-divide exception. The reason code is F.

System action

The system abnormally ends the task, unless a recovery routine was provided to handle the interruption. The hardware action is given in *Principles of Operation.*

System programmer response

Determine whether the problem program or control program was in error.

If the problem program contained an error, correct it, and run the job step again.

Source

Supervisor control

0D2

Explanation

A program check occurred; the interruption code is X'12' for a translation specification error. The error was caused by incorrect data in control registers 0 or 1 or a segment or page table. The incorrect data is due to:

- A hardware error
- Damage by a program running in key 0

See *Principles of Operation* for more information about translation specification errors.

System action

The system tries to end the task experiencing the program check. If the task cannot be ended because of the translation problems, the system tries to end the address space. If this fails, the system enters a disabled wait state, for example, wait state X'014'.

Programmer response

Correct the error. Rerun the program.

Source

Supervisor control

0D3

Explanation

A program check occurred; the interruption code is X'13' for a special operation error. See *Principles of Operation* for more information about special operation errors.

System action

The system abnormally ends the task experiencing the program check.

Programmer response

Check to see if the program issued a PC in secondary mode. Remove the Set System Mask (SSM) instruction. This instruction is not valid in the system.

Source

Supervisor control

0D4

Explanation

A program issued a Program Call (PC), Program Return (PR), Program Transfer (PT), or Set Secondary ASN (SSAR) instruction. During processing of the instruction, an address space number (ASN) translation specification exception occurred. The ASN translation exception is also known as an address space identifier (ASID) translation exception. The program interruption code if X'17'. The address space first table (AFT) or the address space second table (AST) contains incorrect data.

System action

The system abends the program that issued the PC, PR, PT, or SSAR instruction. The system writes an SVC dump or a logrec data set error record or both.

System programmer response

If a search of the problem reporting data bases does not show a fix for the problem, contact the IBM Support Center. Provide:

- The SVC dump and the logrec data set error record, which contains control registers 3, 4, and 14
- The instruction being processed by PC/AUTH when the problem occurred.

  To determine the instruction, start at the bottom of the system trace table and back up to a *PGM 017 entry. Continue backing up to the first PC, PT, or SSAR entry, which is the instruction that was being processed at the time of the failure.

Source

Program Call/authorization (PC/AUTH)

0D5

Explanation

A program issued a Program Call (PC), Program Return (PR), Program Transfer (PT) or Set Secondary ASN (SSAR) instruction for cross memory access. One of the following occurred:

- An address space first table index (AFX) translation exception (program interruption code X'20') occurred. The value in the address space first table (AFT) corresponding to the address space identifier (ASID) is not valid. Either no such address space exists or the system had swapped it out.
- An address space second table index (ASX) translation exception (program interruption code X'21') occurred. The value in the address space second table (AST) corresponding to the ASID is not valid. Either no such address space exists or the system had swapped it out.
- The cross memory access is to a swappable address space, which is a violation of MVS cross memory access protocol.

System action

For program interrupt code X'20' or X'21', the system attempts to correct any errors in the AFT. The system abnormally ends the program that issued the PC, PR, PT or SSAR instruction.

If the error was cross memory I/O in progress for a swappable address space, the system abnormally ends the program that was waiting for the I/O to complete. The system continues swapping out the address space.

If the error was an incorrect cross memory reference to a swappable address space, the system abends that address space. For example, if additional pages are to be fixed in a logically swapped address space, the system ends the logically swapped address space. Check the return code located in register 15 for additional information:

Return Code
  Meaning

04001300
  An enabled caller suffered a page fault due to an invalid attempt to reference storage in a logically swapped out address space.

2D001310
  A disabled caller suffered a page fault due to an invalid attempt to reference storage in a logically swapped out address space.

05000302
  An enabled caller suffered a segment fault due to an invalid attemp to reference storage in a logically swapped out address space.

4F000510
  An enabled caller suffered a page fault due to an invalid attempt to reference storage in a data space owned by a logically swapped out address space.

50000511
  A disabled caller suffered a page fault due to an invalid attempt to reference storage in a data space owned by a logically swapped out address space.

System programmer response

- For a program interrupt code X'20' or X'21':

  - Look for a problem with the PC/AUTH macros that established the cross memory service. Correct any problems.
  - Check the failing program for logic that changes general register 3, 4, or 14.
  - Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

- For cross memory access to a swappable address space:

  - Ensure that the address spaces that provide cross memory services are non-swappable.

– Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump.

Source

Either:

- Real storage manager (RSM)
- Program Call/Authorization (PC/AUTH)

0D6

Explanation

A program issued a Program Call (PC) instruction that specified an incorrect PC number. A hexadecimal reason code or interrupt code explains the error:

Code
> **Explanation**

00
> The PC number specified in the PC instruction is undefined.

Code
> **Explanation**

22
> A linkage index (LX) translation exception occurred; the program interruption code is X'22'.

23
> An entry table (EX) translation exception occurred; the program interruption code if X'23'.

26
> Linkage first index translation exception.

27
> Linkage second index translation exception. This can be caused by using a PC number which is no longer valid.

2E
> An LSTE-Sequence Exception interrupt occurred. The linkage-second-table-entry sequence number in bits 0-31 of 64-bit general register 15 for a PROGRAM CALL instruction does not have the required value.

System action

The system abends the program that issued the PC instruction. The system writes an ABEND dump.

System programmer response

Look for a problem with the PC/AUTH macros that established the cross memory service being used by the failing program.

For reason code X'00', register 14 points to the next instruction after the PC instruction. Bit 31 of register 14 is the PSW problem state bit at the time the PC instruction was issued. Registers 0, 2, 5-11, and 13 contain the values they had when the PC instruction was issued.

If the program that abended is a TCPIP application, see *z/OS Communications Server: IP Diagnosis Guide*.

If no problems were found or the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Source

Program Call/authorization (PC/AUTH)

0D7

Explanation

A problem occurred while the system processed a Program Return (PR), Program Transfer (PT) or Set Secondary ASN (SSAR) instruction, as follows.

- A program issued the PT instruction, but a primary authority exception occurred. The primary address space is not authorized to issue a PT instruction to the target address space.

  Either:

  - The authorization index (AX) is greater than the number of elements in the target address space's authorization table (AT)
  - The P bit is off in the target address space's AT. The program interruption code is X'24'.

- A program issued the SSAR instruction, but a secondary authority exception occurred. The primary address space is not authorized to issue an SSAR instruction to the target address space.

  Either:

  - The AX is greater than the number of elements in the target address space's AT.
  - The S bit is off in the target address space's AT. The program interruption code is X'25'.

- A program issued the PR instruction, but a secondary authority exception occurred. The primary address space is not authorized to issue an PR instruction to the target address space.

  Either:

  - The AX is greater than the number of elements in the target address space's AT.
  - The S bit is off in the target address space's AT. The program interruption code is X'25'.

System action

The system abended the program that issued the PR, PT or the SSAR instruction.

System programmer response

This error might be normal and can occur if an address space involved in the cross memory environment has ended. If the address space is still active, look for a problem with the PC/AUTH macros that established the cross memory service being used by the failing program.

If no problems were found or if the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, and the abend is not expected (e.g. the unit of work owning the cross memory resources was not ended), contact the IBM Support Center.

Source

Program Call/authorization (PC/AUTH)

0D8

Explanation

A space switch exception occurred. A program issued a Program Call (PC), Program Return (PR), or Program Transfer (PT) instruction, but the cross memory resource ownership task in the target address space has ended. The target address space is not the home address space of the program that issued the PC or PT instruction. The program interruption code if X'1C'.

System action

The system abends the program that issued the PC, PR, or PT instruction.

System programmer response

Look for a problem with the PC/AUTH macros that established the cross memory service being used by the failing program. Correct any problems in the program and resubmit it.

If no problems were found or if the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Program Call/authorization (PC/AUTH)

0D9

Explanation

One of the following system errors occurred:

- A program check occurred because of a hardware problem.
- A program running storage key zero caused data damage.

System action

The system abnormally ends the current task.

Programmer response

Rerun the job.

Source

Program Call/authorization (PC/AUTH)

0DA

Explanation

A program issued a Program Call (PC) instruction and a PC translation specification exception occurred. The program interruption code is X'1F'.

Either the linkage table (LT) or the entry tables (ET) contain incorrect data. This can be either an application program or system program error.

System action

The system abended the program that issued the PC instruction. The system may write an SVC dump for this abend.

Operator response

If requested by the system programmer, set a SLIP trap to obtain an SVC dump. Specify the address space for the failing program as the first address space identifier (ASID) in the ASIDLIST parameter as follows:

```
SLIP SET,ID=C0DA,COMP0DA,ACTION=SVCD,ASIDLIST=
 (02),END
```

System programmer response

Do the following:

1. Check the addressing mode of the PC routine. If it is 24-bit, ensure that there is no extraneous data in bits 1-7 of the address.
2. Obtain the SVC dump, if one was written. If no dump was produced, but the problem can be recreated, ask the operator to set a SLIP trap to obtain the dump.
3. In the SVC dump, determine the PC number of the PC instruction processing at the time of the failure by doing the following:
   a. Starting at the bottom of the system trace table, back up to to a *PGM 01F entry.
   b. Continue backing up to the first PC entry. This is the PC entry for the instruction that was being processed. The PC number is in the UNIQUE-1 column.
4. If the failing PC instruction was for an ETCRE or ETCON macro in an installation-provided program, obtain the following data to fix the problem:
   • The input to the ETCRE macro
   • The parameters on the ETDEF macro, if used.
5. If the failing PC instruction is in an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group for the module. Provide the SVC dump.

Source

Program Call/authorization (PC/AUTH)

0DB

Explanation

A program check was detected. An interruption code of X'15', an operand exception, has occurred.

System action

The task ends.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the program listing for the job, and all printed output and output data sets related to the problem.

Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following and run the job step again. Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

• SYSABEND DD statement
• SYSMDUMP DD statement
• SYSUDUMP DD statement

Programmer response

This is a system error. Run the job again.

Source

Recovery termination manager (RTM)

0DC

Explanation

The recovery termination manager (RTM) encountered an unrecoverable error while processing a functional recovery routine (FRR) stack. RTM issues this abend when:

- It detects a problem while processing another abend.
- It detects that critical fields in important control blocks for the address space or system are overlaid. These control blocks include the:
  - Address space control block (ASCB)
  - Extended status block (XSB)
  - Request block (RB)
  - Task control block (TCB)

RTM ends the address space. This abend code is found in the ASCBMCC field in the ASCB for the ended address space and in message IEF402I.

A hexadecimal reason code in field ASCBARC of the ASCB and in message IEF402I explains the error:

Code
   Explanation

04

RTM recovery received control after RTM FRR processing encountered an unrecoverable error and abnormally ended the address space.

08

RTM FRR processing that is not covered by an FRR encountered an unrecoverable error. RTM's default recovery received control and abnormally ended the address space.

0C

During second level interrupt handler (SLIH) processing, RTM detected an incorrect value in the TCBTCBID field of the current TCB. RTM's recovery received control and abnormally ended the address space.

10

During SLIH processing, RTM found 0 in the TCBRBP field. RTM's recovery received control and abnormally ended the address space.

14

During SLIH processing, RTM detected an invalid value for the current FRR pointer in PSASTAK (FRRSCURR). Due to this damage, RTM can not determine which FRRs are available to the current unit of work. A LOGREC record is written that shows the damaged and corrected versions of PSASTAK, and the current Address Space is abnormally ended.

System action

The system abnormally ends the address space, places the abend code and reason code into the ASCB for the ended address space, and issues message IEF402I.

System programmer response

Do the following:

1. Obtain the reason code from message IEF402I or from field ASCBARC of the ASCB.
2. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Recovery termination manager (RTM)

0E0

Explanation

A program check occurred. The hexadecimal interruption code is as follows:

Code

    Explanation

18

A transaction constraint exception occurred.

1D

A square root exception occurred.

1E

An unnormalized operand exception occurred.

28

Reserved bit positions in an access list entry token (ALET) were nonzero.

29

An ALET specified an access list entry (ALE) that is not valid.

2A

An ALET specified a previously deleted ALE.

2B

Either an ALE specified a data space that is not valid or there is an ASTE validity check for an address space on an access list.

2C

An ALE refers to a sequence number in the address space second table entry (ASTE). The sequence number is not equal to the number in the ALE.

2D

A private ALE is specified, but the current extended authorization index (EAX) is not authorized to the target address space.

2F

An ASTE-Instance Exception interrupt occurred. An ASTE instance number associated with a PROGRAM TRANSFER WITH INSTANCE instruction, a PROGRAM RETURN instruction, or a SET SECONDARY ASN WITH INSTANCE instruction, does not have the required value.

30

A stacking instruction was issued when the linkage stack was full.

31

An unstacking instruction such as PR or EREG was issued when the linkage stack was empty.

32

A linkage stack specification interrupt occurred.

33

The hardware or an unstacking operation found a linkage stack entry (LSE) type that is not valid.

34

A Program Return (PR) instruction was issued against a linkage stack entry that has the unstack suppression bit set. The system sets this bit in a linkage stack entry to prevent SVC routines from unstacking entries they did not add to the stack.

nnn

An unexpected interrupt code. A possible cause of this is that the level of MVS is not the correct one for the hardware.

System action

The system abnormally ends the task experiencing the program check, unless the task provides recovery to handle the interruption. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=0E0,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If a logrec data set error record was not written for the program check, ask the operator to set a SLIP trap to obtain an SVC dump.
2. Look at the program status word (PSW) at the time of error. Use the address in the PSW to identify the module that experienced the X'0E0' program check.

   - For an installation-provided module, continue diagnosis with the module.
   - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide, if available, the SVC dump and the logrec data set error record.

Programmer response

Do one of the following:

- For reason code X'30', determine if your program has improperly added entries to the linkage stack. For example, unintentionally executing a BAKR many times can fill the linkage stack. If your program is not improperly adding entries to the linkage stack, then use an LSEXPAND macro to increase the size of the linkage stack.
- For reason code X'32' or X'33', see *Principles of Operation.*
- For other reason codes, determine if the problem program or the system was in error. If the problem program contained an error, correct it, and run the job step again.

Source

Supervisor control

0E1

Explanation

An error was encountered while processing the first EXCP against a virtual I/O (VIO) data set. Register 15 contains a hexadecimal reason code:

Code
  Explanation

2*xx*
  RSM was unable to "assign null" the virtual track buffer or the DSPCT map. Where *xx* is:

  xx
    Explanation

  04
    An assign (move-in) error occurred. The page identified by the VCBVSA field is not available.

  08
    A write (move-out) error occurred. The page identified by the VCBVSA field is fixed in real storage and cannot be written to the data set in auxiliary storage.

  0C
    The request was incorrect; it was not an assign or a write request.

10

The page identified by the VCBVSA field is not written to the data set because it was not brought into real storage by the prior read request or because data in the page has not been modified.

20

The page identified by the VCBVSA field belongs to an LPID other than the LPID in the VCBLPID field.

40

The virtual storage address in the VCBVSA field was incorrect. A GETMAIN macro was not issued for the page identified by the VCBVSA field.

80

An assign error occurred. The page identified by the VCBVSA field was read previously but was not disconnected by a move-out or move-out-null request before the current read (assign) operation.

3*xx*

The auxiliary storage manager (ASM) was unable to ASSIGN a logical group for this VIO data set. Where *xx* is:

xx

Explanation

1C

One of the following occurred:

- ASM could not obtain storage to process the request.
- ASM could not assign a logical group because the requested maximum relative page number was too large.

System action

The input parm list (IDAVOP1), the DSPCT header (IDAVBPH) and SWA are dumped to the SYS1.DUMP data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

System error. Rerun the job.

Source

DFSMSdfp

0E2

Explanation

The error was detected while processing the first EXCP for the VIO data set after a restart. Register 15 contains one of the following hexadecimal reason codes:

Code
   Explanation

2*xx*

RSM was unable to "assign null" the virtual track buffer or the DSPCT map. See code 0E1 for an explanation of *xx*.

System action

The input parm list (IDAVOP1), DSPCT header (IDAVBPH) and SWA are dumped to the SYS1.DUMP data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

System error. Rerun the job.

Source

DFSMSdfp

0E3

Explanation

The error occurred while processing a VIO data set. Register 15 contains one of the following hexadecimal reason codes:

Code
    Explanation

004
    An incorrect RBA was passed to VBP. Probable causes of error code are (1) DEB with extent descriptions that do not fall within the allocated extents as described in the virtual data set control block (VDSCB) (2) EXCP was issued to read the format 1 DSCB on the volume.

2*xx*
    RSM was unable to assign or move out pages in the virtual track buffer. See code 0E1 for an explanation of *xx*.

System action

The following are dumped to the SYS1.DUMP data set:

- Input parameter list (IDABUFC)
- DSPCT header (IDAVBPH)
- SWA
- LSQA
- The region (in some cases)

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

System error. Rerun the job.

Source

DFSMSdfp

0E4

Explanation

The error occurred while trying to scratch a VIO data set.

Register 15 contains one of the following hexadecimal reason codes:

Code
    Explanation

3*xx*
    ASM could not RELEASE the logical group for this data set. Where xx is:

    xx
        Explanation

    04
        Incorrect LGN.

    1C
        Unable to obtain storage to process request.

    20
        Incorrect operation code is supplied in the auxiliary storage manager control area (ACA).

    28
        Incorrect identifier type when an LGN was given, but an S-type symbol is required.

System action

The DSPCT header is dumped to the SYS1.DUMPxx data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

System error. Rerun the job.

Source

DFSMSdfp

0E5

Explanation

Unable to disconnect the virtual track buffer from the VIO data set.

Register 15 contains one of the following hexadecimal reason codes:

Code
    Explanation

2*xx*
    RSM was unable to MOVE OUT pages in the virtual track buffer. See code 0E1 for an explanation of *xx*.

System action

The DSPCT header and SWA are dumped to the SYS1.DUMP data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

System error. Rerun the job.

Source

DFSMSdfp

0E6

Explanation

Unable to process against a VIO data set that has already been scratched.

System action

The VDSCB (IDDVDSCB) is dumped to the SYS1.DUMP data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

Do not access a scratched data set.

Source

DFSMSdfp

0E7

Explanation

The error occurred while journaling the DSPCT header (IDAVBPH) at step end or at checkpoint. Register 15 contains one of the following hexadecimal reason codes:

Code
    Explanation

2*xx*
    RSM was unable to ASSIGN or MOVE OUT pages in the virtual track buffer. See code 0E1 for explanation of *xx*.

3*xx*
    ASM was unable to SAVE the logical group for this data set. Where *xx* is:

    xx
        Explanation

    04
        Incorrect LGN.

    14
        Unrecoverable error occurred while writing to VIO journaling data set.

1C
> Unable to obtain storage to process request.

20
> Incorrect operation code is supplied in the auxiliary storage manager control area (ACA).

2C
> Indeterminate error has occurred.

System action

The DSPCT header (IDAVBPH) and SWA are dumped on the SYS1.DUMP data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

System error. Rerun the job.

Source

DFSMSdfp

0E8

Explanation

The error occurred while processing the VIO data sets for the job after an abnormal system or job step task failure. Register 15 contains one of the following hexadecimal reason codes:

Code
> **Explanation**

3*xx*
> ASM was unable to release the logical group for this data set. See code 0E4 for an explanation of *xx*.

System action

The input parm list (RMPL) and the ASCB are dumped to the SYS1.DUMP data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

System error. Rerun the job.

Source

DFSMSdfp

0F0

Explanation

When the system tried to process a machine check interruption, an error occurred when the function recovery routine (FRR) stack was active.

System action

The system issues error messages. The system writes an SVC dump. The system abnormally ends the task that was running when the machine check interruption occurred.

Programmer response

Run the job again.

Source

Machine check handler (MCH)

0F1

Explanation

While processing a security request, JES3 received an unexpected return code. Register 15 contains a hexadecimal reason code that indicates the type of error.

For reason codes X'01', X'02', X'03', X'04', or X'07':

- Register 5 contains the offset in module IATGRSC where the error was detected.
- Register 6 contains the logical IATXSEC index, which indicates the type of processing in progress when the security request was made.
- Register 8 contains the address of the security check parameter list.

Code
    Explanation

01
    IATUX58 exit returned an incorrect return code in register 2.

02
    System authorization facility (SAF) returned an incorrect return code in register 2. Register 3 contains the security product return code, and register 4 contains the security product reason code.

03
    IATUX59 exit returned an incorrect return code in register 2.

04
    IATGRSC module issued this return code to cause entry into the caller's recovery routine.

05
    The system rejected a security request for authorization to create a SYSIN data set.

06
    The system rejected a security request for authorization to create a SYSOUT data set.

07
    A multi-line write to operator text extraction service, IEAVM703, returned a non-zero return code in register 2. Register 3 contains the reason code.

08
    The JES3 security subtask received incorrect input.

09
    Unexpected return code from a SAF call in module IATISEN.

System action

The security request processing is ended.

Operator response

Request a dump of the address space, save all associated print output, and notify the system programmer.

Programmer response

Depending on the reason code, do the following:

- For reason code X'01', code a valid return code in installation exit IATUX58.
- For reason code X'03', code a valid return code in installation exit IATUX59.
- For reason codes X'02', X'04', X'05', X'06', X'07', and X'08', search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

JES3

0F2

Explanation

An error occurred when the system was processing an I/O interrupt. An I/O recovery routine failed.

System action

The system abnormally ends the current task.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Rerun the job.

Source

Input/output supervisor (IOS)

0F3

Explanation

A hard machine check interruption occurred.

System action

The system abnormally ends the task that was running when the machine check interruption occurred.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

If the data on external storage devices is still valid, run the job step again. If the data is not valid, notify the system programmer.

Source

Machine check handler (MCH)

0F4

Explanation

An error was detected by some system components. The ABEND reason code (in register 15) is the service return code. The service reason code is in register 0 and its first byte can be used to aid in identifying the reporting component:.

- X'04' - IGWSPZAP
- X'71' - CICS VR Logger
- X'77' - CICS VR Logger
- X'7E' - Storage Management Subsystem
- X'83' - Program Management Binder
- In most other cases, DFSMSdfp is the source

System action

Most commonly, recovery routines retry to allow the failing module to return to its caller. If DFSMS or CICS VR Logger issued the abend, an SVC dump will usually have been taken. A failure in the binder will ordinarily produce an extensive snap dump if an IEWDUMP DD has been allocated. Failure information for IGWSPZAP can be captured through one of the following:

- SYSUDUMP
- SYSABEND
- SYSMDUMP

System programmer response

See the problem determination information for this abend. In some cases a SLIP trap on 0F4 may catch a situation from which the system will be able to recover completely. The SLIP 0F4 should be ignored in these cases if there are no other symptoms of a problem.

Programmer response

System error. Rerun the job providing any diagnostic DD indicated earlier under System Action.

Problem determination

If the error recurs and the program is not in error, look for a logrec record related to this abend. In the logrec record, look for the abend return and reason codes. See *z/OS DFSMSdfp Diagnosis* for a description of the return and reason codes. If none found, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the SYSOUT output for the job, and the logrec data set error record.

Source

DFSMSdfp, Binder, SMS, SPZAP, VSAM RLS, TVS, or CICS VR Logger

Module

Many modules.

0F6

Explanation

During processing of a SETEVENT macro for the generalized trace facility (GTF), an error occurred. Register 15 contains a hexadecimal reason code that explains the error:

Code
> **Explanation**

00
> The issuer of the SETEVENT macro was not authorized through the authorized program facility (APF), was not in protect key 0-7, or was not in supervisor state.

04
> The parameter list passed to SETEVENT was incorrect.

08
> An incorrect address for the monitor call queue element (MCQE) was passed to SETEVENT.

0C
> The MCQE at the address passed to SETEVENT is incorrect for the function requested.

20
> The call to SETEVENT:
>
> - Attempted to add elements to an existing event directory
> - Would have resulted in multiple MCQEs.

System action

The system writes messages and a dump.

System programmer response

If an installation-provided program issued the SETEVENT, ensure that the program is authorized. Correct the error indicated by the reason code. Run the job again.

If an IBM-provided program issued the SETEVENT, collect all printed output and output data sets related to the problem. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output and the dump for the job.

Source

Generalized trace facility (GTF)

0F7

Explanation

The system found a serious error condition in the JES2 component-specific user environment (HASC*xxxx*) load modules. The REASON parameter on the ABEND macro specifies a hexadecimal reason code that further explains the error. The system records the hexadecimal reason code associated with this abend in a logrec data set record.

Code
> **Explanation**

00

A subsystem interface (SSI) function was unable to cancel an outstanding ESTAE recovery program, probably because the TRETOKEN field in the TCB recovery element ($TRE) control block was overlaid during that SSI function. Following is the text associated with this reason code: UNABLE TO CANCEL ESTAE.

04

A task attempted to acquire the lock of two distinct subsystem job blocks (SJBs); a task may lock only one SJB at a time. Following is the text associated with this reason code: ATTEMPT MADE TO LOCK TWO SJBS AT ONCE.

08

While attempting to return a common storage area (CSA) cell to the cell pool, $FRECEL routine found one of the following error conditions:

- The cell being returned does not have a valid cell control element (CCE) address at offset 0

- The cell being returned has not been allocated.

Storage has been overlaid in either the first four bytes of the cell being returned, or in the CCE associated with the cell. Following is the text associated with this reason code: INVALID/UNCLAIMED CELL ADDRESS.

0C

During a functional subsystem or functional subsystem application (FSS/FSA) disconnect, a GETMAIN failed to obtain storage from subpool 230 for a parameter list. Following is the text associated with this reason code: DISCONNECT DENIED-- GETMAIN FAILURE.

10

During the Job Termination SSI function, the final input/output table (IOT) could not be written to spool. Following is the text associated with this reason code: UNABLE TO WRITE FINAL IOT CHAIN.

14

While attempting to end processing for a job under the control of an execution batch monitor (joblet), the Job Termination SSI was unable to locate the PDDB for the job journal. (The PDDB is the control block that defines a spool data set.) Therefore, the Job Termination SSI could not nullify the joblet-related spool dataset so that it could be reused for the next joblet. Following is the text associated with this reason code: UNABLE TO FIND JOB JOURNAL PDDB.

18

The common storage $RETURN service determined that there was no previous save area address associated with the current save area. Therefore, the service was unable to return to the proper location. Following is the text associated with this reason code: NO PREVIOUS SAVE AREA FOUND.

1C

The JES2 exit effector determined that the exit was invoked from an FSS assembly environment. However, while attempting to load the address of the HFCT control block for the exit, the exit effector found that the address space was not properly initialized. Following is the text associated with this reason code: ASXBJSVT DOES NOT CONTAIN FSVT ADDRESS.

1E0

JES2 Email Delivery Services (EDS) address space was not shut down properly.

20

While attempting to write the job control table (JCT) to spool, the job termination routine received a nonzero return code, probably because of one of the following:

- An I/O error

- JCT storage was overlaid.

Following is the text associated with this reason code: UNABLE TO WRITE JCT.

24

Without holding a subsystem job block (SJB) lock, the caller attempted to obtain the job communication queues lock ($SVJLOK) that serializes communication between address spaces. Following is the text associated with this reason code: $SVJ LOCK REQUEST FAILED.

28

A TCB attempted to preempt a holder of the SJB lock while producing a dump for an abend that occurred while the SJB lock was held. Following is the text associated with this reason code: UNABLE TO OBTAIN SJB LOCK.

2C

Storage could not be obtained for the service request block (SRB) work area. Following is the text associated with this reason code: HASCDSS DATA SPACE SERVICES FAILURE.

30

HASCDSS was entered with a function other than CREATE or DELETE. Following is the text associated with this reason code: HASCDSS DATA SPACE SERVICES FAILURE.

34

The value given for the BLOCKS parameter was either negative or zero. Following is the text associated with this reason code: HASCDSS DATA SPACE SERVICES FAILURE.

38

RMTR EXIT recovery processing was entered. Following is the text associated with this reason code: HASCDSS DATA SPACE SERVICES FAILURE.

3C

FRR recovery processing was entered. Following is the text associated with this reason code: HASCDSS DATA SPACE SERVICES FAILURE.

40

The MVS macro DSPSERV failed. Following is the text associated with this reason code: HASCDSS DATA SPACE SERVICES FAILURE.

44

The MVS macro ALESERV failed. Following is the text associated with this reason code: HASCDSS DATA SPACE SERVICES FAILURE.

48

The address space control block (ASCB) for the address space that will own the data space is not equal to the current ASCB. Following is the text associated with this reason code: HASCDSS DATA SPACE SERVICES FAILURE.

4C

Incorrect $DSWA version number. Following is the text associated with this reason code: HASCDSS DATA SPACE SERVICES FAILURE.

50

JES2 SAVE/RETURN services detected an error. Following is the text associated with this reason code: CALLER ADDRESS ARRAY FILLED UP.

54

JES2 SAVE/RETURN services detected an error. Following is the text associated with this reason code: NO ENTRY IN CALLER ADDRESS ARRAY.

58

JES2 SAVE/RETURN services detected an error. Following is the text associated with this reason code: $RETURN - SAVE AREA HAS IMPROPER FORMAT.

5C

JES2 SAVE/RETURN services detected an error. Following is the text associated with this reason code: ENTERED $SSIEND WITH AN OUTSTANDING $SAVE.

60

JES2 detected an error while processing a scheduler JCL facility request. Following is the text associated with this reason code: SJF SERVICE REQUEST FAILED.

64

JES2 detected an error while grouping SYSOUT. Following is the text associated with this reason code: INVALID GROUPING STRINGS OBJECT.

68

JES2 detected an error while grouping SYSOUT. Following is the text associated with this reason code: SWBTUREQ RETRIEVE ERROR.

6C

JES2 detected an error while grouping SYSOUT. Following is the text associated with this reason code: INVALID STORAGE BLOCK POINTER.

70

JES2 detected an error while grouping SYSOUT. Following is the text associated with this reason code: SJFREQ KEYLIST ERROR.

74

JES2 detected an error while building a generic grouping token. Following is the text associated with this reason code: UNEXPECTED NUMBER OF SWBIT BUFFERS.

78

JES2 SAVE/RETURN services detected an error. Following is the text associated with this reason code: ENTERED $SSIEND WITH AN OUTSTANDING $ESTAE.

7C

JES2 detected an error while unlocking a $SJB. Following is the text associated with this reason code: SJB UNLOCK NOT BY LOCK HOLDER.

80

JES2 detected an error while freeing storage buffers. Following is the text associated with this reason code: NOT ALL PROTECTED BUFFERS $FREEBUFED.

84

The $GETHP service detected an error while freeing a task control block recovery element ($TRE). Following is the text associated with this reason code: $GETHP ERROR - ATTEMPTED TO FREE THE TRE.

88

The FRETRE service detected a loop in the cell pool chain.

8C

The GETTRE service detected an error in the $TRE cell pool chain. Following is the text associated with this reason code: GETTRE ERROR.

90

The system encountered a failure while serializing a JES2 trace table entry. Following is the text associated with this reason code: $TRACER Trace Table ENQ Error

94

Truncation of the protected buffer failed.

Following is the text associated with this reason code: UNABLE TO TRUNCATE PROTECTED BUFFER.

98

A routine in CSECT HASCRQUE detected an erroneous input parameter.

9C

An incorrect resource number was passed to the $$POST macro.

A0

JES2 detected inconsistent temporary protected buffer pointers.

A4

JES2 requested an ENQ for the SVJ lock but received an unexpected return code. The return code from ENQ is in register 2.

A8

JES2 detected a problem in an SJB. The SJB is not on the expected queue. The SJB address is in register 10.

AC

JES2 detected a problem in an SJB. The SJBQUEUE field is not valid. The SJB address is in register 10.

B0

JES2 detected a problem in an SJB. The SJB is not on the queue indicated in SJBQUEUE. The SJB address is in register 10.

B4

JES2 detected a problem in an SJB. The SJB is not on the queue indicated in SJBQUEUE. The SJB address is in register 10.

B8

Following an unrecoverable I/O error, JES2 detected that channel-end processing requested, incorrectly, to re-drive the I/O. The text associated with the reason code is: INTERNAL ERROR IN CHANNEL END PROCESSING

BC

JES2 detected a problem during a rebuild of the SJB queues. Either the $HAVT is bad, or the SVJ lock was not held at entry to the rebuild routine.

C0

The caller of SJBRQ attempted to move the SJB to a different job communication queue, but did not hold the SVJ lock.

C4

An invalid SAPID pointer was passed in the SSS2 (SAPI, IAZSSS2) SSOB extension.

C8

The fields that should be zeroes in the SSS2 (SAPI, IAZSSS2) SSOB extension were not zeros.

CC

An SJF Request error occurred on an GETDS/SAPI request.

D4

The MVS Cell Pool Service returns a non-zero return code when JES2 calls the MVS service to process $CPOOL ACTION=GET request. Following is the text associated with the reason code: $CPOOL ACTION=GET FAILED TO ALLOCATE THE CELL.

D8

The MVS Cell Pool Service returns a non-zero return code when JES2 calls the MVS service to process $CPOOL ACTION=FREE request. Following is the text associated with the reason code: $CPOOL ACTION=FREE FAILED TO FREE THE CELL.

DC

When processing a PSO SSI request, JES2 discovered that the $PSO control block is in error. Following is the text associated with the reason code: $PSO NOT VALID.

E0

An inconsistency was detected between the input parameter list (XMPLIST) supplied to $XMPOST, and the parameters specified to $XMPOST. Following is the text associated with the reason code: $XMPOST PARAMETER LIST NOT VALID.

E4

An error was encountered removing a element using $FIFODEQ which specified ABENDERR=YES. The requested element was not found on the chain. Following is the text associated with this reason code: FIFODEQ ElEMENT NOT ON QUEUE.

E8

JES2 end of memory processing was unable to access an SJB that is associated with the terminating address space. A VSMLOC for the SJB storage failed. Following is the text associated with this reason code: SJB MEMORY NOT AVAILABLE.

EC

$SUBIT request was made from an address space that does not support $SUBIT requests (not a NETSERV address space). Following is the text associated with this reason code: SUBIT, NOT A NJE SERVER ADDRESS SPACE.

F0

A request buffer queued by JES2 to a NETSERV address space does not have a valid request type (TBFTYPE or NRQEYE is not valid). Following is the text associated with this reason code: 'UNRECOGNIZED TBUF DATA.

F4

A JES2 owned subtask in the NETSERV address space has terminated in such a way that the NETSERV address space must come down.

F8

The $GETTBUF or $FRETBUF service was called from outside a NETSERV or the JES2 address space. Following is the text associated with this reason code: $FRETBUF CALLED FROM INCORRECT ADDRSPC or $GETTBUF CALLED FROM INCORRECT ADDRSPC.

FC

The $GETABLE service has located a table pair in which the JES2 table pointer points to a USER table, or the USER table pointer points to a HASP table, or a dynamic table pointer does not point to a dynamic table. The probable cause is either a mismatch of levels of the $MCT macro, or a failure to use the $PAIR macro to define a table pair. Following is the text associated with this reason code: $GETABLE - INVALID TABLE ENTRY.

100

The NETSERV early init routine (in HASCNJEX) has been entered more than once. Following is the text associated with this reason code: MULTIPLE ROUTINE CALLS.

104

The length of the message passed to the $NOTIFY service exceeds the maximum length allowed (132 bytes). Following is the text associated with this reason code: INCORRECT NOTIFY MESSAGE LENGTH.

108

Storage key of the ECB encountered by the $ECBEXIT service is 8 or greater. This implies either a bad ECB pointer was passed to $XECBSRV or an unauthorized user is attempting to use a service illegally. Following is the text associated with this reason code: $ECBEXIT - UNAUTHORIZED ECB DETECTED.

10C

JES2 (CJOBVFY service) detected an error in the parameter list passed to the System Authorization Facility (SAF) to validate the job. Following is the text associated with this reason code: JOBVALM PARM LIST ERROR.

110

JES2 (CJOBVFY service) is validating a job that is to execute locally, however the SAF token returned by JOBVALM is a submitter token. The job being processed will be purged. Following is the text associated with this reason code: JOBVALM TOKEN TYPE ERROR.

114

NJE JOB header passed to CJOBVFY is in error. Following is the text associated with this reason code: CJOBVFY NJE HEADER ERROR.

118

NJE JOB header corruption detected when trying to locate the SPOOL offload section. Following is the text associated with this reason code: NJE JOB HEADER/TRAILER CORRUPTED.

11C

ENQ error encountered while attempting to serialize SPOOL space allocation (TRKCELL routine, TRACK GROUP ALLOCATION ENQ minor name). Following is the text associated with this reason code: TBLOB ENQ ERROR.

120

ENQ error encountered while attempting to serialize CPOOL build processing (CPBUILD routine, 'cell_pool_type' CPOOL EXPAND minor name). Following is the text associated with this reason code: $CPOOL BUILD ENQ FAILED or $CPOOL EXPAND ENQ FAILED.

124

JES2 CPOOL GET service detected an update to a free cell. This update occurred after the cell had been freed. Following is the text associated with this reason code: STORAGE DEBUG CHECK FAILED.

128

JES2 CPOOL FREE service detected an alteration to a guard byte past the end of a cell. The user of the cell updated storage beyond the end of the cell. Following is the text associated with this reason code: INVALID STORAGE REFERENCE.

12C

$NSSTLOK service was called requesting shared access to a JES2 NSST lock by a subtask not known to JES2. Following is the text associated with this reason code: INCORRECT $NSSTLOK ENVIRONMENT.

130

Error releasing main storage area.

Following is the text associated with this reason code: ATTEMPT TO FREE SUBPOOL 0.

134

Error releasing main storage area.

Following is the text associated with this reason code: UNEXPECTED LENGTH OF 0.

138

A return code of X'18' was returned to JES2 when attempting to perform an ENQ with the minor name of WAITING FOR SPOOL SPACE. The text is TBLOBE ENQ ERROR.

13C

An error occurred when a JESXCF service to retrieve messages was invoked. The text associated with this reason code is FAILURE FROM AN JESXCF SERVICE.

140

A recursive call has been detected in module HASCSISC.

144

Unrecoverable error in remote health checker task.

148

Sysout transmitter for TCP/IP discovered null NDH pointer.

Following is the text associated with this reason code: NDH POINTER IS NULL.

150

An invalid DSERV address has been given to the $DSERV service. Following is the text associated with this reason code: BAD DSERV POINTER.

154

Unrecoverable error detected during $BLDMSG service processing. The text associated with this reason code is $SCAN ERROR DETECTED.

158

SSI 83 encountered CDCT control block with undefined device type. The text associated with this reason code is `Invalid CDCT device type.`

160

Spin processing was invoked without having SJB lock. The text associated with this reason code is SJB `lock not held HFEXJES.`

164

$MGIOMSG - Incorrect channel command.

168

Migration track bitmap was not found during SPOOL migration. The text associated with this reason code is `Bitmap problem during SIGIOU processing.`

16C

$BITMAP service was requested to perform operation on a bit outside of the bitmap. The text associated with this reason code is $BITMAP `boundary error.`

170

Expected group CAT not found.

174

CATTREE - Rotate right - incorrect balance factor.

178

JES2 detected a JES2-generated data set name that contains invalid characters. The following text is associated with this reason code: `Bad character in dataset name.`

17C

There is an error in address space management. Either a "stale" HASB has been found (left over from a prior user of the same address space) or the HASB has been damaged.

180

An SJB has been found to have incorrect data. One or more of the following does not match:

- ASID
- Address space Token
- Eye catcher (SJB)
- JES2 subsystem name

184

Unexpected TYPE or CLASS value.

188

Unexpected CAT Cache element.

18C

Group name mismatch.

190

Unexpected pseudo CAT or zero DSERV address passed.

194

CATREAD - Error during CAT cache build.

198

CATREAD - Cache expected but not present.

19C

CATTREE - Rotate DBL right - incorrect balance factor.

1A0

CATTREE - Rotate left - incorrect balance factor.

1A4

CATTREE - Rotate DBL left - incorrect balance factor.

1A8

SJMPRJ2 - $JQESERV request count mismatch.

1AC

FRETRE - An attempt was made to free a TRE that is not for the current TCB.

1B0

CIMAIN - The CICB address is not valid.

1B4

SDB lock not available. A request to close a SYSOUT or SYSIN data set has been made while concurrent processing for the data set is active (for instance, GET or PUT).

1B8

Incorrect Operation type.

1BC

ZJC free chain error. Free chain does not match free count.

1C0

Checkpoint queues not owned.

1C4

Checkpointed ZOD not validated.

1C8

Input object is not a ZOD.

1CC

Incorrect operation code.

1D0

Unaccounted character code.

1D4

$PGSRVC - An attempt was made to issue $PGSRVC to address 0.

1D8
   Job group logging subtask encountered unexpected error from a JESXCF request.

1DC
   CATREAD - A DSERV address of zero was passed.

1EC
   A failure was detected while attempting to add an entry to the JES address keep using the IAZADRKP macro.

1E0
   EDSCBDL - JES2 failed to properly shutdown the EDS address space.

1E4
   CSPXMSET - Failed to obtain the TCBTOKEN of the Terminal Monitor Program (TMP).

1F0
   FRDRREAD - Buffer error detected while file reader was deblocking a data set.

1F4
   FRDROPEN - A PAD address of 0 was passed to the FRDROPEN routine, or a member name is not specified.

1F8
   HALOKEYL - DSKEYLBL text unit error.

1FC
   NJSTMAIN - Decryption request could not be processed due to a $SUBIT error.

200
   An encryption or decryption request for a SYSOUT data set failed because of an error from $MGENCRY or ENCRYPTV.

204
   An encryption request for a SYSOUT data set with a DSKEYLBL specified failed because of an error from ENCRYPTV.

208
   A decryption request for a job on a job transmitter failed because of an error from $MGENCRY.

System action

If an SSI function took the $ERROR, the system produces a dump (unless the dump is suppressed by dump analysis elimination (DAE)), and the SSI function's caller receives a disastrous error indication upon return. Otherwise, the system abnormally ends the program.

Programmer response

Take one of the following actions, depending on the reason code associated with this abend. If the application programmer response is not specified here, then search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Code
   Response

00
   Determine whether the task control block recovery element ($TRE) control block was properly addressed, and whether that control block has been overlaid.

04
   Ensure that you release the lock for one SJB before you attempt to acquire the lock of another SJB.

08
   Verify that offset 0 of the cell points to a valid CCE, and shows that the cell is allocated.

0C
   Determine why subpool 230 has been depleted. Correct the error.

10
   Determine why $CBIO failed while attempting to write the IOT chain. See *z/OS JES2 Macros* for information about the return codes for $CBIO.

14

Determine why the PDDB cannot be located. Correct the error. Note that an SSI ESTAE recovery program is not active for this abend because the call to end the job originates from the HASCHAM assembly module.

18

Determine whether the save area has been overlaid; if not, determine whether the caller intended to issue a $RETSAVE macro instead and correct any errors found in the $RETSAVE macro.

1C

Ensure that the following conditions are met:

- The assembly module that issued the $EXIT call is assembled with the correct ENVIRON parameter on the $MODULE statement.
- The FSS address space is fully initialized before the $EXIT call is attempted.

20

Determine why $CBIO failed while attempting to write the IOT chain. See *z/OS JES2 Macros* for information about the return codes for $CBIO.

24

Ensure that the caller holds an SJB lock before attempting to obtain the $SVJLOK.

28

Determine the caller of the $SJBLOCK routine. Notify your programming support personnel.

FC

Ensure that table pairs have been defined correctly. Ensure that all modules referencing table pair definitions have been assembled with the same level of the $MCT macro.

104

Ensure that the message passed to the $NOTIFY service is not longer than 132 characters.

124

Determine if the data area being updated was previously owned by JES2 or by a user exit. Since the data area itself had been zeroed, it may require a search of the System Trace to determine who last owned the data area. Attempt to determine where the update access was made and if in IBM code, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

128

The data area being freed is the most likely cause of the error. Ensure that the modules referencing the data areas have all been assembled with the correct level of macros (including HASCPOOL). If the data area was owned and managed by IBM code, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

JES2

0F8

Explanation

The issuer of a Supervisor Call (SVC) instruction was not in the correct mode to issue the SVC. A hexadecimal reason code in the RTM2CRC field of the RTM2WA data area explains the error:

Code
   Explanation

04

The issuer was in a mode other than task control block (TCB) mode.

08

The issuer held a lock.

0C

The issuer was disabled.

10
    The issuer was in cross memory mode.

14
    The issuer had established an enabled, unlocked task (EUT) mode functional recovery routine (FRR) by specifying EUT=YES on a SETFRR macro.

18
    The issuer was in access register (AR) address space control mode. This error applies to only those SVCs that cannot be issued in AR address space control mode.

1C
    The issuer is not authorized to use the SVC microcode assist instruction.

System action

The system abnormally ends the program that issued the SVC. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,ENABLE,COMP=0F8,END
```

System programmer response

Do the following:

1. If a logrec data set error record is not written with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. Identify the address space where the abend occurred by doing one of the following:
   - In the logrec data set error record, find the address space identifier (ASID) of the address space.
   - In the system trace, get the ASID from the SVCE D entry for abend X'0F8'.
3. Use the program status word (PSW) address at the time of error to identify the module that abended.
   - For an installation-provided module, continue diagnosis with the module.
   - For an IBM module, continue diagnosis as follows:
     – For reason code X'08', go to step <u>"4" on page 223</u>.
     – For any other reason code, go to step <u>"5" on page 223</u>.
4. For reason code X'08', determine which lock was held by the issuer of the SVC. If you have not already obtained an SVC dump, ask the operator to set a SLIP trap to obtain an SVC dump. In the system trace, look at the SVCE D entry for completion code X'0F8'. The PSACLHS column contains the current lock held string at the time of the error.

   Use the PSACLHS field in the prefix save area (PSA) to determine which lock was held at the time of error.
5. Search problem reporting data bases for a fix for the problem. For reason code X'08', include in the search argument the name of the lock held, as determined in step <u>"4" on page 223</u>. If no fix exists, contact the IBM Support Center. Provide, if available, the SVC dump and the logrec data set error record.

Source

Supervisor control

0F9

Explanation

An error occurred when the system attempted to process a Supervisor Call (SVC) instruction. This is probably an error in a program, but not necessarily in the program that abnormally ended. A hexadecimal return code in register 15 explains the error:

Code
   Explanation

00
   The local system queue area (LSQA) has been exhausted, so that the SVRB space is not available to honor an SVC instruction in the address space. This problem may be caused by a loop in the program issuing the SVC.

04
   An SVRB is being freed, but the system cannot identify it as belonging to the SVRB pool.

08
   A type 2, 3, or 4 SVC routine exited, but the data in its SVRB in field RBSID was not valid.

12
   SVC screening was active, but the address of the screen table is 0.

System action

The system writes a logrec data set error record. The system abnormally ends the program that was running.

For reason code X'08', the system writes a logrec data set error record. One of the data items recorded in the VRA is the number of the returning SVC. The system does not abnormally terminate the program that was running.

System programmer response

Do the following:

1. For reason code X'00', examine the REGION parameter on the JCL JOB or EXEC statement for the job. If the REGION parameter allocates too much private storage, this may be causing a shortage of available storage for the LSQA. Reduce the value of the REGION parameter.

2. For reason code X'04', search problem reporting databases for a fix for the problem. If no fix exists, contact the supervisor control component group at the IBM Support Center. Provide the logrec data set error record.

3. If the REGION parameter for the job is determined to be reasonable, a complete SVC dump will be needed to diagnose the cause of the abend X'0F9' reason code X'00.'. Since a SLIP on an abend X'0F9' with A=SVCD will not produce a complete SVC dump, and since an abend X'0F9' is nearly always preceded by either an abend X'878' or X'80A', the following two SLIPs should be set to obtain a useful SVC dump.

   ```
   SLIP SET,C=878,A=SVCD,J=failingjob,END
   SLIP SET,C=80A,A=SVCD,J=failingjob,END
   ```

4. For reason code X'08', the SVC routine must be updated to not modify the SCB in the SVRB. Report the problem to the owner of the SVC routine.

Source

Supervisor control

0FB

Explanation

A translation exception has occurred. The system detected an incorrect value in control register 0.

System action

The system abnormally ends the program experiencing the error. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=0FB,ACTION=SVCD,END
```

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.

Source

Supervisor control

0FC

Explanation

A program referenced data in an address space other than its home address space. That address space has either:

- Incorrect data in its dynamic address translation (DAT) tables
- An incorrect segment table origin (STO) address

This error is probably in the system.

System action

The system abnormally ends the program and ends the address space.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Recovery termination manager (RTM)

0FD

Explanation

The Type 6 SVC routine issued the T6EXIT macro to schedule a cross memory service request block (SRB), but the SRBASCB address is not the same as the current memory address. This is a probably an error in the SVC routine.

System action

The system abnormally ends the program that issued the T6EXIT macro. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=0FD,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Ask the operator to set a SLIP trap to obtain an SVC dump.
2. In the system trace, back up to the *RCVY entry for abend X'0FD'. Look for an SVC entry, other than SVC D, prior to the *RCVY entry for this abend. In the entry, note the address in the PSW ADDR column.
3. Use the address in the PSW to identify the module that issued the T6EXIT macro.

   - For an installation-provided module, continue diagnosis with the module.
   - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.

Source

Supervisor control

0FE

Explanation

An error was detected while RMF was sampling data about the state of the system.

System action

All RMF measurement collection is terminated. Reinstatement of RMF can be attempted, and, if successful, RMF continues under the control of the original options. If reinstatement fails, RMF is terminated.

The system writes an ABEND dump for the failing job step.

System programmer response

Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following statements and run the job step again:

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

Obtain the logrec data set error record.

Search problem reporting data bases for a fix for the problem. If no fix exists, report the problem to the IBM Support Center.

Source

Resource Measurement Facility (RMF)

0FF

Explanation

The system encountered an error while processing a DATOFF Move Long (MVCL) instruction. A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

04
    Index given to DATOFF was out of range.

System action

The system abnormally ends the program that issued the instruction.

Source

Supervisor control

101

Explanation

During processing of a WAIT macro, the system found that the problem program specified more events than there were event control blocks (ECB).

System action

The system abnormally ends the program that issued the WAIT macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing for the job.

Programmer response

Change the events specified to less than or equal to the number of ECBs. If the specification was correct, ensure that it was not incorrectly modified. Correct the error. Run the job again.

Source

Task management

102

Explanation

During processing of a POST macro, the system found an incorrect address for an event control block (ECB).

Register 15 contains a hexadecimal reason code that explains the error:

Code
    Explanation

00
    Incorrect ECB and the linkage from the caller is through an SVC instruction (LINKAGE=SVC).

04
    Incorrect ECB for a cross memory POST (XMPOST) macro.

08

The problem program passed an incorrect ECB address.

0C

An incorrect ECB address was passed for a cross-memory post request and the linkage from the caller is through a PC instruction (LINKAGE=SYSTEM).

10

An ECB address of 0 was specified.

14

An Incorrect ECB address was passed by an authorized caller and the linkage from the caller is through a PC instruction (LINKAGE=SYSTEM).

System action

The system abnormally ends the program that issued the POST macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing for the job.

Programmer response

Ensure that the specified ECB address is a valid virtual storage address and that the address was not incorrectly modified. Also, ensure that the program issuing the POST macro has a storage protection key that allows it to update the ECB. Correct the error. Run the job again.

Source

Task management

104

Explanation

An error occurred when the system tried to process an EU, LU, or VU form of the GETMAIN macro. The GETMAIN requested virtual storage that requires more central storage than is available. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
Explanation

04

There is not enough central storage available to back a request for space in a system queue area (SQA) subpool.

08

There is not enough central storage available to back a request for space in a fixed common service area (CSA) subpool.

0C

There is not enough central storage available to back a request for space in a local system queue area (LSQA) subpool.

1C

The system could not satisfy a request for an LSQA subpool. The page table for the segment describing the area to be obtained was paged out.

20

The system could not satisfy a request for an authorized private area subpool. The page table for the segment describing the area to be obtained was paged out.

System action

The system issues message IEA705I. The system abnormally ends the current task.

System programmer response

See installation procedures to increase the central storage requirements.

Programmer response

Ensure that the calling program is not requesting too much central storage.

If the system issues this abend frequently, notify the system programmer.

Source

Virtual storage manager (VSM)

106

Explanation

An error occurred during processing of a LINK(X), LOAD, ATTACH(X), or XCTL(X) macro.

An error was detected by the control program when it attempted to fetch the requested program into virtual storage. The return code in register 15 identifies the error; see accompanying messages IEW4005I, CSV031I, and CSV028I to determine the reason code. For PMLOADER internal errors not listed, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Code
  Explanation

0B
  An error occurred during FETCH processing or in one of the routines that gets control as a result of FETCH processing.

0C
  Not enough storage was available for FETCH to get storage for the module or control blocks.

  Code
    Explanation

  04
    No storage for DATD.

  08
    No storage for data extent block (DEB).

  0C
    No storage for I/O supervisor block (IOSB).

  10
    No storage for EXLIST.

  14
    No storage for module.

  18
    Unable to fix storage.

0D
  The control program found an incorrect record type in the load module.

0E
  The control program found an incorrect address in the load module.

  Code
    Explanation

20

Error converting TTR. One of the following occurred:

- A job opened a data set with DISP=SHR, and another job updates the data set causing the extents in the data set to increase.
- An error occurred in an application program, for example, while retrieving a directory entry using build link-list (BLDL) from one DCB and passing that entry and a different DCB to the LOAD or LINK macro.

24

Block is outside of the module.

28

The address constant location is incorrect.

2C

LOAD from a VIO data set was requested while using ADDR64 or ADRNAPF64 and specifying a target area above the 2GB bar. That is not supported.

0F

Either an uncorrectable I/O error occurred, or an error in the load module caused the channel program to fail. See the accompanying IEW message for a description of the data set error.

Code
   Explanation

40

I/O error on a PDS.

44

Error on a virtual DS.

48

Seek address outside extent.

4C

Possible program-controlled interrupt (PCI) logic error.

10

The control program detected a relocation error in the load module.

28

Internal error occurred during fetch processing.

System action

The task is ended unless ERRET was specified on the macro. The system issues message CSV011I.

Operator response

Notify the system programmer.

System programmer response

For a return code of:

- X'0F', resubmit the job. Then have the operator enter a START GTF command specifying tape output, MODE=EXT and TIME=YES. Have the operator reply TRACE=IO in response to message AHL100A.

  Format the output with the IPCS GTFDATA subcommand.

- X'0B', X'0D', X'0E' (reason code of X'24' or X'28'), X'28', or if the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

For a return code of:

- X'0C' with a reason code of:
  - X'14', increase the region size.
  - X'04', X'08', or X'10' try decreasing the region size. If the problem recurs, notify the system programmer.
- X'0D', or X'0E' (reason code of X'24' or X'28'), ensure that the load module was not altered so that it is no longer valid. If the load module is valid, then notify the system programmer.
- X'0E' (reason code of X'20'), if the error occurred because a different job updated the data set extents, then restart the job so that the extent list is updated (if the error occurred with the LINKLIST, the system must be IPLed to fix the problem).

Source

Contents supervision (CSV)

10A

Explanation

An error occurred when the system tried to process an R form of the GETMAIN macro. The GETMAIN requested virtual storage that required more central storage than is available. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
> **Explanation**

04
> There is not enough central storage available to back a request for space in a system queue area (SQA) subpool.

08
> There is not enough central storage available to back a request for space in a fixed common service area (CSA) subpool.

0C
> There is not enough central storage available to back a request for space in a local system queue area (LSQA) subpool.

1C
> The system could not satisfy a request for an LSQA subpool. The page table for the segment describing the area to be obtained was paged out.

20
> The system could not satisfy a request for an authorized private area subpool. The page table for the segment describing the area to be obtained was paged out.

System action

The system issues message IEA705I. The system abnormally ends the current task.

System programmer response

See installation procedures to increase the central storage requirements.

Programmer response

Ensure that the calling program is not requesting too much central storage.

If the system issues this abend frequently, notify the system programmer.

Source

Virtual storage manager (VSM)

10B

Explanation

Timer supervision found an error on the input parameters for the TIME macro.

System action

The system abnormally ends the program that issued the TIME macro.

System programmer response

Use the program status word (PSW) address in the CLK entry to identify the caller. Do one of the following:

- If the caller is provided by the installation, check the parameters on the TIME macro. If MIC or STCK was specified, the area specified by the address must have the caller's storage protect key.
- If the caller is provided by IBM, search problem reporting data bases for a fix for the problem.
- If the PSW does not contain the caller's address, contact the IBM Support Center.

Source

Timer supervision

10D

Explanation

A job step task abnormally ended, but it had a subtask with a status of step must complete (MC). This completion code is found only in the job step task.

System action

The system abnormally ends the subtask. The system sends messages about the problem to the job log.

System programmer response

Find the abend code for the task that attached the abended subtask in:

- Messages in the job log
- The logrec data set error record
- The TCBCMP field of the task control block (TCB) for the attaching task, if a dump is available

Diagnose the original abend in the attaching task.

Source

Recovery termination manager (RTM)

10E

Explanation

A program issued a SPIE macro. The macro specified an incorrect address for the program interruption control area (PICA).

System action

The system sends messages about the problem to the job log. The system abends the program.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=10E,ACTION=SVCD,END
```

System programmer response

Do the following:

- If the program is installation-provided code, correct the PICA address.
- If the program is IBM code, search problem reporting data bases for a problem fix. If no fix exists, contact the IBM Support Center. Provide:
  - Messages from the job log
  - The ABEND or SVC dump
  - The assembly listing for the job
  - The JCL for the job
  - The program listing for the job

Source

Recovery termination manager (RTM)

110

Explanation

While the system was processing a PURGE macro, an error occurred when the system tried to process the parameter list for the macro.

System action

The system ends the program that issued the PURGE macro.

Programmer response

Correct the pointer to the purge parameter list in the PURGE macro.

Source

Input/output supervisor (IOS)

111

Explanation

An error occurred during processing of a callable service to the z/OS PCIE services. All 111 abnormal end reason codes are considered possible internal errors and should be reported to the IBM Support Center.

System action

The system ends the program that issued the callable service to the z/OS PCIE services.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

PCI Express®

112

Explanation

Incorrect input was passed to SVC 18 by the BLDL or FIND macro instruction. This system completion code is accompanied by message IEC908I. Refer to the explanation of message IEC908I for complete information about the task that was ended and for an explanation of the return code found in register 15.

System action

For return codes 13 and 14, the DCB was written to the GTF trace data set.

Operator response

Start a generalized trace facility (GTF) trace, and re-create the problem. Reply to message AHL100A with:

```
TRACE=SYS,USR,SLIP
```

On the DD statement for the data set in error, specify:

```
DCB=DIAGNS=TRACE
```

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Correct the BLDL or FIND macro instruction. For return codes 03, 13, 04, and 14, make sure that the DCB is not being overlaid, in particular, the fields DCBEBAD and DCBPOINT. Recompile the program and run the job step again.

Source

DFSMSdfp

113

Explanation

The error occurred during processing of an OPEN macro instruction or an OPEN macro instruction with a TYPE=J operand. This system completion code is accompanied by message IEC142I. Refer to the explanation of message IEC142I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC142I.

Source

DFSMSdfp

115

Explanation

The error occurred during the processing of SVC 21 (STOW). The DCB did not point to a valid DEB, or the DEB did not point back to the DCB.

System action

An unsuccessful attempt was made to invoke the STOW task recovery routine.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Verify that register 1 contained the correct DCB address prior to issuing SVC 21, and that the DCB has not been overlaid since it was opened.

Source

DFSMSdfp

117

Explanation

The error occurred during processing of a BSAM CLOSE macro instruction with a TYPE=T operand. This system completion code is accompanied by message IEC218I. Refer to the explanation of message IEC218I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC218I.

Source

DFSMSdfp

118

Explanation

Incorrect parameters were passed to DEVTYPE (SVC 24). This system completion code is accompanied by message IEC912I. Refer to the explanation of message IEC912I for complete information about the task that was ended and for an explanation of the return code found in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Correct the DEVTYPE macro instruction, recompile the program, and rerun the job step.

Source

DFSMSdfp

119

Explanation

Incorrect input was passed to SVC 25. This system completion code is accompanied by message IEC914I. Refer to the explanation of message IEC914I for complete information about the task that was ended and for an explanation of the return code found in register 15.

System action

For return codes 12 and 13, the DCB is written to the GTF trace data set. For return code 14, both the DCB and IOB are written.

Operator response

Start a generalized trace facility (GTF) trace, and re-create the problem. Reply to message AHL100A with:

```
TRACE=SYS,USR,SLIP
```

On the DD statement for the data set in error, specify:

```
DCB=DIAGNS=TRACE
```

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that your program does not overlay the DCB and IOB fields described by the error code. Correct the error, and rerun the job step.

Source

DFSMSdfp

11A

Explanation

The error occurred when the LOCATE or CATALOG function tried to store into a user-specified CAMLST work area.

System action

SVC 26 received a protection check because the protect key of the supplied work area did not match the user's protect key.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Correct the work area pointer in the LOCATE or CATALOG parameter list and run the job step again.

Source

DFSMSdfp

11E

Explanation

An abend occurred in zEnterprise® Data Compression (zEDC) processing.

Code
   Explanation

xxxxyyyy
   Internal errors.

System action

An SVC dump might be produced.

Operator response

Contact the System Programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center for the specified abend and reason codes.

Source

zEnterprise Data Compression (zEDC)

11F

Explanation

An abend occurred in Hardware Accelerator Manager (HWAM) processing.

Code
   Explanation

xxxxyyyy
    Internal errors.

System action

An SVC dump might be produced.

Operator response

Contact the System Programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center for the specified abend and reason codes.

Source

Hardware Accelerator Manager (HWAM)

121

Explanation

A module tried to stop I/O activity by issuing the IOHALT macro with the low order bit of register 1 off.

System action

The system abnormally ends the program that issued the IOHALT macro.

System programmer response

If the IOHALT macro is issued within the system code, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Change the program that issued the IOHALT macro so it sets the low order bit of register 1 on.

Source

Input/output supervisor (IOS)

122

Explanation

The operator canceled the job and requested a dump.

System action

The system ends the job. The system writes a dump to the data set described by the SYSABEND, SYSMDUMP or SYSUDUMP DD statement in the canceled job step.

Programmer response

Find out why the operator canceled the job. Correct the error(s). Resubmit the job.

Source

Master scheduler

128

Explanation

During processing of an EXTRACT macro, the system found an incorrect address for the list to hold the requester fields. The beginning address for the list did not define a fullword boundary, or the list did not begin and end within the storage assigned to the job step.

The first operand of the macro specifies the beginning address of the list. The number of fields requested determines the length of the list.

System action

The system abnormally ends the program that issued the EXTRACT macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Determine if the first operand of the macro was specified correctly or if program errors had incorrectly modified the EXTRACT macro expansion. Correct the error. Run the job again.

Source

Task management

12A

Explanation

During processing of an ATTACH macro, the system found an error. In a GSPV or GSPL operand, the macro specified that a subpool was to be given to the subtask being created.

Register 15 contains a hexadecimal reason code that explains the error:

Code
  Explanation

00
  The attaching task owned the subpool, but had previously shared it with other subtasks through SHSPV and/or SHSPL operands. A task cannot give an owned subpool to a subtask if that task shared the subpool with other subtasks.

04
  The specified subpool contains data-in-virtual (DIV) mapped storage; such a subpool cannot be specified with GSPV or GSPL.

08
  The specified subpool contains storage that had been specified on the IARSUBSP macro with the IDENTIFY parameter, and the storage is eligible to be assigned to a subspace. Ownership of a subpool eligible to be assigned to a subspace cannot be passed to an attached subtask.

System action

The system abnormally ends the program that issued the ATTACH macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Change the ATTACH macro to specify the subpool in an SHSPV or SHSPL operand. Correct the error. Run the job again.

Source

Task management

12C

Explanation

During processing of a CHAP macro, the system found an incorrect address for the task control block (TCB) for the subtask whose priority was to be changed. The second operand of a CHAP macro points to a fullword that contains the TCB address.

The address was incorrect for one of the following reasons:

- It was not a valid TCB address.
- The valid TCB at the address was not associated with a subtask of the task issuing the macro.
- It was not a multiple of 4.
- The valid task has abnormally ended.

System action

The system abnormally ends the program that issued the CHAP macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Change the address specification. Ensure that it and the TCB were not incorrectly modified by the problem program. Correct the error. Run the job again.

Source

Task management

12D

Explanation

A program requested an overlay. When trying to answer the request, the overlay supervisor found that words 3 and 4 of the overlay segment table are incorrect.

The overlay segment table is used by the overlay supervisor; it resides in the load module and is in the same storage protection key as the application program.

Note: Overlay programs run only in 24-bit addressing mode, not in 31-bit addressing mode.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided.

Programmer response

Check the program for errors that caused the overlay segment table to be incorrectly modified. Correct the errors; then assemble, link edit, and run the program again.

Source

Overlay supervisor

12E

Explanation

A program issued a TTIMER macro with incorrect parameters.

System programmer response

Use the program status word (PSW) address in the CLK entry to identify the caller. Do one of the following:

- If the caller is provided by the installation, check the parameters on the TIME macro. If MIC or STCK was specified, the area specified by the address must have the caller's storage protect key.
- If the caller is provided by IBM, search problem reporting data bases for a fix for the problem.
- If the PSW does not contain the caller's address, contact the IBM Support Center.

Source

Timer supervision

12F

Explanation

A program issued an STIMER macro with incorrect parameters. A reason code in register 15 explains the error:

Code
    Explanation

00
    The system could not find a data area that was specified on a parameter for an STIMER request.

04
    The Coordinated universal time (UTC) or local time of day (LT or TOD) parameter was specified for a TASK type STIMER request.

0C
    The value for the Coordinated universal time (UTC) or local time of day (LT or TOD) parameter was greater than 24:00:00.00.

10
    The STIMER service routine cannot access the storage containing the user-specified parameters for the STIMER macro.

14
    The STIMER service routine received an STIMER macro parameter that was not valid. For example, a program running in 31-bit addressing mode is not using the MVS/SP Version 2 or later version of the STIMER macro.

28

The requested time interval was too large. One of these situations occurred: For TASK type requests, the requested MICVL time interval was larger than X'7FFFFFFFFFFFFFFF'. For REAL/WAIT type requests, the requested time interval (BINTVL, DINTVL, MICVL, or TUINTVL) added to the current TOD clock contents would have exceeded X'FFFFFFFFFFFFFFFF' (a value that would expire on September 17, 2042). A value greater than X'7FFFFFFF' was specified for BINTVL.

System action

The STIMER routine produces a tailored dump that provides the following information:

- The control blocks associated with the task that issued the STIMER request
- The register contents for the task that issued the STIMER request
- The virtual subpools that contain the parameter list passed to STIMER

Programmer response

Depending on the reason code, one of the following:

Code
  Explanation

00
  Check the spelling of the data area name on the STIMER request.

04
  Do not specify the TASK parameter with the GMT and TOD parameters on the STIMER request.

0C
  Change the value for the GMT and/or TOD parameter(s) to one that is less than 2400.

14
  Check that a program running in 31-bit addressing mode uses the MVS/SP Version 2 or later version of the STIMER macro.

10
  Change the parameter address so it is in the caller's addressable storage.

28
  Ensure that the specified time interval is correct.

Source

Timer supervision

130

Explanation

Global resource serialization found an error during processing of the DEQ macro instruction.

The DEQ macro instruction specified a resource not previously specified by an ENQ macro instruction under the same task. In other words, the program was attempting to release a resource that was not previously requested. The DEQ macro instruction did not specify a RET=HAVE operand.

System action

The system issued an ABEND dump.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Do one of the following:

- Check the DEQ macro instruction for incorrect qname or rname operands
- Specify RET=HAVE in the DEQ macro instruction
- Add an ENQ macro instruction for the same resource before the DEQ macro instruction

Then recompile and rerun the program.

If the problem persists, do the following:

1. Obtain the address of the DEQ parameter list from register 1 in the UNIQUE-3 column of the SVC 30 or SVC 38 entry in the system trace.
2. Check the parameter list against the SVC 30 or 38 mapping. When analyzing the parameter list, remember that the unit control block (UCB) pointer, if present, is the address of a field that, in turn, contains the address of the UCB.

   If the parameter list contains incorrect data, continue diagnosis in the program that issued the macro.

Source

Global resource serialization

133

Explanation

An unauthorized program requested an SVC dump.

To request an SVC dump through an SDUMP macro (SVC 51), the program must be one of the following:

- Authorized by the authorized program facility (APF)
- In storage key 0-7

To request an SVC dump by a branch entry, the program must be one of the following:

- In storage key 0, supervisor state.
- One of the following must be true:
  - The caller is in SRB mode.
  - The caller owns a lock.
  - The caller is disabled and has a PSASUPER bit set on.
  - The caller is in enabled unlocked task (EUT) mode. That is, the caller specified EUT=YES for the SETFRR macro.

Generally, those modules that cannot issue Supervisor Call (SVC) instructions can do a branch entry to request an SVC dump.

System action

The system abnormally ends the program. If a recovery routine is available, it is given control. SVC dump processing issues message IEA911E or IEA611I. This message indicates whether the dump is complete or partial.

System programmer response

For an unauthorized program, request an ABEND dump. If the branch entry is being used incorrectly, correct the error or use an SDUMP macro.

If the problem persists or is in an IBM-provided program, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the assembly listing and the linkage editor output for the job.

Source

Dumping services

135

Explanation

An error occurred during the processing associated with SVC 53, which obtains and releases exclusive control of a resource associated with a BDAM data set. The task recovery routine for this SVC determined that all user control blocks required as input to the SVC were in the user's region and key, hence the error could not be ascribed to any user control block.

System action

Message IEC903I is issued.

Operator response

Notify the system programmer.

System programmer response

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and all printed output and output data sets related to the problem.

Source

DFSMSdfp

137

Explanation

The error occurred at an end-of-volume on a magnetic tape. This system completion code is accompanied by message IEC022I. Refer to the explanation of message IEC022I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC022I.

Source

DFSMSdfp

138

Explanation

Global resource serialization encountered an error occurred during processing of an ENQ macro. One of the following is true:

1. One ENQ macro instruction was issued for a list of resources. The same resource appears more than once in the list.

2. Two ENQ macro instructions were issued for the same resource in the same task without an intervening DEQ macro instruction to release the resource. The second ENQ macro instruction did not specify TEST, USE, or HAVE in its RET operand.

System action

Processing continues.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

For the first type of error, delete duplicate resources from the list on the ENQ macro instruction.

For the second type of error, do one of the following:

- Specify RET=TEST, RET=USE, or RET=HAVE in the second ENQ macro instruction
- Add a DEQ macro instruction between the two ENQ macro instructions
- Delete one of the ENQ macro instructions.

If the problem persists, do the following:

1. Obtain the address of the DEQ parameter list from register 1 in the UNIQUE-3 column of the SVC 30 or SVC 38 entry in the system trace.

2. Check the parameter list against the SVC 30 or 38 mapping. When analyzing the parameter list, remember that the unit control block (UCB) pointer, if present, is the address of a field that, in turn, contains the address of the UCB.

    If the parameter list contains incorrect data, continue diagnosis in the program that issued the macro.

Source

Global resource serialization

139

Explanation

An error occurred during the processing associated with SVC 57, which frees a buffer or extends the unscheduled test (via the FREEDBUF macro issued either by the user or the system). The BDAM task recovery routine for this SVC determined that all user control blocks required as input to the SVC were in the user's region and key, hence the error could not be ascribed to any user control block.

System action

Message IEC905I is issued.

Operator response

Notify the system programmer.

System programmer response

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and all printed output and output data sets related to the problem.

Source

DFSMSdfp

13C

Explanation

A program issued one of the following macros:

- ATTACH with an ESTAI parameter
- ATTACHX with an ESTAI parameter
- ESTAE
- ESTAEX
- STAE

The macro specified an incorrect value, or the environment in which the macro was running was incorrect.

A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

08
    An ATTACH or ATTACHX macro with ESTAI was issued. One of the following errors occurred:

- The macro specified an EXIT address of 0 with CT.
- The macro specified OV.
- The macro specified an incorrect task control block (TCB) address, or did not specify a TCB address at all.
- The program calling the ATTACH macro service routine is not the ATTACH macro.

0C
    An ESTAE or ESTAEX macro with BRANCH=YES was issued. One of the following errors occurred:

- The macro is not running under a supervisor request block (SVRB).
- The program calling the ESTAE service routine is not the ESTAE macro.
- The issuer of the macro did not obtain the local lock.

10
    A TOKEN parameter was incorrectly specified as follows:

- A program specified the TOKEN parameter on a macro other than ESTAE or ESTAEX.
- An ESTAE or ESTAEX macro with the TOKEN parameter was issued by a program that:
  - Is not authorized by APF
  - Is not running in Supervisor state
  - Is not running with a PKM allowing key 0-7

14
    A STAE macro was issued by a program running in 31-bit addressing mode (AMODE). This is not valid.

18
    An ESTAE or ESTAEX macro with CANCEL=NO parameter was issued by a program that:

- Is not authorized by APF

- Is not running in Supervisor state
- Is not running with a PKM allowing key 0-7

1C

An ESTAEX macro with the SPIEOVERRIDE=YES parameter was issued by a program that:

- Is not authorized by APF
- Is not running in Supervisor state
- Is not running with a PKM allowing key 0-7

System action

The system abnormally ends the program issuing the macro. If a recovery routine is available, RTM gives it control. The system may write an ABEND dump for the abend if the job step provides a dump data set. If so, the LSQA dump option is specified with the ABEND macro.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=13C,ACTION=SVCD,END
```

System programmer response

Do the following:

- If an installation-provided program issued the incorrect macro, rewrite the macro or modify the parameter list built by the ESTAE macro.
- If it was an IBM program, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide:
  - The assembly listing for the job
  - The ABEND or SVC dump

Source

Recovery termination manager (RTM)

13E

Explanation

The task that created a subtask issued a DETACH macro for that subtask, specifying STAE=NO, before the subtask ended.

This may or may not be an error, depending on the intent of the user. Consequently, the system does not abnormally end the task issuing the DETACH macro.

System action

The system abnormally ends the subtask to force its completion.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information.

- For IBM programs that experience this completion code or when you suspect that the system's task termination action and task-level completion code are in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

- For application programs that experience this completion code where the problem is with the application, report the problem to the application owner for resolution.

Programmer response

If the subtask must complete its processing before being detached, use an ECB or ETXR operand on the ATTACH macro that creates the subtask to achieve synchronization.

Source

Task management

13F

Explanation

An error has been detected during checkpoint restart processing. This completion code is accompanied by message IHJxxxI with the appropriate reason code.

System action

The job is abnormally ended, and if a SYSABEND statement was included in the job, a dump is produced.

Programmer response

Respond as indicated in the accompanying message.

Source

DFSMSdfp

144

Explanation

The error occurred during the processing of SYNADAF, where it was determined that an incorrect access method code was specified in the high order byte of register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that the ACSMETH parameter on the SYNADAF macro instruction is correctly coded, or that the high order byte of register 15 contains a valid access method code before issuing SVC 68.

Source

DFSMSdfp

145

Explanation

The error occurred during the processing of SVC 69 (BSP). Register 15 contains a return code indicating the cause of the error. See message IEC916I for a complete description of the possible return codes and their meanings.

System action

The backspace task recovery routine has been invoked. If the caller's DCB or BSAM control blocks are in this region, an attempt was made to trace them to the SYS1.TRACE data set.

Operator response

Start a generalized trace facility (GTF) trace, and re-create the problem. Reply to message AHL100A with:

```
TRACE=SYS,USR,SLIP
```

On the DD statement for the data set in error, specify:

```
DCB=DIAGNS=TRACE
```

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Verify that register 1 contained the correct DCB address prior to issuing BSP and that the DCB has not been overlaid since being opened. If the DCB is valid, verify that it contains the correct IOB and/or ICB addresses and that neither the IOBs and/or ICBs have been overlaid.

Source

DFSMSdfp

147

Explanation

A program check or abnormal end occurred in the Graphics Access Method/System Product (GAM/SP) buffer management routine, IGC0007A. The error occurred either in GAM/SP or in the operating system.

System action

Message GAB260 appears on the system console, identifying the cause of the error and the original system completion code. In addition, GAM/SP writes a record to the logrec data set and produces a dump on the system dump data set.

Programmer response

Do the following:

1. Check for messages identifying the cause of the error. If these are GAM/SP messages, (that is, the message number is of the form 'GABnnn'), they are described in *IBM Graphics Access Method/SP: Messages and Codes*
2. Perform any corrective actions associated with the original system completion code.
3. Get a listing of the system dump.

4. Contact your programming support personnel.

Source

DFSMSdfp

149

Explanation

An error occurred in either the Graphics Access Method/System Product (GAM/SP), or the operating system.

This completion code appears when:

1. A program check or abnormal end occurs in the GAM/SP specify-attention (SPAR) routine, IGC0007C.
2. IGC0007C detects an incorrect condition.

System action

A message appears on the system console, accompanied by a reason code identifying the area of processing where the error occurred. In addition, GAM/SP writes a record to the logrec data set and produces a dump on the system dump data set.

Programmer response

Do the following:

1. Check for messages identifying the cause of the error. If these are GAM/SP messages, (that is, the message number is of the form 'GABnnn'), they are described in *IBM Graphics Access Method/SP: Messages and Codes.*
2. Get a listing of the system dump.
3. Contact your programming support personnel.

Source

DFSMSdfp

14A

Explanation

An error occurred in either the Graphics Access Method/System Product (GAM/SP), or the operating system.

This completion code appears when:

1. A program check or abnormal end occurs in the GAM/SP delete-attention (DAR) routine, IGC0007D.
2. IGC0007D detects an incorrect condition.

System action

A message appears on the system console, accompanied by a reason code identifying the area of processing where the error occurred. In addition, GAM/SP writes a record to the logrec data set and produces a dump on the system dump data set.

Programmer response

Do the following:

1. Check for messages identifying the cause of the error. If these are GAM/SP messages, (that is, the message number is of the form 'GABnnn'), they are described in *IBM Graphics Access Method/SP: Messages and Codes.*
2. Get a listing of the system dump.

3. Contact your programming support personnel.

Source

DFSMSdfp

14B

Explanation

An error occurred in either the Graphics Access Method/System Product (GAM/SP), or the operating system.

This completion code appears when:

1. A program check or abnormal end occurs in the GAM/SP attention inquiry (ATTNINQ) routine, IGC0007E.
2. IGC0007E detects an incorrect condition.

System action

A message appears on the system console, accompanied by a reason code identifying the area of processing where the error occurred. In addition, GAM/SP writes a record to the logrec data set and produces a dump on the system dump data set.

Programmer response

Do the following:

1. Check for messages identifying the cause of the error. If these are GAM/SP messages, (that is, the message number is of the form 'GABnnn'), they are described in *IBM Graphics Access Method/SP: Messages and Codes.*
2. Get a listing of the system dump.
3. Contact your programming support personnel.

Source

DFSMSdfp

14C

Explanation

An error occurred in the system environmental recording (LOGREC) component.

Register 15 contains a hexadecimal reason code that explains the error:

Code
  Explanation

01
  An incorrect input request to build a logrec data set record was specified.

10
  The name/token create service returned an unexpected return code.

11
  An attempt to load module IEANTRT failed.

12
  The ENFREQ signal event returned an unexpected return code.

13
  The ENF 49 parameter area storage obtain request returned an error return code.

20

The ENFREQ event code 48 listen request returned an unexpected return code.

21

The ENFREQ event code 36 listen request returned an unexpected return code.

30

The input parameter list, IXGENF, is not valid.

31

An error occurred during a storage obtain request for an IFBLISCB element.

38

The input parameter list, IFBENF36, is not valid.

39

Storage could not be obtained for the A*n* record.

40

An IXGSXCMP validation error occurred.

41

Unable to obtain storage (IFBSXCB).

42

Unable to obtain storage (IFBSXCBG).

43

Unable to obtain storage for log block area.

44

The OPEN data area validation failed.

45

The CLOSE data area validation failed.

46

The unallocation data area validation failed.

47

An error occurred on browse options.

50

This event is unsupported.

51

An error occurred accessing IFBSXCB or IFBSXCBG.

System action

The system writes a record to logrec and requests a dump. Processing continues.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump, logrec data set and SYSLOG.

Note, for reason code X'10' and X'11', the system could not establish the DSNLOGREC name/token, so the name of the logrec data set cannot be retrieved using the name/token retrieve service.

Source

System Environmental Recording (LOGREC)

14F

Explanation

During processing of a STATUS macro, the system found an error.

Register 15 contains a hexadecimal reason code that explains the error:

Code
   Explanation

04

The STATUS macro specified an incorrect function code. Register 2 contains the function code.

08

Only a program in supervisor state with PSW key 0-7 can request the specified STATUS function.

0C

You specified an address space identifier (ASID) for the STATUS STOP function. The ASID parameter is valid only on the STATUS START function.

10

You issued the STATUS macro with the must complete (MC) parameter, but you had already specified the MC parameter on a previous invocation. You must issue the STATUS macro with the RESET,MC,STEP parameter before issuing another SET,MC,STEP.

14

You issued a STATUS macro with the STOP option, but you had already issued a STATUS STOP. You must issue the STATUS macro with the START option before issuing another STATUS STOP.

18

The input mask you specified on the STATUS SET,SD invocation set TCBSTPP. This bit can only be set by specifying STATUS STOP.

1C

The mask you specified on the STATUS SET,ND invocation set TCBSTP. This bit can only be set by specifying STATUS SET,MC or STATUS SET,MC,STEP.

20

A routine running under a service request block (SRB) cannot use a STATUS macro to set a step nondispatchable.

24

In the parameter list on a SET or RESET request, the caller specified an incorrect address for a task control block (TCB).

28

The caller does not hold a needed local lock.

2C

The caller does not hold a needed local lock.

30

The specified TCB did not pass an acronym check. The TCB was probably overlaid or incorrect.

34

The mask of nondispatchability bits specified with the SD parameter includes the TCBSRBND bit. This nondispatchability bit can be set only by specifying STATUS STOP,SRB.

38

The STATUS macro specified an incorrect function code.

3C

A program issuing either STATUS SET,MC,PROCESS or STATUS RESET,MC,PROCESS was not running in task mode. The calling program must be running in task mode.

44

The input mask you specified on the STATUS SET,ND invocation, set the TCBPNDSP bit. The caller cannot set TCBPNDSP.

48

A routine running under a service request block (SRB) cannot use a STATUS macro for the requested function.

4C

You specified an input address space identifier (ASID) or enclave token on a STATUS invocation that is not valid.

50

The input TCB specified on a STATUS STOP or STATUS START invocation was the caller's TCB. The caller cannot perform this operation on itself.

54

A STATUS invocation to set a caller's nondispatchability bit was invoked using SVC.

58

STATUS STOP,SRB was invoked, but had been invoked previously. Invoke STATUS START,SRB before invoking STATUS STOP,SRB again.

5C

The system detected a possible overlay of a TCB field for a task that is the target of a STATUS macro request.

60

The input TCB specified on a STATUS SET,ND,E or STATUS SET,SD,E invocation was the caller's TCB. The caller cannot perform this operation on itself.

System action

The system abnormally ends the program that issued the STATUS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing for the job.

Programmer response

Correct the error. Run the job again.

Source

Task management

150

Explanation

A non-recoverable System REXX error was encountered.

Code
    Explanation

xxxx0401

During recovery processing, a key System REXX control block was found to be incorrect

System action

The AXR address space is terminated.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Contact the System Programmer.

Source

System REXX

151

Explanation

The error occurred during the processing of SETPRT. The parameter list whose address was passed to SETPRT in register 1 was not in the user's region.

System action

Message IEC918I is issued.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that the SETPRT macro instruction is correctly coded. Correct the error and rerun the job step.

Source

DFSMSdfp

153

Explanation

An error occurred while system management facilities (SMF) processed a record. SMF was unable to handle the new record because of buffer contention.

System action

The system abnormally ends SMF processing. The system requests an SVC dump.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

System Management Facilities (SMF)

157

Explanation

An error occurred when the system was processing a DOM macro.

Register 15 contains a hexadecimal error code in the format *xxxxyyyy*. The fields in this error code are the following:

xxxx
   This halfword is for IBM internal use only.

yyyy
>   This halfword is the unique reason code identifier.

The following are the *yyyy* values and their meanings:

Code
>   **Explanation**

0004
>   The caller passed an incorrect value in register 0.

0008
>   Either caller was not a task in the same job step and address space as the issuer of the WTOR macro that created the message to be deleted, or the caller was not in key 0-7 or APF authorized.

000C
>   A program check occurred while the system was verifying that the caller could access each byte of a multiple DOM parameter list.

0010
>   An unauthorized caller tried to delete a WTO message that was not created by the same task in the same address space.

0014
>   The entry was by a branch, but the caller is not authorized.

0018
>   An unauthorized caller tried to delete a message that was issued on another system.

*yy***1C**
>   The system could not obtain needed storage. The return code from the STORAGE service is found in the *yy* field.

*yy***40**
>   A recovery environment could not be established. The return code from the ESTAE macro is found in the *yy* field.

0050
>   A DOMCBLK request specified an invalid DOMC length.

0051
>   A failure occurred when broadcasting the DOM to the sysplex.

0052
>   A failure occurred when attempting to DOM a message found in the parking lot.

*yy***53**
>   A failure occurred in the data block create routine. The return code from the data block create routine is found in the *yy* field.

0064
>   The branch-entered DOM issuer is not in the required supervisor state.

0068
>   The branch-entered DOM issuer is not in the required key (0-7).

F*yyy*
>   An internal processing error occurred. The *yyy* contains the abend code of the failure.

System action

The system ignores the DOM macro. The DOM parameter list and the failing message identifier are shown in the dump. The system ignores any other message identifiers in the parameter list.

System programmer response

For a *yy*53 reason code, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center with the reason code.

Programmer response

Ensure that the correct message identifier is being used in the DOM macro. Ensure that the DOM issuer is in the same job step as the WTOR issuer.

Source

Console services

15B

Explanation

A VOLSTAT macro can be issued only by an authorized program. While processing a VOLSTAT macro, the system determined that the issuing program was not:

- An authorized program facility (APF) authorized program
- In supervisor state
- In storage protection key 0 through 7

System action

The system abnormally ends the program that issued the VOLSTAT macro.

Programmer response

Correct the program so that an authorized program issues the VOLSTAT macro.

Source

DFSMSdfp

15C

Explanation

Execute channel program (EXCP) processing found that the program issuing an SVC 92 request was not running in supervisor state.

System action

The system abnormally ends the current task.

System programmer response

If the error recurs and the program issuing the XDAP or EXCP macro is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Ensure that the program is authorized to issue TCBEXCP or the EXCP macro.

Source

Execute channel program (EXCP)

15D

Explanation

User specified an incorrect data area to SVC 93 (TGET/TPUT).

System action

The user is abnormally ended and processing continues.

System programmer response

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing for the job.

Programmer response

Supply a data area for access by the program invoking SVC 93. A TPUT request requires read access, a TGET request requires write access.

Source

VTAM®, or TSO/E if Session Manager is being used.

15F

Explanation

A SYSEVENT macro incorrectly invoked the system resources manager (SRM). Register 15 contains a hexadecimal reason code that explains the error:

Code
  Explanation

04

The address space identifier (ASID), the SYSEVENT code, or an input parameter was incorrect.

08

Program was not authorized to issue the SYSEVENT.

0C

A page fault occurred when the system referred to a data area assumed to be fixed.

10

A protection check occurred; the program issuing the macro did not have the correct storage key for storing in the parameter data area.

14

A program held the SRM lock before the SYSEVENT macro invoked SRM.

18

The SRM recovery routine converts this reason code to completion code X'25F'.

1C

A SYSEVENT TRANSWAP or REQSWAP with an event control block (ECB) was issued when the maximum allowed number of pending TRANSWAPs or REQSWAPs with ECBs had already been reached.

20

An SRM stack overflow was detected.

24

The SRM entry point did not receive an SRM recovery parameter area (RRPA).

28

An unexpected condition occurred while enforcing a defined capacity limit.

One reason is that the partition weight is too high relative to the defined capacity limit. As a result, the phantom weight SRM tries to assign is not valid. If this is the case, check the phantom weight assigned to the

LPAR. The phantom weight is calculated based on the defined LPAR capacity, the total CEC capacity and the partition weight. The value specified for a phantom weight should not exceed 1000 times the number of active LPARs. For more information about how to calculate the phantom weight, see Workload management participants in *z/OS MVS Planning: Workload Management*.

If the phantom weight is correct, search problem reporting databases for a fix for the problem. If no fix exists, open a problem record and provide the dump to the IBM Support Center for diagnosis.

2C

The invocation of the SYSEVENT macro with ENTRY=UNAUTHPC failed. See R0 for more information:

*xxxx***0004**

Sysevent is not enabled for ENTRY=UNAUTHPC.

*xxxx***0801**

The caller is in SRM mode and Task mode is required.

*xxxx***0803**

The caller must be enabled for interrupts.

*xxxx***0804**

No locks must be held.

*xxxx***0823**

The caller invoked service while DAT is set to OFF.

*xxxx***0824**

The caller invoked service in AMODE24.

*xxxx***0841**

The caller is in cross-memory (XMEM) mode.

*xxxx***08B6**

The caller must not be authorized.

30

A SYSEVENT is issued against an address space (ASID, ASIDL parameter) that is not fully initialized or is already terminating. SRM has no access to the address space-related OUCB and cannot process the SYSEVENT.

Other

Internal SRM error. Search problem reporting databases for a fix for the problem. If no fix exists, save the dump and contact IBM support.

System action

Take action according to the different reason codes.

For reason codes 04 to 24, and 2C: The system abnormally ends the issuer of the SYSEVENT macro. The system writes messages and a logrec data set error record.

For reason code 28: The system can no longer enforce a defined capacity limit.

System programmer response

Take action according to different reason codes.

For reason codes 04 to 24, and 2C: If an installation-provided program issued the SYSEVENT, ensure that the program is authorized. Correct the error indicated by the reason code. Run the job again. If an IBM-provided program issued the SYSEVENT, run the job again. In either case, if the error recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the SYSOUT output for the job.

For reason code 28: Increase the defined capacity limit, or adjust the weight of the partition.

For reason code 30: When a program issues a SYSEVENT with an ASID parameter of another address space, an ABEND 15F-30 might occur. To minimize the possibility of an ABEND 15F-30, check for a valid OUCB pointer (ASCBOUCB > 0) of the address space prior the SYSEVENT invocation.

Source

System resources manager (SRM)

169

Explanation

The error occurred during the processing of IMGLIB with the CLOSE option. The DCB address passed to IMGLIB in register 1 was incorrect. This system completion code is accompanied by message IEC919I. Refer to the explanation of message IEC919I for complete information about the task that was ended and for an explanation of the return code in register 15.

Operator response

Start a generalized trace facility (GTF) trace, and re-create the problem. Reply to message AHL100A with:

```
TRACE=SYS,USR,SLIP
```

On the DD statement for the data set in error, specify:

```
DCB=DIAGNS=TRACE
```

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that the IMGLIB CLOSE macro instruction is correctly coded. Make sure that the DCB address passed to IMGLIB is the same address returned to your program by a previous IMGLIB OPEN, and that your program has not issued a prior IMGLIB CLOSE specifying this DCB address. Correct the error and rerun the job step.

Source

DFSMSdfp

16B

Explanation

During processing of a MODESET macro, the system found an error.

Register 15 contains a hexadecimal reason code that explains the error:

Code
  Explanation

04
  The macro parameter list was null.

08
  The macro specified reserved bits.

0C
  The macro requested an incorrect mode.

10
  The macro requested an incorrect key.

System action

The system abnormally ends the program that issued the MODESET macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Correct the macro or the program errors that incorrectly modified the parameter list. Run the job again.

Source

Task management

16D

Explanation

The system was processing one of the following Supervisor Call (SVC) extended service routines (ESR):

- 109
- 116
- 122
- 137

The system detected an incorrect ESR code in register 15. This error is the result of a program specifying either:

- An incorrect ESR code
- An unsupported ESR code

A hexadecimal reason code in register 15 explains the error:

Code
    Explanation
0004
    A program specified an incorrect ESR code. The ESR code was too large.
0008
    A program specified an unsupported ESR code.

System action

The system moves the incorrect ESR code from register 15 to register 2. The system abnormally ends the program that issued the incorrect SVC instruction. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=16D,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Ask the operator to set a SLIP trap to obtain an SVC dump.

2. In the system trace, back up to the *RCVY entry for abend X'16D'. Look for an SVC entry, other than SVC D, prior to the *RCVY entry. In the entry, note the address in the PSW ADDR column.

3. Use the address in the PSW to identify the module that called supervisor control.

- For an installation-provided module, correct the problem as follows:
  - For reason code X'0004', correct the ESR code, and run the job step again.
  - For reason code X'0008', be sure that the requested ESR is installed in the system.
- For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.

Source

Supervisor control

16E

Explanation

An application program or the system control program issued a DEBCHK macro for the data extent block (DEB) pointed to in the DCBDEBAD field of a data control block (DCB). Alternatively, the DEB might be pointed to from an access method control block (ACB). The DEBCHK function could not be performed.

Register 15 contains a hexadecimal reason code:

Code
  Explanation

04

For TYPE=VERIFY, the DEB pointer is not in the DEB table. A DEB whose address is not in the DEB table cannot be verified, deleted, or purged.

For TYPE=ADDLOCK, LOCK, LOCKEXCL, UNLOCK, and UNLOCKDELETE, there is additional data in register 0 to identify the error:

01
  Address of the DEB in the DCB that was passed does not agree with the DEB that was passed.

02
  DEB is not on a word boundary.

03
  Unable to access the DEB because of a key or fetch protect error. DEBCHK does not make this test if the job step is APF-authorized or the protection key of the task is 0 - 7.

04
  No DEB table, or the DEB table index is zero or too large.

05
  DEB table entry does not point to DEB or the access method type is wrong. Branch entry only.

For other reason codes, contact IBM Support.

08
  The TYPE specified in the DEBCHK macro is incorrect. The TYPE must be VERIFY, ADD, DELETE, PURGE, ADD, ADDLOCK, LOCK, LOCKEXCL, UNLOCK, or UNLOCKDELETE. With BRANCH=YES, there continues to be no reason code for TYPE=VERIFY and TYPE=PURGE, but other functions set a hexadecimal reason code:

  0000
    The requested function is not valid. The caller bypassed the DEBCHK macro.

  0403
    For TYPE=UNLOCK, the DEB is valid, but the DEB lock that was requested to be released is not held by the specified or defaulted RB.

0C03

For TYPE=LOCK or LOCKEXCL, the DEB is valid, but the DEB lock is already held exclusively by another task. Either the current task must not request locking, or the other task must unlock the DEB. Optionally, the current task can reissue the request after a delay to see whether the other task has unlocked the DEB.

0C04

For TYPE=LOCKEXCL, the DEB is valid, but the DEB lock is already held shared by another task. Either the current task must not request locking or the other task must unlock the DEB. Optionally, the current task can reissue the request after a delay to see whether the other task has unlocked the DEB.

0C

A DEBCHK macro that specified a TYPE other than VERIFY was issued by a program that is not authorized.

10

The system found that the DEBDCBAD field in the DEB does not point to a DCB. DEBDCBAD must point to a DCB when TYPE is VERIFY, ADD, or DELETE.

14

The AM value in the DEBCHK macro does not equal the DEBAMTYP value in the DEB or the DEB is not in the DEB table.. When a DEB pointer is added to the DEB table, the access method (AM) value, if given, is placed in the DEBAMTYP field of the DEB. If no AM value is coded, a 0 is inserted in DEBAMTYP. Subsequent DEBCHK calls issued to verify or delete that DEB pointer must either specify the same AM value or omit the operand. When the operand is omitted, no comparison is made.

18

The DEBCHK macro specified TYPE=ADD; however, the DEB was not queued on the TCB DEB chain. Before the DEB pointer can be added to the table, the DEB itself must be queued on the current TCB DEB chain. The TCBDEB field points to the first DEB in the chain.

1C

The DEBCHK macro specified TYPE=ADD, but the DEBCHK routine found one of the following:

- The DEBAMTYP or DEBTBLOF field in the DEB contains zero.
- The DEB table already contains a pointer to the DEB.
- The DEB to be added is in fetch-protected main storage.

20

The DEBCHK macro specified TYPE=ADD; however, the DEB table contains 32760 bytes, which is its maximum size. The current DEB table does not have space for this new DEB pointer.

24

The DEBCHK macro was issued with TYPE=DELETE where the DEB could not be locked in exclusive mode because it was already held in share or exclusive mode by the same task or another task.

28 or 2C

One possibility is that the DEBCHK macro was issued with BRANCH=YES and TYPE=LOCK, LOCKEXCL, or UNLOCK, but it was not running in task mode or the TCB address was not valid.

Another possibility is that an internal error occurred. Contact IBM Support and provide the return and reason codes.

63

It is an invalid call to the SVC routine that bypassed the DEBCHK macro.

Programmer response

Correct the error indicated by the reason code.

Source

DFSMSdfp

171

Explanation

A PGFIX, PGFREE, PGLOAD, PGOUT, PGRLSE, or PGANY macro requested a paging service. The request was not valid. The storage range specified by the input parameters may not have been requested first by a GETMAIN macro.

The registers contain the following:

- **Register 0:** A hexadecimal reason code, which is one of the following:

Note: If you don't find your reason code in Register 0, see the error code listed in Register 15.

Code
> **Explanation**

06000101
> The starting address in a virtual subarea list (VSL) entry is greater than the ending address.

06F20101

07F20101

0AF20101

32F20101

33F20201

3BF20101

6FF20101
> A program check occurred when the paging services was accessing the caller's service list (SL) entry.

07000101

09000101

0A000101

34000101

51000401
> The starting address in a virtual subarea list (VSL) entry is greater than the ending address.

35000201
> The page is part of a virtual I/O (VIO) window.

35000301

36000101
> The page had not been obtained by a GETMAIN macro.

36000201
> Permanent error.

3AF20101
> A program check occurred when the paging services was accessing the caller's service list (SL) entry. The entry point whose ID is equal to the second byte of the reason code issued the reason code.

3B000401
> The starting address in a virtual subarea list (VSL)/page service list (PSL) entry is greater than the ending address.

3B000601

The starting address in a VSL/PSL entry is greater than the ending address.

3C000101

3C000102

The SVC caller's storage key was not zero and did not match the event control block (ECB) storage key.

3C000201

The ECB page had not been obtained by a GETMAIN macro.

51000101 through 51000105

An incompatible function combination exists in a VSL entry.

51000201

A VSL entry did not request a valid function.

51000301

A caller requested 24-bit interface and a real address in the VSL entry.

51000302

Register format entry and a starting address was greater than an ending address.

55000101

The caller is not in key 0. The key for the page did not match the caller's.

55000201

The caller requested that a permanently resident page be released.

6A000101

The caller specified a nonzero ECB address with a cross memory page services request.

6A000201

The caller specified a nonzero ECB address with a PGOUT, PGRLSE or PGANY request.

6A000301

An ECB address contained a negative number. The request was a PGFIX, PGFREE or PGLOAD.

6A000401

An ECB was not on a word boundary. The request was a PGFIX, PGFREE or PGLOAD.

6A000601

The caller is not authorized to perform the page service function requested. The request was a PGFIX or PGFREE.

6A000701

The caller specified a cross memory mode request and a nonzero task control block (TCB) address with a page service function to which the TCB address was applicable.

6A000801

The caller specified an incorrect TCB. The request was a PGFIX, PGFREE, PGLOAD or PGOUT.

6A000901 through 6A000906

The caller specified incorrect options with the page services request.

6A000A01

The caller did not specify a valid function in the VSL/PSL entry.

6A000B01

6A000B02

The caller specified an ECB address, and the page containing it had not been obtained by a GETMAIN macro.

6A000C01

A caller that is not in key 0 specified an ECB address. The key of the page containing it did not match the caller's key.

- **Register 3:** If an SVC entry, the contents of register 3 are destroyed.

- **Register 4:** If LIST-FORMAT entry, address of the caller's erroneous VSL entry. If REGISTER-FORMAT entry, register 4 contains zero.
- **Registers 5-9:** If branch entry, registers 5-9 are the same as the caller's input registers. If SVC entry, registers 5-9 contain zero.
- **Register 10:** If the error is related to paging address of the page in error. If the error is not related to paging, register 10 contains zero.
- **Register 11:** If LIST-FORMAT entry, address of the caller's first VSL entry. If REGISTER-FORMAT entry, register 11 contains 0.
- **Register 12:** Address of the input ECB. If no ECB address was supplied, register 12 contains zero.
- **Registers 13-14:** The VSL entry in error. If the VSL was in pageable storage or if the VSL storage key did not match a nonzero caller's storage key, registers 13-14 contain zero.
- **Register 15:** Hexadecimal error code, as follows:

    Code
    > **Explanation**

    04
    > This is a PGFIX request. The caller did not obtain the VSL storage using a GETMAIN macro.

    10
    > The input ECB, TCB, or PSL/SSL failed to pass validity checks.

System action

The system issues an abend to the current task.

System programmer response

Correct the problem in the request and run the job again. If PGFIX or PGFREE was requested and the caller was not authorized, obtain proper authorization and run the job again.

Source

Real storage manager (RSM)

172

Explanation

Execute channel program (EXCP) processing found that an unauthorized program issued the EXCPVR macro. One of the following conditions must be present for the program to be authorized:

- The program must run under system protection key 0 through 7.
- The program must be in supervisor state.
- The SVC 114 authorization bit is set on in the job step control block (JSCB).
- The SVC 114 authorization bit is set on in the data extent block (DEB).

System action

The system abnormally ends the current task.

System programmer response

If the system wrote a dump, look at field TCBEXCPD at offset X'C0' in the task control block (TCB) of the current task. TCBEXCPD points to the EXCP debugging area (XDBA). The XDBA contains diagnostic data associated with the EXCP processor.

If the error recurs and the program issuing the EXCPVR or EXCP macro is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Ensure that the program is authorized to issue the EXCPVR macro or SVC 0, the EXCP macro. Check the problem program for the error. If the error cannot be determined, run the job again, requesting an ABEND dump. Notify the system programmer.

Source

Execute channel program (EXCP)

177

Explanation

During processing of a TESTAUTH macro, the system detected incorrect input parameters, as follows:

- An incorrect bit mask is in register 1.
- RBLEVEL=2, but the request block (RB) is the last RB chained or is out of range.
- The function code is greater than 256 or is out of range.
- The authorization code is greater than 256 or is out of range.

System action

The system abnormally ends the program that issued the TESTAUTH macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing for the job.

Programmer response

Ensure that the TESTAUTH parameter list is valid. The only valid IBM-supplied authorization or function code is one (1). If the installation supplied an authorization matrix, check to see that the function and authorization codes fall within the range of the installation-defined codes.

Source

Task management

178

Explanation

An error occurred when the system tried to process an RU or VRU form of the GETMAIN macro or the STORAGE OBTAIN macro. The GETMAIN or STORAGE OBTAIN requested virtual storage that requires more central storage than is available. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
    Explanation

04

There is not enough central storage available to support a request for space in a system queue area (SQA) subpool.

08

There is not enough central storage available to support a request for space in a fixed common service area (CSA) subpool.

0C

There is not enough central storage available to support a request for space in a local system queue area (LSQA) subpool.

1C

The system could not satisfy a request for an LSQA subpool. The page table for the segment describing the area to be obtained was paged out.

20

The system could not satisfy a request for an authorized private area subpool. The page table for the segment describing the area to be obtained was paged out.

System action

The system issues message IEA705I. The system abnormally ends the current task.

System programmer response

See installation procedures to increase the central storage requirements.

Programmer response

Ensure that the calling program is not requesting too much central storage.

If the system issues this abend frequently, notify the system programmer.

Source

Virtual storage manager (VSM)

179

Explanation

While processing an I/O request, the system found an error in the I/O parameters.

Register 2 contains a reason code, as follows:

Code
    Explanation

04

An error occurred when a program issued the SETLOCK macro.

08

The system found an incorrect access method block (AMB) or I/O management block (IOMB).

0C

The system found an incorrect channel program area (CPA).

10

The system could not fix a page in storage.

14

The system found an incorrect buffer address.

18

The system found incorrect addresses in a chain of channel control words (CCW).

1C

The storage block size is not 4 kilobytes.

40

IOMVEB points to a VEB that has incorrect data.

44

IOMVEB is zero, but the media manager return code indicates it should point to a VEB.

48

AMB MRET pointer is incorrect.

4C

MRET MREB pointer is incorrect, or MREB does not point back to BUFC that points to it.

50

For shared resources, no MRET entry pointed to IOMBUFC that points to BUFC.

54

Received unexpected MMCALL return code.

58

Could not find BUFC in error, but the media manager return code indicates some MMRE is posted with an error.

90

An unexpected code was returned when attempting to get storage for the encryption buffer.

System action

The system abnormally ends the current task.

Programmer response

Do the following:

1. Check to see if the program incorrectly modified the I/O parameters. Correct any errors.
2. Recompile the job step.
3. Run the job step again.

Source

VSAM

17A

Explanation

During processing of an EVENTS macro for a table creation or deletion, the system found an incorrect address specified for the EVENTS table.

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that an EVENTS macro was issued to construct the EVENTS table. Correct the error. Run the job again.

Source

Task management

17B

Explanation

A program running in supervisor state, key 0 issued the PURGEDQ macro with an incorrect value in the ASID parameter. The address space for the specified ASID does not exist.

System action

The system abnormally ends the task that issued the PURGEDQ macro. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=17B,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Ask the operator to set a SLIP trap to obtain an SVC dump.
2. In the system trace, look for an SVC 7B entry. The address in the PSW ADDR column for this SVC entry is the address of the calling module.
3. Use the PSW address to identify the module that issued the PURGEDQ macro.
   - For an installation-provided module, continue diagnosis with the module.
   - For an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide the SVC dump and the logrec data set error record.

Source

Supervisor control

17D

Explanation

During processing of an EVENTS macro for a wait request, the system found an incorrect address specified for the EVENTS table.

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that an EVENTS macro was issued to construct the EVENTS table. Correct the error. Run the job again.

Source

Task management

182

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

183

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

185

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

18A

Explanation

A PGSER macro requested a paging service (FIX, FREE, LOAD, RELEASE, ANYWHER, PROTECT, or UNPROTECT). The request was not valid. The caller used 31-bit addressing.

The registers contain the following:

- **Register 0:** A hexadecimal reason code, which is one of the following:

  Code
      Explanation
  08000101
      On a branch request, the start address is greater than the end address. The request was a register-format input.
  0B000101
      On an SVC request, the start address is greater than the end address. The request was a register-format input.
  2A000301
      Partial megabyte pagefree is prohibited against an already page fixed large page segment.
  35000201
      The page is part of a virtual I/O (VIO) window.
  35000301
      The page had not been obtained by a GETMAIN macro.

35000B01

Partial megabyte pagefix is prohibited against an already page fixed large page segment.

36000101

The page had not been obtained by a GETMAIN macro.

36000201

Permanent error.

3AF20101

A program check occurred when the paging services was accessing the caller's service list (SL) entry. The entry point whose ID is equal to the second byte of the reason code issued the reason code.

3B000401

The starting address in a virtual subarea list (VSL)/page service list (PSL) entry is greater than the ending address.

3B000501

The caller's page service list (PSL) entry contains the reserved flag.

3B000601

The starting address in a VSL/PSL entry is greater than the ending address.

3BF20101

A program check occurred when the paging services was accessing the caller's service list (SL) entry.

55000101

The caller is not in key 0. The key for the page did not match the caller's.

55000201

The caller requested that a permanently resident page be released.

6A000101

The caller specified a nonzero event control block (ECB) address with a cross memory page services request.

6A000201

The caller specified a nonzero ECB address with a PGOUT, PGRLSE or PGANY request.

6A000301

An ECB address contained a negative number. The request was a PGFIX, PGFREE or PGLOAD.

6A000401

An ECB was not on a word boundary. The request was a PGFIX, PGFREE or PGLOAD.

6A000601

The caller is not authorized to perform the page service function requested. The request was a PGFIX or PGFREE.

6A000701

The caller specified a cross memory mode request and a nonzero task control block (TCB) address with a page service function to which the TCB address was applicable.

6A000801

The caller specified an incorrect TCB. The request was a PGFIX, PGFREE, PGLOAD or PGOUT.

6A000901 through 6A000906

The caller specified incorrect options with the page services request.

6A000A01

The caller did not specify a valid function in the VSL/PSL entry.

6A000B01

The caller specified an ECB address, and the page containing it had not been obtained by a GETMAIN macro.

6A000B02

The caller specified an ECB address, and the page containing it had not been obtained by a GETMAIN macro.

6A000C01

A caller that is not in key 0 specified an ECB address. The key of the page containing it did not match the caller's key.

6FF20101

A program check occurred when the paging services was accessing the caller's service list (SL) entry.

xx0008xx

The caller tried to release a page of protected storage.

xx000907

The caller issued a PGSER macro with the PROTECT parameter, but one of the other parameters specified was either incorrect or incompatible.

xx000908

The caller issued a PGSER macro with the UNPROTECT parameter, but one of the other parameters specified was either incorrect or incompatible.

xx0701xx

The caller issued a PGSER macro with the PROTECT parameter for storage with a key that does not match the PSW key under which the program runs. The program issuing the PGSER macro with the PROTECT parameter must be either key zero or else run under a PSW key that matches the key of the storage being protected.

xx0702xx

The caller tried to issue the PGSER macro with the PROTECT parameter for virtual storage in either the PSA or any VIO window. Neither storage area can be specified with the PROTECT keyword.

xx0704xx

The caller issued a PGSER macro with the PROTECT parameter for virtual storage in the read/only nucleus that is backed by 1 megabyte pages. This storage area cannot be specified with the PROTECT keyword.

xx0705xx

A PGSER PROTECT request for restricted use common service area (RUCSA) storage was not processed because the VSM ALLOWUSERKEYCSA(NO) parameter is in effect in the DIAGxx member of parmlib and the caller is not authorized for RUCSA.

xx0801xx

The caller issued a PGSER macro with the UNPROTECT parameter with a key that does not match the PSW key under which the program runs. The program issuing the PGSER UNPROTECT macro must be either key zero or else run under a PSW key that matches the key of the storage being unprotected.

xx0802xx

The caller tried to issue the PGSER macro with the UNPROTECT parameter for virtual storage in either the PSA or any VIO window. Neither storage area can be specified with the UNPROTECT keyword.

xx0804xx

The caller issued a PGSER macro with the UNPROTECT parameter for virtual storage in the read/only nucleus that is backed by 1 megabyte pages. This storage area cannot be specified with the UNPROTECT keyword.

xx0805xx

A PGSER UNPROTECT request for restricted use common service area (RUCSA) storage was not processed because the VSM ALLOWUSERKEYCSA(NO) parameter is in effect in the DIAGxx member of parmlib and the caller is not authorized for RUCSA.

- **Register 3:** If branch entry, caller's return address.
- **Register 4:** If LIST-FORMAT entry, address of the caller's erroneous page service list entry (PSL)/short page service list (SSL). If REGISTER-FORMAT entry, register 4 contains zero.
- **Registers 5-7:** If SSL format entry, registers 5-7 contain the caller's input registers.

If PSL format SVC entry, registers 5-7 contain zero.

If PSL format branch entry, registers 5-7 are irrelevant.

- **Register 8:** If SSL format entry, register 8 is the same as the caller's input register.

If PSL format SVC entry, register 8 contains zero.

If PSL format branch entry, register 8 contains the caller's input TCB address, or, if no TCB address was supplied, register 8 contains zero.

- **Register 9:** If PSL format entry, address of the input ECB. If no ECB address was supplied, register 9 contains zero.

  If SSL format entry, register 9 is the same as the caller's input register.

- **Register 10:** If the error is related to paging, the address of the page in error. If the error is not related to paging, register 10 contains zero.

- **Register 11:** If LIST-FORMAT entry, address of the caller's first PSL/SSL entry. If REGISTER-FORMAT entry, register 11 contains 0.

- **Registers 12-14:** If PSL format entry, the PSL entry in error. If the PSL was in pageable storage or if the PSL storage key did not match a nonzero caller's storage key, registers 12-14 contain zero.

  If SSL format entry, register 12 contains zero. Registers 13-14 contain the SSL entry in error, or, if the SSL was in pageable storage, registers 13-14 contain zero.

- **Register 15:** Hexadecimal reason code, as follows:

  Code
  > **Explanation**

  04
  > A caller issued a PGFIX request but did not obtain the PSL storage using a GETMAIN macro, or a page release operation failed because either the caller attempted to release permanently backed storage or a non-system key caller attempted to release storage in a different key.

  10
  > The input ECB, TCB, or PSL/SSL failed validity checks.

System action

The system issues an abend to the current task.

System programmer response

Correct the problem in the request and run the job again. If PGFIX or PGFREE was requested and the caller was not authorized, obtain proper authorization and run the job again.

Source

Real storage manager (RSM)

18B

Explanation

The common VTOC access facility (CVAF) encountered one of the following conditions:

- A structure error in the VTOC index
- The CVAF return code is not consistent with the CVAF status code.

System action

A dump is written to SYS1.DUMP and an error record is written to the logrec data set. The task is not ended. If CVAF encountered a structure error in the VTOC index:

- Message IEC606I is issued.
- CVAF disables the VTOC index.
- If the caller of CVAF requests a read or write of a format 1 or 4 DSCB, CVAF performs the function and returns a code of yes to its caller.

- If the caller of CVAF requested a CVAF function that requires the VTOC index, CVAF returns an error return code to its caller. This may cause the caller to end.

If the CVAF return code is not consistent with the CVAF status code, CVAF returns an I/O error return code to its caller. This may cause the caller to end.

System programmer response

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and all printed output and output data sets related to the problem.

Programmer response

If a structure error in the VTOC index was encountered and the program ended, it may be rerun if it does not depend upon the VTOC index. Run the IEHLIST utility to list the VTOC and the disabled VTOC index. An inconsistency between the CVAF return code and status code indicates a logic error in CVAF. You may not be able to successfully run the job until the problem is corrected.

Source

DFSMSdfp

18F

Explanation

An abend occurred during the processing of the Integrated Cryptographic Service Facility/MVS (ICSF/MVS) main task.

Reason codes are as follows:

Code
   Explanation:

02
   No response was received from a card.

03
   Error in the ICSF mainline cross memory environment.

04
   Error loading or calling installation exits.

05
   The entry code in the component trace environment is not valid.

09
   Error in the interface to the event notification facility.

0A
   Error from the component trace routine.

0B
   ICSF could not load a required exit.

0C
   Exit number is not valid.

0D
   ICSF could not obtain a cross memory linkage index.

0E
   ICSF could not set a cross memory authorization index.

0F
   ICSF could not create an entry table for space-switching PC routines.

10

ICSF could not connect its entry table to the system tables.

12

ICSF could not establish an ENF listen exit.

13

ICSF could not issue a broadcast ENF signal.

14

ICSF could not establish an ESTAE during initialization.

1B

ICSF could not interpret the options data set.

1C

Serious error encountered during processing of the CICS Wait List data set.

1E

Entry code to CSFKSTRE routine not valid.

1F

Error from DSPSERV CREATE in the data space create routine.

20

Error from ALESERV ADD in the data space create routine.

21

Error from ALESERV EXTRACT in the data space create routine.

22

Error from ALESERV DELETE in the data space create routine.

23

Error from DSPSERV DELETE in the data space create routine.

24

An unexpected branch was taken in a utility program.

2C

The refresh code in the component trace routine is not valid.

2D

A cryptographic coprocessor returned a bad condition code. The coprocessor has been fenced off.

33

ICSF could not load a required installation service.

37

Error loading an application service.

38

ICSF could not install the compatibility cryptographic SVC.

3C

Invalid domain index specified in ICSF parameters.

3F

Error from ATTACH in the I/O subtask control routine.

41

Error in initialization.

42

Error in initialization - ATTACH.

48

Cryptographic public key operation disabled.

49

Cryptographic public key operation not initialized.

4A

Cryptographic public key operation not available.

4C

Error in CSFENICP module.

4D

Error from ATTACH in CSFENICP.

4F

Erroneous result from PCI device.

50

Error in messaging interface for PCI devices.

5A

Incorrect entry code passed to dataspace controller.

62

Unexpected output data from CSVDYLPA.

63

Unexpected return code from CSVDYLPA.

6D

Error from ATTACH of CSFINQKP.

6F

Error from ATTACH of the CSFPLMWT task.

70

Error in termination manager, tasks holding ENQs.

71

Error in termination manager, tasks waiting for ENQs.

73

Invalid CCP index in an internal call.

74

Serial number and CCP index mismatch.

75

Error from ATTACH of CSFMISDT.

76

Error from ATTACH in sysplex subtask control routine.

77

Error from ATTACH of CSFKSRCK.

78

Error from ATTACH of CSFPLPST.

79

Error from ATTACH of CSFKSRPK.

7A

Error from ATTACH of CSFPLTST.

7B

Error from ATTACH of CSFKSRTK.

7C

FIPS known answer tests failed.

7D

Installation option FIPSMODE(YES,FAIL(YES)) or FIPSMODE(COMPAT,FAIL(YES)) is specified, but the IBM CPC model type or the z/OS release does not support FIPS.

80

Parameter block for the compatibility services is not valid.

8C

The master key version number is not valid.

8D

The status word from the hardware contained a response code that is not valid.

8E

The status word from the hardware contained a response code that is not valid.

90

The status word from the hardware contained a response code that is not valid.

92

The key encrypting key (KEK) was the wrong type or was not a no control vector (NOCV) KEK.

94

The variant passed to the twist processing routine is not valid.

98

ICSF ended abnormally. An exit installed with the FAIL=ICSF option has ended abnormally.

A1

Requested system key was not found in the in-storage and/or the DASD CKDS.

A2

Error in the CKDS retrieval routine. The requested system key has a MAC that is not valid.

A3

Error in the CKDS retrieval routine. The requested dummy key was not found.

A4

Output type not valid.

A5

Error in parameters for internal ICSF service call.

A6

Cryptographic public key request not valid.

A7

Public key token type not valid.

A8

Hardware configuration is not enabled.

A9

Hardware configuration contains wrong key size.

AA

Arithmetic operand is not valid.

AC

Error in public key processing.

AD

Error in public key processing.

AE

Value for the FUNCTION parameter is unrecognized on call to CSFKSIPE.

AF

Error occurred in module CSFKSPSC.

B0

Error occurred in ATTACH macro issued in CSFKSPSC.

B3

Domain in CPRB does not match CCVE.

B4

Length of CPRB in SPB is wrong.

B5

Return code 16 from Cryptographic Coprocessor.

B6

Too much data for the CPRB/parameter block.

B7

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

B8

Reencipher of the CKDS failed due to an error in processing on the Cryptographic Coprocessor.

BA

Error in Pause processing.

C5

Error from an attempt to create or access a PKCS #11 data space.

D4

Failed latch create from ISGLCRT.

D5

Attempted storage overlay in hash table manager.

D6

Error in PAUSE processing.

D7

Error allocating PAUSE element.

D8

Error in PAUSE while waiting for I/O to complete.

D9

Program error detected on IXCQUERY invocation.

DA

Error in PAUSE while waiting for cross-system services to complete.

DB

Error in ISGENQ during KDS sysplex serialization.

DC

Error in IXCMSGO during KDS sysplex serialization.

DD

Error in IEAVPSE2 during KDS sysplex serialization.

DE

Error in ISGENQ during PKDS sysplex serialization.

DF

Error in IXCMSGO during PKDS sysplex serialization.

E0

Error in IEAVPSE2 during PKDS sysplex serialization.

E1

Error in ISGENQ during TKDS sysplex serialization.

E2

Error in IXCMSGO during TKDS sysplex serialization.

E3

Error in IEAVPSE2 during TKDS sysplex serialization.

E5

Attempted to free a serialization block that was already freed.

E6

Error in IEAVPSE2 while waiting for KDS rename.

E7

Error in ISGLCRT processing of the CKDS latch set.

E8

Error in ISGLCRT processing of the PKDS latch set.

EA

Error establishing ESTAE for KDS sysplex subtask.

EB

Error establishing ESTAE for PKDS cross-system services task.

EC

Error establishing ESTAE for TKDS cross-system services task.

ED

Error initializing KDS sysplex subtask.

EE

Error initializing PKDS cross-systems task.

EF

Error initializing TKDS cross-systems task.

F0

Error in IXCJOIN for ICSF KDS sysplex group.

F1

Error in IXCJOIN for ICSF PKDS sysplex group.

F2

Error in IXCJOIN for ICSF TKDS sysplex group.

F3

Error from IXCQUERY request in CSFPLCMD module.

F4

Error from IXCMSGO request in CSFPLMSR module.

F5

Error from IEAVPSE2 request in CSFPLMSR module.

FA

Error determining sysplex KDS cluster member list in CSFPLCMD.

100

The return code from an installation exit is not valid.

101

Compatibility mode services are not available. ICSF is running in PCF non-compatibility mode (COMPAT(NO)).

102

Condition code from an ICSF (instruction) macro is not valid.

103

The return code from the RCFSTAT macro is not valid.

104

The return code from the RCFCONF macro is not valid.

105

A master key version change occurred during the reencipher, conversion or dynamic CKDS update process.

107

Error in public key processing.

108

Error in interprocessor communication.

109

Bad response code for PKSC/PKA request.

10A

Bad PKSC/PKA request block.

10B

PCI device queue full error.

10C

Unknown response code from PCI device instructions.

110

Invalid return code from security exit.

111

Invalid return code from CSFEXIT1.

112

Invalid return code from CSFEXIT2.

113

Invalid return code from CSFEXIT3.

114

Invalid return code from CSFEXIT4.

115

Invalid return code from CSFEXIT5.

116

Invalid return code from security termination exit.

117

Error in RESMGR processing.

118

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

119

Rewrap of CKDS failed due to an error on coprocessor.

181

The exit list in the common I/O routine is not valid.

182

The access control block in the common I/O routine is not valid.

183

The request parameter list in the common I/O routine is not valid.

184

MAC Generate or MAC Verify failed with RC=12 during dynamic CKDS update processing.

185

An incorrect function request was passed to common I/O routines for dynamic CKDS update processing.

186

An unexpected return or reason code was returned from common I/O routines during dynamic CKDS update processing.

187

Incorrect CKDS record created during dynamic CKDS update processing.

191

A blank message skeleton was retrieved.

192

A matching message table was not found.

193

The message was not found.

194

The substitution tag is not valid.

195

The message buffer size was exceeded.

197

CAMQ reply PSMID does not match.

198

CCP reply PSMID does not match.

199

Unknown response code after dequeue CAM.

19A

XCF message is too big for internal ICSF buffer.

19B

An IXCMSGI request failure occurred receiving an XCF message.

205

The control vector (CV) in the cryptographic key data set (CKDS) record is not valid.

206

The conversion service received a CKDS that is not valid.

207

WLM encountered a bad data area.

300

A function that was passed to the dialog service routine is not valid.

301

Improper key specified for clear key input dialog.

380

A message ID that was used in the component trace routine is not valid.

381

The control block in the component trace routine is not valid.

400

Condition code from an ICSF (instruction) macro is not valid.

401

Condition code from an ICSF (instruction) macro is not valid.

402

Condition code from an ICSF (instruction) macro is not valid.

403

Condition code from an ICSF (instruction) macro is not valid.

404

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

407

Unexpected condition code during PCI device initialization.

408

Condition code from an ICSF (instruction) macro is not valid.

409

Condition code from an ICSF (instruction) macro is not valid.

40A

Error in parameters for internal ICSF service call.

40B

Unknown response code from PCI device instructions.

40C

Condition code from an ICSF (instruction) macro is not valid.

40D

Error in parameters for internal ICSF service call.

40E

Condition code from an ICSF (instruction) macro is not valid.

40F

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

410

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

414

Unexpected condition code while sending a request to a PCI device.

415

Unexpected condition code while sending a request to a PCI device.

416

Unexpected condition code while receiving a reply from a PCI device.

417

Unexpected condition code while receiving a reply from a PCI device.

418

Error accessing PKCS#11 tokens.

419

Error accessing PKCS#11 objects.

41B

Error in parameters for internal ICSF service call.

41C

Re-encipher of the PKDS failed due to an error in processing on the Cryptographic Coprocessor.

41D

Re-encipher of the PKDS failed due to an error in processing on the Cryptographic Coprocessor.

41E

Error in parameters for internal ICSF service call.

41F

Error in parameters for internal ICSF service call.

420

Error in parameters for internal ICSF service call.

421

Error in parameters for internal ICSF service call.

423

Error in parameters for internal ICSF service call.

424

Error in parameters for internal ICSF service call.

426

Erroneous result from PCI device.

427

Error in parameters for internal ICSF service call.

428

Error in parameters for internal ICSF service call.

429

Unexpected condition code while receiving a reply from a PCI device.

42A

Unexpected condition code while receiving a reply from a PCI device.

42B

Unexpected condition code while sending a request to a PCI device.

42C

Unexpected condition code while receiving a reply from a PCI device.

42D

Unexpected condition code while receiving a reply from a PCI device.

42F

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

430

Compatibility mode service EMK is not available. ICSF is running in PCF non-compatibility mode (COMPAT(NO)).

432

Condition code from an ICSF (instruction) macro is not valid.

433

Condition code from an ICSF (instruction) macro is not valid.

434

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

435

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

436

Compatibility mode service EDC is not available. ICSF is running in PCF non-compatibility mode (COMPAT(NO)).

43A

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

43C

The reply CPRB or parameter block cannot be processed because of invalid format or invalid data.

43F

Too much data for the CPRB/parameter block.

444

Storage for structure insufficient in PKCS #11 attribute processing.

445

Storage for structure insufficient in PKCS #11 attribute processing.

446

Storage for structure insufficient in PKCS #11 attribute processing.

447

Storage for structure insufficient in PKCS #11 attribute processing.

448

Storage for structure insufficient in PKCS #11 attribute processing.

449

Condition code from an ICSF (instruction) macro is not valid.

44A

Condition code from an ICSF (instruction) macro is not valid.

44B

Condition code from an ICSF (instruction) macro is not valid.

44D

Error in parameters for internal ICSF service call.

44E

Error in parameters for internal ICSF service call.

44F

Error while loading an ICSF module on startup. The load abend and reason codes are in registers 2 and 3. The most likely problem is the loading of signed module CSFINPV2. A signature verification failure would be indicated by R2 = 00000360, R3 = 00000040, which should be accompanied by security manager messages detailing the problem.

450

Error from PAUSE in CSFENDQT.

451

Error Allocating a PET in CSFENDQT.

452

Error from ATTACH in CSFINCPM.

453

Internal error - improper call to CSFV2KW2.

454

Internal error - unrecognized token.

455

Internal error - unexpected reencipher result.

456

Internal error - PKT full (CSFKSIPE)

457

Internal error - PKT full (CSFPLPST

458

Incorrect key record.

45A

The CSFPLMWT task received a bad RC from IEAVPSE2.

45B

The CSFPLMRT task received inconsistent internal control information.

45C

The CSFSMBTM module received inconsistent internal control information.

45D

CSFPLCMD/CSFPLMRT pause failure (XCF notify exit).

45E

An IXCMSGO request failure occurred sending an XCF message.

45F

An XCF message exit error occurred during ICSF sysplex processing.

460

A sequence number error occurred during ICSF sysplex processing.

461

A cache update failure occurred during ICSF sysplex processing.

462

The CSFKSIDC module was called with an incorrect function code.

463

The CSFKSIIO module was called with an invalid IO function request.

464

The CSFKSIIO module ran out of dynamic storage.

465

ICSF forced termination.

466

An error occurred during ATTACH of the CSFMISTP task.

467

CSFENXCP detected a bad XCP message payload length.

468

CSFENXCP detected a bad XCP message encoding length.

469

CSFENXCP detected a bad XCP responses length.

46A

CSFSMBTI inconsistent internal control information.

46B

Terminate stuck I/O subtask.

46D

CSFENXCP message response too large.

46E

Reencipher of TKDS failed due to an error on coprocessor.

46F

CSFNCGKP data returned from XCP invalid BER format.

470

CSFNCCMK error in internal ICSF service call parms.

471

CSFNCRNC error in internal ICSF service call parms.

472

CSFKSCS2 detects unusable KDS.

473

CSFNCUWK data returned from XCP invalid BER format.

474

CSFNCUWK data returned from XCP has unexpected attrs.

475

CSFPLXNU XCF problems in the sysplex.

477

Crypto processor encountered a toxic request.

478

Damaged variable metadata detected.

479

An error occurred during ATTACH of the CSFKSMPT task.

47A

ISGQUERY returned unexpected results.

47B

KDS bound to multiple KDS tokens.

47C

The regional cryptographic server returned a response parameter that has a length error.

47D

Error attaching CSFMICST.

47E

Received OPIN larger than should be possible.

47F

Received CC1 from protected-key operation.

480

The regional cryptographic server configuration subtask ended.

481

The regional cryptographic server request subtask ended.

482

A regional cryptographic server encountered a toxic request.

483

The regional cryptographic server returned an unsupported OID.

484

An error occurred during ATTACH of the CSFMIKUT task.

485

Cleanup error: A Crypto block has been double freed.

486

Cleanup error: Caller release.

487

An error occurred during ATTACH of the CSFMIAKT task.

488

An error occurred during ATTACH of the CSFMISTT task.

489

Unknown results from compliance warnings processing.

48C

ASCRE failed during early ICSF processing. This abend results in a wait state (X'040').

System action

If the abend occurred during ICSF initialization, ICSF ends abnormally.

In general, if the abend occurred after ICSF is available and running, your application or unit of work ends. ICSF is still available. However, if the error occurred when trying to set the cryptographic domain index or if an exit that is installed with the FAIL=ICSF option abends, ICSF ends abnormally.

Programmer response

Review the reason codes on the dump title to see if the abend was an installation or user error. Also check to see if the reason code was an installation-generated reason code. If you cannot resolve the problem, search problem reporting databases for a fix for the problem. If no fix exists, save the dump, gather the dump header record, and contact the IBM Support Center.

Debugging aids and recovery-related information are discussed in *ICSF System Programmer's Guide.*

Source

Integrated Cryptographic Service Facility (ICSF)

1C2

Explanation

The IBM MQ Workflow for z/OS server address space encountered a severe internal error.

The reason code identifies the source of the error. It has the format X'rrmmnnnn', where *rr* denotes the resource class (as detailed in the table that follows), *mm* denotes the method of the resource class, and *nnnn* identifies the place within the method where the error was encountered.

Resource Class Code	Resource Name	Resource Description
01	Resource	abstract class for workflow server resources
02	FmSrvRes	abstract class for workflow server instance resources
03	FmDevRes	abstract class for workflow server input/output device resources
04	SystCons	implementation class for the system console interface
05	Diagnose	implementation class for the flight recorder
06	FifoLock	implementation class for the queue serialization
07	MvsMsgSv	implementation class for the MVS message services interface

Resource Class Code	Resource Name	Resource Description
08	DevQueue	implementation class for the in-storage queues
09	ErrStack	implementation class for the error recovery
10	ServerDS	implementation class for the data set access
11	Security	implementation class for the security server interface
12	SrvGroup	implementation class for the subtask management
13	SynchEcb	implementation class for the subtask synchronization
14	TimeServ	implementation class for the timer interface
15	ExtTrace	implementation class for the component trace interface
16	TaskServ	implementation class for the subtask services
17	WkldMgmt	implementation class for the workload manager interface
18	XcfGroup	implementation class for the cross-system coupling facility interface
19	XLngServ	implementation class for the cross-language services
20	XMemServ	implementation class for the cross-memory services

System action

The system issues an ABEND dump.

System programmer response

For reason code X'1505nnnn', verify the setup for the component trace and restart the server. For reason code X'1705nnnn', verify the setup for the workload manager application environment and restart the server.

For other reason codes, search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the ABEND dump.

Programmer response

None.

Source
Task 265988 SEV 5/30/19

IBM MQ Worklfow for z/OS

1C3

Explanation

An error occurred during IBM License Manager (ILM) processing. The accompanying reason codes identify either an internal IBM License Manager error or an external error code as follows:

Value	Description
0403	Bad input parameters. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0414	Bad return code from ETCRE macro. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0415	Bad return code from ETCON macro. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0418	Bad return code from ESTAE macro. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0419	Bad return code from VSM Locate macro. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0420	Bad return code from LOAD or NUCLKUP macros. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0422	Bad return code from DSPSERV Create. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0423	Bad return code from ALESERV Add. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0424	Bad return code from EnfReq Listen. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0425	C Daemon not responding to termination request. **Action:** Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.

Value	Description
0427	Attach of BPXBATSL to execute Agent C Daemon failed.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0428	Taking dump as requested by Agent C Daemon.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
0429	Taking dump as requested by Server C Daemon.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05C4	Cell storage address required.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05C5	Cannot do DSPSERV RELEASE for this cell pool.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05C6	Bad return code from Csrpbld service.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05C7	Bad return code from Csrpexp service.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05C8	A Storage Manager Control Block stack is invalid.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05C9	A Storage Manager Control Block stack overflowed.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05CA	A Master Cell Pool is out of extent storage cells.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.

Value	Description
05CC	Cell pool token is invalid.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05CD	Cell pool is out of cells.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05CE	Cell address is invalid.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05CF	Bad return code from Csrpfre service.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05D0	Bad return code from Csrpget service.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05D1	Bad return code from Csrpqpl service.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05D2	Incorrect data in a certificate.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05D3	The set of certificates had no IBM global certificate.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05D4	The agent provided a DOM ID of 0 to be saved.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05D5	The server provided a DOM ID of 0 to be saved.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.

Value	Description
05D6	The agent provided a stall time of 0.
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
05D7	The agent or server provided a DOM ID of 0 to be deleted..
	Action: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and, if this problem caused multiple abends, the portion of the logrec log containing the relevant logrec records.
8005	The callable service was issued by a program running with an EUT FRR set.
	Action: You must not issue the callable service when an FRR is set. FRRs must be deleted before calling the service.
8006	The callable service was issued by a program running with a system lock held.
	Action: You must not issue the callable service when a lock is held. Release the locks before calling the service.
C001	The IBM License Manager is not supported on this system.
	Action: Start the IBM License Manager on a processor that supports this capability.
C003	The callable service was not issued by a program running under a task.
	Action: You must issue the callable service only in task mode. SRB mode is not supported.
C004	The CVTILM bit is off, which means no calls to the IBM License Manager should be made.
	Action: User error. If the official stubs are used to call the IBM License Manager, the stub will test the CVTILM bit. If you are calling the IBM License Manager without the stub, you must check CVTILM and call only if the flag is ON.
C007	The callable service was issued in cross-memory mode.
	Action: You cannot issue the callable service in cross-memory mode. Correct the problem and resubmit the job.
C009	The parameter list contains an incorrect number of parameters.
	Action: An error was encountered that prevents the running of the callable service. However, the system cannot set an error return code for the caller because the input parameter list is incorrectly specified.
	An ABDUMP or symptom dump has been requested for the caller. In the dump, register 2 contains the return code value and register 3 contains the reason code value of the original failure. Do both of the following:
	• Analyze the return code and reason code for the cause of the original problem.
	• Check for incorrect input parameters passed to the callable service.

Value	Description

C00E	An incorrect address was encountered when trying to move user parameter data. This can be caused by one of the following conditions:
	
	• The total number of parameters is incorrect for the callable service being issued.
	
	• **Action:**There is an error in one of the passed user parameters causing the IBM License Manager to program check when the parameter is accessed. Check for the following conditions:
	
	  – A parameter that points to non-existent storage.
	
	  – A parameter that cannot be accessed in the current user PSW key.

Any other reason codes indicate that an internal error has occurred.

System action

For the listed reason codes, use the system actions specifically listed.

System programmer response

Try the request again. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and logrec entries associated with this abend.

For the listed reason codes, use the system programmer response specifically listed.

Source

IBM License Manager

Module

Many

1C5

Explanation

An error occurred during System Logger processing. The accompanying reason codes identify either an internal recoverable Logger error or an external error code as follows:

Code
    Explanation

00000804
    An IXGBRWSE or IXGDELET request failed because the block identifier could not be found in the log stream.

    System Action: The request is not honored and a return code 8, reason code 00000804 (or corresponding missing data reason code) is returned to the caller.

    System Programmer Response: Ensure that the value in the request references an existing portion of the log stream.

    You can run the utility IXCMIAPU with LIST LOGSTREAM (logstream-name) DETAIL(YES) to help you determine if the requested blockid is in a valid range, and it is not in a loss of data range.

    If the blockid is valid, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and LOGREC entries associated with this ABEND.

0000085F
    Control percolated to the service requester's task due to an abend during system logger processing. Retry was not possible.

System Programmer Response: Request the service again. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00010001

Logger encountered an error that would have resulted in overwriting log data on DASD.

System Action: System Logger ends the task.

System Programmer Response: If the operation in question fails, refer to message IXG269I for diagnostic procedures. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center

and provide the diagnostic information.

00010008

Logger is unable to interpret the contents of an offload data set.

System Action: The request to read the data set fails. Logger will issue message IXG063I to attempt to identify the log stream, and it will request a dump. Logger may have also issued message IXG269I to identify the data set in error. Browse (IXGBRWSE) requests to a log stream that encounters this error might result in warning or error gap conditions.

System Programmer Response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00010009

Logger is attempting to read from or write to an offload data set, but a Media Manager access method error was encountered.

System Action: Logger will issue message IXG063I to attempt to identify the log stream and it will request a dump. For offload processing, if Logger can recover from the error, it will close the current data set, allocate a new one, and continue with the offload. If Logger cannot recover, it will issue message IXG301I and the offload will fail. Browse (IXGBRWSE) requests to the log streams that encounter this error might result in warning or error gap conditions.

System Programmer Response: If the operation in question fails, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the diagnostic information.

00030006

An abend occurred after system logger called an application's complete exit. Either the complete exit abended and percolated to system logger recovery, or the address of the complete exit specified on the COMPLETEEXIT parameter of the IXGCONN request for the log stream was incorrect.

System Action: System logger ends the task that owned the connection to the log stream in order to end the connection.

System Programmer Response: Ensure that the complete exit address specified on the IXGCONN request was correct and that the address does not change. System logger requires that the caller's complete exit remain loaded in storage at the address specified on IXGCONN until the application receives control after successfully disconnecting from the log stream. Then, if necessary, restart the application.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and logrec entries associated with this abend.

00030009

System logger was unable to complete an offload during log stream recovery. The operator response to message IXG115A caused system logger to abnormally terminate the structure connect task.

System Action: System logger ends the task that owned the connection to the log stream and the structure for which the offload was processing.

System Programmer Response: Restart any applications that use the log stream identified in message IXG114A.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and logrec entries associated with this abend.

00040003

System Logger has detected that the timestamp of the last block written for the current logstream is well in the future. It is likely that this log stream was used in testing environment, and an attempt has been made to reuse the log stream once testing was complete and the clock has been set back to the present or appropriate date/time. This type of Logger ABEND condition has been known to occur during the following types of testing situations:

- during Y2K testing.
- during reverse migration from a Mixed-CTN to an ETR-only network on z/OS images on the CPC for which the ETR ports are enabled. A Coordinated Timing Network (CTN) is a collection of servers and Coupling Facilities that are time synchronized to a time value called Coordinated Server Time. A Mixed-Coordinated Timing Network (Mixed-CTN) requires a Sysplex Timer, and allows for both an External Time Reference (ETR) network and a Server Time Protocol (STP). Depending on how long the stratum 2 server resides in STP-timing mode, the TOD clock may drift enough for Logger to detect that a system on an ETR-timing CPC might be less advanced than one on the STP-Timing CPC. This might be encountered on any image on the STP-timing server if they are actively writing log blocks to a CF structure based log stream.

System Action: If the log stream had been newly connected on a system after the clock (time) adjustment, then the system has previously issued message IXG218A, warning of this condition. Once the issue is encountered, no IXGWRITE requests for this log stream can be completed until the date/time becomes current (as indicated in Message IXG218A). Until the appropriate date and time are reached, Logger will reject IXGWRITE requests with a return code X'0C'. A dump will be requested to provide diagnostic information.

System Programmer Response: The most likely cause of this problem is that the clock value for the sysplex has been adjusted backwards in time, and that this log stream was written to while the clock was adjusted forward. If the time difference from the clock adjustment or wait time indicated in message IXG218A is unacceptable, it will be necessary to disconnect from the log stream, delete it, redefine it, and reconnect.

Any other reason codes indicate that an internal error has occurred.

System action

The system will have issued message IXG063I in an attempt to identify the log stream (and CF structure) resources Logger was operating on at the time of the ABEND. The system writes a dump and records the error in logrec.

For the listed reason codes, use the system actions specifically listed.

System programmer response

Try disconnecting a log stream and connecting again. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and logrec entries associated with this abend.

For the listed reason codes, use the system programmers response specifically listed.

Source

System Logger

1C6

Explanation

The system detected a possible overlay of a TCB field for a task that is the target of a STATUS macro request. For more information about the STATUS macro, see *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO*.

System action

The system abnormally ends the address space in which the task is running.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

Source

Task Management

1C7

Explanation

An error occurred during workload manager (WLM) processing. The accompanying reason code identifies either an internal recoverable WLM error or an external error code as follows:

Code
> **Explanation**

0Axx0004
> An attempt to reference a caller's parameters caused an 0C4 abend.

xxxx0005
> This is issued by WLM Module IRASAQUE (Queue delay samples gatherer). The QM sampling routine, QMSAM, has either returned with an error code, or it has abended an excessive number of times. This may be the result of damage to the QM/EM data structures, or it could also be a consequence of QMSAM running unserialized.
>
> WLM is rebuilding its internal structure.

1030003
> This is issued during initialization of the WLM address space when the load of a WLM load module fails or the load module is not in the nucleus.

System action

Code
> **System Action**

1030003
> The system goes into a wait state.

Operator response

Code
> **Response**

0Axx0004
> Notify the system programmer.

xxxx0005
> Ignore and continue, and notify system programmer if the problem persists.

1030003
> Notify the system programmer.

System programmer response

Code
> **Response**

1030003

This problem can result from an incorrect "PTF apply", that is, a PTF was not installed successfully. If you cannot identify the respective PTF and fix the problem, search problem reporting databases for a fix for the problem. If no fix exists, create a stand-alone dump and contact the IBM Support Center. Provide the dump issued by the system.

For other reason codes, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump.

Programmer response

Check for possible programmer errors that might exist in a program that requests services from WLM.

Code
   Response

0Axx0004

WLM could not access the parameter list or parameters passed by the IWMPQRY or IWMWQRY services. The following are possible problems:

- WLM could not copy the parameter list because the parameters could not be accessed by storage key.
- WLM could not copy the service definition, service classification rules, or the service notepad area to a private copy.
- WLM could not copy a local copy of the parameter list back into the caller's copy.

Check the parameter list areas for the service definition, service classification rules, and notepad area. Ensure that correct storage keys are specified.

For all other reason codes, contact programmer service support.

1D0

Explanation

An error occurred during Common Event Adapter (CEA) processing. The accompanying reason codes identify either an internal Common Event Adapter error or an external error code, as follows:

Value	Description
0001	The callable service was issued by a program running with an FRR set.
	Action: You must not issue the callable service when an FRR is set. FRRs must be deleted before calling the service.
0002	The callable service was issued by a program running with a system lock held.
	Action: You must not issue the callable service when a lock is held. Release the locks before calling the service.
0003	The callable service was not issued by a program running under a task.
	Action: You must issue the callable service only in task mode. SRB mode is not supported.
0004	The callable service was issued in cross-memory mode.
	Action: You must not issue the callable service in cross-memory mode. Correct the problem and resubmit the job.
0005	The caller was not enabled.
	Action: You must enable the caller to invoke this service.

Value	Description
0007	The specified length for a CEA input argument is incorrect.
	Action: The length of a SIGNED or UNSIGNED argument cannot be longer than 8 bytes (64 bits).
0008	The specified type of a CEA input argument is incorrect.
	Action: Correct the type. The address of the invalid type is in register 2.
0009	The input parameter list of the user is not accessible.
	Action: Check the input parameter list for the service and verify that it is correct.
000A	There is no security product.
	Action: Install a security product such as RACF and retry the request.
0415	There is an error in the software setup or configuration.
	Action: If the module issuing the ABEND is CEAWIFCN, the most likely cause is that the TRUSTED attribute has not been set for the CEA address space. To confirm this, the dump will show that register 2 contains the value X'0000008B' and register 3 contains X'07020303'. See the "System prerequisites for the CEA TSO/E address space services" topic in *z/OS MVS Programming: Callable Services for High-Level Languages* for more information.
	If the module was not CEAWIFCN, an internal CEA error has occurred. Contact the IBM Support Center.

Other reason codes in the range 0401 - 3FFF indicate that an internal error has occurred.

System action

Use the system actions specifically listed.

System programmer response

For the reason codes listed, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Common Event Adapter

Module

Many

1E0

Explanation

A JES SSI routine detected an error in the information passed by the caller. Either an unauthorized caller is attempting to use an SSI that requires authorization or an SSI caller passed a data area to the SSI that it does not have access to. The return code in register 15 identifies the error.

Code
    Explanation

04

An unauthorized caller (problem state and non-authorized PSW storage key) invoked an SSI that requires the caller to be authorized.

08

A data area passed on an SSI could not be accessed in the PSW storage key of the caller. Because this is a transformed ABEND code (original ABEND may have been an X'0C4'), it is not possible to set a SLIP trap on this code to force an SVC dump.

0C

The SSI call was set up improperly.

10

Input to the SSI was not valid.

14

An authorization sequence error occurred when an SSI attempted to delete an entry from the JES address keep using the IAZADRKP macro.

20

An authorization sequence error occurred when an SSI attempted to delete an entry from the JES address keep using the IAZADRKP macro.

System action

The program invoking the SSI is ABENDed.

Operator response

None.

System programmer response

A LOGREC entry will be created to document that this error has occurred.

User response

Correct the application.

Problem determination

Review SSI requirements in *z/OS MVS Using the Subsystem Interface*.

Source

JES2, JES3

Module

HASCLINK, IATSIAU, ATSI70, IATSI83, IATSIES, IATSIJPC, IATSIJPI, IATSIJPN, IATSIJPS, IATSIJPX

1FA

Explanation

The error occurred during execution of a data management request for a spool data set. JES2 found that the data management control blocks are no longer valid.

System programmer response

Obtain the program listing for the job. Look at the messages in the job log. If the JOB statement did not specify MSGLEVEL=(1,1), specify it and run the job again.

Probable user error. Verify that the problem program did not modify the data management control blocks. After making the correction, execute the job step again.

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

JES2 or DFSMSdfp

1FB

Explanation

JES3 may have issued one of the following messages because of the indicated error:

IAT1601
The user is trying to perform I/O to a data set that is closed.

An incorrect IATYDAT was found on the data buffer block (DAT) queue.

IAT1602
One of the following control blocks either (1) could not be validated or (2) contains incorrect data: IATYDAT, IATYDMC, IATYDSB or IATYDSS.

IAT1603
A JES3 module passed, as a parameter to IATDMEB, a code that requested an incorrect data management function.

IAT1604
A start I/O operation in the user's storage returned an error code.

IAT1605
A start I/O operation in the user's storage returned an error code.

IAT1606
IATDMEB found an incorrect unprotected buffer (IATYDAT) address or the associated IATYDMC address was incorrect.

IAT1607
IATDMEB could not allocate an unprotected buffer.

IAT1609
One of the following occurred:

- When module IATDMEB or IATSIAD attempted to set up a data management WAIT, the module found a data management function already waiting.

- When module IATDMEB or IATSIAD attempted to set up a subsystem interface WAIT, the module found a subsystem function already waiting.

IAT1610
During ENDREQ processing, a request for macro IATYJDS failed.

IAT1611
The JES3 SSVT was either (1) incorrect or (2) could not be found.

IAT1612
The SYSOUT class to be allocated is not alphanumeric.

IAT1614
A failure occurred while processing a started task or TSO logon internal reader data set.

IAT1803
An attempt to move data from a JES3 protected buffer in the JES3 auxiliary address space to a user storage unprotected buffer failed.

IAT6700

During deallocation, when attempting to update the JDSENTRY, the module could not find a job data set (JDS) entry.

IAT6703

When the module attempted communication, an error that disrupted operations occurred in the global processor.

IAT6704

OPEN could not allocate a user address space buffer to a data set.

IAT6707

At deallocation of the external writer data set, the module could not find an output scheduling element (OSE).

IAT6708

A permanent I/O error occurred on an output data set.

IAT6711

A SSISERV macro sent incorrect data to the global processor; the request could not be serviced.

IAT6309

A failure has occurred during an MVS LOAD or BLDL of a JES3 input service module.

If none of these messages appear, JES3 found an incorrect IFGACB, IATYDSS, or IATYDSB control block or received an error return code as a result of either a SJFREQ request or a multi-system core buffer request.

System action

Depending on the error, the system ends either the job step or the user address space.

System programmer response

If messages accompany this abend, register 3 in the dump points to a copy of the data set status block (DSS). A hexadecimal reason code explains the error. Use this reason code to determine the cause of the error. If the reason codes report errors from IATDMCB, requestors of multi-system core buffer information will experience a delay in getting a response. Following the delay, the information reported will include only the records that have been written to spool. The core buffer information will not be reported. To repair this processing, request an IPL of the main that received the 1FB abend.

Code
   Explanation

01

Module IATDMEB, while performing verification of the subsystem vector table (SVT), has found that the SVT block ID (SVTID) is incorrect.

03

Module IATDMEB contains undefined function code.

04

Module IATDMEB received an error code from the IATXSIO macro while processing the GET routine.

05

Module IATDMEB3 received an error code from the IATXSIO macro while processing the data management point routine.

06

Module IATDMEB3 received an error code from the IATXSIO macro while processing the SSI point routine.

07

Module IATDMEB received an error code from the IATXSIO macro while processing the GET routine.

08

Module IATDMEB received an error code from the IATXSIO macro while processing the PUT-Update routine.

09

Module IATDMEB contains a dynamic address translation (DAT) validation error. The DAT address is out of range (too low).

0A

Module IATDMEB contains a dynamic address translation (DAT) validation error. The DAT address is out of range (too high).

0B

Module IATDMEBS received an error code from the IATXSIO macro while reading a previous record.

0C

Module IATDMEB3 received a busy return from macro IATXUBAL while processing the buffer checkpoint routine.

0D

Module IATDMEBS received an error return from macro IATXUBAL while processing a POINT request.

0E

Module IATDMEBS received an error code from the IATXSIO macro while attempting to read ahead.

0F

Module IATDMEBS received an error code from the IATXSIO macro while processing a write error retry.

10

Module IATDMEBS received an error code from the IATXSIO macro while processing a required read.

11

Module IATDMEBS received a busy return from macro IATXUBAL due to an unsuccessful Get request following a Point request associated with a JOURNAL data set.

12

Module IATDMEB3 detected a CLOSE serialization failure in the ENDREQ routine.

13

Module IATDMEBS received a busy return form macro IATXUBAL while processing a single record request.

14

Module IATDMEB received an UBUFF validation error while processing. DMC block ID (DMCID) is incorrect.

15

Module IATDMEB found the data management wait already outstanding.

16

Module IATDMEB found the SSI wait already outstanding.

17

Module IATDMEB received an error return from macro IATXSIO.

18

Module IATDMEB received an DMC validation error. The DMC block ID (DMCID) is incorrect.

19

Module IATDMEB received an DMC validation error. DMC address is out of range (too low).

1A

Module IATDMEB received an DMC validation error. DMC address is out of range (too high).

1B

Module IATDMEB received an DAT validation error. DAT block ID (DATID) is incorrect.

1C

Module IATDMEB or IATDMEB3 received an DAT validation error. DAT address is out of range (too low).

1D

Module IATDMEB or IATDMEB3 received an DAT validation error. DAT address is out of range (too high).

1E

Module IATDMEB3 received a GETMAIN failure while processing ENDREQ routine.

1F

Module IATSICC received a permanent I/O error writing last buffer.

20

Module IATDMFR received a failure in IATDMEB channel end routine (IATDMEBS).

21

Module IATDMEBS received a cross memory move (IATXMVXM) error return.

22

Module IATDMEB detected the data set status block id (DSSID) is not valid upon entry.

23

Module IATDMEB received an DSS validation error. The SVT pointer (DSSSVT) is incorrect.

24

Module IATDMEB received an DSB validation error. DSB block ID (DSBID) is incorrect.

25

Module IATDMEBS received an error return from UBUFF while processing the allocation routine.

26

Module IATDMEBS received an error return from IATXSIO while redriving the I/O for a DMC.

27

Module IATDMEB3 could not free user memory buffers. The DSS or DSB failed validation in module IATDMUB.

28

Module IATDMEB2 or IATDMEB3 received an DAT validation error. DAT address is out of range (too low).

29

ModuleIATDMEB2 or IATDMEB3 received an DAT validation error. DAT address is out of range (too high).

2A

Module IATDMEB3 received an SSISERV error while processing ENDREQ routine. The JIB block ID incorrect.

2B

Module IATDMEB3 received an error in JDS access while processing ENDREQ routine.

2C

Module IATDMEB received an DMC validation error. DMC address is out of range (too low).

2D

Module IATDMEB received an DMC validation error. DMC address is out of range (too high).

2E

Module IATDMEBS received an DAT validation error. DAT address is out of range (too low).

2F

Module IATDMEBS received an DAT validation error. DAT address is out of range (too high).

30

Module IATDMEB received an error return from spool record allocation (IATDMDKR).

31

Module IATDMEB3 received an DAT validation error. DAT address out of range (too low).

32

Module IATDMEB3 received an DAT validation error. DAT address out of range (too high).

33

Module IATDMEB3 received an DAT validation error. DAT block ID (DATID) is incorrect.

34

Module IATDMEB3 received an DAT validation error. DAT address out of range (too low).

35

Module IATDMEB3 received an DAT validation error. DAT address out of range (too high).

36

Module IATDMEB3 received an DAT validation error. DAT block ID (DATID) is incorrect.

37

Module IATDMEB3 received an DAT validation error. DAT address is out of range (too low).

38

Module IATDMEB3 received an DAT validation error. DAT address is out of range (too high).

39

Module IATDMEB3 received an DAT validation error. DAT block ID (DATID) is incorrect.

3A

Module IATDMEBS received an error while adding a data set status block (DSS) to the record allocation block (RAB) queue during write error recovery.

3B

Module IATDMEBS received an error while adding a data set status block (DSS) to the record allocation block (RAB) queue after IATXSIO processing.

3C

Module IATDMEB received an error while resetting a data set status block (DSS).

3D

Module IATDMEB received an error while adding the data set status block (DSS) to the record allocation block (RAB) queue.

3E

DSB validation failed.

3F

Module IATDMEB detected that an RPL was not provided upon entry from IATDMDM.

40

Module IATDMDM received an incorrect ACB on entry.

41

Module IATDMDM received an DSB validation error. DSB block ID (DSBID) incorrect.

42

Module IATDMDM received an DSS validation error. DSS block ID (DSSID) incorrect.

43

Module IATDMDM received an incorrect DAT address while processing the PUT routine.

44

Module IATDMDM received an incorrect buffer point while processing the PUT routine.

45

Module IATDMDM found that no room remains in the buffer while processing the PUT routine.

46

Module IATDMDM received an DAT validation error. DAT address out of range (too low).

47

Module IATDMDM received an DAT validation error. DAT address out of range (too high).

48

Module IATDMDM received an unsuccessful GETMAIN while processing the ENDREQ routine.

49

Module IATDMDM received an input service error while processing the ENDREQ routine.

4A

Module IATDMDM did not receive the JOBID from input service while processing the ENDREQ routine.

4B

Module IATDMDM received an error re-opening INTRDR data set while processing the PUT routine.

4C

Module IATDMDM detected serialization failure in the PUT routine.

4D

GETMAIN failed while processing a started task or TSO logon request.

4E

Module IATDMDM detected an error while processing a SYSIN in-stream data set.

4F

Module IATDMDM received a negative record number generated for RPLRBAR.

50

Module IATSIAD received an SSISERV error return.

51

Module IATSIAD received an SSISERV error return.

52

Module IATSIAD received an SSISERV error return. The job is marked delete only.

53

Module IATSIAD received a catastrophic error from SSISERV.

54

Module IATSIAD detected bad data was sent during SSISERV processing.

55

Module IATSIAD received an error during PSO unallocation from SSISERV error return.

56

Module IATSIAD received an SSISERV error return. There was no job number available.

57

Module IATSIAD received an SSISERV error return.

58

Module IATSIAD received an SSISERV error return.

5A

A JES3 module received an allocation request for a SYSOUT class that is not A-Z or 0-9.

60

Module IATSIOR detected an OPEN serialization failure.

61

Module IATSIOR detected an OPEN serialization failure.

62

Module IATSIOR found ORT not available.

63

Module IATSIOR found ORT not available.

64

Module IATSIOR received an error return from IATSIOD module.

65

Module IATSIOR found the user writer name was not specified.

66

Module IATSIOR received an SSISERV error return. The job was marked delete-only.

67

Module IATSIOR received a catastrophic error from SSISERV.

68

Module IATSIOR did not find a job data set (JDS).

69

Module IATSIOR received an SSISERV error return. There was no job number available.

6A

Module IATSIOR received a BUSY return from the buffer allocation routine.

6B

Module IATSIOR received an error while adding a data set status block (DSS) to the record allocation block (RAB) queue after an error during OPEN processing.

6C

Module IATSIOR received an SSISERV error return. The job is marked delete only.

6D

Module IATSIOR detected an OPEN serialization failure.

6E

Module IATSIOR detected an OSE buffer number overflow.

6F

A JES3 module received a JDS pointer value that was zero during DS OPEN processing.

70

Module IATSICC received an SSISERV error return. The job was marked delete-only.

71

Module IATSICC received an SSISERV error return while processing INTRDR job.

72

Module IATSICC received a catastrophic error from SSISERV.

73

Module IATSICC received an SSISERV error return. Bad data was sent.

74

Module IATSICC received an SSISERV error return. The job number is not available.

75

Module IATSICC detected a CLOSE serialization failure.

76

Module IATSICC detected a PUT serialization failure.

77

Module IATSICC received an IAZSYMBL error return code.

78

Module IATSICC received an IATXJSM error return code.

79

Module IATSICC detected an INTRDR serialization failure. The DSBOCTCB lock was overlayed while processing the INTRDR close request.

7A

Module IATSICC/IATSIJS detected an IATYLGC entry in an incorrect state.

80

Module IATDMFR received a failure in module IATSIAD while processing the IATSIADD routine.

81

Module IATDMDK failed when adding a DSS to the PBUF wait queue.

82

Module IATDMDK failed when adding a DSS to the SRB wait queue.

83

Module IATDMDK failed when attempting to reset the DSS after it was removed from the RAB wait queue.

84

Module IATDMER failed when adding a DSS to the SRB wait queue.

85

Module IATDMFR detected a recovery error or control block validation error.

8E

Module IATDMDM received an IAZSYMSU error return.

8F

Module IATDMDM received an IAZSYMSU error return.

90

Module IATDMDM received an error code from a STORAGE OBTAIN request.

91

Module IATDMDM received an error code from a call to IATGRAS.

92

Module IATDMDM received an error code from a call to IXZXIXSM. SEGTYPE=FIRST was specified on the call.

93

Module IATDMDM received an error code from a call to IXZXIXSM. SEGTYPE=LAST was specified on the call.

94

Module IATDMDM received an error code from a call to IXZXIXAC.

95

Module IATDMDM received an error code from a STORAGE RELEASE request.

96

Module IATDMDM found no output buffer or the buffer failed validation.

97

Module IATDMDM detected a record size error.

98

Module IATDMDM detected a record size error.

99

Module IATDMDM detected a record size error.

9A

Module IATDMDM detected a record size error.

9B

Module IATDMDM detected a record size error.

9C

Module IATDMDM detected a record size error.

9D

Module IATDMDM detected a record size error.

9E

Module IATDMDM detected a record size error.

9F

Module IATDMDM detected a record size error.

A0

Module IATDMDS, while processing a chain of DMCs, found them chained in a circular chain.

A1

Module IATDMDS, while in the Link-up routine, detected an error in processing the Extent Busy queue.

A8

Module IATDMIT detected that the channel program for I/O request was incomplete while the request complete normally.

A9

Module IATDMIT detected a failure when attempting to a DSS to the SRB Wait Queue.

AA

Module IATDMIT detected a failure when attempting to reset a DSS after it had been removed from the Protect Buffer (PBUF) Wait Queue.

AB

Module IATGRSP detected a failure when releasing the DSB spinoff lock.

AC

Module IATGRSP detected a failure writing a buffer.

AD

Module IATGRSP detected a failure freeing unprotected buffers (UBUFs).

AE

Module IATGRSP detected a failure obtaining UBUFs.

AF

Module IATGRSP detected a failure during a dataset point operation.

B0

Module IATGRSP detected a failure during spinoff processing.

B1

Module IATGRSP detected a failure trying to obtain the UBUF lock.

B2

Module IATGRSP detected a failure when freeing the UBUF lock.

C0

Module IATDMEB3 detected an error in the EBR000 routine. The EBGETUBF service returned +0.

C2

Module IATDMEBS detected an error. The EBGETUBF returned +0.

C4

Module IATDMEB2 detected an error when freeing the buffer pointed to by DSBLSTBF.

C5

Module IATDMEB3 detected an error in the EBT000 routine. The EBGETUBF service returned +0.

C7

Module IATDMEB detected an error in the EBG000 routine. The read buffers were not in a sequential order.

D0

Module IATDMEB3 or IATGRSP detected that a job termination request was made before the data management request was processed.

D1

Module IATDMEBS detected zero DATPREV when searching backward during a POINT operation.

D2

Module IATDMEBS found the current UBUF chained to the list of waiting buffers.

D3

The DMC failed validation in the GET routine of IATDMEB.

D4

Module IATDMEB was unable to allocate a buffer for a spool browse GET.

D5

Module IATDMEB3 was unable to allocate a buffer for a spool browse GET.

D7

Module IATDMEB detected that the next spool buffer was not sequential.

D8

Module IATDMEB2 attempted to free the top DMC on the DSBBDMC chain.

D9

Module IATDMEB3 was unable to allocate a buffer for a spool browse GET.

DA

Module IATDMEB was unable to allocate a buffer for a spool browse GET.

DB

Module IATDMEB detected that no buffer existed on the DSBBDMC queue.

DC

Module IATDMEB3 detected that no buffer existed on the DSBBDMC queue.

DE

Module IATDMDM detected that the point failed for a Sysin control record.

DF

Module IATDMEB3, the Data Management Point routine, received an IATXSIO error return.

E0

Module IATDMEB3 was unable to allocate a buffer for a spool browse GET.

E1

Module IATDMEB3 detected a JIB error while processing a response from the global.

E2

Module IATDMEB3 detected that no CLST pointer existed after a data set switch.

E3

Module IATDMEB task failed due to preceding buffer corruption most likely caused by a preceding job failure.

E4

Module IATDMCB detected an error when receiving a message from its mailbox.

E5

Module IATDMCB detected an error in the JESXCF message envelope for a message received from the mailbox. The eye catcher is not correct.

E6

Module IATDMCB detected an error in the JESXCF message envelope for a message received from the mailbox. The buffer provided to hold a response is too small.

E7

Module IATDMCB detected an error when attempting to acknowledge a request for multi-system core buffer data.

E8

Module IATDMEB3 was unable to allocate a buffer in the Data Management Point routine.

E9

Module IATDMEB3 detected that no buffer existed on the DSBBDMC queue.

EA

Module IATDMCB detected an error while accessing the Message Envelope BWA mailbox.

EB

Module IATGRJSM detected an error while processing the Job Symbol Table (JSM).

EC

Module IATGRJSM detected the Record Allocation Block (RAB) in an improper state.

ED

Module IATDMEB detected an incorrect local lock state at entry point IATDMXOB.

EE

Various SSI modules: A failure was detected on a IAZADRKP FUNC=ADD call.

EF

Various SSI modules: The address returned by a IAZADRKP FUNC=DELETE call failed validation.

Programmer response

If the problem occurred in an I/O operation, correct any I/O errors in your program. Then rerun the job.

If JES3 issued message IAT6309, correct the cause of the LOAD or BLDL failure. Then rerun the job. Otherwise, notify your system programmer, supplying a SYSABEND dump.

Source

JES3

1FC

Explanation

In response to a Supervisor Call (SVC) instruction, the SVC first level interrupt handler (FLIH) was running, but a system error occurred.

System action

In an attempt to recover, the system abnormally ends the task that issued the SVC instruction. The system writes a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=1FC,ACTION=SVCD,END
```

System programmer response

Do the following:

1. Find the original abend causing the problem in the system diagnostic work area (SDWA) in the logrec data set error record for abend X'1FC'.

2. Search problem reporting data bases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.

Source

Supervisor control

200

Explanation

During a validity check of an I/O request, execute channel program (EXCP) processing encountered an error. Each X'200' abend code has a three digit reason code that explains the error. Each digit of the reason code has a specific meaning:

First digit: The first digit in the reason code indicates the **type** of error:

Code
  Explanation

1*nn*
  Storage protection check. The storage protection key of one of the control blocks being tested was not the same as the storage protection key in the caller's request block (RB).

2*nn*
  Segment translation error. A segment exception occurred when EXCP processing was processing a control block.

  A segment exception occurs when EXCP uses an incorrect address. The incorrect address results from one of the following:

  • The caller may have passed an incorrect address.
  • The storage area that the address is obtained from may have been overlaid.
  • The control block that the address points to may have been prematurely freed.
  • Necessary data sets were prematurely closed.

3*nn*
  Page translation error.

  A page translation error occurs when EXCP uses an incorrect address. The incorrect address results from one of the following:

  • The caller may have passed an incorrect address.
  • The storage area that the address was obtained from may have been overlaid.

- The control block that the address points to may have been prematurely freed.
- Necessary data sets were prematurely closed.

Second digit: The second digit in the reason code indicates the **phase of processing** when that the error occurred:

Code
  Explanation

*n***1***n*
  EXCP encountered an error during the front end processing.

*n***2***n*
  EXCP encountered an error during the back end processing. Back end processing includes DASD ERP, PCI, PURGE, and FRR routines.

*n***3***n*
  EXCP encountered an error during the post-processing.

*n***4***n*
  EXCP encountered an error while updating the data control block (DCB) during the validity check.

*n***5***n*
  EXCP encountered an error while processing a related. request.

*n***5***n*
  EXCP encountered an error while processing the PCI appendage.

Third digit: The third digit in the reason code indicates which **control block** was being tested when EXCP encountered the error:

Code
  Explanation

*nn***1**
  Input/output block (IOB)

*nn***2**
  Data control block (DCB)

*nn***3**
  Data extent block (DEB)

*nn***4**
  Event control block (ECB)

*nn***5**
  Input/output block extension (IOBE)

*nn***6**
  I/O error data block (IEDB)

*nn***7**
  IOCTOKEN block pointed to by IOBECTKN

System action

The system abnormally ends the current task and issues a SNAP dump.

System programmer response

In the dump, look at field TCBEXCPD at offset X'C0' in the task control block (TCB) of the current task. TCBEXCPD points to the EXCP debugging area (XDBA). The XDBA contains diagnostic data associated with the EXCP processor.

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL for the job and the dump.

Programmer response

Correct the problem that the reason code indicates. Verify also that the data set was opened and that the control block indicated was correctly modified by the problem program.

If the EXCP access method is being used, ensure that the IOB and the ECB are correctly built. Correct the error. Run the job again.

If the error recurs and you cannot determine the cause, run the job again, requesting an ABEND dump. Notify the system programmer.

Source

Execute channel program (EXCP)

201

Explanation

During processing of a WAIT macro, the system found either:

- The macro expansion contained an incorrect address for an event control block (ECB)
- The program issuing the WAIT macro was not running under the same storage protection key as the storage containing the ECB

System action

The system abnormally ends the program that issued the WAIT macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that the ECB address specified is a valid virtual storage address and that it was not incorrectly modified. Correct the error. Run the job again.

Source

Task management

202

Explanation

During processing of a POST macro, the system found an error with an event control block (ECB).

Register 15 contains a hexadecimal reason code that explains the error:

Code
    Explanation

00

    The system found an incorrect address for a request block (RB) in the 3 low-order bytes of the ECB specified by the problem program.

    The system places the address of the RB in the ECB during processing of a WAIT macro. This address must remain in the ECB until a POST macro places a post code or zeros in the ECB.

04

The waiting RB is not enabled for interrupts.

08

For a POST in a problem program protection key and a WAIT in a system protection key, the ECB to be posted does not match any ECB being waited on.

0C

For a WAIT in a problem program protection key, the ECB address is incorrect. This can also mean that the program issuing the WAIT has specified a list of ECBs and one of those ECBs is not valid. This could happen if the ECB storage has been released by another process.

System action

The system abnormally ends the program that issued the POST macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that the contents of the ECB were not modified after the WAIT macro and before the POST macro. Correct the error. Run the job again.

Source

Task management

204

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC or VU form of the GETMAIN macro. During request processing, the system tried to get local system queue area (LSQA) storage to support the request, but no central storage is available to back the LSQA storage.

System action

The system abnormally ends the address space where the job was running.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job step again. If the system issues this abend again, notify the system programmer.

Source

Virtual storage manager (VSM)

205

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC or VU form of the FREEMAIN macro. During request processing, the system attempted to get local system queue area (LSQA) storage to support the request, but no central storage is available to back the LSQA storage.

System action

The system abnormally ends the address space where the job was running.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job step again. If the system issues this abend again, notify the system programmer.

Source

Virtual storage manager (VSM)

206

Explanation

An error occurred during processing of a LINK(X), LOAD, XCTL(X), DELETE, or SYNCH macro. The control program detected one of these errors:

- The address of the parameter list specified in the macro instruction was erroneous.
- The address of the name (if EP or EPLOC was specified), or the address of the directory entry (if DE was specified) was erroneous.
- The parameter list pointed to by the macro contains a nonzero value in an undefined field.
- The caller is not authorized to use the options specified in the macro.
- The LOAD macro includes conflicting options.
- The LOAD macro includes the ADDR parameter, but *addr* is not a doubleword boundary.
- An incorrect alias name was detected.
- The LOAD macro specified the ADDR64 or ADRNAPF64 keyword which conflicts with an entry name whose load module is in Overlay (OVLY) format.

The reason code in register code 15 identifies the error:

Code
  Explanation

04
  A LOAD macro was issued with conflicting options. One of the following conditions occurred:

- The EOM (delete module at end of memory) keyword, with the GLOBAL keyword omitted. The EOM keyword applies only if the module is loaded into CSA storage.
- The GLOBAL and ADDR keywords are both specified.
- The ADDR and LOADPT keywords are both specified.
- The LOAD macro specified the ADDR64 or ADRNAPF64 keyword for an entry name whose load module is in Overlay (OVLY) format.

08
  An unauthorized program attempted to run a LOAD macro that had the load to global feature (GLOBAL keyword).

0C

An unauthorized program attempted to run a LOAD macro that had the explicit load option (ADDR keyword).

10

One of the following occurred:

- An unauthorized program attempted to run a SYNCH macro having the KEYADDR, STATE, or KEYMASK operands. These operands are available only to authorized programs.
- Reserved bits in the first word of the SYNCH macro parameter list have nonzero values.

14

The requested name is an alias for another, already loaded, alias.

18

A LOAD macro was issued with the ADDR keyword but the value of the ADDR keyword, the address, is not a doubleword boundary.

1C

A SYNCHX macro was issued with an XMENV operand that contains an incorrect length indicator.

20

The macro level for this macro is not compatible with this system.

24

The program issuing the macro is in AR mode, but the parameter list address does not have an access list entry table (ALET) of zero. Callers in AR mode must qualify the parameter list address with an ALET of zero.

28

Either the EP (entry point) keyword parameter or the DE (list entry address) keyword parameter does not have an ALET of zero.

2C

The data control block (DCB) address (DE) keyword parameter does not have an ALET of zero.

30

An incompatible level of TSO/E is being used with a PDSE load module.

34

An incorrect byte was supplied in the DE parameter.

C0

A parameter was not addressable or was in the wrong storage key.

C4

The directory entry passed in the data control block (DCB) address (DE) keyword parameter was not addressable or was in the wrong storage key.

C8

The data control block (DCB) was not addressable or was in the wrong storage key.

CC

The data extent block (DEB) was not addressable or was in the wrong storage key.

System action

The system issues an ABEND dump. The system issues a message depending on the reason code accompanying the abend:

Code
  Explanation Message

04

CSV010I

08

CSV014I

0C

CSV018I

10
   CSV012I

14
   CSV023I

18
   CSV022I

1C
   CSV012I

20
   CSV029I

24
   CSV029I

28
   CSV029I

2C
   CSV029I

30
   CSV040I

System programmer response

See the system programmer response for messages issued to the console or the job log.

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump and the source program listing for the job.

Programmer response

See the application programmer response for messages accompanying this abend issued to the console or the job log.

Check for program errors that incorrectly modify the parameter list. If the DE operand is specified, check that the macro is correct for the attributes of the requested module. Ensure that the address specified in the EP, EPLOC or DE operand is not incorrectly specified or modified. After making corrections, run the job step again.

Source

Contents supervision (CSV)

20A

Explanation

An error occurred when the system tried to process an R form of the GETMAIN or FREEMAIN macro. During request processing, the system attempted to get local system queue area storage (LSQA) to support the request, but no central storage is available to back the LSQA storage.

System action

The system abnormally ends the address space where the job was running.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job step again. If the system issues this abend again, notify the system programmer.

Source

Virtual storage manager (VSM)

20D

Explanation

An abend occurred in a subtask. The subtask either:

- Operated in step-must-complete (MC) status
- Issued an ABEND macro with the STEP option

As a result, the system abnormally ended the job step.

Note: The original abend code is in the TCBCMP field of the task control block (TCB) for the subtask that caused the error.

System action

The system ends the job step. The system writes an ABEND dump for the failing job step, if it provides a dump data set.

Programmer response

Find the original abend code in the TCB of the subtask that caused the error. Continue diagnosis with that abend.

Source

Recovery termination manager (RTM)

20E

Explanation

A program issued a SPIE macro that specified an incorrect address for the SPIE program interruption element (PIE).

System action

The system sends messages about the problem to the job log. The system abends the program that issued the SPIE macro.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=20E,ACTION=SVCD,END
```

System programmer response

If an IBM program issued the macro, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide:

- Messages from the job log
- The ABEND or SVC dump

- The assembly listing for the job
- The JCL for the job
- The program listing for the job

Programmer response

If an application program issued the incorrect macro, correct the PIE address, ensuring that it is a valid virtual storage address assigned to the job step. Rerun the job.

Source

Recovery termination manager (RTM)

20F

Explanation

A program tried to issue the ERREXCP macro. The program was not in supervisor state.

System action

The system abnormally ends the current task. The system does not process the macro.

Programmer response

Remove the ERREXCP macro from the program.

Source

Input/output supervisor (IOS)

212

Explanation

An error occurred during the processing of SVC 18; the error could not be attributed to incorrect user input. This system completion code is accompanied by message IEC909I. Refer to the explanation of message IEC909I for complete information about the task that was ended and for an explanation of the return code in register 15.

System action

Message IEC909I is issued indicating whether a dump was taken to the SYS1.DUMP data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the program listing for the job, and the logrec data set error record.

Programmer response

Make sure that the BLDL or FIND macro instruction is correctly coded, and that the parameter list and control blocks involved are not modified by your program during the processing of SVC 18.

Source

DFSMSdfp

213

Explanation

The error occurred during processing of an OPEN macro instruction for a direct access device. This system completion code is accompanied by message IEC143I. Refer to the explanation of message IEC143I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated to the applicable message.

Source

DFSMSdfp

214

Explanation

The error occurred during processing of a CLOSE macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC210I. Refer to the explanation of message IEC210I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC210I.

Source

DFSMSdfp

215

Explanation

The error occurred during the processing of SVC 21 (STOW). This system completion code is accompanied by message IEC910I. Refer to the explanation of message IEC910I for complete information about the task that was ended and for an explanation of the return code in register 15.

System action

The STOW task recovery routine has been invoked. If the caller's DCB is in the caller's region, an attempt was made to trace it to the SYS1.TRACE data set.

Operator response

Start a generalized trace facility (GTF) trace, and re-create the problem. Reply to message AHL100A with:

```
TRACE=SYS,USR,SLIP
```

On the DD statement for the data set in error, specify:

```
DCB=DIAGNS=TRACE
```

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

For return codes 01, 02, and 03, verify that register 1 contained the correct DCB address prior to issuing SVC 21 and that the DCB has not been overlaid since being opened. For return code 04, verify that register 0 contained the correct parameter list address and that the list is within the caller's region prior to issuing SVC 21.

Source

DFSMSdfp

218

Explanation

An error occurred during the processing of DEVTYPE (SVC 24) that could not be attributed to incorrect user input. This system completion code is accompanied by message IEC913I.

Refer to the explanation of message IEC913I for complete information about the task that was ended and for an explanation of the return code in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that the DEVTYPE macro instruction is correctly coded, and that the areas passed to DEVTYPE are not freed by your program during the processing of SVC 24.

Source

DFSMSdfp

219

Explanation

An error occurred during the processing of SVC 25 that could not be attributed to incorrect user input. This system completion code is accompanied by message IEC915I. Refer to the explanation of message IEC915I for complete information about the task that was ended and for an explanation of the return code in register 15.

System action

Message IEC915I is issued to indicate whether a dump was taken to the SYS1.DUMP data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that your program does not alter the DCB or IOB during the processing of SVC 25.

Source

DFSMSdfp

222

Explanation

The operator, or an authorized time sharing option extensions (TSO/E) user, canceled the job without requesting a dump.

System action

The system ends the job. In some cases, the system might write a dump even though a dump was not requested, depending on which system routine has control.

Programmer response

Find out why the operator or TSO/E user canceled the job. Correct any errors and resubmit the job. If you want a dump, have the operator resubmit the job and then cancel it using the command CANCEL *jobname*, DUMP.

Source

Master scheduler

228

Explanation

During processing of an EXTRACT macro, the system found that the location of the input parameter list was incorrect. The input parameter list, ordinarily created through expansion of the standard or MF=L form of the EXTRACT macro, describes the function to be performed.

The starting address indicated that the parameter list did not begin either on a fullword boundary or within the storage assigned to the job step.

System action

The system abnormally ends the program that issued the EXTRACT macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Correct the program so that the address of the input parameter list is valid. Run the job again.

Source

Task management

22A

Explanation

During processing of an ATTACH macro, the system found an error.

Register 15 contains a hexadecimal code that explains the error:

Code
   Explanation

00
   The issuer of the ATTACH macro specified a GSPV, GSPL, SHSPV, or SHSPL parameter with a subpool ID greater than 127.

System action

The system abnormally ends the program that issued the ATTACH macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Gather GTF trace data using trace option keyword TRACE=SYSP and event keyword SVC=42,END.

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Change the macro to specify a problem program subpool (1 through 127). If the macro is specified correctly, check for program errors that incorrectly modify it. Correct the error. Run the job again.

Source

Task management

22C

Explanation

During processing of a CHAP macro, the system found that the address of the fullword specified in the second operand is incorrect. This fullword contains the address of the task control block (TCB) for the subtask whose priority was to be changed.

The address was incorrect for one of the following reasons:

- It was not a multiple of 4.
- The addressed virtual storage has not been allocated.
- The protection key of the fullword does not match the protection key of the issuer of the CHAP macro.

System action

The system abnormally ends the program that issued the CHAP macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Format a GTF trace, using trace option keyword TRACE=SVCP and using event keywords SVC=44,END.

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Change the CHAP macro to specify a valid fullword address. Ensure that this fullword will contain the address of the TCB when the CHAP macro is processed. Also, ensure that the problem program does not incorrectly modify the specification. Correct the error. Run the job again.

Source

Task management

22D

Explanation

A program requested an overlay. When trying to answer the request, the overlay supervisor found an incorrect address in the overlay segment table or the entry table. The address points to a location outside the boundaries of the virtual storage assigned to the job step.

The overlay segment table is used by the overlay supervisor; it resides in the load module and is in the same storage protection key as the application program.

Note: Overlay programs run only in 24-bit addressing mode, not in 31-bit addressing mode.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided.

Programmer response

Check the program for errors that caused the overlay segment table or the entry table to be incorrectly modified. Correct the errors; then assemble, link edit, and run the program again.

Source

Overlay supervisor

22F

Explanation

No usable combination of time-of-day (TOD) clock and clock comparator (REAL or WAIT type request) or no usable CPU timer (TASK type request) is available.

Programmer response

Probable hardware error with the system clocks. Contact hardware support.

Source

Supervisor control and timer supervision

230

Explanation

Global resource serialization encountered an error during processing of a DEQ macro.

The DEQ macro specified an incorrect length for the resource name. The length was specified in the rname length operand of the DEQ macro instruction, was supplied by the assembler program, or was contained in the byte immediately preceding the resource name.

System action

The system issues an ABEND dump.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the abend dump.

Programmer response

Correct the incorrect macro instruction or the program errors that incorrectly modified the length. Recompile the program and run the job step again.

Source

Global resource serialization

233

Explanation

The caller passed incorrect parameters in a request for an SVC dump.

Register 15 contains a hexadecimal reason code that explains the error:

Code
   Explanation

04
   The address of the parameter list is zero, or the caller is in AR ASCMODE and the access register of the parameter list is non-zero.

08
   The parameter list is not a valid SVC dump or SNAP parameter list.

0C
   The caller-supplied data set is on an unsupported device.

10
   One of the following:

   - In a caller-supplied storage range, the start address is greater than or equal to the end address.
   - For any of the LIST, STORAGE and SUMLIST parameters, the high-order bit of the last ending address was not set to B'1'.
   - For any of the LISTA, LISTD, LIST64, SUMLSTA, SUMLSTL and SUMLIST64 parameters, the length of the list or the number of ranges was not correctly specified.

14
   The caller-supplied data for the HDR or HDRAD option is greater than 100 characters.

18
   The caller requested the 4-kilobyte system queue area (SQA) buffer, but it is not serialized.

1C
   The parameter list or what it points to is in the 4-kilobyte SQA buffer.

20

The caller supplied a data control block (DCB) address, and the DCB is not open or the address is not valid.

28

An address space identifier (ASID) specified in the ASIDLST, ASID, or SUBPLST parameter is incorrect. The ASID is less than zero or greater than the maximum value.

38

The caller specified the 4-kilobyte SQA buffer, but an SVC dump function was already in progress.

44

The caller specified a subpool greater than the maximum value allowed (255).

47

An inconsistency was detected in the SDUMP parameter list that might be resolved by zeroing the storage for the list before calling the SDUMPX macro.

50

Not all of the parameter list is accessible.

54

The caller-supplied DCB is not accessible.

58

The caller's storage list is not accessible.

5C

The caller's header data is not accessible.

60

The caller-supplied event control block (ECB) is not accessible.

64

The caller's ASID list is not accessible.

68

The caller's SUMLIST is not accessible.

6C

The caller's subpool identification (ID) list is not accessible.

70

The caller's storage key list is not accessible.

74

A copy of SLIP registers and a copy of the program status word (PSW) are not accessible.

78

The caller-supplied SRB is not accessible.

7C

An incorrect version number is in the parameter list.

80

The caller-supplied LISTD or LIST64 list is not accessible.

84

The caller-supplied SUMLSTL or SUMLIST64 list is not accessible.

88

SDUMPX parameter list contained conflicting parameters.

8C

The ID is longer than 50 characters.

90

The ID is not addressable.

94

The PSW/register area is an incorrect length.

98

The PSWREGS is not addressable.

9C
The symptom record is incorrect.

A0
The symptom record is not addressable.

A4
The data extent block (DEB) for the caller-supplied DCB is not accessible.

AC
The STRLIST area supplied by the caller is not accessible.

B0
The caller-supplied INTOKEN area is not accessible.

B4
The caller-supplied REMOTE area is not accessible.

B8
The caller-supplied PROBDESC area is not accessible.

BC
The caller-supplied JOBLIST area is not accessible.

C0
The caller-supplied DSPLIST area is not accessible.

C4
The caller-supplied REMOTE area is not valid; the length of a field in the area is specified as less than 4 bytes.

CC
A LIST64 range exceeded 2G in an ESA environment.

D0
The caller supplied UTOKEN area is not accessible.

System action

The system writes a logrec data set error record. SVC dump processing attempts retry and gives the caller a return code of 8 and an associated reason code. If retry is not possible, the system abnormally ends the caller. SVC dump processing issues message IEA911E or IEA611I. This message indicates whether the dump is complete or partial.

System programmer response

For reason code X'AC', make sure the STRLIST area specified is addressable from the caller's current address space. Then request the dump again.

For all other reason codes, correct the incorrect parameters and issue the SDUMP macro again.

If the problem persists or is in an IBM-provided program, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the assembly listing for the job.

Source

Dumping services

235

Explanation

An error occurred during processing associated with SVC 53, which obtains and releases exclusive control of a resource associated with a BDAM data set. The task recovery routine for this SVC determined that a control block required as input to SVC 53 was not in the user's region and/or key. This system completion code is

accompanied by message IEC902I. Refer to the explanation of message IEC902I for complete information about the task that was ended and for an explanation of the return code in register 15.

System action

Message IEC902I is issued, specifying a cleanup code that indicates the results of the cleanup of resources attempted by the recovery routine.

Programmer response

Insure the validity of the control block from which the address of the block in error was taken. For example, make sure that the input specified in the RELEX macro, the BLKREF address, is valid and in the correct format and that the DCB address passed is valid. If a RELEX macro was not issued, make sure that the IOB related to the exclusive control request is correct and contains the correct DECB address (IOBECBPT) and DCB address (IOBDCBPT).

In addition, check the DCBEBAD field in the DCB to ensure that it contains the correct DEB address, and that the DEB (DEBDCBAD) points back to this DCB. If the next IOB is found to be in error, find the entry in the read exclusive list associated with the requested block and ensure that the RDXIOBUQ field is correct.

Source

DFSMSdfp

237

Explanation

The error occurred at an end-of-volume. This system completion code is accompanied by message IEC023I. Refer to the explanation of message IEC023I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC023I.

Source

DFSMSdfp

238

Explanation

The error occurred during processing of an ENQ macro instruction during the processing of global resource serialization. An incorrect length was specified for the name representing the resource. This length was specified in the rname length operand of the ENQ macro instruction, was supplied by the assembler program, or was contained in the byte immediately preceding the resource name.

System action

The system issues an ABEND dump.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Correct the incorrect macro instruction or the program errors that incorrectly modified the length. Recompile the program, and run the job step again.

Source

Global resource serialization

239

Explanation

An error occurred during the processing associated with SVC 57, which frees a buffer or extends the unscheduled text (via the FREEDBUF macro issued either by the user or the system). The BDAM task recovery routine for this SVC determined that a control block required as input to SVC 57 was not in the user's region and/or key. This system completion code is accompanied by message IEC902I. Refer to the explanation of message IEC902I for complete information about the task that was ended and for an explanation of the return code in register 15.

System action

Message IEC902I is issued, specifying a cleanup code that indicates the results of the cleanup of resources attempted by the recovery routine.

Operator response

Start a generalized trace facility (GTF) trace, and re-create the problem. Reply to message AHL100A with:

```
TRACE=SYS,USR,SLIP
```

On the DD statement for the data set in error, specify:

```
DCB=DIAGNS=TRACE
```

System programmer response

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job.

Programmer response

Insure the validity of the control block from which the address of the block in error was taken. The DECB and DCB were specified in the FREEDBUF macro as input to the SVC. Make sure that the DCBBUFCB field in the DCB contains the correct address of the buffer control block and the DCBDYNB field contains the correct address of the unscheduled list (if address space was virtual). The BCB or USL contain the address of the next IOB waiting to get a buffer, if one was not available. Ensure that this address has not been overlaid. Make sure also that the input DECB contains the address of the buffer being freed (DECAREA field) and, if a buffer was requested for keys also, that the DECKYADR field contains the correct address.

Source

DFSMSdfp

23E

Explanation

During processing of a DETACH macro, the system found an error in the input parameters.

Register 15 contains a hexadecimal reason code that explains the error:

Code
   Explanation

00
   The protection key of the address does not match the key of the issuer of the DETACH.

04
   Access register 1 was nonzero for a caller in access register address space control (ASC) mode.

08
   The task control block (TCB) specified in the input parameter list is not a subtask of the caller's TCB.

System action

The system abnormally ends the program that issued the DETACH macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

This is probably an error in the calling program. Change the DETACH macro to specify a valid TCB address and ensure that it was not incorrectly modified by the problem program. If running in access register ASC mode, ensure that the problem program does not alter access register 1. Correct the error. Run the job again.

Source

Task management

23F

Explanation

A security violation has been detected during checkpoint restart processing. This completion code is accompanied by message IHJxxxI with the appropriate reason code.

System action

The job is abnormally ended.

Programmer response

Respond as indicated in the accompanying message.

Source

DFSMSdfp

240

Explanation

The error occurred during processing of a RDJFCB macro instruction. This system completion code is accompanied by message IEC155I. Refer to the explanation of message IEC155I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC155I.

Source

DFSMSdfp

244

Explanation

The error occurred during the processing of SYNADAF. It was determined that the register save area provided by the user was incorrect.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Probable user error. Make sure that when SYNADAF (SVC 68) is issued, register 13 points to a register save area within the user's region. If SYNADAF is issued from a SYNAD routine, make sure that register 13 has not been altered since the SYNAD routine was entered, and that register 13 contained the address of a valid register save area when the last data management macro was issued.

Correct the error and rerun the job step.

Source

DFSMSdfp

245

Explanation

An error occurred during the processing of SVC 69 (BSP) that could not be attributed to incorrect user input. This system completion code is accompanied by message IEC917I. Refer to the explanation of message IEC917I for complete information about the task that was ended and for an explanation of the return code in register 15.

System action

The backspace task recovery routine has been invoked. Low real storage and the caller's region have been dumped to the SYS1.DUMP data set. The caller's input register 1 and DCB have been written to the logrec data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the program listing for the job, the logrec data set error record, and all printed output and output data sets related to the problem.

Programmer response

Make sure that the BSP instruction is correctly coded, and that the DCB and IOBs and/or ICBs for the data set being processed are not overlaid by your program during the processing of SVC 69.

Source

DFSMSdfp

247

Explanation

An error occurred in either the Graphics Access Method/System Product (GAM/SP), or the operating system. This completion code appears when an incorrect condition is detected by the GAM/SP buffer management routine, IGC0007A.

System action

A message appears on the system console that identifies the cause of the error. In addition, GAM/SP writes a record to the logrec data set and produces a dump on the system dump data set.

Programmer response

1. Check for messages identifying the cause of the error. If these are GAM/SP messages, (that is, the message number is of the form 'GABnnn'), they are described in *IBM Graphics Access Method/SP: Messages and Codes.*
2. Get a listing of the system dump.
3. Contact your programming support personnel.

Source

DFSMSdfp

251

Explanation

The error occurred during the processing of SETPRT. A user-provided area was determined to be incorrect. This system completion code is accompanied by message IEC918I. Refer to the explanation of message IEC918I for complete information about the task that was ended and for an explanation of the return code in register 15.

System action

Message IEC918I is issued.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Make sure that the last entry in the exit list has a high-order bit set to B'1'. Make sure that any FCB image entry in the exit list points to a valid FCB image, that the image is within the user's region, that any FCB image has a valid length field and that it is ended by an end-of-FCB image indicator. Correct the error and rerun the job step.

Source

DFSMSdfp

253

Explanation

While writing to system management facility (SMF) data sets, SMF encountered an error and abnormally ended.

System action

The system ends the SMF address space and releases the resources used by SMF.

Operator response

Notify the system programmer. If SMF recording is essential for the system, restart the SMF address space using the SMF SET command as soon as the problem is corrected.

System programmer response

Check error messages and the SVC dump produced as a result of any previous abnormal endings.

Source

System Management Facilities (SMF)

25F

Explanation

A system failure destroyed data used by the system resources manager (SRM) in controlling an address space.

System action

If the ended task is the master scheduler command processor and SRM was processing a NEWIPS SYSEVENT, the new installation performance specification (IPS) may have been lost.

In all other cases, data pertaining to the address space's swap status or performance characteristics may have been lost. SRM may no longer be able to control the address space according to its previously assigned performance specification.

The system does the following:

- Writes a logrec data set error record
- Inserts 'worst case' substitute values in place of the lost address space characteristics in case the specify task abnormal exit (STAE) routine or the abnormally ended task requests retry
- Abnormally ends the controlling task of the address space or system component affected by the data loss

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the SYSOUT output for the job.

Source

System resources manager (SRM)

260

Explanation

A parameter of the STAX macro was used incorrectly. A hexadecimal reason code in register 15 explains the error.

Code
>**Explanation**

00
>A parameter list address is incorrect.

04
>The input buffer size is greater than 32 kilobytes.

08
>The input buffer address is incorrect.

0C
>The output buffer size is greater than 32 kilobytes.

10
>Both DEFER bits are on.

14
>The format number of the parameter list is incorrect.

18
>An IGNORE attention request was issued by a routine that is not a CLIST capable attention exit routine.

1C
>An IBUF or OBUF address has been specified, but is not a clean 24-bit address.

20
>The caller of STAX DEFER=NO,LINKAGE=BRANCH is not running in task mode.

24
>The caller of STAX DEFER=NO,LINKAGE=BRANCH is locked.

28
>The caller of STAX DEFER=NO,LINKAGE=BRANCH is disabled.

2C
>The caller of STAX DEFER=YES,LINKAGE=BRANCH is not running in task mode.

System action

The system abends the program that issued the STAX macro.

System programmer response

Correct the STAX parameter list error indicated by the reason code. See *z/OS TSO/E Programming Services* for the STAX macro parameters.

If the problem persists, search problem reporting data bases for the fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Region control task (RCT)

269

Explanation

An error occurred during the processing of IMGLIB that could not be attributed to incorrect input to IMGLIB. Register 15 contains a return code that indicates whether a dump was taken to the SYS1.DUMP data set.

System action

The IMGLIB task recovery routine has attempted to take a storage dump to the SYS1.DUMP data set; the result of the dump attempt is indicated by the return code in register 15. See message IEC920I for a complete description of the possible return codes and their meanings. Additional diagnostic information was written to the logrec data set data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the program listing for the job, and the logrec data set error record.

Programmer response

Make sure that the IMGLIB macro instruction is correctly coded.

Source

DFSMSdfp

271

Explanation

The caller requested fixing or freeing of a page. The request was in 24-bit addressing and was without proper authorization.

System action

The system denies the requested service. The system writes messages and a dump. The system issues an abend to the current task.

System programmer response

Look at the messages in the job log. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the messages and the dump.

Programmer response

Correct the program or obtain proper authorization from installation management.

Source

Real storage manager (RSM)

278

Explanation

An error occurred when the system tried to process an RC, RU, VRC, or VRU form of the GETMAIN macro, or an RC or RU form of the FREEMAIN macro or the STORAGE RELEASE macro. The system attempted to get local system queue area (LSQA) storage to support the request, but no central storage is available to back the LSQA storage.

System action

The system abnormally ends the address space where the job was running.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job step again. If the system issues this abend again, notify the system programmer.

Source

Virtual storage manager (VSM)

279

Explanation

While processing the end of an I/O request, the system found an error in the I/O parameters.

Register 2 contains a reason code, as follows:

Code
  Explanation

04
  The system found an incorrect buffer control block (BUFC).

14
  The system found an incorrect buffer address while trying to perform I/O.

System action

The system abnormally ends the current task.

Programmer response

Do the following:

1. Check to see if the program incorrectly modified the I/O parameters. Correct any errors.
2. Recompile the job step.
3. Run the job step again.

Source

Input/output supervisor (IOS)

27B

Explanation

Processing for the PURGEDQ macro issued a FESTAE macro to establish recovery. An error occurred during FESTAE processing. The PURGEDQ and FESTAE macros were issued correctly: They did not cause the error. The problem is an environmental error.

System action

The system abnormally ends the task that issued the PURGEDQ macro. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=27B,ACTION=SVCD,END
```

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.

Programmer response

Rerun the job. If the problems recurs, contact the system programmer.

Source

Supervisor control

282

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

283

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

285

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

28A

Explanation

A caller requested fixing or freeing of a page. The request was in 31-bit addressing and was without proper authorization.

System action

The system denies the requested service. The system writes messages and a dump. The system issues an abend to the current task.

System programmer response

Look at the messages in the job log. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the messages and the dump.

Programmer response

Correct the program or obtain proper authorization from installation management.

Source

Real storage manager (RSM)

290

Explanation

The IBM Health Checker for z/OS encountered an error. A reason code is displayed along with the 290 abend code. The format of the abend code is *cc-mm-rrrr*, where *rrrr* is the halfword reason code.

The IBM Health Checker for z/OS reason codes for the 290 abend code and actions that you can use to correct the problem are:

00xx
 An internal error in the IBM Health Checker for z/OS component, unless listed separately below (for example, 002D).

 Action: Search problem reporting data bases for a fix to the problem. If no fix is found, contact the IBM Support Center. Provide the LOGREC data set and SVC dump, if one is issued.

002D
 The HZSCPARS REQUEST=PARSE was issued a second time without freeing the parse area that was obtained for the first HZSCPARS REQUEST=PARSE request.

 Action: Verify that a HZSCPARS REQUEST=FREE before a subsequent HZSCPARS REQUEST=PARSE is issued.

0035
 The HZSCPARS REQUEST=FREE was requested for an area that does not match the area returned by REQUEST=PARSE.

 Action: Verify that the HZSCPARS REQUEST=FREE request is passing the matching area.

005E
 The CPARAREA or CPARAREAADDR parameter is invalid (NULL).

 Action: Ensure that you pass a valid CPARAREA or CPARAREAADDR parameter when using HZSCPARS REQUEST=CHECKPARM.

005F
 The CPARAREA or CPARAREAADDR parameter is invalid (NULL).

 Action: Ensure that you pass a valid CPARAREA or CPARAREAADDR parameter when using HZSCPARS REQUEST=CHECKNOTPROC.

1xxx
 An internal error in the IBM Health Checker for z/OS component.

 Action: Search problem reporting data bases for a fix to the problem. If no fix is found, contact the IBM Support Center. Provide the LOGREC data set and SVC dump, if one is issued.

4007
 HZSADDCK could not load the specified check routine.

 Action: Make sure that you specified the proper check routine name. The check routine module must be in an APF-authorized library. The system must be able to locate the check routine within the joblib, the steplib of the IBM Health Checker for z/OS address space, the LPA, or the LNKLST.

4008
 HZSADDCK could not load the specified message table.

Action: Make sure that you specified the proper message table name. The message table module must be in an APF-authorized library. The system must be able to locate the message table within the joblib, the steplib of the IBM Health Checker for z/OS address space, the LPA, or the LNKLST.

4009

HZSADDCK found a message table that is not supported on this release, or the message table was not created by HZSMSGEN.

Action: Verify the check and the message table are intended for the release of MVS that is active on this system and that it was created by HZSMSGEN.

400A

HZSADDCK found an AMODE 64 check routine. AMODE 64 is not supported for local check routines.

Action: Ensure the CHECKROUTINE parameter of HZSADDCK identifies an AMODE 31 check routine.

4016

The variable defined in the HZSMGB area has a length greater than the value defined by Maxlen in the message table.

Action: Verify that you specified the correct length for the variable.

4106

The HZSMGB data area or the HZSMGB data area variable array is not available or could not be accessed.

Action: Verify that the input parameter is correct on the HZSFMSG macro.

4107

A variable described in the HZSMGB data area had a bad address or length.

Action: Verify that you specified the correct address and length for the variable.

4108

The message number provided in MGB_Id does not exist in the message table.

Action: Verify that you specified the correct message ID on the HZSFMSG macro.

4109

The maximum number of variables allowed in a check message is defined by Mgb_MaxInserts.

Action: Verify that you specified the correct number of variables on the HZSFMSG macro.

410A

The message table requested a variable that is out of sequence or too few inserts.

Action: Verify that you specified the correct variable on the HZSFMSG macro.

410B

The message definition requires a variable that does not exist in the HZSMGB data area.

Action: Verify that you specified the correct variable on the HZSFMSG macro.

410C

The HZSMGB data area contained variables that were not requested in the associated message.

Action: Verify that you specified the correct variables on the HZSFMSG macro.

410D

A variable described in the HZSMGB data area had a bad address or length.

Action: Verify that you specified the correct address and length for the variable on the HZSFMSG macro.

410E

A variable described in the HZSMGB data area had a bad address or length.

Action: Verify that you specified the correct address and length for the variable on the HZSFMSG macro.

410F

The HZSFMSG macro parameter was not accessible or not in the caller's key.

Action: Verify that the parameter list for the HZSFMSG macro is accessible and in the caller's key.

4110

The HZSFMSG request CHECKMSG requires a valid HZSMGB data area.

Action: Verify that you specified a valid control block on the HZSFMSG macro.

4111

The HZSFMSG parameter list contained an unsupported version number.

Action: Verify that you specified the correct version number on the HZSFMSG macro.

4112

The HZSFMSG request was issued by a program that was not a check routine.

Action: Verify that you did not issue the HZSFMSG macro from a program that was not a check routine.

4113

The HANDLE parameter issued on the HZSFMSG contained an incorrect value.

Action: Verify that the HANDLE parameter on the HZSFMSG request contains a valid value.

4114

The HZSFMSG macro was requested from a remote routine that was not a check routine.

Action: Verify that the HZSFMSG macro is issued from a check routine.

4115

The system could not set the ABENDRESULT parameter on the HZSFMSG macro request.

Action: Verify that the input parameter is correct on the HZSFMSG macro.

4116

The variable defined in the HZSMGB area has a length greater than the value defined by Fieldsize in the message table.

Action: Verify that you specified the correct length for the variable.

4117

The message table supplied by a remote check is not valid.

Action: Verify that the message table was built via the HZSMSGEN exec and has not been overlaid.

4118

A remote check issued HZSFMSG other than from the INITRUN or RUN function.

Action: Verify that HZSFMSG is only issued **the check has gotten control with PQE_Function_code of either PQE_Function_code_Init or PQE_Function_Code_Check**.

4119

HZSFMSG was called with an unrecognized REQUEST type.

Action: Specify only supported REQUEST types, such as CHECKMSG, DIRECTMSG, HZSMSG, STOP, or DOM.

4120

HZSFMSG was called with an unrecognized REASON for this particular REQUEST type.

Action: Specify REASONs which are supported for a particular REQUEST type.

4122

HZSFMSG was called with an IDLEN parameter value which is out of range.

Action: Specify IDLEN values in the range 1 - 10.

4123

HZSFMSG was with a TEXTLEN parameter value which is out of range.

Action: Specify a TEXTLEN value in the range 1 - 65535.

4124

HZSFMSG was called with an ID parameter value of NULL.

Action: Specify a valid ID address.

4125

HZSFMSG was called with a TEXT parameter value of NULL.

Action: Specify a valid TEXT address.

412B

HZSFMSG was called with an EXPL parameter value of NULL.

Action: Specify a valid EXPL address.

412C

HZSFMSG was called with an EXPLLEN parameter value which is out of range.

Action: Specify a EXPLLEN value in the range 1 - 65535.

412E

HZSFMSG was called with a SYSACT parameter value of NULL

Action: Specify a valid SYSACT address.

412F

HZSFMSG was called with a SYSACTLEN parameter value which is out of range.

Action: Specify a SYSACTLEN value in the range 1 - 65535.

4130

HZSFMSG was called with an ORESP parameter value of NULL.

Action: Specify a valid ORESP address.

4131

HZSFMSG was called with an ORESPLEN parameter value which is out of range.

Action: Specify an ORESPLEN value in the range 1 - 65535.

4132

HZSFMSG was called with an SPRESP parameter value of NULL.

Action: Specify a valid SPRESP address.

4133

HZSFMSG was called with an SPRESPLEN parameter value which is out of range.

Action: Specify an SPRESPLEN value in the range 1 - 65535.

4134

HZSFMSG was called with a PROBD parameter value of NULL.

Action: Specify a valid PROBD address.

4135

HZSFMSG was called with a PROBDLEN parameter value which is out of range.

Action: Specify a PROBDLEN value in the range 1 - 65535.

4136

HZSFMSG was called with a SOURCE parameter value of NULL.

Action: Specify a valid SOURCE address.

4137

HZSFMSG was called with a SOURCELEN parameter value which is out of range.

Action: Specify a SOURCELEN value in the range 1 - 65535.

4138

HZSFMSG was called with a REFDOC parameter value of NULL.

Action: Specify a valid REFDOC address.

4139

HZSFMSG was called with a REFDOCLEN parameter value which is out of range.

Action: Specify a REFDOCLEN value in the range 1 - 65535.

413A
HZSFMSG was called with an AUTOMATION parameter value of NULL.

Action: Specify a valid AUTOMATION address.

413B
HZSFMSG was called with an AUTOMATIONLEN parameter value which is out of range.

Action: Specify an AUTOMATIONLEN value in the range 1 - 65535.

4140
HZSFMSG was called with REQUEST=DOM for a health check that was added with DOM=SYSTEM.

Action: Only use REQUEST=DOM for health checks that have been added with DOM=CHECK.

4141
HZSFMSG was called with REQUEST=DOM after a first check exception was issued in a check iteration.

Action: Use REQUEST=DOM to remove previous check exception message WTOs only before any check exception messages are issued in a new check iteration.

4150
HZSFMSG was called with a non-SYSTEM SEVERITY or SEVERITYVAL for a health check that was added with ALLOWDYNSEV=NO.

Action: Use a non-SYSTEM SEVERITY or SEVERITYVAL only for a health check that has been added with ALLOWDYNSEV=YES.

4151
HZSFMSG was called with an unsupported SEVERITY special value.

Action: Specify only valid SEVERITY values, such as SYSTEM, NONE, LOW, MED, HI, or VALUE.

4152
HZSFMSG was called with an unsupported SEVERITYVAL parameter value.

Action: Specify only valid SEVERITYVAL values, such as PQE_LowSeverity (=4), PQE_MediumSeverity (=8), PQE_HighSeverity (=12), PQE_NoSeverity (=255), or PQE_SystemSeverity (=0).

4153
REQUEST=HZSMSG REASON=ENVNA is not allowed after an exception message has been issued already in the same check iteration.

Action: The check writer needs to ensure that only one check status is requested by the check routine: "Exception", via sending exception message(s), or "Successful", for example via REQUEST=HZSMSG REASON=ENVNA, but not both.

4154
An exception message (via DIRECTMSG) is not allowed after HZSFMSG REQUEST=HZSMSG REASON=ENVNA has already been issued in the same check iteration.

Action: The check writer needs to ensure that only one check status is requested by the check routine: "Exception", via sending exception message(s), or "Successful", for example via REQUEST=HZSMSG REASON=ENVNA, but not both.

4155
An exception message (via CHECKMSG) is not allowed after HZSFMSG REQUEST=HZSMSG REASON=ENVNA has already been issued in the same check iteration.

Action: The check writer needs to ensure that only one check status is requested by the check routine: "Exception", via sending exception message(s), or "Successful", for example via REQUEST=HZSMSG REASON=ENVNA, but not both.

4FFF
A check was terminated by DELETE FORCE=YES.

Action: A DELETE FORCE=YES command was processed, which terminated the specified checks with this abend reason code.

System action

The system continues.

System programmer response

See the appropriate reason code in the preceding list and correct the error.

Source

IBM Health Checker for z/OS

2C2

Explanation

The IBM MQ Workflow for z/OS server instance subtask encountered a severe internal error.

The reason code identifies the source of the error. It has the format X'rrmmnnnn', where *rr* denotes the resource class (as detailed in the table that follows), *mm* denotes the method of the resource class, and *nnnn* identifies the place within the method where the error was encountered.

Resource Class Code	Resource Name	Resource Description
01	Resource	abstract class for workflow server resources
02	FmSrvRes	abstract class for workflow server instance resources
03	FmDevRes	abstract class for workflow server input/output device resources
04	SystCons	implementation class for the system console interface
05	Diagnose	implementation class for the flight recorder
06	FifoLock	implementation class for the queue serialization
07	MvsMsgSv	implementation class for the MVS message services interface
08	DevQueue	implementation class for the in-storage queues
09	ErrStack	implementation class for the error recovery
10	ServerDS	implementation class for the data set access
11	Security	implementation class for the security server interface
12	SrvGroup	implementation class for the subtask management
13	SynchEcb	implementation class for the subtask synchronization
14	TimeServ	implementation class for the timer interface

Resource Class Code	Resource Name	Resource Description
15	ExtTrace	implementation class for the component trace interface
16	TaskServ	implementation class for the subtask services
17	WkldMgmt	implementation class for the workload manager interface
18	XcfGroup	implementation class for the cross-system coupling facility interface
19	XLngServ	implementation class for the cross-language services
20	XMemServ	implementation class for the cross-memory services

System action

The system issues an ABEND dump.

System programmer response

Search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the ABEND dump.

Programmer response

None.

Source

IBM MQ Workflow for z/OS

2C3

Explanation

The zFS Physical File System (PFS) encountered an internal error. An internal reason code is displayed along with the zFS 2C3 abend code. Each reason code is made up of 4 bytes; *cccc rrrr*, where *cccc* is a halfword reason code qualifier and rrrr is the halfword   reason code. The high-order bytes of the reason codes returned contain a value that is used to qualify the contents of the 2 low-order bytes. zFS reason code qualifiers are found within the range X'EA00' to X'EAFF'. The low-order bytes of the reason codes are found within the range X'0000' to X'FFFF'.

System action

The system issues an ABEND dump and then zFS might attempt to stop and restart. Additional messages can be issued.

System programmer response

Search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the ABEND dump and the internal reason code.

If the automatic stop and restart of zFS is unsuccessful, cancel the zFS address space and then respond R to the BPXF032D WTOR to restart zFS.

Table 1. Reason code explanations		
Reason code	**Explanation**	**Action**
0342	**F ZFS,DUMP** command was issued	None
0384	**F ZFS,ABORT** command was issued	None
0385	The system this code issued on is taking a zFS dump at the request of zFS running on another sysplex member.	None
0410	The IOEAGFMT utility has attempted to obtain storage and failed.	If possible, determine why the storage obtain failed and correct the problem. Try to increase the region size for the job and run it again. Ensure that a user exit does not cause the job to fail to obtain storage.
0412	zFS marked a zFS aggregate dead because of an internal problem. zFS will attempt to dump on this system and on each member of the sysplex (with the same abend reason code).	To recover the compatibility mode aggregate, unmount it, run the zFS IOEAGSLV utility against it and then mount it again. See *z/OS File System Administration* for information about IOEAGSLV.

Programmer response

None.

Source

zSeries File System (zFS)

2C6

Explanation

The MIHQUERY service, the IOSCDR service, the IOSPTHV service, or the IOSCAPU service has encountered an abend condition while attempting to satisfy the caller's request.

The following reason codes apply to the **MIHQUERY** service:

0001
    Caller of MIHQUERY is not in supervisor state.

0002
    Caller of MIHQUERY is not in key 0-7.

0003
    Incorrect parameter list. For one of the following reasons, an error occurred when the MIHQUERY service tried to copy the list:

    • The caller passed an incorrect parameter list address.

    • The caller passed an address that the caller did not own.

    • The storage was in an incorrect key.

0004
    Incorrect parameter list. For one of the following reasons, an error occurred when the MIHQUERY service tried to update the list:

    • The caller passed an incorrect parameter list address.

- The caller passed an address that the caller did not own.
- The storage was in an incorrect key.

The caller might have freed the parameter list between the time when MIHQUERY copied the parameter list and the time when it updated the list.

0005
The caller of MIHQUERY passed an incorrect UCB address in the parameter list.

0006
The caller of MIHQUERY is in cross memory mode; that is, PASN=HASN=SASN is not in effect.

The following reason codes apply to the **IOSCDR** service:

0100
Incorrect authorization. For LINKAGE=LINK callers, the caller is not in supervisor state. For LINKAGE=SYSTEM callers, the caller is not any one of the following:

- In supervisor state
- In PKM 0-7
- In problem state
- In PSW key 0-7
- APF-authorized
- RACF authorized to the FACILITY class and the IOSCDR entity.

0101
Caller of IOSCDR is not in task mode.

0102
Caller of IOSCDR is locked.

0103
Incorrect AMODE. Caller of IOSCDR is not in 31-bit mode.

0200
Incorrect parameter list. Caller of IOSCDR passed an incorrect version of the parameter list.

0201
Incorrect parameter list. The integrity of the parameter list was compromised. For example, more than one parameter in a list of mutually exclusive parameters was specified.

0202
Incorrect parameter list. For one of the following reasons, an error occurred when the IOSCDR service tried to read the list:

- The caller passed an incorrect parameter list address.
- The caller passed an address that the caller did not own.
- The storage was fetch protected.

0203
Incorrect parameter list. For one of the following reasons, an error occurred when the service tried to update the list:

- The caller passed an incorrect parameter list address.
- The caller passed an address that the caller did not own.
- The storage was in a key that is not accessible from the key of the caller.

The caller might have freed the parameter list between the time when the service read the parameter list and the time when it updated the list. In addition, if the storage is not accessible from the key of the caller, then reads may work, but updates may not.

0204
Incorrect IOCTOKEN storage. For one of the following reasons, an error occurred when the service tried to read the IOCTOKEN.

- The caller passed an incorrect IOCTOKEN address.
- The caller passed an address that the caller did not own.
- The storage is fetch protected.

0205

Incorrect IOCTOKEN. For one of the following reasons, an error occurred when the service tried to update the IOCTOKEN:

- The caller passed an incorrect IOCTOKEN address.
- The caller passed an address that the caller did not own.
- The storage was in a key that is not accessible from the key of the caller.

The caller might have freed the IOCTOKEN storage between the time when the service read it and the time when it attempted to update it. In addition, if the storage is not accessible from the key of the caller, then reads may work, but updates may not.

0206

Incorrect CDRAREA. For one of the following reasons, an error occurred when the IOSCDR service tried to update the CDRAREA.

- The caller passed an incorrect CDRAREA address.
- The caller passed an address that the caller did not own.
- The storage was in a key that is not accessible from the key of the caller.

The caller might have freed the CDRAREA storage before IOSCDR attempted to update it.

The following reason codes apply to the **IOSPTHV** service:

0100

Caller of IOSPTHV is not in supervisor state.

0101

Caller of IOSPTHV is not in task mode.

0102

Caller of IOSPTHV is locked.

0103

Incorrect AMODE. Caller of IOSPTHV is not in 31-bit mode.

0200

Incorrect parameter list. Caller of IOSPTHV passed an incorrect version of the parameter list.

0201

Incorrect parameter list. For one of the following reasons, an error occurred when the IOSPTHV service tried to read the list:

- The caller passed an incorrect parameter list address.
- The caller passed an address that the caller did not own.
- The storage was fetch protected.

0202

Incorrect parameter list. For one of the following reasons, an error occurred when the IOSPTHV service tried to update the list:

- The caller passed an incorrect parameter list address.
- The caller passed an address that the caller did not own.
- The storage was in a key that is not accessible from the key of the caller.

The caller might have freed the parameter list between the time when the service read the parameter list and the time when it updated the list. In addition, if the storage is not accessible from the key of the caller, then reads may work, but updates may not.

0203

Incorrect IOCTOKEN storage. For one of the following reasons, an error occurred when the IOSPTHV service tried to read the IOCTOKEN.

- The caller passed an incorrect IOCTOKEN address.
- The caller passed an address that the caller did not own.
- The storage is fetch protected.

0204

Incorrect IOCTOKEN. For one of the following reasons, an error occurred when the service tried to update the IOCTOKEN:

- The caller passed an incorrect IOCTOKEN address.
- The caller passed an address that the caller did not own.
- The storage was in a key that is not accessible from the key of the caller.

The caller might have freed the IOCTOKEN storage between the time when the service read it and the time when it attempted to update it. In addition, if the storage is not accessible from the key of the caller, then reads may work, but updates may not.

0205

Incorrect MSGBUF. For one of the following reasons, an error occurred when the IOSPTHV service tried to update the MSGBUF.

- The caller passed an incorrect MSGBUF address.
- The caller passed an address that the caller did not own.
- The storage was in a key that is not accessible from the key of the caller.

The caller might have freed the MSGBUF storage before IOSPTHV attempted to update the MSGBUF.

The following reason codes apply to the **IOSCAPU** service:

01000100

Caller of IOSCAPU CAPTUCB or IOSCAPU UCAPTUCB is locked or is not enabled.

01000101

Caller of IOSCAPU CAPTOACT is locked.

01000102

Caller is in SRB mode during nucleus initialization program (NIP) processing and authorization for a PC routine is not available.

01000103

Caller of IOSCAPU CAPTUCB or IOSCAPU UCAPTUCB is in cross memory mode.

01000104

Caller of IOSCAPU CAPTUCB, IOSCAPU UCAPTUCB, or IOSCAPU CAPTOACT ASID is in problem state and is not in key 0-7.

01000200

Caller of IOSCAPU passed an incorrect version of the parameter list.

01000201

For one of the following reasons, the integrity of the parameter list was compromised:

- More than one parameter in a list of mutually exclusive parameters was specified.
- A function parameter was not specified.
- Reserved fields are not zero.
- A required parameter associated with a function parameter was not specified.

01000202

For one of the following reasons, an error occurred when IOSCAPU tried to read the parameter list:

- The caller passed an incorrect parameter list address.

- The caller passed an address that the caller did not own.
- The storage was fetch protected.

01000203

For one of the following reasons, an error occurred when IOSCAPU tried to update the parameter list:

- The caller passed an incorrect parameter list address.
- The caller passed an address that the caller did not own.
- The storage was in a key that is not accessible from the key of the caller.

01000204

The access list entry token (ALET) for the parameter list is not valid.

01000205

The requested function does not exist.

01000300

The release of the specified captured UCB exceeds the number of captures specified with the LASTING parameter or in SRB mode.

System action

The system continues processing. The caller ends abnormally with the appropriate reason code.

System programmer response

If the application programmer is unable to debug the error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump data from the application recovery routine.

Programmer response

The application recovery routine should have recorded and/or dumped the data needed to debug this problem. The dumped data should include the parameter list and its UCB address, the caller's key and the key of the storage that the caller was attempting to obtain. Correct the application and resubmit. If the recovery routine did not save the dump information, fix the recovery routine and try to recreate the original problem. If the error recurs, notify the system programmer.

Source

Input/output supervisor (IOS)

2E0

Explanation

An unexpected error occurred during Basic HyperSwap® processing. This abend can be used for entry into a recovery routine that captures additional documentation and then attempts to try again. In other cases, the 2E0 abend is percolated to an application recovery routine or another system component recovery routine.

Reason code
    Explanation

*xxxx*C*yyy*

Internal reason codes for Basic HyperSwap socket support.

IOSHMSUS:

00010001

IXCSETUS macro returned a parameter error or environment error return code.

00010002

IXCSETUS macro returned an unexpected return code.

IOSHMMSG:

00020001
Input message request qualifier is not defined.

00020002
Input message request type is not defined.

IOSHIPCR:

00030001
Redundant PC routine initialization call is detected.

00030002
IOSHMPCR entry point is unresolved.

00030003
Basic HyperSwap address space authorization failed.

00030004
Basic HyperSwap address space linkage table index reserve failed.

00030005
IOSHMPCR ETCRE macro request failed.

00030006
IOSHMPCR ETCON macro request failed.

IOSHMPAR:

00040001
Input message request type is not defined.

IOSHMCIT:

00050001
CSVDYNEX DEFINE IOSHSWAP_EXIT macro request failed.

00050002
Input message request type is not defined.

00050003
CSVDYNEX UNDEFINE IOSHSWAP_EXIT macro request failed.

IOSHMHST:

00060001
Input message request type is not defined.

00060002
Input message request is not received on the master processor.

IOSHMCMT:

00070001
Input message request type is not defined.

00070002
IOSXTIM macro request failed.

00070003
Input message request was not received on the master processor.

IOSHINTT:

00080001
Task termination wait time for a Basic HyperSwap task has been exceeded.

IOSHMENF:

000F0001
Unable to locate input device UCB.

000F0002

Unable to retrieve configuration data record (CRD) information.

000F0003

Unable to locate device node descriptor (NED) information.

000F0004

IOSHXSND macro request failed. Unable to deliver ENF signal.

IOSHMCFG:

00100001

Input message request type is not defined.

00100002

Response from the master member's configuration validation task (IOSHMCF2) is missing.

00100003

Response from the configuration validation task (IOSHMCF2) on one of the slave members is missing.

00100004

Unable to locate member information in the Basic HyperSwap global information (GMI) table.

IOSHMCF2:

00110001

Input message request type is not defined.

00110002

Response from the HyperSwap API services interface task is missing.

IOSHMPED:

00120001

Input message request type is not defined.

IOSHIMSG:

00130001

IXCQUERY macro request failed.

00130002

IXCJOIN macro request failed.

IOSHMEPT:

00140001

Unrecognized Basic HyperSwap operator command is received from SSI.

00140002

Incorrect operator command parameter list (CSCB) is received from SSI.

00140003

Unrecognized Basic HyperSwap command from the application user exit.

00140004

Incorrect parameter list information from the application user exit.

00140005

Input message request type from the SSI (IOSHMSSM) is not defined.

00140006

Input message request qualifier from the SSI (IOSHMSSM) is not defined.

00140007

Input message request type from subordinate task (IOSHMEPT) is not defined.

00140008

Incorrect operator command parameter list (CSCB) length from subordinate task (IOSHMEPT).

00140009

IOSHXSND macro failed to send request to IOSHMEPT on the master.

0014000A
   IOSHXSND macro failed to send request to IOSHMHST on the master.

0014000B
   IOSHXSND macro failed to send request to IOSHMCIT.

0014000C
   IOSHXMAC macro enable request failed.

0014000D
   IOSHXMAC macro disable request failed.

0014000E
   IOSHXMAC macro PPRC suspend request failed.

0014000F
   IXCMSGI service failed.

00140010
   A system timed out during FREEZE.

00140011
   IOSHXSND to IOSHMBLK on Master failed.

IOSHISSI:

00150001
   IEFSSVT macro CREATE request failed.

00150002
   IEFSSVT macro EXCHANGE request failed.

00150003
   IEFSSVT macro DISABLE request failed.

00150004
   IEFSSI macro PUT request failed.

00150005
   IEFSSI macro ACTIVATE request failed.

00150006
   IEFSSI macro DEACTIVATE request failed.

00150007
   IEFSSI macro QUERY request failed.

00150008
   IEFSSI macro ADD request failed.

00150009
   SSI Broadcast Message START request (IEAVG700) failed.

0015000A
   SSI Broadcast Message STOP request (IEAVG700) failed.

IOSHMOPR:

00170001
   Operator requested Basic HyperSwap SVC dump.

IOSHMSND:

00180001
   IOSHXSND macro processing error occurred and caller requested the DumpOnError parameter option.

IOSHXREC:

00190001
   Rsn Code 1 - Unable to establish an ESTAE.

IOSHMMQM:

001A0001
   IOSHXMAC macro processing error. Request code is not defined.

IOSHMXUS:

001B0001
   IXCSTATUS macro request failed.

IOSHMTKX:

001C0001
   Unable to locate TCB in the Basic HyperSwap task table.

IOSHMTKX:

001D0001
   GetMasterOwner processing failed.

IOSHMBLK:

001E0001
   Invalid message received.

IOSHMHS2:

001F0001
   Invalid message received.

IOSHMCM2:

00200001
   Invalid message received.

IOSHMBPT:

00210001
   Invalid message received.

IOSHMEP2:

00220001
   Invalid message received.

IOSHME64:

00230001
   IOSHXSND macro failed to send request to IOSHMEPT on the Basic HyperSwap master system.

00230002
   UCBPIN request for a device in an active MetroMirror configuration failed.

00230003
   UCBPIN UNPIN request for a device in an active MetroMirror configuration failed.

IOSHSAPI:

80000001
   Dump option requested for HyperSwap API services wSwap (FC=3) request timeout.

IOSHSSUB:

80010001
   Query PPRC pair status I/O error encountered.

80010002
   Terminate PPRC pair I/O error encountered.

80010003
   IOSVSWAP routine call failed.

80010004
   Query unit address configuration I/O error encountered.

80010005
UCBINFO macro on PAVINFO request failed.

80010008
Read DASD volume Label I/O error encountered.

80010009
Write DASD volume Label I/O error encountered.

8001000A
UCBLOOK macro request failed.

8001000B
IOSVMSCQ routine request failed.

8001000C
IEFSSREQ macro request failed.

8001000D
Establish PPRC pair I/O error encountered.

8001000E
Establish PPRC pair I/O error encountered.

8001000F
IOSCFT macro request failed.

80010011
IOPTHVAL macro request failed.

80010012
IOSSLFD macro request failed.

IOSHSENF

80020001
UCBPIN macro request failed.

80020002
UCBPIN macro token count error encountered.

System action

The system might request an SVC dump and may write messages related to the problem.

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the messages, the logrec data set record, the SYSOUT output for the job, and the dump.

Source

Input/output supervisor HyperSwap function (IOSH)

Module

See individual reason codes.

2F3

Explanation

One of the following has occurred to a job which was journaled or was otherwise eligible for restart (checkpoint/restart, step restart, or job restart):

- The job was running when a system failure occurred, and a system restart (IPL and JES2 WARM start) was performed.
- The initiator the job was running in terminated at End Of Memory (EOM).

A system job queue entry for the job existed at the time of the failure, but the specific step to be restarted at was not eligible for restart.

Programmer response

Resubmit the job.

Source

Initiator/terminator

Module

IEFIB605

2FB

Explanation

The system has abnormally ended at one of the following points in processing:

1. A critical error occurred early in JES3 or the functional subsystem (FSS) initialization or late in JES3 abnormally ending. The JES3 ESTAE environment had not yet been established or is deleted, so no JES3-formatted ABEND dump is available.
2. Once JES3 initialization has successfully established the JES3 ESTAE routine (IATABMN), the retry routine (IATABRT) uses this ABEND code to return to IATABMN in order to percolate.

An MVS dump will always appear for a X'2FB' ABEND, regardless of the original abend code. The original abend code is shown in message IAT3713 to the operator and in the JES3-formatted dump. The dump by itself does not tell whether the failing JES3 function recovered or had to be ended.

Note: An MVS dump with a 2FB means that IATABRT or a routine used by module IATABRT failed, thereby producing the 2FB abend.

System action

In the first case, JES3 writes message IAT3702 to the operator and to a dump data set of the type specified during JES3 initialization. This message details critical debugging information.

Operator response

In the first case, respond to message IAT3nnn.

System programmer response

Obtain the abend dump for the failing job step.

If the problem occurred in JES3 you should:

- Save the hardcopy log
- Provide a listing of the initialization deck (JES3OUT)
- Provide a console log from initialization

- Check the JESYSMSG data set for error indications

Programmer response

In the second case, analyze the abend dump to find the cause of the error.

Source

JES3

2FC

Explanation

While the I/O first level interrupt handler (FLIH) was running, an error occurred.

System action

In an attempt to recover, the system abnormally ends the task that experienced the I/O interrupt. The system writes a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=2FC,ACTION=SVCD,END
```

System programmer response

Do the following:

- Find the original abend causing the problem in the system diagnostic work area (SDWA) in the logrec data set error record for abend X'2FC'.
- Search problem reporting data bases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide the SVC dump and the logrec data set error records.

Source

Supervisor control

300

Explanation

During processing of an I/O request, execute channel program (EXCP) processing encountered an error. Each X'300' abend code has a reason code that explains the error:

Code
    Explanation

1 - 2
    EXCP encountered an incorrect data extent block (DEB) at one of the following phases during the validity check:

- Reason code 1 - front end processing
- Reason code 2 - while processing a related request (RRQE)

The problem can be one of the following:

- The DEB does not exist in the DEB TABLE.

- The offset in the DEB TABLE (DEBTBLOF) for this DEB is less than 1 or greater than the number of entries in the DEB TABLE.
- The DEB address that was obtained from the data control block (DCB) does not match any entry in the DEB TABLE.

3

The DEB is not an EXCP or Indexed Sequential Access Method (ISAM) DEB.

4

The system detected that the IOBM field in the input/output block (IOB) is higher than the maximum extent count (DEBNMEXT) in the DEB.

5

The Related Request Queue (RRQ) address in the DEB does not match the RRQ address in each Request Queue Element (RQE) associated with the DEB.

6

Dataset Name Hiding is active and the user does not have RACF/SAF Facility Class Authorization to read the VTOC.

7

During EXCP purge processing an invalid input/output block (IOB) was found on the IOB restore chain.

8

During EXCP purge processing, an invalid DEB was found in the job step TCB's DEB table.

System action

The system abnormally ends the current task and issues a SNAP dump.

For reason code 8, the system records the condition and continues processing.

System programmer response

In the dump, look at field TCBEXCPD at offset X'C0' in the task control block (TCB) for the current task. TCBEXCPD points to the EXCP debugging area (XDBA). The XDBA contains diagnostic data associated with the EXCP processor.

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL for the job and the dump.

Programmer response

Correct the problem that the reason code indicates. Verify that the DCB contains the address of the DEB. Correct the error. Run the job again.

For reason code 6, obtain read access to the 'STGADMIN.IFG.READVTOC.volser' Facility Class profile and rerun the job.

For reason code 8, this condition usually occurs following some other task terminating condition (for example, an out of storage condition). Correct the task terminating condition and run the job again. Note that this condition is recorded only (no dump is taken). The system continues purge processing.

If the error recurs, check the problem program for the error. If the error cannot be determined, run the job again, requesting an ABEND dump. Notify the system programmer.

Source

Execute channel program (EXCP)

For reason code 5, also EXCP purge exit IECVEXPR.

For reason code 7, IECVEXPR.

For reason code 8, IECVEXPR.

301

Explanation

During processing of a WAIT macro, the system found that the wait flag was already on in the event control block (ECB). The flag on indicated that a previous WAIT macro was already waiting for posting of the ECB.

System action

The system abnormally ends the program that issued the WAIT macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Change the problem program to eliminate a double wait on a single event. If no double wait is found, ensure that the program did not incorrectly modify the ECB. Then run the job again.

Source

Task management

302

Explanation

During processing of a POST macro, the system found an error in the caller's environment. Register 15 contains a hexadecimal reason code that explains the error:

Code
  Explanation

04
  The caller does not hold the home address space's local lock.

08
  The caller does not have addressability to the home address space.

14
  The caller does not hold the home address space's local lock.

18
  The caller does not have addressability to the home address space.

24
  The caller does not hold the home address space's local lock.

28
  The caller does not have addressability to the home address space.

34
  The caller does not hold the home address space's local lock.

38
  The caller does not have addressability to the home address space.

3C
  A disabled caller issued a POST macro with the LINKAGE=SYSTEM option.

40

A caller who held a lock issued a POST macro with the LINKAGE=SYSTEM option.

48

A caller who was not processing in primary address space control (ASC) mode issued a POST macro with the LINKAGE=SYSTEM option.

4C

A caller who was not authorized for a cross memory POST (XMPOST) issued a POST macro with the LINKAGE=SYSTEM option.

System action

The system abnormally ends the program that issued the POST macro.

Programmer response

This is probably an error in the calling program. Modify the code to allow the POST macro to be issued in the correct environment. Run the job again.

Source

Task management

305

Explanation

An error occurred when the system tried to process an EU, LU, or VU form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code

    Explanation

08

System queue area (SQA) storage is not in the specified subpool.

0C

Common service area (CSA) storage is not in the specified subpool.

10

Local system queue area (LSQA) storage is not in the specified subpool.

14

Private area storage is not in the specified subpool.

18

The system could not find a private area subpool.

1C

Zero length is not specified on a subpool FREEMAIN. Zero length must be specified on a subpool FREEMAIN.

Note: If this error is detected, the calling program is abnormally ended even though EC, LC, or VC is specified on the FREEMAIN macro.

20

One of the following:

- In the CSA, the area specified on a FREEMAIN is larger than the area specified on the original GETMAIN.
- The FREEMAIN start address is not valid.

24

One of the following:

- In the private area, the area specified on a FREEMAIN is larger than the area specified on the original GETMAIN.

- The FREEMAIN start address is not valid.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Do the following:

- Ensure that the FREEMAIN operands A and LV do not specify a different subpool and/or key than the subpool or key of the storage you are trying to free.
- Ensure that the task control block (TCB) specified on the FREEMAIN request is the same one specified on the corresponding GETMAIN request.
- If a caller running in supervisor state and key 0 made the original GETMAIN request, ensure that the corresponding FREEMAIN request is issued in supervisor state and key 0.

  If a caller in supervisor state and key 0 requests storage in subpool 0 or 250, the system will satisfy this request with storage from a different subpool. This situation is described in *z/OS MVS Diagnosis: Reference*.
- Check for program errors that incorrectly modify the FREEMAIN macro expansion.

Source

Virtual storage manager (VSM)

306

Explanation

The error occurred during processing of a LINK(X), XCTL(X), ATTACH(X), or LOAD macro.

An incorrect load to global request was attempted, or the authorized routine requested a module that could not be found in an authorized library. The module was found either in an unauthorized library or already loaded in storage but marked as coming from an unauthorized library.

The reason code in register 15 identifies the error:

Code
 Explanation

04
 A LOAD macro requested, by the load to global option, a module residing in a library that is not authorized program facility (APF) authorized.

08
 A LOAD macro requested, by the load to global option, a module that is not reentrant.

0C
 An authorized program requested, by a LINK(X), LOAD, XCTL(X) or ATTACH(X) macro, a module in a non-APF-authorized library or concatenation of libraries.

10
 A LOAD macro requested, using the GLOBAL=(YES,F) keyword, a module that requires page alignment.

20
 A job step module was found in a LNKLST data set that was not APF authorized; an APF authorized module was required.

24
 An authorized service attempted, via a LINK(X), LOAD, XCTL(X), or ATTACH(X) macro, to access a copy of a load module which is non-reentrant and loaded from an authorized library by an unauthorized caller. Another copy of the module could not be found.

30

The user attempted to use a controlled program but is not authorized by RACF to use that program. This can occur when a user has EXECUTE access to a program library's data set profile, even if none of the program modules involved are RACF program protected. Have the system security administrator grant you READ access to the data set profile instead.

34

The user attempted to use a program while a program-accessed data set was open.

38

The user requested access to an in-storage program that is not RACF-controlled while a program access data set (PADS) was open.

40

Signature verification for the module being loaded was required but failed.

42

The user attempted to use a program that is not program-controlled, while a must remain controlled environment exists.

44

The authorized user attempted to use a program, providing a parameter longer than 100 characters. The program has not been identified as supporting a parameter longer than 100 characters.

System action

The system issues an ABEND dump.

The system issues a message depending on the reason code accompanying the abend:

Code
    Message

04
    CSV013I

08
    CSV015I

0C
    CSV019I

10
    CSV020I

20
    CSV024I

24
    CSV027I

30
    CSV025I

34
    CSV026I

44
    CSV043I

System programmer response

If the error recurs and the program is not in error, see the system programmer response for accompanying messages in the job log for more information.

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source input for the job.

Programmer response

If the requested module could not be found, make sure the module exists on a system or user-defined authorized library. Correct the error, and run the job step again. If the requested module was provided a parameter longer than 100 characters, shorten the parameter or, if the module supports parameters longer than 100 characters, have the owner re-bind the module specifying the LONGPARM option.

Source

Contents supervision (CSV)

30A

Explanation

An error occurred when the system tried to run an R form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
> **Explanation**

08
> System queue area (SQA) storage is not in the specified subpool.

0C
> Common service area (CSA) storage is not in the specified subpool.

10
> Local system queue area (LSQA) storage is not in the specified subpool.

14
> One of the following:
>
> - Private area storage is not in the specified subpool.
> - The TCB requesting the FREEMAIN is not the same as the TCB which owns the storage. Usually, the TCB that owns the storage did the GETMAIN.
> - The key of storage does not match. This can happen when the FREEMAIN is done under a different PSW key than the GETMAIN.

18
> The system could not find a private area subpool.

1C
> Zero length is not specified on a subpool FREEMAIN. Zero length must be specified on a subpool FREEMAIN.

20
> One of the following:
>
> - In the CSA, the area specified on a FREEMAIN is larger than the area specified on the original GETMAIN.
> - The FREEMAIN start address is not valid.

24
> One of the following:
>
> - In the private area, the area specified on a FREEMAIN is larger than the area specified on the original GETMAIN.
> - The FREEMAIN start address is not valid.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Do the following:

- Ensure that the FREEMAIN operands A and LV do not specify a different subpool and/or key than the subpool or key of the storage you are trying to free.
- Ensure that the task control block (TCB) specified on the FREEMAIN request is the same one specified on the corresponding GETMAIN request.
- If a caller running in supervisor state and key 0 made the original GETMAIN request, ensure that the corresponding FREEMAIN request is issued in supervisor state and key 0.

  If a caller in supervisor state and key 0 requests storage in subpool 0 or 250, the system will satisfy this request with storage from a different subpool. This situation is described in *z/OS MVS Diagnosis: Reference*.
- Check for program errors that incorrectly modify the FREEMAIN macro expansion.

Source

Virtual storage manager (VSM)

30D

Explanation

End of memory (EOM) processing has detected that an EOM resource manager has been inactive (not dispatched) for at least 4 minutes. That EOM resource manager is considered to have failed and receives this abend.

The hexadecimal reason codes are:

Code
  Explanation

00
  The failing resource manager receives this reason code.

04
  This reason code is used internally during the detection process. This reason code may be seen in the LOGREC record that the system records for this abend.

System action

The system takes a synchronous SVCDUMP to capture the situation, then issues this abend. The abend is retriable. If the EOM resource manager's recovery fails to retry, EOM processing will continue with the next EOM resource manager.

System programmer response

The title of the SVCDUMP will begin with "END OF MEMORY RESOURCE MANAGER HANG DETECTED:", and will contain a TCB address as well as the name or address of the last EOM resource manager that was given control. The owner of that resource manager should examine the indicated TCB (which is in ASID 1) to determine why it was not progressing and correct the situation that caused the resource manager to fail in this way.

Note: Since the SVCDUMP is taken before ABEND30D is issued (to provide a more clear picture of the problem), this abend will not be seen under the failing TCB in the dump. It may be seen under the detecting TCB (with reason code 04) and should be ignored there.

Programmer response

None.

Source

Recovery Termination Manager (RTM)

30E

Explanation

A program incorrectly issued a SPIE macro in one of the following ways:

- An unauthorized program specified program interruption code 17 on the macro.
- A program in supervisor state issued the macro. The macro should be issued by a program running in problem state.
- The program that issued the macro had a program status word (PSW) storage key that did not match the task control block (TCB) key.
- A program issued the macro in 31-bit addressing mode.

System action

The system sends messages about the problem to the job log. The system abends the program that issued the macro.

System programmer response

If an IBM program issued the macro, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide:

- Messages from the job log
- The ABEND or SVC dump
- The assembly listing for the job
- The JCL for the job
- The program listing for the job

Programmer response

If an application program issued the SPIE macro, check the program for the errors listed in the explanation. If the program is in 31-bit addressing mode, use an ESPIE macro instead of the SPIE macro. Correct the error. Run the job step again.

Source

Recovery termination manager (RTM)

312

Explanation

An error occurred in a LNKLST or library lookaside (LLA) directory data access routine. The reason code in register 15 identifies the error:

Code
    Explanation

1

LLA partitioned data set (PDS) search function failed. PDS search is used to obtain BLDL format directory entries from the LLA directory.

2

LLA fetch search function failed. Fetch search is used to obtain directory information needed to retrieve a copy of a staged module from LLA's virtual lookaside facility (VLF) data space.

3

LLA logging function failed. LLA logging is used to record fetch statistics in the LLA directory for a fetched module.

4

LLA search failure count has reached the allowed limit. The failures counted are only those caused by an LLA directory problem rather than those caused by a user problem.

System action

LLA does one of the following:

- Issues message CSV222I and then initiates automatic restart processing
- Issues message CSV218E and stops processing.

The system issues an SVC dump and writes a logrec data set error record.

System programmer response

See the system programmer response for message CSV222I or CSV218E.

Source

Contents supervision (CSV)

313

Explanation

The error occurred during processing of an OPEN macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC144I. Refer to the explanation of message IEC144I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC144I.

Source

DFSMSdfp

314

Explanation

The error occurred during the processing of a CLOSE macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC211I. Refer to the explanation of message IEC211I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC211I.

Source

DFSMSdfp

315

Explanation

An error occurred during the processing of SVC 21 (STOW) that could not be attributed to incorrect user input. This completion code is accompanied by message IEC911I. Refer to the explanation of message IEC911I for complete information about the task that was ended and for an explanation of the return code in register 15.

System action

The STOW task recovery routine has been invoked. Low real storage and the caller's region have been dumped to the SYS1.DUMP data set. The caller's DCB and input registers 0 and 1 have been included in a software error record written to the logrec data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the program listing for the job, the logrec data set error record, and all printed output and output data sets related to the problem.

Programmer response

Make sure that the STOW macro instruction is correctly coded, and that the parameter list and DCB involved are not modified by your program during the processing of SVC 21.

Source

DFSMSdfp

317

Explanation

The error occurred during processing of a BSAM CLOSE macro instruction with a TYPE=T operand for a data set on a direct access device. This system completion code is accompanied by message IEC220I. Refer to the explanation of message IEC220I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC220I.

Source

DFSMSdfp

322

Explanation

One of the following occurred:

- The system took a longer time to run a job or job step than the time specified in one of the following:
  - The TIME parameter of the EXEC or JOB statement.
  - The standard time limit specified in the job entry subsystem.
- If the program was executed as a started task running under the master subsystem, the program's properties did not exempt the program from system timing.

System action

The system abnormally ends the job, job step, or procedure.

System programmer response

Consider doing the following:

1. Increase the installation standard time limit value.
2. Check if the installation IEFUTL exit should be modified to extend the maximum time for the failing program.
3. If the program was executed as a started task running under the master subsystem, it can be exempted from system timing restrictions by adding it to the Program Properties Table (PPT). To add the program to the PPT, add a statement for the program to an active SCHEDxx member of parmlib, and include the SYST keyword to indicate that the program should run as an un-timed system task. For more information, see SCHEDxx in *z/OS MVS Initialization and Tuning Reference*.

Programmer response

Check for a program error which caused the abend. If no errors exist, consider adding the TIME parameter to the EXEC statement to increase the installation standard program time limit. Note that maximum program time limits may be enforced by system parameters.

Source

System Management Facilities (SMF)

328

Explanation

During processing of an EXTRACT macro, the system found that the task control block (TCB) specified in the second operand was not for a subtask of the caller's TCB.

System action

The system abnormally ends the program that issued the EXTRACT macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Change the EXTRACT macro to specify a TCB for a subtask. If the macro was specified correctly, check for program errors that incorrectly modified the EXTRACT macro expansion. Correct the error. Run the job again.

Source

Task management

32D

Explanation

A program requested an overlay. In answer to the request, the overlay supervisor was using program fetch to load a program segment from the library. Fetch found one of the following:

- A record of an incorrect length
- An uncorrectable input/output (I/O) error

Note: Overlay programs run only in 24-bit addressing mode, not in 31-bit addressing mode.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided.

Operator response

If messages show an I/O error on the device containing the overlay segment, run the job step again. If the I/O error recurs, contact hardware support.

Programmer response

If messages did not show an I/O error, link edit and run the program again.

Source

Overlay supervisor

32E

Explanation

When a program issued the STIMERM service routine, an error occurred. Register 15 contains a hexadecimal reason code:

Code
    Explanation

010C
    The Coordinated universal time (UTC), time-of-day (TOD), or local time (LT) parameter in a STIMERM SET macro specified a value that was greater that 24 hours.

0110
    The TIMER service routine received an incorrect STIMER or STIMER SET macro parameter. For example, a program running in 31-bit addressing mode is not using the MVS/SP Version 2 or later expansion of STIMER.

011C

The limit of concurrent STIMERM SET macro requests was exceeded.

0120

The timer service routine cannot access the storage containing the parameters for the STIMERM SET macro.

0128

The requested time interval was too large. One of these situations occurred: The time interval specified (BINTVL, DINTVL, MICVL, or TUINTVL), added to the current TOD clock contents, would have exceeded X'FFFFFFFFFFFFFFFF' (a value that would expire on September 17, 2042). A value greater than X'7FFFFFFF' was specified for BINTVL.

0210

An incorrect parameter was specified on the STIMERM TEST macro.

0220

The timer service routine cannot access the storage containing the parameters for the STIMERM TEST macro.

0224

The STIMERM ID number specified for a TEST request was 0, which is not valid.

0310

An incorrect parameter was specified on the STIMERM CANCEL macro.

0320

The timer service routine cannot access the storage containing the parameters for the STIMERM CANCEL macro.

0324

The STIMERM ID number specified for a CANCEL request was 0, which is not valid.

System action

The system abnormally ends the task that issued the macro.

Programmer response

Check and correct the parameters specified on the STIMERM macro. See *z/OS MVS Programming: Assembler Services Reference ABE-HSP* for format and restrictions. Check that a program running in 31-bit addressing mode uses the MVS/SP Version 2 or later expansion of STIMER.

Source

Timer supervision

330

Explanation

An unauthorized task attempted to use authorized options of the DEQ macro instruction during the processing of global resource serialization.

Register 15 may contain a reason code associated with this error:

Code
  Explanation

xxxx0001

An unauthorized requester attempted to DEQ an authorized resource.

The list of authorized major names is described in *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN*.

xxxx0002

An ISGNQXIT exit specified an authorized resource name for an unauthorized DEQ request.

The list of authorized major names is described in *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN*.

xxxx0006
An unauthorized requester specified TCB or RMC.

xxxx0007
An unauthorized requester attempted to issue a generic request.

xxxxyyyy
The reason code could also be associated with an ISGENQ Request=Release. Note that the ABEND reason codes for ISGENQ correspond to the same reason codes listed in the Return and Reason Codes section of the ISGENQ macro in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*.

System action

The system issues an ABEND dump.

System programmer response

If the reason code is X'0002', check your ISGNQXIT installation exits to ensure that they are not coded to specify an authorized major name for unauthorized requests. Otherwise, if the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the abend dump.

Programmer response

Correct the macro instruction. Recompile and run the job step again. Either use an unauthorized major name or make the program authorized.

Source

Global resource serialization

333

Explanation

During processing for a dump, an error occurred.

Register 15 contains a hexadecimal reason code that explains the error:

Code
   Explanation

04
While dumping global storage, SVC Dump (SDUMP) detected a start address that is higher that the end address for a storage range.

08
The SDUMP VSM interface routine detected a start address that is higher than the end address for a storage range.

0C
SDUMP has detected a LIST64 storage range with a start address that is higher than the end address for a storage range.

10
While dumping local storage, SDUMP detected a start address that is higher than the end address for a storage range.

14
Before enqueueing on the SDUMP resource, SDUMP detected that it was running in an address space that is not in the current dump.

18

After enqueueing on the SDUMP resource, SDUMP detected that it was running in an address space that is not part of the current dump.

1C

SDUMP is running in an environment that is not valid.

20

While processing a synchronous dump, an SDUMP cross memory post failed to post a task which was to complete the dump. SDUMP recovery processing captured the local storage which was still in real for the address space where the task was located, and then terminated the address space. The dump is unavailable for user specified DCB SVC dumps.

24

While dumping global storage, SDUMP experienced an internal error.

30

ABDUMP (SYSABEND, SYSUDUMP, or SYSMDUMP) did not produce a dump because another task holds a critical resource. Because ABDUMP waited longer than the interval used to determine if the resource was available, the system determined that the task may never release the resource. This abend was issued and an SVC dump was requested instead of the ABDUMP dump. The dump title will include the JOBNAME of the abending task. LOGREC data contains the JOBNAME and the ENQ name.

System action

Dump processing may write an error record to the LOGREC data set. For ABDUMP reason code 30 an SVC dump was requested instead with the JOBNAME in the dump title and message IEA848I was issued.

For the other codes:

Dump data collection ends and SDUMP proceeds to clean up its system resources. Message IEA794I indicates which job requested the dump. When the dump is written to DASD, message IEA911E or IEA611I contains the SDRSN bits which indicate the reasons for an incomplete dump.

Operator response

Determined by the system programmer.

System programmer response

For ABDUMP reason code 30, see the information for message IEA848I. For SDUMP reason codes, when necessary, ask the operator to set a SLIP trap with ACTION=WAIT to obtain a standalone dump if abend X'333' recurs.

Source

Dumping services

335

Explanation

SVC 53, which obtains and releases exclusive control of a resource associated with a BDAM data set, found that the block for which acquisition or release of exclusive control was requested was not in the data set.

System programmer response

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

If the RELEX macro was issued the user should ensure that the BLKREF address supplied in the RELEX macro points to a valid address within the data set described by the input DCB. Make sure that the address format is compatible with the addressing scheme specified in the DCBOPTCD field of the DCB. If the RELEX macro was not issued, the block ID was taken from the IOBSEEK field, or in the case of write-add requests, the IOBDNCRF field. These addresses are derived from conversion of the block ID pointed to by the DECRECPT field of the DECB. Make sure that this address is correct and that the format of the block ID is compatible with that specified in the DCBOPTCD field of the DCB and that the format of the block ID is left-aligned.

Source

DFSMSdfp

337

Explanation

The error occurred when the end of a data set was reached. This system completion code is accompanied by message IEC024I. Refer to the explanation of message IEC024I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the program listing, and the compiler output for the job.

Programmer response

Respond as indicated for message IEC024I.

Source

DFSMSdfp

338

Explanation

An unauthorized task attempted to use authorized options of the ENQ macro instruction during the processing of global resource serialization.

Register 15 may contain a reason code associated with this error:

Code
> **Explanation**

xxxx0001
> An unauthorized requester attempted to ENQ an authorized resource.
>
> The list of authorized major names is described in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*.

xxxx0002
> An ISGNQXIT exit specified an authorized resource name for an unauthorized ENQ request.
>
> The list of authorized major names is described in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*.

xxxx0003
> An unauthorized requester attempted to RESERVE a device that is not allocated to the requesting task.

xxxx0004
An ISGNQXIT exit specified a UCB for a device that is not allocated to the requesting, unauthorized task.

xxxx0005
An unauthorized requester attempted to issue a MASID request.

xxxx0006
An unauthorized requester specified TCB or SMC.

xxxx0008
An unauthorized requester attempted to issue an ECB request.

xxxxyyyy
The reason code could also be associated with an ISGENQ Request=Obtain or Request=Change. Note that the ABEND reason codes for ISGENQ correspond to the same reason codes listed in the Return and Reason Codes section of the ISGENQ macro in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*.

System action

The system writes an ABEND dump.

System programmer response

If the reason code is X'0002', check your ISGNQXIT installation exits to ensure that they are not coded to specify an authorized major name for unauthorized requests. If the reason code is X'0004', ensure that the installation exits do not modify the UCB to specify one that is not allocated to an unauthorized requests. Otherwise, if the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Correct the macro instruction. Recompile and run the job step again.

If the problem persists, do the following:

1. Obtain the address of the ENQ parameter list from register 1 in the UNIQUE-3 column of the SVC 30 or SVC 38 entry in the system trace.
2. Check the parameter list against the SVC 30 or 38 mapping. When analyzing the parameter list, remember that the unit control block (UCB) pointer, if present, is the address of a field that, in turn, contains the address of the UCB.

   If the parameter list contains incorrect data, continue diagnosis in the program that issued the macro.

Source

Global resource serialization

339

Explanation

SVC 57, which frees a buffer or extends the unscheduled list (via a FREEDBUF macro issued either by the user or by the system) found that the DEB pointed to by the input DCB (DCBDEBAD) was not on any DEB chain associated with that job step TCB, or did not point back to that DCB, or the request was issued for a data set that was neither BDAM or ISAM.

System programmer response

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Make sure that the input DCB address is correct and that the DCBDEBAD field of the input DCB has not been overlaid.

Source

DFSMSdfp

33E

Explanation

During processing of a DETACH macro that specified a STAE=YES operand, the system found that the specified subtask had not completed processing.

System action

The system abnormally ends the subtask. If the STAE macro was issued by the subtask, the specified recovery routine gains control during abend processing. However, if the STAE exit routine specified a retry routine, the retry routine does not gain control.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

This may or may not be an error, depending on the programmer's intent. If the subtask should complete processing before it is detached, synchronize the processing through the ECB or ETXR parameters on the ATTACH macro that creates the subtask.

Source

Task management

33F

Explanation

An error has been detected during checkpoint restart processing. This completion code is accompanied by message IHJxxxI with the appropriate reason code.

System action

No dump is produced; the system attempts to retry to the cleanup address.

Programmer response

Respond as indicated in the accompanying message.

Source

DFSMSdfp

344

Explanation

The error occurred during the processing of SYNADAF, where it was determined that the DCB address was incorrect.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Register 15 contains the DCB address in error. For BDAM, BPAM, QSAM, BISAM, and QISAM, the DCB address should be passed to SYNADAF as the PARM1 operand on the SYNADAF macro instruction. (For BDAM, BPAM, BSAM, and QSAM, the DCB address is in register 1 on entry to the user's SYNAD routine.) For EXCP access method, verify that the IOBDCBPT field contains the correct DCB address. Correct the error and rerun the job.

Source

DFSMSdfp

351

Explanation

An error was detected during the processing of SETPRT that could not be attributed to incorrect macro instruction invocation or incorrect control blocks. This system completion code is accompanied by message IEC918I. Refer to the explanation of message IEC918I for complete information about the task that was ended and for an explanation of the return code in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the program listing for the job, and the logrec data set error record.

Programmer response

Make sure that the SETPRT macro instruction is correctly coded, and that the parameter list and DCB involved are not modified by your program during the processing of SVC 81.

Source

DFSMSdfp

353

Explanation

System management facilities (SMF) detected an error in an SMF callable service.

A hexadecimal reason code in register 15 explains the error:

Code
    Explanation
01
    The in-memory service cannot store into a user-provided area.

02
> The caller of the in-memory service is not in AMODE 64.

System action

The SMF callable service ends. For reason code 01, the system generates an SVC dump.

Operator response

Notify the system programmer.

System programmer response

- For reason code 01, check error messages and the SVC dump produced as a result of any previous abends. Check for any previous X'0C4' system completion codes that might indicate a storage overlay has occurred. For instance, check for a completion code in the SDWASABC field of the system diagnostic work area (SDWA). If there is no previous X'0C4' completion code, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.
- For reason code 02, ensure that the caller is running in AMODE 64.

Source

System management facilities (SMF)

35F

Explanation

In order to initiate a nonswappable program or V=R job step, the system issued a SYSEVENT TRANSWAP macro to swap out an address space. One of the following situations occurred:

- Before the system could complete the swap, the address space became unswappable.
- The swap could not be executed because the swap HOLD count in the OUCB was non-zero.

System action

The system abnormally ends the initiator of the job. The system writes messages and a logrec data set error record.

System programmer response

This is probably a system error. Resubmit the job. If the error recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the SYSOUT output for the job.

Source

Initiator, based on a decision by the System Resources Manager (SRM)

Module

IEFSD263

36D

Explanation

An error was detected in communications between RMF and the System Resources Manager while attempting to initialize, collect, or reinitialize workload activity measurements.

System action

All RMF measurement collection is terminated. Reinstatement can be attempted and, if successful, RMF will continue under the control of the original options. If reinstatement fails, RMF is terminated. Register 15 contains the return code from the System Resources Manager depending on the function attempted by RMF:

Byte
  Attempted Function

0

  N/A

1

  Reinitialization of workload activity measurement collection after a change in the Installation Performance Specification (IPS).

2

  Collection of workload activity measurements.

3

  Initialization of workload activity measurements.

The system writes an ABEND dump for the failing job step.

System programmer response

Obtain the SYSOUT output for the job.

Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following statements and run the job step again:

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

Obtain the logrec data set error record.

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Resource Measurement Facility (RMF)

36F

Explanation

One of the following errors occurred during processing of a job entry subsystem SVC 111:

- An non-valid entry code was passed to SVC 111.
- DEBCHK processing found that the DEB (data extent block) was invalid.
- The DEB was not a subsystem DEB.

System action

The program issuing the SVC terminates.

System programmer response

Be sure the program is authorized to use SVC 111 and check that the SVC is issued at the correct point in the program. Correct the error and rerun the job.

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

JES2

378

Explanation

An error when the system tried to process an RU or VRU form of the FREEMAIN macro or the STORAGE RELEASE macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
    Explanation

08
    System queue area (SQA) storage is not in the specified subpool.

0C
    Common storage area (CSA) storage is not in the specified subpool, or it is not in the specified key.

10
    Local system queue area (LSQA) storage is not in the specified subpool.

14
    Private area storage is not in the specified subpool, is not in the specific key, does not have the specified executable state, or is not owned by the specified task.

18
    The system could not find a private area subpool.

1C
    A user has requested that storage at virtual address 0 be freed. This can happen if the user intended an entire subpool, but has incorrectly specified a non-zero length with an address of 0. Zero length must be specified on a subpool FREEMAIN or STORAGE RELEASE. Another possibility is that the user has specified the wrong address.

20
    One of the following:

- In the CSA, the area specified on a FREEMAIN or STORAGE RELEASE is larger than the area specified on the original GETMAIN or STORAGE OBTAIN.
- The FREEMAIN or STORAGE RELEASE start address is not valid.

24
    One of the following:

- In the private area, the area specified on a FREEMAIN or STORAGE RELEASE is larger than the area specified on the original GETMAIN or STORAGE OBTAIN.
- The FREEMAIN or STORAGE RELEASE start address is not valid.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Do the following:

- Ensure that the FREEMAIN or STORAGE RELEASE operands A and LV do not specify a different subpool and/or key than the subpool or key of the storage you are trying to free.
- Ensure that the task control block (TCB) specified on the FREEMAIN or STORAGE RELEASE request is the same one specified on the corresponding GETMAIN or STORAGE OBTAIN request.
- If a caller running in supervisor state and key 0 made the original GETMAIN or STORAGE OBTAIN request, ensure that the corresponding FREEMAIN or STORAGE RELEASE request is issued in supervisor state and key 0.

  If a caller in supervisor state and key 0 requests storage in subpool 0 or 250, the system will satisfy this request with storage from a different subpool. This situation is described in *z/OS MVS Diagnosis: Reference*.
- Check for program errors that incorrectly modify the FREEMAIN or STORAGE RELEASE macro expansion.

Source

Virtual storage manager (VSM)

37A

Explanation

During processing of an EVENTS macro, the system found that another task was currently waiting on the EVENTS table.

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that only one task at one time can wait on the EVENTS table. Correct the error. Run the job again.

Source

Task management

37B

Explanation

While the system was processing a PURGEDQ macro, an error occurred in a resource manager termination routine (RMTR).

System action

The system records the address of the failing service request block (SRB) in a logrec data set error record. The system asks for a retry and PURGEDQ processing continues. The system does not return control to the RMTR in which the error occurred.

System programmer response

Do the following:

- Use the program status word (PSW) address in the logrec data set error record to identify the failing RMTR.

- Search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group associated with this module at the IBM Support Center. Provide the logrec data set error record.

Source

Supervisor control

37D

Explanation

During processing of an EVENTS macro, the system found that another task was currently waiting on the EVENTS table.

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that no program can issue any EVENTS macro that specifies a table currently being waited on. Correct the error. Run the job again.

Source

Task management

382

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

383

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

385

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

3C2

Explanation

The IBM MQ Workflow for z/OS workload manager selector subtask encountered a severe internal error.

The reason code identifies the source of the error. It has the format X'rrmmnnnn', where *rr* denotes the resource class (as detailed in the table that follows), *mm* denotes the method of the resource class, and *nnnn* identifies the place within the method where the error was encountered.

Resource Class Code	Resource Name	Resource Description
01	Resource	abstract class for workflow server resources
02	FmSrvRes	abstract class for workflow server instance resources
03	RmDevRes	abstract class for workflow server input/output device resources
04	SystCons	implementation class for the system console interface
05	Diagnose	implementation class for the flight recorder
06	FifoLock	implementation class for the queue serialization
07	MvsMsgSv	implementation class for the MVS message services interface
08	DevQueue	implementation class for the in-storage queues
09	ErrStack	implementation class for the error recovery
10	ServerDS	implementation class for the data set access
11	Security	implementation class for the security server interface
12	SrvGroup	implementation class for the subtask management
13	SynchEcb	implementation class for the subtask synchronization
14	TimeServ	implementation class for the timer interface
15	ExtTrace	implementation class for the component trace interface
16	TaskServ	implementation class for the subtask services
17	WkldMgmt	implementation class for the workload manager interface
18	XcfGroup	implementation class for the cross-system coupling facility interface
19	XLngServ	implementation class for the cross-language services
20	XMemServ	implementation class for the cross-memory services

System action

The system issues an ABEND dump.

System programmer response

For reason code X'1726nnnn', verify the setup for the workload manager application environment and restart the server.

For other reason codes, search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the ABEND dump.

Programmer response

None.

Source

IBM MQ Workflow for z/OS

3C4

Explanation

During system processing, an internal system request encountered an unexpected error.

Register 15 contains a hexadecimal reason code.

Code
    Explanation

00000001
    Recovery routine (ESTAEX) could not be established.

00000002
    The request came from an unauthorized program.

00000003
    Not enough storage was available.

00000004
    POST returned an an error code.

00000005
    ATTACH did not complete successfully.

00000006
    LXRES did not complete successfully.

00000007
    AXSET did not complete successfully.

00000008
    Too many ETEs (entry table entries).

00000009
    Incorrect EX (entry index)

0000000A
    ARR (associated recovery routine) not found.

0000000B
    A PC integrity error occurred.

0000000C
    A PC provided an incorrect attribute.

0000000D
    ETCRE did not complete successfully.

0000000E
    ETCON did not complete successfully.

0000000F

An unexpected error occurred.

00000010

ENQ did not complete successfully.

00000011

Start was incorrect.

00000012

The SSCVT was incorrect.

00000013

The DSCT was incorrect.

00000014

Dispatcher control blocks were incorrect.

00000015

ALESERV did not complete successfully.

00000016

DSPSERV did not complete successfully.

00000017

IEFJSVEC did not complete successfully.

00000018

A required routine could not be found.

00000019

RESMGR did not complete successfully.

0000001A

Recovery was entered and there was no available entry on the dynamic area stack for the recovery routine to use.

0000001B

The stack storage has been used up.

0000001C

While processing an IEAMSXMP IRB=YES request, a system SRB could not successfully schedule the needed IRB. Therefore the requested POST was not done. One possible reason is that there was insufficient storage available (either private or common) to meet the system's needs.

0000001D

A DEBCHK macro invocation completed with a non-zero return code.

System action

If the error occurred during address space initialization, the initialization process terminates.

Programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center, providing the reason code that accompanies the abend.

Source

MVS reuse

3C5

Explanation

This abend is issued by the TCP/IP product. For more information, see TCP/IP abend 3C5 reason codes in *z/OS Communications Server: IP and SNA Codes*.

Explanation

An error occurred during IARSUBSP macro processing.

System action

The system fails the IARSUBSP request.

Programmer response

Take the action indicated by **Programmer Response** in the reason code description.

Source

Real Storage Manager (RSM)

The reason code in register 15 identifies the error. When an entry in the range list (specified on the RANGLIST parameter) causes the abend, GPR 2 contains the address of the range list element in error and GPR 3 contains the address of the storage being processed.

Code
  Meaning

xx0108xx
  IARSUBSP IDENTIFY failed. The value specified in the NUMRANGE parameter must be greater than zero and not greater than 16.

  Programmer Response: Correct the value on the NUMRANGE parameter.

xx0109xx
  IARSUBSP IDENTIFY failed. The number of pages specified by the second fullword of the range list entry must be greater than 0 and a multiple of 256.

  Programmer Response: Correct the second fullword of the range list entry to specify the correct amount of storage and resubmit the job.

xx010Axx
  IARSUBSP IDENTIFY failed. The address of the storage specified by the first fullword of the range entry must be aligned on a segment boundary. A segment is 1 megabyte (1,048,576 bytes) long.

  Programmer Response: Correct the first fullword of the range list entry to specify a storage address on a segment boundary, and resubmit the job.

xx0112xx
  IARSUBSP IDENTIFY failed. The storage specified by the range list entry must be pageable and located in either high private or low private storage, and must have been previously obtained using the STORAGE or GETMAIN macro.

  Programmer Response: Correct the range list entry to specify pageable, private storage, or change the subpool from which the storage was obtained, and resubmit the job.

xx0113xx
  IARSUBSP IDENTIFY failed. The storage specified by the range list entry must be owned by one of the following:

- The calling task
- The task that previously issued IARSUBSP IDENTIFY
- A task higher in the task hierarchy than the calling task or the task that previously issued IARSUBSP IDENTIFY.

  Programmer Response: Correct the range list entry to specify storage owned by one of the tasks listed in the error description. If the range list entry is correct, redesign the program so that the task that issues the

IARSUBSP IDENTIFY (or a task higher in the task hierarchy) owns the storage and is the task that issued any previous IARSUBSP IDENTIFY requests.

xx0116xx

Subspace identity failed. A segment in the storage range is part of a shared segment.

Programmer Response: Correct the storage range list entry to specify a storage range that does not include pages that are part of a shared segment.

xx0211xx

IARSUBSP CREATE failed. The subspace name is incorrect. The name must not be blank, or begin with a numeric character. The name must be left-justified, padded to the right with blanks, and must contain only alphanumeric characters and the characters @, $, and #.

Programmer Response: Correct the subspace name specified on the NAME parameter, and resubmit the job.

xx0301xx

IARSUBSP ASSIGN failed. The caller's primary and home address spaces must be the same.

Programmer Response: Change the cross memory mode so that the primary and home address spaces are the same, and resubmit the job.

xx0302xx

IARSUBSP ASSIGN failed. The caller held a lock.

Programmer Response: Release all locks and resubmit the job.

xx0303xx

IARSUBSP ASSIGN failed. A protection exception occurred while the caller was referencing the parameter list.

Programmer Response: The parameter list must be in storage that the caller can access. Make sure the storage was obtained by the caller or passed to the caller by a task higher in the task hierarchy.

xx0304xx

IARSUBSP ASSIGN failed. The caller issued a macro version that is not valid.

Programmer Response: Use the IARSUBSP macro to generate the parameter list.

xx0308xx

IARSUBSP ASSIGN failed. The value specified in the NUMRANGE parameter must be greater than zero and not greater than 16.

Programmer Response: Correct the value on the NUMRANGE parameter.

xx0309xx

IARSUBSP ASSIGN failed. The number of pages specified by the second fullword of the range list entry must be greater than 0 and a multiple of 256 for storage addresses above 16 megabytes.

Programmer Response: Correct the value specified in the second fullword of the range list entry, and resubmit the job.

xx030Axx

IARSUBSP ASSIGN failed. The range entry must be aligned on a segment boundary for storage addresses above 16 megabytes. A segment is 1 megabyte (1,048,576 bytes) long.

Programmer Response: Correct the first fullword of the range list entry to specify a storage address on a segment boundary, and resubmit the job.

xx030Bxx

IARSUBSP ASSIGN failed. The range list entry must specify an address that is aligned on a page boundary for storage addresses below 16 megabytes.

Programmer Response: Correct the first fullword of the range list entry to specify a storage address on a page boundary, and resubmit the job.

xx030Cxx

IARSUBSP ASSIGN failed. The specified STOKEN does not represent a valid subspace.

Programmer Response: Correct the value specified on the STOKEN parameter and resubmit the job.

xx0310xx

IARSUBSP ASSIGN failed. The range must have been specified on a prior IARSUBSP IDENTIFY request before it can be specified on IARSUBSP ASSIGN.

Programmer Response: Ensure that you are supplying the correct range list to IARSUBSP ASSIGN, and that the values in the range list are correct. If so, correct your program design to issue IARSUBSP IDENTIFY before issuing IARSUBSP ASSIGN, and rerun the program.

xx0311xx

IARSUBSP ASSIGN failed. The range already is assigned to another subspace.

Programmer Response: None necessary. However, you might want to take some action depending on your program. If you resubmit the job, specify a different range of storage that is eligible to be assigned to a subspace but not yet assigned.

xx0312xx

IARSUBSP ASSIGN failed. The range cannot span across either the 16-megabyte boundary or the 2-gigabyte boundary.

Programmer Response: Change the second fullword of the range list entry to specify a valid storage range, and resubmit the job.

xx0401xx

IARSUBSP UNASSIGN failed. The caller's primary and home address spaces must be the same.

Programmer Response: Change the cross memory mode so that the primary and home address spaces are the same, and resubmit the job.

xx0402xx

IARSUBSP UNASSIGN failed. The caller held a lock.

Programmer Response: Release all locks and resubmit the job.

xx0403xx

IARSUBSP UNASSIGN failed. A protection exception occurred while the caller was referencing the parameter list.

Programmer Response: The parameter list must be in storage that can be read by the calling program.

xx0404xx

IARSUBSP UNASSIGN failed. The caller issued a macro version that is not valid.

Programmer Response: Use the IARSUBSP macro to generate the parameter list.

xx0408xx

IARSUBSP UNASSIGN failed. The value specified in the NUMRANGE parameter must be greater than zero and not greater than 16.

Programmer Response: Correct the value on the NUMRANGE parameter.

xx0409xx

IARSUBSP UNASSIGN failed. The number of pages specified by the second fullword of the range list entry must be greater than 0 and a multiple of 256 for storage addresses above 16 megabytes.

Programmer Response: Correct the value specified in the second fullword of the range list entry and resubmit the job.

xx040Axx

IARSUBSP UNASSIGN failed. The range entry must be aligned on a segment boundary for storage addresses above 16 megabytes. A segment is 1 megabyte (1,048,576 bytes) long.

Programmer Response: Correct the first fullword of the range list entry to specify a storage address on a segment boundary, and resubmit the job.

xx040Bxx

IARSUBSP UNASSIGN failed. The range list entry must specify an address that is aligned on a page boundary for storage addresses below 16 megabytes.

Programmer Response: Correct the first fullword of the range list entry to specify a storage address on a page boundary, and resubmit the job.

xx040Cxx

IARSUBSP UNASSIGN failed. The specified STOKEN does not represent a valid subspace.

Programmer Response: Correct the value specified on the STOKEN parameter and resubmit the job.

xx0412xx

IARSUBSP UNASSIGN failed. The range cannot span across either the 16-megabyte boundary or the 2-gigabyte boundary.

Programmer Response: Change the second fullword of the range list entry to specify a valid storage range, and resubmit the job.

xx050Cxx

IARSUBSP DELETE failed. The specified STOKEN does not represent a valid subspace.

Programmer Response: Correct the value specified on the STOKEN parameter and resubmit the job.

xx0510xx

IARSUBSP DELETE failed. The caller is running in or is eligible to run in the subspace that is to be deleted.

Programmer Response: Correct the STOKEN supplied on the STOKEN parameter. If the STOKEN is correct, change the program design to switch to full address space addressability before attempting to delete the subspace.

xx0511xx

IARSUBSP DELETE failed. Another program is running in or is eligible to run in the subspace that is to be deleted.

Programmer Response: Correct the STOKEN supplied on the STOKEN parameter. If the STOKEN is correct, change the program design to delete the subspace after the program has finished processing.

xx0512xx

IARSUBSP DELETE failed. The caller does not own the subspace to be deleted.

Programmer Response: Correct the STOKEN supplied on the STOKEN parameter. If the STOKEN is correct, change the program design so the task that created the subspace deletes it.

xx0608xx

IARSUBSP UNIDENTIFY failed. The value specified in the NUMRANGE parameter must be greater than zero and not greater than 16.

Programmer Response: Correct the value on the NUMRANGE parameter.

xx0609xx

IARSUBSP UNIDENTIFY failed. The number of pages specified by the second fullword of the range list entry must be greater than 0 and a multiple of 256.

Programmer Response: Correct the second fullword of the range list entry to specify the correct amount of storage and resubmit the job.

xx060Axx

IARSUBSP UNIDENTIFY failed. The address of the storage specified by the first fullword of the range entry must be aligned on a segment boundary. A segment is 1 megabyte (1,048,576 bytes) long.

Programmer Response: Correct the first fullword of the range list entry to specify a storage address on a segment boundary, and resubmit the job.

xxFF01xx

IARSUBSP failed. The caller's primary, secondary, and home address spaces are not the same (the caller is in cross memory mode.)

Programmer Response: Change the cross memory mode so that the primary, secondary, and home address spaces are the same, and resubmit the job.

xxFF02xx
IARSUBSP failed. The caller held a lock.

Programmer Response: Release all locks and resubmit the job.

xxFF03xx
IARSUBSP failed. A protection exception occurred while the caller was referencing the parameter list.

Programmer Response: The parameter list must be in storage that can be read by the calling program. For a CREATE request, the parameter list must be in storage that can also be modified by the calling program.

xxFF04xx
IARSUBSP failed. The caller issued a macro version that is not valid.

Programmer Response: Use the IARSUBSP macro to generate the parameter list.

xxFF05xx
IARSUBSP failed. The reserved fields in caller's IARSUBSP parameter list must be zeros.

Programmer Response: Ensure that you are running the program on the correct MVS release, and that you use the IARSUBSP macro to generate the parameter list.

xxFF06xx
IARSUBSP failed. The caller requested a service that is not valid.

Programmer Response: Use the IARSUBSP macro to generate the parameter list.

xxFF07xx
IARSUBSP failed. The caller must be in 31-bit addressing mode to use IARSUBSP.

Programmer Response: Change to 31-bit addressing mode by issuing the BASSM or BSM instruction, then resubmit the job. BASSM and BSM are described in *Principles of Operation.*

xxFF07xx
IARSUBSP failed. The caller must be in 31-bit addressing mode to use IARSUBSP.

Programmer Response: Change to 31-bit addressing mode by issuing the BASSM or BSM instruction, then resubmit the job. BASSM and BSM are described in *Principles of Operation.*

xxFF08xx
IARSUBSP failed; caller must not have virtual space above 2G.

Programmer Response: In order to use subspaces, the program must be running in an address space that has not previously used virtual storage above 2 gigabytes. The programmer should either run the program as a started task, or submit the program to run in an initiator job class (set by the installation) that limits address spaces to 2 gigabytes.

xxFF0Exx
IARSUBSP failed. The caller must be in task mode.

Programmer Response: Change the program design to ensure that the IARSUBSP macro is invoked in task mode, and resubmit the job.

3C7

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

3FB

Explanation

JES3 could not obtain enough storage to either build a data set block (DSB) or to build a data set status block (DSS).

System action

The system ends the user address space.

System programmer response

Rerun the job with a SYSABEND DD statement. The problem may not recur. If it does, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

JES3

3FC

Explanation

The system detected an error in the processing following an external interrupt. The program that experienced the external interrupt is running under a task control block (TCB) or service request block (SRB).

A hexadecimal reason code in register 15 explains the error:

Code
  Explanation

00
  The system detected, but does not support, a third recursion of this interrupt.

04
  An error occurred during processing for the interrupt.

08
  An error occurred during a first recursion.

0C
  An error occurred during a second recursion.

System action

The system abnormally ends the active task that experienced the external interrupt. The system writes a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=3FC,ACTION=SVCD,END
```

System programmer response

Do the following:

- Find the original abend causing the problem in the system diagnostic work area (SDWA) in the logrec data set error record.
- Search problem reporting data bases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide the SVC dump and the logrec data set error records.

Programmer response

Resubmit the job. If the error recurs, contact the system programmer.

Source

Supervisor control

400

Explanation

Execute channel program (EXCP) processing found an error while processing an I/O request. One of the following is true:

- The address for the data control block (DCB) in the data extent block (DEB) is not the same as the DCB address in the caller's input/output block (IOB). This situation can occur if the data set is not open or if the control blocks are prematurely freed or overlaid.

- The program issued an EXCPVR macro for a DCB that was opened for BSAM, BPAM, or QSAM. Those access methods allow the user program to issue EXCP or XDAP but not EXCPVR.

- BSAM, BPAM, or QSAM detected that control blocks that are internal to the access method were corrupted. The control blocks are in the application program protection key, so the application program might have overlaid them. The address being checked is in register 11.

System action

The system abnormally ends the task and may issue an SVC dump.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the program and assembly listings for the job, and the SVC dump.

Programmer response

Verify that the data set was opened and that the control blocks were handled correctly in the problem program. Run the job again.

If the system wrote a dump, look at field TCBEXCPD at offset X'C0' in the task control block (TCB) for the current task. The TCBEXCPD points to the EXCP debugging area (XDBA). The XDBA contains diagnostic data associated with the EXCP processor.

Source

Execute channel program (EXCP)

401

Explanation

During processing of a WAIT macro, the system found an error in the caller's environment.

Register 15 contains a hexadecimal reason code that explains the error:

Code
    Explanation
04
    The caller does not hold the home address space's local lock.

08

The caller does not have addressability to the home address space.

0C

A disabled caller issued a WAIT macro with the LINKAGE=SYSTEM option.

10

A caller who held a lock issued a WAIT macro with the LINKAGE=SYSTEM option.

14

A caller who was not processing in task mode issued a WAIT macro with the LINKAGE=SYSTEM option.

18

A caller who was not processing in primary address space control (ASC) mode issued a WAIT macro with the LINKAGE=SYSTEM option.

System action

The system abnormally ends the program that issued the WAIT macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing for the job.

Programmer response

This is probably an error in the calling program. Modify the code to allow the WAIT macro to be issued in the correct environment. Run the program again.

Source

Task management

402

Explanation

During processing of an EVENTS POST macro, the system found an error.

Register 15 contains a hexadecimal reason code that explains the error:

Code
  Explanation

00

The system found an incorrect EVENTS table address in the low-order bytes of the extended format event control block (ECB) that was specified.

04

The waiting request block (RB) is not enabled for interrupts.

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Correct the error. Run the job again.

Source

Task management

406

Explanation

The error occurred during processing of a LINK(X), ATTACH(X), or XCTL(X) macro.

The reason code in register 15 identifies the error:

Code
    Explanation

04
    The requested program is only loadable. The program was produced by linkage editor processing for which the EXEC statement contained OL in the PARM parameter field.

08
    Attempt to fetch an AMODE 64 module when not running in z/Architecture mode.

12
    Attempt by a program running AMODE 24 or 31 using the LINK or LINKX macro to link to an AMODE 64 module without having specified AMODE64OK=YES on the LINKX macro.

System action

The task is ended unless ERRET is specified on the macro instruction. For reason code 04, the system issues message CSV009I. The system issues an ABEND dump.

System programmer response

If the error recurs and the program is not in error, see the system programmer response for messages in the job log.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump and the source program listing for the job.

Programmer response

Code
    Response

04
    Rewrite the problem program so that it specifies only loading, not processing, of the only loadable program. Next, recompile and run the job step again.

08
    Avoid having the system attempt to fetch an AMODE 64 module unless running in z/Architecture mode.

12
    Use LINKX and specify AMODE64=OK and make sure that your program provides the interface needed by the AMODE 64 target routine.

Source

Contents supervision (CSV)

40A

Explanation

An error occurred when the system tried to process an R form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
   Explanation

04

The caller tried to FREEMAIN a subpool that cannot be freed.

Only subpools defined as eligible for subpool FREEMAIN may be freed as an entire subpool. All other subpool storage areas must be freed by individual requests explicitly describing the area.

08

A problem program tried to free subpool zero. The control program releases subpool zero when a job step ends.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

If you intended the FREEMAIN macro to release subpool zero, remove it from the program. If you did not intend the FREEMAIN macro to release subpool zero, check for program errors that incorrectly modify the FREEMAIN macro expansion. After making corrections, run the job step again.

Source

Virtual storage manager (VSM)

40D

Explanation

When the recovery termination manager (RTM) was ending a task, recursive errors occurred. RTM ends the address space. This abend code is in the ASCBMCC field in the address space control block (ASCB) for the ended address space and in message IEF402I.

A hexadecimal reason code in register 15, in message IEF402I, and in the SVC dump title explains the error:

Code
   Explanation

00

At the time of the recursive abends, RTM had established only critical error recursion processing. Therefore, RTM could determine only that the error was not due to a problem identified by the other reason codes.

04

RTM2 detected a critical error in RTM2 processing.

08

RTM experienced another error while processing a recursive error. RTM2 was unable to obtain the RTM2 work area (RTM2WA) associated with the original error.

0C

RTM2 could not obtain the previous RTM2WA because the pointer to it was not valid.

10

No storage was available in either the local system queue area (LSQA) or the extended local system queue area (ELSQA) for the RTM2WA.

14

RTM2 detected that an RTM request to get or free virtual storage ended abnormally.

18

RTM was entered recursively after it had completed end-of-task processing.

1C

RTM2 was entered recursively. RTM2 could not find the request block (RB) for the previously abended routine.

20

RTM2 was entered recursively to process an RTM-initiated abend of a daughter task. RTM2 could not find the error RB for the previously abended mother task.

24

RTM2 tried to enter an exit, but found no exit flag on to indicate which exit to take.

28

RTM2 experienced an unrecoverable recursive error while ending a daughter task of the current task.

30

RTM2 has been recursively entered for multiple DOD abends from a subtask.

34

RTM2 encountered a recursive abend due to a problem with the current Task's Linkage Stack.

38

Address space terminating due to Purge Halt error.

System action

RTM ends the address space. The system issues message IEF402I. The system writes an SVC dump. Critical problems in the address space can prevent the SVC dump from completing successfully. Even if successful, message IEA911E or IEA611I might not be issued to indicate the dump is complete.

Operator response

Obtain the SVC dump. The dump has the title:

```
ABEND=40D,RC=xx,COMPON=RTM2,COMPID=SCRTM,
ISSUER=IEAVTRT2, MEMTERM - UNRECOVERABLE ABEND FAILURE
```

Note: Prior to z/OS the COMPID is SC1CM.

System programmer response

Do the following:

1. Obtain the reason code from message IEF402I, register 15, or the SVC dump title.

2. For reason code X'10', continue diagnosis with virtual storage manager (VSM) to determine why there is not enough ELSQA available. If the problem cannot be determined, search problem reporting databases for a fix for the problem. If no fix exists, contact the component group for VSM at the IBM Support Center. Provide the problem data collected in previous steps.

3. For a reason code other than X'10', a critical problem occurred while RTM was processing an abend. Search problem reporting databases for a fix for the problem. Include in the search argument:

   - Program identifier: PIDS/5752SCRTM
   - Abend code: AB/S040D
   - Abend reason code: PRCS/xx

   If no fix exists, contact the IBM Support Center. Provide the dump and any messages about the problem.

Source

Recovery termination manager (RTM)

413

Explanation

The error occurred during processing of an OPEN macro instruction for a data set on magnetic tape or on a direct access device. This system completion code is accompanied by message IEC145I. Refer to the explanation of message IEC145I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC145I.

Source

DFSMSdfp

414

Explanation

The error occurred during processing of a CLOSE macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC212I. Refer to the explanation of message IEC212I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC212I.

Source

DFSMSdfp

417

Explanation

The error occurred during processing of a BSAM CLOSE macro instruction with a TYPE=T operand for a data set on a direct access device. This system completion code is accompanied by message IEC221I. Refer to the explanation of message IEC221I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC221I.

Source

DFSMSdfp

422

Explanation

This abend is a general use abend code. It provides an abend that will be treated similarly to a 222 abend generated by a CANCEL. This abend will not be delivered to the target task if the task is already in recovery processing.

This abend may be retryable or nonretryable depending on the reason code.

The 422 abend reason codes are in the format: *xxxxyyzz*

The parts of the reason code are:

xxxx
> The first halfword will be left to the component to set. Some components use these two bytes for internal identification.

yy
> The third byte will contain a component identifier. This will allow the 422 abend to be shared by multiple products and components. The following *yy* values indicate which component or product generated the abend:
>
> *yy*
> > **Component or product**
>
> **01**
> > z/OS UNIX System Services
>
> **02**
> > JES2
>
> **03**
> > BCP console services
>
> **04**
> > TCP/IP reason codes
>
> **05**
> > JES3
>
> **06**
> > Database product, as identified by bits 0 - 7 of *xxxx*:
> >
> > **Bits**
> > > **Product**
> >
> > **00000000**
> > > IBM DB2 for z/OS

zz
> The last byte is used by the component to create unique reason codes.

z/OS UNIX System Services reason codes (*yy*= 01):

Code
> **Explanation**

*xxxx***01***zz*
> Where *zz* is between the values of X'01' and X'7F' and represents the signal that caused the task to end. An error occurred in an application program that uses z/OS UNIX System Services.

*xxxx***0109**

The ending address space is the target of a signal. A signal is program-generated and causes the job step task in the target user process to be ended with an abend that cannot be retried.

*xxxx***0181**

This abend is the result of the BPX1EXC (exec) or BPX1EXM (execMVS) service being issued in a process with multiple threads. All dubbed threads in the process are terminated with the abend.

*xxxx***0182**

This abend is the result of the BPX1EXI (_exit) service being issued in a process with multiple threads. The initial pthread_create task (IPT), if not already exited, is abended with this reason, if the thread calling BPX1EXI is created by pthread create.

*xxxx***0183**

BPXPRMPC was requested to terminate and clean up a process. This required the Assembler termination macro CALLRTM of the initial pthread task.

*xxxx***0184**

The task is being ended because it is in a wait state controlled by the kernel address space, which is being ended. To prevent leaving the task in a never-ending wait, the task is abended. If a recovery routine exists in the task, the routine can retry for this abend.

*xxxx***0185**

A system error occurred during thread creation. The process was terminated.

*xxxx***0186**

A system error occurred during the processing of a local process exec. The jobstep is terminated.

*xxxx***0187**

A system error occurred during fork processing. Fork is in the APPC Receive and Wait window trying to create the child address space. Fork maybe hung waiting for ASCH initiators.

*xxxx***0189**

The kernel has, at the request of the user, terminated a thread that was in a ENQ wait.

*xxxx***018A**

A system error occurred creating the child process during fork processing. The child process address space is terminated.

*xxxx***018B**

A system error occurred during server_init processing for a server manager address space. The calling task is terminated.

*xxxx***01A0**

This abend is the result of the kernel terminating a thread. The thread and its associated task are terminated.

*xxxx***01A2**

This retryable abend will drive the BPXOINIT process to clean up a suspected growth of zombie processes. This growth of zombies could have been due to a cross memory post failure that prevented BPXOINIT from waking up sooner to clean up the zombies.

*xxxx***01A3**

This abend is the result of a request to shutdown z/OS UNIX System Services. The thread and its associated task are terminated.

*xxxx***01A4**

The current owner of a mutex (mutual exclusion lock) or condition variable abended thereby making unusable the mutex or condition variable held at that time. The system terminates the thread and any task(s) waiting for the mutex or condition.

*xxxx***01A5**

The system has terminated a user task that has held a z/OS UNIX System Services latch for an excessively long time.

*xxxx***01A6**

The system has terminated a user task that was waiting on an internal z/OS UNIX System Services event. The poster committed to the post but was unable to complete the post.

*xxxx*01A7

No z/OS UNIX recovery stacks are available. The address space is terminated. Reduce concurrent z/OS UNIX workload on the system. Use z/OS UNIX health check, USS_KERNEL_STACKS_THRESHOLD, to receive warnings when available z/OS UNIX stacks are low.

*xxxx*01A8

PFS is terminating. The LFS terminated a task that was active in a call to the PFS.

JES2 reason codes (*yy* = 02):

Code
 Explanation

*xxxx*0200

xxxx is the identifier of the JES2 processor control element (PCEID) currently active. A value of X'02' in the 3rd byte indicates the JES2 component. When xxxx=0003, this abend is the result of a job/TSU/STC being canceled via an $C job or $C job,D command while it is awaiting conversion or active in conversion.

*xxxx*0204

The address space was terminated (through CALLRTM TYPE=ABTERM) during job select processing by a JES2 $C operator command. A dump was produced if the DUMP operand was included on the $C command.

*xxxx*0208

The address space was terminated (through CALLRTM TYPE=MEMTERM) as the result of a JES2 $C command with the FORCE operand.

00030200

Determine why the job is being canceled. If you require a dump, have the operator resubmit the job, and then cancel it with the DUMP operand.

BCP console services reason codes (*yy*=03):

Code
 Explanation

00010301

A command was canceled at the operator's request through the CMDS ABEND command.

00010302

A command was canceled at the operator's request through the CMDS FORCE command.

TCP/IP reason codes (*yy*=04):

See TCP/IP abend 422 reason codes in *z/OS Communications Server: IP and SNA Codes*.

JES3 reason codes (*yy*=05):

Code
 Explanation

00000501

The job was canceled during job initiation. No dump was requested.

00000502

The job was canceled with dump during job initiation.

00000503

The job was forced by using the *MODIFY J=*nn*,FORCE command.

System action

The unit of work is ended with a non-retryable error.

For JES2 reason codes, the job, TSU, or STC is ended with a non-retryable error.

Programmer response

Code
 Response

xxxx*01*zz

The unit of work has terminated for a signal that was either sent by the user or generated by the system. Determining the reason for the signal generally requires an understanding of when signals are generated by the system. For a list of signals, refer to *z/OS UNIX System Services Programming: Assembler Callable Services Reference*.

***xxxx*0181**

No action is required by the user.

***xxxx*0182**

No action is required by the user.

***xxxx*0183**

No action is required by the user.

***xxxx*0184**

The task was in a wait at the time the kernel terminated. This is not an error.

***xxxx*0185**

Retry the operation. If the error persists, search problem reporting databases for a fix for the problem. If no fix exists, report the error to the IBM Support Center.

***xxxx*0186**

No action is required by the user.

***xxxx*0187**

Review the APPC/ASCH setup relating to OMVS.

***xxxx*0189**

No action is required by the user.

***xxxx*018A**

No action is required by the user.

***xxxx*018B**

No action is required by the user.

***xxxx*01A0**

No action is required by the user.

***xxxx*01A2**

No action is required by the user. This is part of automated clean-up of zombie storage that is no longer needed.

***xxxx*01A3**

No action is required by the user.

***xxxx*01A4**

Resubmit those jobs that were terminated when the owner of the mutex or condition variable terminated.

***xxxx*01A5**

Determine why the owner of the z/OS UNIX System Services latch was holding it for an excessive period of time. Correct the problem and resubmit the affected job(s) or restart the affected task(s).

***xxxx*01A6**

No action is required by the user.

***xxxx*01A8**

No action is required by the user.

Rerun the job and use a debugger if necessary to determine why the signal has occurred.

425

Explanation

A program requested an overlay. When trying to answer the request, the overlay supervisor found that the target segment for the request could be resolved but was not valid for an overlay.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided.

Programmer response

Check the program for errors in selecting the segment to overlay. Correct the errors; then assemble, link edit, and run the program again.

Source

Overlay supervisor

42A

Explanation

During processing of an ATTACH macro, the system found that the ECB parameter specified an incorrect address for the event control block (ECB) to be posted when the subtask abnormally ends.

The address was incorrect for the following reasons:

- It was not on a fullword boundary.
- The addressed virtual storage is not allocated, or its protection key does not match the protection key of the issuer of the ATTACH.

System action

The system abnormally ends the program that issued the ATTACH macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing for the job.

Programmer response

Change the ATTACH macro to specify the correct ECB address and ensure that the specification was not incorrectly modified by the problem program. Correct the error. Run the job again.

Source

Task management

42D

Explanation

While an overlay program was running, an error occurred in the processing of a SEGLD macro.

Note: Overlay programs run only in 24-bit addressing mode, not in 31-bit addressing mode.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided.

Programmer response

Obtain the address in register 12 at the time of the error. Add X'14' to the address to find the address of the event completion block (ECB) that contains the subtask completion code.

Look for errors in the program. Correct the errors; then assemble, link edit, and run the program again.

Source

Overlay supervisor

430

Explanation

The error occurred during processing of a DEQ macro instruction during the processing of global resource serialization.

The control program found that the parameter list created from the macro instruction was incorrect.

Register 15 might contain a reason code associated with this error:

Code
    Explanation

xxxx0001
    The input parameter list was altered during DEQ processing.

xxxx0002
    The DEQ request specified UCB and RNL=NO.

xxxx0003
    The storage specified by the input UCB address does not map to a valid UCB.

xxxx0004
    The storage specified by the UCB address specified by an ISGNQXIT exit routine does not map to a valid UCB.

xxxx0005
    The storage passed to DEQ processing could not be accessed in the caller's key.

xxxx0006
    The storage containing the QNAME could not be accessed in the caller's key.

xxxx0007
    The storage containing the RNAME could not be accessed in the caller's key.

xxxx0008
    The storage containing the pointer to the UCB address could not be accessed in the caller's key.

xxxx0009
    The storage containing the UCB address could not be accessed in the caller's key.

xxxx000A
    The number of local resources specified in a DEQ list request has exceeded the maximum value of X'FFFF' resources.

xxxx000B
    The number of global resources specified in a DEQ list request has exceeded the maximum value of X'FFFF' resources.

xxxx000D
    The storage specified by the input TCB was invalid.

xxxx000E
    The storage specified by the input TCB does not map to a valid TCB.

xxxx0014
    Request attempted to set an obsolete bit in the input parameter list.

xxxx0015

Request illegally specified TCB with RMC.

xxxx0016

The DEQ request illegally specified MASID.

xxxx0017

Request specified invalid RET= value.

xxxx0018

Generic request specified invalid RET= value or RMC.

xxxx0022

The storage containing the PEL Prefix could not be accessed in the caller's key.

xxxx0023

The RMC=STEP was specified when PASN was not equal to HASN.

xxxx0024

The request was made while in SRB mode.

xxxxyyyy

The reason code could also be associated with an ISGENQ Request=Release. Note that the ABEND reason codes for ISGENQ correspond to the same reason codes listed in the Return and Reason Codes section of the ISGENQ macro in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*.

System action

The system writes an ABEND dump.

System programmer response

Do the following:

- For reason code X'0004', check your ISGNQXIT installation exits to ensure that they are coded to specify a valid UCB address.
- For reason code X'000A/000B', make sure that no single request is greater than the limit when you issue multiple DEQ LIST requests.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Correct the macro instruction. Recompile and run the job step again.

Source

Global resource serialization

433

Explanation

An error occurred while DAE was processing a symptom record.

Register 15 contains a hexadecimal reason code that explains the error:

Code
  Explanation
00000008

There is no more storage available for keeping DAE symptom strings in storage, and the existing storage cannot be reused.

System action

The system writes a logrec data set error record, and attempts to take an SVC dump. DAE stops processing and issues message ADY015I.

System programmer response

For reason code X'00000008', DAE processing may be restarted using the MVS SET DAE command.

Source

Dump Analysis and Elimination (DAE)

435

Explanation

The RELEX SVC, which obtains and releases exclusive control of a resource associated with a direct (BDAM) data set found an error.

Register 15 contains one of the following hexadecimal reason codes:

1

The user requested a block outside of the extents. This can be due to an overlay of user-key storage.

2

There is an error in the read exclusive list, which is in user-key storage.

3

The DEB pointed to by the input DCB (DCBDEBAD field) was not on any DEB chain associated with the job step TCB, or did not point back to that DCB, or was not for a direct data set.

4

The DEB is not for BDAM.

00000xxx

The reason code (xxx) from the DEBCHK macro. See Return codes from DEBCHK in *z/OS DFSMSdfp Advanced Services*.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Make sure that the input DCB address is correct and that the DCBDEBAD field of the input DCB has not been overlaid.

Source

DFSMSdfp

437

Explanation

The error occurred at an end-of-volume. This system completion code is accompanied by message IEC025I. Refer to the explanation of message IEC025I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC025I.

Source

DFSMSdfp

438

Explanation

An error occurred processing an ENQ macro instruction during processing of global resource serialization.

The control program found that the parameter list created from the macro instruction was incorrect.

Register 15 might contain a reason code associated with this error:

Code
   Explanation

xxxx0001
   The input parameter list was altered during ENQ processing.

xxxx0002
   The RESERVE request specified UCB and RNL=NO.

xxxx0003
   The storage specified by the input UCB address does not map to a valid UCB.

xxxx0004
   The storage specified by the UCB address specified by an ISGNQXIT exit routine does not map to a valid UCB.

xxxx0005
   The storage passed to ENQ processing could not be accessed in the caller's key.

xxxx0006
   The storage containing the QNAME could not be accessed in the caller's key.

xxxx0007
   The storage containing the RNAME could not be accessed in the caller's key.

xxxx0008
   The storage containing the pointer to the UCB address could not be accessed in the caller's key.

xxxx0009
   The storage containing the UCB address could not be accessed in the caller's key.

xxxx000A
   The local resource count for this request exceeded X'FFFF' resources.

xxxx000B
   The global resource count for this request exceeded X'FFFF' resources.

xxxx000C
   The format word value specified in the input parameter list prefix was incorrect.

xxxx000D
   The storage specified by the input TCB was invalid.

xxxx000E
   The storage specified by the input TCB does not map to a valid TCB.

xxxx000F

A MASID request incorrectly specified TCB or SMC.

xxxx0010

A MASID request has an rname with an invalid length.

xxxx0011

A MASID request specified invalid RET= value.

xxxx0012

A MASID request has no TCB associated with it.

xxxx0013

Issuing tasks TCB is a subtask of the target TCB, illegal.

xxxx0014

Request attempted to set an obsolete bit in the input parameter list.

xxxx0015

Request illegally specified TCB with SMC.

xxxx0017

Request specified invalid RET= value.

xxxx0019

The ENQ request illegally attempted a generic request.

xxxx001A

A directed ENQ request was issued with no matching TCB in the requester's address space.

xxxx001B

Directed ENQ request illegally specified UCB.

xxxx001C

Directed ENQ request illegally specified no ECB with an invalid RET= value.

xxxx001D

An ECB request but RET does not specify ECB.

xxxx001E

An ECB request illegally specified SMC.

xxxx001F

The storage containing the format word could not be accessed in the caller's key.

xxxx0020

The storage containing the format value could not be accessed in the caller's key.

xxxx0022

The storage containing the PEL Prefix could not be accessed in the caller's key.

xxxx0023

The RMC=STEP was specified when PASN was not equal to HASN.

xxxx0822

Unable to access the Userdata specified on the request.

xxxx0823

The ALET for the Userdata is bad.

xxxx0024

The request was made while in SRB mode.

xxxxyyyy

The reason code could also be associated with an ISGENQ Request=Obtain or Request=Change. Note that the ABEND reason codes for ISGENQ correspond to the same reason codes listed in the Return and Reason Codes section of the ISGENQ macro in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*.

System action

The system issues an ABEND dump.

System programmer response

If the reason code is X'0004', check your ISGNQXIT installation exits to ensure that they are coded to specify a valid UCB address. Otherwise, if the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Correct the macro instruction. Recompile and run the job step again.

If the problem persists, do the following:

1. Obtain the address of the ENQ parameter list from register 1 in the UNIQUE-3 column of the SVC 38 entry in the system trace.
2. Check the parameter list against the SVC 38 mapping. When analyzing the parameter list, remember that the unit control block (UCB) pointer, if present, is the address of a field that, in turn, contains the address of the UCB.

   If the parameter list contains incorrect data, continue diagnosis in the program that issued the macro.

Source

Global resource serialization

43E

Explanation

The event control block (ECB) address specified with the ECB parameter on the ATTACH macro instruction that created a task was not valid when the subtask abnormally ended.

System action

The ECB is not posted. The system abnormally ends the originating task of the caller.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing and the assembly listing associated with the job.

Programmer response

Determine if the area containing the ECB was freed before the subtask completed processing. Correct the error. Run the job again.

The ECB was specified in the ATTACH macro, and the system checked it for validity while attaching the subtask. The ECB could be incorrect when the subtask is detached or at end of task through a request of the storage containing the ECB.

Source

Task management

43F

Explanation

An error has been detected during checkpoint restart processing. This completion code is accompanied by message IHJxxxI with the appropriate reason code.

System action

The system produces a dump, and retries to the address in register 14.

Programmer response

Respond as indicated in the accompanying message.

Source

DFSMSdfp

444

Explanation

The error occurred during the processing of SYNADAF, where it was determined that the DECB address was incorrect.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Register 15 contains the DECB address in error:

- For BDAM, BPAM, and BSAM, the DECB address should be passed to SYNADAF as the PARM2 operand on the macro instruction. For these access methods, the DECB address was in register 0 on entry to the user's SYNAD routine.
- For BISAM, the IOBECBPT field of the IOB in error should contain the DECB address. Make sure that the PARM2 operand on the SYNADAF macro instruction (the address of the first sense byte within the IOB) is correctly specified, and that the IOBECBPT has not been overlaid.

Correct the error and rerun the job step.

Source

DFSMSdfp

451

Explanation

The error occurred during the processing of SETPRT. Either the DCB whose address was passed in the SETPRT parameter list is incorrect, the DEB address located through the DCB was incorrect, the DCB EXIT LIST address located through the DEB was incorrect, or the IOBs located through the DCB are incorrect.

This system completion code is accompanied by message IEC918I. Refer to the explanation of message IEC918I for complete information about the task that was ended and for an explanation of the return code in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

- For return code 01, make sure that DCBEXLIST points to a valid exit list in your region.
- For return code 02, make sure that the DCB fields DCBIOBAD and DCBIOBA have not been overlaid since the DCB was opened. Make sure that the IOB or ICB link fields have not been overlaid.
- For return code 03, make sure that the DCB field DCBDEBAD has not been overlaid since the DCB was opened.
- For return code 04, make sure that the SETPRT macro instruction correctly specifies the address of an open DCB within your region.

Source

DFSMSdfp

453

Explanation

A buffer queue error occurred while system management facility (SMF) recording was writing to the SMF data sets; the system determined that SMF recording should be ended.

System action

The system ends the SMF address space and releases the resources used by SMF.

Operator response

Notify the system programmer. If SMF recording is essential for the system, restart the SMF address space using the SET SMF command as soon as the problem is corrected.

System programmer response

Check error messages and the SVC dump produced as a result of any previous abends.

Source

System Management Facilities (SMF)

45F

Explanation

A SYSEVENT QUIESCE macro failed during swap out of an address space. A retry was not possible.

System action

The system abnormally ends the address space being swapped. The system writes messages and a logrec data set error record.

System programmer response

This is probably a system error. Resubmit the job. If the problem recurs, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the SYSOUT output for the job.

Source

System resources manager (SRM)

46D

Explanation

A program issued the ESPIE macro incorrectly:

A hexadecimal reason code in register 15 explains the error:

Code
Explanation

04

The ESPIE macro specified an option other than SET, RESET, or TEST.

08

The ESPIE SET or ESPIE TEST macro passed an address pointing to a parameter list. The contents of the parameter list is not valid for one of the following reasons:

- The parameter list is not aligned on a fullword boundary.
- The parameter list is in storage that was not obtained by a GETMAIN macro.
- The parameter list is in storage that is protected from the issuer of the ESPIE macro.

0C

The ESPIE SET macro passed a parameter list containing an exit routine address that is not valid for one of the following reasons:

- The high or low order bits of the address are not 0.
- If the program issuing ESPIE is in 24-bit addressing mode, the high order byte is not zero.
- At least one reserved bit in the ESPIE parmlist is incorrectly set on.

10

The ESPIE RESET macro attempted to delete a SPIE or ESPIE that was created by some other program.

14

The ESPIE RESET macro passed an incorrect TOKEN parameter. TOKEN is incorrect for one of these reasons:

- The TOKEN itself is not valid.
- The exit that the TOKEN represents has been deleted.

18

The program issuing an ESPIE macro is in a mode that is not valid for one of the following reasons:

- The program is in supervisor state.
- The program that issued the ESPIE macro had a program status word (PSW) storage key that did not match the task control block (TCB) key.

1C

The ESPIE macro passed a pointer to a SPIE program interruption exit (PIE) control block. The PIE control block is not valid. The PIE control block had probably been erroneously freed by a FREEMAIN macro.

20

An unauthorized program issued a ESPIE macro to establish an ESPIE exit for page faults.

System action

The system abnormally ends the task. The system sends messages about the problem to the job log.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=46D,ACTION=SVCD,END
```

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide:

- Messages from the job log
- The ABEND or SVC dump
- The assembly listing for the job
- The JCL for the job
- The program listing for the job

Source

Recovery termination manager (RTM)

478

Explanation

An error occurred when the system tried to process an RC or RU form of the FREEMAIN macro or the STORAGE RELEASE macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
    Explanation

04

    The caller tried to FREEMAIN or STORAGE RELEASE a subpool that cannot be freed.

    Only subpools defined as eligible for subpool FREEMAIN or STORAGE RELEASE may be freed as an entire subpool. All other subpool storage areas must be freed by individual requests explicitly describing the area.

08

    A problem program tried to free subpool zero. The control program releases subpool zero when a job step ends.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

If you intended the FREEMAIN or STORAGE RELEASE macro to release subpool zero, remove it from the program. If you did not intend the FREEMAIN or STORAGE RELEASE macro to release subpool zero, check for program errors that incorrectly modify the FREEMAIN or STORAGE RELEASE macro expansion. After making corrections, run the job step again.

Source

Virtual storage manager (VSM)

47A

Explanation

During processing of an EVENTS macro, the system found an incorrect number of entries specified on the on the ENTRIES parameter. The number of entries must be 1 through 32,767.

System action

The system abnormally ends the caller of the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that the number of entries specified on the ENTRIES parameter is 1 through 32,767.

Source

Task management

47B

Explanation

An error occurred during PURGEDQ processing. The SDWACRC field of the system diagnostic work area (SDWA) contains a hexadecimal reason code that explains the error.

Code
  Explanation

00
  During processing of a PURGEDQ macro for the current primary address space, the system found a suspended SRB meeting the purge parameters. The system abended the SRB routine to ensure that all SRB routines affected by PURGEDQ had run to completion.

04
  An internal error occurred during PURGEDQ processing. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

08
  During processing of a PURGEDQ macro for the current primary address space, the system found a preemptable SRB meeting the purge parameters. The system abended the SRB routine to ensure that all SRB routines affected by PURGEDQ had run to completion.

System action

The system abnormally ends the SRB routine.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

If CANCEL command processing caused the error, resubmit the job. If a task-to-SRB routine serialization or abnormal TCB ending caused the problem, modify the application to avoid the problem.

Source

Task management

47D

Explanation

During processing of an EVENTS macro, the system found that the address specified on the LAST parameter was incorrect.

LAST must specify an address between the first and last valid entries in the EVENTS table.

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that the LAST address is a valid table entry that has not been previously purged from the EVENTS table. Correct the error. Run the job again.

Source

Task management

482

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

483

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

485

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

4C5

Explanation

This abend is issued by the TCP/IP product. For more information, see TCP/IP abend 4C5 reason codes in *z/OS Communications Server: IP and SNA Codes*.

4C6

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

4C7

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

4FB

Explanation

During JES3 processing, module IATDMDK, IATSIAD, IATSIWO, or IATSSJM detected an error related to the subsystem interface and issued this system completion code. In some cases the error is further identified by one of the following hexadecimal reason codes:

Code
  Explanation

04
  An error occurred during PUT processing.

08
  No storage was available for an SSISERV request.

0C
  No storage was available for excession limits processing.

10
  An SJF error occurred during excession limits processing.

14
  Failure occurred while releasing storage for a JMU.

18
  Failure occurred while releasing MEMJMULK in the Rel_JMULOCK routine.

1C
  Failure occurred while releasing MEMJMULK in the Cleanup_Retry routine.

20
  Failure occurred while releasing MEMJMULK in the IRB routine.

24
  Failure occurred while releasing MEMJMULK in the Check_Dump_Needed routine.

28
  An error was detected while validity checking the RRE and before the DSS could be validated.

2C
  No storage was available for the SYMLIST= list of symbols.

30
  No storage was available for the SYMBOLS= symbol substitution buffer.

34
  Unable to register an alternate system symbol table (IAZSYMSU macro error return).

38
  No storage available for a IATYLGC entry for a SYMBOLS= logging request.

If no reason code is given, the job calling the SSI was failed by a CALLRTM from JES3.

System action

The system ends the user address space.

System programmer response

Rerun the job with a SYSABEND DD statement. The problem may not recur. If it does, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

JES3

4FC

Explanation

The system detected an error in the processing following a program check interrupt. In an attempt to recover, supervisor control abnormally ended the task that experienced the program check.

System action

The system abnormally ends the program that experienced the program check. The system writes a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=4FC,ACTION=SVCD,END
```

System programmer response

Do the following:

- Find the original abend causing the problem in the system diagnostic work area (SDWA) in the logrec data set error record.
- Search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide the SVC dump and the logrec data set error record.

Programmer response

Resubmit the job. If the problem recurs, contact the system programmer.

Source

Supervisor control

500

Explanation

During processing of an I/O request, execute channel program (EXCP) processing encountered an error while validating a control block. Each X'500' abend code has a reason code that explains the error:

Code
   Explanation

1
   The IOBM field of an Indexed Sequential Access Method (ISAM) input/output block (IOB) specified an extent of zero.

2

A data extent block (DEB) points to a unit control block (UCB) that is not valid. The third byte of the UCB did not contain X'FF', as required.

3

The IOBEID field of the input/output block extension (IOBE) control block does not contain the characters IOBE, which is required.

4

The version field of the IOBE is not compatible with the IOBEVRSC version label. The version field must equal the IOBEVRSC version label.

5

The IEDBID field of the I/O error data block (IEDB) control block does not contain the characters IEDB, which is required.

6

The version field of the IEDB is not compatible with the IEDBVRSC version label. The version field must equal the IEDBVRSC version label.

System action

The system abnormally ends the current task and issues a SNAP dump.

System programmer response

In the dump, look at field TCBEXCPD at offset X'C0' in the task control block (TCB) for the current task. TCBEXCPD points to the EXCP debugging area (XDBA). The XDBA contains diagnostic data associated with the EXCP processor.

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the SNAP dump.

Programmer response

Correct the problem that the reason code indicates. Ensure also that the problem program correctly built or modified the control blocks. If the program is correct, the problem is a system problem. Run the job again, requesting an ABEND dump. Notify the system programmer.

Source

Execute channel program (EXCP)

502

Explanation

During processing of a POST macro, the system found that the EVENTS table specified in the event control block (ECB) had no entries available for the posted ECB address.

System action

The system abnormally ends the program that issued the POST macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that the EVENTS table is large enough to contain entries for all ECBs that can be posted to it. Correct the error. Run the job again.

Source

Task management

504

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the GETMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
  Explanation

04
  Of the following, at least one overlapped the other: length list, address list, or parameter list. For example, the length list overlapped the address list.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Check for program errors that incorrectly modify the macro expansion. Correct them. Run the job step again.

Source

Virtual storage manager (VSM)

505

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
  Explanation

04
  Of the following, at least one overlapped the other: length list, address list, or parameter list. For example, the length list overlapped the address list.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Check for program errors that incorrectly modify the macro expansion. Correct them. Run the job step again.

Source

Virtual storage manager (VSM)

506

Explanation

The error occurred during processing of a LINK(X), LOAD, ATTACH(X), or XCTL(X) macro in an overlay program.

Note: An overlay program can run only in 24-bit addressing mode, not in 31-bit addressing mode.

If the requested program had been loaded, not enough virtual storage would have remained for the overlay supervisor.

System action

The system issues an ABEND dump. The task ends abnormally.

System programmer response

Have the operator enter a START GTF command specifying tape output, MODE=EXT and TIME=YES. Have the operator reply TRACE=SYS in response to message AHL100A.

Format the output with the IPCS GTFDATA subcommand.

Programmer response

Reduce the size of the entire program or of the overlay segment. If this is not possible, change the program from an overlay program to a dynamically loaded program. Then recompile and run the job step again.

Problem determination

If the error recurs and the program is not in error, see the system program response for the messages in the job log.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump and the source program listing for the job.

Source

Contents supervision (CSV)

50D

Explanation

Either the program:

- Tried to use the OPEN, OPEN-J, CLOSE, CLOSE-T, EOV, or FEOV function while holding exclusive control of the TIOT (task input/output table) resource; or
- Issued the OPEN, OPEN-J, CLOSE, or CLOSE-T macro with inconsistent mode specifications between the LIST and the EXECUTE forms of the macro.

Register 15 contains a code that identifies the function that issued the abend:

Code
   Function

00
   OPEN

04
   OPEN-J

08
   CLOSE

0C
   CLOSE-T

10
   EOV

14
   FEOV

18
   EOV

1C
   OPEN or CLOSE

20
   OPEN or CLOSE

24
   OPEN,CLOSE or EOV

System action

The task is ended.

System programmer response

If register 15 is 36 decimal, the error recurs, and the program is not in error, look at the associated IEC999I message in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

If register 15 is 36 decimal, an indeterminate error has occurred. Reference the associated IEC999I message with information about the module that detected the error and a brief description of what the error was.

Source

DFSMSdfp

50E

Explanation

Predictive Failure Analysis (PFA) detected an unrecoverable error that caused it to terminate abnormally.

The reason code identifies the source of the error. The reason code has the format of X'mmmmrrrr', where mmmm represents the failing entry point's module ID, and rrrr represents the reason code.

rrrr
   Code Explanation

0001
   Unable to find requested entry point.

0002
   Unable to load requested entry point.

0003
   Exhausted stack space.

0004
   Unknown server request.

0005
   Jobstep task posted in error.

0006
   Unable to set an ESTAE.

0007
>   Server task terminated.

0008
>   Server task ETXR error.

0009
>   ProcARequest error.

000A
>   Unable to create name/token pair.

000B
>   Unable to attach task.

000C
>   Unable to establish ENF Listener.

000D
>   Unable to create latches.

System action

The system issues ABEND dump and abnormally terminates the PFA address space.

Operator response

Notify your system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the ABEND dump.

Source

Predictive Failure Analysis

513

Explanation

The error occurred during processing of an OPEN macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC146I. Refer to the explanation of message IEC146I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC146I.

Source

DFSMSdfp

522

Explanation

All of the tasks in a job step were in an SVC wait state for the time specified in the JWT, SWT, or TWT parameters in the SMFPRM*xx* parmlib member.

The event control block (ECB) specified in the wait request was never posted. This could be the result of waiting on the wrong ECB or not posting the correct ECB.

System programmer response

Correct any errors and execute the job step again. If no errors are found and the wait is expected for that particular job step, specify TIME=NOLIMIT in the EXEC statement to bypass all job step timing.

Source

System Management Facilities (SMF)

52A

Explanation

During processing of an ATTACH macro, the system found an error in the subtask ABEND intercept (STAI) or the extended STAI (ESTAI) routine.

Register 15 contains a hexadecimal reason code that explains the error:

Code
Explanation

00
There is not enough storage available to create a new ESTAI specify task asynchronous exit (STAE) control block (SCB) or to copy existing STAI or ESTAI SCBs to the new task.

04
The issuer of ATTACH is processing with AMODE 31 and requested STAI. STAI is not supported for AMODE 31 callers.

System action

The system abnormally ends the program that issued the ATTACH macro.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Reason code 00 indicates a probable system error. Notify the system programmer.

For reason code 04, identify the program that issued the ATTACH macro. If an installation-provided program issued the ATTACH, change the macro parameter from STAI to ESTAI. If an IBM-provided program issued the ATTACH, notify the system programmer.

Source

Task management

52D

Explanation

A program requested an overlay. The overlay supervisor called the program loader to obtain the module segment from a linear format data set (such as a PDSE), and the program loader encountered a problem while processing the request.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided. In addition, the program loader may issue ABEND0F4 and an SVCDUMP.

Programmer response

If an ABEND0F4 was issued, see the information in this manual for that abend. Otherwise, check the program for errors that might cause a problem with the overlay segment table. Correct any errors; then assemble, link edit, and run the program again.

Source

Overlay supervisor

530

Explanation

Global resource serialization encountered an error during processing of a DEQ macro instruction.

The DEQ macro instruction was issued in an asynchronous exit routine for a resource. That resource was previously enqueued by another routine in the same task. However, the task had not yet received control of the resource.

System action

The system issues an ABEND dump.

System programmer response

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Correct the program so that the DEQ macro instruction is issued only after the task has control of the resource. If possible, avoid issuing the DEQ macro instruction in the exit routine. Recompile and run the job step again.

Source

Global resource serialization

535

Explanation

SVC 53, which obtains and releases exclusive control of a resource associated with a BDAM data set, issued a GETMAIN for storage to be used in its processing and found no storage was available.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the SYSOUT output for the job, and all printed output and output data sets related to the problem.

Programmer response

Rerun the job. If the problem continues, storage may have to be freed by others before the exclusive control function is used.

Source

DFSMSdfp

538

Explanation

The system determined that a requested ENQ or RESERVE would have exceeded the limit on the number of concurrent ENQ/GQSCAN/RESERVE requests for all tasks in the address space.

System action

The system ends the task that issued the ENQ or RESERVE. The system issues an ABEND dump.

Operator response

Obtain an SVC dump if the system programmer requests it.

System programmer response

- Make sure that no tasks in the job step issue repeated ENQ, ISGENQ or RESERVE macro instructions for resources that are not required.
- Make sure that all GQSCAN requests that return TOKENs are either run to completion or are terminated by a QUIT=YES option on a subsequent GQSCAN macro instruction.
- Make sure that all ISGQUERY requests with RESUMETOKENs have the corresponding SCANACTION=RESUME and SCANACTION=QUIT options.

Prior to an abend, messages ISG368E and ISG369I monitor address spaces that are approaching the request maximum. If a particular subsystem requires more ENQ than normal, use the ISGADMIN service to raise that subsystem's maximum for unauthorized and authorized requesters. As a temporary workaround, you can raise the overall system maximum by issuing the following commands:

- SETGRS ENQMAXA for authorized
- SETGRS ENQMAXU for unauthorized

If the problem persists, set a SLIP trap for abend X'538' and rerun the job step. When the trap matches, instruct the operator to obtain an SVC dump that includes the following:

- The global resource serialization private area.
- The system queue area (SQA), to get the address space control block (ASCB) for the failing program.

Use the GRS QCBTRACE IPCS report to determine the outstanding ENQs for the failed address space. If abend code X'538' is issued for an authorized caller, an SVC dump might not be possible. If the problem persists, search problem reporting databases for a fix. If no fix exists, contact the IBM Support Center. Provide the ABEND or SVC dump.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND or SVC dump.

Source

Global resource serialization

53E

Explanation

During end-of-task processing, the system found an error before:

- The system could post an event control block (ECB) for the ending task
- The system could schedule an end-of-task exit routine (ETXR)
- The system could determine that the task had neither an ECB nor an ETXR

The task contains either:

- An end-of-task ECB, if the ECB parameter was specified on the ATTACH macro that created the task
- An ETXR if the ETXR parameter was specified on the ATTACH macro

System action

The system abnormally ends the originating task for the task in error.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job again. If the error recurs, notify the system programmer.

Source

Task management

53F

Explanation

An error has been detected during checkpoint restart processing. This completion code is accompanied by message IHJxxxI with the appropriate reason code.

System action

A dump is produced and an entry is written to the logrec data set.

Programmer response

Respond as indicated in the accompanying message.

Source

DFSMSdfp

544

Explanation

The error occurred during the processing of SYNADAF, where it was determined that the IOB address was incorrect.

System action

Register 15 contains the IOB address in error:

- For BDAM, BPAM, and BSAM, SYNADAF obtained the IOB address from the DECIOBPT field of the DECB; for these access methods, the DECB address was passed to SYNADAF as the PARM2 operand on the macro instruction, and was contained in register 0 on entry to the user's SYNAD routine. Verify that the PARM2 operand on the SYNADAF macro instruction was correctly specified and that the DECIOBPT field has not been overlaid.
- For QSAM, BISAM, and QISAM, SYNADAF received a pointer to the IOB as the PARM2 operand on the macro instruction. The address passed to SYNADAF should have been the address contained in register 0 on entry to the user's SYNAD routine. Verify that the PARM2 operand on the SYNADAF macro instruction was correctly coded.
- For the EXCP access method, verify that the PARM1 operand of the SYNADAF macro instruction specified the correct IOB address.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Correct the error and rerun the job step.

Source

DFSMSdfp

553

Explanation

System management facilities (SMF) detected that the SMF timer queue element (STQE) chain was in error.

A hexadecimal reason code in register 15 explains the error:

Code
  Explanation

04

The forward pointer of an STQE contains zeroes. The system produces an SVC dump, and SMF repairs the STQE chain.

Note: Repairing the STQE chain results in the loss of some STQEs. Therefore, some tasks no longer provide SMF interval recording.

08

The STQE chain points to an element that is not an STQE.

Note: Repairing the STQE chain results in the loss of some STQEs. Therefore, some tasks no longer provide SMF interval recording.

0C

The backward pointer of an STQE contains zeroes. The system produces an SVC dump, and SMF repairs the STQE chain.

Note: Repairing the STQE chain results in the loss of some STQEs. Therefore, some tasks no longer provide SMF interval recording.

System action

The SMF timer program ends, and the system produces an SVC dump.

Operator response

Notify the system programmer. You can re-establish SMF interval recording for a specific task by restarting that task. Consider restarting tasks for which SMF interval recording is required. However, if you must re-establish SMF interval recording, but you can't determine which tasks to restart, reIPL the system.

System programmer response

Check error messages and the SVC dump produced as a result of any previous abends. Check for any previous abend code X'0C4' that might indicate a storage overlay has occurred. If there is no previous abend code X'0C4', search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

System management facilities (SMF)

55F

Explanation

This abend code describes cases in which the System Resource Manager (SRM) terminates an address spaces abnormally.

The hexadecimal reason code explains the error:

Code
> **Explanation**

*xxxx*0000
> During the processing of a cross Memory POST macro for a swap out complete (SYSEVENT 15), the system encountered an error. The POST notified a SYSEVENT REALSWAP or TRANSWAP issuer that either the swap had to be turned around or the swap was complete.
>
> **System Action:** The system ends the issuer of the cross memory POST abnormally. The system writes messages and a logrec data set error record.
>
> **System Programmer Response:** Determine if the POST macro passes a valid event control block (ECB) address. Resubmit the job. If the problem reoccurs, search the problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record with the SYSOUT output of the job.
>
> **Module:** IRARMPST

*xxxx*0004
> The outstanding WTOR message IRA421D was answered with a reply of 1 to 5, which resulted in an abnormal termination of an address space.
>
> **Module:** IRARMWT1

*xxxx*0008
> The outstanding WTOR message IRA221D was answered with a reply of 1 to 5, which resulted in an abnormal termination of an address space.
>
> **Module:** IRARMWT2

Source

System Resource Manager (SRM)

56D

Explanation

The system issued SVC 109 with routing code 11 in register 15 (the Sort SVC). One of the following error conditions exists:

- A task other than Sort issued SVC 109 with routing code 11. Only Sort is authorized to issue it.
- The task that issued the SVC passed a record that was not in the task's authorized area.
- The task passed a record that contained one or more incorrect fields.

System action

The task ends. The system issued an SVC dump and a logrec data set error record.

System programmer response

If the problem recurs and if the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump and the logrec data set error record.

Programmer response

If the problem occurred because a task other than Sort issued SVC 109 with routing code 11, correct the task.

If the problem occurred while Sort was executing, contact the system programmer.

Source

Data Facility Sort (DFSORT)

56F

Explanation

The error occurred during end-of-job processing for a JES2 job that was being processed by an execution batch monitor. The execution batch monitor pseudo job select procedure found that another task was holding or waiting for a lock on the SJB (subsystem job block).

System action

The job terminates.

System programmer response

Make sure the failing job step includes a SYSABEND DD statement.

If the problem recurs and if the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Notify the system programmer or installation manager of the problem.

Source

JES2

57D

Explanation

During processing of an EVENTS macro, the system found either:

- An incorrect event control block (ECB) address
- The program issuing the EVENTS macro instruction is running under a protection key (8 through 15) that is different from the protection key of the ECB

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that the ECB address specified is a valid virtual storage address and that it was not incorrectly modified. Also, ensure that the ECB is placed in storage belonging to the program issuing the EVENTS macro or the program running under protection key 0 through 7. Correct the error. Run the job again.

Source

Task management

582

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

585

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

5C4

Explanation

A call for a resource recovery services (RRS) service was issued in an incorrect environment. Register 15 contains a hexadecimal reason code.

Code
> **Explanation**

xxxx000B
> RRS was unable to obtain a required storage area. The storage area could be in CSA.

xxxx0029
> RRS was unable to finish Internal Cold Start processing.

00010000
> For a call to the Delete_UR_Interest service, the parameters are not in the primary address space.

00010001
> For a call to the Delete_UR_Interest service, the parameters are not addressable.

00020000

For a call to the Express_UR_Interest service, the parameters are not in the primary address space.

00020001

For a call to the Express_UR_Interest service, the parameters are not addressable.

00030000

For a call to the Begin_Restart service, the parameters are not in the primary address space.

00030001

For a call to the Begin_Restart service, the parameters are not addressable.

00040000

For a call to the End_Restart service, the parameters are not in the primary address space.

00040001

For a call to the End_Restart service, the parameters are not addressable.

00050000

For a call to the Retrieve_Log_Name service, the parameters are not in the primary address space.

00050001

For a call to the Retrieve_Log_Name service, the parameters are not addressable.

00060000

For a call to the Retrieve_UR_Interest service, the parameters are not in the primary address space.

00060001

For a call to the Retrieve_UR_Interest service, the parameters are not addressable.

00070000

For a call to the Process_Interest service, the parameters are not in the primary address space.

00070001

For a call to the Process_Interest service, the parameters are not addressable.

00080000

For a call to the Set_Log_Name service, the parameters are not in the primary address space.

00080001

For a call to the Set_Log_Name service, the parameters are not addressable.

00090000

For a call to the Post_Deferred_UR_Exit routine service, the parameters are not in the primary address space.

00090001

For a call to the Post_Deferred_UR_Exit routine service, the parameters are not addressable.

000B0000

For a call to the Retrieve_Interest_Data service, the parameters are not in the primary address space.

000B0001

For a call to the Retrieve_Interest_Data service, the parameters are not addressable.

000C0000

For a call to the Retrieve_UR_Data service, the parameters are not in the primary address space.

000C0001

For a call to the Retrieve_UR_Data service, the parameters are not addressable.

000D0000

For a call to the Retrieve_Side_Information service, the parameters are not in the primary address space.

000D0001

For a call to the Retrieve_Side_Information service, the parameters are not addressable.

000E0000

For a call to the Retrieve_Work_Identifier service, the parameters are not in the primary address space.

000E0001

For a call to the Retrieve_Work_Identifier service, the parameters are not addressable.

000F0000

For a call to the Change_Interest_Type service, the parameters are not in the primary address space.

000F0001

For a call to the Change_Interest_Type service, the parameters are not addressable.

00100000

For a call to the Set_Persistent_Interest_Data service, the parameters are not in the primary address space.

00100001

For a call to the Set_Persistent_Interest_Data service, the parameters are not addressable.

00110000

For a call to the Retain_Interest service, the parameters are not in the primary address space.

00110001

For a call to the Retain_Interest service, the parameters are not addressable.

00120000

For a call to the Set_Sync-point_Controls service, the parameters are not in the primary address space.

00120001

For a call to the Set_Sync-point_Controls service, the parameters are not addressable.

00130000

For a call to the Set_Side_Information service, the parameters are not in the primary address space.

00130001

For a call to the Set_Side_Information service, the parameters are not addressable.

00140000

For a call to the Set_Work_Identifier service, the parameters are not in the primary address space.

00140001

For a call to the Set_Work_Identifier service, the parameters are not addressable.

00150000

For a call to the Application_Backout_UR service, the parameters are not in the primary address space.

00150001

For a call to the Application_Backout_UR service, the parameters are not addressable.

00150002

For a call to the Application_Backout_UR service, the caller is disabled.

00150003

The program that called the Application_Backout_UR service is holding one or more locks; no locks must be held.

00150004

The program called the Application_Backout_UR service. The system release does not support this service.

00150005

The program that called the Application_Backout_UR service is in an unsupported ASC mode; the mode must be primary.

00150006

The program called the Application_Backout_UR service. The UR is either:

- not in a valid state for the service call. The UR state must be **in-reset** or **in-flight**; or,
- in local transaction mode. This service is only valid for a UR in global transaction mode.

00150007

The program called the Application_Backout_UR service. The service encountered an unexpected error. RRS writes a logrec record and takes a dump.

00150009

The program that called the Application_Backout_UR service is not in task mode, which is required.

00150010

The program called the Application_Backout_UR service, but the current UR (the UR being processed) encountered an unexpected error, and RRS cannot continue to process the UR.

00150011

The program called the Application_Backout_UR service, but the service encountered an unexpected error from a context services service.

00160000

For a call to the Application_Commit_UR service, the parameters are not in the primary address space.

00160001

For a call to the Application_Commit_UR service, the parameters are not addressable.

00160002

The program that called the Application_Commit_UR service is disabled; the interrupt status must be enabled for I/O and external interrupts.

00160003

The program that called the Application_Commit_UR service is holding one or more locks; no locks must be held.

00160004

The program called the Application_Commit_UR service. The system release does not support this service.

00160005

The program that called the Application_Commit_UR service is in an unsupported ASC mode; the mode must be primary.

00160006

The program called the Application_Commit_UR service. The UR is either:

- not in a valid state for the service call. The UR state must be **in-reset** or **in-flight**; or,
- in local transaction mode. This service is only valid for a UR in global transaction mode.

00160007

The program called the Application_Commit_UR service. The service encountered an unexpected error. RRS writes a logrec record and takes a dump.

00160008

An application program called the Application_Commit_UR service but a resource manager has already taken the server distributed sync-point resource manager role (SDSRM), and only the SDSRM can initiate a syncpoint operation.

00160009

The program that called the Application_Commit_UR service is not in task mode, which is required.

00160010

The program called the Application_Commit_UR service, but the current UR (the UR being processed) encountered an unexpected error, and RRS cannot continue to process the UR.

00160011

The program called the Application_Commit_UR service, but the service encountered an unexpected error from a context services service.

00160012

The program called the Application_Commit_UR service, but the current UR (the UR being processed) is a child cascaded UR. Only the top-level UR of a cascaded UR family can be committed.

00170000

For a call to the Backout_UR service, the parameters are not in the primary address space.

00170001

For a call to the Backout_UR service, the parameters are not addressable.

00180000

For a call to the Commit_UR service, the parameters are not in the primary address space.

00180001

For a call to the Commit_UR service, the parameters are not addressable.

001A0000

For a call to the Backout_Agent_UR service, the parameters are not in the primary address space.

001A0001
    For a call to the Backout_Agent_UR service, the parameters are not addressable.

001B0000
    For a call to the Commit_Agent_UR service, the parameters are not in the primary address space.

001B0001
    For a call to the Commit_Agent_UR service, the parameters are not addressable.

001C0000
    For a call to the Forget_Agent_UR service, the parameters are not in the primary address space.

001C0001
    For a call to the Forget_Agent_UR service, the parameters are not addressable.

001D0000
    For a call to the Prepare_Agent_UR service, the parameters are not in the primary address space.

001D0001
    For a call to the Prepare_Agent_UR service, the parameters are not addressable.

001F0000
    For a call to the Create_Cascaded_UR service, the parameters passed by the caller are not in the primary address space.

001F0001
    For a call to the Create_Cascaded_UR service, the parameters passed by the caller are not addressable.

00200000
    For a call to the Set_Post_Sync_PET service, the parameters passed by the caller are not in the primary address space.

00200001
    For a call to the Set_Post_Sync_PET service, the parameters passed by the caller are not addressable.

00210000
    For a call to the Delete_Post_Sync_PET service, the parameters passed by the caller are not in the primary address space.

00210001
    For a call to the Delete_Post_Sync_PET service, the parameters passed by the caller are not addressable.

00220000
    For a call to the Delegate_Commit_Agent_UR service, the parameters passed by the caller are not in the primary address space.

00220001
    For a call to the Delegate_Commit_Agent_UR service, the parameters passed by the caller are not addressable.

00230000
    For a call to the Begin_Transaction service, the parameters passed by the caller are not in the primary address space.

00230001
    For a call to the Begin_Transaction service, the parameters passed by the caller are not addressable.

00240000
    For a call to the End_Transaction service, the parameters passed by the caller are not in the primary address space.

00240001
    For a call to the End_Transaction service, the parameters passed by the caller are not addressable.

00260000
    For a call to the Set_Environment service, the parameters passed by the caller are not in the primary address space.

00260001
    For a call to the Set_Environment service, the parameters passed by the caller are not addressable.

00270000
> For a call to the Retrieve_Environment service, the parameters passed by the caller are not in the primary address space.

00270001
> For a call to the Retrieve_Environment service, the parameters passed by the caller are not addressable.

01010005
> RRS WHEN CFS ARE DOWN

021F0001
> An RRS service was called, but the RRS service could not be processed because the RRS address space was down.

FFFF2222
> The SETRRS CANCEL command has cancelled RRS processing

System action

The system rejects the service call. The system abnormally ends the calling program.

Programmer response

For most of the reason codes, check the calling program for a probable coding error; correct the program and rerun it.

For reason code X'xxxx000B', either enlarge CSA or search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the dump.

For reason code X'xxxx0029', save any dumps related to the problem and contact the IBM Support Center.

For reason code X'00150004' or X'00160004', remove the calling program from the system, and install it on a system that supports RRS. Then rerun the program.

For reason code X'00150007' or X'00160007', search problem reporting databases for a fix for the problem. If no fix exists, obtain the related logrec record and dump, then contact IBM support.

For reason code X'00150010' or X'00160010', check other diagnostic information to determine why RRS encountered the error. To ensure resource consistency, you might need to intervene manually.

For reason code X'00150011' or X'00160011', check diagnostic information, such as the dump, from context services to determine why the error occurred.

For reason code X'01010005', check that coupling facilities are active.

For reason code X'FFFF2222', no action is necessary.

For any other reason code, search problem reporting databases for a fix for the problem. If no fix exists, save any dump related to the problem and contact the IBM Support Center.

Source

Resource recovery services (RRS)

5C6

Explanation

When the system detects an error in internal IBM MQ processing, it will abnormally end a connected user task (TCB) or one of its own internal tasks. See IBM MQ (www.ibm.com/software/integration/wmq/library/index.html) for a description of diagnostic approaches to either a X'5C6' or X'6C6' abend and for information about the reason codes associated with either abend.

System action

The system abnormally ends the connected user task or the IBM MQ internal task.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

Check register 15 of the SDWA section 'General Purpose Registers at Time of Error', and locate the accompanying reason code. In addition, check the information displayed at the console screen, and in the corresponding logrec data set entry.

Source

IBM MQ

5FB

Explanation

During processing of an MVS-JES3 allocation subsystem interface routine, an error occurred. A hexadecimal reason code in register 15 explains the error.

Code
    Explanation

01
    In common allocation, the number of devices requested by MVS does not equal the number to be allocated by JES3. Register 3 contains the number requested by MVS; register 5 contains the number passed by JES3. Register 2 contains the address of the DDNAME.

02
    During deallocation processing, JES3 cannot successfully issue an ESTAE macro.

03
    JES3 cannot obtain storage for a dynamic allocation buffer.

04
    JES3 cannot obtain storage for a change DDNAME buffer.

05
    JES3 cannot find, in any address space header, the address space identifier (ASID) associated with the request. Register 2 contains the address of the job step control block (JSCB); register 3 contains the ASID.

06
    A job summary table (JST) pointer error occurred during common allocation or deallocation.

07
    Module IATSICA cannot find an active MEMDATA entry for the address space. Register 2 contains the address of the job step control block (JSCB); register 3 contains the address space ID (ASID) of the requesting address space; register 8 contains the address of the MEMDATA header.

08
    Module IATSIMS cannot find an active MEMDATA entry for the address space. Register 4 contains the address of the subsystem identification block (SSIB); register 6 contains field SSIBSUSE of the SSIB. However, both registers 4 and 6 may be incorrect.

09
    JES3 found a duplicate volume. The volume cannot be loaded. Register 2 contains the address of the SETUNIT; register 6 contains the address of the job summary table (JST).

0A

> The GETMAIN macro failed for a work area for the subsystem interface (SSI).

0B

> JES3 cannot process the number of concatenated DD statements passed in a change DD name request. The number of DD statements is variable; the approximate maximum number is 187.

Register 3 contains the macro return code for reason code X'02', X'03', X'04', X'06', or X'0A'.

System action

The system abnormally ends the task.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Provide the JCL and the program listing for the job.

Source

JES3

5FC

Explanation

Following a restart interrupt, an error occurred in the restart first level interrupt handler (FLIH).

System action

The system abnormally ends the task that experienced the restart interrupt.

Operator response

Perform another restart operation to restart the system. If the problem recurs, notify the system programmer.

System programmer response

Ask the operator to set a SLIP trap to obtain an SVC dump. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record for the abend.

Programmer response

Submit the job again. If the problem recurs, notify the system programmer.

Source

Loadwait/Restart

602

Explanation

An error occurred during processing of a POST macro instruction. The system issues this abend only in association with cross memory post processing.

The hexadecimal return code in register 15 indicates the nature of the error:

Code
> **Explanation**

00

The target address space control block (ASCB) is incorrect.

System action

The system abnormally ends the program that issued the POST macro.

System programmer response

If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Correct the error identified by the return code. Run the job step again.

Source

Task management

604

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the GETMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
   Explanation

04

The parameter list is not on a word boundary.

08

The parameter list is in protected storage.

0C

The length list is not on a word boundary.

10

The length list is in protected storage.

14

The address list is not on a word boundary.

18

The address list is in protected storage.

1C

The parameter list request flags are not valid.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Ensure that the length list and address list are aligned on word boundaries. Check for program errors that incorrectly modify the parameter list. Correct them. Run the job step again.

Source

Virtual storage manager (VSM)

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
  Explanation

04
  The parameter list is not on a word boundary.

08
  The parameter list is in protected storage.

0C
  The length list is not on a word boundary.

10
  The length list is in protected storage.

14
  The address list is not on a word boundary.

18
  The address list is in protected storage.

1C
  The parameter list request flags are not valid.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Ensure that the length list and address list are aligned on word boundaries. Check for program errors that incorrectly modify the parameter list. Correct them. Run the job step again.

Source

Virtual storage manager (VSM)

60D

Explanation

The recovery termination manager (RTM) discovered an error in a calling program.

A hexadecimal reason code in the following explains the error:

- Field RTM2CRC of the RTM2 work area (RTM2WA)
- Message IEA995I
- TCBARC field of the task control block (TCB)

Code
  Explanation

00
  RTM percolates past the previous exit routine because the recursion limit had been reached for that routine.

04
  A program issued the ABEND, CALLRTM, or SETRP macro with the DUMPOPT or DUMPOPX parameter. DUMPOPT or DUMPOPX contains a pointer to a parameter list, but RTM cannot access the parameter list.

08

A program issued the ABEND, CALLRTM, or SETRP macro with the DUMPOPT or DUMPOPX parameter. DUMPOPT or DUMPOPX contains a pointer to a parameter list. The parameter list contains a storage range list, but RTM cannot access the storage range list.

0C

A program issued the ABEND, CALLRTM, or SETRP macro with the DUMPOPT or DUMPOPX parameter. DUMPOPT or DUMPOPX contains a pointer to a parameter list. The parameter list contains a subpool list, but RTM cannot access the subpool list.

10

A program issued the ABEND, CALLRTM, or SETRP macro with the DUMPOPT or DUMPOPX parameter. DUMPOPT or DUMPOPX contains a pointer to a parameter list. The parameter list contains a range of data space storage to be dumped, but RTM cannot access this storage.

14

Retry was attempted from an FRR, but the retry linkage stack is inconsistent with the requested retry environment.

18

Retry was attempted from an FRR, but the linkage stack entry is not in the currently active linkage stack range.

System action

Depending on the reason code, the system does the following:

- For reason code X'00', RTM:

  - Gives control to any previous exit routines that are valid
  - Resets the recursion count to 0
  - Requests a dump
  - Issues message IEA995I

- For reason codes 4 - 10, RTM continues processing the current recovery routine and issues message IEA995I.

- For reason codes 14 - 18, the retry is not performed.

System programmer response

For reason code X'00':

- Look in the dump for a task control block (TCB) with X'60D' in the TCBCMP field. Look at the accompanying STAE control blocks (SCB). There will be at least 32 SCBs. The SCBEXIT field contains the address of the recovery routine. Many of the SCBs will have the same recovery routine address. Use the SCBEXIT value which is contained in many of the SCBs to get the name of the module of the recovery routine.

- Identify the component for the module.

  - If the recovery routine is an installation-provided module, correct the original error and the exit routine that ended recursively, or correct the problem with the DUMPOPT or DUMPOPX parameter list.

  - If the recovery routine is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group for the module at the IBM Support Center. Provide problem data collected in previous steps.

- For reason codes 04 - 10, identify the program that issued ABEND, CALLRTM, or SETUP with the DUMPPT/DUMPOPX parameter. If it is an installation module, correct the problem. If it is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

- For reason codes 14 -18, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Recovery termination manager (RTM)

613

Explanation

The error occurred during processing of an OPEN macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC147I. Refer to the explanation of message IEC147I for complete information about the job that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC147I.

Source

DFSMSdfp

614

Explanation

The error occurred during processing of a CLOSE macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC214I. Refer to the explanation of message IEC214I for complete information about the job that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC214I.

Source

DFSMSdfp

622

Explanation

A task entered from a Time Sharing Option (TSO) terminal ended for one of the following reasons:

1. The system encountered one of the following errors while constructing control blocks for TSO:

    a. The system encountered a multiple-step procedure.

    b. The prompting task ended abnormally.

2. The terminal user signaled ATTN during LOGON scheduling.
3. The user submitting the job disconnected his or her terminal from the system.
4. The terminal malfunctioned.

System action

In cases 1, the system issued messages to the terminal describing the error conditions.

System programmer response

If the problem recurs and if the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the terminal sheet available and a record of the current display on the graphics device.

Programmer response

In the first case, respond to the messages accompanying this abend:

• For case 1a, specify a different procedure or consult your system programmer. Try running the job again.

• For case 1b, consult your system programmer.

In the second case, LOGON again; make sure that you do not signal ATTN inadvertently.

In the third case, try running the job again when the terminal is reconnected to the system.

In the fourth case, contact hardware support.

Source

Time Sharing Option Extensions (TSO/E)

637

Explanation

The error occurred at an end-of-volume for a data set on magnetic tape or an end-of-volume during concatenation. This system completion code is accompanied by message IEC026I. Refer to the explanation of message IEC026I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC026I.

Source

DFSMSdfp

644

Explanation

The error occurred during the processing of SYNADAF, where it was determined that the message buffer obtained in the user's region had been modified or freed.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Register 15 contains the address of the message buffer area. Make sure that your program does not modify or free this area until SYNADAF processing is complete. Correct the error and rerun the job step.

Source

DFSMSdfp

653

Explanation

System management facilities (SMF) encountered an error while attempting to write an SMF record.

Register 15 contains a hexadecimal reason code that explains the error:

Code
 Explanation

04
 GETMAIN failure.

 System Action: The SMFEWTM or SMFWTM request fails and SMF continues processing.

 Operator Response: Notify the system programmer.

 System Programmer Response: It is likely the SMFEWTM or SMFWTM caller is experiencing storage problems. Check for an ABEND878 or other prior virtual storage abends, and follow the recommended actions accordingly.

09
 IXGWRITE failure. The IXGWRITE operation used for writing a block of data to the logstream failed because of an internal error. For this error, registers 2 and 3 contain the return and reason codes that were returned following the IXGWRITE operation. The IXGWRITE return and reason codes are described in *z/OS MVS Programming: Assembler Services Reference IAR-XCT*.

 System Action: SMF disconnects the log stream that was to receive the data at the time when the failing IXGWRITE was issued. SMF processing continues, and the data that SMF collects that are directed to be written to the now disconnected log stream are buffered until the log stream is connected.

 Operator Response: Notify the system programmer.

 System Programmer Response: Search problem reporting databases for a fix for the problem. If no fix exists, capture the dump and report the problem to the IBM support center.

0C
 A failure occurred while SMF was attempting to generate an SMF digital signature group record.

 System Action: SMF issues messages IFA740E and IFA743I and disables digital signature processing. SMF continues generating SMF records without the associated digital signature records.

 Operator Response: Notify the system programmer.

 System Programmer Response: Search problem reporting databases for a fix for the problem. If no fix exists, capture the dump and report the problem to the IBM support center.

101-111
 Error in IFASEXIT processing. For all of these error codes:

System Action: IFASEXIT processing is discontinued for the current SMF record.

Operator Response: Notify the system programmer.

System Programmer Response: Search problem reporting databases for a fix for the problem. If no fix exists, capture the dump and report the problem to the IBM support center.

101
   IFASEXIT failed to establish recovery.

102
   Incorrect input parameter list.

103
   Failure obtaining storage for IFASXCB.

104
   Failure obtaining storage for IFASXCBG.

105
   Failure obtaining storage for the log stream block (buffer).

106
   OPEN validation error because the IFASXCB token area is not correct.

108
   Error on browse option because of incomplete browse parameters.

110
   IFASXGET input event error.

111
   IFASXGET browse session was not established.

Source

System Management Facilities (SMF)

654

Explanation

An unexpected error occurred when IFASMFDL attempted to use a LOGGER related service.

System action

System takes a dump of the current address space together with the SMF address space.

Operator response

Notify the system programmer.

System programmer response

Search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing that are associated with the job and also the dump that IFASMFDL produced.

Source

IFASMFDL

655

Explanation

System management facilities (SMF) encountered an error in processing.

Register 15 contains a hexadecimal reason code that explains the error:

Code
    Explanation
100
    An internal error was encountered while processing the Product Registration or Enable/Disable queue.
200
    SMF encountered an error with one or more IXGOFFLD requests at HALT EOD time.
300
    SMF encountered an internal error with an IFAUSAGE invocation.

System action

The system attempts to repair the error and continues processing.

Operator response

Notify the system programmer.

System programmer response

Capture the associated dump. For reason code 200, registers 2 and 3 contain the return and reason codes that were returned following the first failed IXGOFFLD request. The IXGOFFLD return and reason codes are described in *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. Contact the IBM support center for errors that are not able to be corrected locally.

Source

System Management Facilities (SMF)

65F

Explanation

The system resources manager (SRM) stopped the collection of channel measurement data in the channel measurement block (CMB) because of an error condition.

System action

The system writes message IRA602I to identify the error. The system writes a logrec data set error record. The system abnormally ends the current task. It cannot be resumed until the next IPL.

The SRM functions, device selection and I/O balancing, use algorithms that do not make use of CMB data.

System programmer response

Look at the reason code in message IRA602I. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record.

Source

System resources manager (SRM)

66D

Explanation

This system can issue this abend code from three different areas in TSO/E:

- I/O services
- REXX
- CLIST processing.

A hexadecimal reason code identifies the error. This code appears either on user's terminal along with the abend notification, or in the dump taken for the abend.

Note:

1. The reason code appears on the user's terminal as a four-byte field. The rightmost two bytes contain the abend reason code. If these two bytes are between X'000D' and X'0013', the leftmost two bytes (if they are non-zero) contain the return code of the function called by the module that issued the abend.

   For example, if the reason code is X'0008000D', the abend reason code is X'000D', and the return code of the function called by the module is X'0008'.

2. If the reason code is of the form X'zzzz0014', X'zzzz0064', X'zzzz0068', or X'zzzz006C', it indicates a failure in IRXINIT while trying to initialize the TSO/E TMP REXX environment. If the rightmost two bytes contain X'0014', the leftmost two bytes contain the IRXINIT reason code associated with IRXINIT return code 20. See the topic about IRXINIT in *z/OS TSO/E REXX Reference*.

   If the rightmost two bytes contain X'0064' or X'0068', indicating a system or user abend occurred in IRXINIT, the leftmost two bytes contain the respective system or user abend code from IRXINIT.

   If the rightmost two bytes contain X'006C', the leftmost two bytes contain the unexpected IRXINIT return code. See codes X'14', X'64', X'68', and X'6C' later in this information.

Code
  Explanation

01
  Recovery cannot be established. This is an internal error. TSO does not perform the requested function.

02
  ECTIOWA contains an non-valid input stack address.

03
  The input stack was in use by another task when re-serialization was done. I/O services, REXX, or CLIST processing encountered an error in a multitasking environment.

04
  An non-valid I/O service identifier was supplied by the caller. This is an internal error. TSO does not perform the requested function.

05
  A input stack address is supplied in ECTIOWA but no stack exists.

06
  No input stack exists.

07
  No input stack exists, but one is being created by another program. I/O service processing encountered an error in a multitasking environment. Two tasks cannot create the first stack at the same time.

08
  An abend X'0C4' occurred when validating user pointers or a pointer was set to zero.

09
  The input stack is in use.

0A
  An ECT was provided, but no stack exists.

0B
  The ECTIOWA field does not contain the address of a valid stack.

0C

The user is trying to delete a stack which someone else is waiting on.

0D

REXX is unable to serialize on an internal resource.

0E

Unable to locate the REXX data stack.

0F

IRXESTK1 found an incorrect count of elements in the REXX data stack.

10

IRXESTK1 found an incorrect REXX data stack size.

11

IRXESTK failed when called by IRXESTK1.

12

IRXESTK failed to purge the number of stack elements requested by IRXESTK1.

13

REXX stack processing failed to release an internal REXX resource.

14

IRXINIT failed with return code 20 while trying to create the TSO/E TMP REXX environment.

15

REXX variable protection failed. This error can occur if sufficient storage is not available to properly protect or unprotect variables when attempting to invoke an authorized command or program under REXX. If this error occurs, try changing your TSO/E PROFILE setting to PROFILE VARSTORAGE(HIGH). You might also try using a larger REGION size when logging onto TSO/E.

16

The MARKTERM function of IRXESTK failed. While processing the data stack, TSO I/O services encountered an error. TSO does not perform the requested function.

17

The DROPTERM function of IRXESTK failed. While processing the data stack, TSO I/O services encountered an error. TSO does not perform the requested function.

18

The PULL function of IRXESTK failed. While processing the data stack, TSO I/O services encountered an error. TSO does not perform the requested function.

19

The input stack size limit was exceeded.

1E

The REXX storage manager was passed a control block that is not valid.

1F

The REXX storage manager was requested to free storage for a control block that is not valid.

20

The REXX storage manager could not allocate storage from the requested control block due to an internal error.

21

The REXX storage manager could not free storage for the requested control block because the storage was freed previously.

22

The REXX storage manager could not free the storage because the storage tree is not valid.

23

The REXX storage manager could not free the storage because the storage tree is not valid.

24

The REXX storage manager could not allocate the requested storage. The tree used to manage the storage has an incorrect format.

25

The REXX storage manager could not allocate the requested storage. An internal tree-management routine failed.

26

The REXX storage manager could not allocate the requested storage. The tree was determined to be not valid after storage allocation occurred.

27

The REXX storage manager could not allocate the requested storage. The tree was determined to be not valid after storage allocation occurred.

28

The REXX storage manager could not assign the new extent.

29

The REXX storage manager could not obtain additional storage from the main REXX storage manager control block.

2A

The REXX storage manager determined that a tree is not valid. An incorrect control block was present at the top of the tree.

2B

The REXX storage manager determined that a tree is not valid. An incorrect control block was passed.

2C

The REXX storage manager determined that a tree is not valid. An inner vertex appeared in place of the top of the tree.

2D

While invoking an internal routine, the REXX storage manager determined that no dynamic storage was available.

2E

The REXX storage manager could not obtain the requested storage.

2F

The REXX storage manager could not free the requested storage.

30

Module IGX00043 was invoked with parameters that were not valid. TSO/E I/O services encountered an internal error. TSO does not perform the requested function.

31

A TSO/E service that requires a TSO/E environment was invoked in a non-TSO/E environment.

3C

The QUEUED function of IRXESTK failed. While processing the data stack, TSO I/O services encountered an error. TSO does not perform the requested function.

40

GETMAIN failure. This error can occur if sufficient storage is not available in the CLIST or Authorized REXX variable pool. If this error occurs, try changing your TSO/E PROFILE setting to PROFILE VARSTORAGE(HIGH).

41

Stack serialization token has wrapped.

42

The token which was associated with the top stack element has changed. This means that the stack has been modified while the lock was released.

43

A TSO/E Service Routine detected a serialization error with the ALTLIB or VLF environment.

44

The user is trying to OPENFILE a dataset which is marked EXECUTE-ONLY.

45

The user is trying to submit a member of a dataset which is marked EXECUTE-ONLY.

46

The user is trying to execute a CLIST from a dataset which is marked EXECUTE-ONLY.

47

The user invoked the TSO/E environment service with a bad parameter list.

48

The user tried to invoke the TSO/E environment service on an incorrect version of TSO/E.

49

The user attempted to run an authorized command or program. This is not supported in the TSO/E environment created by the TSO/E environment service.

4A

The user attempted to attach the TSO/E TMP routine (IKJEFT01) while in a dynamic TSO/E environment.

4B

REXX output processing failed in a TSO/E environment. No command processor parameter list (CPPL) was available.

4C

REXX output processing failed in a TSO/E environment.

4D

TSO/E has detected an overlay condition while reading a member from a concatenated data set. One possible reason for this overlay condition is the concatenation of data sets with unlike RECFM specifications.

4E

TSO/E was invoked in a Web client environment, but JSON message processing did not start.

4F

TSO/E was invoked in a Web client environment, but a severe error occurred during normal TSO/E processing.

50

The user entered the REXX immediate command HE in order to halt execution of the current REXX exec. This abend does not represent an error condition.

51

Incorrect key or state at invocation.

52

An ESTAE environment could not be established.

53

Caller is not at the expected operating system level (z/OS Release 3 or higher).

54

Invalid request passed from caller.

60

The ENVTABLE_HEADER pointer is zero, and a valid REXX ENVTABLE address cannot be obtained.

61

The ENVTABLE_ENTRY pointer for the terminating REXX ENVBLOCK does not point within the bounds of the ENVTABLE from entry two through the end of the ENVTABLE.

62

The CHAIN_LOCK pointer for the terminating REXX ENVBLOCK does not point within the bounds of the ENVTABLE from entry two through the end of the ENVTABLE.

64

IRXINIT failed with return code 100 while trying to create the TSO/E TMP REXX environment.

68

IRXINIT failed with return code 104 while trying to create the TSO/E TMP REXX environment.

6C

IRXINIT failed with an unexpected return code while trying to create the TSO/E TMP REXX environment.

Note: If you are not able to locate the abend reason code in the preceding table, see the beginning of the explanation in abend code.

System action

The action of the system varies depending on the error and on the level of ESTAE that receives control. In all cases, the TSO/E or REXX function is not performed. However, for a TSO/E CLIST or a REXX exec, a retry might be attempted following the statement that encountered the error. In most cases, the TSO/E READY mode is reinstated. If the abend occurs during TSO/E logon, the user must log on again.

Code
    System Action

02 - 0B
    An SVC dump is not taken for the abend.

0D - 13
    See at the beginning of the description of abend code 66D. An SVC dump is not taken for the abend.

14 - 19
    An SVC dump is not taken for the abend. For 14, see at the beginning of the description of abend code 66D.

64
    See at the beginning of the description of abend code 66D. An SVC dump is not taken for the abend.

68
    See at the beginning of the description of abend code 66D. An SVC dump is not taken for the abend.

6C
    See at the beginning of the description of abend code 66D. An SVC dump is not taken for the abend.

System programmer response

If no fix exists, contact the IBM Support Center.

Programmer response

Try rerunning the REXX exec or re-invoking the TSO/E function. The error may have been due to a temporary condition (such as insufficient storage), and your job may succeed on a second attempt.

If the error is severe, the TSO/E session may need to be restarted.

Code
    Response

02
    Check the validity of the I/O service parameter list and the command processor parameter list (CPPL). Verify that the ECT address in both of these parameter lists is correct, that is, the ECT address supplied to a command processor is in fact, in the CPPL.

05
    Check the validity of the I/O service parameter list and the command processor parameter list (CPPL). Verify that the ECT address in both of these parameter lists is correct, that is, the ECT address supplied to a command processor is in fact, in the CPPL.

06
    Wait until the stack is created by the terminal monitor program (TMP) initialization function before calling this service, or use the stack-create service.

08

Verify that all addresses in the I/O service parameter list (and the IKJCT441 parameter list if applicable) are correct.

0B

Provide a valid stack address in the ECTIOWA. The stack address may be obtained from the ECT provided by the ECT pointed to from the CPPL or the stack-create service.

14

IRXINIT failed with return code 20 (X'14') while trying to initialize the TSO/E TMP REXX environment. The complete 4-byte reason code is of the form X'zzzz0014'. The *zzzz* portion is the IRXINIT reason code documented in the topic about IRXINIT in *z/OS TSO/E REXX Reference*, which further describes the meaning of IRXINIT return code 20. The REXX environment is not initialized. Message IRX0900E or IRX0901E, issued to the console, usually accompany this error. If your installation has replaced a parameters module, verify that the correct module was called during REXX initialization.

Example

00150014

IRXINIT completed with return code X'14', reason code X'15': a module cannot be loaded. To locate the module name, look for message IRX0901E issued to the console.

001B0014

IRXINIT completed with return code X'14', reason code X'1B': the wrong number of parameters. Message IRX0900E might also be issued.

15

The READY state resumes; retry the TSO function.

19

Log off from TSO/E and log back on. If the problem occurs again, check your programs that were running around the time of the abend. Any programs that perform input stack operations using the stack service routine should be examined for possible looping conditions.

31

Rerun the program in a TSO/E environment or address space.

44

Obtain READ access from the owner of the dataset. The user cannot OPENFILE a dataset marked EXECUTE-ONLY.

45

Obtain READ access from the owner of the dataset. The user cannot submit a member from a dataset marked EXECUTE-ONLY.

46

Obtain READ access from the owner of the dataset. The user cannot run CLISTs from a dataset marked EXECUTE-ONLY.

47

See *z/OS TSO/E Programming Services* for information on invoking the TSO/E environment service. Correct the error and invoke the TSO/E environment service again.

48

Make sure the installation has the proper version of TSO/E installed.

49

Remove the TSO/E authorized command or program that you tried to run.

4B

If you are using the IRXEXEC programming service, provide a CPPL and retry the operation.

4C

Ensure that the TSO/E I/O services are available in the address space.

4D

Invalid record length found. One possible reason is the concatenation of FB and VB data sets being used for CLIST input.

4E

Ensure the code page, character set, and any additional logon options are correctly specified before starting TSO/E.

4F

Ensure there is a valid logon procedure in use that invokes only IKJEFT01.

64

IRXINIT failed with return code 100 (X'64') while trying to initialize the TSO/E TMP REXX environment. This indicates that IRXINIT encountered a system abend. The complete 4-byte reason code is in the form X'zzzz0064' where *zzzz* is the hexadecimal abend code of the system abend.

If necessary, set a SLIP COMP=*zzz* to get a dump for the abend *zzz* in IRXINIT, where zzz represents the rightmost three hex digits of the system abend code.

68

IRXINIT failed with return code 104 (X'68') while trying to initialize the TSO/E TMP REXX environment. This indicates that IRXINIT encountered a user abend. The complete 4-byte reason code is in the form X'zzzz0068' where *zzzz* is the hexadecimal abend code of the user abend in IRXINIT.

If necessary, set a SLIP COMP=*Udddd* to get a dump for the user abend in IRXINIT, where *dddd* are the decimal digits of the user abend code. That is, hex code *zzzz* converted to decimal *dddd*.

6C

IRXINIT failed with an invalid non-zero return code while trying to initialize the TSO/E TMP REXX environment. The complete 4-byte reason code is in the form X'zzzz006C' where *zzzz* is the hexadecimal IRXINIT return code.

If necessary, set a SLIP COMP=66D to get a dump for this abend.

Source

Time Sharing Option Extensions (TSO/E)

67D

Explanation

During processing of an EVENTS macro, the system found that the wait flag was already on in the event control block (ECB). The flag on indicated that a previous EVENTS or WAIT macro was already waiting for posting of the ECB.

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Change the problem program to eliminate a double wait on a single event. If no double wait is found, ensure that the ECB was not incorrectly modified by the program. Then run the job again.

Source

Task management

683

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

684

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

685

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

6C4

Explanation

The SOM subsystem could not be initialized because one of the following occurred:

- Another SOM subsystem is already active
- Another SOM subsystem ended without cleaning up its resources.

System action

The SOM subsystem subsystem is not initialized. The system abnormally ends the command. The system continues other processing.

System programmer response

Stop the DSOM subsystem that is active before starting this SOM subsystem. If the subsystem is already stopped and the problem persists, start the new SOM subsystem with the same name as the SOM subsystem that previously stopped. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. For more information about starting and stopping a SOM subsystem, see *OS/390® SOMobjects Configuration and Administration Guide*.

A reason code further describes the error:

Code
 Explanation

000A1000
 The activation of a logical unit failed because the VTAM application for the logical unit is not APPC-capable. Check the VTAM APPL statement for the logical unit to ensure that you specified APPC=YES.

 System Action: The system also issues abend X'EC7' with reason code X'000A0037', which can be ignored.

000100xx
 An internal error occurred.

 System Action: The system continues processing, but the requested APPC/MVS service fails. The system writes an SVC dump.

010F0002
 DSOM could not open the data control block (DCB) for the C runtime library for the SOM subsystem. The SOM subsystem might not be installed properly.

 Module: GOSAMCEE

System Action: The system ends the application.

System Programmer Response: Ensure that the SOM subsystem is properly installed. Ensure that the GOSRTL1 data sets are correct and accessible to the userid associated with the SOM subsystem. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

02020001

The caller of a service is not in supervisor state.

Module: GOSAMCCP

System Action: The application is abnormally ended.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

02020002

Common area storage could not be obtained.

Module: GOSAMCCP

System Action: The system issues abend X'6C4' and ends the command processing.

Programmer Response: Contact the system programmer.

System Programmer Response: Increase the amount of common storage specified on the CSA parameter in IEASYSxx parmlib member. ReIPL the system to activate the change. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

02020003

An asynchronous cross memory post failed. A DSOM command might have been entered while the system was processing a command to stop the SOM subsystem.

Module: GOSAMCCP

System Action: The system abnormally ends the command.

Operator Response: Start DSOM again. Once DSOM is started,enter the DSOM command again.

System Programmer Response: Restart the SOM subsystem. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

02080002

The system could not obtain common storage.

Module: GOSAMCST

System Action: The system abnormally ends the command.

System Programmer Response: Increase the amount of common storage specified on the CSA parameter in IEASYSxx parmlib member. ReIPL the system to activate the change. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

02080003

An asynchronous cross memory post failed. A DSOM command might have been entered while the system was processing a STOP DSOM command.

Module: GOSAMCST

System Action: The system abnormally ends the command.

Operator Response: Enter a START DSOM command to start DSOM again.

System Programmer Response: If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05000001

Unsupported DSOM subsystem service.

Module: GOSAPBAD

System Action: The system abnormally ends the application.

User Response: Contact the system programmer.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05010001

Input to a service routine is missing. The caller of the service is not valid. save

Module: GOSAPASC

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05010002

The caller of a DSOM service is not valid.

Module: GOSAPASC

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05010003

The system could not create a server address space.

Module: GOSAPASC

System Action: The system records the error and continues processing. The system does not start the server.

System Programmer Response: Obtain the return code from the ASCRE macro in register 0. Verify that the server PROC is defined correctly. See the section on using a JCL procedure to start a DSOM server in *OS/390 SOMobjects Configuration and Administration Guide* for more information. Enter the START command to start the server. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05020007

The caller of a service is not valid.

Module: GOSAPTRC

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05030001

Input to a service routine is missing. The caller of the service is not valid.

Module: GOSAPRC1

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05030003

The caller passed a parameter list that is not valid.

Module: GOSAPRC1

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05030004

The caller requested a security function that is not valid. The caller of the service is not valid.

Module: GOSAPRC1

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0503000A

The caller is not authorized to invoke the requested function. The caller of the service is not valid.

Module: GOSAPRC1

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05030109

The system could not process a RACROUTE REQUEST=AUTH request when checking command authorization to a server.

Module: GOSAPRC1

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0503000B

A PC routine is not available.

Module: GOSAGCRT, GOSAGCAU

System Action: The system issues abend X'6C4' to the caller of the DSOM service. The system might issue message GOS009I.

Operator Response: Enter a START DSOM command to start DSOM again. If DSOM is already started and the system issued message GOS009I, contact the system programmer.

System Programmer Response: If you cannot start DSOM, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05040001

Input to service routine missing. The caller of the service is not valid.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05040003

The parameter list that was passed to a service routine is not valid because the caller of the service is not valid.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05040004

Function requested from service routine is not valid. The caller of the service is not valid.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0504000A

The caller is not authorized to invoke the requested function. The caller of a service is not valid.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0504000B

SOM subsystem services not available.

Module: GOSACACE, GOSACACE, GOSACAUT, GOSADACE, GOSAGRTO, GOSAMAUT, GOSASAUT, GOSASECI, GOSASECU

System Action: The system issues abend X'6C4' to the caller of the DSOM service. The system might issue message GOS009I.

Operator Response: Enter a START DSOM command to start DSOM again. If DSOM is already started and the system issued message GOS009I, contact the system programmer.

System Programmer Response: If you cannot start DSOM, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05040100

During security initialization, the system could not process a RACROUTE REQUEST=LIST,ENVIR=CREATE request for the SOMDOBJS RACF security class.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

05040101

During security initialization, the system could not process a RACROUTE REQUEST=LIST,ENVIR=CREATE request for the CBIND RACF security class.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS*

Security Server RACROUTE Macro Reference for a description of the return and reason codes from RACROUTE.

05040102

During client authentication, the system could not process a RACROUTE REQUEST=LIST,ENVIR=CREATE request.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

05040103

During client authentication, the system could not process a RACROUTE REQUEST=FASTAUTH request.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

05040104

During client authentication or client/server disconnect, the system could not process a RACROUTE REQUEST=VERIFY ENVIR=DELETE request.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

05040105

During security cleanup processing, the system could not process a RACROUTE REQUEST=LIST ENVIR=DELETE request.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

05040106

During security cleanup processing, the system could not process a RACROUTE REQUEST=LIST ENVIR=DELETE request for the CBIND RACF security class.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

05040107

During client/server connect processing, the system could not process a RACROUTE REQUEST=LIST REQUEST=VERIFY ENVIR=CREATE PASSCHK=NO request.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

05040108

During method level authorization processing, the system could not process a RACROUTE REQUEST=FASTAUTH request.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

05040109

During server authorization processing, the system could not process a RACROUTE REQUEST=AUTH request.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

0504010A

During server authorization or client authentication processing, the system could not process a RACROUTE REQUEST=EXTRACT,TYPE= ENCRYPT request.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

0504010B

During method level authorization processing, a bad parameter was passed to the service. The caller of the service is not valid.

Module: GOSAPRC2

System Action: The system abnormally ends the application.

System Programmer Response: Register 0 contains diagnostic information in the form X'00wwyyzz', where X'ww' is the SAF return code, X'yy' is the RACF return code, and X'zz' is the RACF reason code. See *z/OS Security Server RACROUTE Macro Reference* for a description of the return and reason codes from RACROUTE.

0507000A

The caller is not authorized to invoke the requested function. The caller of the service is not valid.

Module: GOSAPRST

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

050B0001

Input to a service routine is missing. The caller of the service is not valid.

Module: GOSAPIOK

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

050B0002

The caller of a DSOM service is not valid.

Module: GOSAPIOK

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

050C0001

Input to service routine missing. The caller of the service is not valid.

Module: GOSAPSER

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

050C0003

The parameter list that was passed to a service routine is not valid because the caller of the service is not valid.

Module: GOSAPSER

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

050C0004

Function requested from service routine is not valid. The caller of the service is not valid.

Module: GOSAPSER

System Action: The system abnormally ends the application.

System Programmer Response: Verify that the application is using standard interfaces. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

050C0005

Unable to create DSOM latch

Module: GOSAPSER

System Action: The system abnormally ends the application.

System Programmer Response: Obtain the return code from the latch obtain service (ISGLCRT) in register zero. See *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for descriptions of return codes from ISGLCRT.

050C0006
Unable to obtain DSOM latch

Module: GOSAPSER

System Action: The system abnormally ends the application.

System Programmer Response: Obtain the return code from the latch obtain service (ISGLOBT) in register zero. See *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for descriptions of return codes from ISGLOBT.

050C0007
Unable to release DSOM latch

Module: GOSAPSER

System Action: The system abnormally ends the application.

System Programmer Response: Obtain the return code from the latch release service (ISGLREL) in register zero. See *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for descriptions of return codes from ISGLREL.

Source

GOSAMISP

6C5

Explanation

During processing of an IARVSERV macro, the system found a non-environmental error. The macro processing failed. Register 15 contains one of the following hexadecimal reason codes.

Code
  Explanation

xx0120xx
  For a SHARE request, the STOKEN for the source area does not represent a valid data space token.

xx0121xx
  For a SHARE request, the STOKEN for the target area does not represent a valid data space token.

xx0122xx
  For a SHARE request, the beginning address of the source area specified in the range list entry is not page-boundary aligned.

xx0123xx
  For a SHARE request, the beginning address of the target area specified in the range list entry is not page-boundary aligned.

xx0124xx
  For a SHARE request, the source and target areas are not different.

xx0125xx
  For a SHARE request, specified storage has not been obtained with GETMAIN macro or STORAGE macro with the OBTAIN parameter as part of the pageable private region of the caller's address space, nor within the size of an existing data space as pageable storage.

xx0126xx
  For a SHARE request, the caller does not have legal access to the source area with the given ALET.

xx0127xx
  For a SHARE request, the caller does not have legal access to the source area with the given STOKEN.

xx0128xx

For a SHARE request, the caller does not have legal access to the target area with the given ALET.

xx0129xx

For a SHARE request, the caller does not have legal access to the target area with the given STOKEN.

xx012Axx

For a SHARE request, the address space that owns the source is not swapped in.

xx012Bxx

For a SHARE request, the address space that owns the target is not swapped in.

xx012Cxx

For a SHARE request, the caller's PSW key is insufficient for altering the target area.

xx012Dxx

For a SHARE request, the TARGET_VIEW(SHAREDWRITE) option is specified but the caller's PSW key is insufficient for altering the source area.

xx012Exx

For a SHARE request, one page in the source area and its corresponding page in the target area do not have the same storage protect key and fetch-protection status.

xx012Fxx

For a SHARE request, the source area is not acceptable because it contains system data that is not eligible for sharing.

xx0130xx

For a SHARE request, the target area is not acceptable because it contains system data that should not be altered by the caller.

xx0131xx

For a SHARE request, the target area contains unacceptable pages, such as pages that are page-protected or page-fixed.

xx0132xx

For a SHARE request, the source and the target areas do not meet the storage attribute requirements for sharing. This can happen if the storage being shared is in the restricted use common service area (RUCSA). Sharing of RUCSA storage is not permitted regardless of having proper SAF authority to use RUCSA. For more information, see Restricted use common service area (RUCSA/extended RUCSA) in *z/OS MVS Initialization and Tuning Guide*.

xx0133xx

For a SHARE request, READONLY sharing pages cannot be made shared with SHAREDWRITE.

xx0134xx

For a SHARE request, the source area contains pages that are shared with a target view of TARGETWRITE.

xx0135xx

For a SHARE request, the source area contains pages that are currently to a hiperspace object through the DIV macro.

xx0136xx

For a SHARE request, the target area contains pages that are currently mapped through the DIV macro.

xx0137xx

For a SHARE request, part of the source area is in a hiperspace, VIO window, V=R region, or PSA.

xx0138xx

For a SHARE request, part of the target area is in a hiperspace, VIO window, V=R region, or PSA.

xx0139xx

For a SHARE request, the number of pages specified in a range list entry is not valid.

xx013Axx

For a SHARE request, the specified source ALET represents a subspace.

xx013Bxx

For a SHARE request, the specified target ALET represents a subspace.

xx013Dxx

For a SHARE request, the specified target storage was not obtained by the GETMAIN macro or STORAGE macro with the OBTAIN parameter as part of the caller's pageable private region, or within the size of an existing data space as pageable storage.

xx013Exx

For a SHARE request, the specified source ALET is not valid. It is not on the current access list.

xx013Fxx

For a SHARE request, the specified target ALET is not valid. It is not on the current access list.

xx0140xx

For a SHARE request, the source area contains HIDDEN pages.

xx0141xx

IARVSERV-SHARE failed. The source page is part of a shared segment.

xx0142xx

IARVSERV-SHARE failed. The target page is part of a shared segment.

xx0143xx

IARVSERV-SHARE failed. The source area contains pages in the nucleus (read-only, extended read-only, read-write and extended read-write areas).

xx0221xx

For an UNSHARE request, the STOKEN for the target area does not represent a valid data space STOKEN.

xx0223xx

For an UNSHARE request, the beginning address of the target area specified in the range list entry is not page-boundary aligned.

xx0225xx

For an UNSHARE request, the specified storage has not been obtained with GETMAIN macro or STORAGE macro with the OBTAIN parameter as part of the pageable private region of the caller's address space, or within an existing data space.

xx0228xx

For an UNSHARE request, the caller does not have valid access to the address of the target area with the given ALET.

xx0229xx

For an UNSHARE request, the caller does not have valid access to the address of the target area with the given STOKEN.

xx022Bxx

For an UNSHARE request, the address space that owns the target is not swapped in.

xx022Cxx

For an UNSHARE request, the caller's PSW key is insufficient for altering the target area.

xx0231xx

For an UNSHARE request, the target area contains unacceptable pages, such as pages that are page-protected or page-fixed pages.

xx0238xx

For an UNSHARE request, part of the target area is in a Hiperspace, VIO window, V=R region, or PSA.

xx0239xx

For an UNSHARE request, the number of pages specified in a range list entry is not valid.

xx023Bxx

For an UNSHARE request, the specified target ALET represents a subspace.

xx023Fxx

For an UNSHARE request, the specified target ALET is not valid.

xx0243xx

IARVSERV-UNSHARE failed. The target area contains pages in the nucleus (read-only, extended read-only, read-write, and extended read-write areas).

xx0321xx

For a CHANGEACCESS request, the STOKEN for the target area does not represent a valid space STOKEN.

xx0323xx

For a CHANGEACCESS request, the beginning address of the target area specified in the range is not aligned on a page-boundary.

xx0328xx

For a CHANGEACCESS request, the caller does not have access to the target area with the given ALET.

xx0329xx

For a CHANGEACCESS request, the caller does not have access to the target area with the given STOKEN.

xx032Bxx

For a CHANGEACCESS request, the address space that owns the target area is not swapped in.

xx032Cxx

For a CHANGEACCESS request, the caller's PSW key is insufficient for altering the target area.

xx0330xx

For a CHANGEACCESS request, the target area contains unacceptable pages, such as pages that are fixed by PGSER or in permanent storage.

xx0331xx

For a CHANGEACCESS request, the target area is not acceptable because it contains data that the caller should not alter.

xx0338xx

For a CHANGEACCESS request, part of the target area is in a hiperspace window, a VIO window or V=R region, or in a PSA.

xx0339xx

For a CHANGEACCESS request, the number of pages specified in a range list is not valid.

xx033Bxx

For a CHANGEACCESS request, the specified target ALET represents a subspace.

xx033Dxx

For a CHANGEACCESS request, the storage was not obtained using the GETMAIN or STORAGE OBTAIN macro as part of the pageable private region of the caller's address space, nor within any existing data space.

xx033Fxx

For a CHANGEACCESS request, the specified target ALET is not valid.

xx0340xx

For a CHANGEACCESS request, an attempt was made to change a page that is in the restricted use common service area (RUCSA). However, the VSM ALLOWUSERKEYCSA(NO) specification in DIAGxx is in effect and the target address space identified by the associated ALET lacks the proper SAF authority to access or change the state of RUCSA storage.

xx04xxxx

For a xx04xxxx reason code please search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM service center.

xxFF10xx

The caller held a lock other than the local lock.

xxFF11xx

The input parameter list or range list is not accessible to the service using the caller's PSW key.

xxFF12xx

The caller issued a macro version that is not valid.

xxFF13xx

Reserved fields in the caller's macro parameter list are not zeros.

xxFF14xx

The caller requested a service that is not valid.

xxFF15xx

The caller is not in 31-bit addressing mode.

xxFF16xx
> The range list entry count (NUMRANGE) is less than one or greater than 16.

System action

The system sends messages about the job to the job log, writes an ABEND dump for the failing job step, and writes the JCL and SYSOUT output for the job.

System programmer response

If the caller was provided by the installation, correct it. Look at accompanying messages in the job log, the JCL and the SYSOUT output.

If the caller was an IBM-supplied program, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the messages, the JCL, the SYSOUT output, and the ABEND dump.

Programmer response

Correct the program and run the job again.

Source

Real storage manager (RSM)

6C6

Explanation

To avoid data integrity problems, the subsystem abnormally ends; one or more X'5C6' system completion codes will usually precede the end. During IBM MQ abend, a user task with an active IBM MQ connection can be abended with a X'6C6' system completion code; in rare instances, the entire connected address will be abended (MEMTERM). However, if the subsystem ends an address space after numerous cancel attempts, this is not an IBM MQ internal error.

System action

The subsystem abnormally ends IBM MQ.

Operator response

Message CSQV086E should appear on your console screen. First, copy this message and the accompanying subsystem end reason code. Second, notify the system programmer.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output for the job and the logrec data set error record.

Programmer response

If the subsystem abnormally ends IBM MQ, then record the subsystem end reason code that is displayed in message CSQV086E. In addition, you should be aware of the following situations.

1. If you received any X'5C6' system completion codes prior to this subsystem end, perform the following actions. Check register 15 of the SDWA section 'General Purpose Registers at Time of Error', and locate the accompanying reason code. In addition, check the information displayed at the console screen, and in the corresponding logrec data set entry.

2. If you did not receive any X'5C6' system completion codes prior to the subsystem end, you will need an SVC dump, which is entitled "IBM MQ SUBSYSTEM TERMINATION REQUESTED - REASON=xxxxxxxx". The reason code in the message and the one found in the MVS operator message will be the same.

Source

IBM MQ

6C7

Explanation

During processing of a REFPAT macro, the system found a non-environmental error. The macro processing failed. Register 15 contains a hexadecimal reason code.

Code
Explanation

xx0005xx
The INSTALL request failed because the caller does not own the specified data space.

xx0006xx
The INSTALL request failed because the caller specified a data space that does not exist.

xx0102xx
The REMOVE request failed because the caller does not own the specified data space.

xx0103xx
The REMOVE request failed because the caller specified a data space that does not exist.

xxFF01xx
The REFPAT macro request failed because the caller was in cross-memory mode.

xxFF02xx
The REFPAT macro request failed because the caller held one or more locks needed by the system to process the request.

xxFF03xx
The REFPAT macro request failed because a protection exception occurred while referencing the caller's parameter list.

xxFF04xx
The REFPAT macro request failed because reserved fields in the macro parameter list are not zeros.

xxFF05xx
The REFPAT macro request failed because the caller requested an unknown service.

xxFF06xx
The REFPAT macro request failed because the caller must be in 31-bit addressing mode to use any service of the REFPAT macro.

xxFF07xx
The REFPAT macro request failed because the caller cannot be in SRB mode.

xxFF08xx
The REFPAT macro request failed because the virtual storage addresses specified on PSTART and PEND straddle a common area boundary.

System action

The system sends messages about the job to the job log, writes an ABEND dump for the failing job step, and writes the JCL and SYSOUT output for the job.

System programmer response

If the caller was provided by the installation, correct it. Look at accompanying messages in the job log, the JCL and the SYSOUT output.

If the caller was an IBM-supplied program, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the messages, the JCL, the SYSOUT output, and the ABEND dump.

Programmer response

If the caller was an application program, correct the program and run the job again.

Source

Real storage manager (RSM)

6FB

Explanation

During JES3 processing, module IATSSCM, IATSSRN or IATSSRE detected an error related to the subsystem interface and issued this system completion code. The error is identified by a hexadecimal reason code in register 15.

Code
    Explanation

10

IATSSRN - Module IATSSRN received a bad return code from the JESXCF message reroute service (IXZXIXRR).

- Register 3 - Return Code from IXZXIXRR service
- Register 4 - Reason Code from IXZXIXRR service

21

A bad SRB address was passed as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE.

22

A bad service request block (SRB) extension address was passed as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE.

23

The common area data space (CADS) buffer, provided as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained a bad JESXCF acknowledgement message. The eye-catcher for the JESXCF acknowledgement message was not correct.

24

The CADS buffer, provided as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained a bad staging area header. The eye-catcher for the staging area header was not correct.

25

The CADS buffer prefix, provided as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained a bad response exit address. The response exit address must be non-zero.

26

The CADS buffer prefix, provided as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained an incorrect buffer length. The buffer length must be non-zero.

27

The JESXCF Acknowledgement Message, passed as input within the CADS buffer to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained a bad user return code. The user return code was non-zero.

28

The JES3 SRB reply exit routine (SSRECRXT) within module IATSSRE attempted to obtain storage for the staging area buffer using the STORAGE service. The attempt was unsuccessful and a non-zero return code was returned from the STORAGE service.

29

The JES3 SRB reply exit routine (SSRECRXT) within module IATSSRE invoked the TCBTOKEN service to verify the task is still valid. The validation failed. The return code returned from the TCBTOKEN service indicates a programming error.

2A

The JES3 SRB reply exit routine (SSRECRXT) within module IATSSRE attempted to decrement reply count with a value of zero.

2B

The JES3 SRB reply exit routine (SSRECRXT) within module IATSSRE detected an incorrect eyecatcher in the reply information prefix (IATYRIP).

31

The JES3 global status routine (SSRESTAT) in module IATSSRE invoked the IXZXIXIF service to obtain JES3 complex status information. The buffer returned by the service contains a bad JESXCF member information record. The eye-catcher was not correct.

32

The JES3 global status routine (SSRESTAT) in module IATSSRE was unable to find the global MPC entry within the main processor control table.

33

The JES3 global status routine (SSRESTAT) in module IATSSRE attempted to obtain storage for the JESXCF Information Record buffer (IXZXIXIF) via the STORAGE service. The attempt was unsuccessful and a non-zero return code was returned from the STORAGE service.

34

The JES3 global status routine (SSRESTAT) in module IATSSRE invoked the IXZXIXIF service to obtain JES3 complex status information. The service was unsuccessful and provided the SSRESTAT routine with a bad return and/or reason code.

- Register 3 - Return Code
- Register 4 - Reason Code

35

The JES3 global status routine (SSRESTAT) in module IATSSRE invoked the IXZXIXIF service to obtain JES3 complex status information. The JESXCF Information Records returned by the service did not contain any information for the global processor.

100

Module IATSSCM encountered a JES3 subsystem communications service entrance list (SEL) which was already in use by another caller.

101

Module IATSSCM determined the caller was not authorized to issue the SSISERV service.

102

Module IATSSCM encountered a bad memory data block (MEMDATA) pointer. The eye-catcher for the MEMDATA header was not correct.

103

The JES3 subsystem communications service entrance list (SEL) passed into module IATSSCM had an incorrect length. This could be a result of a zero SELDATA pointer or a length of zero or a length exceeding the maximum staging area data size. This applies to all SSISERV service requests except TYPE=RESPONSE request.

104

Module IATSSCM encountered bad parameters specified for an SSISERV TYPE=WAIT request. One of the following problems was found with the parameters:

- A response buffer was not specified. A response buffer is required for SSISERV TYPE=WAIT.
- An EXIT address was specified. An exit address must not be specified for SSISERV TYPE=WAIT.

105

Module IATSSCM encountered bad parameters specified for an SSISERV TYPE=REPLY request. One of the following problems was found with the parameters:

- Both the ECB and EXIT address were specified. Only one of these parameters can be specified.
- A response buffer address was not specified for a request that did not specify an EXIT address. If a response buffer address is not specified, an EXIT address must be specified.

106

Module IATSSCM was unable to find an entry in the Main Processor Control table for the JESXCF member that is to receive this request.

110

Module IATSSCM attempted to obtain storage for a memory data block (IATYMEM) using the STORAGE service. The attempt was unsuccessful and a non-zero return code was returned from the STORAGE service.

- Register 2 - Return Code from STORAGE service

107

Module IATSSCM attempted to create a TTOKEN for the current task using the TCBTOKEN service while processing an SSISERV TYPE=REPLY request. The attempt was unsuccessful and a non-zero return code was returned from the TCBTOKEN service.

- Register 2 - Return Code from TCBTOKEN service

111

Module IATSSCM attempted to release storage it had obtained for a memory data block (IATYMEM) using the STORAGE service. The attempt was unsuccessful and a non-zero return code was returned from the STORAGE service.

- Register 2 - Return Code from STORAGE service

112

Module IATSSCM attempted to obtain a CADS buffer using the JESXCF IXZXCADS service. The attempt was unsuccessful and a non-zero return code was returned from the IXZXCADS service.

- Register 2 - Return Code from IXZXCADS service
- Register 3 - Reason Code from IXZXCADS service

113

Module IATSSCM attempted to release a CADS buffer using the JESXCF IXZXCADS service. The attempt was unsuccessful and a non-zero return code was returned from the IXZXCADS service.

- Register 2 - Return Code from IXZXCADS service
- Register 3 - Reason Code from IXZXCADS service

120

Module IATSSCM received a bad return code from the JESXCF acknowledge processed message service (IXZXIXAC) while processing an SSISERV TYPE=PURGE request.

- Register 2 - Return Code from IXZXIXAC service
- Register 3 - Reason Code from IXZXIXAC service

121

Module IATSSCM received a bad return code from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=WAIT request.

- Register 2 - Return Code from IXZXIXSM service
- Register 3 - Reason Code from IXZXIXSM service

122

Module IATSSCM received a non-zero user return code from the response to a JESXCF send message service (IXZXIXSM) request while processing an SSISERV TYPE=WAIT request.

123

Module IATSSCM received a bad return code from the JESXCF acknowledge processed message service (IXZXIXAC) while processing an SSISERV TYPE=WAIT request.

- Register 2 - Return Code from IXZXIXAC service
- Register 3 - Reason Code from IXZXIXAC service

124

Module IATSSCM received a bad return code from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=REPLY request.

- Register 2 - Return Code from IXZXIXSM service
- Register 3 - Reason Code from IXZXIXSM service

125

Module IATSSCM received a bad return code from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=ACK request.

- Register 2 - Return Code from IXZXIXSM service
- Register 3 - Reason Code from IXZXIXSM service

126

Module IATSSCM received a bad return code from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=COMM request.

- Register 2 - Return Code from IXZXIXSM service
- Register 3 - Reason Code from IXZXIXSM service

127

Module IATSSCM received a bad return code from the JESXCF acknowledge processed message service (IXZXIXAC) while processing an SSISERV TYPE=RESP request.

- Register 2 - Return Code from IXZXIXAC service
- Register 3 - Reason Code from IXZXIXAC service

128

Module IATSSCM received a zero response data address from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=WAIT request.

- Register 2 - Return Code from IXZXIXSM service
- Register 3 - Reason Code from IXZXIXSM service

System action

The system writes the current address space along with the JES3 and JESXCF address spaces and related storage areas to a SYS1.DUMP data set. If the current address space is not the JES3 address space, the system abnormally ends the current address space.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists and the problem occurred in JES3, you should:

- Save the hardcopy log
- Provide a listing of the initialization deck (JES3OUT)
- Provide a console log from initialization
- Check the JESYSMSG data set for error indications

After gathering the necessary data, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. If an SVC dump was taken, provide the SVC dump, the reason code, and, if available, the data set error record.

Source

JES3

6FC

Explanation

During processing following a program check interruption, the system detected an error in a SPIE or ESPIE macro. The SDWACRC field of the system diagnostic work area (SDWA) contains a hexadecimal reason code to be used when searching problem reporting data bases or when reporting the problem to the IBM Support Center.

Code
 Explanation

04
 The user's PICA contains an invalid bit setting in the program mask.

08
 The user's PICA is unavailable.

0C
 The SCA, pointed to by the TCBPIE, is unavailable.

10
 The RPP, pointed to by the SCARPPTR, is unavailable.

14
 The PIE, pointed to by the SCAPIE or SCAPPIE, is unavailable.

18
 The SCA, pointed to by the TCBPIE, is unavailable.

1C
 The RPP, pointed to by the SCARPPTR, is unavailable.

20
 The PIE, pointed to by the SCAPIE or SCAPPIE, is unavailable.

24
 Unable to reference SPIE/ESPIE control blocks or an error occurred while handling a SPIE/ESPIE exit.

28
 After an ESPIE exit returned to the system, a problem was found with EPIEPSW. Either a reserved bit is on or the combination of AMODE bits were found to be invalid.

System action

The system abnormally ends the task that experienced the program check. The system may write a logrec data set error record.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=6FC,ACTION=SVCD,END
```

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide the SVC dump, the reason code, and, if available, the logrec data set error record.

Programmer response

Resubmit the job. If the error recurs, contact the system programmer.

Source

Supervisor control

700

Explanation

During processing of an I/O request, a program check occurred in a supervisor service routine called by the execute channel program (EXCP).

System action

The system abnormally ends the current task. The system writes a logrec data set error record.

System programmer response

In the ABEND dump, look at field TCBEXCPD at offset X'C0' in the task control block (TCB) for the current task. TCBEXCP points to the EXCP debugging area (XDBA). The XDBA contains diagnostic data associated with the EXCP processor.

Look for the problem in one of the service routines used by EXCP. If the error recurs and the program is not in error, look at the messages in the job log for more information.

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the source program listing for the job.

Programmer response

Check the problem program for the error. If the error cannot be determined, run the job again, requesting an ABEND dump. Notify the system programmer.

Source

Execute channel program (EXCP)

702

Explanation

During processing of a POST macro, the system found either incorrect input data or an unauthorized POST exit routine request.

Register 15 contains a hexadecimal reason code that explains the error:

Code
   Explanation

00
   A function request was incorrect.

04
   The address is incorrect for an exit routine for a CREATE or DELETE request.

08
   During an attempt to post an extended event control block (ECB), the descriptor word of the ECB extension contained incorrect data.

0C
   During an attempt to post an extended ECB, the ECB extension contained an incorrect exit routine address.

10

A POST exit routine attempted to post an extended ECB.

14

During an attempt to post an extended ECB, either the ECB address or ECB extension address was incorrect.

18

Without use of the local lock for serialization, the ECB has been updated from an initialized extended state to a waited state.

System action

The system abnormally ends the program that issued the POST macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

This code is only associated with extended ECB processing. If an extended ECB was being posted, ensure that it contains valid data. Then correct the error identified by the return code. Run the job again.

Source

Task management

704

Explanation

A system error, uncorrectable machine error, or error that cannot be determined occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the GETMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Note: Some VSM return codes may be a half-word in length. In these cases, the high-order byte is the module id of the issuing module, and the low-order byte is the return code.

Module ID
  Module Name

1

IGGVVSMRT

3

IGVVSM24

4

IGVVSM31

6

IGVGSQA

7

IGVFSQA

A

IGVGLSQA

B

IGVFLSQA

C

IGVGAPVT

E
> IGVFSP

44
> IGVVSMRF

Code
> **Explanation**

01
> While processing the GETMAIN request, the system tried to release central storage backing global or local system queue area (SQA or LSQA) storage. A program page fixed the virtual storage. However, it is a basic property of the system that SQA and LSQA storage is page fixed.

04
> Status information indicates that the system has obtained a global lock to support the GETMAIN request. However, when the system attempted to release the lock, the release request failed.

08
> A system service routine returned an incorrect return code to the virtual storage manager (VSM) interface module.

09
> While getting or freeing storage in a local or global SQA subpool, the service routine that builds double free elements (DFE) tried to place virtual storage on the DFE queue, but could not do so because the storage was described by another DFE already on the queue.

10
> While in recovery processing, the system detected a condition that is normally considered a user error, such as an error in the parameter list. However, it is likely that the error is not a user error because recovery processing is in control.

System action

The system writes a logrec data set error record. The system continues processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job again. If the error recurs, contact the system programmer.

Source

Virtual storage manager (VSM)

705

Explanation

A system error, uncorrectable machine error, or error that cannot be determined occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Note: Some VSM return codes may be a half-word in length. In these cases, the high-order byte is the module id of the issuing module, and the low-order byte is the return code.

Module ID
> **Module Name**

1
> IGGVVSMRT

3

IGVVSM24

4

IGVVSM31

6

IGVGSQA

7

IGVFSQA

A

IGVGLSQA

B

IGVFLSQA

C

IGVGAPVT

E

IGVFSP

44

IGVVSMRF

Code
   Explanation

01

While processing the FREEMAIN request, the system tried to release central storage backing global or local system queue area (SQA or LSQA) storage. A program page fixed the virtual storage. However, it is a basic property of the system that SQA and LSQA storage is page fixed.

02

While processing a subpool FREEMAIN of a local system queue area subpool, a service routine was called to free storage described by an allocated element (AE). The service routine returned a return code indicating that the storage is not described by an AE.

04

Status information indicates that the system has obtained a global lock in support of the FREEMAIN request. However, when the system attempted to release the lock, the release request failed.

09

While getting or freeing storage in a local or global system queue area subpool, the service routine that builds double free elements (DFE) tried to place virtual storage on the DFE queue, but could not do so because the storage was described by another DFE already on the queue.

0C

A FREEMAIN service routine returned an incorrect return code to the virtual storage manager (VSM) interface module.

10

While in recovery processing, the system detected a condition that is normally considered a user error, such as an error in the parameter list. However, the error is most likely not a user error because recovery processing is in control.

System action

The system writes a logrec data set error record. The system continues processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job again. If the error recurs, contact the system programmer.

Source

Virtual storage manager (VSM)

706

Explanation

The error occurred during processing of a LINK(X), XCTL(X), ATTACH(X), or LOAD macro.

The requested load module was marked not executable.

System action

The task is ended unless ERRET is specified on the macro.

The system issues message CSV016I and an ABEND dump.

System programmer response

If the error recurs and the program is not in error, see the system programmer response for the messages in the job log.

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump and the source program listing for the job.

Programmer response

Ensure that the target load module is executable and the linkage editor did not find errors in the module. Have the module edited by the linkage editor again. Then recompile, and run the job step again.

Source

Contents supervision (CSV)

70A

Explanation

A system error, uncorrectable machine error, or error that cannot be determined, occurred when the system tried to process an R form of the GETMAIN or FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Note: Some VSM return codes may be a half-word in length. In these cases, the high-order byte is the module id of the issuing module, and the low-order byte is the return code.

Module ID
  Module Name

1
  IGGVVSMRT

3
  IGVVSM24

4
  IGVVSM31

6
  IGVGSQA

7

   IGVFSQA

A

   IGVGLSQA

B

   IGVFLSQA

C

   IGVGAPVT

E

   IGVFSP

44

   IGVVSMRF

Code
   Explanation

01

   While processing the FREEMAIN request, the system tried to release central storage backing global or local system queue area (SQA or LSQA) storage. A program page fixed the virtual storage. However, it is a basic property of the system that SQA and LSQA storage is page fixed.

02

   While processing a subpool FREEMAIN of a local system queue area subpool, a service routine was called to free storage described by an allocated element (AE). The service routine returned a return code indicating that the storage is not described by an AE.

04

   Status information indicates that the system has obtained a global lock in support of the FREEMAIN request. However, when the system attempted to release the lock, the release request failed.

08

   A GETMAIN storage management service routine returned an incorrect return code to the virtual storage manager (VSM) interface module.

09

   While getting or freeing storage in a local or global system queue area subpool, the service routine that builds double free elements (DFE) tried to place virtual storage on the DFE queue, but could not do so because the storage was described by another DFE already on the queue.

0C

   A FREEMAIN storage management service routine returned an incorrect return code to the virtual storage manager (VSM) interface module.

10

   While in recovery processing, the system detected a condition that is normally considered a user error, such as an error in the parameter list. However, the error is most likely not a user error because recovery processing is in control.

System action

The system writes a logrec data set error record. The system continues processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job again. If the error recurs, contact the system programmer.

Source

Virtual storage manager (VSM)

70D

Explanation

A program issued a CALLRTM TYPE=ABTERM macro. In response, the recovery termination manager (RTM) was validating entry into RTM1. RTM determined that the entry mode requirements were not met.

A hexadecimal reason code in the following locations explains the error:

- Field RTM2CRC of the RTM2 work area (RTM2WA)
- Message IEA995I
- TCBARC field of the task control block (TCB)

Code
    Explanation

04
    A program issued the CALLRTM macro with TYPE=ABTERM,TCB=0 or TYPE=ABTERM,TCB=(the current TCB) and did not specify the ASID parameter.

08
    A program that does not hold the local lock issued the CALLRTM TYPE=ABTERM macro specifying the address of a task control block (TCB) that is not current.

0C
    RTM1 was entered through CVTBTERM, but without the local lock.

System action

RTM abnormally ends the program that issued the CALLRTM TYPE=ABTERM macro. If the caller requested ending of another task, RTM also ends that task using the abend code and reason code supplied by the caller.

The system issues message IEA995I. The system may write an SVC dump.

Operator response

If RTM did not write a dump and the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=70D,ACTION=SVCD,END
```

System programmer response

The return address of the issuer of the CALLRTM TYPE=ABTERM macro is in:

- Register 14 at the time of error
- The RCVY entry for the ABTERM request in the system trace.

Analyze the dump to identify the module issuing the CALLRTM TYPE=ABTERM macro:

- For an installation-provided module, correct the program to obtain the correct serialization.
- For an IBM-provided module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide problem data collected.

Source

Recovery termination manager (RTM)

713

Explanation

The error occurred during processing of an OPEN macro instruction for a data set on magnetic tape or on a direct access device. This system completion code is accompanied by message IEC148I. Refer to the explanation of message IEC148I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC148I.

Source

DFSMSdfp

714

Explanation

The error occurred during processing of a CLOSE macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC215I. Refer to the explanation of message IEC215I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC215I.

Source

DFSMSdfp

717

Explanation

The error occurred during processing of a BSAM CLOSE macro instruction with a TYPE=T operand for a data set on magnetic tape. This system completion code is accompanied by message IEC222I. Refer to the explanation of message IEC222I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC222I.

Source

DFSMSdfp

71A

Explanation

This system completion code is used to end a catalog address space service task when (1) the catalog address space is ending and restarting or (2) an abend has already occurred in a user address space during catalog processing. System completion code 71A is intended for catalog internal communication only, and no further diagnosis is necessary.

System action

None.

Source

DFSMSdfp

722

Explanation

One of the following output limits was exceeded:

- The output limit specified by the OUTLIM keyword on the SYSOUT DD statement
- The job output limit specified in the LINES and CARDS parameters of the JES2 JOBPARM statement
- The job output limit specified in the BYTES, CARDS, LINES, and PAGES parameters on the STANDARDS initialization statement or the JES3 MAIN statement

System action

The system ends processing of the job step.

Programmer response

Check for input/output (I/O) loops. Verify that the parameter value does not conflict with any installation requirements. If no errors are found, increase the value in the statement. Then run the job again.

Source

JES

72A

Explanation

During processing for an ATTACH macro, the system encountered an error.

Register 15 contains a hexadecimal reason code that explains the error:

Code
    Explanation

00

The system found an incorrect parameter address when processing the ATTACH parameter list.

04

An end-of-task exit routine (ETXR) address is incorrect because both of the following situations exist:

- The ETXR is already in effect as an ETXR for a subtask of the task
- The current ATTACH was issued in a different addressing mode than the ATTACH that created the matching ETXR

08

The length of the ATTACH parameter list is incorrect.

0C

The format number of the parameter list is incorrect.

10

A caller using the ATTACHX macro encountered nonzero access list entry tokens (ALETs). The ALETs should have been set to zero, but they were not.

14

A caller in access register ASC mode used the ATTACH macro instead of the ATTACHX macro.

18

An unauthorized caller issued ATTACH or ATTACHX with the DISP=RESET parameter. The caller must be running in supervisor state or with PSW key 0 - 7.

20

Unauthorized caller attempted ATTACH after task termination began.

1C

A caller issued ATTACHX with the KEY=NINE parameter, but the storage protection override facility is not installed. Only specify KEY=NINE when this facility (indicated by bit CVTOVER in mapping macro CVT being on) is installed.

System action

The system abnormally ends the program that issued the ATTACH macro. The system does not create the new subtask.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

This is probably an error in the program. Correct the error indicated by the reason code by changing the ATTACH macro or the environment in which the macro runs. Run the job again.

Source

Task management

730

Explanation

Global resource serialization encountered an unexpected error occurred during the processing of a DEQ macro.

Register 15 may contain a reason code associated with this error:

Code
    Explanation

xxxx0000

General module failure in DEQ processing.

xxxx0004

DEQ processing could not obtain storage in the home address space.

xxxx0005

DEQ processing could not obtain storage in the common area.

xxxx0006

DEQ processing could not obtain the ALET of the caller's primary address space.

xxxx0008

DEQ processing could not obtain the ALET of the GRS address space.

xxxx0009

DEQ processing could not obtain storage in the primary address space.

xxxx00FE

Abend in dynamic exit.

xxxxyyyy

The reason code could also be associated with an ISGENQ Request=Release. Note that the ABEND reason codes for ISGENQ correspond to the same reason codes listed in the Return and Reason Codes section of the ISGENQ macro in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*.

System action

The system writes a logrec data set error record. The system issues an ABEND dump.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Do the following:

1. Obtain the address of the DEQ parameter list from register 1 in the UNIQUE-3 column of the SVC 30 entry in the system trace.
2. Check the parameter list against the SVC 30 mapping. When analyzing the parameter list, remember that the unit control block (UCB) pointer, if present, is the address of a field that, in turn, contains the address of the UCB.

   If the parameter list contains incorrect data, continue diagnosis in the program that issued the macro.
3. For abend X'730' and reason code X'xxxx0009', determine or relieve the cause of the storage shortage and try the request again.

Source

Global resource serialization

737

Explanation

The error occurred at an end-of-volume or during allocation of a secondary quantity of direct access storage as requested in the SPACE parameter of the DD statement for the data set. This system completion code is accompanied by message IEC027I. Refer to the explanation of message IEC027I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the data set does exist on the specified volumes and the problem recurs, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC027I.

Source

DFSMSdfp

738

Explanation

Global resource serialization encountered an unexpected error during the processing of an ENQ macro instruction.

Register 15 may contain a reason code associated with this error:

Code
   Explanation

xxxx0000
   General module failure in ENQ processing.

xxxx0001

   An ISGENQ REQUEST=OBTAIN, RESERVEVOLUME=YES, SYNCHRES=YES, request resulted in device I/O error when performing the reserve device state transitioning. There is something wrong with the device rather than a GRS problem.

   Note that for ISGENQ SYNCHRES=SYSTEM RESERVEVOLUME=YES requests, the result of the device state transitioning is not provided back to the user.

xxxx0002
   RESERVE start processing failed.

xxxx0003
   Synchronous RESERVE done processing failed.

xxxx0004
   ENQ processing could not obtain storage in the home address space.

xxxx0005
   ENQ processing could not obtain storage in the common area.

xxxx0006
   ENQ processing could not obtain the ALET of the caller's primary address space.

xxxx0007
   ENQ processing could not obtain a DSQE to suspend a request for a RNL change.

xxxx0008
   ENQ processing could not obtain the ALET of the GRS address space.

xxxx0009
   ENQ processing could not obtain storage in the primary address space.

xxxx00FE
   Abend in dynamic exit.

xxxx00FF
   RESERVE processing detected an overflow when updating the reserve count.

xxxxyyyy

The reason code could also be associated with an ISGENQ Request=Obtain or Request=Change. Note that the ABEND reason codes for ISGENQ correspond to the same reason codes listed in the Return and Reason Codes section of the ISGENQ macro in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*.

Additionally, there are 738 abends that occur without reason codes. These include:

- If there are ENQs on resources and the number of jobs suspended exceeds 12,000 on a system during a resource name list (RNL) change. When the number reaches 800, the system cancels the RNL change.
- If there is a control block corruption in the GRS address space.

System action

The system writes a logrec data set error record and an ABEND dump.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the ABEND dump. If abend X'738' with reason code X'000000FF' persists, issue D GRS,DEV=xxxx (xxxx is the device number in hexadecimal) command to determine what are the reserve requests on the device.

For reason code X'00FF', do the following:

- Obtain the address of the parameter list from register 1 in the UNIQUE-3 column of the SVC X'30' or SVC X'38' entry in the system trace.
- Check the parameter list against the SVC X'30' or SVC X'38' mapping. When analyzing the parameter list, remember that the unit control block (UCB) pointer, if present, is the address of the field that contains the address of the UCB.

The UCB mapping will contain the device number that had more than 255 simultaneous RESERVE requests outstanding.

For all other reason codes, if the problem persists, search the problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center, providing the logrec data set error record and the ABEND dump.

Programmer response

Do the following:

1. Obtain the address of the ENQ parameter list from register 1 in the UNIQUE-3 column of the SVC X'38' entry in the system trace.
2. Check the parameter list against the SVC X'38' mapping. When analyzing the parameter list, remember that the unit control block (UCB) pointer, if present, is the address of a field that, in turn, contains the address of the UCB.

   If the parameter list contains incorrect data, continue diagnosis in the program that issued the macro.
3. For abend X'738' and reason code X'000000FF', none.
4. For abend X'738' and reason code X'xxxx0009', determine or relieve the cause of the storage shortage and try the request again.

Source

Global resource serialization

744

Explanation

A program check occurred during the processing of SYNADAF or SYNADRLS. This error could not be attributed to incorrect user input.

System action

The SYNADAF recovery routine tried to take a dump of LSQA and the user's region. The dump header includes the job name, step name, and procedure step name. See message IEC907I to determine whether the dump attempt was successful. A software error record was written to the logrec data set.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the program listing for the job, and the logrec data set error record.

Programmer response

Rerun the job step.

Source

DFSMSdfp

753

Explanation

System management facilities (SMF) detected an error during high-frequency throughput statistics (HFTS) processing in the IFAHFTSK task.

System action

A dump may be taken, and SMF attempts to retry processing. After a number of retries, SMF may stop using the IFAHFTSK task. SMF processing continues.

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

System management facilities (SMF)

75F

Explanation

The system resources manager (SRM) detected that the system timer queue element (TQE) exceeded the expected interval.

System action

SRM performs normal TQE expiration processing and requeues the TQE. The system abnormally ends the current task. The system writes messages and a logrec data set error record.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record.

Source

System resources manager (SRM)

76D

Explanation

The system found an error while processing an OUTADD or OUTDEL macro.

System action

The system does the following:

- The system writes a logrec data set error record.
- The system writes an SVC dump.
- The system abnormally ends the program that issued the macro, or returns to the macro caller with a return code of X'10'.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Check for incorrect input parameters passed to the OUTADD or OUTDEL macro. Submit the job again.

Source

Dynamic output

778

Explanation

A system error, uncorrectable machine error, or error that cannot be determined occurred under one of the following conditions:

- While the system was attempting to satisfy a request made through the STORAGE macro
- While the system was trying to process an RC, RU, VRC, or VRU form GETMAIN macro
- While the system was trying to process an RC or RU form FREEMAIN macro

A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Note: Some VSM return codes may be a half-word in length. In these cases, the high-order byte is the module id of the issuing module, and the low-order byte is the return code.

Module ID
    Module Name

1

IGGVVSMRT

3

IGVVSM24

4

IGVVSM31

6

IGVGSQA

7

IGVFSQA

A

IGVGLSQA

B

IGVFLSQA

C

IGVGAPVT

E

IGVFSP

44

IGVVSMRF

Code
   Explanation

01

While attempting to free storage, the system tried to release central storage backing global or local system queue area (SQA or LSQA) storage. A program page fixed the virtual storage. However, it is a basic property of the system that SQA and LSQA storage is page fixed.

02

While attempting to release an entire LSQA subpool, a service routine was called to free storage described by an allocated element (AE). The service routine returned a return code indicating that the storage is not described by an AE.

04

Status information indicates that the system has obtained a global lock in support of a request to release storage. However, when the system attempted to release the lock, the release request failed.

08

While attempting to obtain storage, a storage management service routine returned an incorrect return code to the virtual storage manager (VSM) interface module.

09

While getting or freeing storage in a local or global system queue area subpool, the service routine that builds double free elements (DFE) tried to place virtual storage on the DFE queue, but could not do so because the storage was described by another DFE already on the queue.

0C

While attempting to free storage, a storage management service routine returned an incorrect return code to the virtual storage manager (VSM) interface module.

10

While in recovery processing, the system detected a condition that is normally considered a user error. However, it is not likely that the error is a user error because recovery processing is in control.

14

VSM failed to backout the acquisition of a new address queue anchor table (AQAT) stack. In this case, the system issues abend X'778' only to record the error. The system continues processing upon retry from VSM recovery.

20
   The STORAGE service routine has failed unexpectedly. The failure is probably not a user error.

System action

The system writes a logrec data set error record. The system continues processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job again. If the error recurs, contact the system programmer.

Source

Virtual storage manager (VSM)

77D

Explanation

During processing of an EVENTS macro, the system found an error in the macro input parameters.

Register 15 contains a hexadecimal reason code that explains the error:

Code
   Explanation
04
   A caller issued an incompatible level of the EVENTS macro.
08
   Both WAIT=YES and WAIT=NO were specified.

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the assembly listing for the job.

Programmer response

Verify the EVENTS macro input parameters, the level of the macro, and the contents of register 0. Correct the error. Run the job again.

Source

Task management

7B0

Explanation

An error occurred during processing of the hardware instrumentation services (HIS). Register 15 contains a hexadecimal reason code describing the error. The first halfword of each reason code (*xxxx*) is set by the system

and contains internal information. The following reason codes only list the external errors. Any unlisted reason codes are internal and should be reported to the IBM Support Center.

Reason code
  Explanation

xxxx8001
  System storage is exhausted or not available.

  System Action: HIS does not perform the requested operation. The HIS address space is not initialized if system storage cannot be obtained.

  Programmer Response: Free up system storage and resubmit the HIS job.

xxxx8003
  It takes too long to write the sampling data.

  System Action: The data collection activities are stopped. HIS waits for the sample data to be written out. However, a preset wait time expires and not all data have been written.

  Programmer Response: Assign a sufficiently high dispatch priority to the HIS task, so that the sampling data can be written to the output in a timely manner. If the problem still exists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

xxxx8005
  The CALLRTM macro was issued against HIS main task.

  System Action: The HIS main task is being abnormally ended by calling the recovery termination manager (RTM). This is a generic abend reason code. The specific reason for the CALLRTM action can be found in the accompanying error messages, or SVC dumps (for unexpected errors).

  Programmer Response: Analyze the accompanying error messages for the cause. Resubmit the HIS job after the error has been corrected.

System action

The system abnormally ends the HIS address space.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Hardware instrumentation services (HIS).

7C4

Explanation

JES3 encountered an error when calling a JESXCF console-related function. The abend reason code identifies the specific error.

Code
  Explanation

01
  IATXCSIF SERVICE=XAUTH was passed a bad parameter list (service routine IATCS01). Analyze the parameter list to determine the problem.

03
  IATXCSIF SERVICE=CONSTYPE was passed a bad parameter list (service routine IATCS03). Analyze the parameter list to determine the problem.

04

During JES3 initialization processing, module IATINC2 detected an error while invoking an IXZXCNSV order. An IXZXCNSV ORDER(START) returned with a bad return code. The return and reason code for the IXZXCNSV macro invocation is within the IXZXCNSV parameter list. The parameter list is contained within the automatic area of IATCS04. The automatic area is pointed to by general register 8 at the time of failure. Use the return and reason codes to determine why JESXCF failed to process the START order successfully.

Note: One common cause of this error is an incorrect MSCOPE value that is passed in as an argument to the call. Run the command D XCF,COUPLE and ensure that the MAXSYSTEM value that is returned for the SYSPLEX couple data sets is greater than or equal to the total number of mains defined in the JES3 initialization deck.

05

During JES3 initialization processing, module IATINC2 detected an error while invoking an IXZXCNSV order. An IXZXCNSV ORDER(SYNCPT) returned with a bad return code. The return and reason code for the IXZXCNSV macro invocation is within the IXZXCNSV parameter list. The parameter list is contained within the automatic area of IATCS04. The automatic area is pointed to by general register 8 at the time of failure. Use the return and reason codes to determine why JESXCF failed to process the SYNCPT order successfully.

System action

For reason codes X'01' and X'03', varies with invoking function. For reason codes X'04' and X'05', JES3 initialization continues but the remote console function may be lost or produce unpredictable results.

System programmer response

To determine the error, refer to reason code descriptions.

Source

JES3

7C6

Explanation

The system encountered an error while processing the UCBPIN macro with the UNPIN option. A hexadecimal reason code in register 15 explains the error:

Code
    Explanation

01

The PTOKEN supplied as input on the UCBPIN macro request contains incorrect data.

02

The PTOKEN supplied as input on the UCBPIN macro request contains non-addressable data.

System action

The system abnormally ends the task, unless a recovery routine was provided to handle the interruption.

Programmer response

Check your programs for one of the following possible scenarios causing the abend:

- A task does the following:

  1. Pins a unit control block (UCB) without specifying the LASTING parameter on the UCBPIN macro.
  2. Schedules a service request block (SRB) to unpin the UCB.

Because the program did not specify LASTING on the UCBPIN macro, the task ends before the SRB is dispatched. When the task ends, the system unpins the UCB. When the SRB subsequently tries to unpin the same UCB, the system issues this abend.

- The PTOKEN specified on the UCBPIN macro is overlaid or altered by the application program.

Source

Input/output supervisor (IOS)

7C7

Explanation

The batch local shared resources (LSR) subsystem encountered an unexpected error. Register 15 contains diagnostic information in the format X'mm0002rr'. The mm field identifies the issuing module; the 02 identifies the batch LSR subcomponent of the callable service request (CSR) component. rr is the reason code associated with the abend.

System action

The subsystem schedules an SVC dump, and does not perform the request.

Operator response

Report the problem to the system programmer.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Report the diagnostic information in register 15.

Source

Callable Service Requests (CSR)

7D0

Explanation

An HSM CANCEL TCBADDRESS (tcbaddress) was issued to cancel an active task. The task is cancelled, and the ABEND code associated with the task cancellation is x'7D0' (decimal 2000).

System action

The HSM task is ended. No dump is taken.

System programmer response

None.

Programmer response

None.

Source

DFSMShsm

7FB

Explanation

An uncorrectable error occurred while one of the MVS-JES3 dynamic device reconfiguration (DDR) subsystem interface (SSI) routines was running.

System action

The system ends the reconfiguration.

Operator response

If you initiated the reconfiguration, retry it. If the system initiated the reconfiguration, notify the system programmer.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Dynamic device reconfiguration (DDR)

800

Explanation

During processing of an I/O request, execute channel program (EXCP) processing encountered an error. Most instances of the X'800' ABEND code have a reason code that explains the error. After the pages for a buffer were fixed, an LRA instruction for a page in the buffer got a nonzero condition code. This means that page is not valid.

Code
   Explanation

01

An error occurred during channel program validity check processing. Either an access protection error or a page fix error occurred when:

- The EXCP IDAW routine tried to access the IDAW using an incorrect storage protection key.
- The EXCP CCW validity check routine tried to access the virtual channel program using an incorrect storage protection key.
- The CCW channel program attempted to execute a restricted operation.
- The EXCP zHPF validity check routine tried to access the virtual channel program using an incorrect storage protection key.
- An error occurred during page-fix or page-unfix processing. A page-fix error can occur if the EXCP processor tries to fix pages that are not assigned to the caller's address space identifier (ASID).

Note: An access protection or page-fix error can occur when there is an error in the channel program. Correct the channel program.

02

System error. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

03

An error occurred during page-fix processing for a data extent block (DEB) for an EXCP V=R request.

04

A program issued SVC 114, the EXCPVR macro, but an error occurred during page-fix or page-unfix processing. A page-fix error can occur if the EXCP processor tries to fix pages that are not assigned to the caller's ASID.

05

The IOBE specified that 64-bit IDAWs are to be used for an EXCPVR request, but they are not supported by the hardware.

06

The IOBE specified that 64-bit IDAWs are to be used for an EXCPVR request but they are not supported by the device support code

07

The IOBE specified that format 1 CCWs are to be used for an EXCP request, but format 1 CCWs are only supported with EXCPVR requests.

08

The IOBE specified that MIDAWs are to be used for an EXCP request, but MIDAWs are only supported with EXCPVR requests.

09

The IOBE specified that this is a zHPF channel program request, but zHPF channel programs are only supported for EXCPVR and EXCP virtual requests for non-VIO data sets. They are not supported for VIO data sets or EXCP V=R requests.

0A

A zHPF channel program request specified a TCW that is not on a 64-byte boundary.

0B

A zHPF channel program request used a TIDAL to point to the TCCB.

0C

A zHPF channel program request specified a TCW that contained a non-zero value for the TSB pointer or the interrogate TCW pointer.

0D

A zHPF channel program for an EXCP virtual request specified a TCCB that crossed a page boundary.

0E

The number of virtual TIDAWs in a zHPF channel program has exceeded the maximum allowed value (65,536). This can occur due to an error in the channel program. For example:

- A virtual TIDAW in the list is linked to a previous virtual TIDAW causing a loop.
- An incorrect TIDAL virtual storage address is specified in the TCW.
- The last virtual TIDAW in the list does not have the last TIDAW in the list flag turned on.

System action

The system abnormally ends the current task. The system writes a logrec data set error record and issues a system dump.

System programmer response

In the dump, look at field TCBEXCPD at offset X'C0' in the task control block (TCB) for the current task. TCBEXCPD points to the EXCP debugging area (XDBA). The XDBA contains diagnostic data associated with the EXCP processor.

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record, the JCL for the job, and the SNAP dump.

Programmer response

Correct the problem that the reason code indicates.

If you get reason code 3 or 4, or if the error cannot be determined, run the job again, requesting an ABEND dump. Notify the system programmer.

Source

Execute channel program (EXCP)

804

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the GETMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
Explanation

04
There is not enough virtual system queue area (SQA) storage available to satisfy the request.

08
There is not enough virtual common service area (CSA) storage available to satisfy the request.

0C
There is not enough virtual local system queue area (LSQA) storage available to satisfy the request.

10
There is not enough virtual private area storage available to satisfy the request.

Note: This error can occur if an installation exit is requesting virtual storage from a V=R region before the system completely initializes the region.

14
A negative amount of storage was specified on the GETMAIN.

Note: If this error is detected, the calling program abnormally ends even though RC, EC, LC, or VC is specified for GETMAIN, or COND=YES is specified for STORAGE.

1C
During request processing, the system tried to get LSQA virtual storage for virtual storage management's (VSM) cell pool. There was not enough LSQA virtual storage available.

20
There is not enough virtual storage in the LSQA to build a new address queue anchor table (AQAT) stack.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Check for program errors that incorrectly modify the macro expansion. Correct them. If necessary, change the program to request less virtual storage.

Source

Virtual storage management (VSM)

805

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
Explanation

18

A negative amount of storage was specified on the FREEMAIN macro.

Note: If this error is detected, the calling program abnormally ends even though RC, EC, LC, or VC is specified for FREEMAIN.

1C

During request processing, the system tried to get local system queue area (LSQA) virtual storage for virtual storage management's (VSM) cell pool. There was not enough LSQA virtual storage available.

20

There is not enough virtual storage in the LSQA to build a new address queue anchor table (AQAT) stack.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Check for program errors that incorrectly modify the macro expansion. Correct them. If necessary, change the program to request less virtual storage.

Source

Virtual storage management (VSM)

806

Explanation

The supervisor, or the Supervisor Call (SVC) for the BLDL (build a directory entry list) macro, detected an error during the processing of a LINK(X), XCTL(X), ATTACH(X), or LOAD macro with the EP (entry point) or EPLOC (EP location (address)) operand.

The reason code in register 15 identifies the error:

Code
   Explanation

04

The system could not find the module, whose entry point is the value of the EP or EPLOC operand, in the indicated library (private library, job library, or link library). This situation can occur when LSEARCH=YES is specified on the macro and the limited library search fails to locate the module. For an alias name, ensure that the entry point attributes match that of the load module which was previously loaded (that is, authorization, RMODE, entry point displacement).

08

An uncorrectable I/O error occurred when the BLDL control program routine attempted to search the directory of the library that contained the program whose entry point was specified in the EP or EPLOC operand. This can occur if the specified library is an uninitialized partitioned data set (PDS).

An incorrect data extent block (DEB) has been detected by the BLDL control program. The DEB was built in other than protect key 0 through 7.

0C

The supervisor attempted to search a library for the program that the EP or EPLOC operand specifies and found that the library data control block (DCB) is not open.

10

A program issued a LOAD macro with the explicit load option, but there is no DCB parameter. For explicit loads, the program must supply the DCB parameter with the macro because the system searches for the module that the LOAD specifies only in the library that the DCB parameter specifies.

14

The system could not find the module, whose entry point is the value of an EP or EPLOC operand of a XCTL(X) macro, in the link pack area (LPA), which is where the module must be when the module is requested by an SVC routine.

18

An SVC routine issued a XCTL(X) macro for a module. The system tried to search the link pack area directory to find the module, but the directory had not as yet been built.

1C

The data control block (DCB), included as part of a LINK(X), LOAD, XCTL(X), or ATTACH(X) macro is incorrect.

2C

Internal error.

System action

The system issues a message depending on the reason code accompanying the abend:

Code
   Message

04
   CSV003I

08
   CSV004I

0C
   CSV005I

10
   CSV007I

14
   CSV008I

18
   CSV006I

1C
   CSV021I

The system issues an ABEND dump.

System programmer response

For reason code X'08', resubmit the job. Then have the operator enter a START GTF command specifying tape output, MODE=EXT and TIME=YES. Have the operator reply TRACE=IO in response to message AHL100A.

Format the output with the IPCS GTFTRACE subcommand.

If the error recurs and the program is not in error, see the system programmer response for messages in the job log.

For reason code X'2C' or if the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump and the source program listing for the job.

Programmer response

If the reason code is X'04', this is probably a user error. Make sure that the requesting program was not incorrectly modified. Make sure that the source library was indicated correctly and that the indicated library does contain the requested program. For an alias name, make sure the alias attributes match the attributes of the load module which was already loaded; check the library authorization, RMODE, and alias entry point displacement). Also, check that there are no duplicate aliases or related primary module names in the library

concatenation. MVS expects that all module names, and aliases, are unique across every library. Correct the error, and run the job step again.

If the reason code is X'14' or X'18', report this completion code to the system programmer.

If the reason code is X'0C' or a X'1C', it is a probable user error. Make sure that the DCB for the library is valid and open. Correct the error and run the job step again.

Source

Contents supervision (CSV)

80A

Explanation

An error occurred when the system tried to process an R form of the GETMAIN or FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
    Explanation

04
    There is not enough virtual system queue area (SQA) storage available to satisfy the request.

08
    There is not enough virtual common service area (CSA) storage available to satisfy the request.

0C
    There is not enough virtual local system queue area (LSQA) storage available to satisfy the request.

10
    There is not enough virtual private area storage available to satisfy the request.

    Note: This error can occur if an installation exit is requesting virtual storage from a V=R region before the system completely initializes the region.

1C
    During request processing, the system tried to get LSQA virtual storage for VSM's cell pool. There was not enough LSQA virtual storage available.

20
    There is not enough virtual storage in LSQA to build a new address queue anchor table (AQAT) stack.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

A complete dump is necessary to diagnose this out of storage condition. If no dump was produced, SLIPs should be set to obtain a dump on problem recurrence. An abend 878 can cause this same condition, so both SLIPs should be set as follows:

```
SLIP SET,COMP=80A,A=SVCD,SDATA=(ALLNUC,
 PSA,SQA,CSA,LPA,TRT,LSQA,RGN),END

SLIP SET,COMP=878,A=SVCD,SDATA=(ALLNUC,
 PSA,SQA,CSA,LPA,TRT,LSQA,RGN),END
```

Also, check for program errors that incorrectly modify the macro expansion. Correct them. If necessary, change the program to request less virtual storage. Further debugging information may be found in Informational APAR II05506.

Source

Virtual storage management (VSM)

80D

Explanation

A task was terminated due to an explicit CALLRTM invocation.

Code
    Explanation

1
    A FORCE TCB=tttttt command requested that the task be terminated.

System action

The system abnormally ends the task.

Source

Master Scheduler.

813

Explanation

The error occurred during processing of an OPEN macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC149I. Refer to the explanation of message IEC149I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC149I.

Source

DFSMSdfp

81A

Explanation

A request to abnormally end the catalog address space (CAS) mother task was issued either through the MODIFY CATALOG,RESTART command, or through catalog analysis task processing.

System action

The system re-drives all catalog requests in process.

Source

DFSMSdfp

822

Explanation

During initialization of a job, the initiator could not obtain a region required to run the step.

System action

The system issues message IEF085I when the job is an ordinary job. The system issues message IEF186I when the job is a deferred checkpoint restart.

Operator response

If more than one 822 abend is received for the same initiator, stop and restart the initiator in which the failing job ran.

System programmer response

A complete dump is necessary to diagnose this out of storage condition. If no dump was produced, a SLIP should be set to obtain a dump on problem recurrence.

```
SLIP SET,COMP=822,A=SVCD,SDATA=(ALLNUC,
 PSA,SQA,CSA,LPA,TRT,LSQA,RGN),END
```

Also, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Initiator/terminator

82A

Explanation

During processing of an ATTACH macro, the system found an incorrect subpool specified by an authorized task with the NSHSPV or the NSHSPL parameter. The authorized task is in system key, supervisor state, or authorized by the authorized program facility (APF).

System action

The system abnormally ends the program that issued the ATTACH macro. The system does not create the new subtask.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the assembly listing for the job.

Programmer response

Change the incorrect parameter. Only subpool 236 or 237 may be specified with the NSHSPV or the NSHSPL parameter. Correct the error. Run the job again.

Source

Task management

830

Explanation

Global resource serialization encountered an error during processing of a DEQ macro instruction.

The resource specified by the DEQ is the target of an outstanding ENQ macro instruction with the MASID and MTCB options specified. The task that issued the ENQ macro instruction with MASID and MTCB should issue the DEQ macro instruction before this task.

System action

The system issues an ABEND dump.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump.

Programmer response

Correct the program so that the DEQ macro instruction is issued only after DEQs have been issued for any outstanding MASID/MTCB ENQs. Recompile and run the job step again.

Source

Global resource serialization

837

Explanation

The error occurred at an end-of-volume for a sequential data set. This system completion code is accompanied by message IEC028I. Refer to the explanation of message IEC028I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC028I.

Source

DFSMSdfp

838

Explanation

The system denied an ENQ macro request because of serious damage to the ENQ/DEQ control blocks.

System action

The system issues an ABEND dump.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Resubmit the job after the system has been re-IPLed. Do the following:

1. Obtain the address of the DEQ parameter list from register 1 in the UNIQUE-3 column of the SVC 30 or SVC 38 entry in the system trace.
2. Check the parameter list against the SVC 30 or 38 mapping. When analyzing the parameter list, remember that the unit control block (UCB) pointer, if present, is the address of a field that, in turn, contains the address of the UCB.

   If the parameter list contains incorrect data, continue diagnosis in the program that issued the macro.

Source

Global resource serialization

85F

Explanation

The channel path measurement facility (CPMF) is not available because of a hardware error.

Code
  Explanation

4

  A restart was not attempted either because the restart threshold was exceeded or because the hardware error was not recoverable.

8

  A restart was attempted but was not successful.

System action

The system issues message IRA604I in conjunction with this system completion code.

System programmer response

Correlate this event to disruptions in CPMF data collection. A CPMF restart will be attempted at the next system IPL. See further documentation regarding CPMF, see IRACPMB in *z/OS MVS Data Areas* in the z/OS Internet library (www.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosInternetLibrary).

Source

System resource manager (SRM)

878

Explanation

The error occurred when the system was trying to do one of the following:

- Satisfy a request made through the STORAGE macro
- Process an RU or VRU form of the GETMAIN macro
- Process an RU form of the FREEMAIN macro

A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
   Explanation

04
   There is not enough virtual system queue area (SQA) storage available to satisfy the request.

08
   There is not enough virtual common service area (CSA) storage available to satisfy the request.

0C
   There is not enough virtual local system queue area (LSQA) storage available to satisfy the request.

10
   There is not enough virtual private area storage available to satisfy the request. This is due to one of the following:

   - A program is requesting virtual storage, but not subsequently freeing the storage.
   - The region size specified is too small.
   - An installation exit is requesting virtual storage from a V=R region before initialization of the region has completed.

14
   A negative amount of storage was specified on a GETMAIN macro.

   Note: If this error is detected, the calling program abnormally ends even though RC, EC, LC, or VC is specified for GETMAIN, or COND=YES is specified for STORAGE.

18
   A negative amount of storage was specified on the FREEMAIN or STORAGE macro.

   Note: If this error is detected, the calling program abnormally ends even though RC, EC, LC, or VC is specified for FREEMAIN, or COND=YES is specified for STORAGE.

1C
   During request processing, the system tried to get LSQA virtual storage for virtual storage management's (VSM) cell pool. There was not enough LSQA virtual storage available.

20
   There is not enough virtual storage in the LSQA to build a new address queue anchor table (AQAT) stack.

24
   A GETMAIN or STORAGE OBTAIN request with the LOC=EXPLICIT keyword specified failed for one of the following reasons:

   - Part of the requested area was already allocated.
   - Storage was already allocated in the same page as this request, but one of the following characteristics of the storage was different:
     – The subpool
     – The key
     – Central storage backing

28
   A GETMAIN or STORAGE OBTAIN request with the LOC=EXPLICIT keyword specified failed because part of the requested area exceeds the bounds of the region.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

A complete dump is necessary to diagnose this out of storage condition. If no dump was produced, SLIPs should be set to obtain a dump on problem recurrence. Further debugging information may be found in Informational APAR II05506. An abend 80A can cause this same condition, so both SLIPs should be set as follows:

```
SLIP SET,COMP=878,A=SVCD,SDATA=(ALLNUC,
 PSA,SQA,CSA,LPA,TRT,LSQA,RGN),END

SLIP SET,COMP=80A,A=SVCD,SDATA=(ALLNUC,
 PSA,SQA,CSA,LPA,TRT,LSQA,RGN),END
```

Also, depending on the reason code, do one of the following:

10

Try increasing the region size specified in the region parameter on the JOB or EXEC statement in the JCL for the job. However, if the cause of the problem is actually that a program is requesting virtual storage and not freeing it, the abend will recur when the program uses the virtual storage in the larger region.

24

Ensure that the calling program specifies the following correctly:

- The storage address on the INADDR keyword.
- The length on the LENGTH keyword for the STORAGE macro or the LV keyword for the GETMAIN macro.
- The desired subpool or key.
- The target address space for the STORAGE macro.
- The TCB address for the STORAGE macro.

Make sure also that the area of storage you are requesting is completely free. If part of the area requested is in a page that is already allocated, make sure that the central storage backing specified on the LOC=EXPLICIT keyword matches that of the allocated storage.

28

Ensure that the calling program specifies the following correctly:

- The storage address on the INADDR keyword.
- The length on the LENGTH keyword for the STORAGE macro or the LV keyword for the GETMAIN macro.

  Make sure also that the calling program correctly specifies the value on the JCL REGION keyword. If the JCL REGION value is not large enough for the requested storage area, increase the size of the JCL REGION and resubmit the job.

04-0C, 14-20

Check for program errors that incorrectly modify the macro expansion and correct them. If necessary, change the program to request less virtual storage.

Source

Virtual storage management (VSM)

87D

Explanation

During processing of an EVENTS macro, the system found that the EVENTS table specified in the event control block (ECB) had no entries available for the posted ECB address.

System action

The system abnormally ends the program that issued the EVENTS macro.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the program listing and the assembly listing associated with the job.

Programmer response

Ensure that the EVENTS table is large enough to contain entries for all ECBs that can be posted to it. Correct the error. Run the job again.

Source

Task management

8C3

Explanation

An abnormal end occurred in NetSpool. This system completion code and a NetSpool abend reason code are provided at the time of the dump. See *z/OS Infoprint Server Messages and Diagnosis* for an explanation of the abend reason code.

Programmer response

If the error recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

8C4

Explanation

During the processing of an automatic restart manager function, JES detected an error.

Register 15 contains a hexadecimal reason code that explains the error:

Code
    Explanation

04
    Unexpected return code from IEFSSREQ macro.

System action

The system issues an SVC dump.

Programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump.

Source

Functional subsystem interface (FSI)

8C5

Explanation

The Subsystem Interface (SSI) encountered a system or user error when either initializing dynamic SSI services or responding to a dynamic SSI service request issued through the IEFSSI or IEFSSVT macros.

Register 15 contains a hexadecimal reason code that explains the error:

Code
 Explanation

01
 The system was unable to obtain storage for the subsystem vector table (SSVT).

03
 The system was unable to establish a PC entry table to support internal SSI services.

04
 The system was unable to establish the PC entry table to support the dynamic SSI services.

05
 An invalid request type was passed to an internal SSI or dynamic SSI service.

06
 The system was unable to obtain storage for internal SSI control structures.

07
 The MSTR subsystem could not be initialized.

08
 An SSI routine was unable to establish an ESTAE.

10
 An unauthorized caller requested a dynamic SSI service. All dynamic SSI services with the exception of the IEFSSI REQUEST=QUERY require the caller to be authorized.

11
 An SRB mode caller requested a dynamic SSI service

12
 A caller holding a lock requested a dynamic SSI service.

13
 An unexpected error was encountered in validating the SSOB and SSIB provided as input to a subsystem function request.

14
 An unauthorized caller of the IEFSSI query service requested that the information be returned in storage obtained from an authorized subpool.

15
 A caller in cross-memory mode requested a dynamic SSI service.

System action

The system action depends on the reason code:

Code
 System Action

01, 03, 04, 06, 07
 The system requests a dump and enters a permanent wait state (either code 00B or 00D).

05, 08, 13
 A dump is produced. If these reason codes occurred during system initialization, the system may enter a permanent wait state.

10, 11, 12, 14, 15
 A user error occurred. A dump is not produced.

Operator response

If the system enters a permanent wait state, reIPL the system.

System programmer response

Analyze the dump to determine why the system was unable to either obtain storage, establish a PC entry table or establish an ESTAE.

Programmer response

The programmer response depends on the reason code:

Code
  Programmer Response

10, 11, 12, 15
  Revise the program issuing either the IEFSSI macro or the IEFSSVT macro to ensure that the correct environment is established. Requestors must be unlocked, in task mode, may not be in cross-memory mode, and must be authorized for all requests other than IEFSSI REQUEST=QUERY.

14
  Change the requested subpool to an unauthorized subpool.

Source

Subsystem Interface (SSI)

8C6

Explanation

A program attempted to free a CIB control block that was not properly chained for execution.

System action

The attempt is rejected, and the CIB is not freed.

System programmer response

Using the information that was dumped for the abend (CIB and associated CSCB), identify the program that attempted to free the CIB. Change the program to avoid chaining a CIB that is not valid. IBM recommends using the MODIFY macro for this purpose.

Source

Master Scheduler Address Space/SVC 34

8C7

Explanation

MVS message service (MMS) processing failed. Due to the error, MMS could not issue an error message to explain the error. A hexadecimal reason code in register 15 explains the reason that MMS could not issue the error message.

System action

The system abnormally ends all MMS processing with completion code X'8C7'. MMS functions are not available. The system writes an SVC dump.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, enter the IPCS VERBEXIT MMSDATA subcommand to format the SVC dump. Contact the IBM Support Center. Provide the VERBEXIT MMSDATA output. Provide the reason code associated with the X'8C7' abend code.

Source

MVS message service (MMS)

8FB

Explanation

One of the following routines detected an error in a subtask:

- Converter/interpreter (C/I)
- Locate
- Main device scheduling (MDS)
- JES3 interface

A hexadecimal reason code in register 15 explains the error.

Code
  Explanation

01

Module IATIIPL detected a subsystem interface error during storage management subsystem (SMS) pre-locate catalog orientation processing. Register 2 contains the subsystem interface return code.

02

Storage management subsystem (SMS) pre-locate catalog orientation processing returned an unexpected return or reason code to module IATIIPL. Register 2 contains the return code from that processing, and register 3 contains the reason code.

03

Module IATLVLC detected a subsystem interface error during storage management subsystem (SMS) pre-locate catalog orientation processing. Register 2 contains the subsystem interface return code.

05

While creating the system work area (SWA), module IATIIII detected an error. The error occurred when the module was either reading or mapping SWA control blocks.

06

Module IATDMGR detected an error in a JES3 user spool access method (USAM) POINT or WRITE operation. Register 2 contains the return code from the failing operation.

07

Module IATDMGR detected an error during the initialization of either a data set status block (DSS) or a data set block (DSB). Register 2 contains the return code from the failing operation.

08

Module IATDMGR detected a user spool access method (USAM) buffer initialization error. Register 2 contains the return code from the failing operation.

09

While incrementing the JCL statement count, module IATIICX detected an overflow condition.

0A

Module IATLVLC detected a subsystem interface error during storage management subsystem (SMS) VOLREF services processing. Register 2 contains the subsystem interface return code.

0C

Module IATMDST detected a subsystem interface error during storage management subsystem (SMS) system select processing. Register 2 contains the subsystem interface return code.

0D

SMS system select processing returned an unexpected return or reason code to module IATMDST. Register 2 contains the return code from that processing, and register 3 contains the reason code.

0E

Module IATSISA detected an error during a PUT operation. Register 2 contains the return code from that operation.

0F

The reader/interpreter passed an incorrect return code to JES3.

10

Module IATIISP detected an error during a user spool access method (USAM) PUT operation.

11

Module IATDMGR detected an incorrect function code.

12

Module IATDMGR detected an error in the block spooler. Register 2 contains the return code from the block spooler.

13

Module IATLVLC detected an error in the block spooler. Register 2 contains the return code from the block spooler.

14

Module IATMDST detected an error in the block spooler. Register 2 contains the return code from the block spooler.

15

Module IATSISA detected an error during a GET operation. Register 2 contains the return code from that operation.

16

Module IATLVLC detected that the ESTAE service could not set up a recovery environment. Register 2 contains the return code from that service.

17

Module IATMDST could not find a job data set (JDS) entry.

18

Module IATLVLC either could not find a locate request table (LVS), or encountered an incorrect LVS entry.

19

Module IATIIST detected an error during a PUT operation.

1A

Storage management subsystem (SMS) VOLREF services returned incorrect information to module IATLVLC.

1C

Catalog management (SVC 26) returned incorrect information to module IATLVLC.

1D

Module IATIIPL detected that the ESTAE service could not set up a recovery environment. Register 2 contains the return code from that service.

1E

Invalid ENF parameter list passed by SMS.

1F

Invalid LRSIZE, larger than allowed maximum issued by IATLVLC.

20

Module IATIICX received a return code of 4 from IATUX03 indicating that the JCL limit has been exceeded.

21

Module IATIIST detected a zero for the number of systems eligible to access SMS resources (field SSSABNUM in IEFSSSA).

22

Module IATMDST detected a zero for the number of systems eligible to access SMS resources (field SSSACNUM in IEFSSSA).

23

Mailbox build failed for the WLM subtask.

24

Bad sampling data was received by the WLM subtask.

25

IATIIST subtask abend.

5E

OAM or SMS subsystem called return code nonzero.

5F

OAM or SMS subsystem called SSOB return code nonzero.

60

LIBSERV FUNC=build error.

61

LIBSERV FUNC=call error.

62

LIBSERV FUNC=delete error.

63

SMS subsystem called invalid subfunction.

64

UCBLOOK failure.

System action

The system action depends on the abend reason code:

Code

    System Action

01, 02, 1D

The system ends the generalized subtask; when the subtask's ESTAE gets control, the system writes a dump. Then, with a DM146 abend, the system fails the converter/interpreter or postscan dynamic support program (DSP) that was using the subtask. Also, the system cancels with print the job that the DSP was processing.

03, 04, 06, 07, 08, 0A, 0B, 13, 18, 1A, 1B, 1C

The system ends the locate subtask; when the subtask's ESTAE gets control, the system produces a dump. Then, the system cancels with print the job that the subtask was processing.

05

The system ends the address space; when the ESTAE gets control, the system produces a dump. Then, the system cancels with print the job that was processing.

09, 10, 19, 21

The system ends the converter/interpreter (C/I) subtask. When the subtask's ESTAE receives control, the system produces a dump. Then, the system cancels and prints the job that the subtask was processing and reinstates the subtask.

0C, 0D, 14, 17, 22

The system ends the main device scheduling (MDS) subtask. When the subtask's ESTAE gets control, the system produces a dump. Then, the system either cancels and prints the job that the subtask was processing or places it on the MDS error queue. The system reinstates the subtask.

0E, 11, 12, 15

The system ends the subtask; when the subtask's ESTAE gets control, the system writes a dump. Then, the system cancels with print the job that the subtask was processing.

0F

The system ends the job and continues other processing.

16

The system ends the locate subtask.

Operator response

Save all associated print output, and notify the system programmer.

System programmer response

Obtain the JCL for the job.

For a return code of X'05', rerun the job with the DEBUG=ALL option after a //* PROCESS CI JECL statement.

For a return code of X'21', examine the IEFSSSA data area and determine the reason for the zero in the SSSABNUM field. Also, examine the SSSABSAC and SSSABSAR fields (failing service return code and reason code). Notify SMS support.

For return code X'22', examine IEFSSSA and determine the reason for the zero in the SSSACNUM field. Also, examine the SSSACSAC and SSSACSAR fields (failing service return code and reason code). Notify SMS support.

For all other return codes, examine the print output to find and correct the error.

If the problem occurs in JES3 and the return code is an X'05' you should:

- Obtain a stand-alone dump of the system by specifying DUMP=PRDUMP on the OPTIONS statement in the initialization deck.
- Save the hardcopy log
- Provide a listing of the initialization deck (JESOUT)
- Determine the MVS and JES3 PTF levels
- Rerun the job with //*PROCESS CBPRINT and save the output after interpreter DSP.

If the problem is not for X'05', check the JESYSMSG data set for error indications.

Source

JES3

905

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the FREEMAIN macro.

A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code

    Explanation

04

The virtual storage area that the FREEMAIN macro tried to release is not on a double word boundary.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Check for program errors that incorrectly modify the macro expansion. Correct them. If necessary, change the program to request less virtual storage.

Source

Virtual storage manager (VSM)

906

Explanation

A reason code in register 15 identifies the error:

Code
 Explanation

04
 An error was detected during the processing of a LOAD macro. The LLE (load list element) count (responsibility count), indicating the number of load requests for a module, is greater than the allowable maximum, which is 32767.

08
 An error was detected during processing of a LINK(X), XCTL(X), ATTACH(X), or LOAD macro. The CDE (contents directory element) use count, indicating the number of LINK(X), XCTL(X), ATTACH(X), or LOAD requests for a module, is greater than the allowable maximum, which is 32767.

0C
 The failing program has issued an XCTL(X) request, but the program has an outstanding program linkage that has not completed properly. This commonly occurs when a program issues a program call (PC) and then issues an XCTL(X) request before issuing a program return (PR).

100
 An error was detected during processing of a CSVINFO request. It was determined that an Extent List (XTLST) control block contained incorrect information.

System action

For reason codes X'04' X'08', the task ends unless ERRET is specified on the macro. For reason codes X'0C' and X'100', the request is terminated. The system issues a message depending on the reason code accompanying the abend:

Code
 Message/ABEND Type

04
 CSV001I/ABDUMP

08
 CSV002I/ABDUMP

0C
 CSV030I/ABDUMP

100
 /SVCDUMP

System programmer response

For reason code X'100', search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and logrec entries associated with with abend. For the other reason codes, if the error recurs and the program is not in error, see the system programmer response for the messages in the job log.

Programmer response

Check for program errors, such as endless loops, that cause macros to be run too often. Ensure that the program logic does not permit improper program linkage. After making corrections, recompile and run the job step again.

Source

Contents supervision (CSV)

90A

Explanation

An error occurred when the system tried to process an R form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
    Explanation

04
    The virtual storage area that the FREEMAIN macro tried to release is not on a doubleword boundary.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Check for program errors that incorrectly modify the macro expansion. Correct them. If necessary, change the program to request less virtual storage.

Source

Virtual storage manager (VSM)

90D

Explanation

This system completion code is used by end-of-task processing. When it causes memory termination, this code appears in the ASCBMCC field of the address space control block (ASCB) of the terminated address space and in the IEF402I message. A hexadecimal reason code that explains the error also appears in the IEF402I message. The reason codes are explained as follows:

Code
    Explanation

0
    The address space is being terminated because an end-of-task resource manager was unable to complete its function.

System action

For reason codes that indicate that the address space is being terminated, the system issues the IEF402I message.

System programmer response

An end-of-task resource manager may issue this system completion code to protect the system by terminating the current address space (and driving memory termination resource managers) if it is unable to complete its function because of an environmental issue, such as being unable to obtain the necessary storage in the address space. Look for messages, dumps, or other indications of problems in the failing address space.

Programmer response

None.

Source

Recovery termination manager (RTM), Cross-system extended services (XES)

913

Explanation

The error occurred during processing of an OPEN macro instruction. This system completion code is accompanied by message IEC150I. Refer to the explanation of message IEC150I for complete information about the task that was ended and for an explanation of the return code in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated in message IEC150I.

Source

DFSMSdfp

91A

Explanation

A request to abnormally end the catalog address space (CAS) service task was issued either through the MODIFY CATALOG,RESTART command, or through catalog analysis task processing.

System action

The system re-drives the catalog request currently in process.

Source

DFSMSdfp

922

Explanation

During initialization of a job step, after all of the job step's data sets had been allocated, or during termination of a job step, before any of the job step's data sets had been unallocated, the initiator's ESTAE routine was invoked for one of the following conditions:

- An abend
- A program check
- Depression of the RESTART key
- A machine check

System action

The system ends the job step and writes an SVC dump unless the ESTAE routine was entered recursively or was percolated to. The system writes a logrec data set error record, except in the case of an OPEN failure. Job processing continues, subject to normal conditional processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center, providing the SVC dump and logrec data set error records.

Programmer response

Submit the job again.

Source

Initiator/terminator

Module

IEFIB621

92A

Explanation

During processing of an ATTACH macro, an environmental error occurred that was not caused by the current task.

Register 15 contains a hexadecimal reason code that explains the error:

Code
  Explanation

00
  An error occurred in the extended subtask ABEND exit (ESTAE) SVC issued to establish a recovery environment for ATTACH processing.

04
  Storage in subpool 255 was not available for the new supervisor request block (SVRB), subpool queue elements (SPQEs), and parameter save area.

08
  An error occurred in SVC 60 (STAI/ESTAI) issued to propagate STAI/ESTAI storage control blocks (SCBs) from the current task control block (TCB) to the new TCB, and to build a new SCB if STAI or ESTAI was specified on the ATTACH macro. The SVC 60 was a STAI entry if the STAI keyword was specified on the ATTACH macro; otherwise, it is an ESTAI entry.

0C
  An error occurred when the system tried to obtain the local lock.

10
  An error occurred when SETLOCK was entered to release the local lock.

14
  The parameter list passed to ATTACH processing contains an error.

18
  ATTACH is unable to obtain a linkage stack for the task.

System action

The system abnormally ends the program that issued the ATTACH macro. The system does not create the new subtask.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job again. If the error recurs, notify the system programmer.

Source

Task management

930

Explanation

A job issued an DEQ macro instruction that included the TCB operand. However, the TCB operand identified a task that was ending.

System action

The system writes a logrec data set error record and issues an ABEND dump.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Determine why the task identified in the TCB operand was terminated. Correct that error and resubmit the job that caused the abend.

Source

Global resource serialization

937

Explanation

The error occurred at an end-of-volume for a checkpoint data set or a RACF-protected data set. This system completion code is accompanied by message IEC029I. Refer to the explanation of message IEC029I for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

See the system programmer response for message IEC029I.

Source

Resource Access Control Facility (RACF)

938

Explanation

The job issued an ENQ macro instruction that included the TCB operand. However, the TCB operand identified a task that was in the process of ending.

System action

The system records the error in logrec data set and issues an ABEND dump.

System programmer response

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Programmer response

Determine why the task identified in the TCB operand ended. Correct that error and resubmit the job that caused the abend.

Source

Global resource serialization

978

Explanation

An error occurred when the system tried to process one of the following:

- A STORAGE macro
- An RC or RU form of the FREEMAIN macro

A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
    Explanation

04
    The virtual storage area that the FREEMAIN macro tried to release is not on a doubleword boundary.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Check for program errors that incorrectly modify the macro expansion. Correct them. If necessary, change the program to request less virtual storage.

Source

Virtual storage manager (VSM)

9C4

Explanation

An abend has been issued by the system data mover (SDM) function.

Register 15 contains one of the following reason codes. You may also receive message ANTX5000E, ANTX5001E, or ANTX5002E with this abend. These messages can contain information that is related to this abend code.

Code
    Explanation

4

    The ANTMAIN address space has restarted due to an operator-initiated CANCEL command, or due to an error condition that ended the session. The session can be a concurrent copy, FlashCopy®, XRC, or PPRC session. Any program that attempts to access the ANTMAIN address space is ended with this abend condition. Check the results of the ended jobs to determine if data movement was successful before the jobs ended. Resubmit the job if data movement was unsuccessful.

8-100

The XRC function has detected an error that requires an abend dump to isolate the cause. The reason codes contain specific diagnostic information to help isolate the specific error condition. In all cases, data on the secondary volumes is preserved at a known consistent state as reported by XRC messages. A dump is generated only if the XRCTRAP function is ON.

The following are some of the more common reason codes for configuration ration-type errors that can produce 9C4 abend dumps:

10

A record from the storage control cannot be found.

2C

An invalid track format error has occurred when writing to a secondary volume.

30
34

The data mover has not read from the storage control for at least the timeout interval specified. The storage control session has been canceled; all XRC volume pairs associated with this storage control must be reinitialized.

38

A storage control logic error has occurred.

54

A nonstandard Record 0 has been detected on the primary volume.

101-112

A logic error occurred with XRC remote pair FlashCopy. Both a logrec entry and a non-disruptive state save on the storage controller were taken. In all cases, data on the secondary volumes is preserved at a known consistent state as reported by XRC messages. A dump is generated only if the XRCTRAP function is on.

Note that XRC has suspended, so, if requested, the tracks associated with FlashCopy are automatically resynchronized during normal volume resynchronization. The FlashCopy at the secondary does not occur, as resynchronization copying the primary tracks is done instead.

200-250

The system data mover (SDM) detected an error in a function necessary to enable XRC to protect against dynamic I/O configurations. Because of this error, SDM is unable to protect against dynamic deletes of XRC primaries, secondaries, and swaps devices. Accompanying message ANTX8061E message indicates the reason for this abend code. If the reason associated with ANTX8061E is not sufficient to identify and resolve the problem, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

The reason codes indicate why the abend was generated. In every case, data on the secondary volumes is left in a consistent, recoverable state. The following are some of the reasons why a 9C4 can occur:

- A volume has been initialized using an XADDPAIR command with NOCOPY specified, but the volume contents were not identical.
- The secondary volume has been updated by a function other than the data mover. The secondary volume must be dedicated to the data mover for all update operations. Other functions may read the volume, but only the data mover can make updates.
- Multiple data movers are updating the secondary volume. It is possible that more than one data mover is copying data to the same secondary volume. Only one data mover may have ownership of a secondary volume.
- I/O has stopped in a subsystem. I/O may not be active on a primary storage control, secondary volumes, or journal volumes. Activity may be stopped because the subsystem is not accepting I/Os or because of a line failure in a channel extended environment.
- A session has been restarted after maintenance has been applied to the data mover system. If incompatibilities exist in the journal, state, or control data sets, a 9C4 abend with reason codes 10 or 2C may result. Ensure that the data sets have been properly allocated before starting or restarting the data mover.

System action

The system abnormally ends the task that encountered the abend condition.

System programmer response

Register 15 contains the nonzero return code that describes the reason the abend was issued. The abend error may be the result of a hardware- or software-detected error. Search problem reporting data bases for a solution. If no solution exists, contact the IBM Support Center. Provide the console log, the dump data set, and the LOGREC data set error record.

The data mover issues the 9C4 abend to freeze the environment for problem diagnosis, and to ensure that the error does not result in data integrity errors.

In most cases, XRC suspends one or more volume pairs as a result of the error and the error level specified. You can usually issue an XADDPAIR command to return the volume pairs to the session, and then resynchronize them. In some cases, you may need to issue the MODIFY ANTAS001,RESTART command, followed by XADDPAIR commands, to rebuild the failed data mover sessions.

Source

System data mover (ANT).

9C5

Explanation

A NetView® RODM abend occurred. The following reason codes describe the error:

Code
    Explanation

0

RODM has cancelled the transaction based on the reply to message EKG132D. Message EKG1326D is issued when there are still transactions running in RODM during checkpoint or RODM termination.

System Action: Task is cancelled.

33

A RODM internal error has occurred.

System Action: Task is ended.

System Programmer Response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

9C6

Explanation

An error occurred when a task or SRB routine called a global resource serialization latch manager service.

Note:

1. In the description of this system code, the term *requestor* refers to a task or SRB routine that calls a latch manager callable service to:

   - Request ownership of a latch, or
   - Release a granted or pending request to obtain ownership of a latch.

2. Equate symbols defined in the latch manager IDFs are followed by their numeric equivalents; you may specify either when coding calls to Latch_Obtain. For example, "ISGLOBT_COND (value of 1)" indicates the equate symbol ISGLOBT_COND and its associated value, 1.

Source

Global resource serialization

General purpose register (GPR) 15 contains a hexadecimal reason code that explains the error. *xxxx* indicates internal information. If

Code
  Explanation

xxxxyyyy
  Some of the 9C6 reason codes indicate internal errors. If the high order bit is on in the second half of the reason code (xxxx8yyy, for example), or if the reason code is not included in the following list, the error is an internal component error. Search problem data bases for any matching problems. If none found, report this problem to your IBM support center.

*xxxx***0001**
  A caller of a latch manager service specified an incorrect value on the latch_set_token parameter.

  System Action: The latch manager does not perform the requested operation.

  Programmer Response: Specify a latch_set_token value that was returned by a previous call to the Latch_Create service.

*xxxx***0002**
  One of the following occurred:

  • The caller of the Latch_Create service specified an incorrect value on the number_of_latches parameter. This value must be a non-zero fullword integer.

  • The caller of the Latch_Obtain service specified an incorrect value on the latch_number parameter. The latch_number must be a fullword integer that is in the range between 0 and the number of latches in the associated latch set minus one.

  System Action: If the error occurred when calling the Latch_Create service, the system does not create the latch set. If the error occurred when calling the Latch_Obtain service, the latch manager does not obtain the latch.

  Programmer Response:

  • If the error occurred on a call to the Latch_Create service, specify a non-zero fullword integer on the number_of_latches parameter.

  • If the error occurred on a call to the Latch_Obtain service, specify a value on the latch_number parameter in the range between 0 and the number of latches specified on the call to the Latch_Create service.

*xxxx***0003**
  A caller of the Latch_Obtain service specified an incorrect value on the obtain_option parameter. The obtain_option parameter must contain one of the following values:

  • ISGLOBT_SYNC (value of 0)

  • ISGLOBT_COND (value of 1)

  • ISGLOBT_ASYNC_ECB (value of 2)

  System Action: The latch manager does not obtain the latch.

  Programmer Response: On the call to the Latch_Obtain service, specify one of the values listed on the obtain_option parameter.

*xxxx***0004**
  A caller of the Latch_Release service specified an incorrect value on the release_option parameter. The release_option must be ISGLREL_UNCOND (value of 0) or ISGLREL_COND (value of 1).

  System Action: The latch manager does not release the latch.

  Programmer Response: On the call to the Latch_Release service, specify ISGLREL_UNCOND (value of 0) or ISGLOBT_COND (value of 1) on the release_option parameter.

***xxxx*0005**

A caller of a latch manager service specified an incorrect requestor_ID of all binary zeroes. The requestor_ID can be any value except all binary zeroes.

System Action: The latch manager does not perform the requested operation.

Programmer Response: Specify a requestor_ID that is *not* all binary zeroes.

***xxxx*0006**

A caller of the Latch_Obtain service specified an obtain_option of ISGLOBT_ASYNC_ECB and an ECB_address that was all binary zeroes. When the obtain_option is ISGLOBT_ASYNC_ECB, the ECB_address must be a non-zero address that points to an event control block (ECB).

System Action: The latch manager does not obtain the latch.

Programmer Response: Specify an ECB_address that points to a valid ECB.

***xxxx*0007**

A caller of the Latch_Release service specified a release_option of ISGLREL_UNCOND (value of 0). The latch manager did not grant ownership of the latch to the original caller of the Latch_Obtain service. The system did not post the ECB specified on the original call to Latch_Obtain.

System Action: The latch manager does not release the latch.

Programmer Response: Wait until the system posts an ECB to indicate that the caller of Latch_Obtain has obtained the latch. Then call the Latch_Release service to release the latch.

***xxxx*0008**

A requestor called the Latch_Release service before the original caller of the Latch_Obtain service could obtain the latch.

System Action: The latch manager does not obtain or release the latch. The Latch_Manager returns a return code of 0 to the caller of Latch_Release. The system passes control to the recovery routine for the caller of Latch_Obtain.

Programmer Response: Check the application code to ensure that the correct latch token is passed to the caller of the Latch_Release service.

***xxxx*0009**

A caller of the Latch_Release service specified a release_option of ISGLREL_UNCOND (value of 0). The latch manager did not grant ownership of the latch to the original caller of the Latch_Obtain service because the original caller is suspended while waiting to obtain the latch.

System Action: The latch manager does not release the latch.

Programmer Response: Check the application code to ensure that the correct latch token is passed to the caller of the Latch_Release service.

***xxxx*000A**

A caller of the Latch_Release service specified a latch_token that:

- Did not match a latch_token returned from the original call to the Latch_Obtain service, or
- Matched a latch_token for a latch that was previously released or purged.

System Action: The latch manager does not release the latch.

Programmer Response: On the call to Latch_Release, specify a latch_token that matches a valid latch_token.

***xxxx*000B**

A requestor called a latch manager service while disabled for I/O and external interrupts.

System Action: The latch manager might not perform the requested operation.

Programmer Response: Call the latch manager service while enabled for I/O or external interrupts.

xxxx000C

A requester called a 31-bit latch manager service while the latch manager service is in a 24-bit or 64-bit addressing mode.

System Action: The latch manager does not perform the requested operation.

Programmer Response: Call the latch manager service again while running in a 31-bit addressing mode.

xxxx000D

A requestor called a latch manager service while holding a lock.

System Action: The latch manager might not perform the requested operation.

Programmer Response: Issue the SETLOCK RELEASE macro to release the lock that the requestor currently holds.

xxxx000E

A requestor called a latch manager service while in access register (AR) address space control (ASC) mode.

System Action: The latch manager might not perform the requested operation.

Programmer Response: Call the latch manager service again while running in primary ASC mode.

xxxx000F

One of the following:

- A requestor called the Latch_Release service and specified an incorrect value on the latch_token parameter
- An internal error occurred in a latch manager service.

System Action: The latch manager might not perform the requested operation.

Programmer Response: Check the application code to ensure that the correct latch token is passed to the caller of the Latch_Release service. If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

xxxx0010

A requestor the Latch_Obtain service to obtain a latch. The requestor is currently suspended and waiting for the latch. The system is ending the requestor because the latch set job step task (the task that created the latch set) or latch set address space (the address space in which the latch set resides) is ending.

System Action: The latch manager does not obtain the latch.

Programmer Response: If necessary, call the Latch_Create service to create a new latch set.

xxxx0011

A requestor called the Latch_Create service to create a latch set. The maximum number of latch sets allowed by the system has been reached.

System Action: The latch manager does not create the latch set.

Programmer Response: Identify programs that are creating an unnecessarily large number of latch sets. Correct any problems with those programs. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

xxxx0012

A requestor called the Latch_Create service with an incorrect value on the create_option parameter. The create_option must be a fullword integer with one of the following values:

- ISGLCRT_PRIVATE (value of 0),
- ISGLCRT_PRIVATE + ISGLCRT_DEADLOCKDET1 (value of 64), or
- ISGLCRT_PRIVATE + ISGLCRT_DEADLOCKDET2 (value of 128).

System Action: The latch manager does not create the latch set.

Programmer Response: Specify a valid create_option on the call to the Latch_Create service. See *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO* for more details on the valid create_options.

***xxxx*0013**

On a call to the Latch_Create service, a requestor specified a latch_set_name parameter with a value that had a first character of zero or blank. The latch_set_name can contain any 48-byte hexadecimal value as long as the first character is not binary zeroes or an EBCDIC blank.

System Action: The latch manager does not create the latch set.

Programmer Response: On the latch_set_name parameter, specify a value with a first character is not binary zeroes or an EBCDIC blank.

***xxxx*0014**

A caller of a latch manager service has a PSW key that does not allow access to the latch set storage.

System Action: The latch manager does not perform the requested operation.

Programmer Response: Call the latch manager service with a PSW key that matches the storage key of the latch set.

***xxxx*0015**

An internal error occurred in a latch manager service.

System Action: The latch manager does not perform the requested operation.

Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

***xxxx*0016**

The system could not obtain enough storage for a particular latch set. GPR 2 contains the return code from the STORAGE OBTAIN macro.

System Action: The latch manager does not create the latch set.

Programmer Response: See the description of the return codes for the STORAGE OBTAIN macro in *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO* to diagnose the error.

***xxxx*0017**

A requestor called the Latch_Obtain service with an incorrect access_option. The access_option must be a fullword integer with a value of ISGLOBT_EXCLUSIVE (value of 0) or ISGLOBT_SHARED (value of 1).

System Action: The latch manager does not obtain the latch.

Programmer Response: Specify an access_option of ISGLOBT_EXCLUSIVE (value of 0) or ISGLOBT_SHARED (value of 1) on the call to the Latch_Obtain service.

***xxxx*0019**

A requestor called the Latch_Obtain service to obtain a latch. The maximum number of Latch_Obtain requests allowed by the system has been reached.

System Action: The latch manager does not obtain the latch.

Programmer Response: Consider placing limits or the number of tasks or SRB routines that can request latches, or release held latches or requests to obtain latches to reduce contention for resources. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

***xxxx*0020**

A requestor called the Latch_Obtain service to obtain a latch. The requestor ended before the latch manager could finish processing the Latch_Obtain request.

System Action: The latch manager does not obtain the latch.

Programmer Response: Call the Latch_Obtain service again, if the requestor still requires access to the latch.

***xxxx*0023**

A requestor called the Latch_Obtain service to obtain a latch. The user provided invalid latch information.

System Action: The system terminates the request.

Programmer Response: Correct your parameters and call the Latch_Obtain service again.

***xxxx*0024**

The system could not obtain enough storage for a particular latch request. GPR 2 contains the return code from the STORAGE OBTAIN macro.

System Action: The latch manager does not perform the requested operation.

Programmer Response: Alleviate the virtual storage constraint in the requester address space and try the request again.

System Programmer Response: To diagnose the error, see the description of the return codes for the STORAGE OBTAIN macro in *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO*.

***xxxx*0025**

A caller of a 64-bit latch manager service was not in 64-bit addressing mode.

System Action: The latch manager does not perform the requested operation.

Programmer Response: Call the latch manager service again while in 64-bit addressing mode.

***xxxx*002E**

A requestor called the Latch_Obtain service to obtain a latch, specifying an access_option of ISGLOBT_EXCLUSIVE (value of 0). The latch has already been obtained by the same unit of work earlier with the ISGLOBT_EXCLUSIVE access_option and it has not yet been released.

Note: This reason code can only happen if the ISGLCRT_DEADLOCKDET1 (value of 64) create_option is specified in ISGLCRT.

System Action: The latch manager does not perform the requested operation. Proceeding with the requested operation will result in a latch hang condition.

Programmer Response: Check the application code to ensure that the first latch has been released via the Latch_Release service before the second latch obtain request is issued.

***xxxx*002F**

A requestor called the Latch_Obtain service to obtain a latch, specifying an access_option of ISGLOBT_SHARED (value of 1). The latch has already been obtained by the same unit of work earlier with the ISGLOBT_EXCLUSIVE access_option (value of 0) and it has not yet been released.

Note: This reason code can only happen if the ISGLCRT_DEADLOCKDET1 (value of 64) create_option is specified in ISGLCRT.

System Action: The latch manager does not perform the requested operation. Proceeding with the requested operation will result in a latch hang condition.

Programmer Response: Check the application code to ensure that the first latch has been released via the Latch_Release service before the second latch obtain request is issued.

***xxxx*0036**

A requestor called the Latch_Obtain service to obtain a latch, specifying an access_option of ISGLOBT_EXCLUSIVE (value of 0). The latch has already been obtained by the same unit of work earlier with the ISGLOBT_SHARED access_option (value of 1) and it has not yet been released.

Note: This reason code can only happen if the ISGLCRT_DEADLOCKDET2 (value of 128) create_option is specified in ISGLCRT.

System Action: The latch manager does not perform the requested operation. Proceeding with the requested operation will result in a latch hang condition.

Programmer Response: Check the application code to ensure that the first latch has been released via the Latch_Release service before the second latch obtain request is issued.

***xxxx*0038**

A requester called a latch manager service with one or more inaccessible parameters.

System Action: The latch manager does not perform the requested operation.

Programmer Response: Ensure that the parameter list is accessible, and try the request again.

*xxxx*0039

A requester called a latch manager service with an incorrect version.

System Action: The latch manager does not perform the requested operation.

Programmer Response: Ensure that the version for the requested service is valid, and try the request again.

*xxxx*003A

A requestor called the Latch_Obtain service to obtain a latch, specifying an access_option of ISGLOBT_SHARED (value of 1). The latch has already been obtained by the same unit of work earlier with the ISGLOBT_SHARED access_option (value of 1) and it has not yet been released. And another unit of work was already waiting for exclusive ownership on the same latch. Allowing the requester to wait for the latch would result in a deadlock.

Note: This reason code can only happen if the ISGLCRT_DEADLOCKDET2 (value of 128) create_option is specified in ISGLCRT.

System Action: The latch manager does not perform the requested operation. Proceeding with the requested operation would have resulted in a latch hang condition.

Programmer Response: Check the application code to ensure that the first latch has been released through the Latch_Release service before the second latch obtain request is issued.

Note: Recursive entries into the same routines through IRBs and abend exit can result in the same latch obtained twice.

*xxxx*01yy

A requestor called the Latch_Obtain service to obtain a latch. The system found an error when it tried to issue the SUSPEND macro. A return code from the SUSPEND macro (yy) indicates the reason for the error:

Code (yy)
Explanation

8

A program tried to call the Latch_Obtain service with an obtain option of ISGLOBT_SYNC (value of 0) from an SRB after the SRB abended with code X'47B'.

C

A program tried to call the Latch_Obtain service with an obtain option of ISGLOBT_SYNC (value of 0) from within the SUSPEND exit.

20

An error occurred in the SUSPEND exit routine.

22

A system error occurred.

FE

The system was not able to PAUSE/SUSPEND because a PURGDEQ is pending against the SRB. Only the Purge, Release, or conditional OBTAIN (ISGLOBT_COND (value of 1)) can be used after an SRB has a PURGDQ pending against it.

FF

The requested function is not supported after an SRB has abended with X'47B'. Only the Purge, Release, or conditional OBTAIN (ISGLOBT_COND (value of 1)) can be used by an SRB that has been abended by a code X'47B'.

System Action: The latch manager does not obtain the latch.

Programmer Response: Depending on the return code from the SUSPEND macro, do one of the following:

Code (yy)
Action

8

Correct the program so it does not try to call the Latch_Obtain service with an obtain option of ISGLOBT_SYNC (value of 0) from an SRB that abended with code X'47B'.

C

Correct the program so it does not try to call the Latch_Obtain service with an obtain option of ISGLOBT_SYNC (value of 0) from within the SUSPEND exit.

20, 22

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

FE

Terminate the SRB processing so the system can complete the PURGEDQ of the SRB.

FF

Correct the program so it does not try to call any service other than Purge and Release from an SRB that abended with code X'47B'.

For more information about the SUSPEND macro, see *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO*.

9C7

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

9FB

Explanation

JES3 output service module IATOSDR or IATOSPS abnormally ended an MVS service routine, usually SETPRT, in order to process a JES writer function or an operator command. This completion code does not indicate a program failure.

System action

The system continues processing.

Source

JES3

A00

Explanation

During processing of an I/O request, execute channel program (EXCP) encountered an error while an appendage was running. Each X'A00' abend code has a reason code that shows which appendage contained the error:

Code
  Explanation

1

Program controlled interrupt (PCI) appendage

2

Start I/O (SIO) appendage

3

End of extent (EOE) appendage

4

Channel end (CHE) normal end appendage

5

Abnormal end (ABE) appendage

6

    Caller's page fix appendage

System action

The system abnormally ends the current task. The system writes a logrec data set error record and issues a SNAP dump.

System programmer response

In the dump, look at field TCBEXCPD at offset X'C0' in the task control block (TCB) for the current task. TCBEXCPD points to the EXCP debugging area (XDBA). The XDBA contains diagnostic data associated with the EXCP processor. To determine which appendage was active, see the microfiche mapping for data area XFRR of the EXCP/EXFR FRR parameter area.

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record, the JCL for the job, and the SNAP dump.

Programmer response

If EXCP is being used for I/O operations, this is an error in the appendage identified by the reason code. Fix the appendage and run the job again. If the error persists, run the job again requesting an ABEND dump and then notify the system programmer.

Source

Execute channel program (EXCP)

A03

Explanation

A task tried to end normally by issuing a RETURN macro or by branching to the return address in register 14. The task was not ready to end processing because either:

- The task had attached one or more subtasks that had not ended.
- The task did not detach a subtask that it had previously attached with the event control block (ECB) option.

System action

The system abends the task.

Operator response

If the system or application programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=A03,ACTION=SVCD,END
```

System programmer response

If the module is an IBM program, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump.

Programmer response

Do the following:

1. If a dump is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.

2. From the dump, identify the abnormally ended module from the contents directory entry (CDE) or from the PRBRSV field in the associated RB.
3. If the module is an installation-provided program, change the program so that, before the task ends, all its subtasks will end. A task can determine that its subtasks have ended by specifying event control block (ECB) operands in ATTACH macros that initiate the subtasks, and then issuing WAIT macros that specify ECBs representing the end of its subtasks.

   When the ECB option has been specified with the ATTACH macro, the task must detach its subtask once notification of subtask ending has been received. Failure to do so will result in this abend.

   If a WAIT macro had been issued and the ECBs indicated that all subtasks had ended, check for program errors that incorrectly modified the WAIT macros or ECBs.

   After making corrections, recompile the program. Run the job step again.

Source

Recovery termination manager (RTM)

A05

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error.

Code
    Explanation

04
    The system queue area (SQA) storage to be freed overlaps free storage.

08
    The common service area (CSA) storage to be freed overlaps free storage.

0C
    The local system queue area (LSQA) storage to be freed overlaps free storage.

10
    The private area storage to be freed overlaps free storage.

14
    Part of the CSA to be freed is fixed.

18
    Part of the private area to be freed is fixed.

1C
    The private area to be freed is associated with a data-in-virtual object.

20
    The private area to be freed has been specified on the IARSUBSP IDENTIFY request, and is eligible to be assigned to a subspace.

24
    The task or service request block (SRB) routine tried to free SQA storage that either overlaps free storage or was obtained by more than one request.

28
    The task or SRB routine tried to free CSA storage that either overlaps free storage or was obtained by more than one request.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Do the following:

- Ensure that the FREEMAIN operands do not specify a different subpool and/or key than the subpool or key of the storage you are trying to free.
- Ensure that the task control block (TCB) specified on the FREEMAIN request is the same one specified on the corresponding GETMAIN request.
- If a caller running in supervisor state and key 0 made the original GETMAIN request, ensure that the corresponding FREEMAIN request is also issued in supervisor state and key 0.

  If a caller in supervisor state and key 0 requests storage in subpool 0 or 250, the system satisfies this request with storage from a different subpool. This situation is described in *z/OS MVS Diagnosis: Reference*.
- If the storage is eligible to be assigned to a subspace, make the storage ineligible by specifying the storage range on an IARSUBSP UNIDENTIFY request before attempting to release the storage.
- Check for program errors that incorrectly modify the FREEMAIN macro expansion.

Source

Virtual storage manager (VSM)

A06

Explanation

The error was detected during processing of either a LINK(X), LOAD, XCTL(X) or ATTACH(X) macro instruction.

Code
   Explanation
04
   A request block (RB) is requesting a serially reusable program. Another RB associated with the task requested the same program, and that request has not yet been satisfied.

System action

The task ends unless ERRET is specified on the macro. The system issues message CSV000I. The system issues an ABEND dump.

System programmer response

If the error recurs and the program is not in error, see the system programmer for the messages in the job log.

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump and the source program listing for the job.

Programmer response

Change the program to wait until the serially reusable load module is run before issuing the LINK(X), LOAD, XCTL(X) or ATTACH(X) macro for the load module. After making corrections, recompile and run the job step again.

Source

Contents supervision (CSV)

A0A

Explanation

An error occurred when the system tried to process an R form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
   Explanation

04
   The system queue area (SQA) storage to be freed overlaps free storage.

08
   The common service area (CSA) storage to be freed overlaps free storage.

0C
   The local system queue area (LSQA) storage to be freed overlaps free storage.

10
   The private area storage to be freed overlaps free storage.

14
   Part of the CSA to be freed is fixed.

18
   Part of the private area to be freed is fixed.

1C
   The private area to be freed is associated with a data-in-virtual object.

20
   The private area to be freed has been specified on the IARSUBSP IDENTIFY request, and is eligible to be assigned to a subspace.

24
   The task or service request block (SRB) routine tried to free SQA storage that either overlaps free storage or was obtained by more than one request.

28
   The task or SRB routine tried to free CSA storage that either overlaps free storage or was obtained by more than one request.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Do the following:

- Ensure that the FREEMAIN operands do not specify a different subpool and/or key than the subpool or key of the storage you are trying to free.
- Ensure that the task control block (TCB) specified on the FREEMAIN request is the same one specified on the corresponding GETMAIN request.
- If a caller running in supervisor state and key 0 made the original GETMAIN request, ensure that the corresponding FREEMAIN request is also issued in supervisor state and key 0.

   If a caller in supervisor state and key 0 requests storage in subpool 0 or 250, the system satisfies this request with storage from a different subpool. This situation is described in *z/OS MVS Diagnosis: Reference*.
- If the storage is eligible to be assigned to a subspace, make the storage ineligible by specifying the storage range on an IARSUBSP UNIDENTIFY request before attempting to release the storage.
- Check for program errors that incorrectly modify the FREEMAIN macro expansion.

Source

Virtual storage manager (VSM)

A13

Explanation

The error occurred during processing of an OPEN macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC151I. Refer to the explanation of message IEC151I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC151I.

Source

DFSMSdfp

A14

Explanation

The error occurred during processing of a CLOSE macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC216I. Refer to the explanation of message IEC216I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC216I.

Source

DFSMSdfp

A1A

Explanation

The catalog address space (CAS) modify task ended abnormally because the modify task exceeded the allotted time for processing. The task may have been waiting for some system resource that is permanently unavailable.

System action

The system attaches a new task to restore the modify function.

Source

DFSMSdfp

A1C

Explanation

The Device Manager Address Space (DEVMAN) encountered an unexpected error. The reason code is in register 15 at the time the system issues the abend.

Code
  Explanation

0001
  The DEVMAN VTOC Convert Routine call to UCBLOOK failed.

0002
  The DEVMAN VTOC Convert Routine call to DSPSERV to extend the data space failed.

0003
  The DEVMAN VTOC Convert Routine encountered an unexpected error processing the VTOC DSCBs.

System action

The system writes an SVC Dump.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

A22

Explanation

A FORCE command requested that a job be canceled, possibly for one of these reasons:

- The CANCEL command could not cancel the job.
- The system was in a deadlock. For example, two tasks were enqueued on a resource without an intervening dequeue.
- An installation-established procedure was violated by the job.

There may be nothing wrong with the job itself.

System action

The system ends the address space associated with the job. The system ends all tasks running in the address space.

Programmer response

Find out why the operator canceled the job and make any necessary corrections. Rerun the job, ensuring that the operator enters a CANCEL *jjj*,DUMP command, if necessary.

Source

Reconfiguration

A23

Explanation

The system was trying to process a macro instruction issued by the communications task (COMMTASK). An error occurred because an incorrect address was specified.

System action

The system issues messages about the problem.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Run the job again. If the error persists, contact the system programmer.

Source

Console services

A37

Explanation

The error occurred during end-of-volume processing. This system completion code is accompanied by message IEC015I. Refer to the explanation of message IEC015I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

Operator response

Start a generalized trace facility (GTF) trace, and re-create the problem. Reply to message AHL100A with:

```
TRACE=SYS,USR,SLIP
```

On the DD statement for the data set in error, specify:

```
DCB=DIAGNS=TRACE
```

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SYSOUT output and the program listing for the job.

Programmer response

Respond as indicated for message IEC015I.

Source

DFSMSdfp

A78

Explanation

An error occurred when the system tried to process an RU or RC form of the FREEMAIN macro or the STORAGE RELEASE macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
   Explanation

04
   The system queue area (SQA) storage to be freed overlaps free storage.

08
   The common service area (CSA) storage to be freed overlaps free storage.

0C
   The local system queue area (LSQA) storage to be freed overlaps free storage.

10
   The private area storage to be freed overlaps free storage.

14
   Part of the CSA to be freed is fixed.

18
   Part of the private area to be freed is fixed.

1C
   The private area to be freed is associated with a data-in-virtual object.

20
   The private area to be freed has been specified on the IARSUBSP IDENTIFY request, and is eligible to be assigned to a subspace.

24
   The task or SRB routine tried to free either SQA storage that overlaps free storage or SQA storage that was obtained by more than one request.

28
   The task or SRB routine tried to free either CSA storage that overlaps free storage or CSA storage that was obtained by more than one request.

2C
   Part of the SQA area to be freed is fixed.

30
   Part of the LSQA area to be freed is fixed.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Do the following:

- For reason code X'1C', ensure that the program issued a DIV UNIDENTIFY request before any FREEMAIN or STORAGE RELEASE request.
- For reason code X'24' or X'28', ensure that the start address, length and subpool specified on the FREEMAIN or STORAGE RELEASE macro do not contain errors.
- Ensure that the FREEMAIN or STORAGE RELEASE operands do not specify a different subpool and/or key than the subpool or key of the storage you are trying to free.
- Ensure that the task control block (TCB) specified on the FREEMAIN or STORAGE RELEASE request is the same one specified on the corresponding GETMAIN or STORAGE OBTAIN request.

- If a caller running in supervisor state and key 0 made the original GETMAIN or STORAGE OBTAIN request, ensure that the corresponding FREEMAIN or STORAGE RELEASE request is also issued in supervisor state and key 0.

  If a caller in supervisor state and key 0 requests storage in subpool 0 or 250, the system satisfies this request with storage from a different subpool. This situation is described in *z/OS MVS Diagnosis: Reference*.
- If the storage is eligible to be assigned to a subspace, make the storage ineligible by specifying the storage range on an IARSUBSP UNIDENTIFY request before attempting to release the storage.
- Check for program errors that incorrectly modify the FREEMAIN or STORAGE RELEASE macro expansion.

Source

Virtual storage manager (VSM)

A7A

Explanation

The system detected an error in the input from an invoker of the Service Processor Interface, or an internal error in MVS. Register 15 contains the reason code in the format X'0000xxrr', where **rr** is the reason code.

Code
   Explanation

06
   The Service Processor Interface is unable to establish the recovery environment.

Others
   The Service Processor Interface detected an unrecoverable error.

System action

The system abnormally ends the invoker of the Service Processor Interface.

System programmer response

For reason code X'06', determine why the system could not establish a recovery environment. If this cannot be done, or if the reason code is other than one previously listed, search problem reporting data bases for a fix. If no fix exists, contact the IBM Support Center.

Source

Service Processor Interface

AC4

Explanation

JES3 encountered an error while processing an IATXCNDB service call which specified (or defaulted to) ABEND=YES. The abend reason code identifies the specific error.

Code
   Explanation

00
   Operation was successfully performed.

04
   The OPERATION requested is not supported by the IATXCNDB macro.

08
   An invalid IATXCNDB parameter list was passed to the IATCNDB module. The eyecatcher in the parameter list is not 'YCNDB '

0C

An invalid IATXCNDB parameter list was passed to the IATCNDB module. The version indicator in the parameter list was not equal to the the current version.

10

The input IATYCNDB (INCNDB parameter) passed to the IATXCNDB INITIALIZE service did not have 'CNDB' as its eyecatcher.

14

The console id and console name parameters were passed to the INITIALIZE service. These parameters are mutually exclusive.

18

An error return (>4) was received from the call to CONVCON by the IATXCNDB INITIALIZE operation.

1C

The IATYCNDB was successfully initialized, but the console name/ID passed to the INITIALIZE routine was not found in the JES3 console table. The IATYCNDB has been initialized with a "non-JES3" console type and the console ID and console name passed on the IATXCNDB invocation and returned by MCS.

20

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB TRANSFER service was zero.

24

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB TRANSFER service did not have 'CNDB' as its eyecatcher.

28

The output IATYCNDB (OUTCNDB parameter) address passed to the IATXCNDB TRANSFER service was zero.

2C

The IATYCNDB passed to the VERIFY service did not have 'CNDB' as its eyecatcher.

30

An error return (>4) was received from the call to CONVCON by the IATXCNDB service VERIFY operation.

34

The IATYCNDB was successfully converted to an IATYCNDB at the current release level, but the console name in the down level CNDB was not found in the JES3 console table. The IATYCNDB has been initialized with a "non-JES3" console type and the console ID returned by MCS.

38

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB TRANSCONSID service was zero.

3C

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB TRANSCONSID service did not have 'CNDB' as its eyecatcher.

40

The output IATYCNDB (OUTCNDB parameter) address passed to the IATXCNDB TRANSCONSID service was zero.

44

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB TRANSROUT service was zero.

48

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB TRANSROUT service did not have 'CNDB' as its eyecatcher.

4C

The output IATYCNDB (OUTCNDB parameter) address passed to the IATXCNDB TRANSROUT service was zero.

50

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB EXTRACTCONSID service was zero.

54

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB EXTRACTCONSID service did not have 'CNDB' as its eyecatcher.

58

The OUTCONSID address passed to the IATXCNDB EXTRACTCONSID service was zero.

5C

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB EXTRACTCONSNAME service was zero.

60

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB EXTRACTCONSNAME service did not have 'CNDB' as its eyecatcher.

64

The OUTCONSNAME address passed to the IATXCNDB EXTRACTCONSNAME service was zero.

68

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB EXTRACTCONSTYPE service was zero.

6C

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB EXTRACTCONSTYPE service did not have 'CNDB' as its eyecatcher.

70

The OUTCONSTYPE address passed to the IATXCNDB EXTRACTCONSTYPE service was zero.

74

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB EXTRACTROUT service was zero.

78

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB EXTRACTROUT service did not have 'CNDB' as its eyecatcher.

7C

The OUTROUT address passed to the IATXCNDB EXTRACTROUT service was zero.

80

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB UPDATE service was zero.

84

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB UPDATE service did not have 'CNDB' as its eyecatcher.

88

An attempt was made to pass the CONSID and CONSNM parameters to the IATXCNDB service for an UPDATE operation. These parameters are mutually exclusive.

8C

An error return (>4) was received from the call to CONVCON by the IATXCNDB UPDATE operation.

90

The IATYCNDB was successfully updated, but the console name/ID passed to the UPDATE routine was not found in the JES3 console table. The IATYCNDB has been Updated with a "non-JES3" console type and the console ID and console name passed on the IATXCNDB invocation and returned by MCS.

94

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB RESET service was zero.

98

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB RESET service did not have 'CNDB' as its eyecatcher.

A8

The input IATYCNDB (CNDB parameter) address passed to the IATXCNDB EXTRACTCART service was zero.

AC

The input IATYCNDB (CNDB parameter) passed to the IATXCNDB EXTRACTCART service did not have 'CNDB' as its eyecatcher.

B0

The OUTROUT address passed to the IATXCNDB EXTRACTCART service was zero.

System action

The IATXCNDB request processing is ended.

System programmer response

To determine the error, perform the following:

1. If called from the JES3 main task, locate the ACALL and RETURN trace entry for the IATXCNDB macro.
2. Register 1 of the ACALL trace entry contains the address of the parameter list used by the IATXCNDB macro. The parameter list is mapped by a DSECT generated from an IATXCNDB MF=L call.
3. Use the trace table to locate the module that issued the IATXCNDB macro. Register 14 of the ACALL entry in the trace table contains the return address and register 10 contains the base register.
4. When IATXCNDB is invoked from a user's address space, the caller issued a BASSM R14,R15 from the IATXCNDB macro. The registers are then saved on the linkage stack by IATCNDB via 'BAKR R14,R0'.
5. Use the abend reason code to identify the cause of the error.
6. Correct the parameter list in the module that issued the IATXCNDB macro.

Source

JES3

AC5

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

AC6

Explanation

IMS uses this code when forcibly terminating one MVS task from another MVS task. There are two situations where this occurs:

1. An ESTAE routine has gained control due to an abend in the system. The abended task (ESTAE) attempts to purge the log buffers and signals the physical log task of its intention. If the ESTAE task does not receive a response within one second, the physical log task is terminated with this abend code and log buffers are purged.
2. The DBRC instance required for this instance of ILS has terminated. All remaining ILS instances dependent upon the abended DBRC will wait for that DBRC and abend with reason code X'01'.

System action

IMS continues termination.

System programmer response

Determine primary cause of failure and take appropriate action.

AC7

Explanation

A supervisor service was issued in an incorrect environment. Register 15 contains a hexadecimal reason code.

System action

The system ends the current unit of work.

Programmer response

Respond according to the reason code:

Code
    Explanation and programmer response

00000000
    Explanation: The caller of the enqueue timer queue element (TQE) service did not hold the dispatcher lock.

    Action: Correct the program to obtain the dispatcher lock before calling the enqueue TQE service.

00000001
    Explanation: The caller of the dequeue TQE service did not hold the dispatcher lock.

    Action: Correct the program to obtain the dispatcher lock before calling the dequeue TQE service.

00000002
    Explanation: The STIMER/STIMERM service detected an error when processing an STIMER/STIMERM WAIT request.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00000003
    Explanation: An enqueue request for a TQE failed because the TQE to be added is already on the real TQE queue. The original STIMER or SETDIE request represented by this TQE will not occur. For this reason code, register 2 contains the address of the caller of Timer services.

    Action: Correct the program to not schedule the same TQE twice.

00000004
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00000005
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00010000
    Explanation: The IEAMCPUF macro was issued by an enabled caller.

    Action: Correct the program so that IEAMCPUF is issued while running disabled.

00020000
    Explanation: The affinity service, IEAAFFN, was invoked by a caller in access register (AR) mode.

    Action Correct the program so that IEAAFFN is invoked in primary ASC mode.

00020001
    Explanation: The affinity service, IEAAFFN, could not access the storage containing the caller's parameter list.

    Action: Correct the program so that the storage containing the caller's parameter list is accessible.

00030000
    Explanation: A name/token callable service, IEANTCRS or IEANTDLS, could not access the storage containing the caller's parameter list or parameter storage.

    Action: Correct the program so that the storage containing the caller's parameter list or parameter storage is accessible.

00030001

Explanation: A name/token callable service, IEANTCRS or IEANTDLS, could not access the caller's home address space.

Action: Retry the request.

00030002

Explanation: A name/token pair callable service, IEANTCRS or IEANTDLS, detected an internal error.

Action: Retry the request.

00040000

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00040001

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00040002

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00040003

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00040004

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00040005

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00050000

Explanation: The caller of the SCHEDIRB macro did not hold the local lock.

Action: Correct the program so that it holds the local lock before invoking the SCHEDIRB macro.

00050001

Explanation: A program invoked the SCHEDIRB macro with one of the following errors:

- The caller's cross memory mode was not HASN=PASN, which is required.
- The caller's ASC mode of AR was correct, but AR1 does not contain the primary ALET.

Action: Correct the program so that the cross memory mode is HASN=PASN or PASN=HASN.

00050002

Explanation: The caller of the SCHEDIRB macro specified the RBPTR keyword to schedule a directed interrupt request block (IRB) while in SRB mode. The calling program cannot schedule directed IRBs while in SRB mode.

Action: Correct the program so that it is not in SRB mode if you want to specify the RBPTR keyword on the SCHEDIRB macro to schedule a directed IRB.

00050003

Explanation: The caller of the SCHEDIRB macro specified an incorrect task control block (TCB) address on the TCBPTR keyword.

Action: Correct the program so that it specifies a valid TCB address in the TCBPTR keyword on the SCHEDIRB macro.

00050004

Explanation: The caller of the SCHEDIRB macro specified an incorrect interrupt queue element (IQE) address on the IQEPTR keyword.

Action: Correct the program so that it specifies a valid IQE address on the IQEPTR keyword on the SCHEDIRB macro.

00050005

Explanation: The caller of the SCHEDIRB macro scheduled a directed IRB to the current task. However, the current task is an error task and the error IRB is active.

Action: Correct the program so that it does not specify the RBPTR keyword on the SCHEDIRB if the current task is the error task and the error IRB is active.

00050006

Explanation: The caller of the SCHEDIRB macro specified and IQE whose IQETCB field pointed to a TCB which is not valid.

Action: Correct the program so that it specifies a valid TCB address in the IQE field IQETCB.

00060000

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00070000

Explanation: The request block (RB) chain is circular or there are a very large number or RBs on the RB chain.

Action: This may be caused by a loop which caused many RBs to be created. If the source of the problem cannot be determined, search problem reporting data bases for a fix of the problem. If no fix exits, contact the IBM support center.

00080001

Explanation: The space token specified via the TARGETSTOKEN keyword on IEAMSCHD is not valid.

Action: Retry the request specifying a valid address space token.

00080002

Explanation: The enclave token specified on IEAMSCHD was not a valid token.

Action: Retry the request specifying a valid enclave token.

00080003

Explanation: CRYPTO was specified on the FEATURE keyword of IEAMSCHD, but there are no processors with the Integrated Cryptographic Feature online.

Action: Remove CRYPTO from the FEATURE keyword.

00080004

Explanation: A DIE routine issued IEAMSCHD to attempt to schedule an SRB with PRIORITY=CURRENT.

Action: Correct the program so that the routine does not specify PRIORITY=CURRENT on IEAMSCHD.

00080005

Explanation: The space token specified via the PURGESTOKEN keyword on IEAMSCHD is not valid.

Action: Retry the request specifying a valid PURGESTOKEN token.

00080006

Explanation: The space token specified via the CLIENTSTOKEN keyword on IEAMSCHD is not valid.

Action: Retry the request specifying a valid CLIENTSTOKEN.

00080007

   Explanation: The parameter list for IEAMSCHD is not in the user's primary address space.

   Action: Correct the program so that the parameter list is addressable.

00080009

   Explanation: The caller of IEAMSCHD specified SYNCH=YES but held a lock.

   Action: Ensure that no locks are held when SYNCH=YES is specified on IEAMSCHD.

00090000

   Explanation: Internal error.

   Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00090001

   Explanation: Internal error.

   Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00090002

   Explanation: Internal error.

   Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00090003

   Explanation: Internal error.

   Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

000A0000

   Explanation: Internal error.

   Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

000B0000

   Explanation: Internal error.

   Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

000C0000

   Explanation: Internal error.

   Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

000C0001

   Explanation: Internal error.

   Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

000D0000

   Explanation The SCHEDULE macro detected a circular SRB chain. The reason may be that the SCHEDULE macro was issued more than once for an SRB.

   Action: Ensure that the program does not issue SCHEDULE for the SRB again before the SRB is dispatched. General purpose register 3 points to the SRB.

000D0001
    Explanation The PURGEDQ macro detected a circular SRB chain. The reason may be that the SCHEDULE macro was issued more than once for an SRB.

    Action: Ensure that the program does not issue SCHEDULE for the SRB again before the SRB is dispatched. General purpose register 3 points to the SRB.

000D0002
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

000D0003
    Explanation: The SCHEDULE macro detected an SRB which is not valid. The reason may be that the SCHEDULE macro was issued more than once for an SRB.

    Action: Ensure that the program does not issue SCHEDULE for the SRB again before the SRB is dispatched. The SRB and the associated WEB are recorded in LOGREC.

000E0000
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

000E0001
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

000E0002
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

000F0000
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00100000
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00100001
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00110000
    Explanation: For a call to the Begin_Context service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

    Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00110001
    Explanation: For a call to the Begin_Context service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

    Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00120000

Explanation: For a call to the Delete_Context_Interest service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00120001

Explanation: For a call to the Delete_Context_Interest service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00130000

Explanation: For a call to the Express_Context_Interest service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00130001

Explanation: For a call to the Express_Context_Interest service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00140000

Explanation: For a call to the End_Context service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00140001

Explanation: For a call to the End_Context service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00150000

Explanation: For a call to the Switch_Context service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00150001

Explanation: For a call to the Switch_Context service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00160000

Explanation: For a call to the Retrieve_Context_Interest_Data service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00160001

Explanation: For a call to the Retrieve_Context_Interest_Data service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00170000

Explanation: For a call to the Set_Context_Interest_Data service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00170001

Explanation: For a call to the Set_Context_Interest_Data service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00180000
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00180001
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00190001
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00190002
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00190003
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00190004
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00190005
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00190006
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00190007
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00190008
    Explanation: Internal Error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00190009
    Explanation: Internal error.

    Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0019000A

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0019000B

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

001B0000

Explanation: This completion code and reason code are used to permit MVS to take a system dump the first time MVS issues message IEA059E for the current IPL.

Action: This reason code should not be treated as an error. Refer to message IEA059E for additional information.

00200000

Explanation: For a call to the Set_Context_Data service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the problem and rerun it.

00200001

Explanation: For a call to the Set_Context_Data service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the problem and rerun it.

00210000

Explanation: For a call to the Retrieve_Context_Data service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the problem and rerun it.

00210001

Explanation: For a call to the Retrieve_Context_Data service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the problem and rerun it.

00220000

Explanation: For a call to the Retrieve_Current_Context_Token service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the problem and rerun it.

00220001

Explanation: For a call to the Retrieve_Current_Context_Token service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the problem and rerun it.

00310000

Explanation: For a call to the Unregister_Resource_Manager service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00310001

Explanation: For a call to the Unregister_Resource_Manager service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00330000

Explanation: For a call to the Register_Resource_Manager service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00330001

Explanation: For a call to the Register_Resource_Manager service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00350000

Explanation: For a call to the Retrieve_Resource_Manager_Data service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00350001

Explanation: For a call to the Retrieve_Resource_Manager_Data service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00360000

Explanation: For a call to the Set_Exit_Information service, the parameters are not in the primary address space. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00360001

Explanation: For a call to the Set_Exit_Information service, the parameters are not addressable. The system rejects the service call. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00360002

Explanation: For a call to the Set_Exit_Information service, the parameters are not addressable. However, the call successfully set exit routines with the exit manager. The system abnormally ends the calling program.

Action: Check the calling program for a probable coding error. Correct the program and rerun it.

00400000

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00400001

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00400002

Explanation: Internal error.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00450001

Explanation: A program invoked the Linkage Stack LSS Cleanup Routine with one of the following errors:

1. The caller was in SRB mode where Task mode is required

2. The caller's cross memory mode was not PASN=HASN, which is required.

Action: Correct the program so that the environment is Task mode and PASN=HASN.

00470001

> **Explanation:** Internal error.
>
> **Action:** Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00470003

> **Explanation:** Internal error.
>
> **Action:** Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

00500001

> **Explanation:** Internal control block overlay detected and repaired.
>
> **Action:** Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Timer supervision, supervisor control, context services, or registration services

AC8

Explanation

Unicode Services detected an error in processing.

Code
> **Explanation**

04
> Unicode detected an unexpected return code from the IEANTRT service and register 3 contains the return code.

08
> Unicode detected critical overlay information.

System action

The system abnormally ends the task.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Unicode Services

AFB

Explanation

While JES3 dynamic support program (DSP) for systems network architecture (SNA) remote job processing (RJP) was executing as a JES3 subtask or under an SRB, a JES3 module IATSNDA, IATSNDE, IATSNDM, IATSNDR, IATSNDT, IATSNDU, or IATSNDV attempted to reuse a still-active request parameter list (RPL).

System action

The system cancels the session associated with the RPL and writes a dump. The system continues processing all other sessions, including those associated with the same work station.

Programmer response

Analyze the dump to determine which RPL is about to be overlaid and what data is about to be sent or received.

Source

JES3

B00

Explanation

During processing of an I/O request, a program check occurred in an execute channel program (EXCP) procedure.

System action

The system abnormally ends the current task. The system writes a logrec data set error record.

System programmer response

In the dump, look at field TCBEXCPD at offset X'C0' in the task control block (TCB) for the current task. TCBEXCPD points to the EXCP debugging area (XDBA). The XDBA contains diagnostic data associated with the EXCP processor.

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record, the job control language (JCL), the program listing, and the assembly listing for the job.

Programmer response

Check the problem program for the error. If the error cannot be determined, run the job again, requesting an ABEND dump. Notify the system programmer.

Source

Execute channel program (EXCP)

B04

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the GETMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
   Explanation

04
   The GETMAIN macro requested an undefined subpool.

08
   The program issuing the GETMAIN macro is not authorized to request system subpools.

14
   A local branch entry caller of the GETMAIN macro did not hold the local lock for the address space that is currently addressable.

18
   An incorrect task control block (TCB) address was specified on a branch entry request.

1C
The address space control block (ASCB) address specified on a branch entry request was not the current ASCB.

20
Using the GETMAIN macro or its equivalent branch entry, the caller tried to obtain disabled reference storage that resides above 16 megabytes. This entry only satisfies requests for storage below 16 megabytes.

5C
A program attempted to obtain user-key (8 - 15) storage from a CSA subpool but the ALLOWUSERKEYCSA(NO) parameter is specified in a DIAGxx member of PARMLIB and either of the following conditions is true:

- An appropriate restricted use common service area (RUCSA/extended RUCSA) is not defined.
- The address space in which the caller is running lacks SAF authority to reference user-key CSA storage.

For more information, see Restricted use common service area (RUCSA/extended RUCSA) in *z/OS MVS Initialization and Tuning Guide*.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Depending on the reason code, do one of the following:

Code
    Response

04
Ensure that the subpool is not incorrectly specified or modified.

08
If the program requires system subpools, ensure that the program resides in an authorized program library.

1C
Specify the correct ASCB address on the FREEMAIN macro.

20
Change the program to request expanded storage.

ALL
Check for program errors that could modify the parameter list.

Source

Virtual storage manager (VSM)

B05

Explanation

An error occurred when the system tried to process an EC, EU, LC, LU, VC, or VU form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
    Explanation

04
The FREEMAIN macro tried to free storage in an undefined subpool.

08
The program issuing the FREEMAIN macro is not authorized to free storage in system subpools.

14

A local branch entry caller of the FREEMAIN macro did not hold the local lock for the address space that is currently addressable.

18

Incorrect task control block (TCB) address specified on a branch entry request.

1C

The address space control block (ASCB) address specified on a branch entry request was not the current ASCB.

20

Using a FREEMAIN macro or its equivalent branch entry, the caller attempted to free disabled reference storage that resides above 16 megabytes. This entry only satisfies requests for storage below 16 megabytes.

5C

A program attempted a FREEMAIN request on user-key (8 - 15) storage from a CSA subpool but the VSM ALLOWUSERKEYCSA(NO) parameter is in effect in DIAGxx and the address space in which the caller is running lacks SAF authority to reference user-key CSA storage. For more information, see Restricted use common service area (RUCSA/extended RUCSA) in *z/OS MVS Initialization and Tuning Guide*.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Depending on the reason code, do one of the following:

Code
  Response

04

Ensure that the subpool is not incorrectly specified or modified.

08

If the program requires system subpools, ensure that the program resides in an authorized program library.

1C

Specify the correct ASCB address on the FREEMAIN macro.

20

Change the program to request expanded storage.

ALL

Check for program errors that could modify the parameter list.

Source

Virtual storage manager (VSM)

B06

Explanation

During input/output activity, a system error task operating in behalf of a user task was abnormally ending.

System action

The system reinstates the system error task and abnormally ends the user task.

Programmer response

Run the job again.

Source

Input/output supervisor (IOS)

B0A

Explanation

An error occurred when the system tried to process an R form of the GETMAIN or FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
 Explanation

04
 The macro tried to obtain or free storage in an undefined subpool.

08
 The program issuing the macro is not authorized to obtain or free storage in system subpools.

14
 A local branch entry caller of the GETMAIN or FREEMAIN macro did not hold the local lock for the address space that is currently addressable.

18
 An incorrect task control block (TCB) address specified on a branch entry request.

1C
 The address space control block (ASCB) address specified on a branch entry request was not the current ASCB.

20
 The caller tried to release disabled reference storage using a GETMAIN/FREEMAIN macro with the R operand or its equivalent branch entry. This entry only satisfies requests for storage below 16 megabytes. Disabled reference subpools do not reside below 16 megabytes.

5C
 A program attempted to obtain or free user-key (8 - 15) storage from a CSA subpool but the ALLOWUSERKEYCSA(NO) parameter is specified in a DIAGxx member of PARMLIB and either of the following conditions is true:

 • An appropriate restricted use common service area (RUCSA/extended RUCSA) is not defined.

 • The address space in which the caller is running lacks SAF authority to reference user-key CSA storage.

 For more information, see Restricted use common service area (RUCSA/extended RUCSA) in *z/OS MVS Initialization and Tuning Guide*.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Depending on the reason code, do one of the following:

Code
 Response

04
 Ensure that the subpool is not incorrectly specified or modified.

08
 If the program requires system subpools, ensure that the program resides in an authorized program library.

1C
 Specify the correct ASCB address on the FREEMAIN macro.

20

Change the program to request expanded storage.

ALL

Check for program errors that could modify the parameter list.

Source

Virtual storage manager (VSM)

B13

Explanation

The error occurred during processing of an OPEN macro for a data set on an impact printer. This system completion code is accompanied by message IEC152I. Refer to the explanation of message IEC152I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC152I.

Source

DFSMSdfp

B14

Explanation

The error occurred during processing of a CLOSE macro instruction for a partitioned data set opened for output to a member. This system completion code is accompanied by message IEC217I. Refer to the explanation of message IEC217I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC217I.

Source

DFSMSdfp

B1A

Explanation

The user address space catalog ESTAE module IGG0CLHC requested the abnormal end of the catalog address space (CAS) service task. An abnormal end occurred in the user address space during catalog recall processing.

Programmer response

Use the following information to determine the cause of the error:

- The SYS1.DUMP produced for this abnormal end.
- The SYS.DUMP produced by the abnormal end of the user address space.

Source

DFSMSdfp

B23

Explanation

A task issued a WTOR macro. Before the operator replied to the WTOR message, a system problem occurred, leaving the message unanswered.

System action

The system abnormally ends the task that issued the WTOR. The system issues message IEE824A or IEE824E.

Operator response

See the operator response for message IEE824A or IEE824E. Restart the task that ended with abend code X'B23'.

Source

Console services

B2D

Explanation

A program requested an overlay. In answer to the request, the overlay supervisor was using program fetch to load a program segment from the library. While the fetch recovery routine was processing because of a previous abend, a program check occurred.

Note: Overlay programs run only in 24-bit addressing mode, not in 31-bit addressing mode.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided.

Programmer response

Check the linkage editor input to be sure the program is designed correctly. Correct the errors; then assemble, link edit, and run the program again.

Source

Overlay supervisor

B37

Explanation

The error was detected by the end-of-volume routine. This system completion code is accompanied by message IEC030I. Refer to the explanation of message IEC030I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC030I.

Source

DFSMSdfp

B78

Explanation

The error occurred when the system tried to run one of the following:

- An RC, RU, VRC, or VRU GETMAIN macro
- An RC or RU FREEMAIN macro
- A STORAGE macro.

A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error. The reason code appears in the form *xxxxxxyy*, where *xxxxxx* is the internal reason for the error, and *yy* is described in the following table:

Code
    Explanation

04
    The macro tried to obtain or free storage in an undefined subpool.

08
    The program issuing the macro is not authorized to obtain or free storage in system subpools. The program must be supervisor state, key 0, or authorized program facility (APF) authorized.

0C
    A global branch entry caller of the GETMAIN or FREEMAIN macro tried to obtain or free a nonglobal subpool.

10
    The LOC parameter is not valid. Virtual storage manager (VSM) received a request for either a fetch-protected local system queue area (LSQA) or a disabled reference subpool that resides below 16 megabytes. Fetch-protected LSQA and disabled reference subpools are supported only above 16 megabytes.

14
    A local branch entry caller of the GETMAIN or FREEMAIN macro did not hold the local lock for the address space that is currently addressable.

18
    An incorrect task control block (TCB) address was specified on a branch entry or STORAGE request. Register 4 at the time of the abend contains the TCB address.

1C

The address space control block (ASCB) address specified on a branch entry request was not the current ASCB.

24

The user of the STORAGE macro is disabled.

28

A caller that is not in supervisor state, or keys 0 through 7, specified the ALET parameter or the TCBADDR parameter on the STORAGE macro.

2C

The caller violated the STORAGE service's locking restrictions by holding a suspend lock that is not the local lock of the target address space.

30

The specified ALET does not translate to a valid STOKEN.

34

The STOKEN does not translate to a valid ASCB; the address space from which the storage is to be obtained or released is not valid for cross memory access.

38

The target address space is the master scheduler's address space, which is not the home address space.

3C

The target address space is either in the process of ending, or has ended.

40

A user violated serialization requirements by calling global branch entry GETMAIN or FREEMAIN while enabled.

44

A program issued a SETLOCK OBTAIN,TYPE=VSMFIX macro before issuing a VSMLIST or VSMLOC request. The program or an associated FRR issued a GETMAIN, FREEMAIN, or STORAGE request before issuing SETLOCK RELEASE,TYPE=VSMFIX.

48

A program issued a SETLOCK OBTAIN,TYPE=VSMPAG macro before issuing a VSMLOC request. The program or an associated FRR issued a GETMAIN, FREEMAIN, or STORAGE request before issuing SETLOCK RELEASE,TYPE=VSMPAG.

4C

An incorrect subpool was specified on a GETMAIN or STORAGE OBTAIN request with the LOC=EXPLICIT keyword specified. Valid subpools for unauthorized programs are:

- 0-127
- 131-132

Valid subpools for authorized programs are:

- 0-127
- 129-132
- 240
- 250-252

50

A GETMAIN or STORAGE OBTAIN request failed because the address specified on the INADDR keyword was greater than 16 megabytes and the central storage backing specified on the LOC keyword was BELOW. The virtual storage address specified on INADDR and the central storage backing specified on the LOC=EXPLICIT must be a valid combination. For example, if the address specified on INADDR is for virtual storage above 16 megabytes, specify LOC=EXPLICIT or LOC=(EXPLICIT,ANY). The following combinations are valid:

- virtual above, central any
- virtual any, central any

- virtual below, central below

- virtual below, central any

54

A GETMAIN or STORAGE OBTAIN request failed because the address specified on the INADDR keyword was not on an doubleword boundary.

58

Branch entry caller for local storage request is running in AR mode.

5C

A program attempted to obtain or release user-key (8 - 15) storage from a CSA subpool but the ALLOWUSERKEYCSA(NO) parameter is specified in a DIAGxx member of PARMLIB and either of the following conditions is true:

- An appropriate restricted use common service area (RUCSA/extended RUCSA) is not defined.

- The address space in which the caller is running lacks SAF authority to reference user-key CSA storage.

For more information, see Restricted use common service area (RUCSA/extended RUCSA) in *z/OS MVS Initialization and Tuning Guide*.

60

The boundary indicated by the CONTBDY parameter on a GETMAIN or STORAGE OBTAIN request was less than the requested storage area length.

64

CONTBDY or STARTBDY was specified on a variable-length GETMAIN or STORAGE OBTAIN request.

68

CONTBDY or STARTBDY was specified with LOC=EXPLICIT on a GETMAIN or STORAGE OBTAIN request.

6C

CONTBDY or STARTBDY was specified with BNDRY=PAGE on a GETMAIN or STORAGE OBTAIN request.

70

Storage overlay detected while freeing storage. VSM processing has recovered this error.

74

PAGEFRAMESIZE1MB was specified with LOC= on a STORAGE OBTAIN request for a subpool that does not support PAGEFRAMESIZE1MB. The supported subpools are 0-127, 129-132, 240, 244 and 250-252. If an unsupported subpool is required, do not specify LOC=PAGEFRAMESIZE1M.

78

An unsupported subpool was specified on the storage obtain request with the EXECUTABLE=NO keyword specified. See the "Storage subpools and their attributes" table in The subpool table in *z/OS MVS Programming: Authorized Assembler Services Guide* to determine which subpools can be specified as non-executable.

7C

STORAGE RELEASE with ALET for a task related subpool is specified where the target address space of the Job Step Program task has terminated.

System action

The system issues message IEA705I. The system abnormally ends the current task.

Programmer response

Depending on the reason code, do one of the following:

Code
    Response

04

Ensure that the specified subpool is not incorrectly specified or modified.

08

If the program requires system subpools, ensure that the program resides in an authorized program library. Users of the STORAGE macro must also switch to supervisor state, or key 0.

0C

Note that a global branch entry request can only request global subpools, that is, system queue area (SQA) subpools or common service area (CSA) subpools.

10

An incorrect bit combination for the LOC operand was put into an input register.

14

Ensure that a local branch entry caller holds the local lock for the currently addressable address space.

44

Issue the SETLOCK RELEASE,TYPE=VSMFIX macro before you issue a GETMAIN, FREEMAIN, or STORAGE macro.

48

Issue the SETLOCK RELEASE,TYPE=VSMPAG macro before you issue a GETMAIN, FREEMAIN, or STORAGE macro.

A4

If the program requires the LOC=PAGEFRAMESIZE1M specification, ensure that a supported subpool is also specified (0-132,240,244). If an unsupported subpool is required, then do not specify LOC=PAGEFRAMESIZE1M.

ALL

Check for program errors that modify the parameter list.

Source

Virtual storage manager (VSM)

BC2

Explanation

During the processing of an FSI call, validation of cell failed before returning it to cellpool.

Code
  Explanation

04

IAZFSIT work area cell pool.

08

FSI trace work area cell pool.

0C

Save area across FSI function call cell pool.

10

FSI trace connected FSS chain cell pool.

14

FSI trace connected FSS chain cell pool.

18

FSI trace connected FSS chain cell pool.

1C

FSI trace connected FSS chain cell pool.

For all codes, the associated component module is JES common, and the detecting module is IAZFSIT.

System action

The system issues an SVC dump.

Application Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the SVC dump.

Source

Functional subsystem interface (FSI)

BC3

Explanation

The JES3 dump job server address space encountered an error. The abend reason code identifies the specific error.

Code
  Explanation

01
  The ASEXT macro returned a non-zero return code while the dump job server space was attempting to extract the address space parameters. Registers 2 and 3 when the BC3 abend is issued contain the return and reason codes from the ASEXT macro call.

02
  The address of the extracted parameter string returned from the ASEXT macro is zero.

03
  The ALESERV macro returned a non-zero return code while the dump job server space was attempting to add JES3's ALET to its access list. Registers 2 and 3 when the BC3 abend is issued contain the return and reason codes from the ALESERV macro call.

04
  The ALESERV macro returned a non-zero return code while the dump job server address space was attempting to extract its STOKEN. Registers 2 and 3 when the BC3 abend is issued contain the return and reason codes from the ALESERV macro call.

05
  The ALESERV macro returned a non-zero return code while the dump job server address space was attempting to extract JES3's STOKEN. Registers 2 and 3 when the BC3 abend is issued contain the return and reason codes from the ALESERV macro call.

06
  The STOKEN associated with the JES3 address space that started the dump job server address space is not the same as the current JES3 address space.

07
  The STIMERM macro returned a non-zero return code while the dump job server address space was attempting to setup status monitoring for the JES3 address space. Register 2 when the BC3 abend is issued contains the return code from the STIMERM macro call.

08
  The dump job server's ECB was posted with an incorrect function code. Register 2 when the BC3 abend is issued contains the function code.

09
  The JES3 dump job server address space was improperly created.

System action

A dump of the JES3 dump job server address and the JES3 address space is taken. The dump job server address space ends and the Dump Job DSP in the JES3 address space that controls the server address space also ends.

Programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the following documentation:

- The BC3 abend reason code.
- The information in registers 2 and 3 at the time of error (if applicable).
- The dump taken by the JES3 server address space.
- The SYSLOG around the time of error.
- The *CALL DJ command that caused the JES3 dump job server address space to be started.
- The dump job DSP log (if available).

Source

JES3

BC5

Explanation

The system terminated an address space.

Code
    Explanation

01
    The system attempted to rebuild its work unit queues and encountered an address space whose queues it could not rebuild.

System action

The system ends the address space.

System programmer response

If the source of the problem cannot be determined, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

Source

Supervisor Control

BFB

Explanation

During JES3 abnormal termination recovery processing, JES3 was unable to invalidate the spool space allocation checkpoint record (PTC). The invalidation failed due to an error in the checkpoint access method or an unrecoverable I/O error in the checkpoint data set(s).

Message IAT6352 accompanies this completion code. JES3 could not invalidate the spool space allocation checkpoint record (PTC) during JES3 abnormal termination recovery processing.

When message IAT1025 accompanies this completion code, JES3 could not invalidate the only copy or both copies of a partition track allocation table (PTAT) during JES3 initialization or after JES3 failsoft processing.

System action

After issuing the message, JES3 ends. IAT6352 contains the checkpoint access method return code, which identifies the error.

If message IAT1025 appears, the system writes an error record to the logrec data set.

System programmer response

If the problem occurs in JES3, take a system dump by specifying DUMP=MVS on the OPTIONS card in the initialization deck Make sure that the failing job step includes a SYSABEND statement.

Programmer response

Using message IAT6352, analyze the return code and correct the error, then restart JES3.

For message IAT1025, analyze the error record in the logrec data set and the accompanying messages. In case the error is caused by a bad track, assign another track to the checkpoint data set and restart JES3 with a warm start. Otherwise, reallocate the checkpoint data set and perform a cold start.

Source

JES3

C03

Explanation

A task tried to end normally by issuing a RETURN macro or by branching to the return address in register 14. The task was not ready to end processing because the task had opened one or more data sets that had not been closed.

The system received a nonzero return code from Data Facility Product (DFP) indicating one of the following:

- DFP returned a nonzero return code.
- DFP could not successfully close one or more data sets still open because a previous error or abend had been ignored by a recovery routine or a data control block (DCB) abend exit routine.
- DFP could not successfully close one or more of the task's data sets that was still open because the DCB for the data set had been incorrectly modified.

   Examples of how the DCB could be incorrectly modified are:

   – A program containing an open DCB issued an XCTL(X) macro.
   – A program freed virtual storage that contained an open DCB.
   – The program modified the DCB incorrectly.

System action

The system may issue message IEC999I. Message IEC999I provides the address of the DEB that could not be properly closed.

Operator response

If the application or system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=C03,ACTION=SVCD,END
```

System programmer response

If the module is an IBM program, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump.

Programmer response

Do the following:

1. If a dump is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. From the dump, find the data extent block (DEB) from the IEC999I message. The DEB + X'18' points to the associated DCB or ACB.
3. If the DCB or ACB has been freed, then this is a user error.

This is a common user error during subtask processing. A user must close a DCB or ACB before freeing the storage where the DCB or ACB resides. If the DCB or ACB has been overlaid, you must determine the cause of the overlay.

Source

Recovery termination manager (RTM)

C0D

Explanation

An unexpected error occurred. For example , a system component experienced an unexpected program check or perhaps an I/O device returned data that was not expected. This abend may be used for entry into a recovery routine that will capture additional documentation and then attempt retry. In other cases, the C0D abend will be percolated to an application recovery routine or another system component recovery routine.

Several components utilize C0D for these unexpected error situations and therefore it becomes necessary to utilize additional information to determine the specific component to determine the exact nature of this unexpected error. Continue reading for additional diagnostic techniques to help identify the nature of your specific instance of this C0D abend.

The system may provide a hexadecimal reason code to describe the error.

Note: Some common C0D reason codes are documented here for convenience. This is not an all inclusive list. In most cases, you will need assistance from IBM Support to interpret the reason codes based on the particular component that issues the abend.

Code
    Explanation

010000xx
    Internal reason codes for System SSL started task (GSKSRVR).

0025xxxx
    Internal reason codes for Basic HyperSwap socket support.

05005C00
    A user-key CSA storage fault occurred while DIAGxx TRAPS NAME(IARRUCSAFLT) is specified on an active DIAGxx parmlib member, IEASYSxx RUCSA is defined, and the user does not have SAF READ authority to CLASS(FACILITY) PROFILE(IARRSM.RUCSA).

2A00010x or 2A00020x
    After a page fixing request that specified a task control block (TCB) address of zero, the system received a corresponding page freeing request with a specific TCB address. The system could not locate the necessary control blocks to process the request.

40000001
    This program may not be invoked as a jobstep program or has an environmental requirement that has not been met.

5E000101
    While processing a page fixing request, the system encountered a fixed page that was not backed with central storage. To satisfy the request, the page must be backed.

The reason code, if any, and the location at which the C0D ABEND was issued, are shown in an entry of type RCVY ABT in the system trace table.

For an indexed sequential access method (ISAM) request, the system found an excess number of error input output blocks (IOB). The probable cause of the problem is that an application neglected to free the dynamic buffers associated with a READ macro.

The following reason codes are used by the input/output supervisor HyperSwap function (IOSH):

IOSHSAPI reason codes

80000002
   Attach macro request failure.

80000003
   Error attaching subtask.

80000004
   ETCRE macro request failure.

80000005
   CSVQUERY macro request failure.

80000006
   IEANTDL macro request failure.

80000007
   IEANTRT macro request failure.

80000008
   IEANTCR macro request failure.

80000009
   Error removing SSID name from master SSID_Array.

8000000A
   RESMGR macro ADD request failure.

8000000B
   RESMGR macro DELETE request failure.

8000000C
   ENFREQ macro LISTEN request failure.

8000000D
   ENFREQ DELETE request failure.

8000000F
   IDENTIFY macro request failure.

80000010
   Maximum number of subtask restart attempts reached.

IOSHSSUB reason codes

80010001
   ESTAEX macro request failure.

80010002
   NUCLKUP macro request failure.

IOSHSENF reason codes

80020001
   UCBPIN macro request failure.

80010002
   NUCLKUP token count error occurred.

IOSHSRDR reason code

80030001
   IRXEXCOM routine call failure.

Container Extensions reason codes

80040001

Bad RC from VSM Locate macro.

80040002

Bad RC from LOAD or NUCLKUP macros.

80040003

Unable to create a latch set needed for resource serialization. Message GLZB005I was issued to describe the failure. It has the return code from the service ISGLCRT and the name of the latch set.

80040004

A device for the zCX instance could not be initialized. The total number of disk and network devices would exceed the maximum of 255.

80040005

The number of virtqueues for a virtual disk or network device has been exceeded.

80040006

A disk device for the zCX instance could not be initialized. The total number of disk and network devices would exceed the maximum of 255.

80040007

The initial program for the zCX instance did not receive control as a started task. zCX only supports the started task environment. The START command must be used to start a zCX instance. This is a user error.

80040008

The guest used an indirect descriptor to provide buffers for incoming network traffic. This is not supported by the virtualization layer.

80040009

The guest used a chain of descriptors for an outgoing network request that were not in the expected format.

8004000A

The address of the prefix area (PSA) for one of guest's virtual CPUs was not within the guest memory.

8004000B

The guest used a chain of descriptors for a disk request that were not in the expected format.

8004000C

The guest used a chain of descriptors for a disk request that were not in the expected format.

8004000D

The virtualization layer received a request from the guest that it does not support. It responded with an operation exception. This should be reported to IBM.

8004000E

The guest sent a request that is not supported by the virtualization layer to a network device.

8004000F

The guest stopped unexpectedly. This was not a shutdown initiated by the STOP command. It may indicate that the guest encountered a problem.

80040010

The request to format the VSAM linear data set for one of the disks failed. Message GLZV002I was issued before the format. It contains the name of the data set.

80040011

The request to format the VSAM linear data set for one of the disks failed. Message GLZV002I was issued before the format. It contains the name of the data set.

80040012

The request to update the high used control interval of the VSAM linear data set for one of the disks failed. Message GLZV003I was issued before the update. It has the name of the data set.

80040013

The virtualization layer was unable to connect to the network. Time out occurred while waiting for a response to the connect request. Check the job log for messages about network problems. Restart the zCX instance after network problems have been resolved.

80040014

The state of the lock word, used by the virtualization layer to serialize with the guest, is not valid.

80040015

The task that handles communication with the z/OS console has terminated abnormally. Check for earlier messages or abends that may have led to the termination.

80040016

The first control interval of the VSAM linear data set for one of the disks did not contain the expected data. Message GLZV004I was issued to describe the failure. It has the name of data set.

80040017

The request to read the first control interval of the VSAM linear data set for one of the disks failed.

80040018

The request to read the first control interval of the VSAM linear data set for one of the disks failed.

80040019

A virtual CPU has encountered an unrecoverable error. The entire zCX instance has been terminated.

8004001A

The task that performs the connect and reconnects of the network(s) associated with this server instance has failed. This is an internal error. If no fix exists, contact the IBM Support Center.

8004001B

After multiple attempts to connect to the network, the server instance is unable to do so.

8004001C

The server is unable to find the disk needed to perform re-initialization for reboot processing. The entire zCX instance will terminate.

8004001D

Errors have been encountered trying to re-initialize a disk during reboot processing. The entire zCX instance has been terminated.

8004001F

Bad ALCPET encountered.

80040020

Bad Pause Pet.

80040021

Bad pause/release element.

80040022

Timer request to set when the timer is still set.

80040023

Invalid timer request.

80040024

Timer is not able to cancel the DIE.

80040025

Unexpected IEAVXTSWRC encountered.

80040026

TDS is requested to be set when still set.

80040027

Unexpected IEAVXTDSRC encountered.

80040028

Invalid TDS Request.

80040029

Internal error. If no fix exists, contact the IBM Support Center.

8004FFFF

Overflow of the virtio descriptor array.

System action

The system may write a logrec data set error record, may write a dump, and may write messages about the problem. The system issues an abend to the current task.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=C0D,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If a dump or a logrec data set error record was not written with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.

2. If you cannot identify a responsible component from the logrec record symptoms such as CSECT NAME and COMPID, then use additional information from logrec data set records, dumps, or both to identify the component that is the source of the ABEND. See the chapters on "Recording Logrec Error Records" and "System Trace" in *z/OS MVS Diagnosis: Tools and Service Aids* for details on how to interpret logrec records and System Trace entries. The failing PSW address, in most cases, reflects the component that issued the ABEND macro. To ensure that the PSW address corresponds to an ABEND macro invocation, refer to the failing instruction text in the logrec record or dump. The failing instruction should have been "0A0D".

   There are some cases where the CALLRTM TYPE=ABTERM macro is used and causes the error PSW instruction address to reference a system program or user program that might be in a wait state. Hence, the failing instruction text might be "0A01" or some other instruction. This might be due to the asynchronous nature of the recovery associated with a CALLRTM call. For this case, you will need a dump that contains SYSTEM TRACE.

3. Search the System Trace for an entry of the type RCVY ABT corresponding to the C0D ABEND, and note the PSW address. Once you have determined the PSW address for the program responsible for invoking the ABEND or CALLRTM macro, use the IPCS WHERE command to find the module name.

   - If the module is not an IBM module, continue diagnosis with the module.
   - If the module is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the messages, the logrec data set record, the SYSOUT output for the job, and the dump.

Programmer response

For an ISAM request error, fix the program and run the job again. For a problem in obtaining storage, fix the storage request and run the job again.

For reason code 40000001, ensure that you invoked the proper program and that its environmental requirements have been met.

Source

Code C0D can be issued by many components, including:

- Real storage manager (RSM)
- Auxiliary storage manager (ASM)
- Contents supervision (CSV)
- Supervisor control (SUP)
- Program Call/authorization (PC/AUTH)
- Input/output supervisor (IOS)

- Access methods (e.g. BSAM, QSAM)
- System SSL started task (GSKSRVR)

C13

Explanation

The error occurred during processing of an OPEN macro instruction for a concatenated partitioned data set or a graphic device. This system completion code is accompanied by message IEC153I (or for graphics, message IEC157I). Refer to the explanation of message IEC153I (or message IEC157I) for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Respond as indicated for message IEC153I (or message IEC157I).

Source

DFSMSdfp

C1A

Explanation

Through the MODIFY CATALOG,ABEND command, a request was issued to abnormally end either the catalog address space (CAS) allocation/unallocation, analysis, or modify task.

System action

The system attaches a new task to restore the allocation/unallocation, analysis, or modify function.

Source

DFSMSdfp

C22

Explanation

The execute channel program (EXCP) processor abnormally ended the job because the maximum number of EXCP/EXCPVR macro requests permitted for an address space was exceeded. The maximum number of outstanding requests is defined in the ASCBXCNT in the address space control block (ASCB).

System action

The EXCP processor abnormally ends the job.

System programmer response

If the error recurs and an installation provided program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job.

Programmer response

Check the job for a loop that could result in EXCP/EXCPVR macros being issued repeatedly without intervening WAIT macros. If the reason for the error cannot be determined, notify the system programmer.

Source

Execute channel program (EXCP)

C2D

Explanation

A program requested an overlay. In answer to the request, the overlay supervisor was using program fetch to load a program segment from the library. Fetch could not get enough storage for the module or control blocks.

Note: Overlay programs run only in 24-bit addressing mode, not in 31-bit addressing mode.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided.

Programmer response

Determine why no storage was available. Correct the errors; then assemble, link edit, and run the program again.

Source

Overlay supervisor

C37

Explanation

The error occurred when an input operation was requested. The data set was on a direct access device. This system completion code is accompanied by message IEC033I. Refer to the explanation of message IEC033I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response

Respond as indicated for message IEC033I.

Source

DFSMSdfp

C78

Explanation

An error occurred when the system tried to process a virtual storage management (VSM) service. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code

Explanation

04

For the CPOOL BUILD or GET options, there is not enough virtual storage available to build or extend a cell pool.

08

For the CPOOL BUILD or GET options, there is not enough central storage available to build or extend a cell pool.

0C

For the CPOOL BUILD or GET options, page tables are paged out for the storage obtained for the pool or pool control blocks.

10

For the CPOOL BUILD GET or DELETE options, an unauthorized user tried to build get or delete storage from an authorized subpool.

14

For the CPOOL BUILD option, an unauthorized caller specified the task control block (TCB) parameter.

18

For the CPOOL GET or DELETE option, an incorrect cell pool identifier (CPID) is specified.

1C

For the CPOOL BUILD DELETE or GET option, there is not enough storage available for a module's work area.

20

For the CPOOL BUILD option, an incorrect cell count is specified.

24

For the CPOOL BUILD option, a reserved field in the parameter list is nonzero.

28

For the CPOOL BUILD, GET, or DELETE options, the invoker of the VSM service is in service request block (SRB) mode and problem state, which is not allowed by the system.

2C

For the CPOOL BUILD option, the invoker of the VSM service is in SRB mode requesting a local area subpool. However, the invoker did not specify the TCB parameter.

30

A FREEMAIN routine returned a nonzero return code unexpectedly when a task ended. Recovery attempts a retry.

34

For the CPOOL BUILD or DELETE option, the subpool identifier is incorrect.

38

For the CPOOL BUILD option, the LOC parameter is incorrect.

3C

For the CPOOL BUILD option, the PSATOLD field points to a TCB that is not in the currently addressable address space.

40

For the CPOOL BUILD option, the invoker of the VSM service holds the VSMPAG lock. This is not valid because the system BUILD routine must obtain the CMS lock, which is lower in the hierarchy than the VSMPAG lock.

44

For the CPOOL BUILD option, the cell size is less than 4 bytes. This is not valid.

48

On a request to free a central or virtual region, the subpool FREEMAIN failed.

4C

The address space that is making a request to free a virtual region is nonswappable.

50

On a request to get a real region, the system assigned virtual=real (V=R) storage that VSM allocated in virtual storage.

54

On a request to get a real region, the request for a VSM cell failed.

58

For the CPOOL GET option, BNDRY=QWORD was requested but the cell size is not a multiple of 16 bytes.

5C

For the CPOOL GET option, input register 1 did not contain a valid cell pool ID.

60

The system detected one of the following:

- The reserved bits of register 15 are not zero.
- The storage type indicator passed to VSMLOC is not valid. Valid storage types are the system queue area (SQA) SQA, local system queue area (LSQA), common service area (CSA), and private area.
- The size passed to VSMLOC is zero or negative.
- The sum of the address passed to VSMLOC plus the size passed is greater than 2 gigabytes.

74

The reserved bits of the VSMLIST parameter list are not zero.

78

The return code field in the work area passed to the VSMLIST routine is not zero (first call) or four (restart).

7C

The SP operand of VSMLIST is not valid.

80

The SPACE operand of VSMLIST is not valid. **Note:** SPACE=UNALLOC is not allowed if SP=SQA, SP=LSQA, or SP=(*subpool list*) is specified.

84

VSMLIST was invoked again. Control information that was saved in the work area, provided by the caller, is not valid.

88

The TCB address is not valid or not in the currently addressable address space.

8C

On VSMLIST, the subpool list address is zero.

90

On VSMLIST, the work area size is less than 4 kilobytes.

A0

On CPOOL, the primary cell count, cell size or cells per CPU specified is too large. Ensure that the cell count, cells per CPU and cell size values are specified correctly. If they are, decrease one or more values.

A4

On CPOOL Build, the secondary cell count, cell size or cells per CPU specified is too large. Ensure that the cell count, cells per CPU and cell size values are specified correctly. If they are, decrease one or more values.

A8

CPOOL FREE attempted to free a cell which is already free. Register 2 contains the address of the cell pool. Register 2 plus X'1C' contains the address of the cell being freed. Register 14 contains the address of the cell pool free requester that results in the system completion code C78.

B0

During an address space create operation, RSM returned a failing reason code. In the LOGREC record associated with the abend, register 0 contains the RSM reason code.

B4

An unauthorized caller of CPOOL BUILD specified the MULTIHDR=YES parameter. The caller must be running in supervisor state or PSW key 0-7 or be APF-authorized to use this option. Ensure that the caller has the authority to perform the requested action.

B8

For the CPOOL BUILD option, an incorrect **LOC** parameter is specified.

C0

A CPOOL BUILD request specified the CONTRACTABLE=COND parameter, but not CELLSPERCPU=1. The CONTRACTABLE=COND parameter requires CELLSPERCPU=1.

C4

A CPOOL request specified the CONTRACTABLE=COND parameter, but not MULTIHDR=YES. The CONTRACTABLE=COND parameter is valid only when MULTIHDR=YES.

C8

The CPOOL **CONTINTVL** parameter specifies a value that exceeds the number of seconds in 365 days (31536000).

CC

On a CPOOL BUILD request, the value of (FREECELLS ÷ FREECELLSDIVISOR) exceeds 128K (131072) when **FREECELLSPERCPU** is not NO.

D0

A CPOOL BUILD request specified LOC(xx,PAGEFRAMESIZE1MB) for a subpool that does not support backing with large pages.

D4

The system detected an unexpected change and could not complete the CPOOL request.

D8

A CPOOL CONTRACT request was issued by an unauthorized caller.

System action

The system writes a logrec data set error record. The system abnormally ends the current task.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Depending on the reason code, do one of the following:

Code
   Response

04, 08, 0C, 1C
   Run the job again. If the error recurs, notify the system programmer.

18, 20, 30, 34, 38, 44, B8,
C0, C4, C8, CC, D0, D4
   Ensure that the correct values are specified.

10, 14, 28, 2C, B4, D8
   Ensure that the caller has the proper authorization to perform the requested action.

24, 74, 78, 7C, 80, and 8C
   Ensure that the parameter list is properly initialized.

40

   Change the program so it releases the VSMPAG lock before issuing the CPOOL macro with the BUILD parameter.

3C

   Ensure that the program passes the proper TCB address.

48, 4C, 50, 54, 58
Notify the system programmer.

5C, 60
Ensure that the input registers are properly initialized.

84
Ensure that the information in the work area does not change before the VSMLIST macro is invoked again.

88
Ensure that the TCB specified and all subtasks of the TCB are correct.

90
Ensure that the work area size is at least 4 kilobytes.

A0, A4
Ensure that the cell count and cell size values are specified correctly. If they are, decrease one value or both values.

Source

Virtual storage manager (VSM)

CC2

Explanation

The error occurred while processing an IXCMSGO macro. Register 2 contains the IXCMSGO return code. Register 3 contains the IXCMSGO reason code.

System action

System processing continues.

System programmer response

If the problem persists, search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason codes and the dump.

Source

Transaction trace.

CC3

Explanation

This abend code is used by WebSphere® Application Server on z/OS. See WebSphere Application Server Knowledge Center (www.ibm.com/support/knowledgecenter/SSEQTP) for further information.

CC4

Explanation

This abend code is issued as a part of normal processing by JES2 during task termination when resolving a deadlock condition involving an internal lock. This is not considered an error.

System action

Normal task termination continues.

System programmer response

None

Source

JES2

CC7

Explanation

A work unit (a task or a system service running under an SRB) issued an instruction requiring the presence of an Integrated Cryptographic Feature (ICRF) on a processor that does not have the feature installed. The system was unable to move the work to a processor with the feature. A hexadecimal reason code in register 15 further describes the error condition.

Code
   Explanation

00
   The work unit was disabled.

04
   The ICRF is not available in the processor complex.

08
   No processors with the feature satisfy the work unit's restrictive processor affinity requirements.

10
   An unexpected error occurred.

System action

The system ends the work unit.

Programmer response

Respond according to the reason code:

00
   Correct the program so that the instruction requiring the ICRF is issued while running enabled.

04
   Resubmit the job to a processor complex that has the ICRF installed. In a recovery routine, if this condition is temporary, the routine could:

   - Retry the instruction later
   - Issue a message to the end users to retry the request later
   - Terminate the part of the program that requires the feature.

08
   Remove the restrictive processor affinity which might have been assigned to the work unit in one of the following ways:

   - In the program properties table (PPT) (using the AFF keyword in SYS1.PARMLIB member SCHEDxx)
   - In the SRB (in the SRBCPAFF field)

10
   Search problem reporting databases for a fix for the problem. If no fix exists, collect diagnostic data and contact the IBM Support Center.

Source

Supervisor control

CFB

Explanation

One of the following occurred:

- During JES3 initialization, JES3 could not attach the JES3 auxiliary task, module IATAUX. ATTACH processing writes message IAT3005 to the console.
- After JES3 initialization, the JES3 auxiliary task, module IATAUX, could not recover from an error and abnormally ended. The ESTAI routine in module IATABMN requests a dump of module IATAUX to the SYSABEND or SYSUDUMP data set.

System action

JES3 ends.

System programmer response

If module IATAUX could not be attached, the system issues messages about the job. Make sure that the failing job step includes a SYSABEND statement.

Collect all printed output and output data sets related to the problem. If the problem occurs in JES3 you should:

- Obtain system dump by specifying DUMP=JES on the OPTIONS card in the initialization deck and save the output
- Provide a console log from initialization
- Provide a listing of the JES3 start up procedure, containing all JCL used to start the subsystem.

If module IATAUX abnormally ended, the system sends messages about the job to one of the following:

- The primary console
- The remote console, for a system with remote consoles
- The hard-copy log for a system with multiple console support (MCS)

Make sure that the failing job step includes a SYSABEND statement.

Collect all printed output and output data sets related to the problem.

Programmer response

If JES3 wrote message IAT3005 to the console, make sure that module IATAUX is in one of the following:

- The library concatenation defined by the JES3LIB initialization statements, if used.
- The STEPLIB concatenation defined in the JES3 procedure.
- The linklist specified in response to message IEA101A.

If JES3 did not write message IAT3005, look in the dump of module IATAUX to find the system completion code for the module's failure. Respond to that completion code.

Source

JES3

D04

Explanation

An error occurred when the system tried to process an EU, LU, or VU form of the GETMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
  Explanation

08
  The system could not satisfy a request for local system queue area (LSQA) storage because there is not enough central storage for the control blocks needed to support the request.

System action

The system issues message IEA705I. The system abnormally ends the current task.

System programmer response

See installation procedures to decrease the fixed central storage requirements of the system.

Programmer response

Resubmit the job. If the system issues this abend frequently, notify the system programmer.

Source

Virtual storage manager (VSM)

D05

Explanation

An error occurred when the system tried to process an EU, LU, or VU form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
  Explanation

04
  A FREEMAIN request was specified for local system queue area (LSQA) virtual storage that is associated with a task. However, the virtual storage area specified is not associated with the task.

08
  The system could not satisfy a request for LSQA storage because there is not enough central storage for the control blocks needed to support the request.

System action

The system issues message IEA705I. The system abnormally ends the current task.

System programmer response

See installation procedures to decrease the fixed central storage requirements of the system.

Programmer response

For reason code X'04', change the FREEMAIN request to obtain storage owned by the task. Run the job step again.

For reason code X'08', resubmit the job. If the system issues this abend frequently, notify the system programmer.

Source

Virtual storage manager (VSM)

D06

Explanation

A program issued the LOAD macro for a module. The macro included some form of the GLOBAL parameter. However, within the same job step task structure, a task control block (TCB) already loaded the requested module with different variables on the GLOBAL parameter. For example, a program issues the LOAD macro for module MYPROG1 with the parameter GLOBAL=(YES,P). However, a TCB already loaded module MYPROG1 with the parameter GLOBAL=(YES,F) or GLOBAL=NO.

If a user tries to load the same module twice - once into a fixed subpool and once into a pageable subpool, or once into global storage and once into local storage, this situation arises.

System action

The system abnormally ends the program that issued the LOAD macro abnormally ends unless the macro included the ERRET parameter. The system issues message CSV017I. The system issues an ABEND dump.

System programmer response

If the error recurs and the program is not in error, see the system programmer response for the messages in the job log.

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump and the source program listing for the job.

Programmer response

Change the GLOBAL parameter on the LOAD macro. Resubmit the job.

Source

Contents supervision (CSV)

D0A

Explanation

An error occurred when the system tried to process an R form of the GETMAIN or FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
   Explanation

04
   A FREEMAIN request was specified for local system queue area (LSQA) virtual storage that is associated with a task. However, the virtual storage area specified is not associated with the task.

08
   The system could not satisfy a request for LSQA storage because there is not enough central storage for the control blocks needed to support the request.

System action

The system issues message IEA705I. The system abnormally ends the current task.

System programmer response

See installation procedures to decrease the fixed central storage requirements of the system.

Programmer response

For reason code X'04', change the FREEMAIN request to obtain storage owned by the task. Run the job step again.

For reason code X'08', resubmit the job. If the system issues this abend frequently, notify the system programmer.

Source

Virtual storage manager (VSM)

D0D

Explanation

The system abnormally ended a subtask. While processing the subtask's end, the recovery termination manager 2 (RTM2) was reentered incorrectly. Therefore, RTM abnormally ended all tasks in the job step.

Note: The original abend code is in the supervisor request block (SVRB) for the original SVC 13 (ABEND macro). This SVRB is queued from the task that experienced the original error.

System action

RTM2 attempts to end the job step. The system may write an SVC dump, or the program may write an ABEND dump. The system sends messages about the problem to the job log.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=D0D,ACTION=SVCD,END
```

System programmer response

Do the following:

1. If a dump is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. Examine the abend code for the original subtask. This abend code can be found in the SVRB of the original SVC 13 SVRB queued from the task that experienced the error.

   Continue diagnosis for that abend code. If the problem cannot be resolved, continue with step .
3. Look at the messages in the job log.
4. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide:

   • An ABEND or SVC dump
   • Messages from the job log
   • The assembly listing associated with the job

Source

Recovery termination manager (RTM)

D13

Explanation

The error occurred during processing of an OPEN macro instruction for a graphic data control block. This system completion code is usually accompanied by message IEC158I. Refer to the explanation of message IEC158I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job and all printed output and output data sets related to the problem.

Programmer response

Respond as indicated for message IEC158I.

Source

DFSMSdfp

D14

Explanation

The error occurred during processing of a CLOSE macro instruction for a graphic data control block.

The graphic device to be closed was not opened by the closing task.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Issue the CLOSE macro instruction within the same task that issues the OPEN macro instruction, or remove the incorrect CLOSE macro instruction. Then run the job step again.

Source

DFSMSdfp

D1A

Explanation

The catalog address space (CAS) analysis task ended abnormally because the analysis task exceeded the allotted time for processing. The task may have been waiting for some system resource that is permanently unavailable.

System action

The system attaches a new task to restore the analysis function.

Source

DFSMSdfp

Explanation

A program issued the MGCR or MGCRE macro (SVC 34) or an operator issued a command. While processing the request, the system detected an error. A hexadecimal reason code in register 15 explains the error:

Code
  Explanation

04

  The request specified both CMDFLAG=SUBSYS and CMDFLAG=COMMTASK. These parameter values are mutually exclusive.

08

  On the TEXT parameter, the request specified a length field that is either greater than 126 characters or zero.

0C

  The request parameter list did not include the control block acronym MGCRE.

10

  The request required the CONSID or CONSNAME parameter, but neither was specified.

14

  The request required the CONSID or CONSNAME parameter, but neither was specified or the request specified both the CONSNAME and CONSID parameters. These are mutually exclusive.

18

  The request specified a CONSNAME parameter value that does not represent a valid console.

1C

  The request specified a CONSID parameter value that is out the defined range for a multiple console support (MCS) console.

20

  The program is not authorized to issue the MGCR or MGCRE macro. The program must be in supervisor state and PSW key 0-7.

28

  Parameters specified on the MGCR or MGCRE cannot be accessed because they are specified incorrectly.

2C

  The command abended because the security product took longer than 30 seconds to process the command authorization (RACROUTE). It was causing a wait in the Console main task, which cannot be tolerated.

30

  The request specified both CMDFLAG=SUBSYS and CMDFLAG=TSO. These parameter values are mutually exclusive.

34

  The request specified both CMDFLAG=TSO and CMDFLAG=COMMTASK. These parameter values are mutually exclusive.

38

  The request specified CMDFLAG=TSO, but did not specify CONSID. CONSID is required with CMDFLAG=TSO.

3C

  The request specified CONSNAME or CONSID and the system found the console name or ID to be defined, but the control blocks that represent the console no longer exist. Most likely this is because the system where the console was defined is no longer active in the sysplex.

40

  The request parameter list indicated that a UTOKEN address was provided, but the UTOKEN address contains a zero.

44

  The request parameter list indicated that an ENVRIN address was provided, but the ENVRIN address contains a zero.

48
  The request specified ENVRIN, but did not specify UTOKEN. UTOKEN is required with ENVRIN.

System action

If reason code X'24' was issued, the system does not process the command.

If reason code X'2C' was issued, the command will be abended to fail the command.

For all other reason codes, the system does not process the MGCR or MGCRE macro.

System programmer response

If reason code X'24' was issued, ask the operator to issue the command again. If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

If reason code X'2C' was issued, check the security product's database to determine why the RACROUTE is taking longer than usual.

For all other reason codes, determine which module issued the MGCR or MGCRE macro:

- If the module is installation-provided code, correct the MGCR or MGCRE macro. Recompile and run the job step again.
- If the module is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group for the module at the IBM Support Center.

Source

Master scheduler

D23

Explanation

An error occurred in processing for a write to operator (WTO) or write to operator with reply (WTOR).

Register 15 contains a hexadecimal error code in the format *xxxxyyyy*. The fields in this error code are the following:

xxxx
  This halfword is for IBM internal use only.

yyyy
  This halfword is the unique reason code identifier.

The following are the *yyyy* values and their meanings:

Code
  Explanation

0002
  The caller issued a WTO or WTOR specifying an incorrect number of lines. Possible errors:

  - A WTOR was specified with SYNCH=NO and more than one line was specified
  - A multiple-line WTO with zero lines was specified
  - A WTO or WTOR was specified with SYNCH=YES, and more than 14 lines were specified

0003
  The parameter list that the caller passed does not reside in storage that the caller can access.

0004
  The caller requested a WTO or WTOR with a text length of zero, or a multiple-line WTO was specified with one of the lines having a text length of zero.

0005

A caller requested a WTO or WTOR with a text length too long for the type of line. The text was truncated to the maximum length for that type of line.

0006

A caller that was not in key 0-7 requested one or more of the authorized WTO keywords.

0007

The caller requested mutually exclusive functions. Examples:

- Both CONSID and CONSNAME were specified
- A multiple-line message requested incompatible or invalid line types for a line
- A WTOR prefix was specified with a WPX

0008

The caller supplied an incorrect parameter list structure. Here are possible reasons:

- WPX length was not correct.
- WQEBLK parameter was specified with an incorrect WPL.
- Zero address was specified for the WPL.

0009

The caller requested a WTO or WTOR with a zero text address, or a multiple-line WTO was specified with one of its lines having a zero text address.

000B

The caller specified LINKAGE=BRANCH with unsupported keywords.

000C

The caller issued a WTOR with SYNCH=NO and LINKAGE=BRANCH.

000E

This processor does not hold the restart resource.

000F

The system could not access the action code storage.

0010

The system found an incorrect value in the write-to-operator queue element (WQE).

0011

The console name is reserved or incorrect.

***yy*12**

The system was unable to create or expand an SQA cellpool. The return code from the failing STORCSR will be found in *yy*.

***yy*20**

A GETCELL for an operator reply element (ORE) failed. The return code from the GETCELL macro will be found in *yy*.

***yy*21**

The system could not build a cellpool for an operator reply element (ORE). The return code from the BLDCPOOL macro will be found in *yy*.

***yy*22**

The system could not obtain storage for an operator reply element (ORE). The return code from the STORAGE macro will be found in *yy*.

0030

A write-to-operator queue element (WQE) for an operator reply could not be obtained.

***yy*40**

A recovery environment could not be established. The return code from the ESTAE macro will be found in *yy*.

***yy*50**

A LOADWAIT request failed. The return code from the BLWLDWT service will be found in *yy*.

yy51

The system could not obtain needed storage. The return code from the STORAGE macro will be found in *yy*. When yy equals 00, a WTO multi-line exceeded the maximum 65533 total lines allowed. The WTO multi-line connect was too large.

yy52

A failure occurred in the data block create routine. The return code from the data block routine will be found in *yy*.

0053

Storage could not be obtained for the dummy SSI control blocks (SSOB, SSWT, WQE, ORE). Processing continues for this message; however, the SSI is not called for this message.

0055

The caller requested a function that requires additional parameters.

0060

Delayed issued WTO subtask timed out.

yy61

Delayed issued WTO subtask could not establish recovery, where *yy* is the ESTAEX return code.

yy62

Delayed Issued WTO task could not attach a subtask where *yy* is the ATTACH return code.

0063

The first line of a multi-line message cannot be marked verbose.

0064

The branch-entered WTO or WTOR issuer is not in the required supervisor state.

0068

The branch-entered WTO or WTOR issuer is not in the required key (0-7).

F*yyy*

An internal processing error occurred. The *yyy* field contains the abend code of the failure.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

If the reason code is X'0012', then increase the SQA/ESQA values in IEASYSxx in parmlib.

Programmer response

Correct the program issuing the WTO or WTOR macro. Recompile the program. Run the job step again. If the problem persists, notify the system programmer.

Source

Console services

D24

Explanation

An error occurred in the Write To Log (WTL) parameter list.

Here are the reason codes and their meanings:

Code
   Explanation

01

No WTLBLK address was specified.

02

The WTLBLK parameter is not valid. The acronym is not valid.

03

The WTLBLK parameter is not valid. The version level is incorrect.

04

The WTLBLK parameter is not valid. The length of the WTLBLK parameter is not correct for the version level.

05

The WTLBLK parameter is not valid. Reserved fields or bits are not zeros.

06

The WTLBLK parameter is not valid. Field WTLBLen does not contain a valid length of the header and text.

D2D

Explanation

A program requested an overlay. In answer to the request, the overlay supervisor was using program fetch to load a program segment from the library. Fetch found an incorrect record type in the segment to be loaded.

Note: Overlay programs run only in 24-bit addressing mode, not in 31-bit addressing mode.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided.

Programmer response

Link edit and run the program again.

Source

Overlay supervisor

D37

Explanation

The error occurred when an output operation to a direct access device was requested. This system completion code is accompanied by message IEC031I.

Refer to the explanation of message IEC031I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC031I.

Source

DFSMSdfp

D78

Explanation

An error occurred when the system tried to process an RU or VRU form of the GETMAIN or an RU form of the FREEMAIN macro. A reason code in the SDWACRC field of the system diagnostic work area (SDWA) explains the error:

Code
> **Explanation**

04
> A FREEMAIN request was specified for local system queue area (LSQA) virtual storage that is associated with a task. However, the virtual storage area specified is not associated with the task.

08
> The system could not satisfy a request for LSQA storage because there is not enough central storage for the control blocks needed to support the request.

System action

The system issues message IEA705I. The system abnormally ends the current task.

System programmer response

See installation procedures to decrease the fixed central storage requirements of the system.

Programmer response

For reason code X'04', change the FREEMAIN request to obtain storage owned by the task. Run the job step again.

For reason code X'08', resubmit the job. If the system issues this abend frequently, notify the system programmer.

Source

Virtual storage manager (VSM)

D82

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

D83

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

D84

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

D85

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

DC2

Explanation

RSM virtual services failed.

A DC2 abend can be issued for a valid request which cannot be successfully processed by RSM. DC2 abend are only generated when an IARV64 request is issued.

An IARV64 macro invocation to manage storage above 2 gigabytes failed. The 4 byte hexadecimal reason code is in the format *xxrrrryy*, where *rrrr* describes the error. The following are the *rrrr* values and their meanings:

Code
    Explanation

0004
    Virtual address specified is not valid.

006C
    Invalid NUMPAGES value specified.

0010
    Spin locks held.

0011
    Local lock held.

0012
    Subspaces exist in target space.

0013
    Caller in amode 24.

0014
    Target address space does not exist.

0015
    Maximum number of segments have been obtained.

0016
    Memory limit exceeded.

0017
    Insufficient free space to satisfy request.

0018
    Could not obtain storage to manage request.

0019
    Caller must be authorized to perform request.

001A
    No memory objects above 4GB have been allocated.

001B
    Frame/pagefix request conflict.

001C
    Page is lost.

001D
    No 64BIT Shared or 64BIT Common storage above 4G has been allocated.

001E
    Fixed page found.

001F

ChangeGuard request in progress for the memory object.

0020

User environment has changed (usually after enablement).

0021

Memlimit was zero.

0022

PAGEFRAMESIZE=1MEG/1M/2G is specified, but the large frame area is not reserved.

0024

The requested INORIGIN is not available; all or some of the requested area is already allocated.

0030

Parameter list is not accessible.

0031

Range list is not accessible.

0032

Version is not supported.

0033

Range list must be specified.

0034

ALET not valid.

0035

ALET not allowed for problem program invoker.

0036

Unauthorized caller specified CONTROL(AUTH).

0037

Key specified is not valid for caller.

0038

Bits 0 - 31 of user token are non-zero for authorized caller.

0039

Bits 32 - 63 of user token are zero for unauthorized caller.

003A

Specified MATCH=USERTOKEN and no token specified.

003B

No memory objects were found for the specified user token.

003C

Memory object were found for this request but none were detached.

003D

User token specified does not match the memory object for the specified address.

003E

User token was specified, and address specified is for a memory object that was created without a user token.

003F

Requested memory object could not be found.

0040

Address specified is not valid. Either the storage was not allocated or the range of storage specified by the VSA and NUMPAGES is not contained in a single memory object.

0041

OWNER value specified is not valid for caller.

0042

Guard size is greater than object size.

0043

Caller must be authorized for memory object specified.

0044

Memory object not created with CONTROL=AUTH attr; required for this request.

0045

A range was specified that is not contained within a single memory object, or would exceed addressable storage, or is not within the shared memory area.

0047

A range was specified that does not start on a page boundary.

0048

TCB TOKEN for calling task does not match TCB TOKEN for memory object.

0049

TCB TOKEN specified does not match TCB TOKEN for memory object.

004A

TCB TOKEN specified does not map to valid task.

004B

TCB TOKEN specified does not map to valid address space.

004C

TCB TOKEN specified does not map to valid address space.

004D

TCB TOKEN specified does not map to valid task.

004E

TCB TOKEN required but not specified.

004F

Request not supported.

0050

Request to unfix a page that is not currently fixed.

0051

The range or starting address specified does not start on a segment boundary.

0052

Invalid View was specified.

0053

PAGEFRAMESIZE=1MEG/1M/MAX/2G or LocalSysArea=Yes is specified, but the caller is not authorized.

0054

PAGEFRAMESIZE=1MEG/1M/2G is specified, but the enhanced DAT1 architecture is not available for 1M pages or the enhanced DAT2 architecture is not available for 2G pages.

0055

A duplicate UToken already exists for the memory object specified for the address space.

0056

AFFINITY=SYSTEM Detach already performed.

0057

Reserve field not zero.

0058

Range or address specified includes shared storage or pages backed by 2G frames, large frames or common storage that is not supported by the service requested.

0059

Requested storage area of size 0.

005A

A bad CONVERT parameter specified by CHANGEGUARD.

005B

At least one segment in the specified range was already guarded/unguarded.

005C

Work area length is too small.

005D

There were not enough frames available in the large frame area for backing 2G or large pages, or the requester is in an execution environment that is a member of a WLM resource group with a memory limit. The real storage needed to satisfy the request would cause the pools current frame allocation to exceed its high threshold.

005E

IARV64 failed. Parameters are not in fixed storage.

005F

Invalid dump priority value (out of range) specified.

0060

A range was specified that contains hidden pages.

0061

A range was specified that contains protected pages.

0062

A range was specified that contains guarded pages.

0065

IARV64 failed; demotion of large page could not be completed.

006A

The range or starting address specified does not start on a region third boundary.

006B

Range includes pages that cannot be protected/unprotected with the AMOUNTSIZE parameter value specified (this includes the case when AMOUNTSIZE was specified against a range that includes 2G pages).

006D

IARV64 failed; cannot PAGEUNFIX a page that is not currently fixed by IARV64 PAGEFIX.

0070

IARV64 failed; range must start on a segment boundary and number of pages to process must be a multiple of 256.

0073

The requested INORIGIN value is not valid; all or some of the requested area is below the 2-GB bar, in the 64-bit common area, or in the 64-bit shared area. If a specific virtual area (USE2GTO32G, USE2GTO64G, LOCALSYSAREA) was requested, all or some of the requested area is outside the specified virtual area.

0081

A cross-memory error has occurred.

0082

An I/O error has occurred.

0083

The page is part of a share group.

0084

IARV64 failed; ChangeAttribute is not supported for this memory object.

00AA

Unable to access parmlist or workarea.

00AC

Keyword CONVERTSTART is not allowed on a large page request.

00AE

AFFINITY=SYSTEM was specified with a MEMOBJSTART address that is not in the 64BIT Common or the 64BIT Shared areas.

00AF

AFFINITY=SYSTEM was not specified for a common memory object.

00EB

Internal system error previously detected. The request could not be processed.

00EC

Inconsistent data.

00ED

Internal service failed.

00EF

A page with I/O in progress has no pagefix PCB.

00F0

Parameter not valid.

00F1

Duplicate memory object found.

00F2

Memory object is damaged

00F3

User Token Block is damaged.

00F4

Unable to obtain TCB Token.

00F5

Internal control block damaged.

00F6

Parameter not valid.

00F7

Parameter not valid.

00F8

Internal control block damaged.

00F9

Memory object detected is not for specified address.

00FA

Common release failed.

00FB

Internal control block damaged.

00FE

Unable to free storage.

00FF

System Error.

2001

The parameter list passed to the IARV64 service specified the INORIGIN keyword with a request other than GETSTOR.

System action

The IARV64 request has failed. The system was unable to complete operation requested using the IARV64 macro.

Operator response

None.

System programmer response

- If the reason code indicates a parameter or request-specific error, correct the parameters that the application code uses to issue the IARV64 macro.
- If the reason code is common release (00FA), then the application has tried to detach a memory object which contains fixed pages or a task that owns pages which are still fixed has terminated.
- If the reason code is memory limit exceeded (0016), and the MEMLIMIT for the address space cannot be raised to meet the applications needed, then the application needs to be changed to reduce the storage consumption within the address space.

Programmer response

- If the reason code is memory limit exceeded (0016), determine if the MEMLIMIT value for the address space can be raised to accommodate its storage needs.
- If the reason code indicates an internal RSM error except common release (00FA), then rerun the job to determine if the error happens again, and collect the appropriate diagnostic information.

Source

RSM

DC3

Explanation

This abend code is used by WebSphere Application Server on z/OS. See WebSphere Application Server Knowledge Center (www.ibm.com/support/knowledgecenter/SSEQTP) for further information.

DC4

Explanation

An error occurred in processing for either IARCP64 or IARST64.

Here are the values and their meanings for IARCP64:

Code
    Explanation

xx0410xx (IARCP64AbendRsnCellAddrLow)
    The cell address passed to the IARCP64 FREE service is within a meg used for storage pools, but the address is less than the address of the first usable storage address.

    Action: Correct the address passed to IARCP64 FREE, making sure that it is the same address that was returned from IARCP64 GET.

xx0412xx (IARCP64AbendRsnBuildMotherFromCmro)
    The OWNINGTASK was specified as the mother task, but the caller is running on the CMRO task. This is not supported.

    Action: Correct the specification of OWNINGTASK. If you need the storage to survive job step termination, then specify RCT as the owner. If you are unauthorized, use OWNINGTASK that is set to either CMRO or JOBSTEP.

xx0413xx (IARCP64AbendRsnCellNotInExtent)
    The request was to the IARCP64 or IARST64 FREE service, and the address of the storage passed in, is not within the bounds of a cell pool.

    Action: Correct the address passed to IARCP64 FREE or IARST64 FREE, making sure that it is the same address that was returned from IARCP64 GET or IARST64 GET.

xx0414xx (IARCP64AbendRsnBuildNotRctOrCmro)
The parameter list passed to the IARCP64 BUILD service from an SRB or cross memory environment did not specify RCT or CMRO as the owning task.

Action: Fix the OWNINGTASK parameter to specify RCT or CMRO. Alternatively, build the pool from a different environment.

xx0415xx (IARCP64AbendRsnBuildCellSizeZero)
The parameter list passed to the IARCP64 BUILD service specified the CELLSIZE as zero.

Action: Change the cell size to be in the range of 1 to 520 192.

xx0416xx (IARCP64AbendRsnBuildNotAuth)
The parameter list passed to the IARCP64 BUILD service from an unauthorized caller requested an authorized option: system key, common storage, RCT ownership, MEMLIMIT=NO, MOTKN, TYPE=FIXED or DREF.

Action: Either correct the environment such that the caller is authorized, or change the options on IARCP64 BUILD such that it does not request options that require authorization.

xx0417xx (IARCP64AbendRsnBuildCellSizeTooBig)
The parameter list passed to the IARCP64 BUILD service specified a cell size larger than the maximum size supported.

Action: Specify a size between 1 and 520 192. If a larger storage area is needed, consider using IARV64 REQUEST=GETSTOR or GETCOMMON.

xx0418xx (IARCP64AbendRsnBuildKeyNot9)
The parameter list passed to the IARCP64 BUILD service from an unauthorized caller, specified a storage key other than 9.

Action: Either remove the key specification for an unauthorized caller, specify key 9, or change the program to run in an authorized environment.

xx0419xx (ARCP64AbendRsnCellOverRun)
The request was to the IARCP64 or IARST64 FREE service, and the trailer data at the end of the cell was detected as being overrun. If the overrun is sufficiently large, it causes damage to the following cell. The caller is abended, so they can fix the code to not use more storage than is requested.

Action: Determine whether the storage has been overrun or whether the trailer data was overlaid by some other code. Fix the code so that it only uses the amount of storage requested. Possibly increase the cell size to meet the program's needs.

xx041Axx (IARCP64AbendRsnCellNotInUse)
The request was to the IARCP64 or IARST64 FREE service, and the address of the storage passed in, is already in the freed state. This happens when an application frees the storage twice.

Action: Determine whether the current application is freeing the storage twice or whether it is using a cell that some other program is freeing twice.

xx041Bxx (IARCP64AbendRsnNotOnCellBoundary)
The request was to the IARCP64 or IARST64 FREE service, and the address of the storage passed in is not on a cell boundary in the cell pool from which the GET request was satisfied.

Action: Correct the address passed to IARCP64 FREE, making sure that it is the same address that was returned from IARCP64 GET.

xx041Cxx (IARCP64AbendRsnIARV64Error)
During processing of IARCP64 BUILD or GET, a call to the IARV64 service for GETSTOR, GETCOMMON, PAGEFIX, or PROTECT failed. The failing return code from IARV64 was placed in register 2 before the abend. The failing reason code from IARV64 was placed in register 3 prior to the abend.

Action: Examine the return and reason code as documented under IARV64 to determine if you can resolve the problem.

xx041Dxx (IARCP64AbendRsnCellPoolHeaderKeyNot0)
The cell pool header points to a key 0 control block used to protect cell pool information. The pointer did not point to key 0 storage. This would happen if a caller tried to trick the service into getting storage that the user was not normally allowed to get.

Action: Correct the cell pool address passed to IARCP64 GET, making sure that it is the same address that was returned from IARCP64 BUILD. Do not modify the cell pool header, other than through IARCP64 services.

xx041Exx (IARCP64AbendRsnHeaderFailedValidityCheck)
The cell pool header points to a key 0 control block used to protect cell pool information. The pointer did not point to a valid structure used by IARCP64. This would happen if a caller tried to trick the service into getting storage that the user was not normally allowed to get.

Action: Correct the cell pool address passed to IARCP64 GET, making sure that it is the same address that was returned from IARCP64 BUILD.

xx041Fxx (IARCP64AbendRsnHeaderDamaged)
The cell pool header authorized area was damaged. This could be caused by a storage overlay or by a user deleting a cell pool while other work units are trying to obtain a cell from the pool.

Action: Make sure that the application does not request cells during or after the cell pool is deleted.

xx0420xx (IARCP64AbendRsnCphaNotQueued)
The cell pool header authorized area was not queued to the owning task as expected. This could happen due to storage overlays, or possibly the user doing IARCP64 DELETE while the pool was still in use.

Action: Make sure that the application does not request cells during or after the cell pool is deleted. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, collect a dump and contact the IBM Support Center.

xx0421xx (IARCP64AbendRsnBuildVersionHigh)
The parameter list passed to the IARCP64 BUILD service has a version level higher than the current implementation can support.

Action: Correct the call of IARCP64 such that you don't specify a level or use parameters that are not supported on the release of the operating system on which it is intended to run.

xx0422xx (IARCP64AbendRsnBuildBadParmlist)
The parameter list passed to IARCP64 BUILD is not addressable in the caller's key or is not valid storage.

Action: Correct the calling program to place the parameter list in storage addressable in the primary address space.

xx0423xx (IARCP64AbendRsnBuildNoOwner)
The parameter list passed to the IARCP64 BUILD service for a common cell pool does not have an owner option specified.

Action: Add the OWNER keyword to the call of IARCP64 BUILD when building a cell pool in common.

xx0424xx (IARCP64AbendRsnDeleteNotChained)
A request was made to the IARCP64 DELETE service for a user key cell pool. The control information for this cell pool was missing from the system queue used to maintain it. This can only happen if the caller has two tasks racing to delete the same cell pool.

Action: Fix the application cleanup logic so that the cell pool is only deleted once.

xx0425xx (IARCP64AbendRsnPoolNotInCallerKey)
The request to IARCP64 GET or DELETE was against a pool that was not in the key of the caller.

Action: You must be in a key that has the ability to modify the pool storage for the request to be processed.

xx0426xx (IARCP64AbendRsnPrimaryExtentOverlaid)
The request to IARST64 or IARCP64 GET was against a storage pool where the primary extent control information had been overlaid.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, collect a dump and report the problem to the IBM Support Center.

xx0427xx (IARCP64AbendRsnSecondaryExtentOverlaid)
The request to IARST64 or IARCP64 GET was against a storage pool where the secondary extent control information had been overlaid.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, collect a dump and report the problem to the IBM Support Center.

xx0428xx (IARCP64AbendRsnUnexpectedError)
During processing of IARCP64 BUILD, DELETE or the cell pool expansion on a GET, an unexpected abend occurred. An SDUMP should have been generated.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, collect the dump and report the problem to the IBM Support Center.

xx0429xx (IARCP64AbendRsnFreeBadParmlist)
During processing of IARCP64 FREE a cell in a 2G extent was specified, but INPUT_CPID was not provided on the invocation.

xx052Axx (IARCP64AbendRsnValidationError)
The call to the IARCP64 GET service detected a validation error when locating the storage pool to be used. The possible cause is the storage overlay of the storage pool control block in the caller's key.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, collect a dump and report the problem to the IBM Support Center.

Here are the values and their meanings for IARST64:

Code
  Explanation

xx0410xx (IARST64AbendRsnCellAddrLow
The storage address passed to the IARST64 FREE service is within a meg used for storage pools, but the address is less than the address of the first usable storage address.

Action: Correct the address passed to IARST64 FREE, making sure that it is the same address that was returned from IARST64 GET.

xx0413xx (IARST64AbendRsnCellNotInExtent)
The request was to the IARCP64 or IARST64 FREE service, and the address of the storage passed in is not within the bounds of a cell pool.

Action: The address passed to IARST64 REQUEST=FREE must be the same as the address obtained from IARST64 REQUEST=GET.

xx0419xx (IARST64AbendRsnCellOverRun)
The request was to the IARCP64 or IARST64 FREE service, and the trailer data at the end of the cell was detected as being overrun. If the overrun is sufficiently large, it causes damage to the following cell. The caller is abended so that they can fix the code to not use more storage than is requested.

Action: Determine whether the storage has been overrun or whether the trailer data was overlaid by some other code. Fix the code so that it only uses the amount of storage requested.

xx041Axx (IARST64AbendRsnCellNotInUse)
The request was to the IARCP64 or IARST64 FREE service, and the address of the storage passed in is already in the freed state. This happens when an application frees the storage twice.

Action: Determine whether the current application is freeing the storage twice or whether it is using a cell that some other storage is freeing twice.

xx041Bxx (IARST64AbendRsnNotOnCellBoundary)
The request was to the IARCP64 or IARST64 FREE service, and the address of the storage passed in is not on a cell boundary in the cell pool from which the GET request was satisfied.

Action: When freeing storage with IARST64 REQUEST=FREE, make sure to specify the address that was returned by IARST64 REQUEST=GET.

xx041Cxx (IARST64AbendRsnIARV64Error)
During processing of IARST64 GET, a call to the IARV64 service for GETSTOR, GETCOMMON, PAGEFIX, or PROTECT failed. The failing return code from IARV64 was placed in register 2 before the abend. The failing reason code from IARV64 was placed in register 3 before the abend.

Action: Examine the return and reason code as documented under IARV64 to determine if you can resolve the problem.

xx0420xx (IARST64AbendRsnCphaNotQueue)
The cell pool header authorized area was not queued to the owning task as expected. This could happen due to storage overlays or the caller bypassing the IARST64 macro and PCing directly to the service with incorrect input paramters.

Action: Make sure that the application is using the IARST64 macro to request storage. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, collect a dump and contact the IBM Support Center.

xx0425xx (IARST64AbendRsnPoolNotInCallerKey)
The request to IARST64 GET was against a storage pool that was not in the key of the caller. Normally, this abends with an 0C4, but if the pool is out of cells and is in storage that is not fetch protected, the pool expand routine verifies that the caller is allowed to modify this storage pool.

Action: You must be in a key that has the ability to modify the pool storage for the request to be processed.

xx0426xx (IARST64AbendRsnPrimaryExtentOverlaid)
The request to IARST64 or IARCP64 GET was against a storage pool where the primary extent control information had been overlaid.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, collect a dump and report the problem to the IBM Support Center.

xx0427xx (IARST64AbendRsnSecondaryExtentOverlaid)
The request to IARST64 or IARCP64 GET was against a storage pool where the secondary extent control information had been overlaid.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, collect a dump and report the problem to the IBM Support Center.

xx0428xx (IARST64AbendRsnUnexpectedError)
During processing of IARST64 GET, an unexpected abend occurred. An SDUMP should have been generated.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, collect the dump and report the problem to the IBM Support Center.

xx0511xx (IARST64AbendRsnKeyGT7Common)
The request to IARST64 GET was for common storage, but the requested or caller key was greater than key 7. You cannot allocate common storage in key 8 or above.

Action: Correct the key passed to IARST64 GET or change your request to get private storage.

xx0512xx (IARST64AbendRsnGetMotherFromCmro)
The request was to the IARST64 GET service and specified OWNINGTASK(MOTHER), but the caller is running on the CMRO task. You cannot request that the mother task be the storage owner from the CMRO task.

Action: Either specify CMRO as the owner or specify RCT if you want the storage to persist across termination of the CMRO.

xx0514xx (IARST64AbendRsnGetNotRctOrCmro)
The request was to the IARST64 GET service for private storage, and the caller was running in cross memory mode or SRB mode. In these environments, the OWNINGTASK parameter must be set to RCT or CMRO. Neither of these was specified, so the request failed.

Action: Specify the OWNINGTASK parameter as RCT or CMRO.

xx0515xx (IARST64AbendRsnGetCellSizeZero)
The request was to the IARST64 GET service and specified a length of zero.

Action: Specify a length between 1 and 128 KB.

xx0516xx (IARST64AbendRsnGetNotAuth)
The request was to the IARST64 GET service and specified a parameter that requires the caller to be running in key 0-7. The caller is not authorized to use authorized options of COMMON, DREF, FIXED, OWNINGTASK(RCT), CALLERKEY(NO), and Key00ToF0 set to a system key.

Action: Either run the code in key 0-7 or do not use authorized options.

xx0517xx (IARST64AbendRsnGetCellSizeTooBig)
The request was to the IARST64 GET service and specified a length greater than 128 KB.

Action: Specify a size between 1 and 128 KB. If larger storage is needed, consider using IARCP64 or IARV64 GETSTOR or GETCOMMON.

xx0518xx (IARST64AbendRsnGetKeyNot9)
The request was to the IARST64 GET service and specified a CALLERKEY(NO) and a value for Key00ToF0 that was not key 9, and the caller is not authorized.

Action: The only key that an unauthorized user can specify is key 9. Either request key 9 or change the specification to CALLERKEY(YES).

xx0529xx (IARST64AbendRsnGetSizeTooBig)
The call to the IARST64 GET service specified a cell size larger than the maximum size supported.

Action: Specify a size between 1 and 128 KB. If a larger storage area is needed, consider using IARCP64 or IARV64 REQUEST=GETSTOR or GETCOMMON.

xx052Axx (IARST64AbendRsnValidationError)
The call to the IARST64 GET service detected a validation error when locating the storage pool to be used. The possible cause is the storage overlay of the storage pool control block in the caller's key.

Action: Search problem reporting databases for a fix for the problem. If no fix exists, collect a dump and report the problem to the IBM Support Center.

xx052Bxx (IARST64AbendRsnMemLimitNoUnauth)
The call to the IARST64 GET service requested MEMLIMIT=NO, but is running unauthorized (key 8-15 and problem program state).

Action: Either specify MEMLIMIT=YES or call from an authorized environment.

xx052Cxx (IARST64AbendRsnCellLT4Gig)
The call to the IARCP64 or IARST64 FREE service is passed to a cell address less than 4GB, so it cannot be a valid cell address in a 64-bit cell pool.

Action: Pass a storage address that is obtained with IARCP64 or IARST64 GET.

xx052Dxx (IARST64AbendRsnLocalSysAreaYesUnauth)
The call to the IARST64 GET service requested LOCALSYSAREA=YES, but is running unauthorized (key 8-15 and problem program state).

Action: Either specify LOCALSYSAREA=NO or CALL from an authorized environment.

xx052Exx (IARST64AbendRsnKeyGT7)
An IARST64 GET service requested private storage with CALLERKEY(NO) and Key00ToF0 greater than key 7 when the caller key was less than key 8. An authorized caller cannot request unauthorized storage.

Action: Correct the key of the requested storage or change the caller key.

System action

The abend is delivered to the applications recovery routine (if any). The application can retry or percolate.

Operator response

None.

System programmer response

None.

Programmer response

The programmer needs to determine whether the problem was caused by bad input, improper use of authorized option, a structure damaged by the application, or a defect in the service. For user-triggered problems, correct the error. For suspected damaged control blocks, search problem reporting databases for a fix for the problem. If no fix exists, collect a dump and contact the IBM Support Center.

Problem determination

If the caller is authorized, some of the abends trigger a system SVC DUMP. For unauthorized callers, no dump will be taken. You can either allocate a SYSMDUMP DD to gather a SYSMDUMP or use a SLIP on DC4 abends to collect a dump.

Module

IAXCV, IAXCY, or IAXSV

DC5

Explanation

JES common coupling services (JESXCF) detected an unrecoverable error during its processing. A hexadecimal reason code returned in register 0 describes the error:

Code
  Explanation

01
  The parameter list passed to the IXZXIXAT or IXZXIXDT macro service does not have a valid eyecatcher.

02
  The parameter list passed to the IXZXIXAT or IXZXIXDT macro service has an incorrect level.

03
  The XCF member name passed on the IXZXIXAT macro either contains a character that is not valid or is all blanks.

04
  The XCF member name passed on the IXZXIXAT macro contains imbedded blanks.

05
  JESXCF validation of the member name on the IXZXIXAT macro failed.

06
  The XCF group name passed on the IXZXIXAT macro either contains a character that is not valid or is all blanks.

07
  The XCF group name passed on the IXZXIXAT macro contains imbedded blanks.

08
  Validation of the group name on the IXZXIXAT macro failed.

09
  Validation of the IXZXIXAT/IXZXIXDT parameter list failed.

0A
  An internal error occurred.

0B

An internal error occurred.

0C

An internal error occurred.

0D

An internal error occurred.

0E

An internal error occurred.

0F

The group token passed on the IXZXIXDT macro contains an eyecatcher that is not valid.

10

The group token passed on the IXZXIXDT macro contains a version number that is not valid.

12

The JES indicator flag bit (WHICHJES) in the parameter list had both or none of the JES flags set.

13

The release in the IXZYIXAT mapping macro is not supported.

14

The release validation of the IXZYIXAT mapping macro returned an unknown reason code.

15

The maintenance level of the IXZYIXAT mapping macro parameter list is not current.

16

An internal error occurred.

17

An internal error occurred.

18

An internal error occurred.

19

An internal error occurred.

1A

An internal error occurred.

1B

An internal error occurred.

1C

The IXZXIXAT macro failed because the member was already active in that group.

1D

The member name specified on the IXZXIXDT macro could not be found.

1E

An internal error occurred.

1F

The data space could not be created for the IXZXIXAT macro request.

20

JESXCF could not add the JES member to the specified XCF group.

21

The XCF group maximum has been reached.

22

The XCF member maximum has been reached.

23

JESXCF could not add the JES member to the specified XCF group.

24

An internal error occurred.

25

The IXZXIXDT macro failed, because it was issued from a different ASCB and TCB than the issuer of the IXZXIXAT macro that created the specified member.

26

An internal error occurred.

27

An internal error occurred.

32

An internal error occurred, probably because the JESXCF address space was forced and restarted.

33

An internal error occurred.

34

An internal error occurred.

35

An internal error occurred.

36

An internal error occurred.

System action

JESXCF produces a dump for the error (unless the dump is suppressed by DAE), and return code X'C' is returned to the caller of the service.

Operator response

Notify your system programmer.

System programmer response

If this abend was issued due to an error in an installation invocation of the IXZXIXAT or IXZXIXDT macro, correct the error based on the reason code provided. Refer to *z/OS MVS Programming: JES Common Coupling Services* for information about using and coding IXZXIXAT and IXZXIXDT.

Interpret the return and reason code provided and determine if the problem is due to a configuration error or coding error. If the problem is due to a configuration error, then correct the problem and restart JES. If the problem is due to a coding error, search the problem reporting data bases for a fix to the problem. If no fix exists, contact the IBM Support Center with the return and reason codes and the dump produced by the error.

For additional information on dumping the JES and JESXCF address spaces, as well as restarting the JESXCF address space, see *z/OS MVS Programming: JES Common Coupling Services*.

Source

JES common coupling services (JESXCF)

DC7

Explanation

While running the APPC/MVS transaction scheduler, the system found an unrecoverable error.

A reason code further describes the error:

Code
   Explanation

01

A CLASSADD statement in parmlib tried to modify the characteristics of a class that already existed.

03

The system found an incorrect transaction scheduling type for a transaction program (TP).

04

The system could not run the Resource Access Control Facility (RACF).

05

The system could not create a security environment.

07

The system could not delete the security environment.

08

The system could not obtain SYSOUT and accounting information from RACF.

10

The GETTRANS service could not notify system management of a new TP.

11-20

An internal error occurred.

21, 22, 23

The system could not initialize the APPC/MVS transaction scheduler.

24, 25

The system could not create a new ASCH initiator.

28-32

An internal error occurred.

33

The system could not obtain a transaction from APPC.

34

The system could not initialize the APPC/MVS transaction scheduler.

35

An attempt was made to start the ASCH address space by something other than a START command.

36

The system could not initialize the ASCH.

37

An internal error occurred.

38-41

The system could not create a new ASCH initiator.

42, 43

While APPC was active, the system could not initialize ASCH.

44

The system could not verify the subsystem specified on the SUBSYS keyword in the current parmlib configuration.

45

While the system was processing a DISPLAY ASCH command, an error occurred.

46

When the system tried to invoke the APPC associate service, an error occurred.

47

The system could not verify the subsystem specified on the SUBSYS keyword in the current parmlib configuration.

48, 49, 50

After being notified that APPC was active, the system could not initialize the APPC/MVS transaction scheduler.

51

The ASCH failed while it was ending.

52, 53, 54

The system could not initialize the APPC/MVS transaction scheduler.

56

After being notified that APPC was active, the system could not initialize the APPC/MVS transaction scheduler.

57

The system could not initialize the APPC/MVS transaction scheduler.

59-65

An internal error occurred.

System action

Depending on the reason code, one of following:

Code
   System Action

01

The system does not process the incorrect CLASSADD statement. Other processing continues.

03

The APPC scheduler does not schedule the TP. The initiator address space where the TP should have run ends. The requestor of the TP receives a return code indicating that the conversation was deallocated.

04-07

Unpredictable.

08

The initiator address space where the TP was scheduled to run ends. The requestor of the TP receives a return code indicating that the conversation was deallocated.

10

If the TP provided recovery, recovery receives control. Otherwise, the TP ends.

11-20

Unpredictable.

21-23

The APPC/MVS transaction scheduler ends. No restart is possible.

24-25

The system continues processing with the existing initiator.

26-27

The system continues processing. If this error occurs again in a certain time period, the system attempts an automatic restart. If restart is unsuccessful, the APPC/MVS transaction scheduler ends.

28-32

Unpredictable.

33

The system continues processing. If this error occurs again in a certain time period, the system attempts an automatic restart. If restart is unsuccessful, the APPC/MVS transaction scheduler ends.

34

The APPC/MVS transaction scheduler ends. No restart is possible.

35

The system does not initialize the ASCH address space.

36-37

The APPC/MVS transaction scheduler ends. No restart is possible.

38-41

The system continues processing with the existing initiator.

42-43

The system automatically attempts a restart. If this error occurs again, the APPC/MVS transaction scheduler ends.

44

The system continues processing with the existing initiator.

45

The system rejects the DISPLAY ASCH command.

46

The system continues processing. The requestor of the transaction receives a return code indicating that the conversation was deallocated.

47

The system continues processing with the existing initiator.

48-50

The system automatically attempts a restart. If this error occurs again, the APPC/MVS transaction scheduler ends.

51-55

The APPC/MVS transaction scheduler ends. No restart is possible.

56

The system automatically attempts a restart. If this error occurs again, the APPC/MVS transaction scheduler ends.

57

The APPC/MVS transaction scheduler ends. No restart is possible.

58-60

Unpredictable.

61, 62

The system continues processing.

63, 64

The system automatically attempts a restart. If this error occurs again, the APPC/MVS transaction scheduler ends.

Operator response

Depending on the reason code, do one of the following:

Code
  Explanation

01, 03, 04

Enter a DISPLAY ASCH command to find the incorrect CLASSADD statement. Notify the system programmer.

08

Contact the RACF administrator to check the installation's security package for information identifying the error.

10-22

Notify the system programmer.

23

Enter a START ASCH command. If the error occurs again, notify the system programmer.

24

Notify the system programmer.

25

If the APPC/MVS transaction scheduler is not processing critical work, enter a CANCEL ASCH command to end the APPC/MVS transaction scheduler. Then enter the START ASCH command to restart the APPC/MVS transaction scheduler. Otherwise, notify the system programmer.

26

Notify the system programmer.

27

If the APPC/MVS transaction scheduler ends, notify the system programmer. Enter a START ASCH command.

28-32

Notify the system programmer.

33

The system continues processing. The requestor of the transaction receives a return code indicating the conversation was deallocated.

34

Enter a START ASCH command. If the error occurs again, notify the system programmer.

35

Notify the system programmer.

36

If the APPC/MVS transaction scheduler ends, notify the system programmer. Enter a START ASCH command.

37

Enter a START ASCH command. If the error occurs again, notify the system programmer.

38, 39, 40

Notify the system programmer.

41

If the APPC/MVS transaction scheduler is not processing critical work, enter a CANCEL ASCH command to end the APPC/MVS transaction scheduler. Then enter the START ASCH command to restart the APPC/MVS transaction scheduler. Otherwise, notify the system programmer.

42

Notify the system programmer.

43

If the APPC/MVS transaction scheduler ends, notify the system programmer. Enter a START ASCH command.

44

If the error occurs again, notify the system programmer.

45

Enter the DISPLAY ASCH command again. If the error occurs again, notify the system programmer.

46

Notify the system programmer.

47

If the APPC/MVS transaction scheduler is not processing critical work, enter a CANCEL ASCH command to end the APPC/MVS transaction scheduler. Then enter the START ASCH command to restart the APPC/MVS transaction scheduler. Otherwise, notify the system programmer.

48, 49

Notify the system programmer.

50

If the APPC/MVS transaction scheduler ends, notify the system programmer. Enter a START ASCH command.

51-54

Notify the system programmer.

55

If the APPC/MVS transaction scheduler ends, notify the system programmer. Enter a START ASCH command.

56

If the APPC/MVS transaction scheduler ends, enter a START ASCH command. If the error occurs again, notify the system programmer.

57-61

Notify the system programmer.

62

If the APPC/MVS transaction scheduler is not processing critical work, enter a CANCEL ASCH command to end the APPC/MVS transaction scheduler. Then enter the START ASCH command to restart the APPC/MVS transaction scheduler. Otherwise, notify the system programmer.

63, 64

If the error occurs again, notify the system programmer.

System programmer response

Depending on the reason code, do one of the following:

Code
    Explanation

01

Delete the incorrect class using a CLASSDEL statement in the current parmlib configuration. Then try to add the class again, using a CLASSADD statement. If the error occurs again, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

03, 04

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

05

Check to see whether a program issued the z/OS UNIX System Services spawn callable service, passing a user ID that is not valid. If the user ID is valid, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

07

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

08

Contact the RACF administrator. Check the installation's security package for information identifying the error.

10-34

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

35

Determine how APPC/MVS transaction scheduler initialization was invoked and take appropriate actions to prevent re-occurrences. The only proper way to initialize the scheduler is with the START command.

36-43

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

44

Enter a valid JES subsystem on the SUBSYS keyword in the current parmlib configuration.

45-65

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

APPC/MVS transaction scheduler

DFB

Explanation

During processing in a functional subsystem (FSS) address space, a JES3 module detected an error. A hexadecimal reason code in register 15 and/or the SDWA explains the error. (Note: when the reason code is X'26', it will appear only in the SDWA, not in register 15.)

When the reason code is X'65', X'66', X'67', or X'68' then the error indicates the JES3 TCP/IP NJE server exits module detected a datastream error and could not continue.

Code
   Explanation

01

   The connect subsystem interface (SSI) routine in module IATSICD determined that the START command for the FSS address space did not contain a token.

02

   The connect subsystem interface (SSI) routine in module IATSICD could not locate the MEMDATA header for the FSS address space.

03

   The connect subsystem interface (SSI) routine in module IATSICD could not establish the listen task, IATFCLT, for the FSS or the FSA.

05

   Module IATSICD encountered an error during JESXCF attach processing (IXZXIXAT service).

06

   Module IATSICD encountered an error during JESXCF mailbox build processing (IXZXIXMB service) for the default mailbox.

07

   Module IATSICD encountered an error during JESXCF mailbox delete processing (IXZXIXMD service) for the default mailbox.

08

   Module IATSICD encountered an error during JESXCF detach processing (IXZXIXDT service).

09

   Module IATSICD encountered an error while attempting to get or free storage for the FSVT (Functional Subsystem Vector Table) while invoking the IAZADRKP macro.

0B

   The common end-of-task exit routine in module IATSICD found that a task in the FSS address space had ended unexpectedly.

0C

   The common end-of-task exit routine in module IATSICD could not identify a task that had ended.

15

   The writer FSA specific connect routine, IATFPCC, could not initialize for GETDS spool access using the block spooler.

16

   The writer FSA specific connect routine, IATFPCC, could not establish the read-ahead task for the FSA.

17

   The writer FSA specific connect routine, IATFPCC, could not establish the checkpoint writer task for the FSA.

1F

   The FSI order interface routine, IATFCOR, received a nonzero return code from the FSS or FSA order routine.

20

   The FSI post interface routine, IATFCPT, received a nonzero return code from the FSA post routine.

21

   Module IATFCLT encountered an error during JESXCF mailbox build processing (IXZXIXMB Service) for a FSS/FSA mailbox.

22

Module IATFCLT encountered an error during JESXCF mailbox clear processing (IXZXIXMC Service) for a FSS/FSA mailbox.

23

Module IATFCLT encountered an error during JESXCF receive message processing (IXZXIXRM Service) for a FSS/FSA mailbox.

24

Module IATFCLT encountered an error during JESXCF acknowledge message processing (IXZXIXAC Service) for a FSS/FSA mailbox.

25

Module IATFCLT encountered an error during JESXCF mailbox delete processing (IXZXIXMD) for a FSS/FSA mailbox.

26

A stop FSA abnormal order has been received from JES3. If a dump has been requested, a dump will be taken as part of abend processing of the FSA task.

29

The C/I FSS order processing routine, IATIIFO, found that the FSI parameter list did not contain an order.

2A

The C/I FSS order processing routine, IATIIFO, received an incorrect order type.

2B

The C/I FSS order processing routine, IATIIFO, received an incorrect stop FSS order.

2C

The C/I FSS order processing routine, IATIIFO, could not locate the C/I communications block (CCB).

33

The writer FSA quick-cell service routine, IATFPQC, failed to get an index, because the first free index was incorrect.

34

The writer FSA quick-cell service routine, IATFPQC, failed to get a buffer, because the first free buffer was incorrect.

35

The writer FSA quick-cell service routine, IATFPQC, failed to free an index, because the index passed in the request was incorrect.

36

The writer FSA quick-cell service routine, IATFPQC, failed to free a buffer, because the buffer passed in the request was incorrect.

3D

While reading a data set checkpoint record, the writer FSA GETDS routine, IATFPGD, received an error return from the block spooler routine; the error return indicated that the parameter list was incorrect.

3E

While reading a data set checkpoint record, the writer FSA GETDS routine, IATFPGD, received an error return from the block spooler routine; the error return indicated that the spool address was incorrect.

3F

While reading a data set checkpoint record, the writer FSA GETDS routine, IATFPGD, received an error return from the block spooler routine; the error return indicated that an error occurred during a cross-address space move.

47

While reading the scheduler work block (SWB), the writer FSA SWB processing service routine, IATFPSB, received an error return from the block spooler routine; the error return indicated that the parameter list was incorrect.

48

While reading the scheduler work block (SWB), the writer FSA SWB processing service routine, IATFPSB, received an error return from the block spooler routine; the error return indicated that the spool address was incorrect.

49

While reading the scheduler work block (SWB), the writer FSA SWB processing service routine, IATFPSB, received an error return from the block spooler routine; the error return indicated that an error occurred during a cross-address space move.

4A

The scheduler JCL facility (SJF) PUTSWB function returned an error code to the writer FSA scheduler work block (SWB) processing service routine, IATFPSB.

4B

The scheduler JCL facility (SJF) UPDATE function returned an error code to the writer FSA scheduler work block (SWB) processing service routine, IATFPSB.

4C

The scheduler JCL facility (SJF) DELETESWB function returned an error code to the writer FSA scheduler work block (SWB) processing service routine, IATFPSB.

51

The writer FSA read-ahead task, IATFPRA, could not initialize for spool access using the block spooler.

52

While reading data from spool, the writer FSA read-ahead task, IATFPRA, received an error return from the block spooler routine; the error return indicated that the parameter list was incorrect.

53

While reading data from spool, the writer FSA read-ahead task, IATFPRA, received an error return from the block spooler routine; the error return indicated that the spool address was incorrect.

54

While reading data from spool, the writer FSA read-ahead task, IATFPRA, received an error return from the block spooler routine; the error return indicated that an error occurred during a cross-address space move.

55

The writer FSA read-ahead task, IATFPRA, found an error in the format of a spool data buffer.

56

The writer FSA read-ahead task, IATFPRA, found an error in the format of a JESNEWS data buffer.

5B

The writer FSA checkpoint writer task, IATFPCW, could not initialize for spool access using the block spooler.

5C

While writing a data set checkpoint record, the writer FSA checkpoint writer task, IATFPCW, received an error return from the block spooler routine; the error return indicated that the parameter list was incorrect.

5D

While writing a data set checkpoint record, the writer FSA checkpoint writer task, IATFPCW, received an error return from the block spooler routine; the error return indicated that the spool address was incorrect.

5E

While writing a data set checkpoint record, the writer FSA checkpoint writer task, IATFPCW, received an error return from the block spooler routine; the error return indicated that an error occurred during a cross-address space move.

65

The Netserv exit subtask detected data stream corruption in the inbound SYSIN record. The subtask is terminated.

66

The Netserv exit subtask detected data stream corruption in the inbound SYSOUT record. The subtask is terminated.

67

The Netserv exit subtask detected data stream corruption in the outbound SYSIN record. The subtask is terminated.

68

The Netserv exit subtask detected data stream corruption in the outbound SYSOUT record. The subtask is terminated.

System action

The system abnormally ends the task.

Most failures in the read-ahead task, IATFPRA, and in the checkpoint writer task, IATFPCW, cause processing of the current data set to be ended. The task is reinstated to resume processing with the next data set.

All other failures result in the FSA or of the entire FSS address space ending.

Operator response

Notify the system programmer. If the FSS address space was ended and if this is not a recurring error, issue the appropriate command to restart the FSS.

System programmer response

Format the SVC dump with the interactive problem control system (IPCS).

If the problem occurs in JES3, save the hardcopy log.

Source

JES3

E00

Explanation

During processing of an I/O request, execute channel program (EXCP) processing encountered one of the following errors:

- A program check or machine check occurred while the input/output supervisor (IOS) interruption response block (IRB) analysis modules were processing or IOS POST was processing.
- The operator pressed the RESTART key while the I/O request was being processed.
- A program check or machine check occurred while a nonresident error recovery program (ERP) was processing or the ERPE loader module was processing.

System action

The system abnormally ends the current task. The system writes a logrec data set error record. The previous error record in the logrec data should indicate the cause of the abend. The system does not provide the EXCP debugging area (XDBA).

System programmer response

Look at the messages in the logrec data set error record for the probable cause of the error. If the reason for the error cannot be determined or if an IBM-provided program is causing the error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record, the JCL, the program listing, and the assembly listing for the job.

Source

Execute channel program (EXCP)

E03

Explanation

A task tried to end normally by issuing a RETURN macro or by branching to the return address in register 14. The task was not ready to end processing because the task issued one of the following macros with a SET,MC (must complete) parameter:

- STATUS
- RESERVE
- ENQ

The task did not issue an accompanying STATUS RESET,MC or DEQ RESET,MC macro to reset the step-must-complete status before attempting to end.

System action

The system abnormally ends the task.

Operator response

If the application or system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=E03,ACTION=SVCD,END
```

System programmer response

If the module is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the component group for the module at the IBM Support Center. Provide problem data collected.

Programmer response

Do the following:

1. If a dump is not produced with the abend, ask the operator to set a SLIP trap to obtain an SVC dump.
2. From the dump, identify the abnormally ended module.
3. If the module is an installation-provided program, ensure that each ENQ, RESERVE, or STATUS macro with the SET,MC parameter is paired with a DEQ or STATUS macro with the RESET,MC parameter.

Source

Recovery termination manager (RTM)

E06

Explanation

An error occurred during contents supervisor processing of an z/OS UNIX System Services (z/OS UNIX) **exec**, **fork**, **loadhfs**, or **deletehfs** function.

A hexadecimal reason code in register 15 describes the error. The reason codes are in the form *xx yy*, where *xx* represents the 1-byte function ID of the function that caused the error, and *yy* represents the reason code for the error. The possible values for the function code *xx* are:

Code
   Explanation

00

An **exec** or **fork** function failed.

01

A **loadhfs** function failed.

02

A **deletehfs** function failed.

The reason code value *yy* can have one of the following values:

Code
   Explanation

00

An unauthorized program requested contents supervisor processing for the z/OS UNIX **exec**, **loadhfs**, or **deletehfs** function.

04-1C

An internal error occurred while processing the **exec**, **loadhfs**, or **deletehfs** z/OS UNIX callable service.

20

A PGMF FIND was not successful. Message CSV034I accompanies this abend.

24

A PGMF FIND for the requested module program checked or ended abnormally. Message CSV036I accompanies this abend.

2C

An unexpected error occurred during contents supervisor processing for an z/OS UNIX callable service.

30

The requested pathname resulted in a fetch of a loadable-only file. Message CSV039I accompanies this abend. The requested pathname references a loadable-only file, which is not valid as the target of an exec callable service.

34

The requested pathname resulted in a fetch of a nonexecutable file. Message CSV038I accompanies this abend.

38

The requested pathname resulted in a fetch of a nonexecutable file. The module was marked as being an overlay module. This should not occur for an exec executable file. Message CSV038I accompanies this abend.

3C

The requested pathname resulted in a fetch of a nonexecutable file. Message CSV038I accompanies this abend.

40

An internal error occurred while attempting to fetch the executable file.

44

A PGMF FIND for the requested module program checked or ended abnormally. Message CSV036I accompanies this abend.

48

The callable service was unable to establish ESTAE recovery.

4C

The caller had more than one RB on its TCB chain.

50-54

These reason codes indicate an internal error occurred during fork callable service processing.

58

An internal error occurred while attempting to remove a program from storage.

System action

The system abnormally ends the program issuing the callable service.

System programmer response

Some of the reason codes may indicate that there is a problem with the file system or the underlying PGMF mechanism. For reason codes other than 00, a system dump is normally taken. Search problem reporting databases for a fix for the problem. If no fix exists, provide the dump to the IBM Support Center.

For reason codes 04 through 18 and 50 through 54, an internal error occurred. Search problem reporting databases for a fix for the problem. If no fix exists, report the error to the IBM Support Center.

Programmer response

Code
    Response

00
    No system dump is taken and no LOGREC record is written.

04-1C
    Contact the system programmer.

20
    Refer to accompanying message CSV034I.

24
    Contact the system programmer.

30
    Correct the program.

34
    Correct the pathname to refer to an executable file.

38
    Correct the pathname to refer to an executable file.

3C
    Correct the pathname to refer to an executable file.

40
    Refer to accompanying message CSV034I.

44
    Contact the system programmer.

50-54
    Contact the system programmer.

Source

Contents Supervision

E13

Explanation

The error occurred during processing of an OPEN macro instruction for a graphic data control block. This system completion code is accompanied by message IEC159I. Refer to the explanation of message IEC159I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the source program listing for the job and all printed output and output data sets related to the problem.

Programmer response

Respond as indicated for message IEC159I.

Source

DFSMSdfp

E1A

Explanation

The catalog address space (CAS) allocate task ended abnormally because the allocate task exceeded the allotted time for processing. The task may have been waiting for some system resource that is permanently unavailable.

System action

The system attaches a new task to restore the allocate function.

Source

DFSMSdfp

E22

Explanation

A WLM resource group with a memory limit (memory pool) exceeds its memory limit and the system is not able to reduce the real storage of the memory pool.

System action

The system terminates the current job step of an address space that is a member of the memory pool. Messages IAR052E, IAR053E, and IAR055I might have been issued previously identifying the memory pool.

Source

Real storage manager (RSM)

E23

Explanation

An error occurred during processing of a write to operator with reply (WTOR) macro. The macro specified one of the following incorrectly:

- The address of the event control block (ECB)
- The address of the request block (RB) in the ECB
- The address of the virtual storage area

Programmer response

Correct the macro or program errors that incorrectly modified the macro expansion. Ensure that the ECB address is a fullword on a fullword boundary. Recompile the program and run the job step again.

Source

Console services

E2D

Explanation

A program requested an overlay. In answer to the request, the overlay supervisor was using program fetch to load a program segment from the library. Fetch found an incorrect address.

Note: Overlay programs run only in 24-bit addressing mode, not in 31-bit addressing mode.

System action

The system abnormally ends the program that requested the overlay. The system writes an ABEND dump, if a dump DD statement is provided.

Programmer response

Link edit and run the program again.

Source

Overlay supervisor

E37

Explanation

The error occurred when an output operation was requested. The data set was on a direct access or magnetic tape device. This system completion code is accompanied by message IEC032I. Refer to the explanation of message IEC032I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Respond as indicated for message IEC032I.

Source

DFSMSdfp

E6D

Explanation

General ABEND code for SVC 109 routines.

A hexadecimal reason code in the format *ccxxxxxx* is displayed along with the E6D abend code or is returned in register 15.

Code
>   **Explanation**

3C*xxxxxx*
>   This reason code is used by IBM InfoSphere® Classic Federation and Data Replication. See the IBM InfoSphere Classic Federation and Data Replication for z/OS documentation for further information.

E77

Explanation

The IBM Generic Tracker for z/OS encountered an error or is issuing this ABEND as a diagnostic aid as requested via a GTZPRMxx DEBUG statement which matched the parameters of a GTZTRACK service invocation.

A hexadecimal reason code in the format *ccmmyyyy* is displayed along with the E77 abend code or is returned in register 15.

The fields in the reason code are the following:

ccmm
>   This halfword is for IBM internal use only.

yyyy
>   This halfword is the unique reason code.

System programmer response

Contact IBM support if the unique reason code (*yyyy*) is not within the range of X'0000'-X'0FFF '. Unique reason codes within that range are from a diagnostic aid ABEND triggered by a GTZ DEBUG statement. The reason code is the value of the REASON parameter of the DEBUG statement.

Source

IBM Generic Tracker for z/OS.

E82

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

E83

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

E84

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

E85

Explanation

For information about this system completion code, see RACF abend codes in *z/OS Security Server RACF Messages and Codes*.

EC3

Explanation

This abend code is used by WebSphere Application Server on z/OS. See WebSphere Application Server Knowledge Center (www.ibm.com/support/knowledgecenter/SSEQTP) for further information.

EC4

Explanation

NetView issues abend EC4 using CALLRTM in order to terminate NetView tasks in error situations. NetView uses abend EC4 during the NetView commands:

STOP FORCE

> To cause a NetView task that will not respond to other signals to abend and recover or terminate.

CLOSE IMMED

> To cause a NetView task to shut down after approximately 1 minute if the task is still active after the CLOSE IMMED is processed.

System action

Abend EC4 means that NetView decided the only way to stop the task was to intervene using a system abend.

System programmer response

If you are using the STOP FORCE command or the CLOSE IMMED command to recover from errors, notify your system programmer to determine whether customer or IBM programming is failing. The NetView product provides the STOP FORCE and CLOSE IMMED commands as a means of recovering from user or IBM product errors until the cause can be remedied. Using STOP FORCE or CLOSE IMMED as a normal operations practice is otherwise a misuse of the product.

If you observe a high number of abend EC4 reports:

- Advise your operators that excessive use of error recovery commands can cause storage loss and affect system performance. Ask them to use the non-abend STOP TASK and CLOSE STOP before resorting to STOP FORCE or CLOSE IMMED.
- If tasks will not stop when using STOP TASK, or NetView does not close down when using CLOSE STOP, call NetView Service for advise on dumps or other problem determination needed to find and fix either customer or IBM programming defects.

EC5

Explanation

JES common coupling services (JESXCF) detected an unrecoverable error that causes the JES member to terminate abnormally. The hexadecimal reason code returned in register 0 describes the error:

Code
    Explanation

00
    An error was detected in the JESXCF recovery environment.

04

> The application was terminated for consuming excessive JESXCF resources.

System action

The system abnormally terminates the JES member or application.

Operator response

Notify your system programmer.

System programmer response

Find the associated JESXCF or application abend and the associated dump. Use these to diagnose the error. If the problem is due to a coding error, search the problem reporting data bases for a fix to the problem. Fix the problem and restart JES. If no fix exists, contact the IBM Support Center with the return and reason codes and the dumps produced by the error.

For additional information on dumping JES and JESXCF address spaces, as well as restarting the JESXCF address space, see *z/OS MVS Programming: JES Common Coupling Services*.

Source

JES common coupling services (JESXCF)

EC6

Explanation

An error occurred during processing of a callable service to z/OS UNIX System Services (z/OS UNIX). The callable service may have been originally issued as a function in a program or as a shell command.

Depending on the source of the abnormal end, register 15 may or may not contain a hexadecimal reason code. The reason codes are in the form *xxxxyyyy*, where *xxxx* represents internal information (not described here) and *yyyy* represents external information shown in the following list.

Only external reason codes are documented. There are many other possible reason codes for internal errors. Report any internal errors IBM.

Code
> **Explanation**

000D
> A failing physical file system requested that the z/OS UNIX kernel be ended.

0016
> An ESTAE macro returned an error return code.

0025
> An unsupported entry code was specified to a file system service.

0026
> While building osi_thread support a failure was reported by the set_dub_default service.

0027
> The Dspserv to create an address space failed.

0029
> The z/OS UNIX couple dataset is not accessible.

002A
> The z/OS UNIX couple dataset data not as expected.

002B
> The z/OS UNIX address space could not be created.

002C

The z/OS UNIX address space could not be initialized.

002E

The request was made by a process that was not properly dubbed.

0030

Issuing Syscalls from SRBs not allowed.

0031

The syscall requested is not supported in SRB mode.

0037

Specified port in use.

003E

An Image Init Exit abended. Identify and correct the problem in the exit and continue processing.

003F

A large open count is being reestablished between a shared file system client and server, and may result in delays.

0040

A shared object is in an unknown state, and the object is not usable.

0041

The OAPB address specified in register 2 for an SRB SYSCALL was not zero and did not point to a valid OAPB.

0042

An error occurred on a file mapped by mmap(). Message BPXM122I might be issued to the hardcopy log.

0043

One of the following conditions:

- An error occurred during opening or reading the /etc/inittab file.

- An error occurred during opening the STDIN or STDOUT file.

- A /etc/inittab file entry could not be spawned.

0044

An error occurred trying to send an I/O Complete Notification to the AIO#MsgQ message queue.

0045

A syscall detected that the USTA control block might have been corrupted.

0049

A BPX1AIO asynchronous I/O operation has completed but the I/O Completion exit program could not be invoked because its address in the Aiocb has changed. This indicates that the Aiocb has been invalidly changed, freed, or reused since the I/O was started so to avoid unpredictable damage to the system or the application address space the I/O will not be completed, the exit will not be called, and the Aiocb will not be updated. A dump and/or logrec entry may be made for diagnostic purposes. Only one dump will be taken for this type of error in a process but subsequent occurrences will generate an OMVS Ctrace record. The application involved should be reviewed for errors in its processing. It may be hung and may need to be recycled.

0050

A BPX1AIO asynchronous I/O operation has completed but the I/O Completion ECB could not be POSTed because its address in the Aiocb has changed. This indicates that the Aiocb has been invalidly changed, freed, or reused since the I/O was started so to avoid unpredictable damage to the system or the application address space the I/O will not be completed, the ECB will not be POSTed, and the Aiocb will not be updated. A dump and/or logrec entry may be made for diagnostic purposes. Only one dump will be taken for this type of error in a process but subsequent occurrences will generate an OMVS Ctrace record. The application involved should be reviewed for errors in its processing. It may be hung and may need to be recycled.

0401

Bad Entry code to module.

0402

Unexpected error.

0403

Set Ktimer (BPXXKTIM) failed.

0405

Bad input parameters.

0407

Validity checks of Kernel Blocks failed.

0421

Bad Entry code to module.

0441

Invalid entry into the syscall layer.

0442

Environmental Error.

0444

Invoking PC Number is not recognized.

0445

Invalid entry to PC.

0446

This thread is not known.

0447

Bad function request code.

0481

Bad Entry code to module.

0482

Not an z/OS UNIX thread.

0483

Too many events requested.

0484

Mask contains an undefined event.

0485

No events in list.

0486

Invalid KSER address.

0488

Invalid combination of events in list.

0489

The task is not properly setup to wait.

048A

Bad Return code from ESTAE macro.

048B

The input ECB list was longer than 1013 entries.

048C

Kernel wait and User Kernel Wait not interchangeable.

048D

Unable to obtain latch for KSER storage pool.

048E

Failed to release latch for KSER storage pool.

048F

Set Ktimer failed.

0490

Hash table count is invalid.

04C1
Bad Entry code to module.

04C2
Bad RC from DSPSERV Create.

04C3
Bad RC from ALESERV Add.

04C4
Bad RC from ALESERV Extract.

04C5
Bad RC from ALESERV Delete.

04C6
Bad RC from DSPSERV Delete.

04C7
Bad RC from TCBTOKEN macro.

04C8
Bad RC from LXRES macro.

04C9
Bad RC from AXSET macro.

04CA
Bad RC from ETCRE macro.

04CB
Bad RC from ETCON macro.

04CC
Bad RC from ESTAE macro.

04CD
Bad RC from VSM Locate macro.

04CE
Bad RC from LOAD or NUCLKUP macros.

04CF
Bad RC from ETDES macro.

04D0
Bad Parms in ParmLib.

04D1
Bad RC from CSVQUERY macro.

04D2
Bad RC from Pgser macro.

04D3
Bad RC from Axres macro.

04D4
Bad RC from Asext macro.

04D5
Bad RC from BPXFSIT during sysplex initialization.

04D6
Bad RC from Lxfre macro.

04D7
A colony AS ended due to Mother Thread termination.

04D8
IXCJOIN of Sysplex failed.

04D9
XCF IXCQUERY operation failed.

04DA

BPXXQHIT queue manager processing failed.

04DB

Sysplex initialization failed.

04DC

XCF IXCMSGI Message-In macro processing failed.

04DD

BPXOPIT failed to ATTACH command processor BPXOTASK.

0501

Bad Entry code to module.

0503

OSAB already exists for the new task.

0506

_Exit Abend Reason Code.

0507

Bad RC from StorMan Create.

0508

Edsa does not exist in calling process.

0509

Load of program failed, program not found.

050A

Load macro failed with unexpected abend code.

050D

Invalid Function # passed to BPXPKEXC.

050E

Bad RC from Attach Macro.

050F

Bad RC from call to BPXPTCAC.

0510

BPXXNXMS(FREE) not issued to free allocated resources.

0511

Required response not issued to BPXXNXMS(SYNC) request.

0512

Response not allowed for BPXXNXMS(ASYNC) request.

0515

The L16J in BPXJCPRC failed unexpectedly.

0516

SAF failure during ACEE create/delete in BPXMRCSI.

0517

Required BPXXNXMS(DEFER) not issued before DEFERRESP or DEFERFREE.

0518

Current® buffer is also on the free chain.

0519

Resource is already freed.

054F

Current buffer is also on the free chain.

0550

PPRT, KSER or PPRP ID overlayed.

0551

PPRA has been clobbered, contents inconsistent.

0553

Failure occurred during vdac task initialization.

0554

Unexpected failure of IVTCSM invocation.

0555

No free Ppra slots while PpraActiveCount lifetime MaxProcSys.

0556

Create Latch failure during process initialization.

0557

PID not found in PPRA.

0558

Obtain Latch failure during process initialization.

0559

PprtLatchedToken only with its PprtPprp, R4.

055C

Invokers BPXXJPID area date does not match.

055D

Invokers BPXXJPID NEXT holds other latch, R4.

055E

Request for latch held by ancestor, R4, R5.

055F

Invoker of BPXXJPID holds too many latches, R4.

0560

Invalid Function # passed to internal MvsIptAffinity.

0561

SLTB has been clobbered, contents inconsistent.

0581

Bad RC from RESMGR macro.

0582

Bad Entry code to module.

0583

Critical control blocks have been damaged.

0584

Bad return code from Estae.

0585

EOM recovery time out. Refer to accompanying message BPXF275E.

0586

Tcb/Ecb table is full.

0587

Bad return code from ATTACH.

05C0

Bad Entry code to module.

05C1

Storage Manager Latch Set already exists in this AS.

05C2

Storage Manager Latch Create out of storage.

05C3

Bad RC from Isglcrt service.

05C4

Cell storage addr required.

05C5

Bad RC from Aleserv macro.

05C6

Cannot do DSPSERV RELEASE for this cell pool.

05C7

Bad RC from Csrpbld service.

05C8

Bad RC from Csrpexp service.

05C9

Cell pool token invalid.

05CA

Cell address is invalid.

05CB

Bad RC from Csrpget service.

05CC

Bad RC from Csrpfre service.

05CD

Bad RC from Csrpqpl service.

05CE

Bad RC from Csrpcon service.

05CF

Bad RC from Csrpact service.

05D0

A Storage Manager Control Block stack is invalid.

05D1

A Storage Manager Control Block stack overflowed.

05D2

A Master Cell Pool is out of extent storage cells.

05D3

A Master Cell Pool is out of control block cells.

05D4

A Cell Pool for stack storage is out of cells.

05D5

Expand stack invoked with an invalid cell pool ID.

05D6

Unexpected failure of IUTL invocation.

05D7

Bad return code from Estae.

05D8

Bad RC from Csrpqex service.

05D9

Bad RC from Csrpdac service.

05DA

Bad RC from Csrpdis service.

05DB

Length of requested storage exceeds the maximum.

05DC

Invalid data space group ID is passed.

05DD

Invalid data space alet is passed.

05DE
Invalid data space Stoken is passed.

05DF
Unexpected error from BPXSMDSP data space manager.

0601
Sleep or Alarm had a system failure.

0603
An error occurred while closing a file.

0605
Process could not notify parent of status change.

0606
Signal Code Failed to Obtain Local Lock.

0607
Signal generation failed.

060A
Bad Return Code from Save Signal Environment Service.

060B
Process could not be stopped.

060C
Unexpected error in Load 16 and Jump from OESIR.

060D
The OESIR was passed an invalid PPSD.

060E
Ppsqs exceeded the space available on InitPpsqChunck.

0641
No Storage to create PTY Latchset.

0642
Duplicate Latchset Name detected.

0643
Unexpected Return Code from Latch Manager.

0644
Storage not obtained for input queue.

0645
Storage not obtained for output queue.

0646
The PTY device state is invalid or unexpected.

0647
The PTY Device Driver input event is invalid.

0648
The Audit Trail EVENT is invalid.

0649
A Count discrepancy was found in the PTY Buffers.

064A
A Count discrepancy was found in the PTY Buffers.

064B
A Count discrepancy was found in the PTY Buffers.

064C
Bad RC from ESTAE macro.

064D
Internal logic error in Pty support.

064E
Invalid Recovery Code during EOT/EOM processing.

0650
Invalid select()criteria.

0651
Invalid select()function.

0652
Invalid value in SBCS scan TRT table.

0653
Invalid value in DBCS scan TRT table.

065B
Unexpected return code from BPXXKTIM Set.

065C
Unexpected return code from BPXXKTIM Cancel.

0680
Bad Entry code to module.

0685
Unexpected error in Load 16 and Jump.

0686
Ptrace request code in Ptrb is invalid.

0688
SVCUPDATE for ptrace SVC 144 failed.

0689
Bad caller id to module.

0700
Bad Entry code to module.

0703
Bad RC from Attach Macro.

0704
The File System that owns the root was not started.

0705
Bad return from storage manager during initialization.

0706
Bad return from PFS that owns root file system.

0707
No ROOT statement was specified in SYS1.PARMLIB.

0708
Invalid vnode address returned on vn_create by PFS.

0709
Queue Manager failed to Initialize.

070A
Queue Manager failed to Connect.

070B
An invalid Pnode was passed.

070C
No KSER for Dispatchable Unit to be waited.

070D
No Pnwt was found.

070E
The Pipe GFS was not found.

070F
The GRS Latch Manager request failed.

0710
File System latch service error during Umask request.

0711
Umask input error. Invalid bits set on in Mode.

0714
Received invalid ALET as a parameter.

0715
Bad command code passed to module.

0716
Bad RC from file/directory close service.

0717
Read/Write invoked with an invalid syscall request.

0718
The Vnode received is invalid.

0719
Pointer to next filedes table page is 0.

071A
The requested function requires a parent directory vnode.

071B
The length passed is negative - not valid.

071C
Attempt made to stop a colony PFS that was not started.

071D
File System module is overlaying a latch handle.

071E
Invalid Vnode address was referenced.

071F
BPXFRLOC caller did not have FRLOC on its BPXXFENT.

0720
BPXFTCLN detected a bad vnode cache queue.

0721
Module Exit while holding Vnode Latches.

0722
BPXXCALL EXCL when held latches were locked SHR.

0723
PFS Recovery Token Stack overflow. See BPXZFSRB.

0724
Invalid Snode or socket detected.

0725
Error in socket read/write queue.

0726
Error in setting up interface to TCP/IP.

0727
Invalid control block address found.

0729
Bad RC from PGSER Fix or Free.

072A
Current system is already the owner.

072B

Different vnod returned after vget or mount.

072D

CSVDYNEX in error attempting to call the pre-process initialization exits.

072E

CSVDYNEX in error attempting to call the post-process initialization.

072F

CSVDYNEX in error attempting to call the image initialization exits (during exec).

0730

Colony AS was canceled when the z/OS UNIX AS was canceled.

0731

Invalid retval from dd_configure.

0732

CSFS DDWT detected invalid DDWE.

0733

On PFS restart, a request was made to allocate a restartbyte beyond the end of the Cabc.

0734

Could not create a msgq for colony thread support.

0735

No saved CDSI token for request which requires token.

0736

Saved CDSI token valid from previous request.

0737

IXCXCDSI return and reason code indicate code error.

0738

Internal structure of CDS inconsistent.

0739

Socket is not in a valid state.

073A

Error on read or write of CDS.

0781

Byte Range Lock Manager cannot be initialized.

0782

Byte Range Lock Manager cannot be terminated.

0783

Unexpected error occurred while unlocking a byte range.

0784

Unexpected error occurred while registering a process.

0785

Unexpected error occurred while registering an object.

0786

The Byte Range Lock Mgr detected an internal error.

0787

Error occurred while trying to get lock information.

0788

Unexpected error occurred while unregistering process.

0789

Unexpected error occurred while unregistering object.

078A

Unexpected error occurred while setting a lock.

078B
Unexpected error occurred while calling MarkBroken.

078C
PprtFd field already used to hold a Vde ptr.

078D
Vnode Vde count is about to go negative.

078E
Oapb Chain has not been cleaned up properly.

078F
IEAVLSUP query service failed.

0790
IEAVLSUP update service failed.

0791
z/OS Unix System Services has terminated unexpectedly.

0793
MemberGoneDelay Member Gone Takeover processing delayed.

0794
A sysplex member received a message with a sequence number that was out of order, implying that a previous message was lost.

0795
A sysplex member received a message with a duplicate sequence number, implying that the message itself is a duplicate.

0796
No root file system after Member Gone processing.

07E0
Level mismatch between kernel and TFS.

07E1
Bad TFS mount table for filesys token.

07E2
Attempt to add a file to a non-directory.

07E3
Bad chain pointer, data block not in file.

07E4
Bad chain pointer, freeing block not in file.

07E5
Allocating an already allocated block.

07E6
Freeing an already freed block.

07E7
Attempt to free the superblock.

07E8
Attempt to lookup in a non-directory.

07E9
Bad length for a WTO.

0800
Reg2 -> offending parameter in BPXXQHIT (see QhitT).

0801
Unexpected return code from BPXXQHIT macro.

0802
Incorrect UDP-plus flag combination.

0803

Structure of QHIT queue damaged.

0804

Channel program check occurred.

0805

Counter goes negative.

0806

The buffer length passed is zero or incorrect.

0807

Unexpected buffer sequence number detected.

0808

BPXUIIOC processing failed.

0809

BPXXKSOC processing failed.

080A

Master socket not created.

080B

Invalid value to an internal counter.

080C

Unexpected ERRNO from BPXUTBIN.

080D

QnodSeqNum mismatch found during accept.

080E

Unexpected TCP state detected.

080F

Attempt to DEQ UTBQEs on empty backlog queue.

0810

Requested wait time is either too long or too short.

0811

Timer processing caught its tail in a circular array.

0812

TCP Readable BFQE chain is corrupted.

0813

TCP Send BFQE chain is corrupted.

0814

The transport provider unexpectedly ran out of latching resources for TCP sockets.

0815

The buffer chain has been corrupted.

0816

Bad return code from BPXXFAST NEWODB.

0817

Waitlist post failure unexpectedly.

0818

A tcp_drop() invocation is not valid.

0819

UTTC2 invoked with 0 Bfqe and FIN not received.

081A

Unexpected return code from ?IWMELEAV macro.

081B

Osenv cell is no longer valid for use.

081C
A new ACEE was created when only a use count update on an existing one is expected.

081D
Invalid VFS or no VFS found when expected.

081E
Invalid Xnod returned to client from server.

8002
z/OS UNIX is not running.

8004
The kernel has been terminated and restarted. Connection to the old kernel is no longer valid.

8006
The current process is being ended.

800C
An error occurred because of a duplicate file system name.

8010
The caller has an incorrect PSW key.

8011
The caller is running in AR mode.

8012
The caller has an incorrect signal data area (PPSD).

8013
A ptrace router was invoked while the calling program was not being traced using ptrace.

8014
A ptrace router was invoked in an incorrect thread.

8015
A ptrace router was invoked in an authorized process.

8017
A sleep callable service was invoked while z/OS UNIX was not running.

8018
An invoker of a callable service had an incorrect PSW key.

8022
A ptrace router was invoked in an exited thread.

8024
A ptrace router was invoked in a process with a controlled environment.

8028
The local INET failed to initialize.

8033
Duplicate NETWORK parmlib statements with DOMAINNAME(AF_INET) and TYPE(OESTACK) not supported.

8034
The specified Network type is not supported under DOMAINNAME(AF_INET).

8035
TCP/IP BASE feature is required but not enabled.

8038
The sysplex server for the byte range lock manager has terminated.

8039
The PARM= value is incorrect in the Colony procedure.

803A
The specified TCPIP stack was not configured under Cinet.

803B

This abend is the result of a request to shut down z/OS UNIX System Services. The thread and its associated task are terminated.

8040

A shared Mutex/Condvar object is in an unknown state, object is unusable.

8046

The system detected that a non-started task attempted to start z/OS UNIX System Services.

8047

The system detected a start request for z/OS UNIX System Services, but z/OS UNIX cannot be started this way.

8051

Too many threads are trying to run in the z/OS UNIX Kernel. Reduce concurrent z/OS UNIX workload on the system. Use z/OS UNIX Health Check, USS_KERNEL_STACKS_THRESHOLD, to receive warnings when available z/OS UNIX stacks are low. For more information see the DISPLAY OMVS,STORAGE command in *z/OS MVS System Commands*.

8487

The task has already been pseudo-dubbed.

8502

Required VSMLIST absent.

8504

Bad return code from Exec Kernel syscall.

8514

An unexpected error occurred in BPXJCSE while changing the address space/process identity for a socket.

8604

Signal processing detected kernel shutdown.

864F

Cannot get the Pty Latch in device driver.

865A

Cannot get the Rty Latch in device driver.

8681

Sigaction callable service from Ptrace failed.

8682

Kill callable service from Ptrace failed.

8683

Sigprocmask callable service from Ptrace failed.

8684

Ptrace initialization of fork child failed.

8687

Ptrace kernel function failed.

868A

Quiesce callable service from Ptrace failed.

8701

The LFS Mother Task did not initialize.

8702

Bad RC from Estae Macro.

8712

Mask not changed. Security support not installed.

8713

Security service error during Umask request.

8728

A file system latch could not be obtained during term.

C001

The callable service is incorrect or is not supported.

C003

The callable service was not issued by a program running under a task control block (TCB).

C005

Callable services cannot be nested.

C007

The callable service was issued in cross-memory mode.

C008

The calling process cannot be dubbed.

C009

The parameter list contains an incorrect number of parameters.

C00A

A parameter length is negative.

C00E

An incorrect address was encountered when trying to move user parameter data.

C00F

There is insufficient storage to copy user parameters.

C019

The calling program was running in an incorrect request block (RB) state.

C01A

A security product is not installed.

C01B

The user ID is not defined to the security product.

C01C

The user ID is in a group that does not have access to z/OS UNIX.

C01D

The user ID does not have access to z/OS UNIX.

C01E

The user ID does not have a UID.

C01F

The user ID is in a group that has does not have a GID.

C020

An internal error is reported by the security product.

C021

The status specified on the _exit callable service is not valid.

C023

The callable service was rejected because the requesting thread is in termination.

C02F

Caller is not authorized for this callable service.

C032

Exec Phase 2 failed because a sticky program was not found in the MVS library search order.

C036

Exec Phase 2 failed because the execution of a HFS executable was attempted from a controlled environment.

C048

An attempt was made to execute an APF authorized MVS program with an argument length greater than 100 characters. If the target APF authorized MVS program is capable of being called with an argument length of

up to 4096 bytes, define a BPX.EXECMVSAPF.*pgmname* resource in the FACILITY class . If the target APF authorized program can not handle an argument length from 101 to 4096, then change the argument to be 100 bytes or less. Message BPXP027I goes to the system hard copy log.

CO4A

Exec or spawn processing failed because the target MVS load library program cannot be invoked in the manner attempted.

C443

Parameter Rules not present for the callable service.

C448

Unexpected error in Load 16 and Jump.

C552

Proc init invoker not key 0 and not supervisor state.

C55A

Unauthorized caller to BPXPRTRM internal callable service.

C056

The callable service was rejected by z/OS UNIX because it is not allowed to be called from syscall exit routines. z/OS UNIX disallows some syscalls from being called by syscall exit routines due to the environment in which the exit routines run.

E04B

Open processing failed for a z/OS UNIX file because the file or link used to reference the file did not have the proper attributes to be opened from a privileged or authorized environment.

E055

The path name that was specified by the caller of the z/OS UNIX exec, spawn, or attach_exec service resolved to a file that has the sticky attribute and either the set-user-id or set-group-id attribute. The corresponding program in the MVS program search order is not allowed to be run in a set-user-id or set-group-id environment.

FDxx

Terminating signal with dump.

FDF1

Unauthorized Caller to Exec2 internal callable service.

FDF2

Osab does not exist in calling process.

FDF3

Bad Return Code from RACF Exec Set Uid/Gid Service.

FDF4

Caller not authorized (key 0 | supervisor) for BPXMRKIN.

FFxx

Terminating signal with no dump.

FFF7

z/OS UNIX is not running and the caller does not expect a return code.

FFF8

z/OS UNIX is not running and the parameter list is too long.

FFFA

Kernel termination or error with user in wait.

FFFE

Normal end of Exec Phase 1, with multiple TCB/RBs.

FFFF

The _exit service was invoked with a normal exit status completion code from a task with subtasks, more than one request block (RB), or linkage stack entries.

System action

The system abnormally ends the program issuing the callable service.

Programmer response

Code
> **Response**

000D
> The failing file system indicated that, should it fail, all of z/OS UNIX should be terminated also.

0016
> Ptrace was invoked to process a ptraceable event, but was unable to establish a recovery environment. The probable cause is a shortage of system resources. Obtain more system resources or reduce the use of system resources.

0025
> The entry code specified on the interface to a file system service is not within the range of codes supported by that interface. The request is not processed.

0026
> Ensure that the procedure for this colony has an entry in the security product's started procedures table, and that it specifies a valid userid.

0027
> A possible reason for this failure is that the dataspace already exists. Verify that there are no duplicate entrypoint names specified in the parmlib member.

0029
> Run the XCF couple dataset utility for TYPE BPXMCDS to create the z/OS UNIX couple dataset. Issue the SETXCF COUPLE operator command to add the new TYPE=BPXMCDS couple data set.

0043
> This abend is percolated to the /usr/sbin/init process so that /usr/sbin/init ends abnormally and causes the installation to see a failure for the ETCINIT job. This is an unexpected type of error that can only occur for a privileged caller during system initialization. You can request a system dump by the kernel to capture the environment of the failure. This dump also allows immediate debugging of the problem without requiring a recreate.

0044

> A BPX1AIO asynchronous I/O operation has completed and the attempt to invoke msgsnd() for the I/O Completion message has failed. This usually means that the queue has filled up. The return and reason codes from this attempt are recorded in the VRA section of the dump and they are also loaded into registers 4 and 5 just before the abend is taken.

> Only one dump will be taken for this type of error but each failed attempt will abend and generate a logrec record for diagnostic purposes. If the message queue is full or the system limit on number of messages has been reached, the application involved may be hung and not able to receive these messages so it may need to be recycled.

002A
> Run the XCF couple dataset utility for TYPE BPXMCDS to create the z/OS UNIX couple dataset. Issue the SETXCF COUPLE operator command to add the new TYPE=BPXMCDS couple data set.

002B
> Consult registers 2 and 3 at time of error in the resulting dump to extract the ASCRE return and reason codes indicating the nature of the error and search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

002C
> A cross memory post failure occurred during z/OS UNIX address space initialization. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

002E

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0030

The calling process is either in termination or has reached its limit on concurrent SRBs issuing z/OS UNIX callable service. If the process is not in termination, reissue the callable service.

0031

Either issue the callable service from task mode or use another callable service to perform the function required.

0037

There may be a parameter specification error. Refer to message BPXF219I, which was issued along with this abend and follow the instructions listed there. If the problem can not be corrected, search problem reporting databases for a fix for the problem. If no fix exists, provide this dump to the IBM Support Center.

003F

Delays may be experienced in the shared file system environment on multiple systems due to this situation. If the condition appears to be preventing systems from completing initialization, it may be necessary to IPL this system to relieve the contention.

0401 - 0791

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0794

The system issues message BPXN004I and a two-system dump. See message BPXN004I for more diagnostic information.

0795

The system issues message BPXN005I and a two-system dump. See message BPXN005I for more diagnostic information.

07E0 - 081C

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

8002

If z/OS UNIX has not been started, request the operator to issue the command to start z/OS UNIX. Verify that z/OS UNIX completes its initialization before running the job again.

8004

z/OS UNIX has been stopped and restarted. Either issue a call to BPX1MPC (MVS process cleanup) to clean up the process before issuing another callable service, or end the job.

8006

A new callable service cannot be issued until this termination is complete.

800C

During file system initialization, an error occurred while processing a duplicate file system name. Verify in the parmlib member used that there are no duplicate file system names in either the ROOT or any MOUNT statements in the BPXPRMxx parmlib member. This includes a duplicate that may be caused by any names when DSNAMEs are specified.

8010

Ptrace was invoked to process a ptraceable event, but the PSW key was not valid. You can only debug programs using ptrace that are run with a PSW key of 8.

8011

Ptrace was invoked to process a ptraceable event, but the ASC mode was not valid. Ptrace only supports non-AR mode programs. Only debug programs with ptrace that are non-AR mode.

8012

Ptrace was invoked to process a ptraceable event, but the PPSD was not valid. Invoke ptrace with a valid PPSD. The PPSD is mapped by macro BPXYPPSD.

8013

Ptrace was invoked to process a ptraceable event, but the process ptrace was invoked in is not currently being debugged using ptrace. Invoke ptrace to process ptraceable events only in processes being debugged by ptrace.

8014

Ptrace was invoked to process a ptraceable event, but the thread ptrace was invoked under was not dubbed. Invoke ptrace to process ptraceable events only under dubbed threads.

8015

Ptrace was invoked to process a ptraceable event, but the process was authorized. Do not attempt to debug programs using ptrace in an authorized process.

8017

Callable service sleep (BPX1SLP) was invoked when z/OS UNIX became inactive. Have the system operator use the DISPLAY OMVS operator console command to determine the status of z/OS UNIX. The operator will probably need to restart z/OS UNIX.

8018

An z/OS UNIX callable service requires the invoker to have a PSW key that would allow signals to be delivered. Change the application to invoke the z/OS UNIX callable service with a PSW key that allows signals to be delivered.

8022

Ptrace was invoked to process a ptraceable event, but the thread ptrace was invoked under has already exited. Do not invoke ptrace to process ptraceable events under exited threads.

8024

Ptrace was invoked to process a ptraceable event, but the process had security product controlled data sets open. Do not attempt to debug programs using ptrace in this controlled environment.

8028

Either the local INET was started without bringing up the converged sockets file system, or the converged sockets file system was started with only the local INET. Converged sockets must be brought up with at least one other file system in order for the local INET to be started.

8033

During file system initialization, an error occurred while processing a duplicate NETWORK parmlib statement with DOMAINNAME(AF_INET) and TYPE(OESTACK). Verify that only one such statement is specified in the BPXPRMxx parmlib member.

8034

During file system initialization, an error occurred while processing a SUBFILESYSTYPE parmlib statement with DOMAINNAME(AF_INET). The specified NAME is not accepted. Only NAME(OESTACK) can be specified.

8035

The TCP/IP BASE feature is required for FILESYSTYPE OESTACK. Enable the feature in the IFAPRDxx member.

8038

The byte-range lock manager will be reactivated on another system. To protect the integrity of previously locked files, any process that has been locking files must be terminated and will have to be restarted. If you do not wish to terminate the process that has done or is doing byte-range locking, then specify preferred signal using pfsctl support.

8039

In the EXEC PGM=BPXVCLNY,PARM=TP(TPNAME) statement of the Colony proc, the PARM value has a syntax error. It must be TP(TPNAME), where:

- Everthing is in upper case EBCDIC.
- "TP(" is contained in the first three characters.
- The value of TPNAME is 1 to 8 characters, left justified, and followed by a blank or ")".

Correct the value to conform the previously described rules, and reply to the console prompt to restart the Colony.

803A

In a Common Inet, Cinet, configuration, the TCPIP stack name specified by the TPNAME value in the Colony proc's EXEC PGM=BPXVCLNY,PARM=TP(TPNAME) statement was not configured under Cinet or is not in upper case. Issue D OMVS,P from the console to see a list of the configured TCPIP stacks, and check the spelling of the TPNAME used. Check the BPXPRMxx parmlib member used for the names specified on the SUBFILESYSTYPE NAME(TPNAME) statements. Correct the name and reply to the console prompt to restart the Colony.

8487-8728

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

C001

Specify the correct callable service number and resubmit the job.

C003

Callable services can be issued only in TCB mode. SRB mode is not supported.

C005

The system has detected a nested callable service. For example:

The request block (RB) issues a callable service. An interrupt request block (IRB), for example, in an STIMER exit, interrupts the RB and attempts to issue another callable service. The second callable service request is detected and flagged as an error.

Correct the problem and resubmit the job.

C007

You cannot issue callable services in cross-memory mode.

Correct the problem and resubmit the job.

C008

An error occurred while trying to make the calling process an z/OS UNIX process. The system cannot set an error return code for the caller because the caller does not expect a return code. A user ABDUMP has been requested. The cause of the error can be determined from either the ABDUMP or the symptom dump. In the dump, register 2 contains the return code value and register 3 contains the reason code value of the failure. Analyze the return code and reason code for the cause of the problem. For detailed information, see *z/OS UNIX System Services Messages and Codes*.

C009

An error was encountered that prevents the running of the callable service. However, the system cannot set an error return code for the caller because the input parameter list is incorrectly specified.

An ABDUMP or symptom dump has been requested for the caller. In the dump, register 2 contains the return code value and register 3 contains the reason code value of the original failure.

Do both of the following:

• Analyze the return code and reason code for the cause of the original problem.
• Verify that the high-order bit of the last parameter list entry is set on. Currently, a maximum of 25 parameter list entries is supported for a callable service.

C00A

Check for incorrect input parameters passed to the callable service. One of the following conditions may have occurred:

• The specified length of a variable-length parameter is negative. (This error can occur only in programs issuing Assembler callable services.)

The length of a variable-length parameter cannot be negative. Callable services with variable-length parameters normally specify them in pairs. The first of the pair specifies the length of the variable-length parameter that comes next.

• The length of a fixed-length parameter exceeds the allowable value. The maximum length of any fixed-length parameter cannot exceed 5000 bytes.

- The size of an input buffer to be used for holding an output variable length parameter is specified as more than 5000 bytes. The actual maximum size of the parameter is much less. This error is reported for performance reasons, to avoid inefficient usage of system resources, including storage and processing time. Specify a smaller size for the input buffer.

C00E
An error occurred while accessing the user parameter data. This can be caused by one of the following conditions:

- The total number of parameters is incorrect for the callable service being issued.
- There is an error in one of the passed user parameters causing z/OS UNIX to program check when the parameter is accessed. Check for the following conditions:
  - A parameter that points to non-existent storage.
  - A parameter that cannot be accessed in the current user PSW key.

Check for incorrect input parameters passed to the callable service.

C00F
z/OS UNIX cannot obtain storage to make a copy of the passed user parameters. This can be caused by one of the following conditions:

- The user region is filled up and the STORAGE request cannot be satisfied.
- There is an error in one of the passed user parameters, causing z/OS UNIX to issue a STORAGE request for a large amount of storage that cannot be satisfied.

Check for incorrect input parameters passed to the callable service. If the parameters are correct, consider increasing the user REGION size.

C019
Fix the application program. An z/OS UNIX callable service, which requires that it be invoked from a specific request block, was invoked from an incorrect request block. The problem may have been caused by a previous invocation of callable service **mvssigsetup** from a different request block. Because signals can be delivered only to the request block that issued **mvssigsetup**, z/OS UNIX cannot perform the callable service.

C01A
A security access facility (for example, RACF) is required, but not installed in the system.

C01B
Define the user to the security product.

C01C
Define the current group as an z/OS UNIX group.

C01D
Define the user as an z/OS UNIX user.

C01E
Define the user as an z/OS UNIX user.

C01F
Define the current group as an z/OS UNIX group.

C020
The security access facility (for example, RACF) has reported an error condition. A dump should have already been taken by the security product. The cause of the error can be determined from the dump.

A user ABDUMP has also been requested by the z/OS UNIX kernel. The error return code from the security product can be determined from either the ABDUMP or the symptom dump. In the dump, register 4 contains the error return code value and register 5 contains the error reason code value as reported by the security product. Analyze the return code and reason code for the cause of the problem.

C021
Specify a valid exit status on the _exit call. See the BPXYWAST macro for a definition of the accepted exit status values.

C023

The BPX1PTX callable service should be issued to complete the termination of the thread and to obtain a new thread to process. Other z/OS UNIX callable services are not supported while a thread is in this state.

C02F

Caller must be APF authorized to issue a callable service.

C032

Caller must insure that the program is either in LPA, LINKLIST or the STEPLIB that the program is targeted to run with.

C036

Caller must ensure that the program is marked as program controlled in the HFS, or place the program in the MVS library search order and define it to SAF program control.

C04A

The failure was as a result of an attempted invocation of a MVS load library program. The z/OS UNIX sticky bit file or link that resolved to the MVS program does not have the proper attributes to allow this type of invocation. General purpose register 4 at the time of this abend contains the name of the MVS program that could not be invoked. Message BPXP028I accompanies this abend. For details about this error, see the description of message BPXP028I in *z/OS MVS System Messages, Vol 3 (ASB-BPX)*.

C443-C55A

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

E04B

The failure resulted from an attempt to open a z/OS UNIX file that did not have the proper attributes to be opened by a set-user-ID or set-group-ID privileged program, an APF-authorized program, or a program that requires a RACF clean environment.

A RACF clean environment is one that requires all programs loaded or executed in the address space to be identified as program-controlled. For example, software applications that require permission to the BPX.SERVER or BPX.DAEMON profile in the RACF facility class require a RACF clean environment.

A set-user-ID or set-group-ID program is a z/OS UNIX program that is installed as an executable file in the z/OS UNIX file system with the set-user-ID or set-group-ID bit set. When executed, it will run with the effective user ID or effective group ID (or both) of the owner of the executable file. The execution of a set-user-ID or set-group-ID program is considered privileged when it changes the effective UID or GID of the calling process.

Message BPXP029I accompanies this abend. For details about this error, see the description of message BPXP029I in *z/OS MVS System Messages, Vol 3 (ASB-BPX)*.

Note that this abend is percolated to the caller of the service that detected the error and could result in unexpected application errors. A dump to an MVS data set or to a z/OS UNIX file for the error will be taken if the caller's environment is set up to handle the dump.

E055

The failure was a result of an attempted exec, spawn, or attach_exec of a z/OS UNIX file that had the sticky attribute and either the set-user-id or set-group-id attributes. By default, programs found in the MVS program search order during exec, spawn or attach_exec of a file with the sticky attribute are not allowed to run with the UID (set-user-id) or GID (set-group-id) identity of the file owner. To override the default behavior, an installation can define resource profiles in the RACF FACILITY class to allow these program to run with the UID or GID of the file owner. For information about defining BPX.STICKYSUG.*program_name* resource profiles, see *z/OS UNIX System Services Planning*.

FDxx

If *xx* is in the range of X'01' to X'7F', a signal was received causing termination and a dump to be taken. This condition is usually the result of an application programming exception. For a description of the signal represented by the value *xx*, check the appropriate appendix "BPXYSIGH - Signal Constants" or "Signal Defaults" in *z/OS UNIX System Services Programming: Assembler Callable Services Reference*.

FDF1-FDF4

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

FFxx

If *xx* is in the range of X'01' to X'7F', a signal was received causing termination. This condition is usually the result of a process explicitly sending a terminating signal to either itself or to another process in the process group. For a description of the signal represented by the value *xx*, check the appropriate appendix "BPXYSIGH - Signal Constants" or "Signal Defaults" in *z/OS UNIX System Services Programming: Assembler Callable Services Reference*.

FFF7

If z/OS UNIX has not been started, request the operator to issue the START OMVS command. Verify that z/OS UNIX completes initialization before running the job again.

FFF8

An error was encountered that prevents the running of the callable service. However, the system cannot set an error return code for the caller because the input parameter list is incorrectly specified. Verify that the high-order bit of the last parameter list entry is set on. Currently, a maximum of 25 parameter list entries is supported for a callable service.

FFFA-FFFE

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

z/OS UNIX System Services (BPX)

EC7

Explanation

Advanced Program-to-Program Communications (APPC) issues abend X'EC7' when it detects an unrecoverable error.

A reason code further describes the error:

Code
    Explanation

000A1000

The activation of a logical unit failed because the VTAM application for the logical unit is not APPC-capable. Check the VTAM APPL statement for the logical unit to ensure that you specified APPC=YES.

System Action: The system also issues abend X'EC7' with reason code X'000A0037', which can be ignored.

000100xx

An internal error occurred.

System Action: The system continues processing, but the requested APPC/MVS service fails. The system writes an SVC dump.

00020001

A program called the Cleanup_AS service, but either did not provide the correct number of parameters or did not follow VLIST conventions.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00020002

A program called the Cleanup_TP service but either did not provide the correct number of parameters or did not follow VLIST conventions.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00020003 - 00020006

An internal error occurred.

System Action: The system continues processing, but APPC/MVS initialization fails.

00020007

A program called the unauthorized Cleanup_TP service but either did not provide the correct number of parameters or did not follow VLIST conventions.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00020008

A program issued a version of the Cleanup_Address_Space service that is not valid on the release of MVS installed on the system.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00020009

A program called a version of the unauthorized Cleanup_TP service that is not valid on the release of MVS installed on the system.

System Action: The system continues processing, but the requested APPC/MVS service fails.

0002000A

A program called the ATBCUC1 service, which is not valid on the release of MVS installed on the system.

System Action: The system continues processing, but the requested APPC/MVS service fails.

0002000B

An abend occurred when the system tried to access the input parameters for a callable service. The caller of the program does not have read or write access to the parameters.

00030001

An internal error occurred while the DISPLAY APPC command processor was trying to extract data for display.

System Action: The system ends the DISPLAY command but APPC continues processing.

00050001

A system error occurred during conversion of a transaction program (TP) profile.

System Action: The system does not use the TP profile.

00050002

An internal error occurred.

System Action: The system does not use the TP profile.

00050300 - 000503E0

An internal error occurred during VSAM processing.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00050420 - 00050424

A system error occurred during transaction program (TP) profile processing.

System Action: The system does not use the TP profile.

00050800 - 00050822

An internal error occurred during TP profile or side information processing.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00050200

An internal error occurred during APPC initialization

System Action: The system continues processing, but APPC/MVS initialization fails.

00050602 - 00050657

An internal error occurred during TP profile or side information processing.

00060001 - 00060004

An internal error occurred.

System Action: The system abnormally ends APPC. If the restart criteria are met, APPC restarts in a new address space.

00060005 - 00060009

An internal error occurred.

System Action: APPC continues processing, but inbound processing could be affected.

0006000A

An internal error occurred.

System Action: The system abnormally ends APPC. If the restart criteria are met, APPC restarts in a new address space.

0006000B

An internal error occurred.

System Action: APPC continues processing, but inbound processing could be affected.

0006000C - 0006000E

An internal error occurred.

System Action: The system abnormally ends APPC. If the restart criteria are met, APPC restarts in a new address space.

0006000F - 00060014

An internal error occurred.

System Action: APPC continues processing, but inbound processing could be affected.

00070001 - 00070002

An internal error occurred.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

00070003

Initialization of the APPC/cross-system coupling facility (XCF) group name failed.

System Action: The system continues processing, but APPC resources are not available. If the operator enters the START APPC command in response to this problem. APPC initialization will fail.

00070004

The system failed to initialize the APPC/XCF group name. The system could not find a match for CVTSNAME in the system information returned from the IXCQUERY macro. The system has not initialized the APPC/XCF group name.

System Action: The system continues processing, but APPC resources are not available. If the operator enters the START APPC command in response to this problem. APPC initialization will fail.

00070005

An unauthorized attempt was made to start APPC. APPC can only be invoked by the installation as a started task using the START APPC command.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

00070006

APPC was unable to obtain required common storage. Register 2 contains the return code from the system STORAGE macro.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

00070008

An illegal state transition was requested for APPC.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

00070009

APPC was unable to obtain required private storage. Register 2 contains the return code from the system STORAGE macro.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

0007000A

An internal error occurred.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

0007000B

An illegal state transition was requested for one of APPC's divisions.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

0007000C

The system cannot load the ATBINPVT load module.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

0007000D - 0007000E

An internal error occurred.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

0007000F

An initialization error occurred. The system was unable to obtain an APPC resource.

System Action: The system continues processing, but the error will cause the failure of APPC initialization processing if the operator enters a START APPC command.

00070010

An internal error occurred.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

00070011

The system was unable to load the ATBINPVT load module. Register 2 contains the return code from the system LOAD macro.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

00070012

The system was unable to load the ATBINLPA load module. Register 2 contains the return code from the system LOAD macro.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

00070013

The system was unable to load the ATBINMIG load module. Register 2 contains the return code from the system LOAD macro.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

00070015

An attempt was made to update the state of a division, but the division identifier is not defined.

System Action: The system sends messages to the operator console to show APPC's status following the abend. If restart conditions are met, APPC will restart itself in another address space.

00070019 - 0007001D

An internal error occurred.

System Action: APPC cannot restart itself in another address space. APPC services remain unavailable.

00090001

The caller specified a parameter list that contained too many or too few parameters for the service being invoked,

System Action: The system denies the request. No conversations end as a result of the error, unless it results in the abnormal ending of the address space. If the address space abnormally ends, all conversations owned by the address space will be cleaned up as part of normal APPC processing.

00090002

An abend occurred while the system tried to access one of the following:

- Input parameters to which the caller does not have read access.
- Output parameters to which the caller does not have write access.

00090003 - 00090051

An internal error occurred.

00090052

An internal error occurred.

System Action: The system continues processing, but the requested APPC/MVS service fails. The system issues an SVC dump.

00090054

APPC/MVS cannot access the conversation_ID parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090055

APPC/MVS cannot access the service_name parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090056

APPC/MVS cannot access the service_reason_code parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090057

APPC/MVS cannot access the message_text_length parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090058

APPC/MVS cannot access the message_text parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090059

APPC/MVS cannot access the error_log_product_set_ID_length parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090060

APPC/MVS cannot access the error_log_product_set_ID parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090061

APPC/MVS cannot access the error_log_data_length parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090062

APPC/MVS cannot access the error_log_data parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090063

APPC/MVS cannot access the return_code parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090064

APPC/MVS cannot access the reason_code parameter for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090065

A program specified an incorrect number of parameters on a call to Error_Extract.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090066 - 00090068

An internal error occurred in APPC/MVS.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090069

APPC/MVS cannot access the parameter list for the Error_Extract service.

System Action: The system does not process the call to Error_Extract. The system continues other processing.

00090070 - 00090073

An internal error occurred in APPC/MVS.

System Action: The system continues processing, but the requested APPC/MVS service fails. The system takes an SVC dump.

00090082

An internal error occurred in APPC/MVS. Transaction Program Cleanup encountered a conversation id that was associated with the transaction program but the conversation itself does not exist. The conversation id will be ignored and cleanup will continue.

System Action: The system continues processing. The system takes an SVC dump.

00090083

An internal error occurred in APPC/MVS. Transaction Program Cleanup encountered a problem and was not able to clean up resources associated with a transaction program for a specific address space.

Operator Response: Stop the address space where this error occurred as soon as possible. APPC services, such as Allocate, Associate and Connect, may fail because of this unsuccessful cleanup. In message IEA045I, the ERROR ID information identifies the ASID for the address space in which the error occurred. The system command DISPLAY A,ALL can be used to obtain additional information about the address space.

System Action: The system continues processing, but the requested APPC/MVS service fails. The system takes an SVC dump.

000A00xx

An internal error occurred.

System Action: APPC continues processing.

000A1000

The activation of a logical unit failed because the VTAM application for the logical unit is not APPC-capable. Check the VTAM APPL statement for the logical unit to ensure that you specified APPC=YES.

00100003

The join group service abnormally ended while trying to access the XCFMSGIN_EXIT_ADDRESS input parameter.

System Action: The system rejects the request. The system does not join the caller to the APPC group.

00100004

The join group service abnormally ended while trying to access the XCFMSGIN_MEMDATA input parameter.

System Action: The system rejects the request. The system does not join the caller to the APPC group.

00100005

The join group service abnormally ended while trying to access the XCF_RETURN_CODE input parameter.

System Action: The system rejects the request. The system does not join the caller to the APPC group.

00100006

The join group service abnormally ended while trying to access the XCF_REASON_CODE input parameter.

System Action: The system rejects the request. The system does not join the caller to the APPC group.

00100007

The join group service abnormally ended while trying to access the RETURN_CODE input parameter.

System Action: The system rejects the request. The system does not join the caller to the APPC group.

00100008

The join group service abnormally ended while trying to access the MEMBER_TOKEN input parameter.

System Action: The system rejects the request. The system does not join the caller to the APPC group.

00100009

An incorrect number of parameters was passed to the join group service.

System Action: The system rejects the request. The system does not join the caller to the APPC group.

0010000A - 0010000B

An internal error occurred.

System Action: The system automatically restarts APPC. If a second failure occurs, APPC will abnormally end.

0010000C

The parameter list passed to the Associate Service contained an incorrect number of parameters.

System Action: APPC continues processing, but the system does not perform the requested service.

0010000D

The parameter list passed to the Connect Service contained an incorrect number of parameters.

System Action: APPC continues processing, but the system does not perform the requested service.

0010000E

The parameter list passed to the Control Service contained an incorrect number of parameters.

System Action: APPC continues processing, but the system does not perform the requested service.

0010000F

The parameter list passed to the Disconnect Service contained an incorrect number of parameters.

System Action: APPC continues processing, but the system does not perform the requested service.

00100010

The parameter list passed to the Identify Service contained an incorrect number of parameters.

System Action: APPC continues processing, but the system does not perform the requested service.

00100011

The parameter list passed to the Unidentify Service contained an incorrect number of parameters.

System Action: APPC continues processing, but the system does not perform the requested service.

00100012

The parameter list passed to the Define Local TP Service contained an incorrect number of parameters.

System Action: APPC continues processing, but the system does not perform the requested service.

00100013

The parameter list passed to a transaction scheduler interface service contains inaccessible parameters.

System Action: APPC continues processing, but the system does not perform the requested service.

00100014

The join service failed while trying to access the parameter pointers. The parameter list is inaccessible.

System Action: The system rejects the request. The system does not join the caller to the APPC group.

00100015

The parameter list passed to the Set_AS_Attributes service contained an incorrect number of parameters.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00100016

The parameter list passed to the Set_AS_Attributes service contains inaccessible parameters.

00100017 - 00100018

An internal error occurred.

System Action: The system automatically restarts APPC. If a second failure occurs, APPC abnormally abends.

00100019

An internal error occurred.

System Action: The callers task is ended.

0010001F

A program issued a version of the Identify service that is not valid on the release of MVS installed on the system.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00100020

A program issued a version of the Unidentify service that is not valid on the release of MVS installed on the system.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00100023

A program issued a version of the Join_Sysappc_Group service that is not valid on the release of MVS installed on the system.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00100025

A program passed a parameter list containing an incorrect number of parameters to the Version_Service.

00100026

A program passed an inaccessible parameter list to the Version_Service.

00100027

A program passed a parameter list containing inaccessible parameters to the Version_Service.

System Action: The system continues processing, but the requested APPC/MVS service fails.

00100028

An internal error occurred during processing of the Identify service.

System Action: The system ends the caller's task.

00100029

An internal error occurred during processing of the Unidentify service.

System Action: The system ends the caller's task.

00120001

The Accept_Test service abnormally ended because the caller's parameter list was incorrect.

00120002

The Accept_Test service abnormally ended while trying to write to caller's parameter list.

00120003

The Register_Test service abnormally ended because the caller's parameter list was incorrect.

00120004

The Register_Test service abnormally ended while trying to write to caller's parameter list.

00120005

The Unregister_Test service abnormally ended because the caller's parameter list was incorrect.

00120006

The Unregister_Test service abnormally ended while trying to write to caller's parameter list.

001300xx

An internal error occurred.

System Action: The system action is unpredictable. -->

00140001

The Register_For_Allocates service abnormally ended because the caller specified a parameter list that contained too many or too few parameters.

00140002

The Register_For_Allocates service abnormally ended because the system tried to access one of the following:

- Input parameters to which the caller does not have read access
- Output parameters to which the caller does not have write access.

00140003

The Receive_Allocates service abnormally ended because the caller specified a parameter list that contained too many or too few parameters.

00140004

The Receive_Allocates service abnormally ended because the system tried to access one of the following:

- Input parameters to which the caller does not have read access
- Output parameters to which the caller does not have write access.

00140005

The Reject_Conversation service abnormally ended because the caller specified a parameter list that contained too many or too few parameters.

00140006

The Reject_Conversation service abnormally ended because the system tried to access one of the following:

- Input parameters to which the caller does not have read access
- Output parameters to which the caller does not have write access.

00140007

The Set_Allocate_Queue_Notification service abnormally ended because the caller specified a parameter list that contained too many or too few parameters.

00140008

The Set_Allocate_Queue_Notification service abnormally ended because the system tried to access one of the following:

- Input parameters to which the caller does not have read access
- Output parameters to which the caller does not have write access.

00140009

The Get_Event service abnormally ended because the caller specified a parameter list that contained too many or too few parameters.

0014000A

The Get_Event service abnormally ended because the system tried to access one of the following:

- Input parameters to which the caller does not have read access
- Output parameters to which the caller does not have write access.

0014000B

The Query_Allocate_Queue service abnormally ended because the caller specified a parameter list that contained too many or too few parameters.

0014000C

The Query_Allocate_Queue service abnormally ended because the system tried to access one of the following:

- Input parameters to which the caller does not have read access
- Output parameters to which the caller does not have write access.

0014000D

The Set_Allocate_Queue_Attributes service abnormally ended because the caller specified a parameter list that contained too many or too few parameters.

0014000E

The Set_Allocate_Queue_Attributes service abnormally ended because the system tried to access one of the following:

- Input parameters to which the caller does not have read access
- Output parameters to which the caller does not have write access.

0014000F

The Set_Conversation_Accounting_ Information service abnormally ended because the caller specified a parameter list that contained too many or too few parameters.

00140010

The Set_Conversation_Accounting_ Information service abnormally ended because the system tried to access one of the following:

- Input parameters to which the caller does not have read access
- Output parameters to which the caller does not have write access.

00140011

The Unregister_For_Allocates service abnormally ended because the caller specified a parameter list that contained too many or too few parameters.

00140012

The Unregister_For_Allocates service abnormally ended because the system tried to access one of the following:

- Input parameters to which the caller does not have read access
- Output parameters to which the caller does not have write access.

00140013 - 00140020

An internal error occurred.

00150001 - 00150004

During the activation of a logical unit (LU), APPC/MVS encountered an error while attempting to perform resource manager restart processing.

System Action: The system writes an SVC dump and continues processing. APPC/MVS adds the LU to the configuration, but the LU can process only conversations with a synchronization level of none or confirm.

00150005

An internal error occurred.

System Action: The system writes an SVC dump and continues processing. APPC/MVS accepts Allocate requests for only conversations with a synchronization level of none or confirm.

00150006

During the activation of a logical unit (LU), APPC/MVS encountered an error while attempting to perform resource manager restart processing.

System Action: The system writes an SVC dump and continues processing. APPC/MVS adds the LU to the configuration, but the LU can process only conversations with a synchronization level of none or confirm.

00150008

During the processing of a synchronization request, a partner LU detected a syncpoint architecture protocol violation made by APPC/MVS during the syncpoint transaction exchange.

System Action: The system writes an SVC dump and continues processing. The syncpoint request completes, but the state of the distributed resources is unknown; a heuristic condition might exist. The syncpoint conversation is deallocated by the partner.

00150009 - 0015000B

An internal error occurred while the DISPLAY APPC command processor was trying to extract data for display.

System Action: The system writes an SVC dump and continues processing. The system ends the DISPLAY command processing. Other APPC/MVS work continues.

0015000C

An APPC LOGNAME mismatch has occurred between APPC and RRS.

System Action: The system writes an SVC dump and continues processing. APPC/MVS adds the LU to the configuration, but the LU can process only conversations with a synchronization level of none or confirm.

System programmer response: The logging value may have been changed in the APPC PROC from either:

- LEGACY to RRSGNAME or
- RRSGNAME to LEGACY

If the LOGGING value has been changed, then check the following:

- If the APPC logging value is incorrect, change it back to either LEGACY or RRSGNAME (the opposite of what was currently specified), and cancel and restart APPC.
- If the APPC logging value is correct and conversations with a synchronization level of synchpoint are required, then it is necessary to cancel both APPC and RRS using the following procedure:
  - COLD START RRS's logstreams
  - Restart both APPC and RRS

For more information, see Considerations when using the APPC LOGGING keyword in *z/OS MVS Planning: APPC/MVS Management*.

0015000D - 00150011

During the activation of a logical unit (LU), APPC/MVS encountered an error while attempting to perform resource manager restart processing.

System Action: The system writes an SVC dump and continues processing. APPC/MVS adds the LU to the configuration, but the LU can process only conversations with a synchronization level of none or confirm.

00150012

An internal error occurred.

System Action: The system writes an SVC dump and continues processing. APPC/MVS accepts Allocate requests for only conversations with a synchronization level of none or confirm.

00150013 - 00150017

APPC/MVS received an unexpected return code from an RRS callable service during resynchronization processing for a unit of recovery, associated with a protected conversation.

System Action: The system writes an SVC dump and continues processing. The resynchronization transaction processing ends, and the unit of recovery remains incomplete.

00150018

An internal error occurred, causing the APPC/MVS resource manager exits for an LU to become unset. Message ATB208I identifies the LU whose resource manager exits have been unset.

System Action: The system writes an SVC dump and continues processing. All active protected conversations associated with the LU have ended abnormally. APPC/MVS automatically re-registers the LU's exits.

0015001A - 0015001B

An internal error occurred.

System Action: The system writes an SVC dump and continues processing. The system does not purge log-name affinities for partner LUs that established protected conversations with an APPC/MVS LU.

0015001C

During the activation of a logical unit (LU), APPC/MVS encountered an error while attempting to perform resource manager restart processing.

System Action: The system writes an SVC dump and continues processing. APPC/MVS adds the LU to the configuration, but the LU can process only conversations with a synchronization level of none or confirm.

0015001D - 00150028

An internal error occurred.

System Action: The system writes an SVC dump and continues processing. The system does not purge log-name affinities for partner LUs that established protected conversations with an APPC/MVS LU.

00150029 - 0015002A

During the activation of a logical unit (LU), APPC/MVS encountered an error while attempting to perform resource manager restart processing.

System Action: The system writes an SVC dump and continues processing. APPC/MVS adds the LU to the configuration, but the LU can process only conversations with a synchronization level of none or confirm.

0015002B

APPC/MVS reported an asynchronous abend during syncpoint processing.

System Action: APPC/MVS continues to process the syncpoint. An asynchronous abend may require APPC/MVS to perform re-synchronization to resolve the unit of recovery.

0015002C

An internal error occurred in APPC/MVS during syncpoint processing.

System Action: The system continues processing. The system issues an SVC dump.

0015002D

An internal error occurred in APPC/MVS during syncpoint processing.

System Action: The system continues processing. APPC/MVS may perform re-synchronization to resolve the unit of recovery.

00150030

RRS has been restarted with a different GNAME while APPC is active.

System Action: The system writes an SVC dump and continues processing. APPC/MVS adds the LU to the configuration, but the LU can process only conversations with a synchronization level of none or confirm.

System Programmer Response: Ensure that the GNAME specified on the RRS PROC when RRS was restarted is correct. If the GNAME is specified correctly, then cancel and restart APPC. For more information, see Considerations when using the APPC LOGGING keyword in *z/OS MVS Planning: APPC/MVS Management*.

00150031

An internal error occurred.

System Action: The system writes an SVC dump and continues processing. APPC/MVS accepts Allocate requests for only conversations with a synchronization level of none or confirm.

0016xxxx

An internal error occurred.

System Action: Ensure that the GNAME specified on the RRSPROC when RRS was restarted is correct. If the GNAME is specified correctly then CANCEL and RESTART APPC.

- Allocate requests for conversations with a synchronization level of syncpt
- Resynchronization processing to resolve incomplete units of recovery and bring distributed resources to a consistent state.

0017xxxx

An internal error occurred.

System Action: APPC continues processing.

Operator response

If APPC abends and does not restart itself automatically, enter the START command to restart APPC.

For errors during FMH-5 manager inbound processing, reason code 0006xxxx, quiesce APPC by deleting all of the logical units (LU) that are active in order to reject any new inbound TPs. Allow TPs in progress to end normally. When APPC has quiesced, enter a START command to restart APPC.

If the system failed to initialize APPC, and APPC is an integral part of the installation, then reIPL the system.

See the system messages written to the console to track the status of APPC's ending/restart processing.

If multiple system abends occur or if a reIPL does not correct the problem, notify the system programmer.

System programmer response

Examine the SVC dump and the APPC trace records, if available, for the cause of the problem. For the following return codes, try using LUDEL followed by LUADD, or VTAM VARY INACT followed by VARY ACT, to reactivate the LU:

- 00150001 - 00150004
- 00150006
- 0015000C - 00150011
- 0015001C
- 00150029 - 0015002A

If the problem cannot be resolved or if the reason code indicates an internal error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump.

Programmer response

Depending on the reason code, do one of the following:

00020001 - 00020002
　　Ensure that your program provides all the parameters for the requested APPC/MVS service. Ensure that all bits except for the high order bit are off. The high order bit must be on. Correct the parameter list for the requested service and submit the program again.

00020008 - 0002000A
　　Do one of the following:

- Invoke the indicated call on a system where the corresponding version of MVS is installed.
- Invoke the version of the service that is appropriate for the release of MVS installed on the system.

00010000C - 000100016
　　Ensure that your program provides all the parameters for the requested APPC/MVS service. Ensure that all bits except for the high order bit are off. The high order bit must be on. Correct the parameter list for the requested service and submit the program again.

0010001F - 00100023
　　Do one of the following:

- Call the service on a system where a version of MVS that supports the service is installed.
- Call the version of the service that is supported on the release of MVS that is currently installed.

00100025 - 00100027
　　Ensure that the call to the Version_Service is coded correctly.

For other parameter errors, check the program to ensure that all services are correctly coded and that all parameters are correctly specified.

If the problem recurs, notify the system programmer.

Source

APPC/MVS

EC8

Explanation

An error occurred in the NETSERV address space during JES TCP/IP NJE processing.

Register 15 contains the hexadecimal reason code for the error. The error is explained in the IAZ0nnnI message (where nnn = decimal value of reason code) preceding the abend. For example, if the reason code (in R15) = X'64' = 100, it would be described in IAZ0100I.

System action, operator response and system programmer response are documented in the IAZ0nnnI message description.

Code Explanation:

　　See descriptions of messages IAZ0001I to IAZ0499I in *z/OS MVS System Messages, Vol 6 (GOS-IEA)* for all possible abend error messages.

Source

JES TCP/IP NJE Server (NETSERV)

EFB

Explanation

JES3 DLOG processing encountered an error. The abend reason code identifies the specific error.

Code
> **Explanation**

01
> The ASEXT macro returned a non-zero return code while the JES3DLOG address space was attempting to extract the address space parameters. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the ASEXT macro call.

02
> The MCSOPER macro returned a non-zero return code while the JES3DLOG address space was attempting to activate its extended MCS console. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the MCSOPER macro call.

03
> Reserved - not used

04
> The IXZXIXAT macro returned a non-zero return code while the JES3DLOG address space was attempting to attach to the JESXCF group. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the IXZXIXAT macro call.

05
> The IXZXIXMB macro returned a non-zero return code while the JES3DLOG address space was attempting to attach to the default mailbox. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the IXZXIXMB macro call.

06
> The IXZXIXMD macro returned a non-zero return code while the JES3DLOG address space was attempting to delete the default mailbox. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the IXZXIXMD macro call.

07
> The MCSOPMSG macro returned a return code greater than 12 while the JES3DLOG address space was attempting to access the next message in its message data space. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the MCSOPMSG macro call.

08
> IATCNDFM returned a non-zero return code when it was called by IATCNDMS to format an MDB in JES3 DLOG format. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from IATCNDFM.

09
> An invalid function code was passed to IATCNDAL. Register 2 when the EFB abend is issued contains the function code.

0A
> An invalid function code was passed to IATCNDIT. Register 2 when the EFB abend is issued contains the function code.

0B
> An invalid function code was passed to IATCNDTR. Register 2 when the EFB abend is issued contains the function code.

0C
> An invalid message pointer cell was returned by IATCNDFM when it was called by IATCNDIT to format an MDB in JES3 DLOG format.

0D
> The RESMGR macro returned a non-zero return code while the JES3DLOG address space was attempting to setup a task level resource manager. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the RESMGR macro call.

System action

A dump of the JES3DLOG address space and its message data space is taken, the JES3DLOG address space is terminated, and the DLOG facility is disabled.

Note: A dump will not be taken for reason code 2 if a return code of four (extended MCS console already active) is returned from the MCSOPER macro.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the following documentation:

- The EFB abend reason code
- The return and reason codes from the service that was called (if applicable)

  Note: For return code X'10' and reason code X'3C' from the MCSOPER macro, run the D XCF,COUPLE command and ensure that the MAXSYSTEM value that is returned for the SYSPLEX couple data sets is greater than or equal to the total number of mains that are defined in the JES3 initialization deck.

- The dump taken by the JES3DLOG address space (if any)
- The SYSLOG around the time of error

01

See *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN* for a description of the ASEXT return and reason codes.

The following additional documentation should be provided:

- Compiler listings for modules IATCNDS and IATCNDIT.

02

See *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU* for a description of the MCSOPER return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.

04

See *z/OS MVS Programming: JES Common Coupling Services* for a description of the IXZXIXAT return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.
- A non-zero return code from the IXZXIXAT macro is usually preceded by an ABEND from the IXZXIXAT service routine (e.g. DC5 abend). If a dump was taken of the JESXCF address space as a result of that abend, that dump should also be provided as part of the documentation.

05

See *z/OS MVS Programming: JES Common Coupling Services* for a description of the IXZXIXMB return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.
- A non-zero return code from the IXZXIXMB macro is usually preceded by an ABEND from the IXZXIXMB service routine (e.g. DC5 abend). If a dump was taken of the JESXCF address space as a result of that abend, that dump should also be provided as part of the documentation.

06

See *z/OS MVS Programming: JES Common Coupling Services* for a description of the IXZXIXMD return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.
- A non-zero return code from the IXZXIXMD macro is usually preceded by an ABEND from the IXZXIXMD service routine (e.g. DC5 abend). If a dump was taken of the JESXCF address space as a result of that abend, that dump should also be provided as part of the documentation.

07

See *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for a description of the MCSOPMSG return and reason codes.

The following additional documentation should be provided:

- Compiler listings for modules IATCNDIT and IATCNDMS.

08

See macro IATYCNDF for a description of the return codes from IATCNDFM.

The following additional documentation should be provided:

- Compiler listings for modules IATCNDMS and IATCNDFM.

09

The following additional documentation should be provided:

- Compiler listings for modules IATCNDTK and IATCNDAL.

0A

The following additional documentation should be provided:

- Compiler listings for module IATCNDIT and the module that called IATCNDIT (usually IATCNDTK or IATCNDRR)

0B

The following additional documentation should be provided:

- Compiler listings for module IATCNDTR and the module that invoked it via the IATXDLTR macro. The caller of IATCNDTR can be found by examining the linkage stack in the dump at the time of error. When the caller's registers and return address are saved on the linkage stack via a "BAKR R14,0" instruction.

0C

The following additional documentation should be provided:

- Compiler listings for modules IATCNDFM and IATCNDMS.

0D

See *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU* for a description of the RESMGR return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.

Source

JES3

Fnn

Explanation

The system detected an error while processing a Supervisor Call (SVC) instruction. The last 2 digits of this completion code, *nn*, are the operand of the SVC instruction in hexadecimal. For example, completion code X'F0D' means that the error occurred while the system was processing SVC X'0D', that is, SVC 13.

One of the following occurred:

- When *nn* is equal to 13, 14, 17, or 37, recovery for OPEN/CLOSE/EOV failed to recognize a passed internal abend code. Register 12 contains the passed internal abend code. This is probably a system error. If the

ABEND is accompanied by message IEC900I, the code was issued by DFSMSdfp and the code explanations are provided in this section. If the ABEND is accompanied by error messages starting with message prefix EDG, the code was issued by DFSMSrmm. See *z/OS DFSMSrmm Implementation and Customization Guide* for explanations of the codes when they are issued by DFSMSrmm.

- When *nn* is **not** equal to 13, 14, 17, or 37, the system detected an incorrect SVC instruction.

System action

Depending on the value of *nn*, the system does the following:

- When *nn* is equal to 13, 14, 17, or 37, the system records the unrecognized internal abend code in register 12. It issues message IEC900I.
- When *nn* is **not** equal to 13, 14, 17, or 37, the system records in register 2 the address of the request block prefix for the program that issued the incorrect SVC.

Operator response

If the system programmer asks for an SVC dump, set the following SLIP trap:

```
SLIP SET,COMP=Fnn,ACTION=SVCD,END
```

System programmer response

Depending on the value of *nn*, do one of the following:

- When *nn* is equal to 13, 14, 17, or 37, see message IEC900I. Search the problem reporting data bases for a fix for the problem. If no fix exists, ask the operator to set a SLIP trap to obtain an SVC dump. Contact the IBM Support Center. Provide the SVC dump and, if available, the logrec data set error record.
- When *nn* is **not** equal to one of the previously listed values, do the following:

For recently installed SVCs, if the number (nn) is X'C8' thru X'FF', it is an installation defined SVC. If the SVC number is X'00' thru X'C7', and you continue to have a problem after following the next steps, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

1. Correct the error as follows:
   - Make sure that the SVC instruction was not incorrectly modified.
   - Check the operand against the valid codes for the system being used.
   - Determine if the SVC that was issued has been installed correctly in the system. For a detailed description on creating installation defined SVCs, see *z/OS MVS Programming: Authorized Assembler Services Guide*, or *z/OS MVS Initialization and Tuning Reference*.
      a. Ensure that the EPNAME specified in IEASVCxx parmlib member or on the SVCUPDTE macro, matches the name specified in the LINKEDIT JCL used to link the SVC routine into SYS1.NUCLEUS or the LPA.
      b. Ensure that the system has been reIPLed after the linkedit of the SVC routine to the modified LPA. See *z/OS MVS Initialization and Tuning Reference* for information about the CLPA and MLPA system parameters.
2. Run the job step again.

Also, the are a couple of other common situations that can cause this ABEND:

- Programs coded or compiled to run on CMS systems commonly issue SVCs 200-204 (X'C8'- X'CC'). If one of these objects is linked into an MVS load module, it will get the corresponding Fnn ABEND when that instruction is executed. The fix is to write such code so that it detects which operating system it's running on and execute the appropriate instructions.
- Another variation on this (and more likely to occur) is REXX EXECs that have been compiled into object format. These have to be link-edited with the appropriate stub code CSECT (EAGSxxxx). If the compiler output is linked into a load module by itself (or the entry point is not set to the stub), the resultant load module will get a

FCA ABEND. The programmer should refer to *IBM Compiler and Library for SAA REXX/370 - User's Guide and Reference* for details.

Source

Supervisor control

Chapter 3. Wait state codes

002

Explanation

During initial program load (IPL), an I/O operation was not initiated; the subchannel status word (SCSW) was stored, and the channel was not busy.

Operator response

This is probably a hardware error. ReIPL the system. If the problem recurs, contact hardware support.

Source

Input/output supervisor (IOS)

003

Explanation

Initial program load (IPL) cannot continue processing because the subchannel for one of the following devices is not operational:

- The IPL device.
- The IODF volume, as specified in the first four characters of the LOAD parameter.

Note: If you did not specify an IODF volume in the LOAD parameter, this wait state is due to a problem with the subchannel for the IPL device.

System action

The system enters a non-restartable wait state.

Operator response

Do one of the following:

- Make sure the IPL device and the IODF volume are enabled and reIPL the system.
- IPL from a different device, or IPL using a different IODF volume.
- Contact hardware support.

Source

Initial program load (IPL)

004

Explanation

During system initialization, the system did not initiate an I/O operation. The channel was not busy after the system tried to store control and status information for the subchannel.

System action

The system enters wait state X'004'. The system does not store the subchannel status word (SCSW).

Operator response

Report this problem to the system programmer.

System programmer response

You need to determine whether a device or a path to the device caused the problem. The most likely path is the last path used to access the device. Take the following steps:

1. Using the hardware Alter/Display facility, read the 4-byte subchannel address in central storage at X'B8'. The subchannel number is the last two bytes (at location X'BA') of the 4-byte subchannel identification word at location X'B8'.

2. Bring up the Device Configuration Display. Enter the 2-byte subchannel number found in step . This displays the device number, unit address, and the installed channel paths for the selected subchannel number.

   If there is only one channel path to the device, there is no need for the system operator to continue problem determination. Contact hardware support.

3. It is likely that the failing path is the last path used. Display subchannel status information. On CMOS-based processors, this is the Analyze Subchannel Data display. Read the last path used mask (LPUM) field to determine the last path used. The LPUM field consists of 8 bits. If bit n is on, then CHPID*n* is the last path used. For example, if the LPUM field shows B'01000000', bit 1 is on and the CHPID1 field identifies the last path used.

4. Bring up the CHPID menu and configure the last used channel path offline.

5. ReIPL the system.

6. If the problem does not recur, you have identified the failing path.

   If the problem recurs and there are other paths to the device, configure the other paths offline one by one until you have identified the failing path. If this does not identify a failing path, the problem is caused either by the remaining online path or by the device. Contact hardware support.

Source

Input/output supervisor (IOS)

005

Explanation

An I/O interruption during initial program load (IPL) indicated a unit check.

A sense operation was unable to determine the cause of the unit check, but the unit check was **not** caused by one of the following:

- No record found
- File mask violation
- End of cylinder
- Track condition check

System action

The system enters a non-restartable wait state.

Operator response

This problem can indicate either that:

- The system programmer either modified the IPL text or the IODF data set (if defined).

- The system detected a hardware error on the IODF volume or the SYSRES volume.

If a system programmer modified the IPL text or the IODF data set, notify the system programmer. Otherwise, make sure the IPL pack is ready, and reIPL the system.

For other situations, a hardware problem is affecting the system. The following steps will assist to find the address of the device that received the unit check, and you need to determine whether a device or a path to the device caused the problem. The most likely path is the last path used to access the device. Take the following steps:

1. Using the hardware Alter/Display facility, read the 4-byte subchannel address in central storage at X'B8'. The subchannel number is the last two bytes (at location X'BA') of the 4-byte subchannel identification word at location X'B8'.

2. Bring up the Device Configuration Display. Enter the 2-byte subchannel number found in step . This displays the device number, unit address, and the installed channel paths for the selected subchannel number.

   If there is only one channel path to the device, there is no need for the system operator to continue problem determination. Contact hardware support.

3. It is likely that the failing path is the last path used. Display subchannel status information. On CMOS-based processors, this is the Analyze Subchannel Data display. Read the last path used mask (LPUM) field to determine the last path used. The LPUM field consists of 8 bits. If bit n is on, then CHPIDn is the last path used. For example, if the LPUM field shows B'01000000', bit 1 is on and the CHPID1 field identifies the last path used.

4. Bring up the CHPID menu and configure the last used channel path offline.

5. ReIPL the system.

6. If the problem does not recur, you have identified the failing path.

   If the problem recurs and there are other paths to the device, configure the other paths offline one by one until you have identified the failing path. If this does not identify a failing path, the problem is caused either by the remaining online path or by the device. Contact hardware support.

Finally, if these steps do not locate the failing hardware, notify the system programmer.

System programmer response

If the IPL text or the IODF data set was modified, look for a problem in the modified text or data set and fix it. If the failing hardware is not found using the steps in the Operator Response, ask the operator to obtain a stand-alone dump. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the stand-alone dump.

Source

Initial program load (IPL)/nucleus initialization program (NIP)

006

Explanation

During initial program load (IPL), an I/O error occurred while IPL was reading from the SYSRES or IODF volume. The error can be one or more of the following:

- An interface control check
- A channel control check
- A channel data check
- A program check
- A channel chaining check
- STATE CHANGE INTERRUPT detected due to SETCACHE SUBSYS OFF issued on sharing system.

Note: One commonly seen cause for this problem is having the nucleus in secondary extents. This problem has also been caused by the nucleus containing a not-executable SVC. Browse SYS1.NUCLEUS for any member with an attribute of NX.

System action

The system enters a non-restartable wait state.

Operator response

Use the hardware Problem Determination facilities to see if any errors occurred during the IPL process. If channel errors occurred, try configuring the channel paths offline and reIPLing the system.

If the problem recurs, notify the system programmer.

If the system programmer requests, obtain a standalone dump.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Source

Initial program load (IPL)

007

Explanation

During system initialization, a console was not available, or became unavailable, to the system.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrrrrwww
```

x
    Not relevant

rrrr
    A hexadecimal reason code

www
    Wait state code

The reason code (*rrrr*) is one of the following:

0000
    No NIP console found

0001
    Unrecoverable error from the NIP console

Operator response

Check to see if the console is available. If so, re-IPL. Otherwise, contact the system programmer.

System programmer response

Check the Console Report in the HCD Operating System (OS) report to verify that at least one NIP console is configured.

For reason code 0001, power the console off and on, and re-IPL the system. If no NIP console is available, the system will use the Hardware Management Console (HMC) during the IPL.

Do the following:

- See *z/OS HCD User's Guide* for information regarding IODF.
- Obtain a stand-alone dump.
- Search problem reporting databases for a fix to the problem. If no fix exists, contact the IBM Support Center.

Source

Console services

009

Explanation

There is a system build error. The required release is not installed. A reason code identifies the error:

Code
    Explanation

0
    The required release of DFSMS is not installed.

System action

The system issues wait state code X'009' reason 0 and message IEA016W.

Operator response

Notify the system programmer.

System programmer response

Install the proper release of DFSMS, and then re-IPL the system.

Source

System initialization (IPL/NIP)

00A

Explanation

For one or more of the following data sets:

- SYS1.LINKLIB
- SYS1.MIGLIB
- SYS1.CSSLIB
- SYS1.SIEALNKE
- SYS1.SIEAMIGE

Their catalog entries could not be found on, or could not be retrieved from the system catalog. This wait state is preceded by message IEA326I.

System action

The system issues message IEA326I before entering a non-restartable wait state.

Operator response

Notify the system programmer.

System programmer response

Ensure that all of the listed data sets are in the catalog, and then restart the system.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Initial program load (IPL)

00B

Explanation

During system initialization, the master scheduler ended abnormally.

System action

The system ends system initialization. The system writes a dump. The system enters wait state X'00B'.

Operator response

Do the following:

- Try to reIPL the system. If unsuccessful, contact the system programmer.
- Obtain the dump written by the system.
- If the system programmer asks for a stand-alone dump, obtain one.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, obtain the dump. If no dump exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center. Provide the dump.

Source

Master scheduler

00D

Explanation

During system initialization, the master scheduler ended abnormally.

System action

The system ends system initialization. The system enters wait state X'00D'.

Operator response

Try to reIPL the system. If unsuccessful, contact the system programmer. If the system programmer asks for a stand-alone dump, obtain one.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump.

Source

Master scheduler

00E

Explanation

Initial program load (IPL) cannot continue due to a problem on the system residence (SYSRES) volume.

The right-most four bytes of the program status word (PSW) have the following format:

```
x rr00www
```

where:

x
> Irrelevant information.

rr
> A hexadecimal reason code indicating the reason for the failure.

www
> The wait state code.

The reason code (*rr*) is one of the following:

Reason Code
> **Explanation**

01

> IPL cannot locate the SYS1.NUCLEUS data set or the system nucleus member of the SYS1.NUCLEUS data set on the system residence volume or the SYS1.NUCLEUS data set is described by a format 8 DSCB. The nucleus member is one of the following:
>
> - IEANUC01, which is DAT-on nucleus IEANUC01
> - IEANUC0x, which is an alternate DAT-on nucleus where x is not 1
> - IEAVEDAT, which is the DAT-off nucleus
>
> DAT is the acronym for dynamic address translation.

02
> An incorrect system residence (SYSRES) volume has been chosen for the IPL.

System action

The system enters a non-restartable wait state.

Operator response

Reason Code
> **Action**

01

> If you selected an alternate DAT-on nucleus member, make sure that the alternate nucleus identifier (*x* of IEANUC0*x*) was correctly entered through the console frame, or at absolute storage location X' F'. Then reIPL the system.

02
> Ensure that the correct SYSRES volume is specified for the IPL then reIPL the system.

If the error persists, notify the system programmer. Obtain a stand-alone dump if requested by the system programmer.

System programmer response

Reason Code
  Action

01

Make sure that the SYS1.NUCLEUS data set resides on the system residence volume, and that it contains the members you want to load, and that it is a data set described with a format 1 DSCB in the VTOC, not a format 8 DSCB.

02

Ensure that the correct SYSRES volume is specified for the IPL and that the hardware management console (HMC) load profile points to this volume. Then reIPL the system.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump. For reason code 01, also provide the name of the SYS1.NUCLEUS member that the IPL program could not find.

Source

Initial program load (IPL)

00F

Explanation

For initial program load (IPL), a volume has been loaded that does not contain IPL text.

Operator response

Correctly identify the correct volume to be loaded. Verify that the correct volume is mounted. If requested by the system programmer, obtain a stand-alone dump. ReIPL the system.

System programmer response

If the problem cannot be resolved, search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump.

013

Explanation

During processing of the nucleus initialization program (NIP), an error occurred from which recovery is impossible. Check the system completion code to determine the problem.

Operator response

If requested by the system programmer, obtain a stand-alone dump. ReIPL the system.

System programmer response

If the problem cannot be resolved, search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump.

014

Explanation

The system encountered recursive program checks. Usually, this is the result of an overlay of a critical system control block, such as PSA, ASCB, SGTE, or PGTE.

System action

The system enters a non-restartable wait state.

Operator response

If the system programmer requests a stand-alone dump, obtain one. ReIPL the system.

System programmer response

Do the following:

1. Ask the operator to obtain a stand-alone dump.
2. Determine the control block that has been overlaid and the module that did the overlay. In many cases, the last program to be dispatched on that processor caused the overlay. The last program dispatched can be determined from the system trace table.
3. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Because of the possibility that a hardware malfunction contributed to this problem, you should also contact hardware support. Provide to the IBM Support Center and to hardware support the stand-alone dump.

Source

Supervisor control

017

Explanation

During initial program load (IPL), a unit check occurred after an I/O operation was successfully started. The I/O operation was:

- A sense I/O
- An attempt to read the home address and record 0 of a track that previously caused a track condition check

The 4-byte address of the subchannel identifier can be found in central storage at decimal address 184 (X'B8').

System action

The system enters a non-restartable wait state.

Operator response

Report this problem to the system programmer.

System programmer response

You need to determine whether a device or a path to the device caused the problem. The most likely path is the last path used to access the device. Take the following steps:

1. Using the hardware Alter/Display facility, read the 4-byte subchannel address in central storage at X'B8'. The subchannel number is the last two bytes (at location X'BA') of the 4-byte subchannel identification word at location X'B8'.
2. Bring up the Device Configuration Display. Enter the 2-byte subchannel number found in step . This displays the device number, unit address, and the installed channel paths for the selected subchannel number.

   If there is only one channel path to the device, there is no need for the system operator to continue problem determination. Contact hardware support.

3. It is likely that the failing path is the last path used. Display subchannel status information. On CMOS-based processors, this is the Analyze Subchannel Data display. Read the last path used mask (LPUM) field to determine the last path used. The LPUM field consists of 8 bits. If bit n is on, then CHPIDn is the last path used. For example, if the LPUM field shows B'01000000', bit 1 is on and the CHPID1 field identifies the last path used.

4. Bring up the CHPID menu and configure the last used channel path offline.

5. ReIPL the system.

6. If the problem does not recur, you have identified the failing path.

   If the problem recurs and there are other paths to the device, configure the other paths offline one by one until you have identified the failing path. If this does not identify a failing path, the problem is caused either by the remaining online path or by the device. Contact hardware support.

Source

Initial program load (IPL)

019

Explanation

During initial program load (IPL), an unexpected program interruption occurred. IPL did not complete loading the resident nucleus. If this wait state occurred because the IPL program is in error, a stand alone dump should be taken so that the cause of the program error can be diagnosed.

The problem is one of the following:

- The operator pressed START during system initialization.
- The IPL program is in error.
- The storage in which IPL resides is failing.
- The IODF being used for IPL may be empty.

System action

The system enters a non-restartable wait state.

Operator response

Do one of the following:

- If this wait state occurred because an operator pressed the START key during system initialization, let the IPL continue. It is not necessary to reIPL; the system will start the waiting processors automatically.
- Make sure the SYS1.NUCLEUS data set does not have secondary extents. If there are no secondary extents, the error is probably the result of a hardware problem. Contact hardware support. When the problem has been corrected, reIPL the system.
- Ensure that the IPL text program installed is at the correct level for the operating system. If not, reinstall IPLTEXT as described in the MVS program directory.

Source

Initial program load (IPL)

01B

Explanation

An active SLIP trap requests an action of WAIT. The conditions specified on the SLIP command have been met. The system enters a wait state, as requested.

PSAWTCOD in the prefixed storage area (PSA) points to a 28-byte field:

```
01ccccxxrrrrrrrrrppppppppsssssssslllllllllzzzzzzzzgggggggg
     Recovery termination manager 1 (RTM1) functional recovery
     routine (FRR)type of entry.

2ccccxxrrrrrrrrrppppppppwwwwwwwwlllllllllzzzzzzzzgggggggg
     RTM2 ESTAE type of entry (RTM2WA).

03ccccxxrrrrrrrrrppppppppaaaaaaaallllllllllzzzzzzzzgggggggg
     Address space ending type of entry.

04ccccxxrrrrrrrrrppppppppiiiiiiiiilllllllllzzzzzzzzgggggggg
     Program event recording (PER) interrupt type of entry.
```

The variable information in the field is as follows:

cccc
    A pointer to the logical CPU id of the processor where the event was detected.

xx
    Irrelevant information.

rrrrrrrr
    A pointer to the general registers.

pppppppp
    A pointer to the program status word (PSW).

ssssssss
    A pointer to the system diagnostic work area (SDWA).

llllllll
    A pointer to control registers 3 and 4.

zzzzzzzz
    A pointer to the access registers.

wwwwwwww
    A pointer to the RTM2 work entry.

aaaaaaaa
    A pointer to the address space control block (ASCB).

iiiiiiii
    A pointer to the PER interrupt code.

gggggggg
    A pointer to the high 32 bits of the 64-bit GPRs, or 0 if not available.

System action

The system issues message IEA992I before the system enters the restartable, disabled wait state.

Operator response

Follow the directions of the system programmer for the SLIP trap. Then restart the system by invoking the restart function.

Source

Recovery termination manager (RTM)

01C

Explanation

Supervisor control experienced a recursive abnormal end in its super functional recovery routine (FRR). This is probably a software error.

The right-most four bytes of the program status word (PSW) have the following format:

```
x0rrrwww
```

where:

x
Irrelevant information.

rrr
A hexadecimal reason code indicating the reason for the failure.

www
The wait state code.

The reason code (*rrr*) is one of the following:

000
Supervisor control experienced a double recursive abend.

004
Supervisor control experienced a recursive abend during list transition processing.

008
System completion code AC7, reason code 000B0000, occurred recursively. This can happen as a result of a shortage of virtual storage above 16 megabytes.

System action

The system may issue message IEA967W. The system writes a logrec error record.

Operator response

If the system programmer requests a stand-alone dump, obtain one. ReIPL the system.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump and, if available, the logrec error record.

Source

Supervisor control

020

Explanation

Reconfiguration initialization failed. The wait state reason code specifies the error.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrrrrwww
```

where:

x
Irrelevant information.

rrrr
A hexadecimal reason code indicating the reason for the failure.

www
The wait state code.

The reason code (*rrrr*) is one of the following:

0010

The service processor could not provide channel path information to reconfiguration. This is a hardware problem.

System action

The system ends the initialization. The system enters non-restartable wait state X'020'.

Operator response

For reason code X'0010' or X'0030', obtain a stand-alone dump. Contact hardware support, providing the recorded contents of the wait state PSW. Check the processor controller. Try to do a switch-over or reIPL the system. If this does not work, partition the machine and use the side with a good service processor.

For reason code X'0040', contact the system programmer.

System programmer response

For reason code X'0040', search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Ask the operator to obtain the stand-alone dump and provide it to IBM.

Source

Reconfiguration

022

Explanation

A page fault occurred for a page with a primary and secondary copy. The primary and secondary devices are in one of the following states:

- Quiesced
- Not ready

The error occurred in a system facility invoked by direct access volume verification (DAVV).

Operator response

Do the following:

- Display the contents of register 7 to see if the correct volume is mounted. Register 7 contains the address of the unit control block (UCB) that contains the following:
  - The device address
  - The volume serial number of the volume that should be mounted

  ⚠️ **Attention:** If you do not mount the correct volume before restarting the system, some system data may be lost.
- ReIPL the system.

Source

Input/output supervisor (IOS)

023

Explanation

During the creation of the system trace address space or during the initialization of the system trace function, the system detected an error. System trace returned a nonzero return code.

System action

The system abnormally ends the system trace initialization with a non-restartable wait state. The system writes message IEA416W.

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

System trace

025

Explanation

The system detected a duplicate entry point name appearing in modules being loaded into the DAT-on nucleus. (DAT is the acronym for *dynamic address translation*.)

System action

The system issues message IEA087W to identify the entry point names and the modules in which the entry points appear. IEA087W appears one or more times in the IPL WTO buffer.

The system enters a non-restartable wait state.

Operator response

Do the following as soon as possible to find the WTO buffer and locate message IEA087W in the buffer. Do not write a stand-alone dump before doing this procedure, because the dump might overlay storage.

- Using the hardware Alter/Display facility, display the address at location X'14' in central storage. This address points to the IPL diagnostics area. Primary Real Storage must be displayed to find the IPL diagnostic area.
- Add X'28' to the address of the IPL diagnostic area and display the resulting location in central storage. This location contains the 31-bit virtual address of the IPL vector table (IVT). Henceforth, all addresses are 31-bit virtual and **you must switch to displaying Primary Virtual Storage** to display remaining storage locations.
- Add X'E0' to the IVT address. The result is the address of the IVTMQHP field. IVTMQHP contains the address of the message queue header (MQH).
- MQH + X'0' contains the address of the oldest message queue element (MQE) available. The message text for the oldest MQE begins at MQE + X'8'.
- Use MQE + X'0' of the oldest MQE to find the MQE of the next oldest message. Again, the message text for this MQE begins at MQE + X'8'.
- Repeat this sequence (using MQE + X'0' of the current MQE to locate the next MQE), until the message text for the appropriate IEA51xW message is displayed.

Notify the system programmer, providing the texts of IEA087W messages. If the system programmer requests it, obtain a stand-alone dump.

System programmer response

Translate the text of IEA087W messages from hexadecimal into EBCDIC.

If a NUCLST*xx* member is being used (the LOAD*xx* member has a NUCLST statement which refers to a NUCLST*xx* member), and the NUCLST member includes one or both of the modules in the message text, the problem may be that the module being included has entry points in common with a module that is already included. If this is the case, the NUCLST member must be changed, or the entry point(s) in the module being included must be changed to have different entry point names.

If either module in the message text is supplied by the installation, change the entry point name.

If one of the modules is IEANUC0*x*, look in the link-edit map to find which CSECT contains the duplicate CSECT name.

If IBM supplies both modules, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide a stand-alone dump and the IEA087W message text.

Source

Initial program load (IPL)

02E

Explanation

The auxiliary storage manager (ASM) is unable to function because of recovery problems or an unusual number of permanent I/O errors on one or more necessary page data sets. The accompanying reason code further describes the error:

Code
  Explanation

00
  The cause of the error cannot be determined.

01
  The PLPA data set is now bad.

02
  The common data set is now bad.

03
  Both the PLPA and common data sets are not available.

04
  The PLPA data set is now bad.

05
  The common data set is now bad.

06
  The last local page data set is now bad.

07
  The catalog entry for the data set has been deleted while in use.

08
  The catalog data set extents, volume, device type, or page data set attributes have changed.

09
  The status information record header has become unrecognizable.

0A
  The status information record has been updated.

System action

System processing ends. The system issued message ILR008W or ILR035W prior to the wait state. The system may have issued messages ILR007I, ILR009E, and ILR010I previously; these messages indicate what conditions led to the wait state.

Operator response

Report this wait state to the system programmer. Provide the system programmer with the system messages for problem analysis.

If necessary, at the IPL, replace the page data sets referenced in the preceding messages or add more page data sets. Then IPL the system.

System programmer response

Analyze the messages provided by the operator to determine the cause of the error. Look at any I/O, machine check, missing interrupt handler, or disabled console communication messages that occurred prior to the wait. Determine which page data sets are no longer usable. Correct or replace these data sets.

Source

Auxiliary storage manager (ASM)

02F

Explanation

The auxiliary storage manager (ASM) is unable to process paging requests because of permanent errors while attempting to access storage-class memory (SCM). The accompanying reason code further describes the error.

Code
  Explanation

01
  A permanent error condition has been detected.

02
  Repeated channel errors have been detected.

System action

Processing ends. Message ILR040W was issued prior to the wait state.

Operator response

Notify the system programmer.

System programmer response

Report the problem with the wait state code, wait state reason code, and ILR040W message diagnostic information to IBM Support. This could be an SCM-related hardware issue that requires replacement of the storage. Consider restarting the system without SCM (PAGESCM=NONE in IEASYSxx). Ensure adequate paging data sets are defined until the cause of the problem can be determined.

Source

Auxiliary storage manager (ASM)

030

Explanation

The system abnormally ended a task during nucleus initialization program (NIP) processing. The hexadecimal abend code *ccc* appears in the right-most four bytes of the wait state program status word (PSW). The wait state PSW can appear in either of the following formats:

```
x0cccwww
xccc0www
```

System action

The system abnormally ends the task and enters a non-restartable wait state.

Operator response

Record the wait state PSW and notify the system programmer. If the system programmer requests it, obtain a stand-alone dump.

System programmer response

See the system programmer response for the abend code.

The abend SVC entry in the system's SVC table contains the address of a trap routine in NIP and not the address of the abend SVC. The registers at the time of the abend SVC request are found in the Type I SVC save area.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM support Center. Provide the contents of the wait state PSW.

Source

Nucleus initialization program (NIP)

031

Explanation

The system did not find a unit control block for the device containing the system residence (SYSRES) volume, for one of the following reasons:

- The system was IPLed using the wrong SYSRES volume
- The SYSRES volume was not specified in the I/O configuration definition
- The system did not select the desired I/O configuration.

System action

The system enters wait state X'031'.

Operator response

Depending on the reason that this wait state code was issued, do the following:

- If the system was IPLed using the wrong SYSRES volume, then mount the correct SYSRES volume and reIPL the system.
- If the SYSRES volume was not specified in the I/O configuration definition, then notify the system programmer to rebuild the I/O configuration to include the correct SYSRES volume.
- If the system did not select the desired I/O configuration, use the following steps to determine which I/O configuration was selected; then notify the system programmer:

  1. Using the hardware Alter/Display facility, read the real address in central storage at X'14', representing the address of the IPL diagnostic area.

2. Add X'28' to the address in X'14', and also read this as a real address in central storage. The result is a 31-bit virtual address, which is the IPL vector table (IVT). Henceforth, all addresses are 31-bit virtual and **you must switch to displaying Primary Virtual Storage** to display remaining storage locations. Note that the following addresses are also 31-bit virtual addresses.

3. Add X'E0' to the address of IVT to locate the IVTMQHP field, which points to the message queue header (MQH).

4. MQH + X'0' points to the oldest message queue element (MQE) available. Message text beings at MQH + X'8'. This message should be IEA371I, showing the device number and data set (SYS1.PARMLIB or SYS1.IPLPARM) used to located the selected LOAD*xx* member.

5. MQE + X'0' of the oldest MQE points to the second oldest MQE. This message should be IEA246I, showing which LOAD*xx* member was selected.

6. MQE + X'0' of the oldest MQE points to the third oldest MQE. This message should be either IEA097I, showing which MVSCP IOCONFIG was selected, or IEA519I, showing which IODF was selected.

System programmer response

If the SYSRES volume was not specified in the I/O configuration definition, then rebuild the I/O configuration to include the correct SYSRES volume.

If the system did not select the desired I/O configuration, then ensure that the device number, data set (SYS1.PARMLIB or SYS1.IPLPARM), LOAD*xx* member, and I/O configuration were specified correctly. Also, if LOAD*xx* filtering keywords (HWNAME, LPARNAME and VMUSERID) were being used, ensure that the keywords were specified correctly. For more information on the filtering keywords in LOAD*xx*, see the "Filtering with LOAD*xx*" chapter in *z/OS MVS Initialization and Tuning Reference*.

Source

Input/output supervisor (IOS)

032

Explanation

A module required for nucleus initialization (NIP) is missing from the SYS1.NUCLEUS data set.

The reason code identifies the missing module. You can determine the name of the missing module by appending the last two digits of the reason code after IEAVNP. For example, if the reason code is 003, the missing module is IEAVNP03.

Exceptions are 7D4, 7E1, and 7E7, as follows:

Reason Code (hex)	Module in SYS1.NUCLEUS	Component
7D4	IEAVNIPM	NIP
7E1	IEAVNPX1	NIP
7E7	IEAVNIPX	NIP

The reason code *rrr* can appear in the right-most four bytes of the wait state program status word (PSW). The wait state PSW can appear in either of the following formats:

```
x0rrrwww
xrrr0www
```

System action

The system enters a non-restartable wait state.

Operator response

Record the contents of the wait state PSW and notify the system programmer. If the system programmer requests it, obtain a stand-alone dump.

System programmer response

If no modules are missing from the data set, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Note to IBM Support Center: The source code for module IEADRIMS contains the correspondences between module names and components.

Source

Nucleus initialization program (NIP)

033

Explanation

An I/O error occurred in build link-list request (BLDL macro) processing for a required nucleus initialization program (NIP) module.

The reason code *rrr* identifies the missing module. The reason code can appear in the right-most four bytes of the wait state program status word (PSW). The wait state PSW can appear in either of the following formats:

```
x0rrrwww
xrrr0www
```

To identify the NIP module, see the explanation for wait state X'032'.

System action

The system enters a non-restartable wait state.

Operator response

This is probably a hardware error. ReIPL the system. If the error persists, contact hardware support. Provide the number of the IPL device where the I/O error occurred and the contents of the wait state PSW.

Source

Nucleus initialization program (NIP)

035

Explanation

During system initialization, the system could not find an entry point in the nucleus. The system loaded one of the following:

- An incomplete nucleus
- An incomplete I/O configuration
- Both an incomplete nucleus and an incomplete I/O configuration

System action

The system enters wait state X'035'. The system places message IEA084W in the initial program load (IPL) write to operator (WTO) buffer.

Operator response

Do the following as soon as possible to find the WTO buffer and locate message IEA084W in the buffer. Do not write a stand-alone dump before doing this procedure, since the dump might overlay storage.

1. Using the hardware Alter/Display facility, read the real address in central storage at X'14'. This address points to the IPL diagnostic area.

2. Add X'28' to the address at real X'14', and also read this as a real address in central storage. The result is the 31-bit virtual address of the IPL vector table (IVT). Henceforth, all addresses are 31-bit virtual and **you must switch to displaying Primary Virtual Storage** to display remaining storage locations.

3. Add X' E0' to the IVT address. The result is the 31-bit address of the IVTMQHP field. IVTMQHP contains the address of the message queue header (MQH).

4. MQH + X'0' contains the address of the oldest message queue element (MQE) available. The message text for the oldest MQE begins at MQE + X'8'.

5. Use MQE + X'0' of the oldest MQE to find the MQE of the next oldest message. Again, the message text for this MQE begins at MQE + X'8'.

6. Repeat this sequence (using MQE + X'0' of the current MQE to locate the next MQE), until the message text for the appropriate message is displayed.

Notify the system programmer, providing the texts of the IEA084W messages. If the system programmer requests it, obtain a stand-alone dump. Then reIPL the system, using a different nucleus member, if possible.

System programmer response

Do the following:

1. Look in the stand-alone dump for message IEA084W. Note the entry point given in the message text.

2. Use the IEHLIST program to print the SYS1.NUCLEUS directory.

3. Search problem reporting databases for a fix for the problem. If no fix exists, call the IBM Support Center. Provide the stand-alone dump and the SYS1.NUCLEUS directory listing.

Source

Input/output supervisor (IOS)

037

Explanation

The data space control block (DSCB) for logrec, SYS1.SVCLIB, SYS1.PARMLIB, or SYS1.LINKLIB could not be successfully read from the volume where the data set resides for one of the following reasons:

- The data set does not exist on this volume.

- An unrecoverable input/output (I/O) error occurred during the attempt to read the related data space control block (DSCB).

- An error occurred during nucleus initialization program (NIP) OPEN processing.

Register 1 contains a pointer to the input/output buffer (IOB) for the failing I/O operation (EXCP). Diagnostic messages explaining the reason for the wait state and identifying the name of the data set involved precede the system wait.

Operator response

Report this wait state code and the diagnostic messages that precede it to the system programmer.

System programmer response

If any IGGN*xxx* messages are issued with this wait state code, perform the system programmer response for those messages. Otherwise, ensure that the data set is not cataloged with an esoteric device name. Correct the error that caused the DSCB read I/O operation. Ask the operator to reIPL the system.

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Logrec

038

Explanation

The operating system cannot initialize itself because there is not enough central storage. One of the following is true:

- There are not enough usable online frames.
- There are not enough usable contiguous frames.

Operator response

Notify the system programmer.

System programmer response

Ensure that there is enough central storage available for IPL processing. You may have to reduce the number of optional system facilities selected for this system configuration. Then ask the operator to IPL the system.

Source

Auxiliary storage manager (ASM), initial program load (IPL), and nucleus initialization program

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039

Explanation

The system could not mount a direct access volume because the mount request conflicted with another volume. One of the following occurred:

- Both volumes were required by the system.
- Both volumes had the same volume serial.
- The volume to be mounted required a different device type than that containing the online volume.
- The system could not find a proper device on which to mount the volume.

System action

The system enters wait state X'039'.

System programmer response

If any IGGN*xxx* messages are issued with this wait state code, perform the system programmer response for these messages. Otherwise, change the volume where one of the two data sets resides. Update the catalogue to contain the volume of the moved data set.

Source

Input/output supervisor (IOS)

03A

Explanation

An error occurred during an attempt to build the link pack area (LPA) during a cold start.

System action

The system issues message IEA304W to identify the error. The system may also issue message IEA353I or IEA354I or both.

Operator response

Report this wait state code and the preceding diagnostic messages to the system programmer.

If requested by the system programmer, obtain a stand-alone dump.

System programmer response

See the programmer response for message IEA304A. Correct the conditions that caused the LPA cold start to fail. Ask the operator to reIPL the system.

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Source

Contents supervision (CSV)

03B

Explanation

A module required for continued system operation cannot be found in the system link pack area (LPA).

System action

The system may issue message IEA363I to indicate which module could not be found. The system enters a non-restartable wait state.

Operator response

Report this wait state code to the system programmer and save the console listing.

System programmer response

Examine the console listing and look for message IEA363I to determine the name of the missing module. Execute the IEHLIST utility program to obtain a directory listing of the SYS1.LPALIB data set. Examine this list to determine which required system modules are missing. The missing modules should then be copied into SYS1.LPALIB from the starter system libraries or from a similar back-up source. Ask the operator to reIPL the system and add the missing module to the LPA either by requesting an LPA cold start or by using the MLPA or FIX options.

If the problem recurs and the program is correct, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the contents of the wait PSW available.

Source

Contents supervision (CSV)

03C

Explanation

The auxiliary storage manager (ASM) found that not enough auxiliary storage space is available for system operation:

During IPL
> Either the required number of page data sets was not specified, or ASM has detected a problem with a required page data set.

After IPL
> ASM has run out of usable auxiliary storage for the pageable link pack area (PLPA), common or local page data sets, and any storage-class memory (SCM).

A reason code identifies the error:

Code
> **Explanation**

00
> The cause of the error cannot be determined because of an error in recovery processing.

01
> Insufficient paging space. All local paging data sets are full, and there is no available SCM.

02
> The PLPA data set is full, SCM; is full, and the common data set is unavailable.

03
> The common data set is full, SCM is full, and the PLPA data set is unavailable.

04
> SCM is full, and the PLPA and common data sets are unavailable.

System action

During IPL, the system issues message IEA935W, then enters this wait state. After IPL, the system issues message ILR008W, then enters this wait state, unless all the local page data sets and storage-class memory (SCM) blocks were unusable; in that case, the system does not issue a message before entering this wait state.

Operator response

Notify the system programmer. ReIPL the system, specifying larger page data sets or additional page data sets, or additional SCM blocks.

System programmer response

Do one of the following:

- Redefine spaces to conform with the description provided in paging planning specifications. Ask the operator to reIPL with the CLPA option.
- Provide additional paging spaces and make them available through either the PAGE parameter or the IEASYSxx parmlib member during reIPL.
- After additional paging spaces are added and the system is re-IPLed, issue the D ASM command to monitor the available paging space to help prevent a reoccurrence of the wait state condition.
- Provide additional SCM blocks and make them available to the system using the CONFIG SCM ONLINE command.

Source

Auxiliary storage manager (ASM)

03D

Explanation

When the nucleus initialization program was running, an error occurred while the system was building common area page tables. There may not be enough central storage available to initialize the system.

System action

The system may issue message IEA907W. The system enters wait state X'03D'.

Operator response

Notify the system programmer.

System programmer response

Increase the amount of available central storage.

Source

Virtual storage management (VSM)

03E

Explanation

The auxiliary storage manager (ASM) determined that there were not enough slots to back master scheduler initialization.

System action

The system ends IPL.

Operator response

Notify the system programmer. ReIPL the system, specifying larger page data sets or additional page data sets, as indicated by the system programmer.

System programmer response

Increase the amount of auxiliary storage for system operation.

Source

Auxiliary storage manager (ASM)

03F

Explanation

A program invoked a nucleus initialization program (NIP) function incorrectly.

System action

The system enters a non-restartable wait state.

Operator response

If the system programmer requests it, obtain a stand-alone dump.

System programmer response

If the problem recurs or if the program is correct, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Source

Nucleus initialization program (NIP)

040

Explanation

The system abnormally ended a task during nucleus initialization program (NIP) processing.

The right-most four bytes of the program status word (PSW) have the following format:

```
x0cccwww
```

where:

x
    Irrelevant information.

ccc
    A hexadecimal abend code indicating the reason for the failure.

www
    The wait state code.

System action

The system issues message IEA303W. The system enters a non-restartable wait state.

Operator response

Record the wait state PSW and report the problem to the system programmer. If the system programmer requests it, obtain a stand-alone dump.

System programmer response

See the system programmer response for the abend code displayed in message IEA303W.

The abend SVC entry in the system's SVC table contains the address of a trap routine in NIP, and not the address of the abend SVC. The registers (0 through 15) at the time of the abend SVC request are found in the area pointed to by field NVTDIAGA (mapped by macro IHANVT).

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Providing the contents of the wait state PSW.

Source

Nucleus initialization program (NIP)

044

Explanation

During nucleus initialization program (NIP) processing, a machine check occurred on a central processor.

The right-most four bytes of the program status word (PSW) have the following format:

> *aaaa0www*

aaaa
> The first bit contains irrelevant information. The remaining bits represent the logical address of the central processor on which the machine check occurred.

www
> The wait state code.

System action

The system issues messages about the problem. The system enters a non-restartable wait state.

Operator response

This is probably a hardware error. ReIPL the system. If the error persists, configure the failing central processor offline. This action requires a power-on-reset. Contact hardware support.

Source

Nucleus initialization program (NIP)

045

Explanation

While initializing the recovery termination manager (RTM), the nucleus initialization program (NIP) requested cell pool storage in the system queue area (SQA). The request failed. System initialization cannot continue.

System action

The system may issue message IEA897I.

Operator response

If requested by the system programmer, obtain a stand-alone dump. Then try again to IPL the system.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Source

Recovery termination manager (RTM)

046

Explanation

During nucleus initialization program (NIP) processing, an unexpected program check occurred.

System action

The system enters a non-restartable wait state.

Operator response

Notify the system programmer. If the system programmer requests it, obtain a stand-alone dump.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Source

Nucleus initialization program (NIP)

04A

Explanation

A time-of-day (TOD) clock on one of the central processors is in error. The clock must be set to avoid generating a machine check later in nucleus initialization program (NIP) processing.

System action

Every central processor with a clock that needs setting will enter restartable wait state X'04A'.

Operator response

Perform restart function, then press the TOD ENABLE and ALT keys at the system console to set the clock. IPL will continue.

Source

Nucleus initialization program (NIP)

050

Explanation

The system determined that alternate CPU recovery (ACR) was recursively invoked.

System action

The system issues message BLW007W. Then the system enters disabled wait state X'050'.

Operator response

Retain the SYS1.LOGREC error records. Take a stand-along dump and reIPL the system. Contact the system programmer.

System programmer response

Search the problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump and the SYS1.LOGREC error records.

Source

Loadwait/Restart

051

Explanation

Alternate CPU recovery (ACR) encountered an unrecoverable error while recovery was in progress for another processor. ACR attempted to recover but was unsuccessful. This is probably a software error.

System action

The system:

- Issues message IEA857W
- Tries to write a logrec error record for the failed processor
- Places all processors in a wait state X'051'

Operator response

If requested by the system programmer, obtain a stand-alone dump. ReIPL the system.

System programmer response

Look at accompanying message IEA857W to identify the error. If a search of the program reporting databases shows no existing fix, report the problem to the IBM Support Center. Provide the stand-alone dump the logrec error records.

Source

Alternate CPU recovery (ACR)

052

Explanation

Alternate CPU recovery (ACR) encountered an unrecoverable error while recovery was in progress for another processor. This is probably a hardware error.

System action

The system:

- Issues message IEA857W
- Writes a logrec error record for the failed processor
- Places all processors in a wait state X'052'

Operator response

Look at accompanying message IEA857W and the logrec error record to identify the error.

If message IEA857W indicates that this is a hardware error, remove the failing hardware from the system, or remove the system with the failure from the complex. Then reIPL the other systems. Contact hardware support.

Otherwise, report the problem to system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec error record and the text of message IEA857W.

Source

Alternate CPU recovery (ACR)

053

Explanation

There is not enough system queue area (SQA) storage available to initialize all of the I/O devices that are defined in the I/O configuration. The right-most four bytes of the program status word (PSW) have the following format:

```
rrrxxwww
```

where:

rrr
A hexadecimal reason code indicating the reason for the failure

xx
Reserved

www
The wait state code

The reason code (*rrr*) is one of the following values:

000
The system could not obtain enough system queue area (SQA) storage.

001
The system could not obtain enough extended system queue area (ESQA) storage.

System action

The system enters wait state X'053'.

Operator response

Notify the system programmer.

System programmer response

Contact IBM Support to report this error. Modify the virtual storage allocated to the system queue area using the INITSQA keyword in the LOAD*xx* member of parmlib.

Source

I/O Supervisor (IOS)

054

Explanation

The system detected an error with a member being loaded into the dynamic address translation (DAT)-on nucleus region during system initialization.

If bits 100 - 107 in the wait state program status word (PSW) contain reason code X'1', the member being loaded contained more than one control section (CSECT). The member was not link-edited with the SCTR option.

System action

The system issues message IEA089W to the IPL WTO buffer to identifies the member. The system enters a non-restartable wait state.

Operator response

If the system programmer requests, do the following to find the WTO buffer and locate message IEA089W:

1. Using the hardware Alter/Display facility, read the real address in central storage at X'14'. This address points to the IPL diagnostic area.
2. Add X'28' to the address at real X'14', and also read this as a real address in central storage. The result is the 31-bit virtual address of the IPL vector table (IVT). Henceforth, all addresses are 31-bit virtual and **you must switch to displaying Primary Virtual Storage** to display remaining storage locations.
3. Add X'E0' to the IVT address. The result is the 31-bit address of the IVTMQHP field. IVTMQHP contains the address of the message queue header (MQH).
4. MQH + X'0' contains the address of the oldest message queue element (MQE) available. The message text for the oldest MQE begins at MQE + X'8'.
5. Use MQE + X'0' of the oldest MQE to find the MQE of the next oldest message. Again, the message text for this MQE begins at MQE + X'8'.
6. Repeat this sequence (using MQE + X'0' of the current MQE to locate the next MQE), until the message text for the appropriate message is displayed.

If the system programmer requests it, obtain a stand-alone dump.

System programmer response

Link edit the member again using the SCTR option.

If the problem recurs, have the operator retrieve message IEA089W from the WTO buffer. Translate the text of message IEA089W from hexadecimal into EBCDIC. The translated message text will show which module or member was in error.

If the member identified in message IEA089W belongs to IBM, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide a stand-alone dump.

Source

Initial program load (IPL)

055

Explanation

The initial program load (IPL) program was unable to locate a necessary member in the SYS1.NUCLEUS data set.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrr00www
```

where:

x
    Irrelevant information.

rr
    A hexadecimal reason code indicating the reason for the failure.

www
    The wait state code.

The reason code (*rr*) is one of the following:

01
    IPL could not find a DAT-off nucleus module. (DAT is the acronym for dynamic address translation.)

02
    IPL could not find a DAT-on nucleus module.

04
    IPL could not find one or more required module list tables (MLT) in SYS1.NUCLEUS.

05
> IPL could not find a module required for IPL processing. This reason code indicates that the system is not properly installed.

06
> IPL could not find a DAT-on nucleus module.

System action

For reason codes X'01' through X'04', IPL writes one or more IEA086W messages in the IPL WTO buffer. The system enters a non-restartable wait state.

For reason code X'06', IPL writes one or more IEA086W messages in the IPL WTO buffer. The system enters a restartable wait state.

Operator response

For reason code X'01', if you selected an alternate I/O configuration ensure that you correctly entered the alternate I/O configuration identifier (*xx*) through the console frame or at storage location 9-10. ReIPL the system. If the error persists, notify the system programmer.

For reason codes X'02' and X'06', make sure that the load parameter fifth and sixth digits are correct.

For reason code X'01', X'02', X'04', and X'06', do the following to find the WTO buffer and locate message IEA086W in the buffer:

1. Using the hardware Alter/Display facility, read the real address in central storage at X'14'. This address points to the IPL diagnostic area.
2. Add X'28' to the address in X'14', and also read this as a real address in central storage. The result is the 31-bit virtual address of the IPL vector table (IVT). Henceforth, all addresses are 31-bit virtual and **you must switch to displaying Primary Virtual Storage** to display remaining storage locations.
3. Add X'E0' to the IVT address. The result is the 31-bit address of the IVTMQHP field. IVTMQHP contains the address of the message queue header (MQH).
4. MQH + X'0' contains the address of the oldest message queue element (MQE) available. The message text for the oldest MQE begins at MQE + X'08'.
5. Use MQE + X'0' of the oldest MQE to find the MQE of the next oldest message. Again, the message text for this MQE begins at MQE + X'08'.
6. Repeat this sequence (using MQE + X'0' of the current MQE to locate the next MQE), until the message text for the appropriate message is displayed.

For all reason codes, notify the system programmer. For reason codes X'01' through X'04' and X'06', provide the text of message IEA086W. If the system programmer requests it, obtain a stand-alone dump.

System programmer response

For reason codes X'01' through X'04' and X'06', get the text of message IEA086W from the IPL WTO buffer and translate it from hexadecimal into EBCDIC. The translated message text will show which module or member was not found in SYS1.NUCLEUS:

- If *memname* is IEANUC0*x*, IEANUC1*x*, or IEANUC2*x*, make sure that *x* is the correct identifier for the nucleus you need. Specifically, if *memname* is IEANUC1*x* or IEANUC2*x*, make sure both that *x* refers to the correct IEANUC0*x* and that the corresponding IEANUC1*x* or IEANUC2*x* exists. For example, if *x* is 5 (you are defining an alternate nucleus named IEANUC05), you also need to create the corresponding IEANUC15 and IEANUC25 members.

  If *x* is incorrect, ask the operator to reIPL the system and specify the correct identifier for the nucleus on the SYSCTL frame load parameter.

- If *memname* is a member name other than IEANUC0*x*, IEANUC1*x*, and IEANUC2*x*, reason code X'04' identifies the module as an MLT, and reason code X'02' or X'06' indicates either a nucleus device support module, a

nucleus extension module, or a module specified on an INCLUDE statement in a NUCLST*xx* member (identified on the NUCLST statement in the LOAD*xx* member).

If the member is a module specified on an INCLUDE statement, verify that the module was specified correctly.

If the member is an MLT or a nucleus device support module, find the MLT name and the corresponding user information module (UIM) name in the MVS device report from HCD. If the UIM was installation-provided:

- Verify that the UIM logic is correct and that the UIM provided the correct MLT name.
- Make sure the SYS1.NUCLEUS directory contains a directory entry for the MLT.

If the UIM was not installation-provided, determine which product contains the member and why the member was not installed in SYS1.NUCLEUS.

If the reason code is X'05' or if you cannot solve the problem, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the text of accompanying message IEA086W if issued.

Source

Initial program load (IPL)

056

Explanation

DFP encountered a terminating error during NIP initialization. See message IGW008D for further information.

System action

System is in a disabled wait state without restart capability.

Operator response

Report this wait state code to the system programmer.

System programmer response

Provide software support personnel with console listing and stand alone dump. Also include a copy of message IGW010I in the console listing.

Programmer response

See message IGW008D for further information.

Source

DFSMSdfp

059

Explanation

During nucleus initialization program (NIP) processing, a build link-list request (BLDL macro) returned an undefined return code. System initialization cannot continue.

System action

The system enters a non-restartable wait state.

Operator response

Notify the system programmer. If the system programmer requests it, obtain a stand-alone dump.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Source

Nucleus initialization program (NIP)

05A

Explanation

Alternate CPU recovery (ACR) attempted to remove the last standard CP. There must be at least one standard CP online in order for the system to run.

System action

The system issues message IEA856W and enters a non-restartable wait state.

Operator response

Notify the system programmer.

System programmer response

The system has lost access to the last standard CP and can not run in this mode. If the CP was lost due to hardware failure, it will require the LPAR to be reconfigured to have at least one usable standard CP. If the CP was taken offline due to a software error, then reIPL the system.

Source

Alternate CPU recovery (ACR)

05C

Explanation

During nucleus initialization program (NIP) processing, the pointer to the master catalog could not be obtained from the SYS1.NUCLEUS data set. Possible causes are:

- I/O errors while attempting a build link-list request (BLDL macro) to find the member.
- Member not found.
- I/O errors attempting to read records from the member.

The pointer to the master catalog should be in the SYSCATLG or SYSCAT*nn* member in the SYS1.NUCLEUS data set.

System action

The system issues messages about the problem. The system enters a non-restartable wait state.

Operator response

ReIPL the system. If the problem persists, notify the system programmer.

System programmer response

Ask the operator to IPL a different system. Use it to determine if the SYSCATLG or SYSCAT*nn* member exists in the SYS1.NUCLEUS data set and is in the correct format:

- Run the IEHLIST utility with LISTPDS to list the directory of the SYS1.NUCLEUS data set.
- Run the IEBPTPCH utility to print the SYSCATLG or SYSCAT*nn* member of SYS1.NUCLEUS.

Add the SYSCATLG or SYSCAT*nn* member to the SYS1.NUCLEUS data set.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

05D

Explanation

During initialization, DFP could not find a data set control block (DSCB) for the master catalog or could not read the DSCB from the volume pointed to by the SYS1.NUCLEUS data set.

For an integrated catalog facility (ICF) master catalog, NIP could not read the DSCB for the VSAM volume data set (VVDS) of the volume that it required. For example, a page data set is specified that resides on a different volume than the master catalog, and the volume containing the page data set has a damaged VVDS.

Possible causes include:

- Hardware errors
- The wrong volume is mounted
- The pointer to the master catalog is incorrect in the SYSCATLG member of SYS1.NUCLEUS data set.

System action

The system issues messages about the problem. The system enters a non-restartable wait state.

Operator response

ReIPL the system. Notify the system programmer.

System programmer response

IPL a different system. Use it to determine whether the volume table of contents (VTOC) of the volume containing the master catalog or the VVDS are correct:

- Run the IEHLIST utility with LISTVTOC FORMAT to format the VTOC for the volume associated with the problem.
- Run the IEBPTPCH utility to print the SYSCATLG member of SYS1.NUCLEUS.

If the problem persists, contact hardware support.

Source

DFSMSdfp

05E

Explanation

An I/O error occurred while the system attempted to read the master catalog self-describing records.

The wait state can be caused by one of the following:

- The VVDS entry for the master catalog is damaged.
- The master catalog name, volume serial or both in the SYSCAT*xx* member of SYS1.NUCLEUS is incorrect.
- A hardware error was detected.
- A catalog was moved to a different volume serial and the SYSCAT*xx* member was not updated.
- The SYSCAT entry of LOAD*xx* produced an incorrect master catalog name.

The first ten records in the master catalog data set describe the master catalog itself. They are the catalog entry for the master catalog.

System action

The system enters a non-restartable wait state.

Operator response

ReIPL the system and report this wait state code to the system programmer.

System programmer response

Do the following:

- Check the the master catalog name and volume serial in the SYSCAT*xx* member of the SYS1.NUCLEUS. If the name or volume serial is incorrect, correct it and have the operator reIPL the system.
- If the master catalog name is correct, look for a problem with the VVDS entry for the master catalog.
- If neither the master catalog name nor the VVDS entry for the master catalog are in error, this is probably a hardware error. Contact hardware support, providing one of the following:
  - Run the IEBPTCH utility to print the cataloged procedure.
  - Issue the access method services LISTCAT command to list catalog entries and information about objects defined in the catalog.

The master catalog must either be recreated or restored to the proper volume after the damage to that volume is corrected.

Source

DFSMSdfp

05F

Explanation

DFP processing found an error related to the master catalog. The problem was caused by one of the following:

- The catalog information found during IPL was incorrect. This information can be supplied by SYSCATLG or SYSCAT*xx* members of the SYS1.NUCLEUS data set, or in the LOAD*xx* members of the SYS1.PARMLIB or SYS*n*.IPLPARM data sets.
- Either the SYSCATLG member or an alternate SYSCAT*xx* member of SYS1.NUCLEUS contains incorrect data.
- Either the master catalog's VSAM volume record (VVRs) or its first ten records have been improperly written over or damaged.

The first ten records in the master catalog data set describe the master catalog itself. They are the catalog entry for the master catalog.

System action

The system issues messages about the problem. The system enters a non-restartable wait state.

Operator response

Notify the system programmer. After the system programmer corrects the error in the SYSCATLG member or alternate SYSCAT*xx* member, reIPL the system.

System programmer response

Check to see if the catalog information was correctly specified. This information will be taken from the first of these places it is found during IPL:

1. The SYSCAT parameter found in the specified LOAD*xx* member of the first SYS0.IPLPARM through SYS9.IPLPARM data set found on the IODF volume.
2. The SYSCAT parameter found in the specified LOAD*xx* member of SYS1.PARMLIB on the IODF volume.
3. The SYSCAT parameter found in the specified LOAD*xx* member of SYS1.PARMLIB on the system residence volume.
4. The specified SYSCAT*xx* member of the SYS1.NUCLEUS data set used for IPL (if none is specified, SYSCATLG is the default).

Confirm that the data in the SYSCATLG member or alternate SYSCAT*xx* member, including the volume serial number and the device type, are correct. To look at the master catalog, run the IEBPTPCH utility to print the SYS1.NUCLEUS data set.

If the member is correct, either restore the master catalog to the proper volume or recreate it.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

060

Explanation

While saving or rebuilding the pageable link pack area (PLPA) or extended PLPA (EPLPA), the auxiliary storage manager (ASM) detected an error in processing external page table entries.

System action

The system issues message IEA943W. The system ends the IPL.

Operator response

Notify the system programmer of this wait state. ReIPL, specifying the CLPA system parameter. For a hardware error, contact hardware support.

System programmer response

Try to determine the cause of the problem. Check for hardware and software errors.

Source

Auxiliary storage manager (ASM)

061

Explanation

The auxiliary storage manager (ASM) detected an error with the time-of-day (TOD) clock while processing the store clock (STCK) instruction.

System action

The system issues message IEA945W. The system ends IPL.

Operator response

Correct the TOD clock. ReIPL the system. If the problem persists, contact hardware support to repair the clock.

Source

Auxiliary storage manager (ASM)

062

Explanation

An error occurred on one or more channel paths to reserved devices (such as DASD) or assigned devices (such as tapes).

System action

The system does not use the channel paths until recovery is complete. Recovery waits until the operator restarts the system.

The system issues message IOS201E when the I/O on other processors that share devices can be started.

Operator response

The correct response varies, depending on whether there are non-DASD devices on any channel paths where an error occurred.

For errors on channel paths with DASD or assignable devices only:

1. Enter the IOACTION STOP command to prevent other processors that share devices from initiating I/O. If the IOACTION STOP command fails, stop sharing processors to prevent I/O activity to the shared devices.
2. After the IOACTION STOP command is successful or sharing processors have been stopped, restart the system that has the error.
3. After the system issues message IOS201E, do one of the following:
   - If the IOACTION STOP command was successful, enter the IOACTION RESUME command.
   - Otherwise, restart sharing processors.

For errors on channel paths with at least one non-DASD or non-assignable device:

1. Stop sharing processors to prevent I/O activity to the shared devices.
2. Restart the system that has the error.
3. After the system issues message IOS201E, restart sharing processors.

See *z/OS Problem Management* for further information about restarting the system.

Source

Input/output supervisor (IOS)

063

Explanation

The nucleus initialization program (NIP) was unable to obtain storage. The probable cause of this error is that insufficient system queue area (SQA) was available to provide the options requested for this IPL. Another possibility is a system error resulting in excessive demands on the NIP region.

Operator response

Notify the system programmer.

System programmer response

If the request was for SQA after NIP processes the SQA parameter, the problem can be corrected by specifying a larger value on the 'SQA' parameter. However, the problem can occur before NIP processes the SQA parameter.

If the system was initialized with insufficient central storage available to back the SQA requests, then it may be necessary to increase the amount of online storage before attempting to reIPL, or to reduce the number of optional system facilities selected for this system configuration.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Auxiliary storage manager (ASM)

064

Explanation

During nucleus initialization program (NIP) processing, NIP detected a software or hardware error. An attempt was made to enter the recovery termination manager (RTM). This was trapped by NIP because the system is in a variable state of initialization and, in particular, RTM is not fully initialized.

The right-most four bytes of the program status word (PSW) have the following format:

```
x0rrrwww
```

where:

x
    Irrelevant information.
rrr
    A hexadecimal reason code indicating the reason for the failure.
www
    The wait state code.

The reason code (*rrr*) is one of the following:

001
    A module branched to abnormal ending processing.
002
    A dynamic address translation (DAT) error occurred.
003
    The operator pressed the RESTART key instead of the time-of-day (TOD) key.
004
    A machine check occurred. This can be caused by:

- An I/O interrupt from a device that was not defined in the I/O configuration program (IOCP). The channel subsystem presents the interruption as a machine check.
- The system is changing the state of a resource during system initialization.

005

A Supervisor Call (SVC) instruction was issued in an incorrect mode. However, this is not usually the actual error, because it is common for system routines to issue an abend while holding a lock.

Code X'05' can occur when:

- NIP is reading from SYS1.PARMLIB
- NIP is trying to process an incorrect load module
- I/O errors occurred on the system residence volume

006

A paging I/O error occurred.

007

A call to abnormal ending processing was issued without providing an address space identifier (ASID).

008

A request for memory ending occurred.

009

A program check occurred. Accompanying message IEA304W further explains this wait state and entry code. If the message does not appear on the console, you can find the message in the wait state message area (WSMA). The WSMA is described in *z/OS MVS Data Areas* in the z/OS Internet library (www.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosInternetLibrary).

00A

NIP called the alternate CPU recovery (ACR) component.

00B

A call to cross-memory abend processing was issued with the address space identification (ASID) provided.

00C

A routine entered RTM holding a cross memory local (CML) lock.

00D

A module specified the ITERM option on the CALLRTM macro.

00E

A module specified the SABEND option on the CALLRTM macro.

00F

A call to ABTERM processing was issued with RETRY=NO.

010

A call to cross-memory ABTERM processing was issued with RETRY=NO.

System action

The system issues messages about the problem. The system may issue message IEA304A. The system enters a restartable wait state.

Operator response

Do one of the following:

- For table entry code X'003' reIPL the system.
- For table entry code X'004', do the following:

  – Use the hardware Problem Determination facilities to see if any unexpected events occurred during the IPL process.
  – Check that the system is using the correct I/O configuration data set (IOCDS).
  – Notify the system programmer and provide the text of the message.

  Do not:

  – Detach, attach, or define any I/O service during system initialization.

- Configure on or offline any channel path identifiers (CHPID) to the logical partition where the system is initialized if the system is running in logically partitioned (LPAR) mode.
- For table entry code X'009', try restarting the system, specifying CLPA in the reply to accompanying message IEA101A. Table entry code X'009' may occur on a warm or quick start if the previous cold start failed before or during master scheduler initialization.
- For other entry codes, check the READ/WRITE switch on direct access storage devices (DASD) before reporting this wait state code to the system programmer.

If the system programmer requests it, obtain a stand-alone dump.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, do the following before contacting the IBM Support Center:

- For table entry code X'005', determine if an SVC 13 was the last SVC issued by looking at the SVC OLD PSW or the trace table in a stand-alone dump. If this is the case, register 1 in the trace table contains the abend codes and register 15 contains the reason code. The abend code may indicate which SVC issued the abend. If it does, the trace table may show the module that issued the SVC.

  If SVC 13 was not the last SVC issued, then it is a true SVC error. The problem could be:

  - A module is incorrectly issuing an SVC while holding a lock.
  - A routine that was in control returned to its caller without releasing a lock. In this case, the issuer of the SVC is not at fault.

- For table entry code X'009', the program check OLD PSW indicates the type of exception and where it occurred. The registers at the time of the exception are saved at displacement X'48' into the logical configuration communication area (LCCA). If it was a translation exception (program interrupt code X'10' or X'11'), location X'90' contains the address that could not be translated. The system trace also contains this information.

Search problem reporting databases for a fix. If no fix exists, contact the IBM Support Center. Provide the information that you gathered, including the wait state PSW.

Source

Nucleus initialization program (NIP)

065

Explanation

During nucleus initialization program (NIP) processing, a program issued type 3 or 4 supervisor control (SVC) instruction before these types were loaded. This SVC interrupt was trapped by NIP.

System action

The system enters a non-restartable wait state.

Operator response

Notify the system programmer. If the system programmer requests it, obtain a stand-alone dump.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide a stand-alone dump.

Source

Nucleus initialization program (NIP)

06F

Explanation

The system found one of the following along a path to a device:

- An inoperative control unit
- A channel error
- An undetermined error

There is no device reservation or active I/O operation on the path to indicate which system owns the device.

If the system could not determine the channel path identifier and/or device number, the system substitutes X'FFFF' for the channel path identifier and/or device number.

System action

The system:

1. Disables the device.
2. Enters wait state X'06F' because it cannot issue message IOS427A.
3. Expects an operator action, but does not prompt the operator for a reply.

Operator response

Do the following:

1. Find the address of the error information by using the hardware Alter/Display facility to display the contents of location X'40C'. Record the first 4 bytes of data at this location.
2. Use the hardware Alter/Display facility to display the storage pointed to by location X'40C'.

   Note: This is indirect addressing.

   The system displays the contents of the error information area:

   Offset 0
   The channel path identifier (or X'FFFF', if the CHPID could not be determined).

   Offset 2
   The device number (or X'FFFF', if the device number could not be determined).
3. Use the hardware Alter/Display facility to change location X'30E' to one of the following recovery codes:

   Code
   Explanation

   00
   Try to restart the device without attempting recovery. (Entering this code is the same as replying NOOP to message IOS427A). If the problem persists, the system issues message IOS427A again (or wait state code X'06F' if the system cannot issue IOS427A); consider entering one of the other recovery codes.

   Use the Restart facility to restart the waiting processor.

   01
   Attempt to recovery access to the device through an alternate channel path. (Entering this code is the same as replying UR to message IOS427A). Before entering this recovery code and restarting the processor, all other processors that share the device you must prevent from initiating I/O to this device by issuing the IOACTION STOP command. If this command fails, you must stop all sharing processors to prevent I/O activity to the shared device.

Use the Restart facility to restart the waiting processor. The system might issue one of the following messages:

- IOS428I - The attempt to access the device through an alternate channel path was successful.
- IOS104I - The attempt to access the device through an alternate channel path was not successful.

After the system issues either message, start I/O to the shared device either by issuing the IOACTION RESUME command or by restarting the sharing processors if they were stopped in step 11.

02
Force the device offline. (Entering this code is the same as replying B0X to message IOS427A). The system issues message IOS501I. Use the Restart facility to restart the waiting processor.

See message IOS427A in *z/OS MVS System Messages, Vol 10 (IXC-IZP)* for additional information.

Source

Input/output supervisor (IOS)

070

Explanation

During initial program load (IPL) processing, IPL did not find enough contiguous central storage to satisfy a request that requires contiguous storage. This is probably a hardware error.

Operator response

Check the configuration of storage. If hardware errors have made too many frames unusable, contact hardware support. Otherwise, notify the system programmer.

System programmer response

Make sure that enough central storage is available for IPL processing. You may have to reduce the number of optional system facilities selected for this system configuration.

Source

Initial program load (IPL)

071

Explanation

Either the system or the operator initiated a restart. The reason code, located in SDWA, explains the reason for the abnormal end:

Code
  Explanation

00
One of the following occurred:

- The operator selected RESTART option 0 to initiate the abnormal end.
- The operator replied ABEND to either message IEA500A or BLW004A.
- The operator selected RESTART with no option. When no option is specified, the system uses the default, which is option 0.
- The operator did not reply to either message IEA500A or IEA502A within 125 seconds.
- The system could not determine the reason for the restart, and uses the default, which is option 0.

04

The operator selected RESTART option 1 to initiate system diagnosis and repair.

08

A programming error caused the program that was currently running to branch directly to the restart interruption handler.

0C

The operator selected RESTART option 0 on a processor that is in a valid spin waiting for a global resource held by a second processor that is in an erroneous disabled loop. A DSGNL RESTART command, directed to the second processor, failed.

10

The system started writing logrec error records after detecting an excessive spin loop condition. The interrupted unit of work continues to run.

20

The system abnormally ended the program that was causing a system excessive spin loop. Recovery routines are not allowed to retry because the recovery action for the spin loop was TERM.

30

The system abnormally ended the program that was causing a system excessive spin-loop condition. Recovery routines are allowed to retry because the recovery action for the spin loop was ABEND.

System action

The system does one of the following:

- For reason code X'00', X'08', X'0C', X'20', or X'30', the system abnormally ends the program currently running.
- For reason code X'00', the system might issue either message IEA500A or BLW004A.
- For reason code X'04', the system detects and repairs, where possible, errors in critical system areas. The system refreshes selected system control blocks and validates and repairs selected system resources. The system logs the old values of some refreshed control block fields in the variable recording area (VRA) of the system diagnostic work area (SDWA). The system writes these old values in the logrec error record. Then the system returns control to the interrupted program.
- For reason code X'10', the system records the excessive spin loop in a logrec error record.

Operator response

If requested by the system programmer, set a SLIP trap to obtain a dump.

System programmer response

Depending on the reason code, do the following:

Reason code
  Action

X'00'

Either message IEA500A or BLW004A might accompany this reason code and identify the work that was in progress at the time of the interruption.

1. If a logrec error record is not produced with the abend, ask the operator to obtain an SVC dump.
2. Examine the program status word (PSW) at the time of error in the logrec error record. The PSW points to the location where RESTART was entered by the operator. If the program was in a loop, the PSW address will be within the loop.
3. Examine the system trace table for evidence of a loop or a wait. If a loop or a wait is suspected, use the address in the PSW to obtain the name of the looping module.

   - If the module is not an IBM module, continue diagnosis with the module.
   - If the module is an IBM module, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and the logrec error record.

X'08'
   Determine which program branched incorrectly, as follows:

1. If a logrec error record is not produced with the abend, ask the operator to obtain an SVC dump.

2. Look at register 14 at the time of the error. If the illegal branch was made by a BALR 14,15 instruction, register 14 points to the instruction following the instruction that took the bad branch. If this instruction is a branch instruction, then this instruction probably branched directly into the restart interrupt handler.

3. Use the address in register 14 to get the name of the module that issued the bad branch instruction.

   - If the module is not an IBM module, continue diagnosis with the module.
   - If the module is an IBM module, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and the logrec error record.

X'0C', X'10', X'20', or X'30'
   Determine why an excessive spin condition occurred, as follows:

1. Get the program status word (PSW) at the time of error as follows:

   - For reason code X'10', X'20', or X'30', obtain the PSW from the logrec error record.
   - For reason code X'0C', X'20', or X'30', ask the operator to obtain an SVC dump. Format the dump to see the PSW at the time of error.

2. Use the address in the PSW to obtain the name of the module that was causing the spin.

   - If the module is not an IBM module, continue diagnosis with the module.
   - If the module is an IBM module, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the dump and the logrec error record.

   See *z/OS Problem Management* for information about diagnosing a loop.

Source

Loadwait/Restart

072

Explanation

There is no more room in the work space allocated to initial program load (IPL).

System action

The system enters a non-restartable wait state.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Initial program load (IPL)

073

Explanation

Initial program load (IPL) is waiting for an I/O or external interrupt.

The right-most four bytes of the program status word (PSW) have the following format:

```
x0r00www
```

where:

x
   Irrelevant information.

r
   A hexadecimal reason code indicating the reason for the failure.

www
   The wait state code.

The reason code (*r*) is one of the following:

1
   IPL is waiting for an I/O interrupt.

2
   IPL is waiting for an external interrupt.

System action

The system enters an enabled wait state.

Operator response

The wait time might vary between 30 seconds and three minutes. If the system is still in a wait state after three minutes, record the wait state PSW and inform the system programmer.

System programmer response

Take the following steps:

1. Using the hardware Alter/Display facility, examine the reason code in bits 40 through 43 of the wait state PSW.

   - If the reason code is X'1', the system is waiting for an I/O operation to complete. Continue problem determination with step .
   - If the reason code is X'2', a hardware problem exists. Have the operator retry the IPL. If the IPL is not successful, contact hardware support.

2. If the reason code is X'1', the system is waiting for an I/O operation to complete. This wait state indicates that an I/O interrupt is outstanding. During IPL, I/O is done to either the SYSRES volume or the IODF volume. The IPL program issues SSCH to initiate the I/O, then loads a wait PSW that is enabled for I/O (X'010A0000 00100073'). This PSW remains loaded until the I/O interrupt comes in. If the I/O interrupt never comes in, the system remains in a wait state.

   If the system is still in a wait state after three minutes, have the operator retry the IPL. If the system enters a wait state again for three minutes, you need to determine whether a device or a path to the device is causing the problem. Continue with the next step.

3. Using the hardware Alter/Display facility, read the 4-byte subchannel address in central storage at X'B8'. The subchannel number is the last two bytes (at location X'BA') of the 4-byte subchannel identification word at location X'B8'.

4. Bring up the Device Configuration Display. Enter the 2-byte subchannel number found in step . This displays the device number, unit address, and one or more installed channel paths to the device for the selected subchannel number.

   If there is only one channel path to the device, the problem is caused either by the path or by the device. There is no need for the system operator to continue problem determination. Contact hardware support.

   If there is more than one channel path to the device, configure offline one path at a time and attempt to reIPL. If one of these IPL attempts succeeds, the offline path is the failing path. If none of these IPL attempts succeeds, the device is causing the problem.

5. It is likely that the failing path is the last path used. Display subchannel status information. On CMOS-based processors, this is the Analyze Subchannel Data display. Read the last path used mask (LPUM) field to determine the last path used. The LPUM field consists of 8 bits. If bit n is on, then CHPIDn is the last path used. For example, if the LPUM field shows B'01000000', bit 1 is on and the CHPID1 field identifies the last path used.

6. Bring up the CHPID menu and configure the last used channel path offline.

7. ReIPL the system.

8. If the problem does not recur, you have identified the failing path.

   If the problem recurs, continue attempting to reIPL the system with one path configured offline. If one of these IPL attempts succeeds, you have identified a failing path. If none of these IPL attempts succeeds, the device is causing the problem. Contact hardware support.

Source

Initial program load (IPL)

074

Explanation

Initial program load (IPL) contains a program logic error.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrr00www
```

where:

x
   Irrelevant information.

rr
   A hexadecimal reason code indicating the reason for the failure.

www
   The wait state code.

The reason code (*rr*) is one of the following:

01
   An incorrect Supervisor Call (SVC) instruction was issued.

02
   IPL SVC stack overflow.

03
   IPL SVC stack underflow.

04
   IPL received an unexpected condition code of 2 on a Start Subchannel (SSCH) instruction.

05
   IPL received an unexpected condition code of 1 on a Test Subchannel (TSCH) instruction.

06
   IPL received an unexpected condition code on a Load Real Address (LRA) instruction. Message IEA090W, which appears in the IPL WTO buffer, accompanies this reason code.

07
   IPL received an incorrect parameter list.

08
   IPL received a nonzero condition code on a Modify Subchannel (MSCH) instruction.

09

Code was loaded from a new restart PSW. This code will be loaded when a restart is issued on a processor that has a zero prefix register. The prefix register is zero when the operator attempts to do a restart too early in IPL or in a logically offline processor in LPAR mode.

0A

The I/O Supervisor attempted to enable a hardware facility, but received an unexpected response code.

0B

The I/O Supervisor attempted to enable a hardware facility, but received an unexpected response code.

0C

The I/O Supervisor attempted to enable a hardware facility, but received an unexpected response code.

System action

The system may issue message IEA090W to the IPL WTO buffer. The system enters a non-restartable wait state.

Operator response

For a reason code other than X'05' or X'06', record the wait state PSW. Notify the system programmer and obtain a stand-alone dump, if requested.

For reason code X'05', check that the devices are: not a secondary PPRC; not experiencing I/O errors; and not unavailable due to a Reserve in the control unit.

For reason code X'06', do the following to find the WTO buffer and locate message IEA090W in the buffer:

1. Using the hardware Alter/Display facility, read the real address in central storage at X'14'. This address points to the IPL diagnostic area.

2. Add X'28' to the address at real X'14', and also read this as a real address in central storage. The result is the 31-bit virtual address of the IPL vector table (IVT). Henceforth, all addresses are 31-bit virtual and **you must switch to displaying Primary Virtual Storage** to display remaining storage locations.

3. Add X'E0' to the IVT address. The result is the 31-bit address of the IVTMQHP field. IVTMQHP contains the address of the message queue header (MQH).

4. MQH + X'0' contains the address of the oldest message queue element (MQE) available. The message text for the oldest MQE begins at MQE + X'8'.

5. Use MQE + X'0' of the oldest MQE to find the MQE of the next oldest message. Again, the message text for this MQE begins at MQE + X'8'.

6. Repeat this sequence (using MQE + X'0' of the current MQE to locate the next MQE), until the message text for the appropriate message is displayed.

Notify the system programmer, providing the text of message IEA090W. If the system programmer requests it, obtain a stand-alone dump.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

For reason code X'06', provide the text of message IEA090W translated from hexadecimal into EBCDIC.

Reason code X'09' can also be the result of another problem.

For subchannel related reason codes, the IODF might not be on the volume that the LOADPARM indicated, or the volume might be experiencing problems.

Problem determination

Take a stand-alone dump.

Source

Initial program load (IPL), I/O Supervisor

Module

IEAIPL46

075

Explanation

Initial program load (IPL) could not load a module.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrr00www
```

where:

x

Irrelevant information.

rr

A hexadecimal reason code indicating the reason for the failure.

www

The wait state code.

The reason code (*rr*) is one of the following:

01

IPL could not find IRIM IEAIPL01 in the SYS1.NUCLEUS data set. This could be caused by:

- Previous I/O error reading SYS1.NUCLEUS
- Mismatch in IODF or IOCDS of true system configuration
- Device cabling error for IODF or IOCDS

02

A module is too large; it is longer than 4096 bytes.

03

Either the delimiter for the end of the IPL resource initialization module (IRIM) list was encountered before IPL found all the IRIMs or a pre-MVS SP 4.3 IPL text was attempting to IPL a system at a level of MVS SP 4.3 or higher.

04

IPL could not find an IRIM member in SYS1.NUCLEUS.

05

An IRIM module is too large; it is longer than 4096 bytes.

06

The IPL text on the volume used to IPL did not match the nucleus code resident on that volume.

System action

The system enters a non-restartable wait state.

Operator response

Record the wait state PSW. Notify the system programmer, and obtain a stand-alone dump, if requested.

System programmer response

Make sure that the module is properly link-edited into SYS1.NUCLEUS. Then ask the operator to reIPL. For reason code 06 or 03 (in the case of an IPL text error), run ICKDSF to install the proper level of the IPL text on the volume used to IPL.

Source

Initial program load (IPL)

076

Explanation

During initial program load (IPL) processing, the system attempted to load an IPL resource initialization module (IRIM) or the DAT-off nucleus, but the system encountered a relocatable address constant that is not a fullword. (DAT is the acronym for *dynamic address translation*.)

System action

The system enters a non-restartable wait state.

Operator response

Notify the system programmer.

System programmer response

Make sure that the IRIM module is properly link-edited into SYS1.NUCLEUS on the system residence volume.

Source

Initial program load (IPL)

077

Explanation

The system cannot resolve the entry point of a supervisor call (SVC) or extended SVC router (ESR) routine.

Operator response

Report this wait state to the system programmer. If requested by the system programmer, obtain a stand-alone dump.

System programmer response

Make sure that the IEANUC0*x* module is properly link-edited. If the problem cannot be resolved, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

078

Explanation

The master catalog could not be opened successfully. Message IEC161I precedes this wait state and identifies the specific open failure.

Operator response

Probable I/O error. ReIPL the system and report this wait state code to the system programmer.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response

Correct the error identified by message IEC161I.

Source

DFSMSdfp

07B

Explanation

A required processor facility is not available. The wait state reason code identifies the missing facility.

The right-most four-bytes of the program status word (PSW) have the following format:

```
xrrr0www
```

where:

x
    Irrelevant information.

rrr
    A hexadecimal reason code indicating the reason for the failure.

www
    The wait state code.

The reason code (*rrr*) is one of the following:

1

    Access register support is not available.

2

    Immediate-and-Relative instructions are not available.

3

    Suppress on Protection with Virtual-Address Enhancement is not available.

4

    Storage-Protection Override is not available.

5

    Subspace Group support is not available.

6

    Set Address Space Control Fast support is not available.

7

    Compare until Substring Equal support is not available.

9

    Perform Locked Operation support is not available.

A

    Lock Page support is not available.

B

Compression support is not available.

C

PER 2 support is not available.

D

String support is not available.

E

Checksum support is not available.

F

Move Inverse support is not available.

11

Compare and Move extended support is not available.

12

Branch and Set Authority (BSA) instruction is not available.

13

Compare Swap and Purge (CSP) instruction is not available.

14

Store System Information (STSI) instruction is not available.

15

Extended TOD Clock facility is not available.

16

Extended Translation facility is not available.

17

LICENSE=z/OSe was specified, but you were not on a 2066 machine type on a ZOSE*xxxx* LPAR.

18

LICENSE=z/OSe was not specified, but you were on a 2066 machine on a ZOSE*xxxx* LPAR.

1E

One or more of the following functions required by z/OS V2R1, or later, is not available:

- DAT-enhancement facility
- ASN-and-LX reuse facility
- Store-facility-list-extended facility
- Long-displacement facility has high performance
- HFP-multiply-add/subtract facility
- Extended-immediate facility
- Extended-translation facility 3
- HFP-unnormalized-extension facility
- ETF2-enhancement facility
- Store-clock-fast facility
- Move-with-optional-specifications facility
- ETF3-enhancement facility
- Extract-CPU-time facility
- Compare-and-swap-and-store facility
- Floating-point-support-enhancement facility
- Decimal-floating-point facility
- PFPO instruction

1F

One or more of the following functions required by z/OS V2R2, or later, is not available:

- Enhanced-DAT facility 1
- Configuration-topology facility
- Parsing-enhancement facility
- Compare-and-swap-and-store facility 2
- General-instruction-extension facility
- Execute-extensions facility
- Decimal-floating-point facility has high performance

20

One or more of the following required functions required by z/OS V2R3, or later, are not available:

- Decimal-floating-point zone-conversion facility
- Miscellaneous-instruction-extension facility
- Interlocked-access facility 2
- Floating point extension facility
- Distinct operands facility

21

One or more of the following required functions required by z/OS V2R4 are not available:

- Transactional-execution facility
- Constrained transactional-execution facility

System action

The system enters a non-restartable wait state.

Operator response

Notify the system programmer.

System programmer response

Upgrade the processor to one which supports all of the required facilities.

Source

Nucleus initialization program (NIP)

07C

Explanation

During system initialization an error was detected in the system configuration. The error needs to be corrected before the system will properly initialize. A reason code in the wait PSW explains the error:

Code
   Explanation

01

A system was IPLed in a partition with a non-zero logical channel subsystem identifier (CSSID). The level of z/OS installed on this system does not support non-zero CSSIDs.

System action: Message IEA004W accompanies the wait state.

System programmer response: Either IPL the z/OS system in a logical partition with a CSSID of 0 or modify your I/O configuration to define this partition in CSS 0. See *z/OS HCD Planning* or *z/OS HCD User's Guide* for information about how to associate a logical partition with a logical channel subsystem.

02

A system was IPLed in a partition with an logical partition identifier greater than X'F'. The level of z/OS installed on this system does not support logical partition identifiers greater than X'F'.

System action: Message IEA006W accompanies the wait state.

System programmer response: Change the LPAR identifier assigned to the partition in the LPAR image profile to a number in the range X'0' – X'F'. See *PR/SM Planning Guide*.

03

More CPUs were defined for the partition than the installed level of z/OS supports. The system encountered a CPU address that exceeds the maximum allowed by this level of z/OS.

System programmer response: Reduce the number of logical CPUs defined for the partition in the LPAR image profile (see *PR/SM Planning Guide*) to a number less than or equal to the number of CPUs supported by the installed level of z/OS (see ECVT_MAX_HIGHESTCPUID in *z/OS MVS Data Areas Volume 1 (ABE - IAR)*).

04

The system contained the following mutually exclusive facilities:

- An Integrated Facility for Applications (IFA)
- A CPU with the Integrated Cryptographic Feature

System action: The system enters a non-restartable wait state.

Operator response: Contact the system programmer.

System programmer response: Contact hardware support.

06

Multithreading (MT) activation defined a CPU address that exceeds the maximum allowed by this level of z/OS.

System action: The system enters a non-restartable wait state.

Operator response: Contact the system programmer.

System programmer response: Reduce the number of logical CPUs defined for the partition in the LPAR image profile (see *PR/SM Planning Guide*) or deactivate MT (see the LOAD*xx* member of parmlib in *z/OS MVS Initialization and Tuning Reference*) to a number less than or equal to the number of CPUs supported by the installed level of z/OS (see ECVT_MAX_HIGHESTCPUID in *z/OS MVS Data Areas Volume 1 (ABE - IAR)*).

07

MT activation encountered an unexpected error.

System action: The system enters a non-restartable wait state.

Operator response: Contact the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

08

The system was IPLed with an unsupported CPU or CORE type.

System Action: The system enters a non-restartable wait state.

Operator Response: Notify the system programmer.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

09

The system was IPLed with a RUCSA area defined, but the use of the RUCSA feature is not enabled in the product management policy (IFAPRDxx).

System action: The system enters a non-restartable wait state.

Operator response: Re-IPL the system without RUCSA, if that is the desired environment. If necessary, you can specify RUCSA=(0M,0M) on the reply to the system parameter WTOR message to override the RUCSA setting in the IEASYSxx member and allow the IPL to proceed so that the IFAPRDxx or IEASYSxx members can be updated.

System programmer response: If RUCSA is not required for the system, instruct the operator to re-IPL the system without a RUCSA definition. If RUCSA is required, follow the guidelines for the product enablement policy to create an appropriate entry in the IFAPRDxx member of parmlib.

Source

Initial program load (IPL) and Nucleus initialization program (NIP)

07D

Explanation

During system initialization, an error occurred when the system tried to process the IEASYM parmlib member. A reason code in register 15 explains the error:

Code
  Explanation

00
  The system found a *circular* system symbol definition in IEASYM*xx*. A circular system symbol definition is one that contains another system symbol that is not resolved.

  System action: The system issues message IEA012E, which further describes the error, to the NIP console. The system enters a non-restartable wait state.

  System programmer response: See the system programmer response for message IEA012E.

04
  The system found an error in IEASYM*xx* from which it could not recover. The error occurred when the system tried to determine the substitution text for a system symbol definition.

  System action: The system issues message IEA013E, which further describes the error, to the NIP console. The system enters a non-restartable wait state.

  Operator response: Contact the system programmer. Provide the text of message IEA013E.

  System programmer response: See the system programmer response for message IEA013E.

Source

Nucleus initialization program (NIP)

07E

Explanation

The system was unable to obtain storage from LSQA which was needed to process an SVC instruction. The system loaded a wait state because it was unable to terminate the address space of the program which issued the SVC.

System action

The system enters a non-restartable wait state and issues message IEA297W.

Operator response

Provide a stand-alone dump if requested by the system programmer. ReIPL the system.

System programmer response

The problem may be caused by a loop which causes LSQA to be exhausted. If the source of the problem cannot be determined, search problem reporting databases for a fix. If no fix exists, contact IBM support center. Provide the stand-alone dump.

Source

Supervisor Control

081

Explanation

Initial program load (IPL) tried to load a module from the SYS1.NUCLEUS data set. The SYS1.NUCLEUS data set or an IEANUC0x or IEAVEDAT member occupies more than one extent.

System action

The system enters a non-restartable wait state.

Operator response

Notify the system programmer.

System programmer response

Make sure that the SYS1.NUCLEUS data set is allocated to single extent. Then ask the operator to reIPL the system.

Source

Initial program load (IPL)

082

Explanation

The system entering the sysplex is removed to prevent console sysplex data corruption. The system being partitioned either requires maintenance to be installed to be able to coexist with the other systems in the sysplex, or a system already active in the sysplex requires maintenance to be installed to be able to coexist with the failing system. For example, the failing system does not have a necessary consoles compatibility APAR installed.

System action

The system entering the sysplex is partitioned from the sysplex and wait state X'082' is loaded on that system to prevent global console sysplex data corruption. Message IEA002I is issued to indicate which system requires maintenance to be applied and the appropriate APAR to apply.

System programmer response

Read the information regarding installation of the appropriate APAR(s).

083

Explanation

The system found an incorrect address in a critical prefixed storage area (PSA) field. The damage could not be corrected by supervisor recovery. This error is probably a software error.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrrr0www
```

where:

x
Irrelevant information.

rrr
A hexadecimal reason code indicating the reason for the failure.

www
The wait state code.

The reason code (*rrr*) is one of the following:

001
Field PSALCCAV or PSASCWA

002
Field PSAPCCAV

System action

The system may write a logrec error record.

Operator response

If the system programmer requests a stand-alone dump, stop all other systems and obtain a stand-alone dump. ReIPL the system.

System programmer response

Do the following:

1. If necessary, ask the operator to obtain a stand-alone dump.
2. Examine the damaged PSA for the system that is in wait state X'083'. See if you can recognize the damage.
3. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump and, if available, the logrec error record.

Source

Supervisor control

084

Explanation

The recovery termination manager (RTM) encountered an error that could not be corrected while:

- Supporting recovery or ending of a system routine
- Supporting recovery or ending of a task of an application program

The right-most four bytes of the program status word (PSW) have the following format:

```
x0rrrwww
```

where:

x
Irrelevant information.

rrr
A hexadecimal reason code indicating the reason for the failure.

www
> The wait state code.

The reason code (*rrr*) is one of the following:

004
> A first level interruption handler (FLIH) determined that the interruption, which was in a PSW-disabled routine, was an error condition. The FLIH called RTM to recover or to end the routine that was interrupted. While processing the request, RTM found uncorrectable damage to at least one functional recovery routine (FRR) stack pointer in the recovery stack vector table (PSARSVT) of the prefixed save area (PSA).

008
> The FRR recovery routine for RTM's FRR processing could not recover from an error in RTM. The system invoked the super FRR. The super FRR scheduled RTM recovery as the retry attempt for the original error. This RTM recovery tried to end the current address space but encountered a second error.

00C
> RTM found an error while processing the FRR stack. RTM processing is not covered by an FRR recovery routine. Therefore, RTM attempted to end the address space but encountered a second error.

010
> The system entered the program check FLIH recursively for segment exceptions, and detected a dynamic address translation (DAT) error in an address space. The system invoked RTM's FRR processing to end the address space experiencing the DAT error, but RTM's FRR processing encountered a second error. This is an unrecoverable software error.

014
> RTM detected a bad PSATOLD value while running in task mode. RTM could not end the failing address space to resolve the problem.

System action

The system issues message IEA020W and enters the X'084' wait state.

Operator response

If requested by the system programmer, obtain a stand-alone dump. ReIPL the system.

System programmer response

Perform the following actions based on the reason code:

- For reason code X'004', do the following:
  1. Look at message IEA020W for an indication of which CPU had damaged stack pointers and which pointers were damaged.
  2. Search problem reporting databases for a fix for the problem. Include in the search argument:
     - Name of the overlaid control block field: FLDS/cccccccc
     - Wait state code: WS/D0084
     - Reason code: PRCS/hhhhhhhh
     - Module name: RIDS/cccccccc

     If no fix exists, contact the IBM Support Center.
- For reason codes X'008', X'00C', X'010', or X'014', RTM experienced recursive errors while processing an error. This problem could be due to overlays of critical fields in control blocks such as:
  - PSA
  - Address space control block (ASCB)
  - Task control block (TCB)
  - Request block (RB)

- Extended status block (XSB)

Do the following:

1. Analyze the dump and logrec error records for recursive errors. Identify the RTM module that experienced the recursive errors. Determine the offset into the module at which the recursive errors occurred.
2. Search problem reporting databases for a fix for the problem. Include in the search argument:

   - Name of the overlaid control block field: FLDS/cccccccc
   - Wait state code: WS/D0084
   - Reason code: PRCS/hhhhhhhh
   - Module name: RIDS/cccccccc

   If no fix exists, contact the IBM Support Center.

Source

Recovery termination manager (RTM)

085

Explanation

During this warm start IPL, the auxiliary storage manager (ASM) forced a switch to a cold start. ASM determined that one of the following is true:

- The pageable link pack area (PLPA) page data set is behind a cached device. The cache must be reset.
- PLPA has overflowed to the COMMON page data set and the common data set is on a cached device. Warm or quick start has failed. The cache must be reset.

System action

The system ends processing and enters the wait state.

Operator response

To reset the cache, reIPL the system with the CLPA option.

Source

Auxiliary storage manager (ASM)

087

Explanation

At the end of removing a system from a sysplex, the system enters this wait state.

The right-most four bytes of the program status word (PSW) have the following format:

```
x0rrrwww
```

x
　　Irrelevant information

rrr
　　Hexadecimal reason code

www
　　Wait state code

The reason code (*rrr*) is one of the following values:

Code

Explanation

01

Communications task (COMMTASK) initialization could not establish a member of the SYSMCS group because the maximum number of members per cross-system coupling facility (XCF) group was reached.

02

A recursive abend occurred while processing the console services sysplex update task.

03

A recursive abend occurred while processing the console services cross-system update subtask.

05

A recursive abend occurred while processing the console services sysplex send data processor.

06

A recursive abend occurred while processing the console services sysplex receive data processor.

07

A recursive abend occurred while processing the console services cross-system service group exit.

08

A recursive abend occurred while processing the console services cross-system service message exit.

09

A recursive abend occurred while processing the console services sysplex command processor.

0A

A recursive abend occurred when the system processed a message.

0B

A recursive abend occurred while processing the console services sysplex data queuer.

0C

A recursive abend occurred while processing the console services sysplex cleanup task.

0D

Another system was unable to accept the system into the sysplex because of a storage shortage.

0E

A recursive abend occurred while the system was processing the sysplex reply ID task.

0F

A recursive abend occurred while processing the console services sysplex recovery module.

11

The system could not join the XCF SYSMCS2 group.

12

The system could not create control members in the XCF SYSMCS2 group.

13

The system could not initialize reply ID processing.

14

Message cache could not be created.

15

A recursive abend occurred while processing the console services general-purpose task.

16

Console definition initialization had an unrecoverable error.

18

Data space could not be created.

19

A bad return code was received from ALESERV ADD for a required data space.

1D

Both CNZ_MainDsm and CNZ_AuxDsm were damaged.

22

A basic test of the CLT failed.

27

A basic test of the CDUH failed.

30

Console initialization could not establish appropriate serialization. Message CNZ0006W has been issued with additional codes.

31

The sysplex is in shared mode which this system cannot join. Message CNZ0006W has been issued.

34

Essential console services function failed.

35

The IPLing system does not support distributed mode.

36

The IPLing system could not obtain console data from an existing system in the sysplex. Message CNZ0008I identifies the existing system.

37 - 43

During initialization, a module failed and could not be reattached because module IEAVN701 had not finished its initialization.

System action

The system enters wait state X'087'.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Console services

088

Explanation

During initial program load (IPL), the system encountered an error in processing the LOAD*xx* or NUCLST*xx* members of SYS1.PARMLIB.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrryywww
```

where:

x

Irrelevant information

rr

A hexadecimal reason code indicating the reason for the failure

yy

Irrelevant information

www

The wait state code

The reason code (*rr*) is one of the following:

00

IPL could not find the LOAD*xx* member in SYSn.IPLPARM on the IODF volume or SYS1.PARMLIB on the IODF volume or on SYSRES. Either the system programmer did not create the member or the operator typed the wrong value for the LOAD parameter.

Note: Make sure the parmlib is a PDS and not a PDSE.

02

The system could not find the NUCLST*xx* member of SYSn.IPLPARM or SYS1.PARMLIB that was specified on the NUCLST statement in the LOAD*xx* SYS1.PARMLIB member.

04

The SYSn.IPLPARM or SYS1.PARMLIB directory entry for the LOAD*xx* member contains incorrect information. IPL cannot read the LOAD*xx* member.

06

The SYSn.IPLPARM or SYS1.PARMLIB directory entry for the NUCLST*xx* member contains incorrect information, and IPL cannot read it.

08

While reading the LOAD*xx* member, IPL reached the end-of-file where there should have been more data. The contents of the LOAD*xx* member are incorrect.

0A

While reading the NUCLST*xx* member, IPL reached the end-of-file where there should have been more data. The contents of the NUCLST*xx* member are incorrect.

0C

The member of SYS1.NUCLEUS selected was excluded by a NUCLST*xx* EXCLUDE statement. There was no alternate IEANUC0x member of SYS1.NUCLEUS included.

0E

Could not locate nucleus extension IEANUC1*x* or IEANUC2*x*.

10

z/Architecture mode was requested on the ARCHLVL parameter in the LOAD*xx* parmlib member, but the processor does not support z/Architecture mode.

14

You attempted to IPL a level of z/OS that requires z/Architecture, but the machine does not support z/Architecture.

80

An MVSCP statement was found in the LOAD*xx* member that was used to IPL.

System action

The system enters a non-restartable wait state.

Operator response

For reason codes X'04', X'08' or X'80', notify the system programmer.

For reason code X'00', check the value specified in the LOAD parameter. If it is incorrect, use the correct value and reIPL. If it is correct, notify the system programmer that the LOAD*xx* member is missing from SYS*n*.IPLPARM on the IODF volume or SYS1.PARMLIB on the IODF volume or on SYSRES.

System programmer response

Do one of the following:

- For reason code X'00', create the LOAD*xx* member of SYSn.IPLPARM on the IODF volume or SYS1.PARMLIB on the IODF volume or on SYSRES. Tell the operator what value to use for the LOAD parameter.

- For reason code X'02' make sure that the NUCLST statement was specified correctly in the LOAD*xx* member of SYSn.IPLPARM or SYS1.PARMLIB. Make sure also that the NUCLST*xx* parmlib member resides in the same data set as the LOAD*xx* parmlib member.
- For reason code X'06' or X'0A', delete the NUCLST*xx* member of SYS1.PARMLIB. Then either recreate the NUCLST*xx* member, or create a different one. Tell the operator what value to use for the LOAD parameter.
- For reason code X'04' and X'08' delete the LOAD*xx* member. Then either recreate the LOAD*xx* member, or create a different one. Tell the operator what value to use for the LOAD parameter.
- For reason code X'0C', correct the NUCLST*xx* member so that it does not exclude IEANUC0*x*.
- For reason code X'0E', if IPLing with ARCHLVL 1 specified in LOAD*xx*, create nucleus extension IEANUC1*x*, or if by IPLing with ARCHLVL 2, create nucleus extension IEANUC2*x*.
- For reason code X'10', do not specify ARCHLVL 2 in LOAD*xx*.
- For reason code X'14', IPL this z/OS release only on a machine that supports z/Architecture.
- For reason code X'80', remove the MVSCP statement from the LOAD*xx* member used to IPL. An IODF must be used to specify I/O configuration data. See *z/OS HCD User's Guide* for information about IODF.

Source

Initial program load (IPL)

089

Explanation

During NIP processing, the system found an error with a unit control block (UCB) while trying to create the eligible devices table (EDT).

System action

The system enters a non-restartable wait state.

System programmer response

Determine if the problem is a device error. If not, take a stand-alone dump of the system. Try to IPL with an IODF that is known to be good.

If the source of the problem cannot be determined, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM support center. Provide the dump.

Source

Allocation/unallocation

08A

Explanation

An error occurred while requesting a wait state with the WSPARM option on the write to operator (WTO) macro.

The right-most four bytes of the program status word (PSW) have the following format:

```
x0rrrwww
```

where:

x
   Irrelevant information.
rrrr
   A hexadecimal reason code indicating the reason for the failure.

www
> The wait state code.

The reason code (*rrr*) is one of the following:

Code
> **Meaning**

001
> Two callers, running on the same processor, tried to load the same wait state.

002
> The system abnormally ended the wait state processing.

System action

The system issues message IEA548W. The system enters wait state X'08A'.

Operator response

If the system programmer asks for a dump, request a stand-alone dump. ReIPL the system.

System programmer response

Depending on the reason code, do one of the following:

Code
> **Action**

001
> See the system programmer response for the requesting wait state.

002
> See the system programmer response for the abend displayed in message IEA548W.

Source

Console services

08C

Explanation

An error occurred during workload manager (WLM) processing due to recurring abends in the WLM address space. The accompanying hexadecimal reason code identifies an internal, unrecoverable WLM error.

Code
> **Description**

001
> Wait state/reason code for nonspecific WLM failure. This WaitState code is by the WLM Job Step Tasks Resource Manager Routine as well as the WLM Address Space Resource Manager Routine should IWMINTSK or IWMINJST terminate for any reason
>
> Detecting EP (?IWMXLWT issuer): IWMLTLWT

002
> Wait state/reason code for WLM initialization (IWMLTATT) IWMLTATT was invoked to attach a WLM subtask but the epid is not a known WLM subtask routine
>
> Detecting EP (?IWMXLWT issuer): IWMLTATT

003
> Wait state/reason code for WLM Sysplex Mgmt (IWMSMTSK) SubTask IWMSMTSK failed
>
> Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

004

Wait state/reason code for WLM Data Mgmt (IWMDMTSK) SubTask IWMDMTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

005

Wait state/reason code for WLM Policy Mgmt (IWMPMTSK) SubTask IWMPMTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

006

Wait state/reason code for WLM Performance Mgmt (IMMDCTSK) SubTask IWMDCTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

007

Wait state/reason code for WLM Linkage/Tasking (IWMLTETX) Restart of a WLM subtask failed. Failing TCB@ not found on FTDE queue.

Detecting EP (?IWMXLWT issuer): IWMLTETX

008

Wait state/reason code for WLM Work Mgmt (IWMWMTSK) SubTask IWMWMTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

009

Wait state/reason code for WLM Workload reporting (IWMWRTSK) SubTask IWMWRTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

00A

No policy available

Detecting EP (?IWMXLWT issuer): IWMPMxxx

00B

Wait state/reason code for WLM (IWMLTLWT) WLM address space termination occurred.

Note: Unlikely WS; see the following task level RESMGR wait states.

Detecting EP (?IWMXLWT issuer): None

00C

Wait state/reason code for WLM (IWMLTLWT) WLM Job Step Task IWMINTSK abnormally terminated, and is non-restartable, therefore degrading WLM/SRM and system function. IPL required.

Detecting EP (?IWMXLWT issuer): None

00D

Wait state/reason code for WLM (IWMLTLWT) WLM Job Step Task IWMINJST abnormally terminated, is non-restartable therefore degrading WLM/SRM and system ability, IPL required.

Detecting EP (?IWMXLWT issuer): None

00F

Wait state/reason code for WLM Environment Manager (IWMEMTSK) SubTask IWMEMTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

010

Wait state/reason code for WLM Device Clustering (IWMDVTSK) SubTask IWMDVTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

011

Wait state/reason code for WLM Workload Balancing (IWMWBTSK) SubTask IWMWBTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

012

Wait state/reason code for WLM Operations (IWMOPTSK) SubTask IWMOPTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

013

Wait state/reason code for WLM Scheduling Environment (IWMSETSK) SubTask IWMSETSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

014

Wait state/reason code for WLM Coupling Facility Manager (IWMCFTSK) SubTask IWMCFTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

015

Wait state/reason code for WLM LPAR Manager (IWMLMTSK) SubTask IWMLMTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

016

Wait state/reason code for WLM CHPID Manager (IWMCMTSK) SubTask IWMCMTSK failed

Detecting EP (?IWMXLWT issuer): IWMLTETX, IWMLTATT

System action

The system places the processor into a wait state.

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM support center. Provide the hardcopy log and the dump.

Source

Workload manager (WLM)

08E

Explanation

A recursive, unrecoverable error occurred during the processing of the NEWIPS SYSEVENT.

System action

The system places the processor into a wait state.

Operator response

Notify the system programmer. ReIPL the system. After reIPL, avoid issuing any of the following commands, if possible, because the wait state occurred during the processing of one of them:

- Issuing the V WLM,POLICY=*xxxxxxx* command
- Activating a service policy from the WLM ISPF application

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM support center. Provide the hardcopy log and the dump.

Source

Workload manager (WLM)

08F

Explanation

The system attempted to rebuild the work unit queues, but was unable to do so.

System action

The system enters a non-restartable wait state, and issues message IEA460W.

Operator response

If the system programmer asks for a dump, request a stand-alone dump. ReIPL the system.

System programmer response

If the source of the problem cannot be determined, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM support center. Provide the dump.

Source

Supervisor Control

09x

Explanation

The system put a processor into wait state X'09x' because the following occurred:

1. The processor was in a spin loop, waiting for an event to occur on another processor. The spin loop exceeded the time normally required for the event to occur.
2. The system was unable to issue the excessive spin notification message, IEE331A.

The third digit (*x*) of the wait state code identifies the event for which the processor waited, as follows:

x

    Event

1

    RISGNL response

2

    Lock release

4

    Restart resource

5

    Address space to QUIESCE

6

    Central processor (CPU) in stopped state

7

    Intersect release

9
　　Operator intervening state

E
　　Successful bind break release

The right-most four bytes of the program status word (PSW) have the following format:

```
0aaa009x
```

where:

aaa
　　The logical address of the processor causing the spin loop.

x
　　The third digit of the wait state code (*x* in 09*x*).

System action

The processor in the spin loop enters restartable wait state X'09*x*'. The system may issue a message that describes the problem.

Operator response

Before restarting the processor, store an action code in storage location X'30E' of the processor. The action code indicates the recovery action that the processor will take in an attempt to resolve the excessive spin-loop condition. The action codes, in order of severity, and the related recovery actions are the following:

Code
　　Recovery Action Performed by System

None
　　SPIN - Continue in the spin loop, waiting for the expected event to occur. To start the SPIN action, restart the processor in the X'09*x*' wait state.

CC
　　ABEND - Abnormally end the current unit of work on the processor on which the expected event did not occur. In this case, the system does allow the recovery routines to retry.

BB
　　TERM - Abnormally end the current unit of work on the processor on which the expected event did not occur. In this case, the system does not allow recovery routines to retry.

AA
　　ACR - Start alternate recovery (ACR) for the processor on which the expected event did not occur. This will take the processor offline and initiate an abnormal end (with retry allowed) for the current unit of work on that processor.

Depending on the type of recovery action, do the following to start the recovery action:

Action
　　Procedure

SPIN
　　Restart the processor in the X'09*x*' wait state.

ABEND

TERM

　　1. Display location X'30E' of the processor in the X'09*x*' wait state.
　　2. Store the action code (X'CC' or X'BB') at location X'30E'.
　　3. Restart the processor in the X'09*x*' wait state. The system ignores the restart reason.

ACR

1. Stop all the processors in this system.

2. Display location X'30E' of the processor in the X'09*x*' wait state.

3. Store action code X'AA' at location X'30E'.

4. Identify the processor that is causing the spin loop (the failing processor) from the sixth byte of the X'09*x*' wait state PSW. The characters 4*x* will appear in this byte, where *x* is the identifier for the failing processor.

5. Start all processors except the failing processor and the processor in the X'09*x*' wait state.

6. Restart the processor in the X'09*x*' wait state (the system ignores the restart reason).

7. After ACR processing is complete, enter a CONFIG CPU(*x*),ONLINE command at a console with master authority, where *x* is the identifier for the failing processor.

If wait state X'09*x*' occurs again within approximately one spin-loop interval, respond with recovery action of the next greatest severity. Notify service personnel.

Source

Loadwait/Restart

0A1

Explanation

All system-initiated recovery actions were exhausted without resolving an excessive spin loop.

System action

The system issues message IEE183W before loading the wait state. Message IEE178I might have appeared at least once prior to the wait state, and may provide additional information.

Operator response

Notify the system programmer. Obtain a stand-alone dump. ReIPL the system.

System programmer response

Collect all printed output and output data sets related to the problem. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Loadwait/Restart

0A2

Explanation

Cross-system coupling facility (XCF) or cross-system extended services encountered a non-recoverable error and stopped the system. The system also issues this wait state in response to an operator request to stop the system. See *z/OS MVS Diagnosis: Reference* for information on diagnosing sysplex problems.

The right-most four bytes of the program status word (PSW) have the following format:

```
x0rrrwww
```

where:

x

Irrelevant information.

rrr

A hexadecimal reason code indicating the reason for the failure.

www

The wait state code.

The reason code (*rrr*) is one of the following:

004

The operator entered the VARY XCF,*sysname*,OFFLINE command to remove the system from the sysplex.

008

XCF lost signalling path connectivity between systems.

00C

XCF will imply LOSS_OF_ETR_WAIT.

010

XCF lost access to all couple data sets.

014

During IPL, XCF removed a system from the sysplex.

020

XCF removed the system from the sysplex.

One of the following occurred:

- An I/O error was encountered by this system on either the primary or the alternate couple data set after this system joined the sysplex but before it could complete initialization of the couple data sets.
- An I/O error was encountered by another system in the sysplex on either the primary or the alternate couple data set after this system joined the sysplex but before it could complete initialization of the couple data sets
- The operator on another system in the sysplex initiated a data set transition by making a new alternate available via the SETXCF COUPLE,ACOUPLE command or by replacing the primary couple data set with the alternate couple data set via the SETXCF COUPLE,PSWITCH command. This action was taken after the time that this system joined the sysplex but before it could complete initialization of the couple data sets.
- The operator replied DOWN to message IXC402D or IXC102A to specify that XCF was to remove the system from the sysplex before the target system has been reset.

030

An ETR failure on another system has occurred. The operator has restarted that system. All other systems are stopped. Another system is removing this system from the sysplex because of an external time reference (ETR) failure. When there is an ETR failure, only one system can remain in the sysplex. The remaining system removes all others from the sysplex.

078

The set of sysplex couple data sets in use by the sysplex was changed while it was marking itself active.

07C

System checks indicate that there are no allowable configurations (XCF-local, monoplex, and sysplex) for this system based on current settings.

08C

XCF will not accept this system into the sysplex because a couple data set inconsistency was detected.

09C

The CFRM couple data set has been lost.

091

Internal XCF error

104

I/O has been prevented as a result of a system being fenced.

108

The system was partitioned out of the sysplex as specified by XCFPOL*xx*.

10C

The system was found to be in a status update missing condition and was partitioned out of the sysplex.

110

The system experienced a signaling connectivity failure and was partitioned out of the sysplex as specified by the Sysplex Failure Management policy.

114

This is a non-restartable wait state due to the loss of the ETR link or the ETR itself.

11C

Not enough storage to define subchannel notification vectors.

14C

The wait state occurred because one of the names being declared by the operating system was already declared via logical partition definition at the hardware console, and the previously-declared name does not match the name being declared by the operating system.

158

The system has lost time synchronization with the Server Time Protocol (STP) time source.

15A

The system has been partitioned out of the sysplex because it has lost time synchronization with the other systems in the sysplex.

160

A member of XCF group SYSGRS, SYSMCS, or SYSXCF appeared to be causing signaling sympathy sickness. The system was removed from the sysplex to terminate the member.

164

XES common storage control block CADS initialization failed.

17C

Operator requested partitioning with the VARY XCF command and REIPL AutoIPL option specified.

180

Operator requested partitioning with the VARY XCF command and SADMP AutoIPL option specified.

184

Operator requested partitioning with the VARY XCF command and SADMP and REIPL AutoIPL options specified.

188

A coupling facility structure connector failed to provide a required response within the time specified by the CFSTRHANGTIME interval defined in the SFM policy (over and above the time required to determine that the response is overdue, approximately 2 minutes). The system was removed from the sysplex to terminate the connector.

18C

A coupling facility (CF) structure connector encountered an unexpected internal error during the processing of a CF request, structure-related event, or other connection-related system processing. The system was removed from the sysplex to terminate the connector in accordance with the IXLCONN TERMLEVEL specification of the connector.

190

Terminating an XCF member due to an IXCTERM request that requires a system to be removed from the sysplex. This can occur for the following reasons:

- The target member is running on a system that is in the early phases of system initialization. During this time the system can not terminate the member without terminating the system.

- The target member specified TERMLEVEL=SYSTEM when it joined its group. The system will terminate the system on which the target member resides.

XCF issues message IXC615I to identify the member that was the target of the IXCTERM request. The message also identifies the system from which the IXCTERM request was issued, and if possible, the XCF group member that initiated the request.

194

The system was removed from the sysplex to alleviate a critical member impairment condition that could have been impacting other systems in the sysplex. Messages IXC633I, IXC636I and IXC615I may have been issued by the removed system to indicate which impaired XCF members were causing the critical member impairment condition. See *z/OS MVS System Messages, Vol 10 (IXC-IZP)*

19C

The system was removed from the sysplex because no logical processors for the system image were detected as operating. All CPs were in the not-operating state.

System action

The system enters a non-restartable wait state and issues message IXC220W or IXL004W.

Operator response

The following reason codes are possible hardware errors:

- 010
- 08C
- 110
- 114

Look in the LOGREC data set for hardware errors. Correct the hardware configuration. If the problem persists, contact hardware support.

The following reason codes represent errors internal to the XCF component. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

018	024	028	040	050
054	058	05C	060	064
068	06A	06C	070	074
080	084	088	090	091
092	094	098	118	120
130	134	140	144	148
150	154			

For other reason codes, see the operator response for any preceding messages.

If the system programmer requests it, obtain a stand-alone dump.

System programmer response

See the system programmer response for message IXC220W.

Format the stand-alone dump with the following IPCS subcommands:

- XESDATA, including all the reports and the summary, detail, and exception levels.
- COUPLE, including all the reports and the summary, detail, and exception levels.
- CTRACE COMP(SYSXES) SUB((GLOBAL))
- CTRACE COMP(SYSXES) SUB((*individual-connections*))

  You can determine the individual connections by issuing the CTRACE QUERY command to see the sub name traces associated with SYSXES.

- CTRACE COMP(SYSXCF) to obtain XCF trace data.

Issue the D XCF,COUPLE command from a system currently active in the sysplex. Check the connectivity to the volumes that contain the couple data sets. See *z/OS MVS Setting Up a Sysplex* for additional information about couple data set placement for avoidance of a single point of failure in couple data set availability.

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the formatted stand-alone dump. Include all the reports and the summary, detail, and exception levels for each report.

Source

Cross-system coupling facility (XCF)

0A3

Explanation

A system could not successfully participate in a global resource serialization complex. In order for a system to join a sysplex, it must also be a member of the global resource serialization complex, but the system cannot join the global resource serialization complex for one of the following reasons:

- The global resource serialization system parameters specified are incorrect.
- Global resource serialization encountered an unrecoverable error.

The right-most four bytes of the program status word (PSW) have the following format:

```
x0rrrwww
```

where:

x
    Irrelevant information.

rrr
    A hexadecimal reason code indicating the reason for the failure.

www
    The wait state code.

The reason code (*rrr*) is one of the following:

004
    The system IPLed into a sysplex with GRS=JOIN or TRYJOIN parameters, but global resource serialization was unable to join the global resource serialization complex. Systems in a sysplex must be in the same global resource serialization ring. The wait state is accompanied by message ISG167W.

008
    The system IPLed into the sysplex with GRS=JOIN, START, TRYJOIN or STAR system parameter, and when global resource serialization attempted to use the cross-system coupling facility (XCF) during initialization, the service failed with an unexpected error.

    When this wait state occurs, message ISG152W is issued to the console. This message identifies the XCF service and the return and reason codes.

00C
    Global resource serialization found an error in parmlib member GRSCNF*xx*. The wait state is accompanied by message ISG043I or ISG044I.

010
    Global resource serialization found an error in parmlib member GRSRNL*xx*. The wait state is accompanied by messages ISG062I and ISG063I.

014
    Global resource serialization could not establish the event notification (ENF) exits. The wait state is accompanied by message ISG021I.

018

Global resource serialization found an error in parmlib member GRSCNF*xx*. The parmlib member specifies a device that is already in use. The wait state is accompanied by message ISG045I.

01C

The system IPLed with GRS=NONE and PLEXCFG=MULTISYSTEM. These two parameters are mutually exclusive. The wait state is accompanied by message ISG159W.

020

Global resource serialization tried to remove this system from the complex, but the attempt failed. The wait state is accompanied by message ISG152W.

026

Global resource serialization detected an unrecoverable error in an XCF exit.

028

Global resource serialization detected an internal error.

02C

Global resource serialization detected an unrecoverable failure while running in a sysplex. The wait state is accompanied by message ISG168W.

030

Global resource serialization detected an internal error.

034

The system IPLed with GRS=JOIN or TRYJOIN, but global resource serialization could not invoke the XCF Set User State service. The wait state is accompanied by message ISG152W.

038

Global resource serialization could not find the systems exclusion RNL exit (ISGGSEEA) while trying to process a GRSRNL=EXCLUDE system parameter.

03C

Global resource serialization could not find the systems inclusion RNL exit (ISGGSIEA) while trying to process a GRSRNL=EXCLUDE system parameter.

040

The system could not send a message via the XCF message out service.

044

The global resource serialization complex is unable to restart after a ring disruption. No active global resource serialization ring exists, and this system has repetitively failed in its attempts to initiate one. The wait state may be accompanied by messages ISG011I, ISG015I, ISG021I, ISG025I, ISG173I, ISG176I, or ISG180E.

04C

The operator entered a VARY GRS,PURGE command for this system, removing it from the global resource serialization complex.

050

This system is unable to enter the global resource serialization ring. A current member of the global resource serialization complex belongs to a different multisystem sysplex than the rest of the members of the global resource serialization complex. Global resource serialization only supports one multisystem sysplex per global resource serialization complex. The wait state is accompanied by message ISG182W.

054

This system is unable to reactivate a global resource serialization ring from the quiesced state. It became quiesced because of a ring disruption, system failure, or an operator-issued VARY GRS,QUIESCE command. No active global resource serialization system exists. This system had the most current global request information of all systems in the complex.

058

This system encountered an unrecoverable software error in recovery for global resource serialization ring processing.

05C

This system encountered an unrecoverable software error in recovery for global resource serialization internal or external command processing.

060

Global resource serialization tried to invoke the XCF Query service to gather information about the sysplex, but the attempt failed. The wait state is accompanied by message ISG152W.

064

This system's inclusion resource name list (GRS RNL parmlib member) is not exactly the same as the one the global resource serialization complex is currently using. All RNLs must be the same within the GRS complex. Note that RNLs that may have the same results are not considered to be exact matches. They should be the exact same RNL values in the exact same order. If they appear to be the same, then obtain a stand-alone dump; in a sysplex, a SDUMP will be taken on the assisting system. This dump should also be provided to the IBM Support Center.

068

This system's exclusion resource name list (GRS RNL parmlib member) is not exactly the same as the one the global resource serialization complex is currently using. All RNLs must be the same within the GRS complex. Note that RNLs that may have the same results are not considered to be exact matches. They should be the exact same RNL values in the exact same order. If they appear to be the same, then obtain a stand-alone dump; in a sysplex, a SDUMP will be taken on the assisting system. This dump should also be provided to the IBM Support Center.

06C

This system's RESERVE conversion RNL (GRS RNL parmlib member) is not exactly the same as the one the global resource serialization complex is using. All RNLs must be the same within the GRS complex. Note that RNLs that may have the same results are not considered to be exact matches. They should be the exact same RNL values in the exact same order. If they appear to be the same, then obtain a stand-alone dump; in a sysplex, a SDUMP will be taken on the assisting system. This dump should also be provided to the IBM Support Center.

070

This system encountered an unrecoverable software error during global resource serialization queue merge processing. Obtain a stand-alone dump; in a sysplex, a SDUMP will be taken on the 'assisting system'. This dump should also be provided to the IBM Support Center.

07C

Global resource serialization address initialization failed. A system service called to initialize one of its modules was not successful.

When this wait state occurs, message ISG305W is issued to the console. This message identifies the service, the module and the non-zero return code passed back from the service.

080

Global resource serialization initialization failed. A critical task terminated.

When this wait state occurs, message ISG306W is issued to the console. An error code in this message identifies the particular task that failed.

084

Global resource serialization failed. The type of complex the system initialized is not compatible with the complex currently active in the sysplex. A system IPLed with GRS=START, JOIN or TRYJOIN, cannot join an existing global resource serialization star complex. Similarly, when a system is IPLed with GRS=STAR, it cannot join an existing global resource serialization ring complex.

If the system detected the error condition itself and issued the wait state, message ISG307W is issued.

If the system partitioned out of the complex and was put into a wait state as a result of action taken by an already active system that detected the error, then message ISG307W is not issued.

088

Global resource serialization invoked a system service which did not successfully complete. Message ISG308W is issued, identifying the system service along with the error return and reason code.

08A

During system initialization, global resource serialization was unable to access the global resource serialization record on the sysplex couple dataset.

When this wait state occurs, message ISG342W is issued to the console. This message identifies the reason the record could not be accessed.

08E

During the initialization, GRS GRQA was allocated too high by the IARV64 service to guarantee IXLLOCK processing integrity. The wait state is accompanied by message ISG373W. See message ISG373W for additional diagnostic data that should be provided to the IBM Support Center.

090

Global resource serialization processing failed due to the unexpected termination on one of its tasks that is critical to global resource processing.

When this wait state occurs, message ISG315W is issued to the console. An error code in this message identifies the task that failed.

094

During global resource serialization processing, one of its critical task terminated. Global resource serialization is unable to reinstate the task because the ATTACH for the task failed with an error return code.

When this wait state occurs, message ISG316W is issued to the console. This message identifies the module the could not be ATTACHed and the error return code from ATTACH.

098

During recovery, a primary global resource serialization control block was damaged. Global resource serialization is unable to recover from this error.

When this wait state occurs, message ISG317W is issued to the console.

09C

During GRS Star initialization, the system was unable to access the GRS lock structure (ISGLOCK).

This wait state might occur if CFRM is not available for the first system trying to come up in STAR mode, and CFRMPOL is not specified in the COUPLE*xx* parmlib member.

When this wait state occurs, message ISG342W is issued to the console. The message describes what kind of access to the structure failed.

0A0

During GRS processing, an unexpected error occurred in one of the GRS XCF exits. GRS is unable to recover from the failure. (Message ISG310W is issued to the console.)

0AC

The top level global resource serialization task from which all other task are anchored unexpectedly received control at a point in its processing that should not occur and is unable to recover.

When this wait state occurs, message ISG329W is issued to the console.

0BC

During initialization of a star complex, global resource serialization was not able to allocate the global resource serialization lock structure. The reason can be one of the following:

1. Connection to the structure failed with IXLCONN RC=0C and RSN=0C08 or RSN=0C27.
2. Storage on the coupling facility is insufficient or the policy size is too small for the minimum structure size needed.

When this wait state occurs, message ISG338W is issued to the console. This message identifies the name of the structure causing the failure.

0C0

An unexpected error occurred in one of the Global resource serialization lock structure exits. Global resource serialization is unable to recover from this error.

When this wait state occurs, message ISG310W is issued to the console. This message identifies the name of the global resource serialization lock structure that failed.

0C4

During a rebuild of the global resource serialization lock structure detected damage to the global request queue on the system. Global resource serialization is not able to continue using the original lock structure due to a structure failure or loss of connectivity.

Additionally, this code is issued for a failure when the lock structure rebuild was issued on behalf of a GRSRNL=EXCLUDE to standard RNLs migration. The original structure does not contain an accurate reflection of all globally managed resources and therefore cannot be used.

When this wait state occurs, message ISG309W is issued to the console.

0C8

During a rebuild of the global resource serialization lock structure, global resource serialization received a request to stop the rebuild. Global resource serialization can not resume processing with the original global resource serialization lock structure, due to a structure failure or loss of connectivity.

When this wait state occurs, message ISG309W is issued to the console.

0CC

During a rebuild of the global resource serialization lock structure, sysplex failure management (SFM) determined that this system should not disconnect from the structure. Global resource serialization partitioned the system from the sysplex to insure data integrity is maintained.

When this wait state occurs, message ISG309W is issued to the console.

0D0

During a rebuild of the global resource serialization lock structure, sysplex failure management (SFM) determined that the original lock structure has better connectivity than the new structure. Global resource serialization could not resume processing with the original lock structure due to a structure failure or a loss of connectivity condition. Global resource serialization partitions the system from the sysplex to insure data integrity is maintained.

Additionally, this code is issued for a failure when the lock structure rebuild was issued on behalf of a GRSRNL=EXCLUDE to standard RNLs migration. The original structure does not contain an accurate reflection of all globally managed resources and therefore cannot be used.

When this wait state occurs, message ISG309W is issued to the console.

0D4

During a rebuild of the global resource serialization lock structure, global resource serialization was unable to connect to the new structure. Global resource serialization partitions the system from the sysplex to insure data integrity is maintained.

When this wait state occurs, message ISG309W is issued to the console.

0D8

During a rebuild of the global resource serialization lock structure, global resource serialization received an unrecoverable response from a XES service. Global resource serialization is not able to continue processing.

When this wait state occurs, message ISG308W or ISG309W is issued to the console.

0DC

During a rebuild of the global resource serialization lock structure, global resource serialization received an unexpected event, violating the rebuild protocol. Global resource serialization is not able to continue.

When this wait state occurs, message ISG309W is issued to the console.

0E0

During a rebuild of the global resource serialization lock structure, global resource serialization stopped for an unknown reason. Global resource serialization is not able to continue processing.

When this wait state occurs, message ISG309W is issued to the console.

0E4

During migration from a global resource serialization ring to a star complex, a structure error occurred. Global resource serialization is not able to continue processing.

When this wait state occurs, message ISG309W is issued to the console.

0E8

During migration from a global resource serialization ring to a star complex, global resource serialization queue damage was detected. Global resource serialization is not able to continue processing.

When this wait state occurs, message ISG332I is issued to the console.

0EA

The system attempted to IPL while global resource serialization was migrating from a global resource serialization ring to a star complex. The system cannot join the complex during this processing.

When this wait state occurs, message ISG301W is issued to the console.

0EC

During migration from a global resource serialization ring to a star complex, an unexpected error occurred.

When this wait state occurs, message ISG304W is issued to the console.

0EE

During migration from GRSRNL=EXCLUDE to standard RNLs, an unexpected error occurred.

When this wait state occurs, message ISG373W is issued to the console.

System action

The system enters a non-restartable wait state. For reason codes X'026', X'058', and X'05C', the system writes a logrec error record and issues an SVC dump.

For reason codes X'064' through X'070', the system issues message ISG015I. The system may also issue message ISG183W.

System programmer response

Do one of the following:

- To IPL a system without global resource serialization, IPL with COUPLE=00,GRS=NONE. The system will IPL in XCF-local mode. Do not start any jobs that access shared sysplex resources.
- To IPL a system into the sysplex and the global resource serialization complex,
  - If you want to IPL a global resource serialization ring complex, correct the GRS= specification (in IEASYS*xx* parmlib member or in response to message IEA101A) to be one of the following:
    - START
    - JOIN
    - TRYJOIN
  - If you want to IPL a global resource serialization star complex, check the following:
    1. The global resource serialization record was formatted on the sysplex couple data set via the IXCL1DSU formatting utility.
    2. The sysplex couple data set with the global resource serialization record is the current primary sysplex couple data set.
- To resolve the problem preventing the system from joining global resource serialization, do the following:
- See the explanations for accompanying messages for information about the problem.
- Obtain the SVC dump, if one was issued, and format it with the IPCS VERBEXIT MTRACE command to find the last message global resource serialization issued. See the explanation for any message found.
- For reason codes 64, 68, 6C, and 70, obtain a stand-alone dump; in a sysplex, a SDUMP will be taken on the 'assisting system'. This dump should also be provided to the IBM Support Center.

- If you cannot find the problem, or the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec error record and the SVC dump if they were issued.

Source

Global resource serialization

0A4

Explanation

Two or more processors could not complete external time reference (ETR) synchronization check processing. ETR is the generic name for the IBM Sysplex Timer (9037) or equivalent.

System action

The system enters wait state X'0A4'. This wait state is accompanied by message IEA503W.

Operator response

Retain the logrec error records. Contact hardware support.

Source

Timer supervision

0A5

Explanation

The system detected a logic error in one of the hardware configuration definition (HCD) modules.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrrr0www
```

where:

x
   Irrelevant information.

rrr
   A hexadecimal reason code indicating the reason for the failure.

www
   The wait state code.

The reason code (*rrr*) is one of the following:

070
   Two UIMs made multiple attempts to build a GIT. The first UIM is flagged as in error.

071
   Two UIMs specified the same generic preference value. The last UIM is flagged as in error.

072
   A UIM defines a generic device type with a compatible list that contains duplicate entries.

073
   Two UIMs made multiple attempts to build a CIT for the indicated control unit. The first UIM is flagged as in error.

074
   A UIM specified an non-valid device number in DFP.

- Message reason code 1: The device number in the DFP is greater than the maximum allowed device number.
- Message reason code 2: A DFT exists already for the device number specified in the DFP.

075

A UIM specified either in the DFP or UIP a generic name for which the GIT could not be found. The indicated UIM is flagged as in error.

076

The indicated UIM specified more than 5 MLT names or specified no MLT names. The indicated UIM is flagged as in error.

077

The indicated UIM specified more than the 256 bytes of device-dependent information. The indicated UIM is flagged as in error.

078

The indicated UIM specified an non-valid UCB segment type for an ACON position pointer. The indicated UIM is flagged as in error.

079

The indicated UIM specified an non-valid UCB segment type for an ACON relocation pointer. The indicated UIM is flagged as in error.

080

The indicated UIM specified an offset for an ACON position pointer that is not within the specified UCB segment. The indicated UIM is flagged as in error.

081

Two UIMs made multiple attempts to build a UIT for the indicated device. The first UIM is flagged as in error.

082

The indicated UIM specified more than 24 bytes of device-dependent segment data. The indicated UIM is flagged as in error.

083

The indicated UIM specified a device number greater than the maximum allowed device number.

- Message reason code 1: Device number in the relocation information is greater than the maximum allowed device number.
- Message reason code 2: Device number in the device class extension area is greater than the maximum allowed device number.

The indicated UIM is flagged as in error.

084

The indicated UIM specified an non-valid device class in the DFPTBYT3 field. The indicated UIM is flagged as in error.

085

The DCT information specified for a DASD does not match the previously specified information for this DASD type.

086

A UIM specified a DCT entry length greater than the allowed maximum.

087

Insufficient space in DCT for current DCT entry.

088

The indicated UIM tried to build a CIT by passing a CIP that does not specify an attachable device list.

091

The indicated generic name as specified in the list of compatible generics could not be found in the list of GITs. The first indicated generic is deleted from the list of compatible generics. The UIM is flagged as in error.

System action

The system enters wait state X'0A5'. The system issues the following hardware configuration definition (HCD) messages with the following wait state reason codes:

Code
    Accompanying Message

070
    CBDA070I, to display the UIM name and the generic name.

071
    CBDA071I, to display the UIM name and the generic names.

072
    CBDA072I, to display the UIM name and the generic name.

073
    CBDA073I, to display the UIM name and the control unit type/model.

074
    CBDA074I, to display the UIM name, device number, and reason code.

075
    CBDA075I, to display the UIM name and the DFP or UIP, as applicable.

076
    CBDA076I, to display the UIM name.

077
    CBDA077I, to display the UIM name.

078
    CBDA078I, to display the UIM name and UCB segment type.

079
    CBDA079I, to display the UIM name and the UCB segment type.

080
    CBDA080I, to display the UIM name.

081
    CBDA081I, to display the UIM names and the device type/model.

082
    CBDA082I, to display the UIM name.

083
    CBDA083I, to display the UIM name, device number, and reason code.

084
    CBDA084I, to display the UIM name, device number, and Ucbtype3.

085
    CBDA085I, to display the DASD type.

086
    CBDA086I, to display the UIM name.

087
    CBDA087I.

088
    CBDA088I, to display the UIM name and control unit type/model.

091
    CBDA091I, to display the generic names.

Operator response

Notify the system programmer. If requested by the system programmer, obtain a stand-alone dump.

System programmer response

Search problem reporting databases for a fix for the problem. Use the following search argument:

- WS/D0A5: Wait state code
- PRCS/hhhhhhhh: Reason code
- PIDS/name of UIM: Program name
- VALU/Cccccccccc: Message variable text

If no fix exists, ask the operator to obtain the stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump, the UIM name, if available, and the accompanying message.

Source

Hardware configuration definition (HCD)

0A7

Explanation

There is insufficient storage available to build the eligible device table (EDT) during the nucleus initialization program (NIP).

The right-most four bytes of the program status word (PSW) have the following format:

```
x0rrrwww
```

where:

x
Irrelevant information.

rrr
A hexadecimal reason code indicating the reason for failure.

www
The wait state code.

The reason code (*rrr*) is one of the following:

002
The system could not obtain enough extended system queue area (ESQA) storage.

004
The system could not obtain enough private storage.

System action

The system enters a non-restartable Wait State.

Operator response

Notify the System Programmer.

System programmer response

If the reason code is 002, increase the ESQA storage size specifications on the SQA parameters in the appropriate IEASYS*xx* member(s), and reIPL. If the reason code is 004, analyze the IODF and eliminate redundant esoterics and unused devices, and then reIPL.

Source

Allocation Build EDT Resource Initialization Module (RIM) IEAVNP88.

0B0

Explanation

The system could not recognize the I/O definition file (IODF) specified in the LOAD*xx* parmlib member.

Note: If equals ('==') was specified as the IODF suffix in the LOAD*xx* parmlib member, the system uses the IODF suffix obtained from the hardware token in the Hardware System Area (HSA). If equals ('========') was specified as the IODF high-level qualifier in the LOAD*xx* parmlib member, the system uses the high-level qualifier obtained from the hardware token in the HSA. If the characters I0DF are not found, or the IODF suffix is not X'00' to X'FF', the system loads wait state X'0B1' reason code X'00B'. The system uses the same rules for determining its ability to use the IODF name explicitly specified in LOAD*xx*.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrr00www
```

where:

x
Irrelevant information.

rr
A hexadecimal reason code indicating the reason for the failure.

www
The wait state code.

The reason code (*rr*) is one of the following:

01
The input/output supervisor (IOS) section of the IODF is not compatible with the system code.

02
The allocation section of the IODF is not valid. The most likely reason for this is that the IODF was created by a system with a higher release level than the system that is attempting to use the IODF.

System action

The system enters non-restartable wait state X'0B0'.

System programmer response

If the correct IODF is being used, it is likely that a recent release of the operating system has converted the IODF to a format not supported by the current release and service level. Search RETAIN for an appropriate compatibility PTF to bring this system up to the required service level.

If the correct IODF is not being used, enter the correct IODF data set name in the LOAD*xx* PARMLIB member. Ask the operator to REIPL the system.

Source

Input/output supervisor (IOS)

0B1

Explanation

System initialization cannot continue because of a problem in the LOAD*xx* parmlib member, the I/O definition file (IODF) data set, or a device.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrr00www
```

where:

x
> Irrelevant information.

rr
> A hexadecimal reason code indicating the reason for the failure.

www
> The wait state code.

The reason code (*rr*) is one of the following:

01
> The required data set was not found.

02
> The IODF occupies more than one extent.

03
> A required device is not defined.

04
> MSCH instruction failed for a required device.

05
> The IODF is not valid for an IPL.

06
> The IODF did not contain an operating system configuration definition matching the configuration ID specified in the LOAD*xx* member.

07
> The IODF is not valid for an IPL. The configuration ID was blank in LOAD*xx*, but there was more than one operating system configuration definition. If the configuration ID is blank, then IPL will use a single-defined operating system configuration definition as the default.

08
> The IODF suffix is not valid.

09
> After parsing the LOAD*xx* member and applying any specified filtering keywords, the high-level qualifier for the IODF data set name is not valid.

0A
> The IODF is not valid for an IPL. It must be a VSAM dataset.

0B
> Equals ('==') were specified as the IODF suffix or equals ('========') were specified as the IODF high-level qualifier in the member and the configuration hardware token was not able to be obtained from the Hardware System Area (HSA), the IODF suffix found in the hardware token did not contain a valid hexadecimal number or the characters I0DF were not found in the token.
>
> **Note:** If equals ('========') were specified as the IODF high-level qualifier in the LOAD*xx* parmlib member, the system uses the high-level qualifier obtained from the hardware token in the HSA. If the characters I0DF are not found, or the IODF suffix is not X'00' to X'FF', the system loads wait state X'0B1' reason code X'00B'. The system uses the same rules for determining its ability to use the IODF name explicitly specified in LOAD*xx*.

0C
> An incorrect IODF volume has been chosen for the initial program load (IPL).

Note: This wait state can also occur because of an IODF statement that is not valid. In addition to incorrect data entries, this wait state can also be caused by incorrect keyword filtering that uses the HWNAME, LPAR NAME, and VMUSERID keywords.

Note: Ensure that the LOAD*xx* member has not been compressed by the ISPF Edit PACK option. This can be checked by using the PROFILE command from the ISPF edit command line to display the state of the edit

options. When PACK ON is used, the ISPF editor stores the data set in a compressed form that is not detected by the operating system.

System action

The system enters non-restartable wait state X'0B1'. The system issues the following messages with the following wait state reason codes:

Code
> **Accompanying Message**

01
> IEA513W

02
> IEA514W

03
> IEA515W, to display the device number

04
> IEA516W, to display the device number

05
> IEA517W

06
> IEA518W

07
> None

08
> None

09
> None

0A
> IEA517W

0B
> IEA511W

0C
> None

To view any accompanying message, perform the following:

1. Using the hardware Alter/Display facility, read the real address in central storage at X'14'. This address points to the IPL diagnostic area.

2. Add X'28' to the address in X'14', and also read this as a real address in central storage. The result is the 31-bit virtual address of the IPL vector table (IVT). Henceforth, all addresses are 31-bit virtual and **you must switch to displaying Primary Virtual Storage** to display remaining storage locations.

3. Add X'E0' to the IVT address. The result is the 31-bit address of the IVTMQHP field. IVTMQHP contains the address of the message queue header (MQH).

4. MQH + X'0' contains the address of the oldest message queue element (MQE) available. The message text for the oldest MQE begins at MQE + X'08'.

5. Use MQE + X'0' of the oldest MQE to find the MQE of the next oldest message. Again, the message text for this MQE begins at MQE + X'08'.

6. Repeat this sequence (using MQE + X'0' of the current MQE to locate the next MQE), until the message text for the appropriate message is displayed.

Operator response

Ensure that the correct IODF volume is specified for the IPL and then reIPL the system. Device numbers are four digits in length. ReIPL and run the job again. Set LOAD parameter to the device number of the device that contains or SYS1.PARMLIB. Device numbers can be four digits in length, reIPL. Notify the system programmer.

System programmer response

Depending on the reason code, one of the following:

Code
  Action

01
  Verify that the correct device number was specified on the LOAD parameter. Verify that the IODF resides on the same volume as SYSn.IPLPARM or SYS1.PARMLIB and is in the same subchannel set as the IPL device. Enter the correct IODF data set name in the LOAD *xx* parmlib member.

02
  Ensure that the IODF data set is allocated as a single extent data set.

03
  Load device does not have the proper subchannel identifier. Verify that the device on which the IODF resides is defined. Verify that the correct device number was specified on the LOAD parameter. Verify that the hardware configuration matches the definitions in the IODF. Verify that the device on which the IODF resides is in the same subchannel set as the IPL device. Ensure that the LOAD parm on the HMC does NOT contain leading zero's for the IODF number.

04
  Move any of the following data sets (that are on the device specified on the LOAD parameter) to a different device:

  - IODF
  - SYS1.PARMLIB
  - SYSn.IPLPARM

05
  Change the LOAD*xx* member to specify another IODF. Be sure to specify the name of a production IODF.

06
  Change the LOAD*xx* member to specify another IODF or the correct operation system configuration ID.

07
  Specify the correct operating system configuration identifier.

08
  Correct the suffix to be within the range X'00' to X'FF'.

09
  Check to ensure that the IODF statement correctly specifies the high-level qualifier that is wanted. Then check for any usage of filtering keywords, HWNAME, LPAR NAME, or VMUSERID, to ensure that a valid IODF Statement can be found. If the filtering keywords are incorrectly specified, the high-level qualifier for the IODF statement resolves to blanks and this reason code results. Read carefully the rules for specifying these filter keywords.

0A
  Change the Load*xx* member to specify another IODF. Be sure to specify the name of a VSAM data set (instead of a sequential or partitioned data set).

0B
  Change the Load*xx* member to specify another IODF. Be sure to specify the name of a production IODF or specify pluses ('++'), minuses ('--'), blanks (' ') or asterisks ('**') and let the system locate a valid IODF. If equals ('========') were specified as the high-level qualifier, specify the high-level qualifier of a production IODF.

0C

> Ensure that the correct IODF volume is specified for the IPL and that the hardware management console (HMC) load profile points to this volume. Then reIPL the system.

In each case, ask the operator to reIPL the system.

Problem determination

If the problem persists, search problem reporting databases for a fix for the problem. Provide the following search argument:

- WS/D0B1: Wait state code
- PRCS/000000rr: Reason code
- MS/IEAnnnW: Message identifier

If no fix exists, ask the operator to obtain the stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump, the accompanying message, and the reason code.

Source

Input/Output supervisor (IOS)

0B2

Explanation

No devices were defined in the I/O definition file (IODF).

System action

The system enters non-restartable wait state X'0B2'. The system may issue message IEA523W.

System programmer response

See the explanation for message IEA523W. Verify that the IODF contains devices that are defined to the system. Verify that the necessary UIMs supporting these devices are present in SYS1.NUCLEUS. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain the stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump and the accompanying message.

Source

Hardware configuration definition (HCD)

0B3

Explanation

Initial program load (IPL), found incorrect information in the LOAD parameter. The first four characters of the LOAD parameters should contain the device number of the direct access storage device (DASD) volume containing the SYS1.PARMLIB data set. The value specified in the LOAD parameter is not a valid device number.

System action

The system enters a non-restartable wait state.

Operator response

Check the LOAD parameter on the hardware frame you used to IPL the system. The first four characters are supposed to be hexadecimal digits (0 through 9, A through F) that form the device number where the IODF

resides. For three digit device numbers, add a leading zero so that all four characters are valid hexadecimal digits.

If the value is incorrect, enter the correct value and reIPL the system. If the value is correct, record the contents of the LOAD parameter, and notify the system programmer.

System programmer response

If the LOAD parameter specifies the correct four digit hexadecimal device number and the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Initial program load (IPL)

0B4

Explanation

A unit information module (UIM) specified an undefined device number.

System action

The system issues message IEA525W to identify the UIM in error. The system enters non-restartable wait state X'0B4'.

System programmer response

See message IEA525W for the name of the failing UIM. Check if the failing UIM is an installation-provided or IBM-provided UIM. If it is an IBM-provided UIM, search problem reporting databases for a fix for the problem. Provide the following search argument:

- WS/D0B4: Wait state code
- MS/IEA525W: Message identifier
- VAlu/Cuim_name: Message variable text

If no fix exists, ask the operator to obtain the stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump.

Source

Input/output supervisor (IOS)

0B5

Explanation

Basic HyperSwap has partitioned a member out of the SYSPLEX due to an error condition. Basic HyperSwap can partition a system out of a sysplex for the following reasons:

- Reason 1 - User-specified policy indicates that a member failure, while a Basic HyperSwap is in progress, is to be partitioned out of the sysplex. This includes a new system joining the sysplex while a Basic HyperSwap is already in progress.
- Reason 2 - User-specified policy indicates that a new sysplex member should be partitioned if it is unable to successfully load and monitor a Basic HyperSwap configuration.

System action

XCF services are used to partition the failing member out of the sysplex. Basic HyperSwap message IOSHM0428I can result if XCF services are not available to perform the partition request.

System programmer response

Ask the operator to obtain the stand-alone dump. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump. Review the Basic HyperSwap policy in effect at the time of the failure to ensure that the required actions were performed.

Source

Input/output supervisor (IOS)

0E0

Explanation

During nucleus initialization program (NIP) processing, the system could not signal an online processor to update control register 14.

System action

The system sends messages about the job to one of the following:

- The primary console.
- The remote console, for a system with remote consoles.
- The hard-copy log for a system with multiple console support (MCS).

The system enters a non-restartable wait state.

Operator response

This is probably a hardware error. Try to reIPL the system.

If the problem persists, switch to uniprocessor mode and reIPL the system. Then try to vary the other processor online. If necessary, contact hardware support.

Source

Supervisor control

0E1

Explanation

A configure CPU online command failed.

The right-most four bytes of the program status word (PSW) have the following format:

```
xxxrrwww
```

where:

xxx
    Irrelevant information

rr
    A hexadecimal reason code indicating the reason for the failure

www
    The wait state code

The reason code (*rr*) is one of the following:

10
    While IEEVWKUP was processing a CF CPU online request on the target CPU, another RESTART signal was received on the same CPU.

11

A program-check occurred on the new processor prior to the architecture mode being properly set for that processor.

12

A machine-check occurred on the new processor prior to the architecture mode being properly set for that processor.

20

A RESTART was received on the target CPU after IEEVCVSR timed out waiting for DSGNL RESTART to finish.

30

During CPU online processing, IEEVWKUP detected that IEEVCVSR decided to back out of CPU online processing.

System action

The system ends command processing and loads wait state X'0E1'.

Operator response

Enter the command again. If the problem recurs, contact hardware support.

Source

Loadwait/Reconfiguration

0E3

Explanation

There is not enough virtual storage available to initialize the common service area (CSA).

System action

The system may issue message IEA140W. The system enters wait state X'0E3'.

Operator response

Notify the system programmer.

System programmer response

Modify the virtual storage allocated to the nucleus, system queue area (SQA), or link pack areas (LPA).

Source

Virtual storage management (VSM)

0E8

Explanation

During nucleus initialization program (NIP) processing, the machine check handler (MCH) resource initialization module (RIM) failed.

The right-most four bytes of the program status word (PSW) have the following format:

```
x01rrwww
x02rrwww
x03rrwww
```

where:

x
    Irrelevant information.

1*rr*, 2*rr*, 3*rr*
    A hexadecimal return code indicating the reason for the failure.

www
    The wait state code.

The return code is one of the following:

1*rr*
    A request to allocate MCH control blocks returned nonzero return code *rr*.

2*rr*
    A request to initialize the control registers returned nonzero return code *rr*.

3*rr*
    A request for virtual storage returned nonzero return code *rr*.

System action

The system enters non-restartable wait state X'0E8'.

Operator response

Record the wait state PSW. Notify the system programmer. ReIPL the system.

If the system programmer requests it, obtain a stand-alone dump.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Source

Machine check handler (MCH)

101

Explanation

A program running in supervisor state tried to obtain more storage from the system queue area (SQA) than was available.

System action

The system may issue message IEA946W. The system enters wait state X'101'.

Operator response

ReIPL the system. If this code occurs frequently, notify the system programmer.

System programmer response

Increase the space allowed for the SQA, or specify more space for the SQA in response to message IEA101A at the next system initialization.

Source

Virtual storage management (VSM)

102

Explanation

During processing for a GETMAIN macro for a program running in supervisor state, an error occurred. More pages of central storage were requested for the system queue area (SQA) than were available.

System action

The system may issue message IEA946W. The system enters wait state X'102'.

Operator response

ReIPL the system. If this code occurs frequently, notify the system programmer.

System programmer response

Increase the fixed central storage requirements for the system.

Source

Virtual storage management (VSM)

104

Explanation

While the system was processing the Supervisor Call (SVC) instruction for an ABEND macro, a program check occurred recursively.

System action

The system writes a logrec data set error record. The system may issue message IEA740W. The system loads the X'104' wait state PSW.

Operator response

If the system programmer requests a stand-alone dump, obtain one. ReIPL the system.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump and the logrec data set error record.

Source

Supervisor control

110

Explanation

The system detected a hot I/O condition on a device other than a direct access storage device (DASD).

System action

The system leaves the device status pending and issues message IOS110D. Depending on the recovery code entered by the operator, the system does the following:

Response
　　System Action

01
　　The system clears the device status. The device remains online. The system does not attempt channel path recovery. Processing continues.

02 or 03
　　The system boxes the device, as follows:

- The I/O on the device is ended.
- Any new I/O requests result in permanent I/O errors.
- The system does not perform new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur, in this order:

  1. The device is no longer allocated to any job.
  2. Allocation processing allocates any device in the system.

- If the device was offline, it remains offline.

04
　　The system tries to recover the channel path. If channel path recovery is successful, the system:

- Issues message IOS203I
- Leaves the channel path online
- Clears the pending status of the hot device

If channel path recovery is not successful, the system issues message IOS202I and forces the channel path offline.

05
　　The system forces the channel path offline. The system issues message IOS202I.

06
　　The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I
- Leaves the device paths online for all devices on the same control unit
- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

Operator response

Do the following:

1. Find the address of the status collection data (SCD) area by using the hardware Alter/Display facility to display the contents of location X'40C'. Record the first 4 bytes of data at this location.
2. Use the hardware Alter/Display facility to display the storage pointed to by location X'40C'.
3. Contact hardware support.
4. Use the hardware Alter/Display facility to change location X'30E' to one of the following recovery codes:

　　Code
　　　　Explanation

　　01
　　　　Do not attempt channel path recovery.

02

Box the device.

03

Allow the operator to store the device number of each device on the control unit in the operator reply area for IOS110D.

04

Try to recover the channel path.

05

Force the channel path offline.

06

Try to recover the control unit.

5. Use the Restart facility to restart the waiting processor

Source

Input/output supervisor (IOS)

111

Explanation

The system detected a hot I/O condition on a direct access storage device (DASD).

System action

The system leaves the device status pending and issues message IOS111D. Depending on the recovery code entered by the operator, the system does the following:

Code
   Response

01

The system clears the device status. The device remains online. The system does not attempt channel path recovery. Processing continues.

02 or 03

The system boxes the device, as follows:

- The I/O on the device is ended.

- Any new I/O requests result in permanent I/O errors.

- The system does not perform new allocations for the device.

- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur, in this order:

   1. The device is no longer allocated to any job.

   2. Allocation processing allocates any device in the system.

- If the device was offline, it remains offline.

04

The system tries to recover the channel path. If channel path recovery is successful, the system:

- Issues message IOS203I

- Leaves the channel path online

- Clears the pending status of the hot device

If channel path recovery is not successful, the system issues message IOS202I and forces the channel path offline.

05

The system forces the channel path offline. The system issues message IOS202I.

06

The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I
- Leaves the device paths online for all devices on the same control unit
- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

Operator response

Do the following:

1. Find the address of the status collection data (SCD) area by using the hardware Alter/Display facility to display the contents of location X'40C'. Record the first 4 bytes of data at this location.
2. Use the hardware Alter/Display facility to display the storage pointed to by location X'40C'.
3. Contact hardware support.
4. Use the hardware Alter/Display facility to change location X'30E' to one of the following recovery codes:

   Code
   >   **Explanation**

   01
   >   Do not attempt channel path recovery.

   02
   >   Box the device.

   03
   >   Allow the operator to store the device number of each device on the control unit in the operator reply area for IOS110D.

   04
   >   Try to recover the channel path.

   05
   >   Force the channel path offline.

   06
   >   Try to recover the control unit.

5. Use the Restart facility to restart the waiting processor

Source

Input/output supervisor (IOS)

112

Explanation

The system detected a hot I/O condition on a reserved direct access storage device (DASD).

System action

The system leaves the device status pending and issues message IOS112D. Depending on the recovery code entered by the operator, one of the following:

Code
>   **Response**

01

The system clears the device status. The device remains online. The system does not attempt channel path recovery. Processing continues.

02 or 03

The system boxes the device:

- The I/O on the device is ended.

- Any new I/O requests result in permanent I/O errors.

- The system does not perform new allocations for the device.

- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur, in this order:

    1. The device is no longer allocated to any job.

    2. Allocation processing allocates any device in the system.

- If the device was offline, it remains offline.

04

The system tries to recover the channel path. If channel path recovery is successful, the system:

- Issues message IOS203I

- Leaves the channel path online

- Clears the pending status of the hot device

If channel path recovery is not successful, the system issues message IOS202I and forces the channel path offline.

05

The system forces the channel path offline. The system issues message IOS202I.

06

The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I

- Leaves the device paths online for all devices on the same control unit

- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

Operator response

Do the following:

1. Find the address of the status collection data (SCD) area by using the hardware Alter/Display facility to display the contents of location X'40C'. Record the first 4 bytes of data at this location.

2. Use the hardware Alter/Display facility to display the storage pointed to by location X'40C'.

3. Contact hardware support.

4. Use the hardware Alter/Display facility to change location X'30E' to one of the following recovery codes:

    Code
       Explanation

    01

    Do not attempt channel path recovery.

    02

    Box the device.

    03

    Allow the operator to store the device number of each device on the control unit in the operator reply area for IOS110D.

04

Try to recover the channel path.

05

Force the channel path offline.

06

Try to recover the control unit.

5. Use the Restart facility to restart the waiting processor

Source

Input/output supervisor (IOS)

113

Explanation

The system could not recover from an error that occurred while the system was performing channel path recovery.

The system may have released reserved devices. Data may be lost or written over.

System action

The system may issue message IOS113W. The system enters wait state X'113'.

The system issues message IOS113W.

Operator response

Do the following:

- Verify data sets.
- Refer to installation procedures for diagnosing an error in channel path recovery. If none exist, obtain a stand-alone dump and reIPL the system.
- Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Source

Input/output supervisor (IOS)

114

Explanation

A previous error required that the operator stop sharing processors. The system recovered from the error.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrrr0www
```

where:

x

Irrelevant information.

rrr
> A hexadecimal reason code indicating the reason for the failure.

www
> The wait state code.

The reason code (*rrr*) is one of the following:

001
> Reserves are intact. The system successfully recovered the reserved devices.

002
> Reserves are lost. The system forced one or more devices that are reserved for the system offline.

System action

The system enters wait state X'114' because it could not issue message IOS201E. The system waits for the operator to restart the system.

Operator response

Do the following:

1. Isolate the failing channel path for repair.

2. Identify and recover failing tasks.

3. If the reason code indicates that reserves are intact, do the following:

    a. Enter the IOACTION RESUME command for the device on all other sharing systems if the device was stopped, or restart any stopped systems, or vary the device back online. Start the stopped processors by pressing the START key at the system console of each sharing system or logical partition.

    b. Perform a system restart on the system that detected the stopped processor.

4. If the reason code indicates that reserves are lost, do the following:

    a. Enter the IOACTION RESUME command for the device on all other sharing systems if the device was stopped, or restart any stopped systems, or vary the device back online. Start the stopped processor by pressing the START key at the system console of each sharing system or logical partition.

    b. Perform a system restart on the system that detected the stopped processor.

    c. Notify the system programmer.

Source

Input/output supervisor (IOS)

115

Explanation

A direct access storage device (DASD) containing a page data set is unavailable for an I/O operation.

Location X'40C' in central storage points to an area that contains the following information:

Byte
> **Contents**

0-3
> The number of bytes in the following area.

4-7
> The wait state code.

8-15
> The name of the module issuing wait state code X'015'

16-23
  The time stamp.

24
  The reason code. It is one of the following:

  Code
    Explanation

  10
    A permanent I/O error occurred when the system was reading the volume serial number for the specified device.

  20
    The device is not operational.

  40
    Intervention is required for the specified device.

  80
    The pack mounted does not contain the proper volume serial number for the device.

25
  Zero.

26-27
  The device address.

28-29
  The first 2 bytes of sense data.

30-31
  Zeros.

32-35
  The address of the complete sense data.

System action

The system enters wait state X'115'.

Operator response

Do the following:

1. Verify that the proper pack is mounted on the device specified. Then ready the device.
2. Restart the waiting processor.
3. If the reason code indicates that the device is not operational, verify that the channel and the control unit are powered on and properly connected.

Source

Input/output supervisor (IOS)

116

Explanation

During restart processing, the system found a missing interruption for a paging device.

Storage location X'40C' contains the paging device number.

System action

The system enters wait state X'116'.

Operator response

Do the following:

1. Check the paging device for hardware problems.
2. Check control units and switching units for proper connections.
3. Restart the waiting processor.
4. If you just mounted the device, enter a VARY DEVICE ONLINE command to generate a simulated device end.

Source

Input/output supervisor (IOS)

117

Explanation

Joining this system to a clustered LPAR group after updating the IOS Couple Dataset failed.

The right most four bytes of the program status word (PSW) have the following format:

```
xxrrrwww
```

where:

xx
    Irrelevant information.

rrr
    A hexidecimal reason code indicating the reason for the failure.

www
    The wait state code.

The reason code (*rrr*) is one of the following:

xyy
    XCF JOIN failed. This code can be interpreted as follows:

- *x* is the return code from the IXCJOIN service divided by four.
- *yy* is the reason code from the IXCJOIN service divided by four.

F01
    If retry was possible but a suitable retry point could not be determined.

System action

The system is partitioned from the sysplex and enters a non-restartable wait state.

System programmer response

Look at the explanation of the return and reason code from the IXCJOIN service in MVS Programming: Sysplex Services Reference.

Source

Input/output supervisor (IOS)

11A

Explanation

The SVC 26 routine received a protection exception when the routine tried to store into a user-supplied CAMLST work area. The storage protection key of the work area did not match the user's protection key.

System programmer response

If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

Programmer response

Correct the pointer in the LOCATE parameter list to the LOCATE work area, and execute the job step again.

Source

DFSMSdfp

120

Explanation

Geographically Dispersed Parallel Sysplex® (GDPS®) processing has stopped a system. See *GDPS/PPRC Installation and Customization Guide* for additional information.

System action

GDPS processing places the z/OS image(s) affected in wait state X'120' with reason code 4 or wait state X'CCC'. GDPS also issues message GEO557E, which is delivered to the console specified in the SYNCHDEST definition in your CONSOLxx member.

Source

GDPS

140

Explanation

IOS detected a non-recoverable error and stopped the system.

The right-most four bytes of the program status word (PSW) have the following format:

```
xrrrrwww
```

where:

x
    Irrelevant information.

rrrr
    A hexadecimal reason code indicating the reason for the failure.

w
    The wait state code.

The reason code *rrrr* is one of the following:

Code
    Explanation

0000
    A device containing a page data set has no paths available.

Note: WAIT 140 RSN 0000 does not permit AUTOIPL of z/OS.

0001
A device containing a page data set is in intervention required state.

Note: WAIT 140 RSN 0001 does not permit AUTOIPL of z/OS.

System action

The system enters non-restartable wait state X'140'.

Operator response

If requested by the system programmer, obtain the stand-alone dump. When requested by the system programmer, Re-IPL the system.

System programmer response

For reason code X'0000' determine why the device has no available paths. This is typically a hardware problem with the channels, switch(es), links or the DASD control unit. Correct the problem and Re-IPL the system.

For reason code X'0001' determine why the device is in the intervention required state. This is typically a problem at the DASD control unit. Correct the problem and Re-IPL the system.

Source

Input/Output Supervisor (IOS)

201

Explanation

A failure occurred when the system was trying to create the console communications task (COMMTASK) address space. This code is associated with message IEA366W.

The following shows the right-most four bytes of the wait state PSW in z/Architecture mode:

```
0rrrxwww
```

Where *rrr* is one of the following hexadecimal reason codes:

Code
    Explanation
001 or 002
    While the system was creating the console communications address space, a failure occurred.
F*ccc*
    An abend occurred. The completion code is *ccc*.

and where *www* is the wait state code.

Operator response

Record the contents of the wait state PSW. Notify the system programmer. ReIPL the system.

System programmer response

If the reason code is F*ccc*, see the system programmer response for abend *ccc*.

If the reason code is 8*xxx*, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Console services

Explanation

During system initialization, the system was initializing the address space to be used for console communications. Initialization of the address space failed.

A hexadecimal reason code in field PSAWTCOD in the prefixed save area (PSA) explains the error:

Code
> **Explanation**

00008001
> Console communication could not establish a recovery environment.

00008002
> An error occurred when the system tried to load a module.

00008003
> An error occurred during POST macro processing.

00008004
> An error occurred during POST macro processing.

00008005
> An error occurred when the system updated the command address space table (CAST).

00008007
> An error occurred when the system tried to post IEEVIPL.

00008008
> An error occurred when the system tried to attach IEAVM613.

00008009
> An error occurred when the system tried to attach IEAVM605.

0000800C
> An error occurred when the system tried to attach CNZM1TIM.

0000F*ccc*
> An abend occurred. The completion code is *ccc*.

System action

The system enters restartable wait state X'202'. The system may issue message IEA367A.

Operator response

Do the following:

1. Find the reason code by using the hardware Alter/Display facility to display the contents of location X'40C'. Report the reason code to the systems programmer.
2. Perform the restart operation to restart the system.

System programmer response

Do the following:

1. Look at the explanation of message IEA367A, if issued.
2. Continue diagnosis according to the reason code:

   - For reason code X'0000F'*ccc*, see the description of the abend code.

- For reason code X'00008'*xxx*, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Console services

204

Explanation

An error occurred during Allocation processing. A reason code appears in bits 36 through 51 of the wait state PSW and explains the error:

Code
>**Explanation**

0000
>During system initialization, the system found an eligible devices table (EDT) identifier specified in the LOAD*xx* parmlib member that does not exist in the I/O definition file.

0001
>During system initialization the system could not build the AGT.

0002
>During system initialization, the system could not build the TSRA.

0003
>During system initialization or ABEND recovery processing, the system could not attach or reattach the Tape Switch work task.

0004
>During system initialization, the system could not join the sysplex.

0005
>The Tape Switch work task encountered too many errors.

0006
>ATS initialization error.

0007
>IEFHBPDB task failed.

0008
>During ALLOCAS initialization, the system could not obtain storage for device information. The amount of storage on the GETMAIN request depends on the number of devices in the configuration and the maximum number of users determined by the MAXUSER value in the IEASYS*xx* parmlib member. The GETMAIN failure may occur if these numbers are large, so consider reducing the number of devices in the configuration and / or the MAXUSER value. For a detailed description of MAXUSER, RSVNONR, and RSVSTRT in IEASYS*xx*, refer to *z/OS MVS Initialization and Tuning Reference*.

0040
>IEFHBPDC could not be attached.

System action

The system enters a non-restartable wait state X'204'.

System programmer response

If the reason code is X'0000', check that the EDT identifier specified in LOAD*xx* exists in the I/O definition file. If filtering keywords such as HWNAME, LPARNAME, and VMUSERID are used, verify that they allow the desired IODF to be found. ReIPL the system.

If the reason code is X'0008', search problem reporting databases for a fix for the problem. If no fix exists, take a stand-alone dump and contact the IBM Support Center. If a new IODF configuration is used for IPLing, return to

the previous configuration in the interim. Try to reduce the number of devices in the configuration and/or use a smaller MAXUSER value in IEASYSxx.

For all other reason codes, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Allocation

205

Explanation

During nucleus initialization program (NIP) processing, the system tried to load a module that was not in the data set in the linklist (as defined by PROG*xx* or LNKLST*xx* parmlib members).

System action

The system enters a non-restartable wait state X'205'.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Allocation

206

Explanation

During system initialization, a sysplex test datesource partition specified OPERATOR PROMPT.

System action

The system enters a non-restartable wait state.

Operator response

Notify the system programmer.

System programmer response

Modify the CLOCK*xx* parmlib member for the sysplex datesource LPAR to specify OPERATOR NOPROMPT.

Source

Timer supervision

5C7

Explanation

An error occurred during processor or system termination.

The right-most four bytes of the program status word (PSW) has one of the following formats:

```
rrrr0www
8rrrrwww
0rrrrwww
```

where:

rrrr
A hexadecimal reason code indicating the reason for the failure.

www
The wait state code.

In z/Architecture mode, the reason code (*rrrr*) is one of the following:

0101
Three processors each attempted to load a wait state. There is not enough storage available to support the third request.

0201
Two concurrent wait state requests were in progress.

0907
An error occurred during ACR processing.

1904
An error occurred while the system was processing a write to operator (WTO) to display a message and load a system wait state.

1905
An error occurred in the processor stop routine.

1906
The system could not start alternate CPU recovery (ACR) on a target processor.

System action

For reason code X'0101', the system rejects the third request and loads temporary disabled wait state X'5C7' on one processor. Then the system (all processors) enters the first successfully loaded wait state.

For reason code X'0201', the system rejects one of the requests and loads temporary disabled wait state X'5C7' on one processor. Then the system (all processors) enters the other requested wait state.

For all other reason codes, the system enters a non-restartable wait state X'5C7'. For reason codes X'9906' and X'1906' the system also issues message BLW006W.

Operator response

Notify the system programmer. If necessary, obtain a stand-alone dump. ReIPL the system.

System programmer response

For reason code X'0101'and X'0201', see the system programmer response for the wait state that the processor enters after wait state X'5C7'. For all other reason codes, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Loadwait/Restart

A00

Explanation

A dynamic address translation (DAT) error occurred for a system address space. The recovery termination manager (RTM) does not end the address space because the ASCBNOMT and ASCBNOMD fields of the address

space control block (ASCB) show that the MEMTERM option of the CALLRTM macro is not valid for the address space. The address space is critical for system operation.

System action

The system may issue message IEA802W. The system enters the wait state.

Operator response

If requested by the system programmer, obtain the stand-alone dump. ReIPL the system.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand-alone dump.

Source

Recovery termination manager (RTM)

A01

Explanation:
A predefined number of hard machine check interruptions occurred on the only online processor.

System action

The system enters wait state X'A01'.

Operator response

To recover possible unrecorded machine check error records, write a stand-alone dump. Contact hardware support.

Source

Machine check handler (MCH)

A02

Explanation

A hard machine check interruption from which the system cannot recover occurred on the only online processor.

System action

The system enters wait state X'A02'.

Operator response

To recover possible unrecorded machine check error records, write a stand-alone dump. Contact hardware support.

Source

Machine check handler (MCH)

A18

Explanation

The system received an unsolicited device end interruption for a volume containing a paging data set. Volume serial verification failed for one or more of the following reasons:

- The device address contained a volume with a different volume serial number.
- An I/O error occurred while attempting to read the volume label.
- The device went from ready to not ready status when volume verification attempted to read the volume label.

System action

The system enters wait state X'A18'.

Operator response

Do the following:

1. Ensure that all volumes containing paging data sets are on the same device addresses as they were at system initialization.
2. Ensure that all devices are ready.
3. Restart the waiting processor.

Source

Input/output supervisor (IOS)

A19

Explanation

The system can no longer perform I/O.

System action

The system issues message IOS019W. The system enters non-restartable wait state X'A19'.

Operator response

Contact hardware support.

Source

Input/output supervisor (IOS)

A1E

Explanation

The only online time-of-day (TOD) clock failed. This wait state is accompanied by message IEA274W.

System action

The system enters wait state X'A1E'.

Operator response

Retain the logrec data set error records. Contact hardware support.

Source

Timer supervision

A1F

Explanation

The processor controller is not available. Time-of-day synchronization cannot occur.

System action

The system enters wait state X'A1F'.

Operator response

ReIPL the system.

Source

Timer supervision

A20

Explanation

The system found a page in the fixed link pack area (FLPA) that is not fixed.

System action

The system enters wait state X'A20'. The system writes message IAR011W.

Operator response

If requested by the system programmer, obtain a stand-alone dump. Attempt to reIPL the system without the FLPA.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, collect a stand-alone dump from the operator and contact the IBM Support Center. Provide the stand-alone dump.

Source

Real storage manager (RSM)

A21

Explanation

The system attempted to page-protect a storage area. The segment table entry (SGTE) for this area was incorrect. The error occurred in the modified link pack area (MLPA), the extended pageable link pack area (PLPA), the fixed link pack area (FLPA), or the extended FLPA.

System action

The system enters wait state X'A21'. The system issues message IAR012W.

Operator response

If requested by the system programmer, obtain a stand-alone dump.

If the error occurred in MLPA, EXTENDED MLPA, BLDL, FLPA, or EXTENDED FLPA, attempt to reIPL the system without this area. If the error occurred in MLPA or EXTENDED MLPA, try to reIPL the system without the default page protection for this area. Use the NOPROT option on the MLPA parameter.

System programmer response

Search the problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center. Provide the dump.

Source

Real storage manager (RSM)

A22

Explanation

An error, such as a hot I/O condition in a multiprocessing configuration, caused the disabled console communications facility (DCCF) to load this interim wait state. While in this wait state, DCCF issues a message requesting a reply, or enters another wait state.

System action

The processor on which the DCCF is running waits for responses to the messages that the DCCF sent to the console with master authority, or the alternate or system console. When message processing is complete, the system restarts the processors that are in the X'A22' wait state.

Operator response

Respond to DCCF messages.

Source

Console services or master scheduler

A23

Explanation

A program check interruption occurred while the machine check handler was running on the only online processor. No recovery was possible.

System action

The system issues message BLW006W. Processing continues on other processors.

Operator response

To recover possible unrecorded machine check error records, write a stand-alone dump. Retain the dump. Contact hardware support.

Source

Machine check handler (MCH)

A24

Explanation

The system detected a loop while the machine check handler was running on the only online processor. No recovery was possible.

System action

The system issues message BLW006W. The system enters wait state X'A24'.

Operator response

To recover possible unrecorded machine check error records, write a stand-alone dump. Contact hardware support.

Source

Machine check handler (MCH)

A26

Explanation

A machine check interruption occurred on the only online processor. The machine check interruption code associated with the interruption is incorrect. No recovery was possible.

System action

The system issues message BLW006W. The system enters wait state X'A26'.

Operator response

To recover possible unrecorded machine check error records, write a stand-alone dump. Retain the dump. Contact hardware support.

Source

Machine check handler (MCH)

A27

Explanation

One of the following occurred:

- A machine check interruption or a program check interruption occurred
- The processor issued a malfunction alert (MFA) and did not enter or remain in check-stop state
- The system simulated a malfunction alert when the operator replied alternate CPU recovery (ACR) to message IEE331A, but the processor did not enter or remain in check-stop state

System action

The system enters wait state X'A27'. Processing continues on other processors in the sysplex.

Operator response

To recover possible unrecorded error records, write a stand-alone dump. Retain the dump. Contact hardware support.

Source

Loadwait/Restart

A28

Explanation

The DAT-off machine check handler (MCH) routine (DAT is Dynamic Address Translation) cannot reach the DAT-on MCH routine. This situation can arise when a second machine check occurs when the load program status word (LPSW) assembler instruction gives control to the DAT-on MCH routine.

System action

The system enters wait state X'A28'.

Operator response

To recover possible unrecorded machine check error records, request a stand-alone dump. Retain the dump. Contact hardware support.

Source

Machine check handler (MCH)

A29

Explanation

The system was stopping itself when a program or machine check occurred. While trying to recover from this program or machine check, another program or machine check occurred. This problem is probably a software error.

System action

The system enters wait state X'A29'. Processing continues on other processors in the sysplex.

System programmer response

If the problem reporting databases do not show a fix for the problem, contact the IBM Support Center.

Source

Loadwait/Restart

A2A

Explanation

The system detected a page within the range of the pageable link pack area (PLPA), extended PLPA, the modified link pack area (MLPA), or the extended MLPA that was never paged into auxiliary storage. Ranges of system storage that are page protected must have a copy on auxiliary storage so the system can refresh the page if necessary.

System action

The system enters wait state X'A2A'.

Operator response

If requested by the system programmer, obtain a stand-alone dump. Try to reIPL the system using the no-protect option on the MLPA system parameter in the IEASYS*xx* parmlib member. See the explanation of messages IAR012W and IEA928I for more information.

System programmer response

Fix the MLPA parameter in the IEASYS*xx* parmlib member so that the error does not recur. If the error does recur, search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center. Provide the dump.

Source

Real storage manager (RSM)

A2C

Explanation

The system could not allocate storage for a memory object in the high virtual common area. The address portion of the program status word (PSW) contains X'*xxxrr*A2C', where *rr* is the reason code.

The following reason codes explain the failure:

Code
    Explanation

01
    Error in creating the control structures used to manage high virtual common storage.

02
    There is insufficient free space in the high virtual common area to hold the memory object being created.

03
    Error in creating the control structures for the internal PCIE area.

System action

Message IAR024W is issued and the system enters wait state X'A2C'.

Operator response

If requested by the system programmer, obtain a stand-alone dump.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, collect a stand-alone dump from the operator and contact the IBM Support Center. Provide the stand-alone dump.

Source

Real storage manager (RSM)

A2D

Explanation

The PAGE=*NONE* parameter was specified, but no storage-class memory (SCM) is available for paging. When *NONE* is used on the PAGE= parameter, SCM must be online and available, and PAGESCM=*NONE* must not be specified.

System action:

Message IAR036W is issued and the system enters wait state X'A2D'.

Operator response

Notify the system programmer.

System programmer response

If PAGE=*NONE* is intended, determine why SCM is not available for paging. Configure SCM online for the system and ensure that PAGESCM=*NONE* is not specified. Alternatively, change *NONE* to a valid page data set on the PAGE= system parameter.

Source

Real storage manager (RSM)

A2E

Explanation

The Real Storage Manager (RSM) detected an uncorrectable error condition and is unable to continue.

System action:
The system enters a non-restartable wait state. Message IAR038W is issued prior to the wait state.

Operator response

Notify the system programmer.

System programmer response

Consider obtaining a stand-alone dump before re-IPLing the affected system. Report the problem to IBM support with the message ID and any diagnostic information displayed in the message text, along with any dumps and logrec records that may have been produced.

Source

Real storage manager (RSM)

A70

Explanation

During system initialization, the console is unavailable, and the system could not deliver a write to operator with reply (WTOR) or synchronous message.

System action

The system issues message IEA548W. The system issues the first 8 lines of the text of the failing message. The system enters wait state X'A70'.

Operator response

ReIPL when the console becomes available.

Source

Console services

A71

Explanation

During initialization, the reconfiguration component either could not complete initialization or could not establish a recovery environment. The address portion of the program status word (PSW) contains X'*x*0*rrr*A71', where *rr* is the reason code.

The following reason codes explain the failure:

Code
　　Explanation

030
　　A reconfiguration module could not determine the cause of error.

032
　　A reconfiguration module could not establish a recovery environment.

033
　　A reconfiguration module could not be loaded.

034
　　A reconfiguration module could not be called.

035
　　A reconfiguration module could not obtain a message buffer.

036
　　A reconfiguration module could not obtain a required resource.

099
　　A reconfiguration module could not initialize the IPLing processor.

System action

The system loads a non-restartable wait state.

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Reconfiguration

A7A

Explanation

Initialization of the service processor interface (SPI) failed. The reason code appears in the program status word (PSW). The address portion of the PSW contains X'*x*0*rrr*A7A', where *rr* is the reason code. The following reason codes explain the failure:

Code
　　Explanation

001
　　The service processor interface task could not be attached.

002
　　The recovery environment could not be established.

004
　　The required service processor facilities are not installed.

006
> The service processor is busy during system initialization.

007
> A service processor malfunction occurred during system initialization.

008
> Service processor damage is detected during system initialization.

009
> Service processor interface component trace could not be initialized.

00A
> The service processor interface could not load a module.

00B
> The service processor interface could not obtain storage.

00C, 00D, 00E, 00F
> An internal error occurred.

011
> The enabled wait PSW was used for looping during a disabled write to operator.

013
> An internal error occurred.

System action

The system loads non-restartable wait state X'A7A'.

Operator response

For reason code X'06', X'07', or X'08', contact hardware support. For other reason codes, notify the system programmer.

System programmer response

Search problem reporting databases for a fix. If no fix exists, contact the IBM Support Center.

Source

Service processor interface

B01

Explanation

The 3203/3211 utility has completed normally.

Operator response

Verify the printed image and restart the system.

Source

DFSMSdfp

B02

Explanation

This wait state code is issued by the 3203/3211 utility. A control statement is missing or out of order. The JOB and END control statements must be the first and last statements, respectively. The DFN, UCS, and FCB statements can be included in any order.

Operator response

Correct the control statement sequence, insert any missing statements, and rerun the program. If requested by the system programmer, obtain a stand-alone dump.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

B03

Explanation

This wait state code is issued by the 3203/3211 utility. The JOB statement is incorrect.

Operator response

Correct the JOB statement and rerun the program. Have the 3203/3211 utility and control statements available. If requested by the system programmer, obtain a stand-alone dump.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

B04

Explanation

This wait state code is issued by the 3203/3211 utility. The DFN statement is incorrect.

Operator response

Correct the DFN statement and rerun the program. Have the 3203/3211 utility and control statements available. If requested by the system programmer, obtain a stand-alone dump.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

B05

Explanation

This wait state code is issued by the 3203/3211 utility. The UCS statement is incorrect.

Operator response

Correct the UCS statement and rerun the program. Have the 3203/3211 utility and control statements available. If requested by the system programmer, obtain a stand-alone dump.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

B06

Explanation

This wait state code is issued by the 3203/3211 utility. The FCB statement is incorrect.

Operator response

Correct the FCB statement and rerun the program. Have the 3203/3211 utility and control statements available. If requested by the system programmer, obtain a stand-alone dump.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

B07

Explanation

This wait state code is issued by the 3203/3211 utility. The END statement is incorrect.

Operator response

Correct the END statement and rerun the program. Have the 3203/3211 utility and control statements available. If requested by the system programmer, obtain a stand-alone dump.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

B0A

Explanation

This wait state code is issued by the 3203/3211 utility. An external interrupt has occurred.

Operator response

Rerun the program.

Source

DFSMSdfp

B0B

Explanation

This wait state code is issued by the 3203/3211 utility. A program check interrupt has occurred.

Operator response

Have the 3203/3211 utility and control statements available. If requested by the system programmer, obtain a stand-alone dump.

System programmer response

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

DFSMSdfp

B0C

Explanation

This wait state code is issued by the 3203/3211 utility. A machine check interrupt has occurred.

Operator response

Execute the SEREP program and save the output. Rerun the job.

Source

DFSMSdfp

B11

Explanation

This wait state code is issued by the 3203/3211 utility. The reader is not online. This will occur when the reader's control unit has no power or when the control unit has been switched off the I/O interface.

Operator response

Put the specified control unit online and rerun the program. If the error recurs, contact your hardware support personnel.

Source

DFSMSdfp

B12

Explanation

This wait state code is issued by the 3203/3211 utility. The reader is not ready.

Operator response

Ready the reader and rerun the program.

Source

DFSMSdfp

B13

Explanation

This wait state code is issued by the 3203/3211 utility. The reader is not ready.

Operator response

If the error condition is not apparent, display location 3 for sense information. (An interpretation of sense bit settings can be found in the component description book for the control unit being used.) Correct the faulty condition and clear the reader check. Rerun the program. If reader checks occur frequently, use a card guide to check for off-punched cards. If the cards are punched correctly and are in good condition and read checks continue, contact your hardware support personnel.

Source

DFSMSdfp

B14

Explanation

This wait state code is issued by the 3203/3211 utility. A reader channel error has occurred.

Operator response

Probable hardware error. Rerun the job.

Source

DFSMSdfp

B15

Explanation

This wait state code is issued by the 3203/3211 utility. No device end is indicated on the reader.

Operator response

Probable hardware error. Rerun the job.

Source

DFSMSdfp

B19

Explanation

This wait state code is issued by the 3203/3211 utility. The printer is not online. This will occur when the printer's control unit has no power, when the control unit has been switched off the I/O interface, or when the control unit is not a part of the system.

Operator response

Ensure that the address of the printer specified in the DFN statement is correct. Ensure that the control unit is online, and rerun the job. If the error recurs, contact your hardware support personnel.

Source

DFSMSdfp

B1B

Explanation

This wait state code is issued by the 3203/3211 utility. A unit check has occurred on the printer.

Operator response

If the error condition is not apparent, display low storage location 2 - 7 for sense information. Correct the faulty condition and rerun the job. If the problem recurs, contact your hardware support personnel.

Source

DFSMSdfp

B1C

Explanation

This wait state code is issued by the 3203/3211 utility. A printer channel error has occurred.

Operator response

Probable hardware error. Rerun the job.

Source

DFSMSdfp

B1D

Explanation

This wait state code is issued by the 3203/3211 utility. No device end is indicated on the printer.

Operator response

Probable hardware error. Rerun the job. If the error recurs, contact your hardware support personnel.

Source

DFSMSdfp

B20

Explanation

The operator running the stand-alone version of the input/output configuration program (IOCP) has ended IOCP.

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source

Input/output configuration program (IOCP)

B21

Explanation

A program check interruption has occurred during processing of the stand-alone version of the input/output configuration program (IOCP).

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Source

Input/output configuration program (IOCP)

B22

Explanation

A machine check interruption has occurred during processing of the stand-alone version of the input/output configuration program (IOCP).

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Source

Input/output configuration program (IOCP)

B23

Explanation

An unrecoverable I/O error has occurred during processing of the stand-alone version of the input/output configuration program (IOCP).

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Source

Input/output configuration program (IOCP)

B24

Explanation

During processing of the stand-alone version of the input/output configuration program (IOCP), IOCP encountered an error in the hardware processor controller and cannot communicate with the IOCP operator.

Operator response

Notify the system programmer.

System programmer response

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Source

Input/output configuration program (IOCP)

CCC

Explanation

When the system runs the QUIESCE function, the system is placed in restartable wait state X'CCC'.

System action

The system issues message BLW002I before entering wait state X'CCC'.

Operator response

Perform the restart function on the waiting processor, when you want the system out of QUIESCE.

Source

Loadwait/Restart

D0D

Explanation

System management facilities (SMF) encountered a resource shortage. Bits 104 - 115 in the wait state program status word (PSW) contain one of the following reason codes:

Code
> **Explanation**

00
> This reason code is associated with message IEE987E. No SMF buffer space is available. SMF has used up all the available storage for its internal buffers and has stopped the system, as requested by the NOBUFFS(HALT) in the SMFPRM*xx* parmlib member.

01
> This reason code is associated with message IEE988E. No SMF data sets are available. SMF has used up all the available data sets for its data. SMF stopped the system, as requested by the LASTDS(HALT) in the SMFPRM*xx* parmlib member.

02
> No SMF buffer space is available for a specific log stream buffer. The system has stopped because the NOBUFFS(HALT) option is specified in the SMFPRM*xx* parmlib member. This reason code is associated with message IFA787E.

System action

SMF enters restartable wait state X'D0D'.

Operator response

Respond as indicated for the specific reason code:

Code
> **Response**

00
> Do one of the following:
>
> - Perform a restart operation to restart the system and operate in the "data lost" mode.
> - ReIPL the system.
>
> If you do restart the system, request a dump of the SMF address space.

01
> Do one of the following:
>
> - Perform a restart operation to restart the system.
> - ReIPL the system using the SMF=*xx* parameter to provide empty SMF data sets for SMF recording.
>
> If you do restart the system, SMF will start buffering data until a data set becomes available. If no data sets become available, the system will eventually use up all available storage for its internal buffers and generate wait state code X'D0D', reason code 00.

02
> Do one of the following:
>
> - Perform a restart operation to restart the system and operate in the "data lost" mode.
> - ReIPL the system.
>
> If you do restart the system, request a dump of the SMF address space.

System programmer response

Use the IPCS SMFDATA subcommand to retrieve the data that was in the SMF buffers at the time of the error. The log stream that caused this error can be identified by finding message IFA787E in the master trace table in the dump.

Source

System Management Facilities (SMF)

EC7

Explanation

A severe error has occurred in the z/OS UNIX System Services component that prohibits this system from executing.

The right-most four bytes of the program status word (PSW) have the following format:

```
x0rrrwww
```

where:

x
   Irrelevant information.

rrrr
   A hexadecimal reason code indicating the reason for the failure.

www
   The wait state code (EC7).

The reason codes are as follows:

001
   Shared file system support is enabled by the SYSPLEX(YES) parmlib statement that is specified in the BPXPRM parmlib member used to initialize the system. The shared file system support has detected that it is executing with a software service level that is incompatible with the software service level of at least one active system in the sysplex that is also configured for shared file system support. Operator message BPXF078W is issued to the system console.

002
   Shared file system support is enabled by the SYSPLEX(YES) parmlib statement that is specified in the BPXPRM parmlib member used to initialize the system. The shared file system support on another active system has detected that this system is executing with a software service level that is incompatible with the software service level of that system. The detecting system has requested that this system be partitioned out of the sysplex. The detecting system has also issued operator message BPXF077S indicating that this system is executing with an incompatible software service level.

System action

Either this system or another system in the sysplex issues operator messages about the problem.

Operator response

Refer to the console log of all systems in this sysplex, including this system, for any messages associated with this wait state. Contact the system programmer.

System programmer response

Review the message documentation associated with this wait state.

Source

z/OS UNIX System Services

FFx

Explanation

Non-IBM programs can use wait state codes X'FF0' through X'FFE'.

Operator response

See installation-supplied information for these codes.

System programmer response

See installation-supplied information for these codes.

Source

Non-IBM

Chapter 4. System completion code to module table

This table correlates system completion codes with module names. For each system completion code, the associated component and detecting module are listed.

If the system completion code you require does not appear in the table, contact the IBM Support Center. Provide the system completion code.

Table 2. System completion codes to modules reference			
Completion code (Hex)	**Reason code (Hex)**	**Component**	**Detecting module**
00B		Scheduler restart	IEFXBCHK IEFXBDYS IEFXBGDG IEFXBRDC IEFXBSJX IEFXBSWA IEFXBSWB IEFXBUSJ
00C	16xx00xx	XCF	IXCA3ARP IXCA3ASE IXCA3ASS IXCA3CKW IXCA3ECU IXCA3ERS IXCA3EV IXCA3MST IXCA3FAI IXCA3GAP IXCA3INT IXCA3IOX IXCA3IO2 IXCA3IO3 IXCA3IO6 IXCA3MSI IXCA3PCC IXCA3PCT IXCA3REG IXCA3RGT IXCA3RPR IXCA3SAP IXCA3SG0 IXCA3SJT IXCA3TOP IXCA3WPD IXCA3XRP IXCM2TMR
00D	01 02 03 04 05 101 102	CTRACE	ITTCT
012		Timer supervision	IEATTUSD
01D		RSM	IARCA IARCD IARCF IARCI IARCL IARCR IARCS IARCV IARCW IARCX IARCZ IARDD IARDK IARDM IARDO IARDP IARDR IARDS IARDT IARDU IARFF IARSO IARXG
022		Vector processing	IGTDSR
023		CSV	CSVLLBLD CSVLLCPY CSVLLDCL CSVLLDSB CSVLLDYN CSVLLEXT CSVLLINF CSVLLIN2 CSVLLPRS CSVLLREF CSVLLSCH CSVLLSTA CSVLLSTC CSVLLST2 CSVLLTRC

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
			Table 2. System completion codes to modules reference (continued)
025		Initiator	IEFSD161 IEFIB600 ILRSWAP
028		ASM	IAXCE IAXDO IAXDP IAXDX IAXFA IAXFE IAXFG IAXFN IAXFP IAXFS IAXFZ IAXMA IAXPF IAXPM IAXPU IAXPX IAXSA IAXSR IAXVH IAXVY IAXXV
X29		ASM	ILRPOS
02C		JES2	HASPFSSM HASPWARM
02E		AVM	AVFGB AVFGR AVFIC AVFIW AVFJB AVFKO AVFKP AVFKS AVFLA AVFLR AVFLT AVFMB AVFMC AVFME AVFMF AVFMG AVFMH AVFML AVFMN AVFMS AVFNS AVFNY AVFPC AVFSI AVFSQ AVFSR AVFSS AVFSW AVFSX AVFTA AVFTB AVFTD AVFUT AVFWA AVFWM
03C		RSM	IARFF IARFP
047		Supervisor control	IEAVESVC
04B		TSO/E	IKJEFTSL IKJTSLAR
04E		DFP	
04F		DFP	DSNWDSDM DSNWSDWA DSNYESWE DSN3RDMP DSN3RDMP DSN3RDMP DSN3RDMP DSN3RDMP
051		TSO/E	
052		PC/AUTH	IEAVXLRE
053		PC/AUTH	IEAVXLRE
054		SJF	IEFSJBLD IEFSJDEF IEFSJDEL IEFSJFND IEFSJJDV IEFSJEXT IEFSJGET IEFSJIRT IEFSJPUT IEFSJRET IEFSJUPD IEFSJVAL IEFSJWRT IEFSJINT
055	30 34 36 40 52	ENF	IEFENFNM IEAVNP47

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
Table 2. System completion codes to modules reference (continued)			
058	00 04 08 0C 10 28 2C 30 34 38	Supervisor control	IEAVECMS
058	14 18 1C	Supervisor control	IEAVESSE
058	20	Supervisor control	IEAVEDSR
058	24	Supervisor control	IEAVEE1R
059		Supervisor control	IEAVESRT
05B		Timer supervision	IEAVRTI0
05D		Supervisor control	IEAVECMS
05E		Supervisor control	IEAVESTS
064		Supervisor control	IEAVLKRM
065		Task management	IEAVESSI
066		Supervisor control	IEAVEDSR
06B		Loadwait	IEEVEXSN
06C		RTM	IEAVTSLP
06D		RTM	IEAVTADR
06E		RTM	IEAVTGLB IEAVTLCL
06F		RTM	IEAVTRT1
070		Supervisor control	IEAVETCL
071		Loadwait	IEAVEREX
072		Supervisor control	IEAVEDS0
073		Supervisor control	IEAVESLK IEAVELK IEAVELKB
074		Supervisor control	IEAVESLR
075		Supervisor control	IEAVESC0
076		Supervisor control	IEAVEMCR
077		Console services	Various console services modules
078		RCT	IEAVAR00 IEAVAR02
079		RCT	IEAVAR04
07A		RCT	IEAVAR00 IEAVAR02
07C		Supervisor control	IEAVESPR
07E		Reconfiguration	IEEVDEV
07F		Task management	IEAVECH0

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
080		RSM	IARDM IARDT IARFS IARKC IARKI IARKM IARMA IARMS IARPI IARPV IARRI IARRQ IARSC IARSH IARSI IARSO IARSQ IARSR IARSU IARSX IARVF IARXM IARXV IARXW IARYB IARYF
083		ASM	ILRSLSQA
084		ASM	ILRCMP ILRSWPDR
085		ASM	ILRSAV
086		ASM	ILRVSAMI
087		ASM	ILRSAV ILRACT ILRRLG ILRVSAMI ILRTMRLG
088		ASM	ILRCMP
089		ASM	ILRCMP ILRCMP01
08B		DIV	ITVCC ITVCD ITVCF ITVRA ITVRB ITVRE ITVRF ITVRR ITVSA ITVSB ITVSF ITVSG ITVSI ITVSL ITVSM ITVSU ITVTR ITVTS ITVXM ITVXN
08F		RSM	IARXK
09D		System trace	IEAVETRC

Table 2. System completion codes to modules reference (continued)

Table 2. System completion codes to modules reference (continued)			
Completion code (Hex)	**Reason code (Hex)**	**Component**	**Detecting module**
09E		System trace	IEAVETAC IEAVETAI IEAVETIH IEAVETEA IEAVETPA IEAVETSP IEAVETSN IEAVETPS IEAVETRR IEAVETSD IEAVETTF IEECB924 IEECB925 IEAVETFC IEAVETEF IEAVETFA IEAVETVP IEAVETNP IEAVETPW IEAVETRW IEAVETCV IEAVETPVIEAVETFD IEAVETSI IEAVETSR ITRF0009 ITRF000A ITRFHEX ITRFBR ITRF0001 ITRF0003 ITRF0005 ITRF0007 ITRF000B ITRF000F ITRF0013 ITRF0015 ITRF0017 ITRF0019 ITRF001B
09F		Supervisor control	IEAVEVS IEAVVSR
0A0	01 02 03	Initiator	IEFSD161 IEFSD164 IEFSD263
0A1		DFP	IGG0193Y
0A2		DFP	IGG0203Y
0A3		DFP	IGG019OE
0A4		DFP	IGG019OE
0A5		DFP	IGG019OE
0AE		IOS	IOSVRSTS
0B0		SWA manager	IEFQB551 IEFQB556 IEFQB580
0B1		SSI	IEFJACTL IEFJCNTL IEFJJCLS IEFJJOBS IEFJWTOM
0B2		SSI	IEFJJOBS
0B3		SSI	IEFJACTL
0B4		SSI	IEFJCNTL
0B5		SSI	IEFJCNTL

Table 2. System completion codes to modules reference (continued)			
Completion code (Hex)	**Reason code (Hex)**	**Component**	**Detecting module**
0B7		Reconfiguration	IEEVCPR IEEVCONF IEECB927 IEEVCPLF IEEVVFLF IEEVCPLN IEEVCVSR IEEVTOD IEEVCPRA IEEVCVPH IEEVCPVF IEEVCRLF IEEVMSI. IEEVCPUT IEEVEXTR
0B6		OAM	CBRLLCAN CBRLLDMT CBRLLERR CBRLLMT CBRLLMTL CBRLLVER CBRLLWT
0B8		Master scheduler	IEEPRWI2
0B9		Master scheduler	IEESB605
0BA		Master scheduler Initiator	IEESB605 IEFSD161 IEFSD162 IEFSD166
0BB		Initiator	IEFSD263
0BF		Master scheduler	IEEMB816
0Cx		Supervisor control	IEAVEPC.
0D2		Supervisor control	IEAVEPC
0D3		Supervisor control	IEAVEPC
0D5		RSM PC/AUTH	IARDX IARPE IARYB
0D9		COMMTASK	IEAVPIX
0F2		IOS	IECVPST
0F6		GTF	AHLSETEV
0F7		JES2	IECVPST IECVPST IECVPST IECVPST IECVPST IECVPST
0F8		Supervisor control	IEAVESVC
0F9		Supervisor control	IEAVESVC
0FB		Supervisor control	IEAVEPC
0FD		Supervisor control	IEAVESVC
0FF		Supervisor control	IEAVMVC0
101		Task management	IEAVEWAT
102		Task management	IEAVEPST
104		VSM	IGVGLSQA
106		CSV	CSVGETMD
10A		VSM	IGVGLSQA

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
		Table 2. System completion codes to modules reference (continued)	
10B		Timer supervision	IEAVRT01
10D		RTM	IEAVTRTC
10E		RTM	IEAVTESP
110		IOS	IOSPURGA
121		IOS	IGC0003C
122		Master scheduler	IEE3703D
128		Task management	IEAVTB00
12A		Task management	IEAVEAT0
12C		Task management	IEAVECH0
12E		Timer supervision	IEAVRT00
12F		Timer supervision	IEAVRT00
130		GRS	ISGGNRM ISGGFP
133		Dumping services	IEAVAD00 IEAVTSDX
138		GRS	ISGGNRM
13C		RTM	IGC00060
13E		Task management	IEAVEED0
147		DFP	IGC0007A
149		DFP	IGC0007C
14A		DFP	IGC0007D
14B		DFP	IGC0007E
14C	01 10 11	System Environmental Recording (LOGREC)	IFBBLD76 IFBSMFNT
14F		Task management	IEAVSETS
153		SMF	IFASMFDT
157		Console services	CNZS1DOM IEAVBWTO
15C		EXCP	IECVEXCP
15F		SRM	IRARMINT
16B		Task management	IEAVMODE
16D		Supervisor control	IEAVESVC
171		RSM	IARPF IARPI IARPR IARPS IARPU IARPV IARXW
172		EXCP	IECVEXCP
177		Task management	IEAVTEST
178		VSM	IGVGLSQA

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
17A		Task management	IEAVEVT0
17B		Supervisor control	IEAVEPD0
17D		Task management	IEAVEVT0
182		RACF	ICHRCK00
183		RACF	ICHRIN00
185		RACF	ICHRDF00
18A		RSM	IARPF IARPI IARPR IARPU IARPV IARXV
1C5	00010001	System logger	IXGA1WRT
1C5	00010002	System logger	IXGA1WRT
1C5	00010003	System logger	IXGA1SWT
1C5	00010004	System logger	IXGA1DEL
1C5	00010005	System logger	IXGA1SET
1C5	00020001	System logger	IXGA1HSM
1C5	00020002	System logger	IXGBLF01
1C5	00020003	System logger	IXGBLF01
1C5	00030000	System logger	IXGC3SEX
1C5	00030002	System logger	IXGC3SEX IXGWORKT
1C5	00030003	System logger	IXGC3SEX
1C5	00030004	System logger	
1C5	00030006	System logger	IXGF2EXT
1C5	00030009	System logger	IXGC4RSC
1C5	00040001	System logger	IXGF2WRT
1C5	00050001	System logger	IXGI3DIR
1C5	00050002	System logger	IXGI3DIR IXGI3RPT
1C5	00050003	System logger	IXGI3DIR
1C5	00060001	System logger	IXGL1SRB
1C5	00070001	System logger	IXGF1TRX
1C5	00070002	System logger	IXGF1TRX
1C5	00070003	System logger	IXGF1TRX
1C5	00070004	System logger	IXGF1TRX
1C5	00070005	System logger	IXGF1TRX
1C5	00070006	System logger	IXGF1TRX
1C5	00070007	System logger	IXGF1TRX

Table 2. System completion codes to modules reference (continued)

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
1C5	00070008	System logger	IXGF1TRX
1C5	00070009	System logger	IXGF1TRX
1C5	00070010	System logger	IXGF1TRX
1C5	00070011	System logger	IXGF1TRX
1C5	00070012	System logger	IXGF1TRX
1C5	00070013	System logger	IXGF1TRX
1C5	00070014	System logger	IXGF1TRX
1C5	00070015	System logger	IXGF1TRX
1C5	00070016	System logger	IXGF1TRX
1C5	00080202	System logger	IXGSDSIN
1C5	00080302	System logger	IXGSDSIN
1C5	00080401	System logger	IXGSDSOC
1C5	00080402	System logger	IXGSDSOC
1C5	00080403	System logger	IXGSDSOC
1C5	00080501	System logger	IXGSDSUN
1C5	00080502	System logger	IXGSDSUN
1C5	00080601	System logger	IXGSDSGT
1C5	00080602	System logger	IXGSDSGT
1C5	00080702	System logger	IXGSEXIT
1C5	00080703	System logger	IXGSEXIT
1C5	00080704	System logger	IXGSEXIT
1C5	00080705	System logger	IXGSEXIT
1C5	00080706	System logger	IXGSEXIT
1C5	00080707	System logger	IXGSEXIT
1C5	00080801	System logger	IXGSXGET
1C5	00080802	System logger	IXGSXGET
1C5	00090000	System logger	IXGX1LSN
1C5	00090001	System logger	IXGX1LSN
1C5	00090002	System logger	IXGX1LSN
1C5	00090003	System logger	IXGX1LSN
1C5	00090004	System logger	IXGX1LSN
1C6		Task Management	IEAVSETS
1FC		Supervisor control	IEAVESVR
200		EXCP	IECVEXFR

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
201		Task management	IEAVEWAT
202		Task management	IEAVEPST
204		VSM	IGVGLSQA
205		VSM	IGVGLSQA
206		CSV	CSVGETMD
20A		VSM	IGVGLSQA
20D		RTM	IEAVTRTE
20E		RTM	IEAVTESP
20F		IOS	IECVPST
222		Master scheduler	IEE3703D
228		Task management	IEAVTB00
22A		Task management	IEAVEAT0
22C		Task management	IEAVECH0
22F		Timer Supervision	IEAVRTI0
230		GRS	ISGGNRM ISGGFP ISGGIFP
233		Dumping services	IEAVAD00 IEAVTSDT IEAVTSDX
238		GRS	ISGGNRM ISGGFP
23E		Task management	IEAVEED0
247		DFP	IGC0007A
253		SMF	IEEMB830 IEEMB834 IEEMB839
25F		SRM	IRARMERR
260		RCT	IEAVAX00
271		RSM	IARPV
278		VSM	IGVGLSQA
27B		Supervisor control	IEAVEPD0
282		RACF	ICHRCK00
283		RACF	ICHRIN00
285		RACF	ICHRDF00
28A		RSM	
2C6		IOS	IOSVMIHQ IOSVPTHV IOSVCDRI
2F3		Initiator	IEFIB605

Table 2. System completion codes to modules reference (continued)

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
*Table 2. System completion codes to modules reference (continued)*

Table 2. System completion codes to modules reference (continued)

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
2FC		Supervisor control	IEAVEIOR
300		EXCP	IECVEXCP
301		Task management	IEAVEWAT
305		VSM	IGVAAQAT
306		CSV	CSVGETMD
30A		VSM	IGVAAQAT
30E		RTM	IEAVTESP
312		CSV	IGC018
322		SMF	IEATLEXT
328		Task management	IEAVTB00
32E		Timer supervision	IEAVRT00
330		GRS	ISGGNRM
333		Dumping services	IEAVTSDG IEAVTVSM IEAVTSDH IEAVTSDL IEAVTSDT
338		GRS	ISGGNRM
33E		Task management	IEAVEED0
35F		Initiator	IEFSD263
378		VSM	IGVAAQAT
37A		Task management	IEAVEVT0
37B		Supervisor control	IEAVEPDR
37D		Task management	IEAVEVT0
382		RACF	ICHRCK00
383		RACF	ICHRIN00
385		RACF	ICHRDF00
3C4	0000001C	Task management	IEAMSXMP
3FC		Supervisor control	IEAVEE1R
400		DFP	IECVEXCP
402		Task management	IEAVEPST
406		CSV	CSVSBRTN
40A		VSM	IGVVSMRF
42A		Task management	IEAVEAT0
430		GRS	ISGGNRM ISGGRT ISGGFP ISGGIFP

Completion code (Hex)	Reason code (Hex)	Component	Detecting module
433	00000008	Dump Analysis and Elimination (DAE)	ADYTRNS
438		GRS	ISGGNRM ISGGRT ISGGFP ISGGIFP
43E		Task management	IEAVEED0
45F		SRM	IRARMEVT
46D		RTM	IEAVTESP
478		VSM	IGVVSMRF
47A		Task management	IEAVEVT0
47D		Task management	IEAVEVT0
482		RACF	ICHRCK00
483		RACF	ICHRIN00
485		RACF	ICHRDF00
4FC		Supervisor control	IEAVEPCR
500		EXCP	IECVEXCP
502		Task management	IEAVEPST
504		VSM	IGVVSM24
505		VSM	IGVVSM24
522		SMF	IEATLEXT
52A		Task management	IEAVEAT0
530		GRS	ISGGNRM
538		GRS	ISGGNRM
53E		Task management	IEAVEED0
553		SMF	IEEMB839
55F		SRM	IRARMSRV
57D		Task management	IEAVEVT0
582		RACF	ICHRCK00
585		RACF	ICHRDF00
5FC		Loadwait	IEAVERER
604		VSM	IGVVSM24
605		VSM	IGVVSM24
622		TSO/E	IKJEFLJ IKJEFLG
65F		SRM	IRARMCHM
67D		Task management	IEAVEVT0

Table 2. System completion codes to modules reference (continued)

Table 2. System completion codes to modules reference (continued)			
Completion code (Hex)	**Reason code (Hex)**	**Component**	**Detecting module**
683		RACF	ICHRIN00
684		RACF	ICHRSV00
685		RACF	ICHRDF00
6FC		Supervisor control	IEAVEPC
700		EXCP	IECVEXCP
702		Task management	IEAVEPST
704		VSM	IGVVSMRT
705		VSM	IGVVSMRF
706		CSV	CSVGETMD
70A		VSM	IGVVSMRF
71A		DFP	IGG0CLA9 IGG0CLA9
72A		Task management	IEAVEAT0
730		GRS	ISGGNRM ISGGRT
738		GRS	ISGGNRM ISGGRT
75F		SRM	IRARMINT
76D		Dynamic Output	IEFDOCNL
778		VSM	IGVVSM31
77D		Task management	IEAVEVT0
7C4		JES3	IATCS01 IATCS03 IATCS04
7C6		IOS	IOSVUSER
800		EXCP	IECVEXCP
804		VSM	IGVGSQA
805		VSM	IGVVSMRF
806		CSV	CSVGETMD
80A		VSM	IGVGSQA
80D		Master Scheduler	IEE3703D
822		Initiator	IEFSD263
82A		Task management	IEAVEAT0
830		GRS	ISGGNRM
838		GRS	IEAVENQ1
878		VSM	IGVGSQA
87D		Task management	IEAVEVT0
8C4	04	JES	IAZPJCL

Table 2. System completion codes to modules reference (continued)			
Completion code (Hex)	**Reason code (Hex)**	**Component**	**Detecting module**
905		VSM	IGVVSMRF
906		CSV	CSVSBRTN
90A		VSM	IGVVSMRF
922		Initiator	IEFIB621
92A		Task management	IEAVEAT0
930		GRS	ISGGNRM
938		GRS	ISGGNRM
978		VSM	IGVVSMRF
9C6		GRS	ISGLOBTS ISGLRELS ISGLPRGS ISGLCRTS ISGLRTR ISGLTM
A00		EXCP	IECVEXCP IECVEXFR
A03		RTM	IEAVTSKT
A05		VSM	IGVBDFE
A06		CSV	CSVRBENQ
A0A		VSM	IGVBDFE
A22		Reconfiguration	IEE3703D
A23		Console services	IEAVMFRR
A78		VSM	IGVBDFE
AC4		JES3	IATCNDB
AC7	01	Timer supervision	IEAVRTI0
B00		EXCP	IECVEXFR
B04		VSM	IGVVSMRT
B05		VSM	IGVVSMRF
B0A		VSM	IGVVSMRF
B23		Console services	IEAVSTAA
B78		VSM	IGVVSMRF

Table 2. System completion codes to modules reference (continued)			
Completion code (Hex)	**Reason code (Hex)**	**Component**	**Detecting module**
C0D		RSM ASM PC/AUTH CSV IOS SAM and others	IARDG IARDP IAREI IARER IARFP IARGA IARGD IARGI IARKE IARKI IARKO IARKR IARKS IARLS IARMB IARME IARPB IARPH IARPP IARPR IARRR IARRW IARSC IARSI IARSO IARSP IARSQ IARSS IARSX IARUA IARUI IARUM IARUR IARVF IARXI IARXR IARXS IARXW IARYA IARYR and others
C22		EXCP	IECVEXCP
C78		VSM	IGVSLIST IGVCPBLD
CFB		JES3	IATABMN
D04		VSM	IGVAAQAT
D05		VSM	IGVFLSQA
D06		CSV	CSVSBRTN
D0A		VSM	IGVAAQAT
D0D		RTM	IEAVTRTE
D22		Master scheduler	IEE0003D
D23		Console services	CNZS1WTO IEAVBWTO IEAVBNLK IEAVBWGL IEAVBLWT IEAVG715 IEAVM613 IEAVM619 IEAVNPGD CNZQ1MTC
D24		Console services	IEEMB804
D78		VSM	IGVAAQAT
DFB		JES3	IATFCLT IATNTTXR
E00		EXCP	IECVEXCP
E03		RTM	IEAVTSKT
E23		Console services	IEAVVRP2
EFB		JES3	IATCNDAL IATCNDIT IATCNDMS IATCNDTR

Chapter 5. Wait state code to module table

This table correlates wait state codes with module names. For each code, the associated component and detecting module are listed.

If the wait state code you require does not appear in the table, contact the IBM Support Center. Provide the wait state code.

Table 3. Wait state codes to modules reference		
Wait state code (Hex)	**Component**	**Detecting module**
002	IOS	IEAIPL00
003	IPL, IOS	IEAIPL00 IEAIPL03
004	IOS	IEAIPL03
005	IPL	IEAIPL00
006	IPL	IEAIPL00
007	Console services	IEAVNPCA IEEVDCIO
009	NIP	IEAVNPC4
00A	IPL	IEAVNP03
00B	Master scheduler	IEEVIPL
00D	Master scheduler	IEEVIPL
00E	IPL	IEAIPL00
014	Supervisor control	IEAVEPCO IEAV9PCO
017	IPL	IEAIPL00
019	IPL	IEAIPL00
01B	RTM	IEESTPRS
01C	Supervisor control	IEAVESPR
020	Reconfiguration	IEAVNP27
021	IOS	IEAVNPM2
022	IOS	IECVDAVV
023	System trace	IEAVNP51
024	MCH	IGFPTREC
025	IPL	IEAIPL41
028	IOS	IEAIPL40
02E	ASM	ILRMSG00
02F	ASM	ILRCMP ILRMSG00
030	NIP	IEAVNIP0
031	IOS	IEAIPL03
032	NIP	IEAVNIPM IEAVNIP0

Wait state code (Hex)	Component	Detecting module
		Table 3. Wait state codes to modules reference (continued)

Wait state code (Hex)	Component	Detecting module
033	NIP	IEAVNIPM IEAVNIP0
035	IOS	IEAIPL03
037	System Environmental Recording	IEAVNP76
038	ASM IPL	IEAIPL00 IEAVNP05 ILRASRIM
039	IOS	IEAVNPM3
03A	CSV	IEAVNP05
03B	CSV	IEAVNP05
03C	ASM	ILRASRIM ILRIODRV ILRMSG00
03D	VSM	IEAVNP08
03E	ASM	ILRTMI00
03F	NIP	IEAVNPM2
040	NIP	IEAVNIPM
044	NIP	IEAVNIP0
045	RTM	IEAVNIPM
046	NIP	IEAVNIP0
04A	NIP	IEAVNIP0
050	Loadwait	IGFPTSIG
051	ACR	IGFPTERM
052	ACR	IGFPTERM
053	IOS IPL NIP	IEAIPL03 IEAIPL99 IEAVNIP0 IOSIUCB
054	IPL	IEAIPL02
055	IOS IPL	IEAIPL31 IEAIPL41 IEAIPL02 IEAIPL40
059	NIP	IEAVNIP0
05C	DFSMSdfp	IEAVNP11
05D	DFSMSdfp	IEAVNP11
05E	DFSMSdfp	IEAVNP11
05F	DFSMSdfp	IEAVNP11
060	ASM	ILRASRIM
061	ASM	ILRASRIM
062	IOS	IOSRCHPR
063	ASM	IEAVNP03 IEAVNP11 IEAVNP19 ILRASRIM
064	NIP	IEAVNIPM IEAVNIP0
065	NIP	IEAVNIPM
06F	IOS	IOSVMSLG

Wait state code (Hex)	Component	Detecting module
070	IPL	IEAIPL00
071	IPL	IEAIPL41
072	IPL, IOS	IEAIPL30 IEAIPL41 IEAIPL40 IEAIPL43 IEAIPL46 IEAIPL70 IEAIPL71 IEAIDRIA IOSISTOR
073	IPL	IEAIPL00
074	IPL,IOS	IEAIPL35 IEAIPL00 IEAIPL02 IEAIPL03
075	IPL	IEAIPL00
076	IPL	IEAIPL00
077		IEAIPL07
07B	NIP	IEAVNIP0
07D	NIP	IEAVNPCF
07E	Supervisor Control	IEAVESVC IEAV9SVC
081	IPL	IEAIPL00
082	Console services	IEAVG603 IEAVN703
083	Supervisor control	IEAVESAR
084	RTM	IGFPEMER
085	ASM	ILRASRIM ILRASRIM
087	Console services	IEAVG603 IEAVG604 IEAVG605 IEAVG610 IEAVG611 IEAVM605 IEAVM613 IEAVM616 CNZQ1CNQ IEAVMFRR CNZQ1MT2 CNZI1DLI CNZM1TIM CNZM1TSK CNZM1TST CNZQ1DCQ CNZQ1SLG IEAVN701 IEAVN703 IEECVSMA IEEVWAIT
088	IPL	IEAIPL50
08A	Console services	IEAVBLWT
08B	IOS	IEAIPL40
08C	WLM	IWML2LWT
08E	SRM	IEAVNP10 IRARMERR
08F	Supervisor Control	IEAVEGR
09x	Loadwait	IEEVEXSN
0A1	Loadwait	IEEVEXSN
0A2	XCF	IXCI2IST IXCI2ETX IXCI2PH1
0A3	GRS	ISGNLD
0A4	Timer supervision	IEATESC2 IEATESCH
0B0	IOS	IEAIPL43

Table 3. Wait state codes to modules reference (continued)

Wait state code (Hex)	Component	Detecting module
0B1	IOS	IOSIOFR IEAIPL43
0B2	IOS	IEAIPL71
0B3	IPL	IEAIPL49
0B4	IOS	IOSIUCB
0E1	Loadwait/Restart	IEEVSTOP
0E3	VSM	IEAVNP08
0E8	MCH	IEAVNP06
101	VSM	IEAVGM00
102	VSM	IEAVGM00
104	Supervisor control	IEAVESVR
110	IOS	IOSRHREC
111	IOS	IOSRHREC
112	IOS	IOSRHREC
113	IOS	IOSRCHPR
114	IOS	IOSRCHPR
115	IOS	IECVPST IOSVDAVV IECVPST
116	IOS	IOSVRSTS
140	IOS	IECVPST
200	ALC	IEFAB4I0 IEFEB400
201	Console services	IEAVN700
202	Console services	IEAVN701
204	Allocation	IEAIPL08
206	Timer	IEAVNP21
5C7	Loadwait/Restart	BLWLDWT BLWPTERM BLWPTSIG BLWRSTOP
A00	RTM	RTM
A01	MCH	IGFPMCIH
A02	MCH	IGFPMAIN
A19	IOS	IOSRMCH
A1E	Timer supervision NIP	IEATESC2 IEAVRTOD IEATVTOD IEATTSCH IEATTFDH IEATESCH IEAVNIP0
A1F	Timer supervision	IEATESC2
A20	RSM	IARMN
A21	RSM	IARMN

Table 3. Wait state codes to modules reference (continued)

Wait state code (Hex)	Component	Detecting module
Table 3. Wait state codes to modules reference (continued)		
Wait state code (Hex)	**Component**	**Detecting module**
A22	Master scheduler	IEEVDCSR
A23	MCH	IGFPMAIN
A24	MCH	IGFPMAIN
A26	MCH	IGFPMAIN
A27	Loadwait/Restart	IEEVSTOP
A28	MCH	IGFPMCIH
A29	Loadwait	IGFPTERM
A2A	RSM	IEAVNPD8
A2C	RSM	IARMN
A2D	RSM	IAXBI
A2E	RSM	IAXRR
A70	Console services	IEAVBWTO
A7A	Service processor interface	ISNAINIT ISNATACH ISNDAMAG ISNIH ISNIRIM ISNMSI ISNRIM
B23	IOCP	IEAVSTAA
CCC	Loadwait	IEEMPS03
D0D	SMF	IEEMB829
FF0	Installation-provided	N/A
FF1	Installation-provided	N/A
FF2	Installation-provided	N/A
FF3	Installation-provided	N/A
FF4	Installation-provided	N/A
FF5	Installation-provided	N/A
FF6	Installation-provided	N/A
FF7	Installation-provided	N/A
FF8	Installation-provided	N/A
FF9	Installation-provided	N/A
FFA	Installation-provided	N/A
FFB	Installation-provided	N/A
FFC	Installation-provided	N/A
FFD	Installation-provided	N/A
FFE	Installation-provided	N/A

Chapter 6. Stand-alone dump wait state codes

When producing a stand-alone dump, a stand-alone dump program loads wait state codes into the PSW to tell the operator about certain problems.

In z/Architecture mode, the PSW for one of these wait states has the format:

```
X'00020000 00000000 00000000 00wwrrrr'
```

2
   Bits 12-15 (the CMWP bits).

ww
   The hexadecimal wait state code.

rrrr
   The hexadecimal reason code.

Table 4. Stand-alone dump wait state codes

Wait state code	Reason code	Explanation	Operator response
21	0000	The stand-alone dump program is waiting for I/O on the IPL device.	None.
22	0000	The stand-alone dump program is waiting for intervention on the IPL device.	Ready the IPL device.
24		The stand-alone dump program detected an error.	If the dump program did not issue message AMD005I, try a system restart. If system restart fails, reIPL the stand-alone dump program, preferably from a different volume.
	0100	The stand-alone dump program cannot read the volume label.	Use another volume or regenerate the label. Other data sets on the volume might be unusable.
	0200	The volume label is nonstandard.	Use another volume or regenerate the label. Other data sets on the volume might be unusable.
	0300	The stand-alone dump program cannot read the format 4 data set control block (DSCB).	Use another volume or change the DSCB. Other data sets on the volume might be unusable.
	0400	The system does not support the IPL device type.	Use a device type that the system supports.
	0500	The SYS1.PAGEDUMP data set is not on the IPL volume.	None.
	0501	A non-format 1 DSCB for SYS1.PAGEDUMP was found on the IPL volume.	None.
	0600	The stand-alone dump program cannot read the stand-alone dump common communication table (CCT).	None.

Wait state code	Reason code	Explanation	Operator response
	0700	The stand-alone dump program cannot write to the stand-alone dump file.	None.
		For a tape IPL version, this could result from a missing write ring in the IPL volume.	If tape IPL, check for the needed write ring, or disable file protection.
	0800	The stand-alone dump program cannot read module AMDSARDM.	None.
	0900	The stand-alone dump program cannot read module AMDSADIP.	None.
	0A00	The stand-alone dump program cannot read module AMDSAPGE.	None.
25	0200	A program check or other unexpected error was detected during output DASD dump data set processing. The system ends the dump.	None.
27	0010	The validity check of the devices and dump options table (DDO) failed after the system loaded it from SYS1.PAGEDUMP. The system ends the dump.	None.
	0020	The validity check of the dump relocation table (RLT) failed after the system loaded the AMDSAPGE load module from SYS1.PAGEDUMP. The system ends the dump.	None.
	0030	An error occurred while the system read the AMDSAPGE load module from SYS1.PAGEDUMP The system ends the dump.	None.
	0040	The system detected an internal logic error in the SADMP dump initialization program. The system ends the dump.	None.
28	0100	The DASD IPL program is unable to read the label on the IPL device. The system ends the dump.	None.
	0200	The DASD IPL program encountered a non-standard label on the IPL device. The system ends the dump.	None.
	0300	The DASD IPL program is unable to read the format 4 data set control block (DSCB) on the IPL device. The system ends the dump.	None.
	0400	The DASD IPL program detected an unsupported device type for the IPL device. The system ends the dump.	None.

Table 4. Stand-alone dump wait state codes (continued)

Wait state code	Reason code	Explanation	Operator response
	0500	The DASD IPL program could not locate SYS1.PAGEDUMP on the IPL device. The system ends the dump.	None.
	0600	The DASD IPL program could not read the stand-alone dump common communication table (CCT) from the IPL device. The system ends the dump.	None.
	0700	A permanent I/O error occurred while performing I/O to the SYS1.PAGEDUMP work file on the DASD IPL device. The system ends the dump.	None.
	0800	A permanent I/O error occurred while performing I/O to the SYS1.PAGEDUMP work file on the DASD IPL device. The system ends the dump.	None.
	0900	A program check or other unexpected error was encountered in the DASD IPL module or subroutine. The system ends the dump.	None.
	0A00	The work file interface in the DASD IPL module was passed incorrect parameters. The system ends the dump.	None.
	0B00	The DASD IPL program detected an error when performing a Sense-ID to the IPD device. The system ends the dump.	None.
	0C00	The DASD IPL program could not read the DAT validation and initialization routine (AMDSADVI) from the IPL device. The system ends the dump.	None.
	0D00	The DASD IPL program could not write page 1 to the work file on the IPL device. The system ends the dump.	None.
	0E00	The DASD IPL program could not read the IPL initialization routine (AMDSAIPI) from the IPL device. The system ends the dump.	None.
	0F00	The stand-alone dump program was IPLed from DASD on a processor which does not support z/Architecture.	None.
29	0700	The tape IPL module was unable to write to the work file on the IPL tape. The system ends the dump.	None.
	0800	The tape IPL module was unable to read the dump program loader (AMDSADPL) from the IPL tape. The system ends the dump.	None.

Table 4. Stand-alone dump wait state codes (continued)

Wait state code	Reason code	Explanation	Operator response
	0900	A program check or other unexpected error was encountered in the tape IPL module or subroutine. The system ends the dump.	None.
	0A00	The work file interface in the tape IPL module was passed incorrect parameters. The system ends the dump.	None.
	0C00	The tape IPL program could not read the DAT validation and initialization routine (AMDSADVI).	None.
	0D00	The tape IPL program could not write page 1 to the work file on the IPL device. The system ends the dump.	None.
	0E00	The tape IPL program could not read the IPL initialization routine (AMDSAIPI) from the IPL device. The system ends the dump.	None.
	0F00	The stand-alone dump program was IPLed from tape on a processor which does not support z/Architecture.	None.
31	*dddd*	The stand-alone dump program is waiting for I/O to the device.	None.
32	*dddd*	The stand-alone dump program is waiting for intervention on the device.	Mount and ready a tape.
33	0*mmm*	The stand-alone dump program is waiting for a reply to message AMD*mmm*A or AMD*mmm*D.	Reply to the message.
34	*dddd*	The stand-alone dump program detected an I/O error on the device and is waiting for a sense command to complete.	None.
35	*dddd*	The stand-alone dump program restarted I/O on the device and is waiting for I/O to complete.	None.
36	0100	The output tape is labelled and cannot be used.	Mount another tape and ready it.
	0200	The output tape needs a file protect ring.	Insert a ring into the tape and ready it, or disable file protection.
	0300	The output tape is full.	Save the previous tape and mount a new one.
37	0*ddd*	The stand-alone dump program is waiting for I/O that is neither a sense nor a restart to complete on the device.	None.

Table 4. Stand-alone dump wait state codes (continued)

Wait state code	Reason code	Explanation	Operator response
38	0000	The stand-alone dump program is waiting for I/O to complete on any of the output devices.	None.
3E	0000	The system is waiting for one of the following: • An attention interrupt from the operator selected console • An interrupt from the system console • An external key interrupt to indicate a no-console condition.	Select the system console or press ENTER on one of the consoles defined in the AMDSADMP macro. If a console is not available, ready a tape on the tape drive that you defined on the AMDSADMP macro, then cause an external interruption.
	0100	All storage was cleared to binary zeroes prior to the loading of stand-alone dump.	None. If SADMP is restarted at this point, a dump will be produced that contains the central processor status records, a summary of the cleared storage, and the stand-alone dump message log.
	0200	The default console was not usable. Either the device specified in the load parm was not found, or an I/O occurred when trying to write to the device.	Select the system console or press ENTER on one of the consoles defined in the AMDSADMP macro. If a console is not available, then cause an external interruption to proceed with dumping to the device you defined on the AMDSADMP macro.
3F	0100	The generated output device cannot be used, and due to a no-console condition, a replacement cannot be specified. The system ends the dump.	None.
	0101	The generated output DASD data set is not initialized and REUSEDS=NEVER was specified on the AMDSADMP macro. Because of a no-console condition, a replacement cannot be specified. The system ends the dump.	Do one of the following: • Reinitialize the output data set from another system and perform a system restart. • Perform a system restart and select a usable console so that a different output device can be specified.
	0102	The generated output DASD data set is initialized and REUSEDS=CHOICE was specified on the AMDSADMP macro. Because of a no-console condition, SADMP cannot issue message AMD096A to determine if the data set should be reused.	Do one of the following: • Reinitialize the output data set from another system and perform a system restart. • Perform a system restart and select a usable console so that SADMP can issue AMD096A.
	0200	A program check or other unexpected error was detected during output device initialization. The system ends the dump.	None.

Table 4. Stand-alone dump wait state codes (continued)

Table 4. Stand-alone dump wait state codes (continued)			
Wait state code	**Reason code**	**Explanation**	**Operator response**
40	0100	The generated output device address is not usable, and due to a no-console condition, a replacement cannot be specified. The system ends the dump.	None.
	0200	A program check or other unexpected error was detected during output device address processing. The system ends the dump.	None.
41	0000	The SADMP program ended normally; dumping is complete. **Note:** Message AMD104I can be an indication of successful completion of dump.	Save the dump.
47	0000	An unexpected machine check occurred.	Record the wait state code. If necessary, rewind and unload the output tape; the normal end-of-file is not present.
	0001	An unrecoverable machine check with invalid registers occurred.	Record the wait state code. If necessary, rewind and unload the output tape; the normal end-of-file is not present.
4F	*ssee*	The virtual storage dump program ended due to an internal error. • *ss* denotes the failing module or service. • *ee* denotes the specific type of error. Common codes are listed below. The stand-alone dump program tries to write a self-dump to the output device. Message AMD066I also contains these wait reason codes.	Record the wait state code. If necessary, rewind and unload the output tape; the normal end-of-file is not present.
	0D01	An unexpected error occurred during SADMP error recovery and program ending processing.	None.
	0D02	The stand-alone dump program requested too many self-dumps.	None.
	0D03	The system ended SADMP error recovery and program ending processing because of I/O errors.	None.
	0D05	The system did not find any SADMP error recovery module on the recovery stack.	None.
	0E10	The system cannot continue processing because there are not enough SADMP internal storage blocks (BCT) on the available queue.	None.

Table 4. Stand-alone dump wait state codes (continued)			
Wait state code	Reason code	Explanation	Operator response
	0F01	A permanent I/O error occurred on the output DASD and the operator replied 'T' to message AMD098A.	Perform a system restart to dump to another output device.
	13F1	A permanent I/O error occurred on the output tape and the operator replied 'T' to message AMD098A.	Perform a system restart to dump to another output device.
	14F1	A permanent I/O error occurred on the output tape, and the operator replied 'T' to message AMD098A.	Perform a system restart to dump to another output device.
	1C13	A system restart occurred.	None.
	1D12	An external interruption occurred.	None.
	1E20	The operator replied 'T' to message AMD088D.	None.
	1E30	The prefix storage area (PSA) was incorrect. The system cannot dump virtual storage.	None.
	1E40	The segment table (SGT) was incorrect. The system cannot dump virtual storage.	None.
	1E50	The page table (PGT) was incorrect. The system cannot dump virtual storage.	None.
	1E60	The communication vector table (CVT) was incorrect. The system cannot dump virtual storage.	None.
	1E70	The paging vector table (PVT) was incorrect. The system cannot dump virtual storage.	None.
	1E80	The real storage manager (RSM) internal table (RIT) was incorrect. The system cannot dump virtual storage.	None.
	1E90	The page frame table (PFT) was incorrect. The system cannot dump virtual storage.	None.
	1EA0	No contiguous storage could be found for a swap SGT. The system could not dump virtual storage.	None.
	22F1	A permanent I/O error occurred on the output tape volume and the operator replied 'T' to message AMD098A.	Perform a system restart to dump to another output device.
	4701	A program check or other unexpected error was detected during dump title processing. The system ends the dump.	None.

Wait state code	Reason code	Explanation	Operator response
	ssF1	An I/O error occurred on the output device.	Perform a system restart to dump to another output device.
	FEcc	A program check occurred. *cc* is the rightmost byte of the program interruption code.	None.
52	0200	The IPL initialization routine found a non-standard label on the IPL device. The system ends the dump.	None.
	0400	The IPL initialization routine found the IPL device to be an unsupported device. The system ends the dump.	None.
	0500	The IPL initialization routine was unable to locate the SYS1.PAGEDUMP.Vvolser on the IPL device. The system ends the dump.	None.
	0F00	The stand-alone dump program was IPLed on a processor which does not support z/Architecture.	None.

Table 4. Stand-alone dump wait state codes (continued)

Chapter 7. IPCS user completion codes

Use this procedure if IPCS processing ends with a user completion code. The code is 4 decimal digits.

Problems in either IBM-provided IPCS code or in installation exit routines can cause IPCS to issue an abend. Do the following for most IPCS user completion codes:

1. Check to see if IPCS issued any messages that might provide more information about the problem. These messages have the form of BLSnnnnc, unless they were issued from an exit routine.
2. Look at the following explanation of the user completion code for a description of the problem. Follow the diagnostic steps for the code.
3. Check for a failing installation exit routine.

   - Use the IPCS TRAP subcommand to isolate problems relating to the use of exit services.
   - If your installation provides exit routines, check the dump to see if one of them is identified as the failing module.

     The IPCSTOC file might contain information to help identify exits.

   - If the problem appears to be in an installation exit routine, attempt to by-pass the problem by using the NOTEST keyword.
   - For an additional check:
     - Remove all command options that cause installation exit routines to be invoked from the IPCS input stream.
     - Rerun IPCS. If the problem goes away, an installation exit routine probably has a logic problem.

   If an installation exit routine caused the problem, use the dump data to isolate the reason for the failure. Correct the exit routine.

   The following list contains the IPCS completion codes:

0100 (hexadecimal 064)

Explanation

The system detected an error while attempting to open the problem or data set directory for reading.

System action

The abend follows messages that indicate the nature of the problem. The system ends subcommand processing.

System programmer response

Follow the programmer response for the BLS03nnnt messages that precede the abend.

0101 (hexadecimal 065)

Explanation

The system detected an error while attempting to get a record from the problem or data set directory.

System action

A set of messages that describe the problem in more detail precedes the abend. The system ends subcommand processing.

System programmer response

Follow the programmer response for the BLS03nnnt messages that precede the abend.

0102 (hexadecimal 066)

Explanation

The system detected an error while attempting to close the problem or data set directory.

System action

A set of messages that describe the problem in more detail precedes the abend. The system ends subcommand processing.

System programmer response

Follow the programmer response for the BLS03nnnt messages that precede the abend.

0103 (hexadecimal 067)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0104 (hexadecimal 068)

Explanation

An attempt was made to acquire a problem resource while either the problem directory or the data set directory was open.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0105 (hexadecimal 069)

Explanation

The system detected an error during a message production procedure. A reason code is in general purpose register 15, as follows:

Reason Code
 Explanation

60
 The system could not obtain enough storage for the current output message.

Other
    An internal problem occurred.

System action

The system does not issue the message. The system ends subcommand processing.

System programmer response

If the reason code is 60, increase the region size and try again. If the problem persists or if the reason code is other than 60, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0106 (hexadecimal 06A)

Explanation

The system detected an I/O error during processing of a DELPROB subcommand. The type of problem is indicated by one of the following messages: BLS04042I, BLS04043I, or BLS04045I and their associated messages.

System action

The system ends DELPROB subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0107 (hexadecimal 06B)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0108 (hexadecimal 06C)

Explanation

The system detected an error while performing an open or close operation on the problem directory during confirmation processing.

System action

Message BLS04042I or BLS04045I precedes the abend. The system ends DELPROB subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0109 (hexadecimal 06D)

Explanation

A dump-directory equate-symbol record was passed to a service routine to have an action performed on its contents. The record contents were incorrect. The system issues the abend only if the TEST operand is specified.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0110 (hexadecimal 06E)

Explanation

The system detected an internal error.

System action

A message that indicates the type of internal error detected precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0111 (hexadecimal 06F)

Explanation

Records passed for comparison do not contain the same VSAM key.

System action

Message BLS04064I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0112 (hexadecimal 070)

Explanation

The system detected an internal error.

System action

Message BLS04061I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0113 (hexadecimal 071)

Explanation

The system detected an error while opening the data set directory. An attempt to free the data set directory did not succeed.

System action

Message BLS04052I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0114 (hexadecimal 072)

Explanation

The user instructed the IPCS attention processor to issue a diagnostic abend by entering 'abend'.

System action

The system ends the IPCS session.

System programmer response

The purpose of the IPCS attention-exit abend function is to permit diagnostic information to be collected regarding apparent IPCS problems. Use the dump to confirm this diagnosis.

0115 (hexadecimal 073)

Explanation

The system detected an error while reading the data set directory.

System action

Message BLS04053I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0116 (hexadecimal 074)

Explanation

The system detected an incorrect write request while writing a record to the data set directory.

System action

Message BLS04054I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0117 (hexadecimal 075)

Explanation

The system detected a permanent write problem while writing a record to the data set directory.

System action

Message BLS04054I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0118 (hexadecimal 076)

Explanation

The system detected an error while attempting to write a record to the data set directory.

System action

The informational message BLS04054I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0119 (hexadecimal 077)

Explanation

The system detected a permanent error while attempting to close the data set directory.

System action

Message BLS04055I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0120 (hexadecimal 078)

Explanation

The system detected an error while attempting to close the data set directory.

System action

Message BLS04055I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0121 (hexadecimal 079)

Explanation

The system detected an error while attempting to open the problem directory. The attempt to free the problem directory was unsuccessful.

System action

Message BLS04042I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0122 (hexadecimal 07A)

Explanation

The system could not obtain enough virtual storage.

System action

Message BLS04015I precedes the abend. The system ends subcommand processing.

System programmer response

Ensure that the region size is large enough for IPCS execution.

0123 (hexadecimal 07B)

Explanation

The system detected an error while reading the problem directory.

System action

Message BLS04043I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0124 (hexadecimal 07C)

Explanation

The system detected an incorrect write request while attempting to write to the problem directory.

System action

Message BLS04044I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0125 (hexadecimal 07D)

Explanation

The system detected a permanent write error while writing a record to the problem directory.

System action

Message BLS04044I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0126 (hexadecimal 07E)

Explanation

A problem occurred while writing a record to the problem directory.

System action

Message BLS04044I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0127 (hexadecimal 07F)

Explanation

The system detected a permanent error while closing the problem directory.

System action

Message BLS04045I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0128 (hexadecimal 080)

Explanation

The system detected an error while attempting to close the problem directory.

System action

Message BLS04045I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0129 (hexadecimal 081)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0130 (hexadecimal 082)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0131 (hexadecimal 083)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0132 (hexadecimal 084)

Explanation

The system detected an error while attempting to write a record into a data set. The messages that precede this abend specify in more detail the nature of the problem.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0133 (hexadecimal 085)

Explanation

The system detected an internal error.

System action

Any existing messages on the message queue were routed to the terminal prior to the abend. The system ends subcommand processing.

System programmer response

Follow the programmer response(s) for any messages issued prior to the abend.

0134 (hexadecimal 086)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0135 (hexadecimal 087)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0137 (hexadecimal 089)

Explanation

The system detected an error while attempting to close a data set. Messages that precede this abend specify in more detail the nature of the problem.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0138 (hexadecimal 08A)

Explanation

The system detected an error while attempting to open a data set. Messages that precede this abend specify in more detail the nature of the problem.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0139 (hexadecimal 08B)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0140 (hexadecimal 08C)

Explanation

The system could not close a data set.

System action

Message BLS03114I precedes the abend. The system ends subcommand processing. Either the data set may not be closed or freed.

System programmer response

If the data set is not properly closed, use IDCAMS VERIFY to close it. If the data set is not freed, issue a TSO/E FREE command.

0141 (hexadecimal 08D)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0145 (hexadecimal 091)

Explanation

The area pointed to by the control block pointer specified in message BLS04072I does not contain the specified control block.

System action

Message BLS04072I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0147 (hexadecimal 093)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0148 (hexadecimal 094)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0149 (hexadecimal 095)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0150 (hexadecimal 096)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0151 (hexadecimal 097)

Explanation

The system detected an internal error.

System action

Message BLS04014I precedes the abend. The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0152 (hexadecimal 098)

Explanation

The system detected an internal error.

System action

Message BLS03102I precedes the abend. The system ends IPCS processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0200 (hexadecimal 0C8)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0201 (hexadecimal 0C9)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

0999 (hexadecimal 3E7)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

2048 (hexadecimal 800)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

2049 (hexadecimal 801)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

2050 (hexadecimal 802)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

2051 (hexadecimal 803)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

2052 (hexadecimal 804)

Explanation

The system detected an internal error.

System action

The system ends subcommand processing.

System programmer response

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Appendix A. Accessibility

Accessible publications for this product are offered through IBM Knowledge Center (www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

If you experience difficulty with the accessibility of any z/OS information, send a detailed message to the Contact the z/OS team web page (www.ibm.com/systems/campaignmail/z/zos/contact_z) or use the following mailing address.

> IBM Corporation
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Accessibility features

Accessibility features help users who have physical disabilities such as restricted mobility or limited vision use software products successfully. The accessibility features in z/OS can help users do the following tasks:

- Run assistive technology such as screen readers and screen magnifier software.
- Operate specific or equivalent features by using the keyboard.
- Customize display attributes such as color, contrast, and font size.

Consult assistive technologies

Assistive technology products such as screen readers function with the user interfaces found in z/OS. Consult the product information for the specific assistive technology product that is used to access z/OS interfaces.

Keyboard navigation of the user interface

You can access z/OS user interfaces with TSO/E or ISPF. The following information describes how to use TSO/E and ISPF, including the use of keyboard shortcuts and function keys (PF keys). Each guide includes the default settings for the PF keys.

- *z/OS TSO/E Primer*
- *z/OS TSO/E User's Guide*
- *z/OS ISPF User's Guide Vol I*

Dotted decimal syntax diagrams

Syntax diagrams are provided in dotted decimal format for users who access IBM Knowledge Center with a screen reader. In dotted decimal format, each syntax element is written on a separate line. If two or more syntax elements are always present together (or always absent together), they can appear on the same line because they are considered a single compound syntax element.

Each line starts with a dotted decimal number; for example, 3 or 3.1 or 3.1.1. To hear these numbers correctly, make sure that the screen reader is set to read out punctuation. All the syntax elements that have the same dotted decimal number (for example, all the syntax elements that have the number 3.1)

are mutually exclusive alternatives. If you hear the lines `3.1 USERID` and `3.1 SYSTEMID`, your syntax can include either USERID or SYSTEMID, but not both.

The dotted decimal numbering level denotes the level of nesting. For example, if a syntax element with dotted decimal number 3 is followed by a series of syntax elements with dotted decimal number 3.1, all the syntax elements numbered 3.1 are subordinate to the syntax element numbered 3.

Certain words and symbols are used next to the dotted decimal numbers to add information about the syntax elements. Occasionally, these words and symbols might occur at the beginning of the element itself. For ease of identification, if the word or symbol is a part of the syntax element, it is preceded by the backslash (\) character. The ∗ symbol is placed next to a dotted decimal number to indicate that the syntax element repeats. For example, syntax element ∗FILE with dotted decimal number 3 is given the format `3 \* FILE`. Format `3* FILE` indicates that syntax element FILE repeats. Format `3* \* FILE` indicates that syntax element ∗ FILE repeats.

Characters such as commas, which are used to separate a string of syntax elements, are shown in the syntax just before the items they separate. These characters can appear on the same line as each item, or on a separate line with the same dotted decimal number as the relevant items. The line can also show another symbol to provide information about the syntax elements. For example, the lines `5.1*, 5.1 LASTRUN, and 5.1 DELETE` mean that if you use more than one of the LASTRUN and DELETE syntax elements, the elements must be separated by a comma. If no separator is given, assume that you use a blank to separate each syntax element.

If a syntax element is preceded by the % symbol, it indicates a reference that is defined elsewhere. The string that follows the % symbol is the name of a syntax fragment rather than a literal. For example, the line `2.1 %OP1` means that you must refer to separate syntax fragment OP1.

The following symbols are used next to the dotted decimal numbers.

? indicates an optional syntax element
The question mark (?) symbol indicates an optional syntax element. A dotted decimal number followed by the question mark symbol (?) indicates that all the syntax elements with a corresponding dotted decimal number, and any subordinate syntax elements, are optional. If there is only one syntax element with a dotted decimal number, the ? symbol is displayed on the same line as the syntax element, (for example `5? NOTIFY`). If there is more than one syntax element with a dotted decimal number, the ? symbol is displayed on a line by itself, followed by the syntax elements that are optional. For example, if you hear the lines `5 ?`, `5 NOTIFY`, and `5 UPDATE`, you know that the syntax elements NOTIFY and UPDATE are optional. That is, you can choose one or none of them. The ? symbol is equivalent to a bypass line in a railroad diagram.

! indicates a default syntax element
The exclamation mark (!) symbol indicates a default syntax element. A dotted decimal number followed by the ! symbol and a syntax element indicate that the syntax element is the default option for all syntax elements that share the same dotted decimal number. Only one of the syntax elements that share the dotted decimal number can specify the ! symbol. For example, if you hear the lines `2? FILE, 2.1! (KEEP), and 2.1 (DELETE)`, you know that (KEEP) is the default option for the FILE keyword. In the example, if you include the FILE keyword, but do not specify an option, the default option KEEP is applied. A default option also applies to the next higher dotted decimal number. In this example, if the FILE keyword is omitted, the default `FILE(KEEP)` is used. However, if you hear the lines `2? FILE, 2.1, 2.1.1! (KEEP), and 2.1.1 (DELETE)`, the default option KEEP applies only to the next higher dotted decimal number, `2.1` (which does not have an associated keyword), and does not apply to `2? FILE`. Nothing is used if the keyword FILE is omitted.

∗ indicates an optional syntax element that is repeatable
The asterisk or glyph (∗) symbol indicates a syntax element that can be repeated zero or more times. A dotted decimal number followed by the ∗ symbol indicates that this syntax element can be used zero or more times; that is, it is optional and can be repeated. For example, if you hear the line `5.1* data area`, you know that you can include one data area, more than one data area, or no data area. If you hear the lines `3*`, `3 HOST`, `3 STATE`, you know that you can include HOST, STATE, both together, or nothing.

Notes:

1. If a dotted decimal number has an asterisk (*) next to it and there is only one item with that dotted decimal number, you can repeat that same item more than once.
2. If a dotted decimal number has an asterisk next to it and several items have that dotted decimal number, you can use more than one item from the list, but you cannot use the items more than once each. In the previous example, you can write HOST STATE, but you cannot write HOST HOST.
3. The * symbol is equivalent to a loopback line in a railroad syntax diagram.

+ indicates a syntax element that must be included

The plus (+) symbol indicates a syntax element that must be included at least once. A dotted decimal number followed by the + symbol indicates that the syntax element must be included one or more times. That is, it must be included at least once and can be repeated. For example, if you hear the line 6.1+ data area, you must include at least one data area. If you hear the lines 2+, 2 HOST, and 2 STATE, you know that you must include HOST, STATE, or both. Similar to the * symbol, the + symbol can repeat a particular item if it is the only item with that dotted decimal number. The + symbol, like the * symbol, is equivalent to a loopback line in a railroad syntax diagram.

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Policy for unsupported hardware

Various z/OS elements, such as DFSMSdfp, JES2, JES3, and MVS, contain code that supports specific hardware servers or devices. In some cases, this device-related element support remains in the product even after the hardware devices pass their announced End of Service date. z/OS may continue to service element code; however, it will not provide service related to unsupported hardware devices. Software problems related to these devices will not be accepted for service, and current service activity will cease if a problem is determined to be associated with out-of-support devices. In such cases, fixes will not be issued.

Minimum supported hardware

The minimum supported hardware for z/OS releases identified in z/OS announcements can subsequently change when service for particular servers or devices is withdrawn. Likewise, the levels of other software products supported on a particular release of z/OS are subject to the service support lifecycle of those

products. Therefore, z/OS and its product publications (for example, panels, samples, messages, and product documentation) can include references to hardware and software that is no longer supported.

- For information about software support lifecycle, see: IBM Lifecycle Support for z/OS (www.ibm.com/software/support/systemsz/lifecycle)
- For information about currently-supported IBM hardware, contact your IBM representative.

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