



**Program Directory for
Hardware Configuration Definition and
Hardware Configuration Manager for z/VM**

function level 740

Program Number 5741-A09

for Use with
z/VM version 7 release 4

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GI13-4365-03

Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 19.

This program directory, dated September 2024, applies to Hardware Configuration Definition and Hardware Configuration Manager for z/VM (HCD/HCM for z/VM), function level 740, Program Number 5741-A09.

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1.0 Introduction

This program directory is intended for the system programmer responsible for program installation and maintenance. It contains information that corresponds to the material and procedures for installation and service of Hardware Configuration Definition and Hardware Configuration Manager for z/VM (HCD/HCM for z/VM).

Note: It is recommended that you review this program directory in its entirety before you install or service this program, then keep this document for future reference.

The program directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic and optional program materials and documentation for HCD/HCM for z/VM.
- 3.0, “Program Support” on page 6 describes the IBM support available for HCD/HCM for z/VM.
- 4.0, “Program and Service Level Information” on page 7 lists the APARs (program level) and PTFs (service level) incorporated into HCD/HCM for z/VM.
- 5.0, “Installation and Migration Requirements and Considerations” on page 8 identifies the resources and considerations for installing, migrating and using HCD/HCM for z/VM.
- 6.0, “Installation Instructions” on page 11 provides detailed installation instructions for HCD/HCM for z/VM.
- 7.0, “Service Instructions” on page 18 provides servicing instructions for HCD/HCM for z/VM.

Obtaining Updated Planning Information

Before you install HCD/HCM for z/VM, read 4.2, “Service Level Information” on page 7. This section describes how to obtain any updates to the product and the information and procedures presented within this program directory.

1.1 Program Description

HCD/HCM for z/VM brings a new way of performing I/O configuration tasks to z/VM customers. Using HCD/HCM for z/VM is optional.

- 4 HCD/HCM for z/VM is no longer shipped pre-installed as of z/VM version 7 release 4. Instead HCD/HCM
4 functional executables are delivered as part of the z/VM version 7 release 4 product and serviced through
4 the Control Program (CP) component, simplifying the process for applying HCD/HCM service.

z/VM HCD is an I/O configuration definition tool which validates channel subsystem and operating system definition at data-entry time. All I/O configuration settings are stored in an optional I/O configuration repository called I/O Definition File (IODF). z/VM HCD is responsible for creating and maintaining the IODF. When using z/VM HCD support, z/VM Control Program (CP) reads its I/O configuration settings

from the IODF during IPL. z/VM HCD allows for changing the I/O configuration dynamically by setting a new IODF active, without having to IML or IPL your VM system.

z/VM HCD supports I/O configuration for all hardware which is supported by z/VM version 7 release 1, z/VM version 7 release 2 and z/VM version 7 release 4. z/VM HCD checks a broad range of I/O configuration rules. In particular, control unit and device specific rules are checked. z/VM HCD creates valid IOCDs from the IODF by running IOCP. When using z/VM HCD support, there is no need for z/VM customers to run IOCP directly. In addition, z/VM HCD contains several REXX programs for accomplishing I/O configuration tasks.

HCD/HCM for z/VM contains Hardware Configuration Manager (HCM) which is a Graphical User Interface (GUI) running on a Windows™ PC workstation. HCM is a client program which needs a running z/VM HCD server on a z/VM system. z/VM HCD and HCM communicate via a TCP/IP connection mediated by the z/VM HCD TCP/IP dispatcher for HCM.

2.0 Program Materials

An IBM program is identified by a program number. The program number for Hardware Configuration Definition and Hardware Configuration Manager for z/VM function level 740 is 5741-A09.

The z/VM program announcement materials provide detailed information about the features supported by HCD/HCM for z/VM. If you have not already received a copy of this information, contact your IBM marketing representative.

The following sections identify:

- basic and optional program materials that are applicable to this program
- publications useful during installation and service.

2.1 Basic Machine-Readable Material

- 4 Hardware Configuration Definition and Hardware Configuration Manager for z/VM (HCD/HCM for z/VM) is
4 delivered as part of the z/VM 7.4 product and serviced through the Control Program (CP) component.
Refer to the z/VM version 7 release 4 Software Announcement for information on ordering z/VM and its features.

2.2 Optional Machine-Readable Material

There are no features or optional machine-readable materials associated with HCD/HCM for z/VM.

2.3 Program Publications

The following sections identify the basic and optional publications associated with HCD/HCM for z/VM.

2.3.1 Basic Program Publications

The following publication is part of a HCD/HCM for z/VM order but it is only available as softcopy. Refer to the section 2.3.3, “Softcopy Publications” on page 4 for the World Wide Web URL that this program directory can be found at.

Figure 1. Basic Material: Unlicensed Publications

Publication Title	Form Number
Program Directory for Hardware Configuration Definition and Hardware Configuration Manager for z/VM	GI13-4365-03

2.3.2 Base Program Publications

Figure 2 on page 4 identifies the base program publications associated with HCD/HCM for z/VM.

Figure 2. Program Publications - New Editions

Publication Title	Form Number
z/VM: I/O Configuration	SC24-6291
z/OS® and z/VM: Hardware Configuration Manager User's Guide	SC34-2670
z/OS and z/VM: Hardware Configuration Definition Messages	SC34-2668

2.3.3 Softcopy Publications

HCD/HCM for z/VM publications, except the Program Directory, are available in the z/VM library in the IBM Documentation Center web site:

www.ibm.com/docs/en/zvm/7.4

HCD/HCM for z/VM softcopy publications including the Program Directories are available from the z/VM internet library home page on the World Wide Web; the URL for this home page is:

www.vm.ibm.com/library

2.4 Program Source Materials

No program source materials or viewable program listings are provided with HCD/HCM for z/VM.

2.5 Publications Useful During Installation and Service

The publications listed in Figure 3 may be useful during the installation and servicing of HCD/HCM for z/VM. To order copies, visit the IBM Publications Center web site (URL above) or contact your IBM representative.

Figure 3 (Page 1 of 2). Publications Useful During Installation / Service

Publication Title	Form Number
z/VM: I/O Configuration	SC24-6291
z/OS and z/VM: Hardware Configuration Manager User's Guide	SC34-2670
z/OS and z/VM: Hardware Configuration Definition Messages	SC34-2668
z/VM: VMSES/E Introduction and Reference	GC24-6336
z/VM: Service Guide	GC24-6325
z/VM: Installation Guide	GC24-6292

Figure 3 (Page 2 of 2). Publications Useful During Installation / Service

Publication Title	Form Number
z/VM: CP Planning and Administration	SC24-6271
z/VM: CMS Commands and Utilities Reference	SC24-6268
z/VM: CMS File Pool Planning, Administration, and Operation	SC24-6261
z/VM: Other Components Messages and Codes	GC24-6300
z/VM: CMS and REXX/VM Messages and Codes	GC24-6255
z/VM: CP Messages and Codes	GC24-6270
z/VM: Reusable Server Kernel Programmer's Guide and Reference	SC24-6313
z/VM: TCP/IP Planning and Customization	SC24-6331
z/VM: TCP/IP User's Guide	SC24-6333

3.0 Program Support

This section describes the IBM support available for HCD/HCM for z/VM.

4 3.1 HCD/HCM for z/VM Service Application

- 4 VM service for HCD/HCM for z/VM is shipped as an APAR to the CP component of z/VM.

3.2 Statement of Support Procedures

With HCD/HCM for z/VM you are entitled to support under the basic warranty for z/VM version 7. Also note that the z/VM Software Subscription and Support is *automatically* added to your z/VM order. This provides IBM Z® service to which you are likely accustomed. If you do not want the z/VM Software Subscription and Support, then you must take specific action to decline it when ordering z/VM.

Report any difficulties you have using this program to your IBM Support Center.

When working with HCD/HCM for z/VM support personnel on problems associated with an active Salesforce™ Case Record, diagnostic information may occasionally be requested. In such cases, the support staff will work with you to determine how to provide them with the required documentation.

Figure 4 identifies IBM RETAIN information - the Component ID (COMPID), RETAIN Release, and Field Engineering Service Number (FESN) - that corresponds to HCD/HCM for z/VM.

Figure 4. Component IDs

RETAIN		Component Name	FESN
COMPID	Release		
568411219	740	HCD/HCM for z/VM	0409974

4.0 Program and Service Level Information

This section identifies the program level and any relevant service levels of HCD/HCM for z/VM. In this context *program level* refers to APAR fixes incorporated within the HCD/HCM for z/VM program; *service level* refers to PTFs that are supplied with this product. Information about the HCD/HCM for z/VM cumulative service tape is provided as well.

4.1 Program Level Information - HCD/HCM for z/VM

The following APAR fixes against the previous release of HCD/HCM for z/VM have been incorporated into the base of this release:

4 VM66371 VM66445 VM66523 VM66547 VM66554 VM66603 VM66624

4.2 Service Level Information

- 4 Before you install and configure HCD/HCM for z/VM, you should review the z/VM 7.4 CP Change Log
4 (<https://www.vm.ibm.com/changelog/740/cp.html>) for any recent fixes available for HCD/HCM for z/VM,
4 and check for any updated installation instructions in the and the current version of the z/OS® and z/VM:
4 Hardware Configuration Manager User's Guide (SC34-2670)

4.3 Cumulative Service (RSU) Information

- Cumulative service for HCD/HCM for z/VM, function level 740 is available through a periodic, preventive service deliverable, referred to as a Recommended Service Upgrade (RSU). The RSU is used to provide
4 service updates for multiple z/VM components (including HCD/HCM for z/VM as part of the CP
4 component) and is often referred to as the *stacked* RSU. It will contain service for all of the components, features or products, in VMSES/E format, that are pre-installed on the z/VM System deliverable.
- 4 The stacked RSU can be obtained by ordering PTF UM97740.

Current RSU status and content information is available at the z/VM RSU home page on the World Wide Web; the URL for this home page is:

www.vm.ibm.com/service/rsu

5.0 Installation and Migration Requirements and Considerations

The following sections identify the system requirements for installing HCD/HCM for z/VM.

5.1 Hardware Requirements

A PC workstation is required to install and run the Hardware Configuration Manager (HCM) part of HCD/HCM for z/VM. Refer to the *z/OS and z/VM: Hardware Configuration Manager User's Guide* for details. All data exchange between z/VM HCD and HCM is based on the TCP/IP protocol. Refer to the Program Directory for TCP/IP for z/VM for hardware requirements for TCP/IP.

5.2 Program Considerations

The following sections list the programming considerations for installing and activating HCD/HCM for z/VM.

5.2.1 Operating System Requirements

HCD/HCM for z/VM requires the following VM operating system:

- z/VM version 7 release 4
- 4 A PC workstation with a Windows™ 10 or Windows™ 11 operating system is required to install and run the Hardware Configuration Manager (HCM). Refer to the *z/OS and z/VM: Hardware Configuration Manager User's Guide* for details.

5.2.2 Other Program Product Requirements

5.2.2.1 Other Program Product Requirements - HCD/HCM for z/VM

High Level Assembler for MVS™ & VM & VSE V1.6 (HLASM V1.6) with at least APAR PI06694, or higher is required to migrate (convert) a file containing I/O configuration (IOCP) statements into an existing work IODF (using CBDSMIGR command). For more information on CBDSMIGR see *z/VM: I/O Configuration*.

Note: If you do not have the High Level Assembler, please contact the IBM Support Center for assistance.

5.2.2.2 Other Program Product Requirements - HCM

For using the Hardware Configuration Manager (HCM) as a Graphical User Interface (GUI) to HCD/HCM for z/VM, the following program products are required:

- TCP/IP for z/VM, must be installed and configured on your z/VM system. Refer to the Program Directory for TCP/IP for z/VM for details.
- The TCP/IP network protocol must be installed and configured on your PC workstation. Refer to the *z/OS and z/VM: Hardware Configuration Manager User's Guide* for details.

5.2.2.3 Customizable Parts

Two of the HCD/HCM for z/VM customizable parts have been changed. In part CBDSDPRF SAMPPROF the SFS directory check was removed because the HCD/HCM for z/VM production disk can no longer be in SFS. In part CBDCONF NAMES a new :NICK. definition was added for new CBDSDPKG utility. If you are migrating you will have to update the PROFILE EXEC and CBDCONF NAMES file on CBDIODSP's A-disk.

If you use the upgrade procedure documented in the *z/VM: Installation Guide* to upgrade HCD/HCM for z/VM from a z/VM V7.2 or z/VM V7.3 system, the customizable files will be moved to z/VM version 7 release 4. If the customizable files have been changed on the new level of HCD/HCM for z/VM and you have made changes to them on your current z/VM system, you will be told to rework your changes.

5.2.2.4 Increased Virtual Machine Size for z/VM HCD TCP/IP Dispatcher

With z/VM version 7 release 4, the default storage size for the z/VM HCD TCP/IP dispatcher user ID, CBDIODSP, is defined as 2G, with a maximum size of 2G, in order to satisfy an increased storage requirement to activate larger Dynamic I/O changes. If you migrate your CP user directory from a release of VM before z/VM version 7 release 4 then you will need to make this change.

5.2.2.5 Update to IPL ZCMS for z/VM HCD TCP/IP Dispatcher

With z/VM version 7 release 4, the z/VM HCD TCP/IP dispatcher ID, CBDIODSP CP directory changed IPL CMS to IPL ZCMS. If you migrate your CP user directory from a release of VM before z/VM version 7 release 4 then you will need to make this change. This is needed if the IOCP program is used.

5.2.3 Program Installation and Service Considerations

This section describes items that should be considered before you install or service HCD/HCM for z/VM.

- HCD/HCM for z/VM is delivered as part of the z/VM version 7 release 4 product.
- With the packaging changes introduced with z/VM V6.2 to provide support for a z/VM single system image (SSI), note that **all HCD/HCM for z/VM service activity now must be performed using the user ID MAINT_{vr}m (e.g. MAINT740).**
- VMSES/E is required to install and service this product.

- If you modify or eliminate any of the IBM-supplied user IDs, minidisk addresses or SFS directory names that are associated with HCD/HCM for z/VM, you **must** create an appropriate PPF override for the **SERV2P \$PPF** file.

You also must use the **VMFUPDAT SYSSUF** command to update the VM SYSSUF Software Inventory file, so that your PPF override for SERV2P PPF is used for automated service processing. For more information about PPF overrides, see the *z/VM: VMSES/E Introduction and Reference*.

- An RSU deliverable will be supplied as necessary. Service between RSUs can be obtained through CORrective service.

6.0 Installation Instructions

- 4 HCD/HCM for z/VM was delivered as part of the CP component as part of the z/VM System.

This chapter describes the installation methods and the step-by-step procedures to complete the installation and activate HCD/HCM for z/VM.

Did you do an upgrade installation?

- 4 If you used the upgrade installation procedure documented in the *z/VM: Installation Guide* to upgrade a z/VM version 7 release 2 or z/VM version 7 release 3 system to a z/VM version 7 release 4 system, no further enablement or customization is necessary. Your installation of HCD/HCM for z/VM is complete. Proceed to Section 7.

6.1 Place HCD/HCM for z/VM Into Production

6.1.1 Setting up Security for HCD/HCM for z/VM

You can exploit native CP methods to set up security or you can use an external security manager.

To set up security with native CP, go to section 6.1.1.1, “Setting Up Security with native CP.”

To set up security using an External Security Manager, go to section 6.1.1.2, “Setting Up Security with RACF/VM External Security Manager” on page 12. This section will use RACF/VM as an example.

For further information on using security with HCD/HCM for z/VM refer to Chapter 2 'Installing HCM' in the *z/OS and z/VM: Hardware Configuration Manager User's Guide* manual.

6.1.1.1 Setting Up Security with native CP

To use native CP for security the following things need to be done.

Note: If you are running in an Single System Image (SSI) cluster then these steps need to be done on each member. For any CP directory update you only update the common directory once but then you need to run DIRECTXA on every member.

- 1 The file CBDCONF NAMES needs to have the following entry:

:SECURITY.CP

This is the default shipped in the file.

- 2 In the CP directory entry for the dispatcher service virtual machine, CBDIODSP, you need to add the directory statement:

OPTION DIAG88

This is the default shipped in the file.

- 3** Make sure the password for the dispatcher service virtual machine, CBDIODSP, in the CP directory entry, is set according to your company's security rules.

If running in an SSI cluster, remember to run DIRECTXA on all members of your cluster.

Proceed with section 6.1.2, "Install Hardware Configuration Manager (HCM)" on page 14.

6.1.1.2 Setting Up Security with RACF/VM External Security Manager

To use RACF/VM as the ESM, perform the following procedure to authorize virtual machines to issue RACROUTE requests. For more information, refer to *z/VM: Security Server RACROUTE Macro Reference*.

Notes:

1. RACF must be enabled and running on your system in order to perform this procedure.
2. If running in an SSI cluster the first and second steps need to be done on every member. Step three only needs to be done once and it can be done on any member.

- 1** The file CBDCONF NAMES needs to have the following entry:
:SECURITY.ESM

- 2** Identify the RACF/VM service machine to which RACROUTE requests will be sent. Make sure the z/VM HCD TCP/IP dispatcher service virtual machine (CBDIODSP) has access to the RACF SERVMACH file. See the *z/VM: RACF Security Server System Programmer's Guide* for more information.

- 3** Give the z/VM HCD TCP/IP dispatcher permission to perform password validation using DMSPASS (which uses DIAGNOSE X'88').

Note: If you do not enable RACF profile protection for Diagnose X'88', the z/VM HCD TCP/IP dispatcher service virtual machine (CBDIODSP) must be defined with OPTION DIAG88 in its directory entry.

- a** Define a RACF profile called DIAG088 in class VMCMD, if it does not already exist, and ensure that profile DIAG088 has a UACC of NONE.

rac rdefine vmcmd diag088 uacc(none)

- b** Authorize the z/VM HCD TCP/IP dispatcher (CBDIODSP) to use DIAGNOSE X'88' by giving it READ access to the DIAG088 profile.

rac permit diag088 class(vmcmd) id(cbdiodsp) access(read)

- c** If the VMCMD class is not already active, use the SETROPTS commands to activate it.

rac setropts classact(vmcmd)

- d** Make sure that the protection of DIAGNOSE X'88' is active. It is active by default, if the installation has not changed the setting in the currently active VMXEVENT profile.

- 1** Check to see if active by issuing

rac setevent list

DIAG088 should say CONTROL if it is active

- 2** If DIAG088 is not currently active, then activate it

rac ralter vmxevent events1 delmem(diag088/noctl)

rac setevent refresh events1

- 4** Make sure the z/VM HCD TCP/IP dispatcher (CBDIODSP) has IUCV authorization by performing one of these two steps.

- Update the RACF/VM service machine's (RACFVM is default) CP directory by adding IUCV ALLOW to provide global IUCV authorization, so that any user in the system can connect to the RACF/VM service machine.

- OR -

- Give IUCV authorization to the z/VM HCD TCP/IP dispatcher. Update the CBDIODSP CP USER directory by adding the following IUCV statement that specifies the RACF/VM service machine with which the RACROUTE issuer will be communicating.

IUCV RACFVM PRIORITY MSGLIMIT 255

See *z/VM:CP Planning and Administration* for more information.

- 5** RACF-authorize a connection to the RACF/VM service machine.

a Log on to a user ID that has RACF system-SPECIAL attribute.

b Create a profile named ICHCONN in the FACILITY class.

rac rdefine facility ichconn uacc(none)

c Give UPDATE access authority to CBDIODSP

rac permit ichconn class(facility) id(cbdiodsp) access(update)

d Activate the FACILITY class (if not already active)

rac setropts classact(facility)

e In the PROFILE EXEC for CBDIODSP (z/VM HCD TCP/IP dispatcher) initialize the connection to the RACF/VM virtual machine by removing the comment characters in the line /* RPIUCMS INIT */. To look like:

RPIUCMS INIT

Proceed with section 6.1.2, "Install Hardware Configuration Manager (HCM)."

6.1.2 Install Hardware Configuration Manager (HCM)

Install the Hardware Configuration Manager (HCM) part of HCD/HCM for z/VM using the following instructions. For your convenience these instructions can also be found in 'Chapter 2. Installing HCM' in the the *z/OS and z/VM: Hardware Configuration Manager User's Guide*.

Note: Regardless if running in an SSI cluster or not, these steps only need to be done once. In an SSI cluster they can be done on any member.

- 1** Log on to the z/VM HCD TCP/IP dispatcher user ID, CBDIODSP
- 2** Download to the PC, in binary mode, the install shield file EEQINSTMSIBIN. This file is on the CBDIODSP production disk which is the 400 minidisk. Use a transfer program of your choice. The file must be executable on the PC therefore you need to make sure it has an extension of MSI when you download it.
- 3** Invoke the HCM install utility that now resides on your workstation, e.g. choose the RUN option in the START menu. This will install HCM. The HCM installation creates an entry in your START menu, that you can use to launch HCM.

6.1.3 Start Hardware Configuration Definition (HCD)

Following are instructions for starting and stopping the z/VM HCD TCP/IP dispatcher service virtual machine in order to communicate between z/VM HCD and HCM. For your convenience these commands are also provided in *z/OS and z/VM: Hardware Configuration Manager User's Guide*.

Note: If you are running in an SSI cluster, log on to any member associated with the processor where you are going to make I/O configuration changes and perform the following steps. If you want to be able to make I/O changes from any member in an SSI cluster then you need to update the appropriate files mentioned in step 1 on every member.

- 1** Log on to the z/VM HCD TCP/IP dispatcher for HCM service virtual machine. The default user ID is CBDIODSP.

Notes:

- a. If the name of your TCP/IP service virtual machine is not equal to TCPIP, then you must change the TCP START command in the PROFILE RSK file (on CBDIODSP 191 A-disk). Refer to the *z/VM: Reusable Server Kernel - Programmers Guide and Reference* for information on the TCP START command.
- b. The z/VM HCD TCP/IP dispatcher, CBDIODSP, uses 51107 as its default port. You should reserve this port in TCP/IP's PROFILE TCPIP. You should add the following entries to the PORT section of TCP/IP's PROFILE TCPIP.

```
PORT
51107  TCP CBDIODSP      ; HCD server
51107  UDP CBDIODSP      ; HCD server
```

- c. Recycle TCP/IP.

Note that you can change the port to something else. If you do, update the CBDCONF NAMES file on the A-disk of the CBDIODSP user ID as well as the PROFILE TCPIP.

- 2** Start the z/VM HCD TCP/IP dispatcher for HCM by issuing the command CBDSDISP in CMS while logged on to the CBDIODSP user ID. Wait for text messages and verify that all services started correctly. Following are messages that you will see after issuing CBDSDISP:

```

IBM VM/ESA® Reusable Server Kernel
(C)Copyright 1993,1994,1995,1996,1997,1998
International Business Machines Corporation.
All Rights Reserved.
RSK>
SUBCOM BKWSCM00000I Operation completed OK.
SUBCOM BKWSCM00000I Operation completed OK.
CONSOLE BKWCNS00000I Operation completed OK.
CONSOLE BKWCNS00000I Operation completed OK.
TCP BKWTCP00000I Operation completed OK.
CBDD200I z/VM 7.4.0 HCD TCP/IP dispatcher for HCM successfully started.
TCP BKWTCP00000I Operation completed OK.
SUBCOM BKWSCM00000I Operation completed OK.
CONSOLE BKWCNS00000I Operation completed OK.

```

You may disconnect this machine at this time.

- 3 On your workstation, start HCM. This can be done either by starting the executable or by double-clicking with the left mouse button on one of your saved HCM configuration files in Windows Explorer. In the latter case, the configuration is loaded as soon as HCM is running. The Product Information window of the Hardware Configuration Manager (HCM) program is displayed.
- 4 Enter the z/VM HCD TCP/IP dispatcher service virtual machine user ID, default is CBDIODSP, and its password. Use the z/VM TCP/IP hostname or IP address, of the system where HCD is installed, and your port number (51107 is the default).
- 5 Optionally, you can switch on the HCD trace, if needed.
- 6 Work with HCM. Refer to the 'Getting Started' chapter in the *z/OS and z/VM: Hardware Configuration Manager User's Guide*.

Note: When the z/OS and z/VM HCM dialog opens to logon, you will see a box to check "Enable Encryption". Do not check this box for z/VM. Encrypting the host communication is only available on z/OS for HCM.
- 7 Exit from HCM on your workstation.
- 8 Stop the z/VM HCD TCP/IP dispatcher for HCM by issuing the command 'SERVER STOP' on the CBDIODSP console. If you disconnected the dispatcher user ID then you need to log back on to issue the command. You should see the following:

```

SERVER STOP
RSK>
SERVER BKWSRV03000I Shutdown initiated.
CBDD210I z/VM 7.4.0 HCD TCP/IP dispatcher for HCM stopped.
Ready;

```

Note: The dispatcher can be started again using step 2 on page 15 above; there is no need to logoff and logon again.

HCD/HCM for z/VM is now installed and ready to use on your system. To use HCD/HCM for z/VM go to the *z/VM: I/O Configuration* and *z/OS and z/VM: Hardware Configuration Manager User's Guide* publications.

7.0 Service Instructions

Note - z/VM Automated Service Procedure

The z/VM automated service procedure (use of the **SERVICE** and **PUT2PROD** commands) is **required** for applying service to HCD/HCM for z/VM.

7.1 Servicing HCD/HCM for z/VM

Use the service instructions documented in the *z/VM: Service Guide* to receive, apply, build and place
4 HCD/HCM for z/VM service to the z/VM CP component into production.

You have finished servicing HCD/HCM for z/VM.

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