IBM z/OS HCD & HCM
Newsletter No 8

HCM and New HCD
Functions in MVS/ESA 5.2

From the Boeblingen HCD/HCM Team
June 1995

Table of Contents

By looking at the Header, you may have noticed a change! The HCD newsletter has become the 'HCD/HCM Newsletter' and the HCD Team has become the 'HCD/HCM Team'. As a matter of fact, quite a number of people in the team work on both products. And now - to satisfy your curiosity - some information about **'HCM'** which has been **announced June 13, 1995** and is planned to be **available October 1995** .

The second and third part of the newsletter is then again information about HCD.

In the future we will always inform you about news in both HCD and HCM.

Hardware Configuration Manager for MVS (HCM)

Configuration Management Today

During the last years the complexity of configuration management has grown rapidly. Many installations run several processors with logical partitions running several operating systems are connected using shared I/O equipment. With the introduction of EMIF, the logical connections have become even more flexible through the definition of shared channels. The logical definitions are done with Hardware Configuration Definition (HCD).

In addition to the logical connections, your enterprise also has to manage the physical aspects of a configuration. For example, until now it has not been possible to effectively manage the increasing flexibility offered by the ESCON infrastructure.

In most cases, different user groups are involved in the planning, installation, and operation of these logical and physical configurations. They normally use different tools to plan and document their definitions and to keep track of their changes. Configuration documentation can easily diverge and problem determination may become a cumbersome process. Only the discipline of each user group helps to keep an overview of the whole configuration.

The Hardware Configuration Manager for MVS (HCM) helps you to get this complexity under control and master your configuration. HCM is a client-server extension to HCD exploiting the advantages of a graphical user interface to track both logical and physical configurations.

The Product at Work

The Hardware Configuration Manager for MVS (HCM) provides a graphical user interface that allows you to define logical as well as physical configuration data for the hardware and the MVS operating system.

Since HCM is an extension to HCD, updates done with HCM are immediately reflected in the HCD input/output definition file (IODF) on the host. The IODF will automatically be kept up-to-date.

Product Benefits

Improved System Availability

Since HCM always provides up-to-date configuration data of both logical and physical definitions, problem determination is much easier. The graphical

representation of the configuration helps you to quickly find the causes of errors. In addition, the validation that is part of the connection to HCD reduces the chance of unplanned system outages.

Improved Productivity

Different user groups can use the same tools for different tasks, the same data does not have to be entered several times but is the same for all tasks. The graphical user interface with graphical navigation techniques supports the users in a more natural way than the ISPF interface of HCD.

No Need to Produce Documentation Manually

Since the real system data is used for the documentation, data and documentation are always in synchronization and there is no extra effort required to produce the documentation.

Hardware Configuration Manager for MVS is a separate Program Product - Program Number 5697-119.

If you want to get more information about the product, you can order the brochure G511-3523.

What Is New in HCD 5.2

Already in HCD 5.1 a number of usability improvements to the ISPF dialog interface have been made available. This has been continued in HCD 5.2.

HCD 5.2 will be available as part of MVS/ESA 5.2 in June 1995.

Improved Navigation

Context Menu

The **Add** , **Modify** , **View** , and **Build** actions have been removed from the action bar. Instead, you will now see a context menu when you select an object on an action list panel and press **Enter**. The context menu shows all options available for the selected object. If there is only one action possible, the action is performed without showing the context menu.

View objects and Work with objects

HCD 5.2 makes a clear distinction between viewing objects and working with objects to change them. Whenever you used **View** in the past to navigate to a list panel and perform some changes, you now have to select **Work with ...** from the context menu.

Selecting **View ...** , you can view information about the selected object but you cannot change it.

Consistent Usage of Action Code

(v)

For consistency reasons the action code **(v)** is now used exclusively to view objects. Therefore the action code to request an Esoteric List panel from an EDT List panel has been changed from **(v)** to **(s)**.

Consistent Usage of Action Code

(s)

The action to select an object has been made consistent. On the Define Device to Operating System Configuration panel and on the Select Processor / Control Unit panel you now select an operating system or a processor by using action code **(s)** instead of **(c)**.

GOTO Enhancements

 Goto is now made available as an action bar choice and displays all possible targets in the pull-down menu. This means that you do not have to worry about the GOTO command syntax but simply select the target object you want to work with.

The GOTO command has been further enhanced and you can now go directly to the switch configuration and port matrix panels.

Extended Filtering

Additional filter criteria give you more flexibility in limiting the number of objects displayed. For instance, you can now get an overview of objects that are not attached to another object (such as CUs not attached to a processor or devices not attached to a CU) or you can get an overview of CHPIDs and ports that are free for establishing connections.

Confirm Leaving HCD

To prevent you from unintentionally leaving HCD when pressing **F3=Exit** or **F12=Cancel**, you are now asked to confirm that you want to leave HCD.

Streamlined Dialog

EDT/Esoteric Dialog

Some EDT/Esoteric panels have been combined to reduce the number of panels you have to go through when assigning devices to esoterics.

Channel Path/Partition Assignment Matrix

The Channel Path List panel has been extended and includes now the partition's access and candidate list assignments. You can view the assignments by scrolling the panel to the right. You can easily update the information by typing over the new assignments.

Removed Restrictions

Virtual Storage Constraint Relief

When defining devices, the UCBs for the devices are appended to the SQA located below the 16 megabyte line. You could run out of storage below the 16 megabyte line when defining a large number of devices. To overcome this problem, you are now allowed to specify that the UCBs are located above the 16 megabyte line. The UCBs will then be located in the Extended SQA, which is above the 16 megabyte line in 31-bit storage. Use the LOCANY parameter in HCD to define where you want the UCBs for your devices to be located.

Exporting between Different HCD Versions

You can now export an IODF from a higher HCD version to a lower HCD version. The version of the IODF remains the same. For example, if you export an IODF from HCD 5.1 to HCD 4.3, the IODF remains a 5.1 IODF. When using this IODF you have to consider some restrictions. For details please consult the HCD User's Guide, SC33-6468.

New and Improved Reports

Coupling Facility Report

You can now create or view a graphical report showing the connections that exist between a coupling facility and the other processors defined in the IODF.

Improved Readability of Reports

The readability of a number of reports has been increased by grouping devices with the same characteristics. The grouping is done by showing the starting device number and the range (Example: 110,8) rather than listing each device on a separate line. The device grouping is done for the following

reports:

- Device summary report
- MVS Device report
- VM Device report
- EDT Device report

Reports Showing Supported Hardware

You can use the HCD batch utility "Print a Configuration or Supported Hardware Report" to print the actual status of the hardware supported in your installation. This is particularly useful for installation planning. The report shows the following supported hardware:

- Processors
- Control units
- Devices (including device characteristics and attachments)
- MVS devices (including device capabilities and parameters/features)
- VM devices (including device capabilities and parameters/features)

New SPE

: Printing List Panels
for HCD 5.1 and HCD 5.2. HCD introduces the **Save** command that allows you to save the data that is currently displayed on HCD list panels into a data set. The data set can be used for printing.

You can also save and print lists that are filtered. Before using the command, filter the list using the *Set Filter* option from the *Filter* action bar choice. That allows you, for example, to print all DASD devices that are not dynamic or all channels of a processor that are not connected to a control unit.

The command is available on the following list panels:

- Processor list
- Channel path list
- Partition list
- Switch list
- Switch configuration list
- Port list
- Port matrix
- Control unit list
- Device list
- Operating system configuration list
- EDT list
- Esoteric list
- Esoteric/device list
- Generic
- Generic/device list
- Console list

On these list panels, perform the following steps:

1. Enter the command

   ```
   SAVE
   ```

2. The Save List panel appears

   ```
   +------------------------------------------------------------------+
   |*---------------------------* Save List *----------------------*   |
   ||                                                         |    |
   || Specify the following values.                           |    |
   ||                                                         |    |
   || Output data set  _____ |    |
   ||                                                         |    |
   || Additional remarks (for example, the filter criteria)   |    |
   || _____  |    |
   || _____  |    |
   ||                                                         |    |
   |*--------------------------------------------------------------*   |
   +------------------------------------------------------------------+
   ```

   The data set can be a sequential data set or a member of a partitioned data set. If the data set does not exist, it will be automatically allocated (record length 300, record format fixed block). The name of the data set is saved for the next HCD session.

   In addition you can specify two lines of optional comments that will be shown under the header of your report.

3. A result of a printed data set may look like the following example:

   Figure 2. Example of a Printed List Panel

   ```
   HCDTEST.IODF50 - 95-06-02  10:41 - Channel Path List     (1)

    No filter used          (2)

    Processor : VMABASIC     (3)

                  Dyn    ---Entry---                   (4)
   CHPID Type Mode Switch Switch Port Con. Description
   -------------------------------------------------------------------
   20    BL   REC                     3174-D2 CONSOLES-VMA(1C0-1DF)
   ```

```
20  BL   REC   __   __   __  _   3174-D2 CONSOLES VMA(1C0-1DF)
21  BL   REC   __   __   __  _   3174-D5 CONSOLES-MVS1(1E0-1FF)
22  BL   REC   __   __   __  _   3814-3-SW PRT(A0F) TAPE(A80-A83)
23  BL   REC   __   __   __  _   3990-2 E80-A 600A DASD(600-61F)
24  BL   REC   __   __   __  _   3990-2 E10-A 500A DASD(500-51F)
25  BL   REC   __   __   __  _   3990-2 B50-A 400A DASD(400-41F)
26  BL   REC   __   __   __  _   3990-2 E81-A 600A DASD(600-61F)

27  BL   REC   __   __   __  _   3990-2 E11-A 500A DASD(500-51F)
28  BL   REC   __   __   __  _   3990-2 B51-A 400A DASD(400-41F)
2F  CNC  REC   __   __   __  _   _____
30  CNC  REC   __   __   __  _   CTC(120-170) to CHPID 31
31  CTC  REC   __   __   __  _   CTC(020-070) to CHPID 30
32  CNC  REC   02   02   C9  _   DASD DIRECTOR
33  CNC  REC   __   __   __  _   3990-6 B4-1EF 400A DASD(400-41F)
34  CNC  REC   00   00   CA  _   VTAM(9D00-9D91)
35  CNC  REC   02   02   CD  _   DASD DIRECTOR
36  CTC  REC   00   00   C6  _   RSCS(9F00-9F91)
37  CVC  REC   __   __   __  _   9033(01)-CA to C6-CONV.TERM.
```

(1)
Header with IODF name, date, time, list name

(2)
Optional comments specified on Save List panel

(3)
Identifier of higher level object, for example the processor name when you print the channel path list

(4)
Column headers as shown on the panel itself

This new function will be available as PTFs UW90159, UW90160 for HCD 5.2 and PTFs UW90156, UW90157 for HCD 5.1 in June 1995.

Those are the same PTFs that also contain support for 'Activate Configuration Changes Sysplex-Wide' which has been described in HCD Newsletter 7.

Your Feedback Is Important to Us

If you like the idea of the 'HCD Newsletters', or if you don't like it, or if you have suggestions for topics you want to hear about

```
please call (49-7031-164237)
or fax      (49-7031-164240)
or send a note to IBMMAIL(DEIBMHCD)
or on INTERNET: HCDHOT@BOEVM3.VNET.IBM.COM.
```

HCD / HCM home page