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IBM z/OS HCD & HCM
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New functions for OS/390 2.7.0

With OS/390 2.7.0 there is a new release for HCM available. This new release offers quite a number of interesting enhancements. These enhancements allow you to work more effectively with stored ESCON director configurations and it simplifies complex I/O configuration changes. Further we have also incorporated some other improvements. To use HCM 2.7.0, there is also a specific HCD support necessary on the host (PTFs for APAR OW35129, OW28654). The HCM 2.7.0 User's Guide (SC33-6595) is also available from the HCM home page as Acrobat Reader File.

Using ESCON Matrix Configuration for Path Visualization

Now HCM can evaluate stored ESCON director matrixes for visualization of paths between processors and controllers. You can now easily identify dedicated connections or blocked ports in regard of a selected matrix configuration. When highlighting an object in the diagram, HCM can now show the particular route of the CHPID-to-control-unit connection depending on the selected matrix: This is important when there is more than one physical route possible between a CHPID and a control unit, for example when there are chained directors involved.

Improved ESCON Matrix Editor

The presentation of director configurations as a matrix has been significantly improved. The presentation now makes effective use of the whole HCM configuration and shows, for example whether a connection between ports is logically defined or not, or whether a connection requires a dedicated connection or might have a dynamic connection. Furthermore, sorting and filtering to rearrange ports within the matrix is possible.

Three New Utilities for Configuration Changes

There are three new utilities for simplifications of complex configuration changes. These utilities help to reduce the effort for some kind of configuration changes.

Move Port Connections

This new utility allows you to move complete channel-to-control-unit connections that are routed through one ESCON director to a different director or to rearrange such connections on the same director. It is especially helpful if a new director (like an IBM 9032-5) is to be added to the configuration and connections are to be moved from existing directors to the new director. This utility allows this kind of reconfiguration without the need for manual disconnects and reconnects by the user. All these actions, as well as necessary changes of the destination link addresses are done without user intervention by the utility. Further the utility provides a summary report about all performed changes. This report can also be used to support the necessary re-cabling work.

You can also use the *Move Port Connections* utility to change the identifier of an ESCON director (rename): Create a new director with the desired identifier, move all connections to new director, then delete the old director.

The *Move Port Connections* utility recognizes *implied connections*: If a connection is to be moved and this would result in breaking another connection then this additional connection is automatically selected to be moved. For example, if there are two different controllers connected via two different ports of an ESCON director to the same channel and a connection to one of these two controllers is selected to be moved to another director. In this case, the connection to the second controller will be selected automatically. Note, the switch CU which is connected to port FE belongs to the director and therefore connections to this internal CU cannot be moved to another director using this utility. If a connection is to be moved to another director which would also imply that a connection to the internal switch CU is involved, then the move will not be performed because the connection to the switch CU would get lost. This would be a contradiction to the objective of not breaking connections by using the utility. To move such connections, the customer has to resolve the conflicts before performing the move action: A disconnect of the internal director CU must be done in advance.

Aggregate CHPIDs

I/O equipment which is connected to different channels can be easily consolidated to be connected to only one channel. This is especially of interest when a new FICON channel with bigger bandwidth is to be used, or when there are several channels to be consolidated, as their usage is well below the maximum throughput capacity.

Convert ESCON Port to FICON

This utility helps for configuration changes when you migrate to the new FICON architecture. You can use this utility for the necessary configuration changes if a new FICON bridge card is installed in an IBM 9032-5 director. This utility is especially useful, if CHPID-to-control-unit connections have to be moved from on port to another port, or if CHPID-to-control-unit definitions have to be aggregated from several CHPIDs to a new FICON CHPID.

Variable Size of Patch Panels within a Cabinet

Starting with HCM 2.7.0 SL 2, it is now possible to have cabinets with different sizes of patch panels within one cabinet This allows more flexibility for the documentation of cabinets, especially if panels with a different size are added into an existing cabinet.

32 Bit Application

HCM 2.7.0 is a full 32 bit Windows application. This means, that some restrictions of the 16 bit Windows application have been removed. It is for example possible to have more than one instance of HCM running on a workstation.

Note, HCM 2.7.0 code will no longer run on a workstation with Windows 3.n or OS/2 (WIN-OS/2). HCM 2.7.0 code requires Windows 95 or higher or Windows NT Version 4.0 or higher.

New Installation Method

Starting with HCM 2.7.0, a new method of installation is provided. Now, only one file (member EEQINSTX) has to be downloaded from the OS/390 host to the workstation. Store this file on the workstation using a file name extension EXE. To install HCM, invoke this executable file and follow the instructions. The HCM installation is based on InstallShield. After installing HCM on the workstation, you will find an appropriate entry in the registry of Windows. You can de-install HCM like other Windows programs.

Also future HCM service will use this method. After installing a PTF on the host, download the member EEQINSTX to the workstation using an extension EXE and invoke this executable. The provided service will replace the complete prior installed HCM 2.7.0 Service Level.

Host Connectivity

For the communication between the HCM client on the workstation and the HCD server on the OS/390 host there are two networking protocols provided: You can either use APPC or TCP/IP.

The APPC communication part of HCM has been exchanged. The host part of the APPC communication which has been used by the prior releases of HCM is no longer supported. Therefore you need a new or updated TP profile on the host. A sample of a job to create an appropriate TP profile is provided as member EEQTPA00 in SYS1.SEEQINST. Note, that the data set with the old APPC communication modules SYS1.SCBDCOMM is no longer necessary.

For using TCP/IP connectivity please check the HCM User's Guide. If you migrate to HCM 2.7.0 and you have used HCM 2.4.0 Service Level 7 (or later) with TCP/IP, then the necessary TCP/IP support is already set up.

Tivoli Inventory Support

HCM 2.7.0 provides support to enable Tivoli Inventory to store HCM configuration data. This allows HCM data to be shared with other data in a relational data base.

All HCM 2.7.0 Enhancements for OS/390 2.4.0 (or Higher)

All enhancements described in the previous chapter are also available for HCM customers who have OS/390 2.4.0 (or higher) if HCM is installed on a workstation running under Windows NT 4.0 or Windows 95 (or higher). We ship the original HCM 2.7.0 code starting with OS/390 2.4.0. HCM 2.7.0 is shipped *in addition* to the modules of HCM 2.4.0 in the data set SYS1.SEEQINST. The new additional parts in the HCM distribution data set SYS1.SEEQINST are EEQINSTX and EEQTPA00. We recommend, that customers running workstations with OS/2 or Windows 3.n continue using HCM 2.4.0 as in the past, all customers who are using Windows NT or Windows 95 (or higher) should migrate to HCM 2.7.0 to benefit of the new functions and the full 32 bit capabilities.

To migrate from HCM 2.4.0 to HCM 2.7.0 proceed in the following way:

- You might want to consider having a backup copy of your old HCM 2.4.0 inclusive of a backup copy of the configuration files to be used with HCM 2.4.0
- Un-install HCM 2.4.0 from you workstation as it is described in the HCM 2.4.0 User's Guide (using the 2.4.0 installation utility)
- Install PTF for HCM 2.7.0 on the OS/390 host
- Download the member EEQINSTX to the PWS in binary format using a file extension EXE.
- Invoke the downloaded EXE file and follow the instructions.
- If you use APPC as communication protocol, update of create a new TP profile. A sample job is provided in SYS1.SEEQINST(EEQTPA00) Note, For HCM 2.7.0 APPC communication, the data set SYS1.SCBDCOMM is no more necessary. Further you have to add a new or change an existing SYMBOLIC DESTINATION INFORMATION in the APPC setup of the workstation (CPI-C Side Information).

- If you use TCP/IP and migrate to HCM 2.7.0 from a service level prior to HCM 2.4.0 SL 7, then you have also to do some HCM TCP/IP connectivity setup. For details, please see the HCM 2.7.0 User's Guide, which is available from the HCM home page on the Internet, or the HCM 2.4.0 User's Guide Update for SL 7 (also available from the HCM home page.
- If you use TCP/IP and migrate to HCM 2.7.0 from HCM 2.4.0 SL 7, then you have already the appropriate TCP/IP connectivity setup.
- After installation of HCM 2.7.0, you can invoke HCM. As soon as you open an existing HCM configuration file, it will be upgraded to the new (internal) format for HCM 2.7.0. Note, if a configuration file has been upgraded for HCM 2.7.0, it can no more be used by a prior version of HCM!

The complete HCM 2.7.0 User's Guide is available as Acrobat Reader File from the HCM home page on the Internet. There is no extra hard copy version of the HCM 2.7.0 User's Guide for OS/390 2.4.0, 2.5.0 and 2.6.0 available. Providing the HCM 2.7.0 part on these OS/390 releases is to be regarded as an additional extra service. Therefore only a soft copy of the HCM 2.7.0 User's Guide is provided via the Internet. To use HCM 2.7.0 under an OS/390 2.4.0, 2.5.0 or 2.6.0 you need to install PTF UR90309 of SPE IR39712 to get HCM 2.7.0 SL 2. Further, there is some HCD service necessary on the host (see *Recommended HCD Service*).

Recommended HCD Service

In the meantime, there is some new service for HCD available. Please consider to install the latest PTFs.

APAR	FMID	PTF Number	Comment
OW35129	HCS6031	UW90513	Connectivity support for HCM
	HCS6051	UW90514	
OW28654	HCS6031	UW90407	IC CHPID support, HCM Utility support
	JCS6033	UW90408	
	HCS6051	UW90410	
	JCS6053	UW90543	
OW37677	HCS6031	UW56671	Y2K support for IOCDS report
	HCS6051	UW56672	

Feedback to our Products

You can send us feedback for HCD and HCM via e-mail to our userid

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More information on the [HCD/HCM home page](.).