IBM z/OS HCD & HCM
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Enhancements in HCM 2.9, LDAP support, I/O Operations, PDF file sharing, Cisco routers

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Enhancements in OS/390 2.9.0 HCD and HCM

With OS/390 2.9.0 there are new releases available for HCD and HCM. With HCD R9 it is possible to access and update IODF data via the Lightweight Directory Access Protocol (LDAP) Version 3.

Other enhancements include

- generation of an ESCON director matrix based on the defined connectivity of the switch
- new HCD profile options
- report enhancements

HCM R9 provides an I/O Operations interface that allows monitoring the I/O configuration of the active sysplex and performing operations on the switch ports and switch matrices of the ESCON directors.

Further enhancements are provided concerning

- physical connectivity functions
- exploitation of the Generate Matrix function of HCD
- visualization of the configuration diagram
- reporting capability

LDAP support for HCD

OS/390 V2R9 HCD introduces optional LDAP support that enables LDAP client programs to access and update IODF information. This is done by providing an HCD backend to the OS/390 Security Server LDAP Server.

The HCD LDAP Backend has the following characteristics:

- All existing IODFs accessible by the OS/390 system on which the HCD LDAP Backend is running can be made accessible and updatable via LDAP V3.
- All operations on IODFs via the HCD LDAP Backend are performed on behalf of selected user IDs, which must be explicitly permitted for this mode of operation. The usual access rights for these user IDs apply when accessing IODFs. Authentication takes place via the SDBM (RACF) backend. In this way, LDAP support does not affect your system security.
- A subset of LDAP search requests (i.e., access) and a subset of LDAP add, delete, and modify requests (i.e. update) are supported. It is possible to perform sequences of update requests as transactions using LDAP V3 controls.
- Updates to an IODF are performed via HCD. This ensures that the HCD validation rules are applied.
- Multiple LDAP requests can be served at the same time.

Generate Matrix function

HCD and HCM now offer the option to generate a switch matrix where existing connections on the switch are considered. This increases the productivity when defining a switch configuration.

I/O Operations with HCM

With HCM 2.9, you get a graphical user interface that exploits the I/O Operations component of System Automation for OS/390 (ESCON Manager functionality). This includes a color-coded graphical representation of states of I/O objects of the active sysplex as well as sensing of physical data of the I/O objects.

This allows you to

- view the I/O configuration of the active sysplex
- monitor the states of the I/O objects and the director configurations for a specific system of the sysplex
- obtain physical I/O data from the system
- visualize and change active director matrices
- issue I/O operations commands

Thus, I/O operations functionality has been integrated into the HCM GUI.

Physical connectivity enhancements in HCM

With HCM 2.9, major physical connectivity enhancements have been introduced. The regular connect sequence has changed in some areas: since the user can now specify more physical information during connect, the connection sequence has been rearranged so that all physical attributes of a connection are defined first, followed by the logical attributes. A new 'Select Connection Target(s)' dialog is now the common dialog for all connect requests, regardless of which object is to be connected, and HCM now differentiates serial connections as either 'permanent' or 'mutual', which has consequences when breaking connections. The Cabinet dialog and its descendants have been revised, and panel and patchport information is now consolidated in new dialogs in some cases.

Further enhancements in HCM 2.9:

- popup menus
- 'Save List' in Edit and Locate Windows
- print hard copies of the diagram in the same colors that appear on the screen
- multiple delete
- multiple disconnect
- comment field in cable assignment
- deeper zooming
- IODF information in HCM reports
- unused-cable reports
- selective cabinet reports

Sharing your Physical Description Files (PDF files) with other users

IBM provides Physical Description Files for HCM that describe physical characteristics of IBM I/O equipment. However, vendors who provide their own I/O equipment sometimes also provide their own Physical Description Files, and users of HCM can also build PDF files if a different representation of I/O equipment is needed than that provided by IBM.

Thorntree Software is preparing to support a PDF database via their Web site to allow sharing of PDF files. Customers will be able to either send PDF files which they have written and provide them for other users or obtain specific user-provided PDF files from Thorntree Software's Web site. When available, this service will be explained on Thorntree's Technical Notes page. If you have any questions concerning this service, please contact Thorntree Software at hcm@thorntreesoftware.com .

Defining Cisco routers as 'RS6K' in HCM

In the past, I/O equipment such as Cisco routers has sometimes been defined as SCTC control units or devices. In contrast to HCD, HCM requires both ends of an SCTC connection to be defined at the same time. As a consequence, Cisco routers (and other I/O equipment as well) could not be defined properly using HCM. Moreover, since SCTC control units and devices which were used for these definitions are only virtual objects, HCM cannot display

properly using HCM. Moreover, since SCTC control units and devices which were used for these definitions are only virtual objects, HCM cannot display the control units and devices which represent specific I/O equipment in the diagram. To overcome these restrictions, you should define I/O equipment such as Cisco routers as 'RS6K'. Note that the basic properties of the SCTC and RS6K definitions for the S/390 Channel Subsystem are identical. For detailed information, check the Cisco Web site for RS6K sample definitions for Cisco routers.

Feedback concerning our products

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

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