IBM Education Assistance for z/OS V2R1

Item: Customer Requirements and PMR Reduction
Element/Component: HCD/HCM

Material is current as of June 2013

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Agenda

- Presentation Objectives
- Overview
- Usage & Invocation
- Appendix

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Presentation Objectives

- The purpose of this line item is to enhance the quality of HCD/HCM and to reduce customer PMRs. This is done by providing extended information in dialogs or reports, introducing additional checks to warn users from definition errors and enhancing the performance and productivity of definitions in HCD and HCM.
  - Show port number in HCM status line
  - Performance improvement in HCM when working with CHPID connections
  - HCM explanatory message on load production IODF
  - Warning message for Activate command w/ NOVALIDATE option
  - New warning message with CIB connection
  - Ability to dynamically activate new IODF via batch job
  - OS group change action on device group list
  - Unconditional generation of DR site OS configurations
  - OFFLINE parameter in MVS Device Detail Report only if it can be specified
  - PCHID column in CF Channel Path Connectivity List
  - Improve filter for graphical CU report via batch

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Overview – Show port number in HCM status line

- Problem Statement / Need Addressed
  - The HCM status line displays the host name and sysplex name of the connected z/OS system but not the IP port number.
- Solution
  - The HCM status line is enhanced to show the port number of the dispatcher HCM is connected to.
- Benefit / Value
  - An HCM user can easily check the host name and port number of the dispatcher HCM is connected to.

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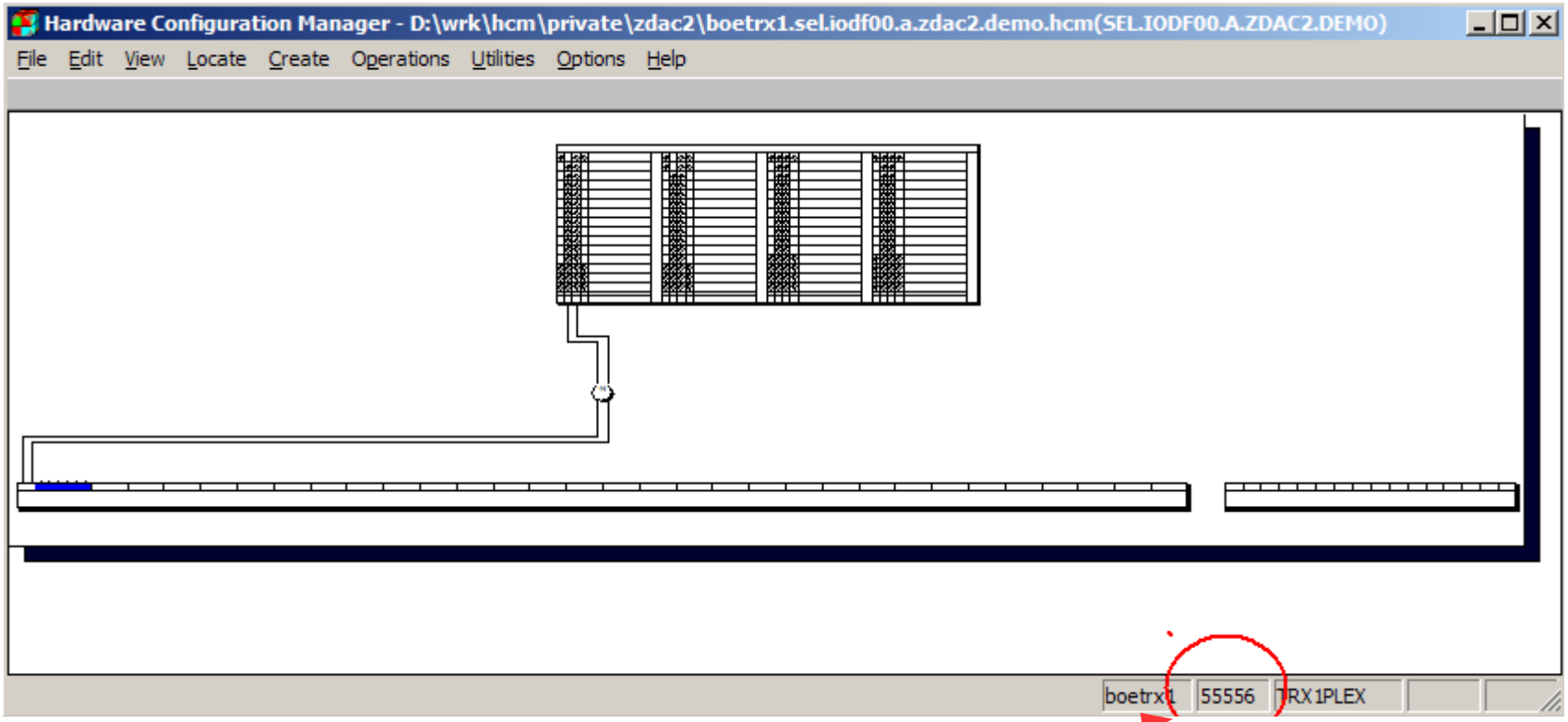
Usage & Invocation



IP port number is shown in HCM status line.

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Overview – Enhance performance when connecting CHPIDs to control units in HCM

- Problem Statement / Need Addressed
  - In HCM, a performance degradation is observed when CHPIDs are connected to multiple control units via switches.
- Solution
  - Remove redundant processing in this task.
- Benefit / Value
  - The connection time of CHPIDs to control units is similar whether one or multiple control units are concerned.

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Overview – HCM explanatory message on load production IODF

Problem Statement / Need Addressed

- When a production IODF is loaded, HCM builds a work configuration file (with extension .hcm) instead of a production configuration file (extension .hcr). Also, if a production file is built, the opened configuration in HCM is still a work configuration. This confused HCM users.

- Solution
  - When loading a production IODF or performing task 'Build production', a message informs that the opened HCM configuration file is a work file.

- Benefit / Value
  - User is made aware that HCM generates a work configuration.

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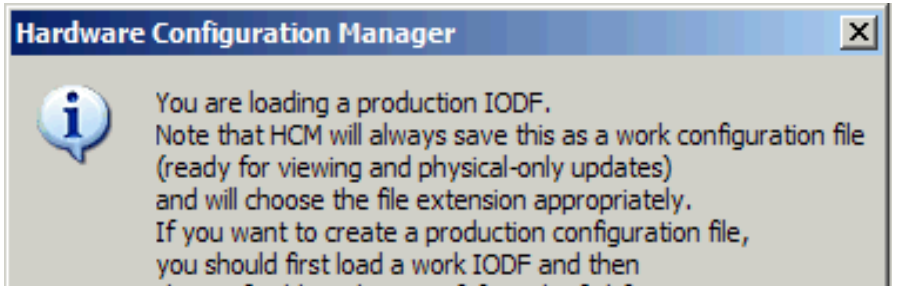
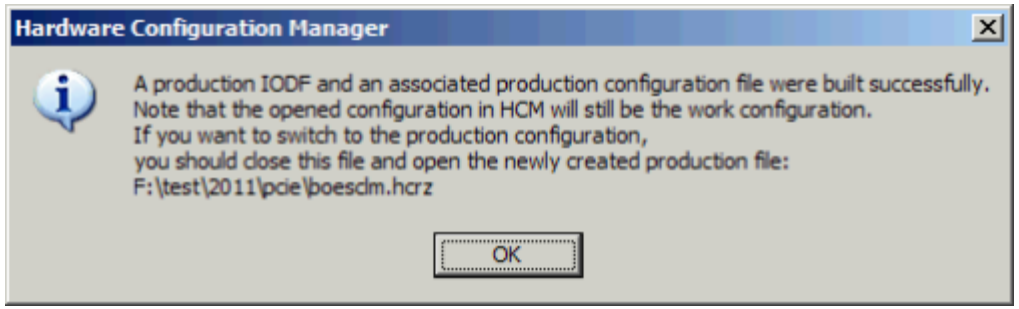
Usage & Invocation

- When loading a production IODF, the following message is shown:



- When running menu [File / Build production] on a work configuration, the following message is shown:



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Overview – Warning message for ACTIVATE command w/ NOVALIDATE

Problem Statement / Need Addressed

- When an ACTIVATE SOFT=VALIDATE command is issued, any changes in coupling facility connectivity are processed from the passed hardware changes. Customers are unaware that this is not done with ACTIVATE SOFT=NOVALIDATE.

- Solution
  - Issue a message ACTIVATE SOFT=NOVALIDATE that warns the user that changes to CF elements are not processed.

- Benefit / Value
  - User is made aware that CF elements are not processed with this command.

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Usage & Invocation

- When an ACTIVATE SOFT=NOVALIDATE command is given, HCD issues warning message CBDA854I:

```
CBDA854I Changes to Coupling Facility elements
are not processed.
```


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Overview – Warning message when changing of a CIB connection

Problem Statement / Need Addressed

- When removing the lowest CSS of a spanned CIB channel path, the connected target CIB channel path is implicitly changed which requires an activation also for the connected processor. If this is not done, the CIB channel path looses its connectivity.

- Solution
  - Issue a warning message if the change on a CIB channel path impacts the I/O configuration of another processor.

- Benefit / Value
  - User is made aware that an activate is required for both sides of the CIB connection.

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Usage & Invocation

- When changing or editing the partition lists of a spanned CIB channel path such that the backward-referenced channel subsystem of the connected target CIB channel path is changed, HCD issues the following warning message:

```
CBDG422I Changing CHPID <source CHPID> changes
the lowest CSS to <CSS ID>, affecting CF
connection to <target CHID>. Consider activating
the target LPAR/processor.
```

- This message is also given when a dynamic activate is done which impacts the target processor configuration.

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Overview – Ability to dynamically activate new IODFs via batch job

Problem Statement / Need Addressed

- No possiblity to have HCD batch jobs including activate commands. Therefore it is more difficult to automate a complete switch of configuration via batch.

- Solution
  - Offer activate as HCD batch function

- Benefit / Value
  - User can write batch jobs including a series of HCD actions including activate, with common return code handling, message log and so on.

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Usage & Invocation

- HCD allows the activate command as parameter string. It will activate an I/O configuration from an existing production IODF. Both the active and the target IODF have to be accessible.

- Sample

```
//*
//WORK EXEC PGM=CBDMGHCP,PARM='ACTIVATE IODF=01,TEST'
//HCDMLOG DD DSN=BBEI.HCD.MSGLOG,DISP=OLD
```


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Overview – OS group change action on I/O Device group list

Problem Statement / Need Addressed

- The 'OS group change' action is only available on the I/O Device List which shows single devices but not on the I/O Device List which shows device groups.

- Solution
  - This action will also be provided for the I/O Device list of the device groups.

- Benefit / Value
  - Users can select multiple device ranges for changing their OS device attributes in one step, thus making their work more productive.

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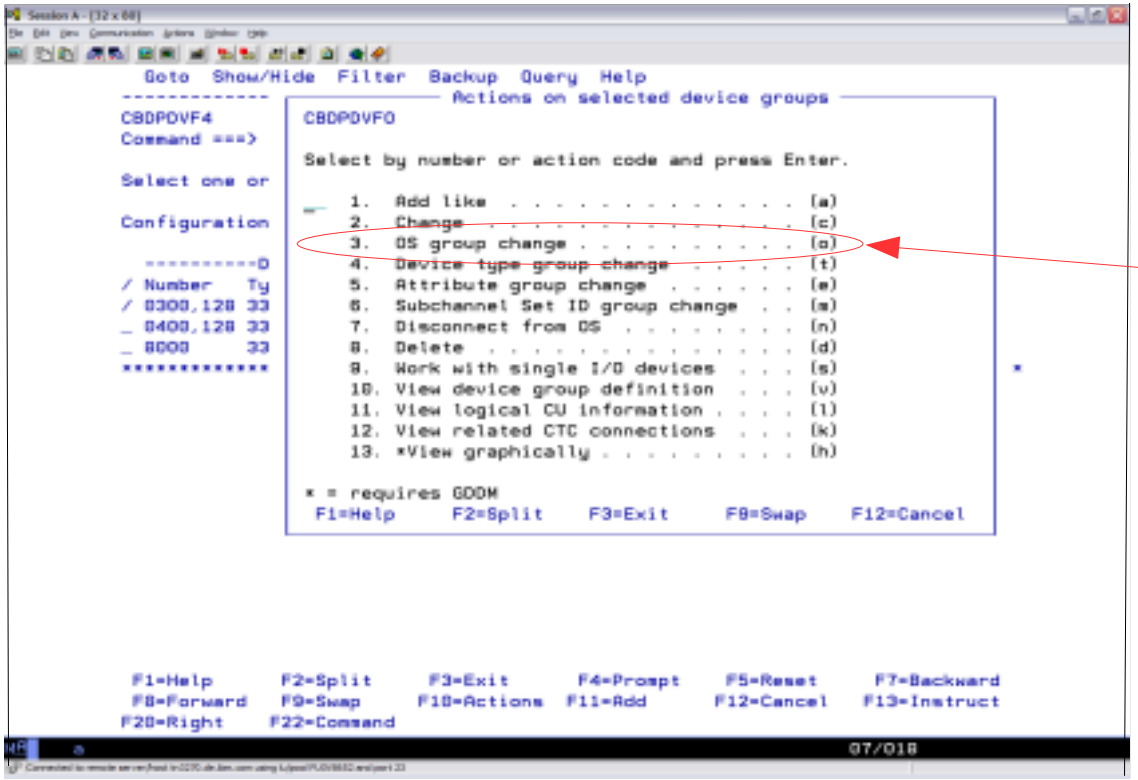
Usage & Invocation



Action `OS group change (o)` has been added to the I/O Device List panel for device groups.

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Overview – Unconditional generation of DR site OS configurations

Problem Statement / Need Addressed

- If PPRC devices are deleted, their connections are removed both from the primary and secondary (DR site) OS configurations. This causes that the 'generated' attribute of the secondary OS configuration is deleted and further updates to the primary OS configuration will not be automatically reflected in the secondary OS configuration.

- Solution
  - A new profile option allows the user to generate a new DR site OS configuration at production IODF build time regardless whether the generated OS configuration has been changed or not.

- Benefit / Value
  - The user does not have to manually deleted the old generated OS configuration in order to have it generated new when the production IODF is built.

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Usage & Invocation

- New profile option, `UNCOND_GENERATE_DROS`, is added.
- If set to YES, the DR site OS configuration will always be generated new when a production IODF or validated work IODF is built.
- If set to NO (default), the previous behavior is preserved that causes the generation of a new DR site OS configuration only if the old one has not been modified.

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Overview – OFFLINE parameter in MVS Device Detail Report

Problem Statement / Need Addressed

- The MVS Device Detail Report shows the OFFLINE parameter for each device (e.g. a D/T3390D or D/T3390A) , also if it can not be specified by the user.

- Solution
  - The MVS Device Detail Report shows the OFFLINE parameter for devices only if it can be set by a user.

- Benefit / Value
  - The MVS Device Detail Report now only shows the OS parameters that the user can define externally.

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Overview – PCHID data in CF Channel Path Connectivity List

Problem Statement / Need Addressed

- The CF Channel Path Connectivity List does not contain the PCHID or HCA/port ID information for the CF CHPIDs. This requires customers to use the Channel Path List for looking up this data.

- Solution
  - The CF Channel Path Connectivity List is extended with the PCHID / HCA ID / port number value for both the source and target CHPIDs of a CF connection.

- Benefit / Value
  - Usability of the CF Channel Path Connectivity List is enhanced.

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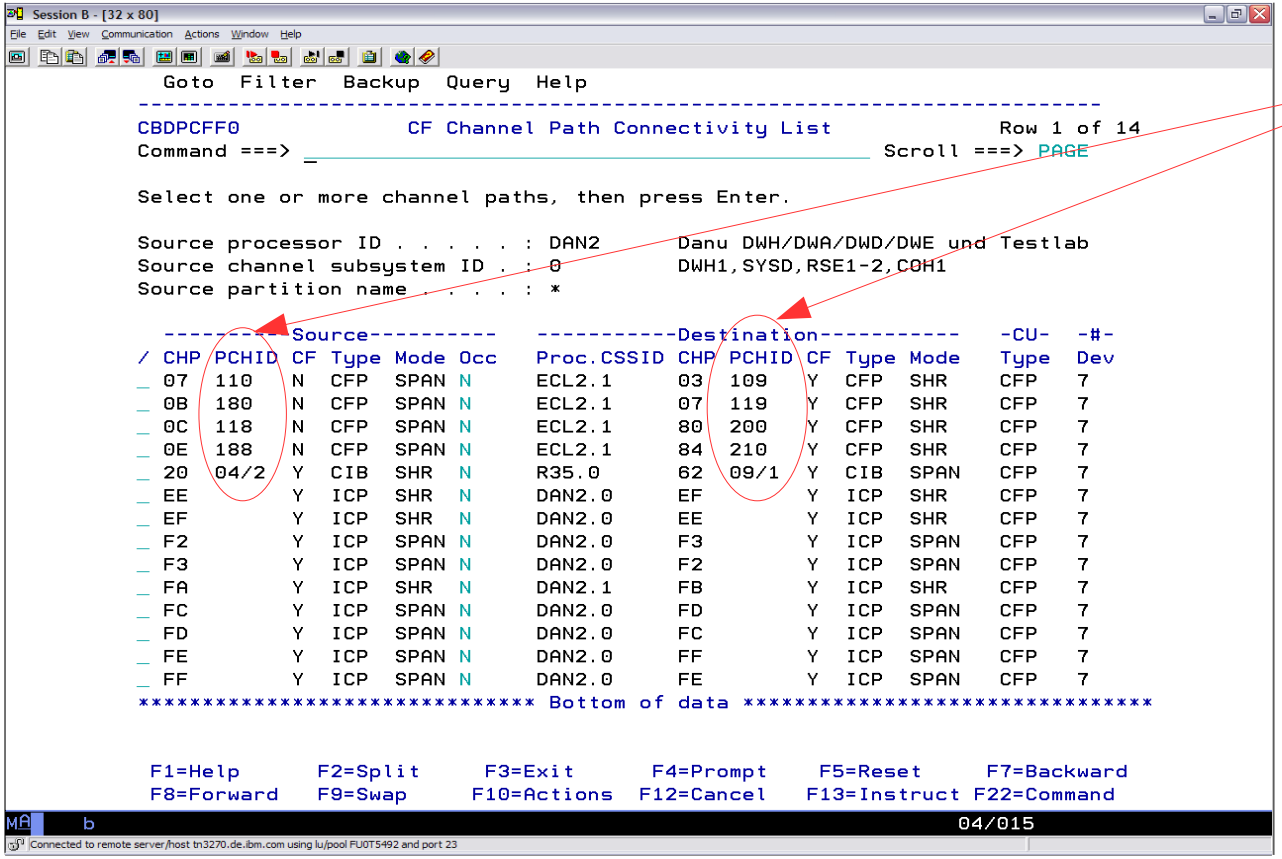
Usage & Invocation – PCHID data in CF Channel Path Connectivity List



Source and destination CHPIDs now show their PCHID or HCA ID / port numbers.

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Overview – Improve filter for graphical CU report via batch

Problem Statement / Need Addressed

- When issuing graphical CU report via batch, there was no possibility to filter the report by control unit ranges. As a consequence it was necessary to use the HCD dialog to generate graphics for control unit connections.

- Solution
  - The filter criteria abailable in the HCD dialog have been exposed as batch fitler parameter.

- Benefit / Value
  - Productivity gain, because HCD users can generate their filtered CU reports via batch job.

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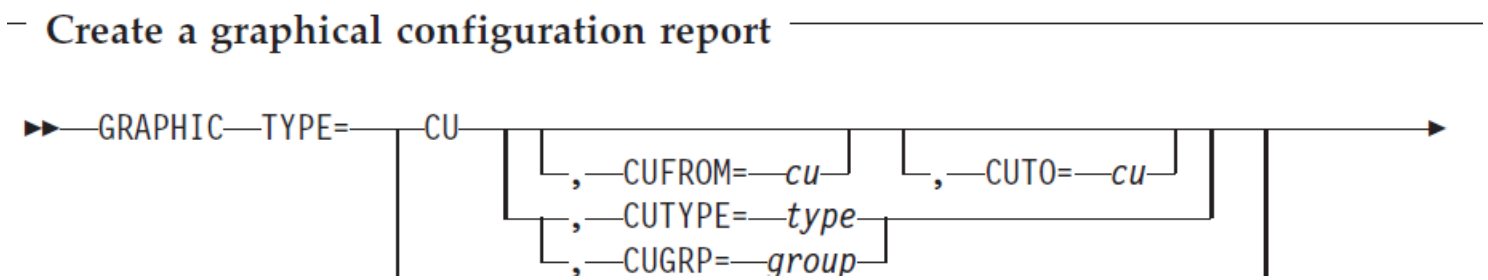
Usage & Invocation

- Enhanced syntax for graphical control unit report (see below)

```
//GCREP EXEC PGM=CBDMGHCP,
//      PARM='GRAPHIC TYPE=CU,CUFROM=0200,CUTO=0480'
//HCDIODFS DD DSN=USER.IODF00.DBR4,DISP=SHR
//HCDRPT DD DSN=USER.IODF00.DBR4.REPORT,DISP= ..
```

- Syntax diagram



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Appendix

- Hardware Configuration Definition User's Guide, SC34-2669
- Hardware Configuration Manager User's Guide, SC3-2664
- Hardware Configuration Definition Messages, SC34-2668
- Hardware Configuration Definition Planning, GA32-0907
- z/OS Migration, GA32-0889

- HCD/HCM Homepage:
  - http://www.ibm.com/systems/z/os/zos/features/hcm/

- HCD/HCM Contact:
  - IBMHCD@de.ibm.com

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