



# What's New in z/OS 2.1 HCD

Dale F. Riedy

IBM

riedy@us.ibm.com

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# Agenda



- New processor support
  - zEC12 & zBC12
  - PCIe functions
  - Coexistence of different releases
- Autoconfiguration improvements
  - Improvements for discovery
  - Verifying a configuration (I/O path report) via zDAC
- Productivity and Usability improvements
- Additional presentations:
  - Session 14245 – zDAC 2.1 Update – Tuesday 4:30-5:30
  - Session 14246 - HMC wide activate – Wednesday 3:00-4:00

# Overview of zEC12, zBC12

Processor Type	2827	2828
Models	H20 H43 H66 H89 HA1	H06 H13
Number of LCSSs	4	2
Number of LPs	60	30
Subchannel sets	0, 1, 2	0, 1
Number of FC / FCP CHPIDs	352 / 256	160 / 160
Number of OSA / IQD CHPIDs	48 / 32	48 / 32
Number of CFP / CIB / ICP CHPIDs	48 / 128 / 32	48 / 128 / 32

- Support of up to 24K subchannels on a FICON CHPID
- Support of PCIe functions for ROCE and zEDC-Express
- Support for PNETID for OSD and IQD CHPIDs and PCIE function

Note: New support level for 2827 (GA2). Enable via a change processor action.

## Overview - PCIE

- Two types of PCIE based functions are available:
  - ROCE – high throughput, low latency networking
  - zEDC-Express – data compression accelerator
- Identified by a:
  - PCIE function id or PFID
  - Physical channel id (PCHID)
  - Virtual function id – for sharable physical adapters
- Each PCIE function (PFID):
  - May be defined to up to 15 LPARs
  - Only online to 1 LPAR at a time
  - Multiple PFIDs may or may not be defined to the same PCHID

# Usage & Invocation - HCD



CBDPM000

z/OS V2.1 HCD

Command ===> \_\_\_\_\_

## Hardware Configuration

Select one of the following.

- 1 0. Edit profile options and policies
  1. Define, modify, or view configuration data
  2. Activate or process configuration data
  3. Print or compare configuration data
  4. Create or view graphical configuration
  5. Migrate configuration data
  6. Maintain I/O definition files
  7. Query supported hardware and installed U
  8. Getting s \_\_\_\_\_ Define, Modify, c
  9. What's ne

For options 1 to  
I/O definition fi

Select type of objects to

- 3\_ 1. Operating system co
  - consoles
  - system-defined ge
  - EDTs
  - esoterics
  - user-modified c f
2. Switches
  - ports
  - switch configura
  - port matrix
3. Processors
  - channel subsystems
  - partitions
  - channel paths
  - PCIe functions
4. Control units
5. I/O devices
6. Discovered new and changed control units and I/O devices

Goto Filter Backup Query Help							
-----							
CBDPPRF0				Processor List		Row 1 of 17	
Command ===> _____						Scro	
Select one or more processors, then press Enter. To add, use F11.							
/	Proc.	ID	Type +	Model +	Mode+	Serial-# +	Description
-	DAN2		2094	S28	LPAR	_____	z9
-	ECL2		2097	E40	LPAR	_____	z10
-	GRY2		2817	M32	LPAR	_____	z1963
-	G14		2084	B16	LPAR	_____	z990
-	HBUV1		2097	E12	LPAR	_____	z10 11
-	H05		2097	E26	LPAR	_____	z10 12
-	H37		2097	E26	LPAR	_____	z10 13
-	H42		2097	E26	LPAR	_____	z10 14
-	P0L1		2096	S07	LPAR	_____	z9 15
-	P23		2827	H43	LPAR	_____	zEC12
-	P35		2827	H20	LPAR	_____	T3 demo processor
-	R17		2817	M49	LPAR	_____	z196 1
-	R37		2817	M66	LPAR	_____	z196 2
-	T29		2094	S18	LPAR	_____	z9 1

# Usage & Invocation - HCD

```

Goto  Filter  Backup  Query  Help
-----
Command ==>
Select one or

/ Proc. ID Ty
_ DAN2    20
_ DUUZD   28
_ ECL2    20
_ GRY2    28
_ G14     20
_ HBUV1   20
_ H37     20
_ H42     20
_ POL1    20
_ P23     28
_ P35     28
_ R17     28
_ R37     28
_ T29     20

```

Actions on selected processors

Select by number or action code and press Enter.

- 1. Add like . . . . . (a)
- 2. Repeat (Copy) processor configurations (r)
- 3. Change . . . . . (c)
- 4. \*Prime serial number . . . . . (i)
- 5. Delete . . . . . (d)
- 6. View processor definition . . . . . (v)
- 7. View related CTC connections . . . . . (k)
- 8. Work with PCIe functions . . . . . (f)
- 9. Work with partitions . . . . . (SMP) (p)
- 10. Work with attached channel paths (SMP) (s)
- 11. Work with attached devices . . . (SMP) (u)
- 12. Copy to channel subsystem . . . (SMP) (y)
- 13. Work with channel subsystems . . (XMP) (p,s)

\* = requires TSA I/O Operations

F1=Help      F2=Split      F3=Exit      F9=Swap      F12=Cancel

**goto pcie [procname]** from any command line that accepts the goto command

# Usage & Invocation - HCD

Goto Filter Backup Query Help

-----  
 PCIe Function List Row  
 Command ==> \_\_\_\_\_

Select one or more PCIe functions, then press Enter. To ac

Processor ID . . . . : P35 T3 Demo Processor

/ FID	PCHID	VF+	Type+	Description
_ 000	314	__	ROCE	_____
/ 001	318	__	ROCE	_____
_ 0AE	418	2	ZEDC-EXPRESS	Sample ZEDC
_ 0AF	418	1	ZEDC-EXPRES	

\*\*\*\*\*

Actions on selected PCIe Function \_\_\_\_\_

CBDPPFFX

Select by number or action code and press Enter.

- 1\_ 1. Add like . . . . . (a)
- 2. Change . . . . . (c)
- 3. Delete . . . . . (d)
- 4. View . . . . . (v)

# Add PCIe Function - HCD

## Add PCIe Function

CBDPPF10

Specify or revise the following values.

```
Processor ID . . . . . : P35          T3 demo processor
Function ID . . . . . : 008
Type . . . . . : ROCE          +
PCHID . . . . . : 223
Virtual Function ID . . . . . : _ _ +
Description . . . . . : ROCE card (no VF, pnetid)
```

## Add/Modify Physical Network IDs

CBDPPF11

If the PCHID is associated to one or more physical networks, specify each physical network ID corresponding to each applicable physical port.

```
Physical network ID 1 . . . IBMNET
Physical network ID 2 . . . EXTERNAL
Physical network ID 3 . . . CUSTOMER1
Physical network ID 4 . . . CUSTOMER2
```

Next ==> access/candidate lists



# Add PCIE Function - HCD

## Define Access List

CBDPPF1A Row :  
 Command ==> \_\_\_\_\_ Scroll ==>

Select one or more partitions for inclusion in the access list.

Function ID . . . . : 008

/	CSS ID	Partition Name	Number	Usage	Description
-	0	IRD7	C	0S	
-	0	R35LP01	1	0S	
/	0	R35LP02	2	0S	
-	0	R35LP03	3	0S	
-	0	R35LP04	4	0S	
-	0	R35LP05	5	0S	
-	0	R35LP06	6	0S	
-	0	R35LP07	7	0S	
-	0	R35LP08	8	0S	
-	0	R35LP09	9	0S	

# Usage & Invocation - HCM



The screenshot displays the 'Processor' configuration window with the 'Edit Processor' dialog box open. The 'Processor' window shows details for ID: HELIXGA2 and Short name: A2. The 'Edit Processor' dialog box contains the following fields and options:

- ID: HELIXGA2
- Short name: A2
- Description: (empty text field)
- Serial No.: (empty text field)
- Type-Model: 2827-HA1 (dropdown menu)
- Configuration Mode:  Basic  LPAR
- Support Level: XMP, 2827 GA2 support
- SNA address section: Specify SNA address only if part of an S/390 microprocessor cluster. Network name: (dropdown menu) CPC name: (dropdown menu)
- Local system name: (empty text field)

Buttons in the dialog include: Edit.., Status..., Performance..., OK, Cancel, Help, PCIe..., Info..., CMT..., WPT..., and OK.



# Usage & Invocation - HCM



PCIe Functions for: HELIXGA2

Function ID ▲	Virtual Function	PCHID	Function Type	Description	Physical Netw	Physical Netw	Phys
111		111	ROCE		PNETID1		
112		112	ROCE		PN1		
113	1	123	FPGA-CMPR...				
114		114	ROCE		IBMNET		
116	3	116	FPGA-CMPR...				

Edit...

Add...

Copy...

Delete

OK

Cancel

Help

Columns...

Partition legend:

01=LP01	02=LP02	03=LP03	04=LP04	05=*	06=*	07=*	08=*
09=*	0A=*	0B=*	0C=*	0D=*	0E=*	0F=*	
11=LP11	12=LP12	13=LP13	14=LP14	15=*	16=*	17=*	18=*
19=*	1A=*	1B=*	1C=*	1D=*	1E=*	1F=*	
21=LP21	22=LP22	23=LP23	24=LP24	25=*	26=*	27=*	28=*
29=*	2A=*	2B=*	2C=*	2D=*	2E=*	2F=*	
31=LP31	32=LP32	33=LP33	34=LP34	35=*	36=*	37=*	38=*
39=*	3A=*	3B=*	3C=*	3D=*	3E=*	3F=*	

# Add ROCE - HCM

**Add PCIe Function**

Processor: HELIXGA2

Function ID:

Function type:

Virtual function number:

PCHID:

Description:

Physical Network IDs:

Physical Network ID 1:

Physical Network ID 2:

Physical Network ID 3:

Physical Network ID 4:

Unassigned Partitions:

CSS Partition	Usage	Description
0.LP03	CF/OS	
0.LP04	CF/OS	
1.LP11	CF/OS	
1.LP12	CF/OS	
1.LP13	CF/OS	
1.LP14	CF/OS	
2.LP21	CF/OS	
2.LP22	CF/OS	
2.LP23	CF/OS	
2.LP24	CF/OS	
3.LP31	CF/OS	
3.LP32	CF/OS	
3.LP33	CF/OS	
3.LP34	CF/OS	

Access list:

Candidate list:

Buttons: Add >>, << Remove, Add >>, << Remove, OK, Cancel, Help

# Add zEDC Express - HCM



**Add PCIe Function**

Processor: HELIXGA2

Function ID:

Function type:

Virtual function number:

PCHID:

Description:

Physical Network IDs

Physical Network ID 1:

Physical Network ID 2:

Physical Network ID 3:

Physical Network ID 4:

Unassigned Partitions:

CSS.Partition	Usage	Description
0.LP03	CF/OS	
0.LP04	CF/OS	
1.LP11	CF/OS	
1.LP12	CF/OS	
1.LP13	CF/OS	
1.LP14	CF/OS	
2.LP21	CF/OS	
2.LP22	CF/OS	
2.LP23	CF/OS	
2.LP24	CF/OS	
3.LP31	CF/OS	
3.LP32	CF/OS	
3.LP33	CF/OS	
3.LP34	CF/OS	

Access list:

0.LP01

Candidate list:

0.LP02

Buttons: Add >>, << Remove, Add >>, << Remove, OK, Cancel, Help



## Other HCD Actions Regarding PCIE Functions

- PCIE functions are processor based, not LCSS based
- Actions that do copy the PCIE functions or connections:
  - Copy processor
  - Repeat partition within the same processor
- Actions that do not copy the PCIE functions or connections:
  - Copy LCSS
  - Copy partition to a different processor
  - Transfer partition

# Validation Rules – PCIe Functions

- Each function uniquely identified by function id (PFID)
  - 3 hex digits (000-0FF), allowed range is processor dependent
- A function must specify a PFID, a type, a PCHID, and partition assignments
  - Virtual function id may also need to be specified
- PCHID follows same rules as CHPID PCHID
  - May be overgennered (\*)
- PCHID may not be duplicated for non-shared adapters
- Virtual function id required for shared adapters
- At most one LPAR allowed in access list. If access list empty, at least one LPAR must be in candidate list.
- Default candidate list for migration is all defined partitions
- Hardware activate requires processor and OS to support PCIe

# PNETIDs for OSD/IQD CHPIDs - HCD

## Add/Modify Physical Network IDs

If the PCHID is associated to one or more physical networks, specify each physical network ID corresponding to each applicable physical port.

```
Physical network ID 1 . . CUSTOMER
Physical network ID 2 . . NET1
Physical network ID 3 . . NET2
Physical network ID 4 . . _____
```

F1=Help    F2=

## Specify IQD Channel Parameters

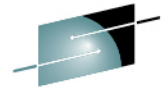
Specify or revise the values below.

```
Maximum frame size in KB . . . . . 40 +
IQD function . . . . . 1    1. Basic HiperSockets
                               2. IEDN Access (IQDX)
                               3. External Bridge
Physical network ID . . . . . _____
```

F1=Help    F2=Split    F3=Exit    F4=Prompt    F5=Reset    F9=Swap  
F12=Cancel



# PNETIDs for OSD & IQD CHPIDs - HCM



CHPID on HELIXGA2.0

ID: 45

Description:

Type: IQD

Mode

- Dedicated
- Reconfigurable
- Shared
- Spanned

Dynamic Switch:

Dynamic CHPID Management

Managed

I/O Cluster:

Maximum frame size in KB: 16

IQD function

- Basic Hipsockets
- EDN Access (IQDX)
- External Bridge

Physical Network ID : PNETID1

**If editing IQD CHPID**

Physical Network ID 1: PN1

Physical Network ID 2: PN2

Physical Network ID 3: PN3

Physical Network ID 4: PN4

**For OSD CHPIDs**

Specify IQD channel parameters:

Maximum frame size in KB: 16

IQD function

- Basic Hipsockets
- EDN Access (IQDX)
- External Bridge

Physical Network ID: PNETID2

**If creating IQD CHPID**



# Creating a PCIE and PCHID Report - HCD



```
Session A - SCLM - [32 x 80]
File Edit View Communication Actions Window Help
Host: boesclm.boeblingen. Port: 23 LU Name: Disconnect
z/OS V2.1 HCD
C Print or Compare Configuration Data
Print Configuration Reports
Select the types of report you want, and specify the values below.
IODF name : 'REDDE.IODF00.WORK.RZPNET'
Types of re
/ CSS repo
- Switch r
- OS repor
- CTC conn
- I/O path
Job stateme
//REPORT J
//GO.HCDTRA
//GO.HCDRPT
//GO.HCDPRO
//GO.STEPLI
//
Available CSS Report Types
Select one or more.
/ CSS summary reports
- Channel path detail reports
- Control unit detail report
- Device detail report
M,MSGCLASS=X
F1=Help F2=Split F3=Exit
F9=Swap F12=Cancel
F1=Help F2=Split F3=Exit F5=Reset F9=Swap F12=Cancel
F1=Help F2=Split F3=Exit F4=Prompt F9=Swap F12=Cancel
*CBDRPC
MR A 17/018
```



# Sample PCIe Report



## PCIe FUNCTION SUMMARY REPORT

PROCESSOR ID		P35		TYPE		2827		MODEL		H66		CONFIGURATION MODE: LPAF			
												PARTITION NUMBERS			
				CSS0-----		CSS1-----		CSS2-----		CSS3-					
FID	VF	PCHID	TYPE	123456789ABCDEF		123456789ABCDEF		123456789ABCDEF		123456789ABCDEF		12345			
000		314	ROCE	-----		-----C-----		-----C-----		-----A---					
001		318	ROCE	-----		-----A-----		-----C-----		-----C---					
0AE	2	418	ZEDC-EXPRESS	-----		-----A-----		-----C-----		-----C---					
0AF	1	418	ZEDC-EXPRESS	-----		-----A-----		-----C-----		-----C---					

CSS0		CSS1		CSS2		CSS3	
PARTITION		PARTITION		PARTITION		PARTITION	
NUM	NAME	NUM	NAME	NUM	NAME	NUM	NAME
1	R35LP01	1	R35LP16	1	R35LP31	1	R35LP46
2	R35LP02	2	R35LP17	2	R35LP32	2	R35LP47
3	R35LP03	3	R35LP18	3	R35LP33	3	R35LP48
4	R35LP04	4	R35LP19	4	R35LP34	4	R35LP49





# Sample PCHID Report

## PCHID SUMMARY REPORT

- PROCESSOR ID P35 TYPE 2827 MODEL H66 CONFIGURATION M  
 CHPID

PCHID	VF	FID	TYPE	SWITCH	CSS Numbers	PNET-1
218		0CA	ROCE		1 2 3	IEDN
290		88	OSD		0 1 2 3	IBMNET
314		000	ROCE		1 2 3	IBMNET
318		001	ROCE		1 2 3	IBMNET
418	1	0AF	ZEDC-EXPRESS		1 2 3	
418	2	0AE	ZEDC-EXPRESS		1 2 3	
5E2		3B	FC	14	0 1 2 3	
5E3		5B	FCP		0 1 2 3	
0B/1		E4	CIB		0 1 2 3	
0B/2		E5	CIB		0 1 2 3	
N/A		F5	IQD		0 1 2 3	IBMNET
N/A		F6	IQD		0 1 2 3	
N/A		FD	IQD		0 1 2 3	IEDN

### TOTALS FOR CHANNEL CARD TYPES

EXTERNAL CHPIDS									INTERNAL CHPIDS		PCIE FUNCTIONS	
CFP	CIB	FC	FCP	OSC	OSD	OSE	OSN	ICP	IQD	ROCE	ZEDC	
8	4	21	23	1	43	3	0	2	6	3	2	



# PCIe Function Compare Report

PROC	FID	New IODF	Old IODF	Description
PROC1	001		Deleted	
			001	Physical Channel ID (PCHID)
			ROCE	Function Type
			undefined	Virtual Function ID (VF)
			comment 1	Function Description
			FRD	Physical Network ID 1
			DDD	Physical Network ID 2
			AAAA	Physical Network ID 3
				Physical Network ID 4
				>> LP01
		>> LP02	Partition in Candidate List	
		>> LP03	Partition in Candidate List	
PROC1	002	Actual Data	Old Data	
		072	002	Physical Channel ID (PCHID)
		new comment	comment 1	Function Description
		OLD1	CUSTOMER	Physical Network ID 1
		OLD2	PNET2	Physical Network ID 2
			INTERNAL	Physical Network ID 3
			EXTERNAL	Physical Network ID 4

HCD Dialog: select in compare report dialog  
 Batch: part of CSS compare, report “PF”

# Creating a PCIE and PCHID Report - HCM



IODF Reports

Select Report Type

- Channel Subsystem (CSS) Reports
  - CSS Summary
  - Channel Path Detail
  - Control Unit Detail
  - Device Detail
- Switch Report
- Operating System (OS) Reports
  - OS Device
  - OS Console (NIP/VM)
  - EDT (MVS only)
- CTC Connection Report
- I/O Path Report
- Supported Hardware Report
- I/O Definition Reference Report

Select Limitation

Processor ID:

Partition ID:

OS Configuration ID:

Switch ID:

Specify the sysplex and system name to gather the actual configuration from. (Blanks default to the local system)

Sysplex Name:

System Name:

Output Format

Show text     CSV     XML

OK    Cancel    Help

# HCD IOCP Deck Migration

The following changes to the IOCP deck are supported:

- **FUNCTION** statement
  - Operands FID, VF, PCHID, PNETID, PART
  - DESC and UNIT internally supported
- **CHPID** statement
  - PNETID – ignored if processor doesn't support

# HCD Deck Migration

★ IOCP deck usable for standalone IOCP

## ROCE

FUNCTION FID=002,PART=((LP01),(LP03,LP04,LP12,LP22)), \*  
PNETID=(NET1,NET2,N3,),PCHID=002

## ZEDC-EXPRESS

FUNCTION FID=005,VF=1,PART=((LP14),(LP01)),PCHID=105

**NOTE: This is not valid for HCD migration, since HCD will default to type ROCE, which does not allow the VF keyword – you must use extended migration**

## OSD CHPID

CHPID PATH=(CSS(0),11),PARTITION=((LP01),(LP04),REC), \*  
PCHID=041,PNETID=(,NET1,NET2,),TYPE=OSD



# HCD Deck Migration

★ IOCP deck with HCD attributes for extended migration

## ROCE

```
FUNCTION FID=002,PART=((LP01),(LP03,LP04,LP12,LP22)),      *  
          PNETID=(NET1,NET2,N3,),PCHID=002  
*$HCDC$    UNIT=ROCE  
*$HCDC$    DESC='myDescription'
```

## ZEDC-EXPRESS

```
FUNCTION FID=005,VF=1,PART=((LP14),(LP01)),PCHID=105  
*$HCDC$    UNIT=ZEDC-EXPRESS  
*$HCDC$    DESC='myDescription'
```

## OSD CHPID

```
CHPID PATH=(CSS(0),11),PARTITION=((LP01),(LP04),REC),      *  
          PCHID=041,PNETID=(,NET1,NET2,),TYPE=OSD  
*$HCDC$    DESC='myDescription'
```

# Support and Coexistence

- Enabling support
  - OA39234 – z/OS 1.12, z/OS 1.13, z/OS 2.1
  - OA41350 – z/OS 1.11
- z/OS 2.1. has full support (PCIE functions, PNETIDs)
- Other releases – toleration only
  - zBC12 and zEC12 GA2 supported
  - PCIE functions and PNETIDs not supported
  - S/W activate with hardware validation is allowed if PCIE functions and PNETIDs are specified

# Autoconfiguration (zDAC) Improvements

- Point to point connections supported
- Profile option to allow you to manually specify control unit and device numbers
- Channel path/switch inclusion/exclusion lists
- Discovery by controller serial number
- Autoconfiguration policies can be changed between two subsequent controller discoveries
- Inactive or incapable systems are ignored during discovery
- SAVE command supported on panels containing the discovered information

## Verify a Configuration via zDAC

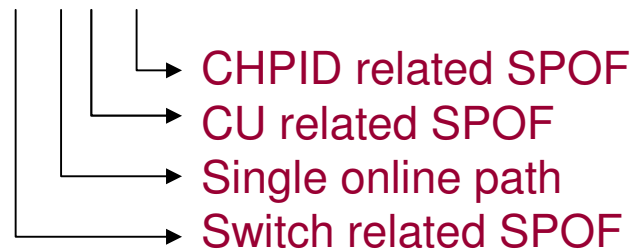
- Prior to z/OS 2.1, required Tivoli System Automation (TSA) I/O Operations (priced product)
- With z/OS 2.1, zDAC is used to discover the active configuration
  - Requires z196 / z114 or higher processor
  - Only done if TSA I/O Operations is not operational
  - System to run report must be part of local sysplex
  - Device and path status information only available if run against the local system

# Single Point of Failure Info for I/O Path

- Today, for local system, STAT column contains the status of each channel path
  - Online (Blank)
  - Offline (OFFL)
  - Unknown (UNKN)
- For local system, if path online, STAT contains single point of failure information:

```

----I/O Path-----Sensed Data...
CHP  CU    DEV      STAT  CHT    CUTYPE
80   2000  2000,144  #CPS  FC_S   2107-941
  
```



# Verify Config - Resulting I/O Path List



Goto Filter Backup Query Help

I/O Path List

Row 5 of 1515 More: >

Command ==>

Scroll ==> PAGE

Accessed IODF: SYS1.IODF01

Active IODF : SYS1.IODF01

System . : THIS-SYS

Processor . . : P35

Partition : TRX1

OS config: MVSVM

----I/O Path-----			-----Sensed Data-----				----IODF Data-----				D
CHP	CU	DEV	STAT	CHT	CUTYPE	DEVTYPE	O	CHT	CUTYPE	DEVTYPE	S
0D	0621	0620, 16						OSM	OSM	OSA-M	*
30	2000	2000, 2	5	FC_S	2107-9A2	3390B		FC	2107	3390B	
30	2000	2002, 17		FC_S	2107-9A2	3390B	Y	FC	2107	3390B	
30	2000	2013	5	FC_S	2107-9A2	3390B		FC	2107	3390B	
30	2000	2014, 14		FC_S	2107-9A2	3390B	Y	FC	2107	3390B	
30	2000	2022, 4	5	FC_S	2107-9A2	3390B		FC	2107	3390B	
30	2000	2026, 9		FC_S	2107-9A2	3390B	Y	FC	2107	3390B	
30	2000	202F	5	FC_S	2107-9A2	3390B		FC	2107	3390B	
30	2000	2030, 32		FC_S	2107-9A2	3390B	Y	FC	2107	3390B	



# Productivity and Usability improvements

- HMC wide activate (session 14246 on Wednesday, 3-4)

Provide single point of management control of activates across all servers / LPARs controlled by the same HMC

- Central deployment of target IODF
  - Remote activate from a single managing system
- Activate command available via batch

```
//WORK EXEC PGM=CBDMGHCP,PARM='ACTIVATE IODF=01,TEST'
```

# Productivity and Usability improvements

- ACTIVATE SOFT=NOVALIDATE and IODF contains CF related changes
  - CBDA854I Changes to Coupling Facility elements are not processed.
- Warning message issued when CSS is deleted from a CIB channel, which affects definition of the connected target CIB channel
  - Activate is also required to target processor
  - CBDG422I Changing CHPID <source CHPID> changes the lowest CSS to <CSS ID>, affecting CF connection to <target CHID>. Consider activating the target LPAR/processor.



# Productivity and Usability improvements

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.

```

Goto Filter Backup Query Help
-----
CBDPCFF0          CF Channel Path Connectivity List          Row 1 of 14
Command ==> _____ Scroll ==> PAGE

Select one or more channel paths, then press Enter.

Source processor ID . . . . . : DAN2          Danu DWH/DWA/DWD/DWE und Testlab
Source channel subsystem ID . . : 0          DWH1,SYSD,RSE1-2,COH1
Source partition name . . . . . : *

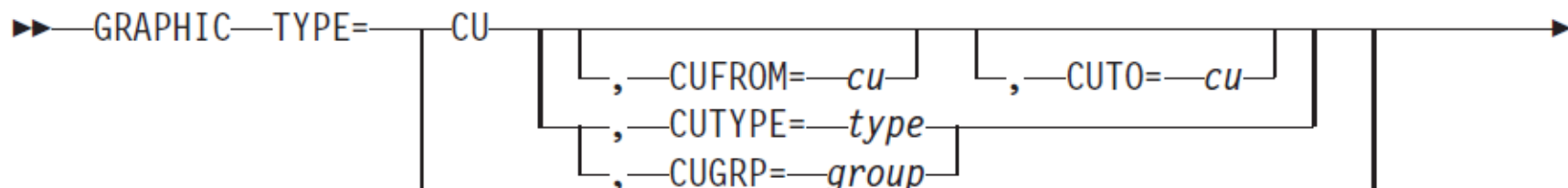
-----Source-----
/ CHP PCHID CF Type Mode Occ Proc.CSSID CHP PCHID CF Type Mode -CU- -#-
- 07 110 N CFP SPAN N ECL2.1 03 109 Y CFP SHR CFP 7
- 0B 180 N CFP SPAN N ECL2.1 07 119 Y CFP SHR CFP 7
- 0C 118 N CFP SPAN N ECL2.1 80 200 Y CFP SHR CFP 7
- 0E 188 N CFP SPAN N ECL2.1 84 210 Y CFP SHR CFP 7
- 20 04/2 Y CIB SHR N R35.0 62 09/1 Y CIB SPAN CFP 7
- EE Y ICP SHR N DAN2.0 EF Y ICP SHR CFP 7
- EF Y ICP SHR N DAN2.0 EE Y ICP SHR CFP 7
- F2 Y ICP SPAN N DAN2.0 F3 Y ICP SPAN CFP 7
- F3 Y ICP SPAN N DAN2.0 F2 Y ICP SPAN CFP 7
- FA Y ICP SHR N DAN2.1 FB Y ICP SHR CFP 7
- FC Y ICP SPAN N DAN2.0 FD Y ICP SPAN CFP 7
- FD Y ICP SPAN N DAN2.0 FC Y ICP SPAN CFP 7
- FE Y ICP SPAN N DAN2.0 FF Y ICP SPAN CFP 7
- FF Y ICP SPAN N DAN2.0 FE Y ICP SPAN CFP 7
***** Bottom of data *****

```

# Productivity and Usability improvements

- The MVS Device Detail Report shows the OFFLINE parameter for devices only if it can be set by a user.
- Filter graphical CU report by control unit range when issued in batch mode

– Create a graphical configuration report



# Productivity and Usability improvements

- The 'OS group change' is now available on the I/O Device List which shows device groups
- If PPRC devices are deleted, their connections are removed both from the primary and secondary (DR site0 OS configurations). This causes the 'generated' attribute of the secondary OS configuration to be deleted and further updates to the primary OS configuration will not be automatically reflected in the secondary OS configuration.
  - New profile option to generate a new DR site OS configuration at production IODF build time regardless whether the generated OS configuration has been changed or not. New profile option, UNCOND\_GENERATE\_DROS, is added.

## Reference

- Hardware Configuration Definition User's Guide, SC34-2669
- Hardware Configuration Manager User's Guide, SC34-2664
- Hardware Configuration Definition Messages, SC34-2668
- Hardware Configuration Definition Planning, GA32-0907
- z/OS Migration from z/OS V1R13 and z/OS V1R12 to z/OS V2R1, GA32-0889
  
- HCD/HCM Homepage:
  - <http://www.ibm.com/systems/z/os/zos/features/hcm/>
  
- HCD Contact:
  - [IBMHCD@de.ibm.com](mailto:IBMHCD@de.ibm.com)

# Thank you

