IBM

z/OS

HCD
Reference Summary

Contents

Chapter 1. Introduction

This publication provides a brief overview of the Hardware Configuration Definition (HCD) tasks, the relationships of the configuration objects within HCD, and the navigation options among these objects. It also contains tables of actions (and their matching action codes) available for each object and information about the online help. It is organized as follows:

Main configuration tasks (see page 4)

Provides an overview of the main tasks supported by HCD.

Selecting actions (see page 5)

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Navigating in a panel flow (see page 6)

Summarizes how to navigate through the HCD panels while performing the desired actions.

Navigating to objects (see page 7)

Shows the organization of the object lists and how to navigate between these lists.

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Lists where connections can be changed between the different configuration objects.

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Provides information about context action menus for all HCD objects.

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Lists available actions on systems in an active sysplex.

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Lists available commands.

Online help (see page 26)

Provides an overview of the context-sensitive online help structure with hyperlinks.

If you are new to HCD, you will find much useful information in **Getting started with this dialog** (option **8** on the "Main panel" on page 3).

Chapter 2. Reference

Main panel

The HCD primary task selection panel (or main panel) is
displayed when you start an HCD session.

```
                  z/OS V1.4 HCD

              Hardware Configuration

Select one of the following.

1_  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 report
    5. Migrate configuration data
    6. Maintain I/O definition files
    7. Query supported hardware and installed UIMs
    8. Getting started with this dialog
    9. What's new in this release

For options 1 to 5, specify the name of the IODF to be used.

I/O definition file . . . 'SYS1.IODF00.WORK'            +
```

If you enter the name of a non-existing I/O definition file (IODF)
in the main panel, HCD asks you to define a new work IODF.

IODF naming conventions

The format of the IODF data set name follows the standard TSO/E
rules:

hhhhhhhh.IODF*cc*.*yyyyyyyy*.*yyyyyyyy*

hhhhhhhh	TSO/E high-level qualifier
IODF*cc*	IODF plus 2 hexadecimal characters
yyyyyyyy.*yyyyyyyy*	Optional qualifiers

A production IODF name has the same format as a work IODF;
however, you must omit the optional qualifiers if you intend to
use the IODF for IPL or dynamic activation.

Main configuration tasks

If you are using HCD for the first time, the standard sequence to define a configuration is:

1. Migrate an existing configuration into a work IODF:

   On the main panel, select **Migrate configuration data**. You can then do the following:
   Migrate IOCP data sets
   Migrate MVSCP data sets
   Migrate HCPRIO data sets
   Migrate switch configuration data

   These options build a work IODF, or parts of it.

2. Change configuration definitions:

   On the main panel, select **Define, modify, or view configuration data**. On the resulting panel, select one object:

   ```
          Define, Modify, or View Configuration Data

    Select type of objects to define, modify, or view data.

     1_  1. Operating system configurations
             consoles
             system-defined generics
             EDTs
               esoterics
               user-modified generics
         2. Switches
             ports
             switch configurations
               port matrix
         3. Processors
             channel subsystems
               partitions
               channel paths
         4. Control units
         5. I/O devices
   ```
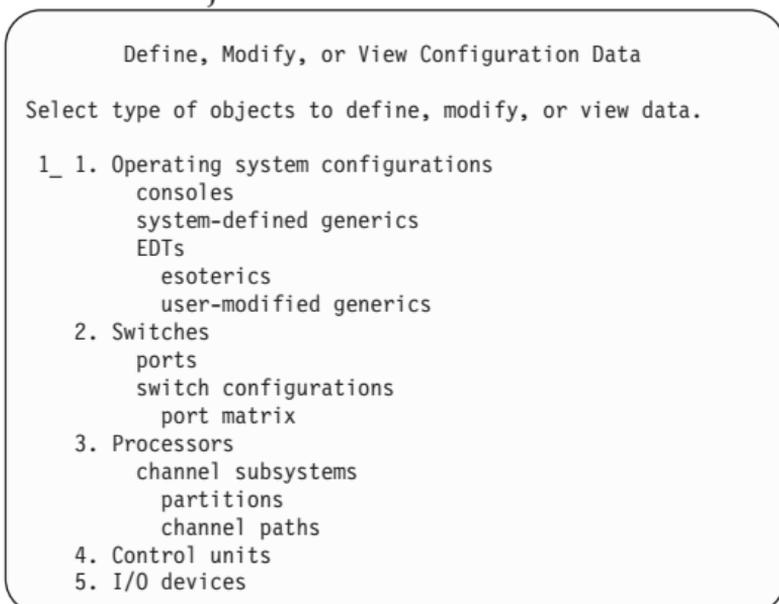
   Working with these objects allow you to modify a work IODF. If you try to perform any of the available actions on a production IODF, HCD copies the production IODF into a newly built work IODF, on which you then can perform the options.

3. Activate configuration data:

   On the main panel, select **Activate or process configuration data**. You can then select one of the following:

```
1.  Build production I/O definition file
2.  Build IOCDS
3.  Build IOCP input data set
4.  Create JES3 initialization stream data
5.  View active configuration
6.  Activate or verify configuration dynamically
7.  Activate configuration sysplex-wide
8.  Activate switch configuration
9.  Save switch configuration
10. Build I/O configuration statements
11. Build and manage S/390 microprocessor
    IOCDSs and IPL attributes
12. Build validated work I/O definition file
```

Selecting actions

To perform an action against an object:
1. Select the object (or a group of objects).
2. Select an action to be performed against the selected object.

You can select the actions using the object's context menu or action codes.

Using the context menu:
- To select an object [single select], enter a slash '/' to the left of the object.
- To perform the same action on a group of objects [extended select], use a left parenthesis '**(**' [top of range] and a right parenthesis '**)**' [bottom of range].
- Press the Enter key to display a context menu with a list of possible actions.
- Type the number or action code of the action into the entry field and press the Enter key.

Note: If there is only one action possible, the action is performed without showing the context menu.

Using the action code:
- Type an action code to the left of the object, or an equal sign **=** to repeat the previous action code.
- To see a list of all available action codes, place the cursor in the action entry field to the left of an object and press the F4=Prompt key. The same context menu is shown as when selecting an object and pressing the Enter key.
- To get more information on action codes, place the cursor in the action entry field to the left of an object and press the F1=Help key.

Removing selections:
- To remove all selections, action codes, and changes to a panel, press the F5=Reset key twice.

Navigating in a panel flow

Most HCD tasks are performed in one step; when the step is complete, you can select the next task.

Some tasks, for example, defining a device, require the display of several panels. The navigation through the different panels is done with the Enter key and the function keys as follows:

Enter   Displays the next panel. On the last panel of a task, it returns to the object list.

F3=Exit   Returns to the object list. The values you entered are processed.

F6=Previous

> Returns to the previous panel. The values you entered are discarded.

F12=Cancel

> Cancels the action and returns to the list panel without processing any values. If you cancel more than one panel, you are asked to confirm the cancel operation.

Figure 1 illustrates the use of the Enter, F3, F6, and F12 keys.
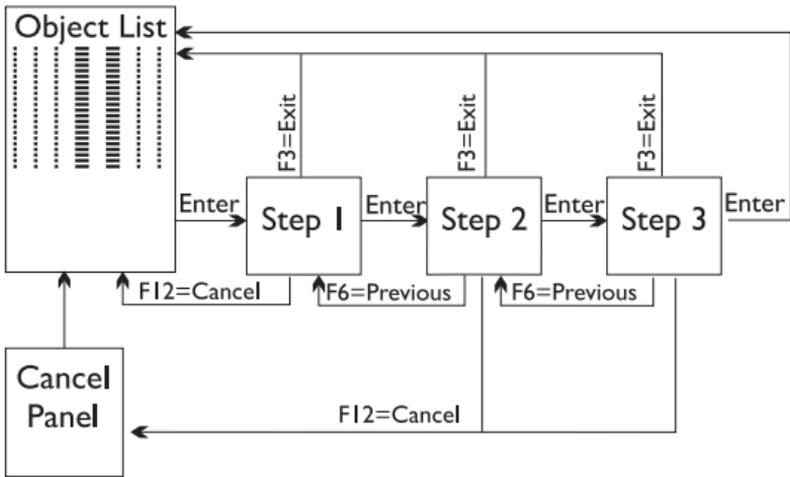
Figure 1. Navigating within a Task

Navigating to objects

Figure 2 provides an overview of the different object lists within HCD. The leftmost numbers are the option numbers that must be selected on the main panel. Select the second number from the panel that follows.

Request the other lists by applying an action to a selected object within the displayed list (action code into the column next to the object). In the action tables (see pages 12 to 22) you see the actions to request these lists. Usually, **Work with...** actions navigate to these lists.

Figure 2. Object Lists within HCD

Changing connections

To define a configuration with HCD, you need to establish
connections between different objects. The following overview
shows one way of changing the different connections in HCD and
how to navigate to them. If there are attributes associated with the
connections, these are listed as well.

Connection   Where to Change it

Channel Subsystem Connections

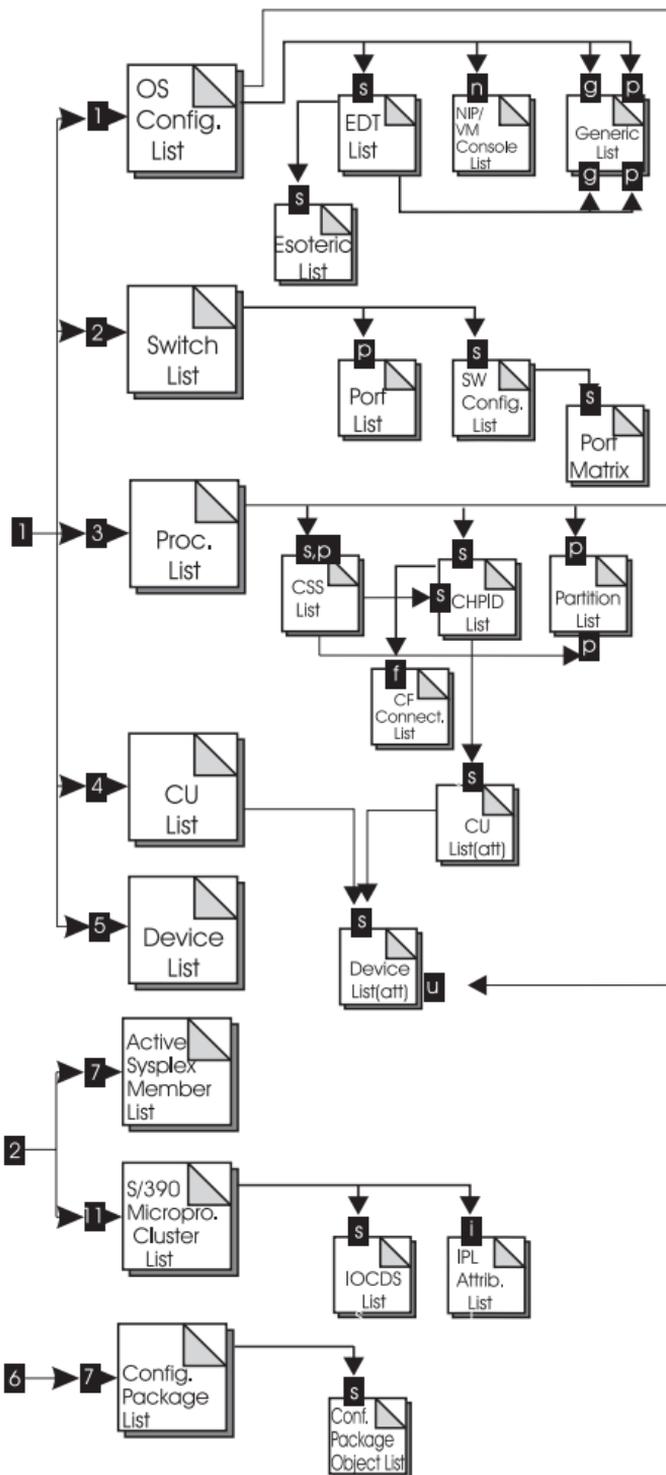|	
Processor – CU	To modify processor-CU settings like unit address ranges:
	• Select CU.
	• Select action **Change** (or action code **c**).
	• Press the Enter key.
	• Work on the *processor-CU* list.
Processor – Device	You are prompted when you connect a device to a CU that is connected to a processor. To modify Processor-Device settings like unit address ranges:
	• Select device.
	• To change a device, select action **Change** (or action code **c**).
	• To change a group, select action **CSS group change** (or action code **g**).
	• Press the Enter key.
	• Work on the *device-processor* list.
Partition – Device	This is part of the connection between processor and device.
CHPID – Partition	To modify the *access* or *candidate* list:
	• On the *CHPID* list, scroll to the right.
	• Type over the values (a or c) in the channel path/partition matrix.
CHPID (CF receiver) – CHPID (CF sender)	• On the *CHPID* list select any channel path and the action **Connect CF channel path** (or action code **f**).
	• Select the source CHPID on the *CF channel path connectivity* list.
	• To establish coupling facility (CF) channel path connections, use action **Connect to CF channel path** (or action code **p**).
	• To disconnect, use action **Disconnect** (or action code **n**).
CHPID – Port	• Select the port of a switch on a *port* list.
	• To connect, use action **Connect to channel path** (or action code **p**) on a *port* list.
	• To disconnect, use action **Disconnect** (or action code **n**) on the *port* list.
	You can change settings like **Dynamic switch ID** or **Entry switch** by selecting the action **Change** (or action code **c**) on the *CHPID* list or by writing over the appropriate values.

Connection	Where to Change it
CHPID – CU	• Select CU.
	• Use action **Change** (or action code **c**).
	• Continue on the *processor-CU* list.
CU – Port	• Select a port of a switch.
	• Select action.
	• To connect, select **Connect to CU** (or action code **u** on a *port* list).
	• To disconnect, select action **Disconnect** (or action code **n**).
Port – Port	• Select a port of a switch.
	• Select **Connect to switch** (or action code **w** on a *port* list).
	• To disconnect, select action **Disconnect** (or action code **n**).
Port (in port matrix)	• Open a switch configuration of a switch using action **Work with port matrix** (or action code **s** on the *switch configuration* list).
	• Define dynamic or dedicated port connections by typing over values (or using action code **c**).
CU – Device	• Select device.
	• Select action **Change** (or action code **c**) or overtype the CU field on the *device* list.
Operating System (OS) Connections	
OS – Device	To define settings like parameters and features:
	• Select device.
	• To change a device, select action **Change** (or action code **c**). To change a group of devices, select action **OS group change** (or action code **o**).
	• Work on a *device-OS* list.
	If you have invoked the *device* list from an OS, you can disconnect devices using the action **Disconnect** (or action code **n**)
Esoteric – Device	This is part of the connection of a device to an OS.
	• On the *OS* list, use action **Work with EDTs** for an OS (or action code **s**).
	• Select action **Work with esoterics** (or action code **s**).
	• To assign devices, select action **Assign devices** on the *esoteric* list (or action code **s**). This displays an *unassign/ assign devices to esoterics* list.
	• Type over the values in the Assigned column to assign (Yes) or unassign (No) a device.
	You can also establish an esoteric-device connection when adding or changing devices. The device is automatically known by the EDT when the device is assigned to one or more esoterics of the EDT.

Action bar

The different action bar choices and their meanings are listed below. Online help for the action bar can be requested by invoking extended help from any panel showing an action bar (under the action bar entry help, or using the F2 key from any field help panel, or by pressing the F1 key while the cursor is not on an input field). For a description of a specific action bar choice, move the cursor to that action and press the Enter key again.

Action Bar	Pull-down Menu	Meaning
Goto		**Displays a list of target objects to which you can go directly without having to navigate through the dialog.**
	Operating systems	
	EDTs ...	
	Esoterics ...	
	Generics ...	
	Consoles ...	
	Switches	
	Ports ...	
	Switch Configurations ...	
	Port Matrix ...	
	Processors	
	Partitions ...	
	CHPIDs ...	
	Control units	
	Devices	
	Migrate configuration data	
	Leave HCD	
Show/Hide		Actions to show and hide parameters / features (only available on a *device* list invoked from the *OS configuration* list).
Options		**Action to select other switch configuration (only available on a *port* list).**
Filter		**Actions to reduce or reset the list (Set filter, Clear filter).**
Backup		**Actions to backup the IODF (backup with prompt, backup without prompt).**
Query		**Actions to query the types and models supported on your system, UIMs, and logs.**
	List supported processors	
	List supported switches	
	List supported control units	
	List supported devices	
	List installed UIMs	
	View message log	
	View activity log	
	View IODF information	
Help		**Provides different kinds of help.**
	Help for Help	Describes how to use help.
	Extended Help	Provides help about the function of the panel.

Action Bar	Pull-down Menu	Meaning
	Keys Help	Provides help on the meaning of the function keys.
	Instruction Help	Provides help on how to interact with the panel (only on object list panels).

Context menus

To request an action from an object's context menu, select an object from a list panel (or type the action code letter next to the object) and press the Enter key. Only those actions appear in the context menu that are possible for the selected object.

Actions on OS and related objects

The following list provides an overview of the different actions available on the context menu for OS, EDT, esoteric, generic and console objects. An arrow (→) in the description indicates that the action leads to one of the lists shown in Figure 2 on page 7.

Action Code	Action	Meaning
OS Configuration		
a	Add like	To add an OS configuration definition like the one selected, without associated objects or references.
r	Repeat (copy)	To copy the selected OS configuration, including its I/O devices, EDTs, esoterics, and consoles.
c	Change	To change an OS configuration definition.
d	Delete	To delete an OS configuration and the associated objects and references.
s	Work with EDTs	→ *EDT* list
n	Work with consoles	To display a list of consoles and to add or delete consoles, or to change the order.
u	Work with attached devices	→ *Device* list
g	View generics by name	→ *Generic* list (sorted by name)
p	View generics by preference value	→ *Generic* list (sorted by preference value)
EDT		
r	Repeat (copy)	To copy an EDT with its esoterics and device assignments and any EDT-dependent generic characteristics.
c	Change	To change the EDT description.
d	Delete	To delete an EDT from the selected configuration, including all esoterics and device references.
s	Work with esoterics	→ *Esoteric* list
g	Work with generics by name	→ *Generic* list (sorted by name)
p	Work with generics by preference value	→ *Generic* list (sorted by preference value)
Esoteric		

Action Code	Action	Meaning
r	Repeat (copy)	To copy the esoteric device group with its assigned devices to a new esoteric name.
c	Change	To change the esoteric group name and/or VIO eligibility.
d	Delete	To delete the esoteric device group with all references to devices.
s	Assign devices	To assign or unassign devices. This displays an *assign/unassign device to esoteric* list on which you can type over the values in the Assigned column by either Yes or No.
v	View assigned devices	To view the esoteric devices.
Generic		
c	Change	To change the preference value and/or VIO eligibility (only valid when selecting action **Work with generics ...** on the *EDT* list).
s	View devices	To view all devices that are contained in the specified generic: • *Generic* list by name • *Generic* list by preference value **Note:** You can reach the *Generic* list from the *OS* list or from the *EDT* list.
Consoles		
c	Change	To change the selection order of a console.
d	Delete	To delete a console definition.

Actions on processors and related objects

The following overview shows the different actions available on the context menu for processors, CHPIDs, partitions, and related objects. An arrow (→) in the description indicates that the action leads to one of the lists shown in Figure 2 on page 7.

Action Code	Action	Meaning
Processor		
a	Add like	To add a processor definition like the one selected, without references and content.
r	Repeat (copy)	To copy a processor definition, including partitions, CHPIDs and all object connections.
c	Change	To change processor definitions; for example type or model.
i	Prime serial number	To update selected processors with the sensed data for the serial number of the local processor.
d	Delete	To delete a processor configuration and all its partitions, CHPIDs, and connections from the IODF.
v	View processor definition	Displays processor configuration definition.
k	View related CTC connections	Displays defined CTC connections.
p	Work with partitions ......(SMP)	→ *Partition* list
s	Work with attached CHPIDs ... (SMP)	→ *Channel path* list
u	Work with attached devices ... (SMP)	→ *I/O Device* list
y	Copy to channel subsystem ... (SMP)	To copy an SMP processor's configuration to a XMP processor's channel subsystem.
p,s	Work with channel subsystems ... (XMP)	→ *Channel Subsystem* list
Channel Subsystem (CSS)		
a	Add like	To add a channel subsystem with attributes like the one selected.
r	Repeat (Copy)	To copy a channel subsystem including partitions, CHPIDs and all object connections.
y	Copy to processor	To copy or merge a channel subsystem including partitions, CHPIDs and all object connections to an SMP processor's configuration.
c	Change	To change CSS definitions, for example, the maximum number of devices.

Action Code	Action	Meaning
d	Delete	To delete a channel subsystem including its partitions and channel paths, and all control unit and device references to this channel subsystem.
p	Work with partitions	→ *Partition* list
s	Work with attached channel paths	→ *Channel Path* list
u	Work with attached devices	→ *I/O Device* list

CHPID

a	Add like	To add a channel path with attributes like the one selected.
c	Change	To change a CHPID definition and its channel path access and candidate lists.
f	Connect CF channel paths	→ *CF channel path connectivity* list.
g	Aggregate channel paths	To move all control units from a source CHPID to the selected target CHPID of the same processor.
d	Delete	To delete a CHPID definition and all references.
s	Work with attached CUs	→ *CU* list
v	View channel path definition	To display the CHPID definition and its channel path access and candidate lists.
w	View connected switch(es)	To display dedicated connections of related switch configurations.
k	View related CTC connections	Displays defined CTC connections.
h	View graphically	To display graphically a channel path in relation to attached switches, CUs, and devices.

Coupling Facility CHPIDs in the CF receiver / CF sender Channel Path Connectivity List

p	Connect to CF channel path	To select a source and a destination channel path for a CF connection, and to define a CF control unit and devices for that connection.
n	Disconnect	To break a CF connection; the CF control unit and CF devices are deleted implicitly.
v	View source CHPID definition	To display the definition of a source CHPID and its access and candidate lists.
t	View destination CHPID definition	To display a definition of a destination CHPID and its access and candidate lists.
s	View CF control unit and devices	To display the CF control unit and devices that are used for a specific connection.

Partition

Action Code	Action	Meaning
r	Repeat (copy)	To add a partition definition with the same access and candidate list entries as the one selected.
x	Transfer (move) partition configuration	To transfer an entire partition configuration (CUs and devices), or a subset of it, to another partition (target partition can be in a different processor configuration of the same IODF).
c	Change	To change a partition definition.
d	Delete	To delete a partition definition and all references.
v	View attached CHPID	To display a list of CHPIDs known to the partition (read-only)
s	View attached control units	To display a list of CUs attached to the partition (read-only)
u	View attached devices	To display a list of devices attached to the partition (read-only)
k	View related CTC connections	Displays defined CTC connections.
h	View graphically	To display graphically a partition in relation to attached switches, CUs, and devices.

Actions on switches and related objects

The following overview shows the different actions available on
the context menu for switches and related objects (switch
configurations and ports). An arrow (→) in the description indicates
that the action leads to one of the lists shown in Figure 2 on
page 7.

Action Code	Action	Meaning
Switch		
a	Add like	To add a switch definition with the same attributes as the one selected.
c	Change	To change a switch definition.
i	Prime serial number	To update the selected switches with the sensed data for the serial number.
x	Move ports	To move ports within the selected switch or from other switches to the selected target switch.
d	Delete	To delete a switch definition.
p	Work with ports	→ *Port* list
s	Work with switch configurations	→ *Switch configuration* list
h	View graphically	To display graphically a switch in relation to attached processors, CUs, and devices.
Port		
c	Change	To change a port definition.
p	Connect to channel path	To connect ports to channel paths.
u	Connect to CU	To connect ports to CUs.
w	Connect to switch	To connect a port to a port of another switch.
n	Disconnect	To disconnect connected units (ports of other switches, CUs, or CHPIDs).
i	Prime port name and connections	To update the selected ports with the sensed data for the port names, the connected processor/channel paths, control units or switches.
s	Work with dynamic connections	To view and process dynamic connection attributes (defined in a specific switch configuration). → *Dynamic Connection* list.
Dynamic connections		
a	Allow	To set the attribute Allow for the dynamic connection between the designated port and the selected ports.
p	Prohibit	To set the attribute Prohibit for the dynamic connection between the designated port and the selected ports.

Action		
Code	**Action**	**Meaning**
f	Use default connection type	To set the default attribute for the dynamic connection between the designated port and the selected ports.
Switch configuration		
r	Repeat (copy)	To copy a switch configuration.
c	Change	To change a switch configuration definition.
g	Generate Matrix	To create a port matrix for a switch configuration according to the logical paths already defined.
d	Delete	To delete a switch configuration.
s	Work with port matrix	→ *Port* matrix
Port matrix		
c	Change	To change port definition (name, block/unblock, dedicated port).
a	Allow all	To set the **Allow all dynamic connections** attribute.
p	Prohibit all	To set the **Prohibit all dynamic connections** attribute.
f	Use default	To reset to user-defined default **dynamic connection allowed/ prohibited** attributes.
v	View connected units	To view all units connected to the selected port(s) (CUs, processors, and ports of other switches).

Actions on control units and devices

The following overview shows the different actions available on the context menu for control units and devices. An arrow (→) in the description indicates that the action leads to one of the lists shown on Figure 2 on page 7.

Action Code	Action	Meaning
CU		
a	Add like	To add a CU with the same attributes as the one selected.
c	Change	To change a CU definition.
i	Prime serial number	To update the selected control units with the sensed data for the serial numbers.
d	Delete	To delete a CU definition.
s	Work with attached I/O devices	→ *Device* list
v	View CU definition	To display CU definitions and connections to CHPIDs and processors.
l	View logical CU information	To view information about the physical CUs that make up the logical CU.
k	View related CTC connections	Displays defined CTC connections.
h	View graphically	To display graphically a CU in relation to attached processors, switches, and devices.
Device		
a	Add like	To add a device with the same attributes as the one selected.
c	Change	To change a device definition.
g	CSS group change	To change the channel subsystem definition(s) for one or more devices.
o	OS group change	To change the operating system I/O definition(s) for one or more devices.
t	Device type group change	To change the device type for one or more devices.
e	Attribute group change	To change the dynamic attribute for all selected devices (only valid on a *device* list reached from a *OS configuration* list.)
n	Disconnect from OS	To delete all device references to the selected operating system (only valid on a *device* list invoked from an *OS configuration* list).
i	Prime serial number and VOLSER	To update the selected I/O devices with the sensed data for the serial numbers. For DASD devices, the sensed VOLSER is also updated.
d	Delete	To delete a device.

Action Code	Action	Meaning
v	View device definition	To display device attributes and connections to CUs, processors and OSs.
l	View logical CU information	To view information about the CUs that the device is connected to (making up the logical CU).
k	View related CTC connections	Displays defined CTC connections.
h	View graphically	To display graphically a device in relation to attached processors, CUs, and devices.

Actions for device groups: Do one of the following:

- Mark all devices of the group with the same action code in the action entry field.
- Mark the beginning and end of the group with parentheses in the action field; then select the action from the context menu.

Actions on configuration packages and related objects

The following overview shows the different actions available on the context menu for configuration packages and configuration package objects. An arrow (→) in the description indicates that the action leads to one of the lists shown on Figure 2 on page 7. Display the Configuration Package list by selecting **Maintain I/O definition files** from the main panel and **Work with Configuration Packages** from the panel that follows.

Action Code	Action	Meaning
Configuration package		
a	Add like	To add a configuration package with the same attributes as the one selected.
d	Delete	To delete a configuration package.
s	Work with configuration package objects	→ *Configuration Package Object* list
x	Transmit configuration package	To transmit I/O configuration data from a production IODF to a target system.
Configuration package object		
a	Add like	To add a configuration package object with the same attributes as the one selected.
m	Merge	To merge I/O configuration data from another IODF into a work IODF.
r	Replace	To replace I/O configuration data in a work IODF with I/O configuration data from another IODF.
d	Delete	To delete a configuration package object.

No special action is provided for editing configuration packages. Edit a configuration package by overwriting the information displayed on the Configuration Package list.

Actions on processors in an S/390 microprocessor cluster and related objects

The following list provides an overview of the different actions available on the context menu for CPCs/processors configured in an S/390 microprocessor cluster and related objects (IOCDSs and IPL attributes in an S/390 microprocessor cluster). An arrow (→) in the description indicates that the action leads to one of the lists shown in Figure 2 on page 7.

Action Code	Action	Meaning
Active CPCs/Processors		
s	Work with IOCDS	→ *IOCDS* list
i	Work with IPL attributes	View the IPLADDR and IPLPARM values used for the last IPL for CPCs in an S/390 microprocessor cluster and edit the values to be used for the next IPL.
p	Select other processor configuration	To display definitions of additional IODF processors associated with a specific CPC.
IOCDSs in an S/390 microprocessor cluster		
u	Update IOCDS	To write the processor configuration information to the selected IOCDSs of the designated CPCs.
s	Switch IOCDS	To switch the IOCDS pointer for next POR.
e	Enable write-protection	To prevent the selected IOCDSs from being updated.
w	Disable write-protection	To allow the selected IOCDSs to be updated.

Actions on systems in an active sysplex

The following list provides an overview of the different actions available on the context menu for systems in an active sysplex.

Action Code	Action	Meaning
Systems in a sysplex		
o	Activate software configuration only	To activate the software configuration dynamically.
a	Activate software and hardware configuration	To activate a configuration dynamically if both hardware and software changes are allowed.
t	Resume activation of target configuration	To force the activation of the system.
r	Reset source configuration	To reset the original configuration.
s	Switch IOCDS for next POR	To specify the IOCDS to be used for the next POR.
m	View activate messages	To display the messages as the result of the activation request.
d	Delete activate messages	To delete the messages of the activation request.
v	View configuration status	To get additional information if the activation is rejected.
k	Verify active configuration against system	To display a list comparing all sensed paths from the system to the definitions in the active IODF.
l	Verify target configuration against system	To display a list comparing all sensed paths from the system to the definitions in the target IODF.
b	Build CONFIGxx member	To build a CONFIGxx member for the system from the definitions in the accessed IODF.
p	Process DISPLAY M=CONFIG(xx) command	To compare the definitions in the CONFIGxx member with the hardware configuration of the system and display any results in a message list.

Commands

All HCD list panels have a command line, on which you can enter the usual ISPF commands and specific HCD commands.

You can get a list of available HCD commands by moving the cursor to the command line and pressing the F1=Help key.

As a fastpath to information about a specific HCD command, type the command before pressing the F1=Help key.

Some commands are described in the following list.
Note: On the help panel command line, only the help commands are available.

Command	Meaning
GOto listtype [parent objectid]	Is a fastpath for going to another target panel without having to navigate through the dialog. You can specify the object (parent) with which some targets might be associated and the object ID of the first entry in a list panel. For example, `go chpid proc01 10` leads to the Channel Path list of processor PROC01 starting with CHPID 10 as the first list entry.
	If you want to go to the Channel Path list or the Partition list of an XMP processor, you specify the processor ID with the channel subsystem ID appended by a dot.
	Examples:
	`GO CHPID MCSSPRO.2`
	`GO PART MCSSPRO.1`
GOto CHPID	Channel Path list
GOto CONS	Console list
GOto CU	Control Unit list
GOto DEV	Device list
GOto EDT	EDT list
GOto ESO	Esoteric list
GOto GEN	Generic list
GOto MIG	Migrate Configuration Data
GOto OS	Operating System Configuration list
GOto PART	Partition list
GOto PORT	Port list
GOto PR	Processor list
GOto SW	Switch list
GOto SWCON	Switch Configuration
GOto MATRIX	Port Matrix
GOto X	Leave HCD dialog
LEFT	Left or Hleft; scroll left on screen (= F19).
RIGHT	Right or Hright; scroll right on screen (= F20).
INSTRUCT	View information about interaction (= F13), available only on panels containing the F13 key.
Locate objectid	Search for an object in an object list starting with the objectid characters.
SAVE	Saves list data into a data set, which then can be used for printing.

Command	Meaning
FIND port1 port2	Search vertically, as well as horizontally, for a specific port intersection in the port matrix (on the Port Matrix panel only).
TRace [ON/OFF]	Activate or deactivate HCD internal tracing; also refer to *z/OS HCD User's Guide*
HELPID	Display panel ID (on help panels only).
SHOWMsg [ACTivate]	Display the messages that are currently queued in the HCD message log. For messages issued during last activation request only, enter the activate parameter.
SHOWIodf	Displays information about the currently accessed IODF data set.

Online help

- The F1=Help key with the cursor on an input field (or when a message is displayed) gives you **contextual field help** (or message help).
- The F1/F2=Ex_help key from any contextual field help gives you Extended Help explaining the whole panel. (You get Extended help as well using **Help** from the action bar.)
- The F13=Instruct key, from an object list panel, provides Instruction help.
- The F1=Help or F9=Keys key, in a help window, gives you general information.
- The Enter key, with the cursor on a **Reference Phrase**, gives you more help. Reference phrases are highlighted HCD-specific terms, abbreviations or acronyms.

How to use the dialog efficiently

You can use the dialog efficiently with the display of positional information, by direct editing, by using keyboard and function keys, and prompts.

Display positional information

```
 Goto  Backup  Query  Help
 ---------------------------------------------
                       Row 20 of 158 More: < >
```

For example, Row 20 of 158 More: < >.
- Row 20 of 158 specifies that the first row of data that is displayed in the work area is the twentieth row of the 158 available rows.
- More: > specifies that more data can be seen by scrolling the work area to the right.
- More: < specifies that more data can be seen by scrolling the work area to the left.
- More: < > specifies that more data can be seen by scrolling the work area to the left as well as to the right.

Direct editing

When HCD asks you to specify some data, type the data in the appropriate entry field. The field might already contain data that you have previously defined or a default value inserted by HCD; you can overwrite this. Configuration data for an object can also be modified by overwriting the data on the object list panel.

Keyboard and function keys

HCD assumes that the terminal supports 24 function keys. If this is not so, HCD commands can be used for the functions that are assigned to keys F13 to F24, such as F13=Instruct, F19=Left, or F20=Right.

Prompt

Whenever you see a + to the right of a field or on top of a column, HCD offers a prompt. Just press the F4=Prompt key and you get a list of valid values to choose from. Move the cursor on the choice you want and press the Enter key.

Prompt for action codes is available for the action entry field on object lists, although + is not shown. Requesting prompt for action codes displays the same context menu as when selecting an object and pressing the Enter key.

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