HP CNU Command Line Interface User Guide

Abstract

This document is intended for the person who configures FCoE and iSCSI devices.

Contents

Introduction

CLI overview

This document provides CLI guidelines for the CNU.

CLI commands catalogue

This document also provides CLI guidelines and usage for the iSCSI and FCoE subcommands.

Command line syntax

CLI input is case-insensitive, except when otherwise noted. The general CLI syntax format is as follows:

```
hpcnucli <[command] | [personality]> [<managed element>] [<options>
<parameters>]
```

Item	Description
command	Operation performed
personality	Managed element personality, either -iscsi or -fcoe
managed element	Optional managed element identifier [iSCSI MAC / FCoE Port WWN] This might be required by the personality
options	Commands performed on a managed element
parameters	Optional parameters used for managed element commands

CLI commands

Common hpcnucli commands

The common commands for `hpcnucli` are as follows.

Command	Description
`hpcnucli -help`	Displays general help for the CNU CLI application and a brief synopsis of all commands
`hpcnucli -about`	Displays information about the product including product name, owner, and version
`hpcnucli -showadapter`	Displays the adapter name, port name and MAC address, or port WWN, based on iSCSI or FCoE configuration, and for all supported adapters
`hpcnucli -import`	Imports the XML configuration from one machine to another

iSCSI subcommand properties

When using this subcommand, you might need to use login options. For login option information, see "Login options (on page 8)."

The `hpcnucli -iscsi` subcommand options are as follows.

Command	Description
`hpcnucli -iscsi -getinitiator`	Displays the iSCSI initiator name

`hpcnucli -iscsi -setinitiator`	Changes the iSCSI initiator name to one you specify
	Examples:
	`hpcnucli -iscsi -setinitiator <initiator name> [login options]`
	and
	`hpcnucli -iscsi -setinitiator <initiator name> [-mp] [-hd] [-dd] [ [-mutualCHAP] <[TargetCHAP] [TargetSecret] [InitiatorCHAP] [Initiabbc newstorSecret]>]`
	and
	`hpcnucli -iscsi -setinitiator <initiator name> [-mp] [-hd] [-dd] [ [-oneWayCHAP] <[TargetCHAP] [InitiatorCHAP]>]`

`hpcnucli -iscsi -isns -listall`	Lists all iSNS servers
`hpcnucli -iscsi -isns -add`	Adds an iSNS server to the system based on a server IP address that you enter as an argument Example: `hpcnucli -iscsi -isns -add <IP address>`
`hpcnucli -iscsi -isns -remove`	Removes an iSNS server to the system based on a server IP address that you enter as an argument Example: `hpcnucli -iscsi -isns -remove <IP address>`

Command	Description
`hpcnucli -iscsi -portinfo`	Displays all information related to a specified port on the console Example: `hpcnucli -iscsi <MAC address> -portinfo`
`hpcnucli -iscsi -portstat`	Displays all port statistics for a specified port Example: `hpcnucli -iscsi <MAC address> -portstat`
`hpcnucli -iscsi -defparam`	Displays the default driver parameter related to the port on the console Example: `hpcnucli -iscsi <MAC address> -defparam`
`hpcnucli -iscsi -getbootconfig`	Displays the current boot configuration for the port on the console Example: `hpcnucli -iscsi <MAC address> -getbootconfig`
`hpcnucli -iscsi -setbootconfig`	Displays the current boot configuration for the port on the console and allows you to modify the boot configuration interactively Example: `hpcnucli -iscsi <MAC address> -setbootconfig`
`hpcnucli -iscsi -portal -listall`	Displays all portals that are in use Example: `hpcnucli -iscsi <MAC address> -portal -listall`
`hpcnucli -iscsi -portal -add`	Adds a portal to the system based on a target IP address and port number that you enter as arguments Login options are optional Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -portal -add <portal IP of target iSCSI target portal> [port number] [login option]`
`hpcnucli -iscsi -portal -remove`	Removes a portal from the system based on a target IP address and port number that you enter as arguments The default iSCSI target portal port is 3260 Login options are optional Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -portal -remove <portal IP of target iSCSI target portal> [port number]`
`hpcnucli -iscsi -target -listall`	Displays all currently discovered targets Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -target -listall`
`hpcnucli -iscsi -target -listactive`	Displays all currently connected targets Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -target -listactive`

Command	Description
`hpcnucli -iscsi -target -login`	Adds a target to the system based on an iSCSI target iqn, portal IP address, and port number that you enter as arguments Login options are optional Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -target -login <iSCSI target you want to add and log into into> <IP address for the iSCSI target portal> [port number for iSCSI target portal] [login option]`
`hpcnucli -iscsi -target -getinfo`	Retrieves information for a target you specify Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -target -getinfo <iSCSI target iQN>`
`hpcnucli -iscsi -target -sessioninfo`	Retrieves information for the currently logged-in session The session ID ranges from 0 to N-1, where N is the session count The default value for the session ID is 0 Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -target -sessioninfo <iSCSI target iQN> [session ID]`
`hpcnucli -iscsi -target -logout`	Logs-out a defined target The default value for the session ID is 0 Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -target -logout <iSCSI target iQN> [Session ID]`
`hpcnucli -iscsi -target -remove`	Removes a target from the system based on a iSCSI target iqn that you enter as an argument Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -target -remove <iSCSI target iQN>`
`hpcnucli -iscsi -target -lunlist`	Displays all active LUNs Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -target -lunlist <iSCSI target iQN>`
`hpcnucli -iscsi -ping`	Verifies connectivity by sending an ICMP ping request to an IP address you specify Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -ping <IP address you are sending the ping request>`
`hpcnucli -iscsi -modifytcpip -dhcp`	Sets an iSCSI host to be a DHCP client so that its TCP/IP settings are automatically configured by a DHCP server Example: `hpcnucli -iscsi <MAC> -modifytcpip -dhcp [optional VLAN ID]`

Command	Description
`hpcnucli -iscsi -modifytcpip -static`	Sets an iSCSI host's TCP/IP settings to be configured manually Example: `hpcnucli -iscsi <MAC address on iSCSI host port> -modifytcpip -static <VLAN ID> <IP address> <subnet mask> <gateway>`

Login options

The `hpcnucli -iscsi` login options are as follows.

Login option	Description
`-mp`	Multi-path, enabled by default
`-hd`	Header digest
`-dd`	Data digest
`-option`	Specified CHAP values, either mutual or one-way Possible CHAP values: • `[-Option (-mutualCHAP | -oneWayCHAP)]` • `[TargetCHAP]` • `[TargetSecret]` • `[InitiatorCHAP]` • `[InitiatorSecret]`

FCoE subcommand properties

The `hpcnucli -fcoe` subcommand options are as follows.

Command	Description
`hpcnucli -fcoe -portinfo`	Displays all the information related to an FCoE port that you specify Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -portinfo`
`hpcnucli -fcoe -resetstat`	Resets FCoE port statistic attribute values to 0 Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -resetstat`
`hpcnucli -fcoe -getdcbinfo`	Displays negotiated DCB information for a portWWN you specify Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -getdcbinfo`
`hpcnucli -fcoe -getdcbconfig`	Displays the current DCB admin configuration for a portWWN you specify Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -getdcbconfig`

Command	Description
`hpcnucli -fcoe -setdcb`	Modifies the DCB admin configuration interactively Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -setdcb`
`hpcnucli -fcoe -target -listactive`	Displays the list of all the active targets connected to a port you specify Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -target -listactive`
`hpcnucli -fcoe -target -pbindinfo`	Displays the list of all persistent targets connected to a port you specify Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -target -pbindinfo`
`hpcnucli -fcoe -target -getinfo`	Displays information for a target you specify Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -target -getinfo <portWWN of the connected target>`
`hpcnucli -fcoe -target -lunlist`	Displays the list of the LUNs associated with a target you specify Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -target -lunlist <portWWN of the connected target>`
`hpcnucli -fcoe -getbootconfig`	Displays FCoE boot configuration for a port you specify Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -getbootconfig`
`hpcnucli -fcoe -setbootconfig`	Displays the current boot configuration for the port on the console and allows you to set the boot configuration interactively Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -setbootconfig`
`hpcnucli -fcoe -ping`	Verifies connectivity by sending a SCSI inquiry command request to a portWWN you specify The optional parameters are as follows: • `pcount` is the number of packets sent in the ping • `timeout` is the maximum time to wait for receiving a packet Example: `hpcnucli -fcoe <portWWN of the FCoE adapter> -ping <portWWN of the connected target> [-pcount] [-timeout]`

CLI help command screenshot

The following is a screenshot of the CLI help command output.

```
C:\Program Files (x86)\HP Converged Network Utility>hpcnucli.exe -help

HP Converged Network Utility CLI(1.0.3.1)
Copyright c 2013 Hewlett-Packard Development Company, L.P.


List of supported commands for HPCNUCLI

<..> Mandatory Arguments

[..] Optional Arguments

hpcnucli -about
hpcnucli -showadapter
hpcnucli -import
        -iscsi -getinitiator
        -iscsi -setinitiator <Initiator Name> [*login options]
               -isns -listall
                     -add <iSNS Server IP>
                     -remove <iSNS Server IP>
        -iscsi <MAC> -portinfo
                     -portstat
                     -defparam
                     -getbootconfig
                     -setbootconfig
                     -portal -listall
                             -add <Portal IP> <Port Number**> [*login option]
                             -remove <Portal IP> <Port Number**>
                     -target -listall
                             -listactive
                             -login <Target Name> <IP> <Port Number**> [*login option]
                             -getinfo <Target Name>
                             -sessioninfo <Target Name> <Session ID>
                             -logout <Target Name> <Session ID>
                             -remove <Target Name>
                             -lunlist <Target Name>
                     -ping <IP Address>
                     -modifytcpip -dhcp [VLAN ID***]
                                  -static <VLAN ID> <IP Address> <Subnet Mask> <Gateway>
        -fcoe <portWWN>  -portinfo
        -fcoe <portWWN>  -portstat
        -fcoe <portWWN>  -resetstat
        -fcoe <portWWN>  -getdcbinfo
        -fcoe <portWWN>  -getdcbconfig
        -fcoe <portWWN>  -setdcb
        -fcoe <portWWN>  -target -listactive
                                 -pbindinfo
                                 -getinfo <Target Name>
                                 -lunlist <Target Name>
                         -getbootconfig
                         -setbootconfig
                         -ping <Target Name>
                         -ping <Target Name> -pcount <Count>
                         -ping <Target Name> -timeout <time in secs>

*   <-mp> <-hd> <-dd> <-Option (-mutualCHAP | -oneWayCHAP)>   <TargetCHAP> <TargetSecret> <InitiatorCHAP> <InitiatorSecret>
**  Default Port Number : 3260
*** Default VLAN ID : 1
```

CNU system log location

The CNU system log is stored in the following directory:

```
$installdir$\hpcnu.log
```

Support and other resources

Before you contact HP

Be sure to have the following information available before you call HP:

- Active Health System log (HP ProLiant Gen8 or later products)

  Download and have available an Active Health System log for 3 days before the failure was detected. For more information, see the *HP iLO 4 User Guide* or *HP Intelligent Provisioning User Guide* on the HP website (http://www.hp.com/go/ilo/docs).

- Onboard Administrator SHOW ALL report (for HP BladeSystem products only)

  For more information on obtaining the Onboard Administrator SHOW ALL report, see the HP website (http://www.hp.com/go/OAlog).

- Technical support registration number (if applicable)

- Product serial number

- Product model name and number

- Product identification number

- Applicable error messages

- Add-on boards or hardware

- Third-party hardware or software

- Operating system type and revision level

HP contact information

For United States and worldwide contact information, see the Contact HP website (http://www.hp.com/go/assistance).

In the United States:

- To contact HP by phone, call 1-800-334-5144. For continuous quality improvement, calls may be recorded or monitored.

- If you have purchased a Care Pack (service upgrade), see the Support & Drivers website (http://www8.hp.com/us/en/support-drivers.html). If the problem cannot be resolved at the website, call 1-800-633-3600. For more information about Care Packs, see the HP website (http://pro-aq-sama.houston.hp.com/services/cache/10950-0-0-225-121.html).

Acronyms and abbreviations

CHAP

Challenge Handshake Authentication Protocol

CNU

Converged Network Utility

DHCP

Dynamic Host Configuration Protocol

FCoE

Fibre Channel over Ethernet

ICMP

Internet Control Message Protocol

IQN

iSCSI qualified name

iSCSI

Internet Small Computer System Interface

iSNS

Internet Storage Name Service

LUN

logical unit number

MAC

Media Access Control

VLAN

virtual local-area network

WWN

World Wide Name

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