

# **Commands**

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# activate (firmware)

To activate CIMC firmware, use the activate command.

activate

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Firmware (/cimc/firmware)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to activate CIMC firmware:

```
server# scope cimc
server /cimc # scope firmware
server /cimc/firmware # activate
server /cimc/firmware #
```

Command	Description
show cimc	
show version	

# activate-adapter-fw

To activate an adapter firmware image, use the activate-adapter-fw command.

activate-adapter-fw pci-slot image

### **Syntax Description**

pci-slot	The PCI slot number of the adapter card.
image	The number of the firmware image to be activated. This can be the number 1 or 2.

#### **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

Server /chassis #

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

### **Usage Guidelines**

Use this command to select one of two adapter firmware images to be activated upon the next reboot of the server. Use the **show adapter detail** command to view the status and version information of the installed firmware images.

#### **Examples**

This example shows how to activate firmware image 2 in the adapter in PCI slot 1:

Server# scope chassis
Server /chassis # activate-adapter-fw 1 2
Firmware image activation succeeded
Please reset the server to run the activated image

Command	Description
show adapter detail	

# adapter-reset

To reset the adapter, use the adapter-reset command.



Resetting the adapter also resets the host.

adapter-reset index

## **Syntax Description**

<i>index</i> The PCI slot number	er of the adapter to be reset.
----------------------------------	--------------------------------

**Command Default** 

None

#### **Command Modes**

Chassis (/chassis)

#### **Command History**

Release	Modification
1.4(6)	This command was introduced.

#### **Usage Guidelines**

Use this command to reset the adapter at the PCI slot number specified by the index argument.

#### **Examples**

This example shows how to reset the adapter in PCI slot 1:

Server# scope chassis

Server /chassis # adapter-reset 1

This operation will reset the adapter and the host if it is on. You may lose connectivity to the CIMC and may have to log in again. Continue?[y|N]  $\boldsymbol{y}$ 

Continue?[y|N] **y**Server /chassis #

Command	Description
show adapter detail	

# adapter-reset-defaults

To reset the adapter to default setting, use the adapter-reset-defaults command.

adapter-reset-defaults index

#### **Syntax Description**

index

The PCI slot number of the adapter to be reset to factory default settings.

**Command Default** 

None

**Command Modes** 

Chassis (/chassis)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to restore factory default settings for the adapter at the PCI slot number specified by the index argument.

### **Examples**

This example shows how to reset the adapter in PCI slot 1 to its default setting:

Server# scope chassis

Server /chassis # adapter-reset-defaults 1

This operation will reset the adapter to factory default.

All your configuration will be lost.

Continue?[y|N] **y**Server /chassis #

Command	Description
show adapter detail	

# bios-setup-defaults

To restore the BIOS settings to default values, use the bios-setup-defaults command.

bios-setup-defaults

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to restore the BIOS settings to default values. This command initiates a reboot.

#### **Examples**

This example shows how to restore the BIOS settings to default values:

Server# scope bios

Server /bios # bios-setup-default

This operation will reset the BIOS set-up tokens to factory defaults.

All your configuration will be lost.

Changes to BIOS set-up parameters will initiate a reboot.

Continue?[y|N] ${f y}$ 

Command	Description
show bios	

# cancel

To stop the technical support process, use the **cancel** command.

cancel

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Technical support (/cimc/tech-support)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

### **Examples**

This example shows how to stop the technical support process:

```
server # scope cimc
server /cimc # scope tech-support
server /cimc/tech-support # cancel
This operation will cancel your current Tech Support upload.
Continue?[y|N]y
server /cimc/tech-support #
```

Command	Description
start	

# clear (log)

To clear the CIMC log, use the **clear** command in log mode.

clear

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Log (/cimc/log)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to clear the CIMC log:

```
server# scope cimc
server /cimc # scope log
server /cimc/log # clear
server /cimc/log #
```

Command	Description
show sel	
show sensor	

# clear (sel)

To clear the system event log, use the **clear** command in sel mode.

clear

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

System event log (/sel)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to clear the system event log:

```
server# scope sel
server /sel # clear
server /sel #
```

Command	Description
show sel	
show sensor	

# clear-cmos

To clear the BIOS settings in CMOS memory, use the clear-cmos command.

clear-cmos

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

## **Command History**

Release	Modification
1.1(1)	This command was introduced.

# **Examples**

This example shows how to clear the BIOS settings in CMOS memory:

server# scope bios server /bios # clear-cmos

This operation will clear the BIOS CMOS. Note: Server should be in powered off state to clear CMOS.

Continue?[y|n]  $\mathbf{y}$ 

server /bios #

Command	Description
show bios	

# commit

To save configuration changes, use the **commit** command.

commit

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Any command mode

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to save a configuration change:

```
server /http # set enabled yes
server /http* # commit
server http #
```

Command	Description
discard	

# configure-vmfex

To specify the number of VM FEX interfaces you want CIMC to create, use the **configure-vmfex** command.

configure-vmfex port-count

#### **Syntax Description**

port-count The number of VM FEX interfaces to create.	
---	--

**Command Default** 

None

**Command Modes** 

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the number of virtual machine fabric extender (VM FEX) interfaces you want CIMC to create. The range is 0 to 112. NIV mode must be enabled.

#### **Examples**

This example shows how to specify that 24 VM FEX interfaces are created:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # set niv-mode enable
Server /chassis/adapter *# configure-vmfex 24
```

Server /chassis/adapter \*# commit

Server /chassis/adapter #

Command	Description
scope vmfex	

# connect

To connect to either the server CLI or the server shell, use the **connect** command.

connect {host| shell}

# **Syntax Description**

host	Specifies the CLI on the server.
shell	Specifies the GNU bash shell on the server.

### **Command Default**

None

#### **Command Modes**

Any command mode

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

Use the exit command to exit the GNU bash shell.

# **Examples**

This example shows how to connect to the server shell:

server# connect shell

bash-3.2

Command	Description
exit	

# create-boot-entry

To create a boot entry in the host Fibre Channel interface, use the **create-boot-entry** command.

create-boot-entry wwpn lun-id

### **Syntax Description**

wwpn	The World Wide Port Name (WWPN) for the boot target.
lun-id	The LUN ID of the boot LUN.

#### **Command Default**

None

#### **Command Modes**

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to create boot entry. The range of the *lun-id* is 0 to 255. The *wwpn* for the boot target should be in the form hh:hh:hh:hh:hh:hh:hh.

### **Examples**

This example shows how to create a boot entry in the host Fibre Channel interface:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc1
Server /chassis/adapter/host-fc-if # create-boot-entry 20:00:00:11:22:33:44:55 3
Server /chassis/adapter/host-fc-if # commit
New boot table entry will take effect upon the next server reset
Server /chassis/adapter/host-fc-if #
```

Command	Description
delete boot	

# create host-eth-if

To create a virtual Ethernet interface, use the **create host-eth-if** command.

create host-eth-if name

#### **Syntax Description**

пате	The name of the vNIC.
------	-----------------------

#### **Command Default**

None

#### **Command Modes**

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to create the virtual host Ethernet network interface card (vNIC). The name argument can be up to 32 ASCII characters.

### **Examples**

This example shows how to create a vNIC:

Server# scope chassis

Server /chassis # scope adapter 1

Server /chassis/adapter # create host-eth-if Vnic5 Server /chassis/adapter/host-eth-if\* # commit

New host-eth-if settings will take effect upon the next server reset

Server /chassis/adapter/host-eth-if #

Command	Description
delete host-eth-if	

# create host-fc-if

To create a virtual host bus adapter (vHBA), use the create host-fc-if command.

create host-fc-if name

#### **Syntax Description**

ame of the	vHBA.
ί	ame of the

#### **Command Default**

None

#### **Command Modes**

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to create the virtual Fibre Channel host bus adapter (vHBA). The name argument can be up to 32 ASCII characters.

### **Examples**

This example shows how to create a vHBA:

Server# scope chassis

Server /chassis # scope adapter 1

Server /chassis/adapter # create host-fc-if Vhba5

Server /chassis/adapter/host-fc-if\* # commit

New host-fc-if settings will take effect upon the next server reset

Server /chassis/adapter/host-fc-if #

Command	Description
delete host-fc-if	

# delete boot

To delete a boot entry, use the **delete boot** command.

delete boot entry

#### **Syntax Description**

entrv	The boot table entry.
Cittiy	The boot more entry.

#### **Command Default**

None

#### **Command Modes**

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

#### **Usage Guidelines**

Use this command to delete the boot table entry at the specified position. The range of entry is 0 to 3. The change takes effect upon the next server reset.

#### **Examples**

This example shows how to delete a boot entry in the host Fibre Channel interface:

Command	Description
create-boot-entry	
show-boot	

# delete host-eth-if

To delete an Ethernet interface, use the **delete host-eth-if** command.

delete host-eth-if name

#### **Syntax Description**

name The na	ame of the vNIC.
-------------	------------------

#### **Command Default**

None

#### **Command Modes**

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

#### **Usage Guidelines**

Use this command to delete the specified virtual host Ethernet network interface card (vNIC). You cannot delete either of the two default vNICs, eth0 or eth1.

### **Examples**

This example shows how to delete a vNIC:

```
Server# scope chassis
```

Server /chassis # scope adapter 1

Server /chassis/adapter # delete host-eth-if Vnic5

Server /chassis/adapter \*# commit

New host-eth-if settings will take effect upon the next server reset

Server /chassis/adapter #

Command	Description
create host-eth-if	

# delete host-fc-if

To delete a vHBA interface, use the **delete host-fc-if** command.

delete host-fc-if name

#### **Syntax Description**

пате	The name of the vHBA.

#### **Command Default**

None

#### **Command Modes**

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification	
1.4(1)	This command was introduced.	

#### **Usage Guidelines**

Use this command to delete the specified virtual Fibre Channel host bus adapter (vHBA). You cannot delete either of the two default vHBAs, fc0 or fc1.

### **Examples**

This example shows how to delete a vHBA:

```
Server# scope chassis
```

Server /chassis # scope adapter 1

Server /chassis/adapter # delete host-fc-if Vhba5

Server /chassis/adapter \*# commit

New host-fc-if settings will take effect upon the next server reset

Server /chassis/adapter #

Command	Description
create host-fc-if	

# discard

To discard all configurations, use the discard command.

discard

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Any command mode

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

**Examples** 

This example shows how to discard all configurations:

server# discard

server#

Command	Description
show pending	

# exit

To leave any command mode, use the exit command.

exit

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Any command mode

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to exit BIOS command mode:

server /bios # exit

server#

Command	Description
scope	
enter	

# export-config

To export a CIMC configuration, use the **export-config** command.

export-config tftp-ip-address path-and-filename

#### **Syntax Description**

tftp-ip-address	The IP address of a remote TFTP server hosting the CIMC configuration file.
path-and-filename	Specifies the absolute path to the file on the remote server.

#### **Command Default**

None

#### **Command Modes**

Import-export (/cimc/import-export)

#### **Command History**

Release	Modification	
1.1(2)	This command was introduced.	

#### **Usage Guidelines**

Use this command to export the CIMC configuration as a file. The *path-and-filename* is a unique set of up to 128 characters that identifies the path and CIMC configuration filename on the remote server. Do not use characters that are not allowed in a URL.

To determine whether the export operation has completed successfully, use the **show detail** command. To abort the operation, press CTRL+C.



Note

For security reasons, this operation does not export user accounts or the server certificate.

#### **Examples**

This example shows how to export a CIMC configuration to a remote TFTP server:

```
server# scope cimc
server /cimc # scope import-export
server /cimc/import-export # export-config 192.0.2.34 /ucs/backups/cimc5.xml
Export config started. Please check the status using "show detail".

server /cimc/import-export # show detail
Export Export:
    Operation: EXPORT
    Status: COMPLETED
    Error Code: 100 (No Error)
    Diagnostic Message: NONE

server /cimc/import-export #
```

Command	Description
import-config	

# export-vnic

To export the adapter vNIC configuration, use the **export-vnic** command.

export-vnic tftp-address path/name

### **Syntax Description**

tftp-address	The IP address of a remote TFTP server hosting the adapter configuration file.
path/name	The absolute path to the file on the remote server along with the name of the adapter configuration file to be exported.

#### **Command Default**

None

#### **Command Modes**

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

### **Usage Guidelines**

Use this command to export the adapter vNIC configuration. The adapter configuration file is stored at the specified path and filename on the TFTP server at the specified IP address.

### **Examples**

This example shows how to export the adapter vNIC configuration:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # export-vnic 192.0.2.34 /backup/P81E.cfg
Server /chassis/adapter #
```

Command	Description
import-vnic	

# factory-default (cimc)

To set the server to factory default, use the factory-default command.

factory-default

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Cisco Integrated Manangement Controller (/cimc)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to set the server to factory default:

server# scope cimc
server /cimc # factory-default

This operation will reset the CIMC configuration to factory default.

All your configuration will be lost.

Continue?[y|N] y

# generate-csr (certificate)

To generate a Certificate Request Signing (CSR), use the **generate-csr** command.

#### generatecsr

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Certificate (/certificate)

### **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

### **Examples**

This example shows how to generate a CSR:

server# scope certificate
server /certificate # generate-csr

Common Name (CN): abcCertificate
Organization Name (O): abcCo
Organization Unit (OU): 01
Locality (L): west
StateName (S): CA
Country Code (CC): US
Email: abcCo@abcCo.com

Continue to generate CSR?[y|N]  ${\bf y}$ 

----BEGIN CERTIFICATE REQUEST----

MIIBOTCCAToCAQAwbDELMAkGA1UEBhMCVVMxCzAJBgNVBAgTAkNBMQ0wCwYDVQQHEwRoZXJ1MQwwCgYDVQQKEwN0aW0xCzAJBgNVBAsTAjAxMQwwCgYDVQQDEwNib2IxGDAWBgkqhkiG9w0BCQEWCW1lQG1LLMNvbTCBnzANBgkqhkiG9w0BAQEFAAOBjQAwgYkCgYEAw49PYuDXdOfHtXwBT7k5kX1set/I3e8TtkuO/EQ5HVd9HrPIy4Kpb3Oj33CkqjysVWBpPSGzWAlEL6cZYs5p6JxR74+tqW5BYpNKRLNFawpsTZvCXhe/n/O2WYsx1FnW1m6BgQnPKCBCp9R1ESmq9Np24r2c3PEStZEjeIVWbaUCAwEAAaAlMCMGCSqGSIb3DQEJBzEWExRBIGNoYWxsZW5nZSBwYXNzd29yZDANBgkqhkiG9w0BAQUFAAOBgQBosXif9feLXHBK19kqeVZ8uqRgoMIcM03aBTImjIO1RgwhRLuMrG21+thACT+fbYOYXJ4bHsn25XQjcSdG0uxsti3C2SnK83nKdulpEzBzj545rvH20QK+RtHNYUBEKVABCeqoIUu+ErMtGvryaQw7WQiQjWf+RTf8IXDGShIQwQ==----END CERTIFICATE REQUEST----

server /certificate #

Command	Description
show certificate	
show ssh	

# import-config

To import a CIMC configuration, use the **import-config** command.

import-config tftp-ip-address path-and-filename

## **Syntax Description**

tftp-ip-address	The IP address of a remote TFTP server hosting the CIMC configuration file.
path-and-filename	Specifies the absolute path to the file on the remote server.

#### **Command Default**

None

### **Command Modes**

Import-export (/cimc/import-export)

### **Command History**

Release	Modification
1.1(2)	This command was introduced.

## **Usage Guidelines**

Use this command to import a CIMC configuration file. The *path-and-filename* is a unique set of up to 128 characters that identifies the path and CIMC configuration file name on the remote server. Do not use characters that are not allowed in a URL.

To determine whether the import operation has completed successfully, use the **show detail** command. To abort the operation, press CTRL+C.



Note

Some modifications caused by an import operation, such as IP address changes, can disrupt traffic or cause a server reboot.

### **Examples**

This example shows how to import a CIMC configuration from a remote TFTP server:

```
server# scope cimc
server /cimc # scope import-export
server /cimc/import-export # import-config 192.0.2.34 /ucs/backups/cimc5.xml
Import config started. Please check the status using "show detail".
server /cimc/import-export #
```

Command	Description
export-config	

# import-vnic

To import the adapter vNIC configuration, use the **import-vnic** command.

import-vnic tftp-address path/name

## **Syntax Description**

tftp-address	The TFTP address of the server.
path/name	The absolute path to the file on the remote server along with the name of the adapter configuration file to be imported.

### **Command Default**

None

### **Command Modes**

Adapter (/chassis/adapter)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.

### **Usage Guidelines**

Use this command to import the adapter vNIC configuration. The adapter downloads and installs the configuration from the specified path and filename on the TFTP server at the specified IP address.

### **Examples**

This example shows how to import the adapter vNIC configuration:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # import-vnic 192.0.2.34 /backup/P81E.cfg
Server /chassis/adapter #
```

Command	Description
export-vnic	

# **locateHDD**

To turn on or off a hard disk drive (HDD) locator LED, use the locateHDD command.

locateHDD  $drivenum\{1|2\}$ 

### **Syntax Description**

drivenum	The HDD number.
<b>{1   2}</b>	A value of 1 turns the LED on; a value of 2 turns the LED off.

**Command Default** 

None

**Command Modes** 

HDD (/chassis/hdd)

### **Command History**

Release	Modification	
1.4(5)	This command was introduced.	

# **Examples**

This example turns on the locator LED on HDD 2:

Server# scope chassis

Server /chassis # scope hdd Server /chassis/hdd # locateHDD 2 1 HDD Locate LED Status changed to 1

Server /chassis/hdd # show

Name Status LocateLEDStatus

HDD1\_STATUS present TurnOFF
HDD2\_STATUS present TurnON
HDD3\_STATUS absent TurnOFF
HDD4\_STATUS absent TurnOFF

Server /chassis/hdd #

Command	Description
show hdd	

# ping (network)

To ping, use the **ping** command in network mode.

ping address

### **Syntax Description**

address

The IP address or the hostname.

**Command Default** 

None

**Command Modes** 

Network (/cimc/network)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

### **Examples**

This example shows how to ping:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # ping 209.165.200.225

Press CTRL+C to stop.
PING 209.165.200.225 (209.165.200.225): 56 data bytes
64 bytes from 209.165.200.225: seq=0 ttl=122 time=2.000 ms
64 bytes from 209.165.200.225: seq=1 ttl=122 time=2.000 ms
64 bytes from 209.165.200.225: seq=2 ttl=122 time=2.000 ms
64 bytes from 209.165.200.225: seq=3 ttl=122 time=3.000 ms
64 bytes from 209.165.200.225: seq=4 ttl=122 time=3.000 ms
64 bytes from 209.165.200.225: seq=4 ttl=122 time=2.000 ms
--- 209.165.200.225 ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 2.000/2.200/3.000 ms
server /cimc/network #
```

# power (chassis)

To manage server power, use the **power** command.

power{cycle | hard-reset | off | on | shutdown}

### **Syntax Description**

cycle	Power cycles the server.
hard-reset	Hard resets the server.
off	Powers off the server.
on	Powers on the server.
shutdown	Shuts down the server.

### **Command Default**

None

### **Command Modes**

Chassis (/chassis)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

### **Examples**

This example shows how to power off the server:

```
server# scope chassis
server /chassis # power off
This operation will change the server's power state.
Continue?[y|n] y
server /chassis #
```

### **Usage Guidelines**

- Cycle—Power off, then power on.
- Hard reset—Power off, then power on. Equivalent to pressing the front panel reset button, or performing an IPMI reset.
- Shutdown—Graceful shut down of the OS, then power off.

Command	Description
show chassis	
show psu	

# reapply (bios)

To reapply the boot order, use the **reapply** command in bios mode.

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

# **Command History**

Release	Modification
1.0(1x)	This command was introduced.

# **Examples**

This example shows how to reapply the boot order:

server# scope bios
server /bios # re-apply

Boot order has been successfully re-applied

server /bios #

Command	Description
set boot-order (bios)	
show actual-boot-order	

# reboot (chassis)

To reboot the server, use the **reboot** command.

reboot

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Cisco Integrated Management Controller (/cimc)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.
1.0(1X)	This command was deprecated.

# **Examples**

This example shows how to reboot the server:

server# scope cimc server /cimc # reboot

This operation will reboot the BMC.

Continue?[y|n] y

Command	Description
power	

# rebuild

To rebuild the persistent binding table for the vHBA, use the rebuild command.

### rebuild

This command has no arguments or keywords.

### **Command Default**

None

### **Command Modes**

Persistent binding (/chassis/adapter/host-fc-if/perbi)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

# Usage Guidelin

Note

Persistent binding must be enabled in the vHBA properties.

### **Examples**

This example shows how to rebuild the persistent binding table for the vHBA on interface fc0 on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope perbi
Server /chassis/adapter/host-fc-if/perbi # rebuild
Server /chassis/adapter/host-fc-if/perbi #
```

Command	Description
show trans-queue	

# recover (bios)

To recover corrupted BIOS, use the **recover** command in firmware mode.

recover

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

### **Command History**

Release	Modification
1.0(1X)	This command was introduced.

### **Usage Guidelines**

Before executing the **recover** command, perform the following tasks:

- Ensure that the BIOS recovery ISO image is available for your use
- Launch the KVM Console
- Power off server
- Map the BIOS recovery ISO image using vMedia

Executing the **recover** command automatically powers the server on. After the recovery is finished, power cycle or reset the server.



Note

This procedure is not available in some server models.

### **Examples**

This example shows how to recover corrupted BIOS:

server# scope bios
server /bios # recover

This operation will automatically power on the server to perform BIOS FW recovery. Continue?[y|N]  $\boldsymbol{y}$ 

server /bios #



Note

You can use the CLI or the KVM console to monitor the progress of the recovery.

Command	Description
show bios	
show version	

# recover-adapter-update

To clear an incomplete firmware update condition, use the recover-adapter-update command.

recover-adapter-update [ pci-slot ] [ pci-slot ]

### **Syntax Description**

pci-slot	The PCI slot number of the adapter card to be cleared. You can specify one or
	two adapters.

### **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.

### **Usage Guidelines**

Use this command to clear the firmware update status if an adapter firmware update has failed or if the adapter status is stuck in the updating state when no update is in progress. This command clears the adapter firmware update status on one or two specified adapters or, if no adapter is specified, on all adapters.

Use the **show adapter detail** command to view the adapter firmware update status.

### **Examples**

This example shows how to clear the adapter firmware update status on the adapters in PCI slots 3 and 4:

```
Server# scope chassis
Server /chassis # recover-adapter-update 3 4
Server /chassis #
```

Command	Description
show adapter	
update-adapter-fw	

# scope adapter

To enter the adapter command mode, use the **scope adapter** command.

scope adapter pci-slot

### **Syntax Description**

nci-slot	
pci-sioi	

The PCI slot number of the adapter card.

### **Command Default**

None

### **Command Modes**

Chassis (/chassis)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.

# **Usage Guidelines**

Use this command to enter the command mode for the adapter card at the specified PCI slot.

### **Examples**

This example shows how to enter the adapter command mode for the adapter card in PCI slot 1.

Server# scope chassis

Server /chassis # scope adapter 1

Server /chassis/adapter #

Command	Description
show adapter	

# scope advanced

To enter the advanced BIOS command mode, use the scope advanced command.

scope advanced

**Syntax Description:** 

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

# **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Examples**

This example enters the advanced BIOS command mode:

Server# scope bios

Server /bios # scope advanced Server /bios/advanced #

Command	Description
show advanced	

# scope bios

To enter bios mode, use the **scope bios** command.

scope bios

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use bios mode to set the server boot order:

- CDROM—CD-ROM boot
- EFI—Extensible Firmware Interface boot
- FDD—Floppy disk drive boot
- HDD—Hard disk drive boot
- PXE—Preboot Execution Environment boot

# **Examples**

This example shows how to enter BIOS mode:

server# scope bios
server /bios #

Command	Description
show bios	
show firmware	

# scope certificate

To enter certificate mode, use the **scope certificate** command.

scope certificate

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Certificate (/certificate)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use certificate mode to perform the following tasks:

- Generate a certificate signing request
- Upload a signed certificate

# **Examples**

This example shows how to enter certificate mode:

server# scope certificate
server /certificate #

Command	Description
generate-csr	
show certificate	

# scope chassis

To enter chassis mode, use the **scope chassis** command.

scope chassis

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Chassis (/chassis)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use chassis mode to set the following chassis properties:

- Server description
- Server locator LED state

# **Examples**

This example shows how to enter chassis mode:

server# scope chassis
server /chassis #

Command	Description
show chassis	
show led	

# scope cimc

To enter CIMC command mode, use the **scope cimc** command.

scope cimc

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Cisco Integrated Management Controller (/cimc)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use cimc mode to perform the following actions:

- Reset the CIMC to factory defaults
- Reboot the CIMC

# **Examples**

This example shows how to enter cimc mode:

server# scope cimc
server /cimc #

Command	Description
show cimc	
show log (cimc)	

# scope comp-queue

To enter the completion queue command mode of the host Ethernet interface, use the **scope comp-queue** command.

### scope comp-queue

This command has no arguments or keywords.

### **Command Default**

None

### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

VM FEX (/chassis/adapter/vmfex)

# **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added in the VM FEX command mode.

# **Examples**

This example shows how to enter the completion queue command mode of the host Ethernet interface:

```
Server# scope chassis
Server/chassis # scope adapter 1
Server/chassis/adapter # scope host-eth-if eth0
Server/chassis/adapter/host-eth-if # scope comp-queue
```

Server/chassis/adapter/host-eth-if/comp-queue #

Command	Description
set cq-count	

# scope error-recovery

To enter the Fibre Channel error recovery command mode, use the **scope error-recovery** command.

scope error-recovery

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Fibre Channel host interface (/chassis/adapter/host-fc-if)

# **Command History**

Release	Modification
1.2(1)	This command was introduced.

# **Examples**

This example shows how to enter the error recovery command mode of the host Fibre Channel interface:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope error-recovery
Server /chassis/adapter/host-fc-if/error-recovery #
```

Command	Description
set fcp-error-recovery	

# scope fault

To enter fault mode, use the **scope fault** command.

scope fault

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Fault (/fault)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use fault mode to set the following SNMP properties:

- Community string
- Platform event

# **Examples**

This example shows how to enter fault mode:

server# scope fault
server /fault #

Command	Description
show fault	
show pef	

# scope firmware

To enter firmware command mode, use the scope firmware command.

scope firmware

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

Use firmware command mode to perform the following tasks:

- Activate and upload firmware
- Display firmware information

### **Examples**

This example shows how to enter firmware command mode:

```
server# scope bios
server /bios # scope firmware
server /bios/firmware #
```

Command	Description
show bios	
show firmware	

# scope flexflash

To enter the Cisco Flexible Flash controller command mode, use the scope flexflash command.

scope flexflashindex

### **Syntax Description**

<i>index</i> The name of the Cisco Flexible Flash controller.	
---	--

**Command Default** 

None

**Command Modes** 

Chassis (/chassis)

### **Command History**

Release	Modification
1.3(3)	This command was introduced.

### **Usage Guidelines**

Use this command to enter the Cisco Flexible Flash controller command mode.

### **Examples**

This example shows how to enter the Cisco Flexible Flash controller command mode for the first flash device

Server# scope chassis

Server /chassis # scope flexflash FlexFlash-0 Server /chassis/flexflash #

Command	Description
scope operational-profile	

# scope host-eth-if

To enter the host Ethernet interface command mode, use the **scope host-eth-if** command.

scope host-eth-if {eth0| eth1| name}

# **Syntax Description**

eth0	Specifies vNIC 0.
eth1	Specifies vNIC 1.
name	Specifies the name of the vNIC.

### **Command Default**

None

### **Command Modes**

Ethernet host interface (/chassis/adapter)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.

# **Examples**

This example shows how to enter the host Ethernet interface:

```
Server# scope chassis
```

Server /chassis # scope adapter 1

Server /chassis/adapter # scope host-eth-if eth0

Server /chassis/adapter/host-eth-if #

Command	Description
scope host-fe-if	

# scope host-fc-if

To enter the host Fibre Channel interface command mode, use the scope host-fc-if command.

scope host-fc-if {fc0| fc1| name}

# **Syntax Description**

fc0	Specifies vHBA fc0.
fc1	Specifies vHBA fc1.
name	Specifies the name of a user-defined vHBA.

### **Command Default**

None

### **Command Modes**

Fibre Channel host nterface (/chassis/adapter)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was modified to add the <i>name</i> variable.

# **Examples**

This example shows how to enter the command mode of the host Fibre Channel interface:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc1
Server /chassis/adapter/host-fc-if #
```

Command	Description
create host-fc-if	

# scope http

To enter http mode, use the **scope http** command.

scope http

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

HTTP (/http)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use http mode to set the following HTTP properties:

- Enabing or disabling HTTP
- Specifying port numbers and the HTTP connection timeout

# **Examples**

This example shows how to enter http mode:

server# scope http
server /http #

Command	Description
show http	
show http-port	

# scope import-export

To enter CIMC import-export mode, use the **scope import-export** command.

scope import-export

# **Syntax Description:**

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

CIMC (/cimc)

### **Command History**

Release	Modification
1.1(2)	This command was introduced.

### **Usage Guidelines**

You can use import-export mode to import or export a CIMC configuration file.

# **Examples**

This example shows how to enter import-export mode:

```
server# scope cimc
server /cimc # scope import-export
server /cimc/import-export #
```

Command	Description
export-config	
import-config	

# scope interrupt

To enter interrupt command mode, use the **scope interrupt** command.

# scope interrupt

This command has no arguments or keywords.

## **Command Default**

None

### **Command Modes**

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

Host Ethernet interface (/chassis/adapter/host-eth-if)

VM FEX (/chassis/adapter/vmfex)

# **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added in the VM FEX command mode.

# **Examples**

This example shows how to enter the interrupt command mode of the host Ethernet interface:

```
Server # scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if
Server /chassis/adapter/host-eth-if # scope interrupt
Server /chassis/adapter/host-eth-if/interrupt #
```

Command	Description
set interrupt-count	

# scope ipblocking (network)

To enter ipblocking mode, use the **scope ipblocking** command in network mode.

scope ipblocking

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

IP blocking (/cimc/network/ipblocking)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

### **Usage Guidelines**

You use ipblocking mode to perform the following tasks:

- Enable or disable IP blocking
- Set failure count, failure window, and penalty time

# **Examples**

This example shows how to enter ipblocking mode:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # scope ipblocking
server /cimc/network/ipblocking #
```

Command	Description
show ipblocking	
set penalty-time	

# scope ipmi

To enter ipmi mode, use the **scope ipmi** command.

scope ipmi

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Intelligent Platform Management Interface (/ipmi)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use ipmi mode to perform the following tasks:

- Enable or disable IPMI
- Create an encryption key
- Set the security privilege level

# **Examples**

This example shows how to enter ipmi mode:

```
server# scope ipmi
server /ipmi #
```

Command	Description
show ipmi	
set encryption-key	

# scope kvm

To enter kvm mode, use the **scope kvm** command.

scope kvm

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Keyboard, video and mouse (/kvm)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use kvm mode to set the following KVM properties:

- Encryption
- KVM port number
- Local video
- Maximum sessions

# **Examples**

This example shows how to enter KVM mode:

server# scope kvm server /kvm #

Command	Description
set max-sessions	
show kvm	

# scope Idap

To enter ldap mode, use the **scope ldap** command.

scope ldap

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Lightweight Directory Access Protocol (/ldap)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use ldap mode to perform the following LDAP properties:

- Enable or disable LDAP
- Set attribute and Base DN (Base Distinguished Name)
- Enable encryption
- Create LDAP server IP address and connection timeout

### **Examples**

This example shows how to enter ldap mode:

```
server# scope ldap
server /ldap #
```

Command	Description
set server-ip	
show ldap	

# scope log (cimc)

To enter log mode, use the **scope log** command in cimc mode.

scope log

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Log (/cimc/log)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Usage Guidelines**

You use log mode to perform the following tasks:

- Clear the CIMC trace log
- Display CIMC trace log entries

# **Examples**

This example shows how to enter log mode:

```
server# scope cimc
server /cimc # scope log
server /cimc/log #
```

Command	Description
show entries	
show log	

# scope main

To enter the main BIOS command mode, use the **scope main** command.

scope main

**Syntax Description:** 

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example enters the main BIOS command mode:

Server# scope bios Server /bios # scope main Server /bios/main #

Command	Description
show main	

## scope network (cimc)

To enter network mode, use the **scope network** command in cimc mode.

scope network

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Network (/cimc/network)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

You use network mode to perform the following tasks:

- Enable DHCP and DNS
- Create a host name
- Set the NIC mode and redundancy
- · Create an IPv4 IP address, gateway, and netmask
- Enable the VLAN membership feature

### **Examples**

This example shows how to enter network mode:

```
server# scope cimc
server /cimc # scope network
server /cimc/network #
```

Command	Description
set dhcp-enabled	
show network	

## scope offload

To enter the TCP offload command mode, use the **scope offload** command.

## scope offload

This command has no arguments or keywords.

### **Command Default**

None

### **Command Modes**

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

Host Ethernet interface (/chassis/adapter/host-eth-if)

VM FEX (/chassis/adapter/vmfex)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added in the VM FEX command mode.

## **Examples**

This example shows how to enter the TCP offload command mode:

```
Server# scope chassis
```

Server /chassis # scope adapter 1

Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope offload
Server /chassis/adapter/host-eth-if/offload #

Command	Description
set tcp-segment-offload	

# scope operational-profile

To enter the Cisco Flexible Flash operational profile command mode, use the **scope operational-profile** command.

#### scope operational-profile

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

FlexFlash (/chassis/flexflash)

#### **Command History**

Release	Modification
1.3(3)	This command was introduced.

#### **Usage Guidelines**

Use this command to enter the Cisco Flexible Flash operational profile command mode.

### **Examples**

This example shows how to enter the Cisco Flexible Flash operational profile command mode for the first flash device:

```
Server# scope chassis
```

Server /chassis # scope flexflash FlexFlash-0
Server /chassis/flexflash # scope operational-profile
Server /chassis/flexflash/operational-profile #

Command	Description
set error-count-threshold	
set raid-primary-member	
set virtual-drives-enabled	

## scope pef (fault)

To enter pef mode, use the **scope pef** command in fault mode.

scope pef pef-index

### **Syntax Description**

pef-index	The index of a specific performance event filter. The range of valid values is 1 to 12.
	See Usage Guideline for a complete list of perfomance event filter indexes.

### **Command Default**

None

#### **Command Modes**

Performance event filter (/fault/pef)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

Following is a list of the performance event filter indexes:

- 1—Temperature Critical Assert Filter
- 2—Temperature Warning Assert Filter
- 3—Voltage Critical Assert Filter
- 4—Current Assert Filter
- 5—Fan Critical Assert Filter
- 6—Processor Assert Filter
- 7—Power Supply Critical Assert Filter
- 8—Power Supply Warning Assert Filter
- 9—Power Supply Redundancy Lost Filter
- 10—Discrete Power Supply Assert Filter
- 11—Memory Assert Filter
- 12—Drive Slot Assert Filter

## **Examples** This example shows how to enter pef mode:

server# scope fault
server /fault # scope pef 3
server /fault/pef #

Command	Description
show pef	

## scope perbi

To enter the persistent LUN binding command mode for the vHBA, use the **scope perbi** command.

## scope perbi

This command has no arguments or keywords.

## **Command Default**

None

### **Command Modes**

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to enter the persistent LUN binding command mode of the host Fibre Channel interface:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope perbi
Server /chassis/adapter/host-fc-if/perbi #
```

Command	Description
set persistent-lun-binding enable	

## scope physical-drive

To enter the physical drive command mode, use the **scope physical-drive** command.

scope physical-drive drive-number

#### **Syntax Description**

drive-number

The drive number of the physical drive.

**Command Default** 

None

**Command Modes** 

Storage adapter (/chassis/storageadapter)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

### **Usage Guidelines**

You can use the physical-drive command mode to display general, inquiry, and status information about a physical drive.

## **Examples**

This example shows how to enter the physical drive command mode for physical drive number 1 on the storage adapter named SAS:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # scope physical-drive 1
```

server /chassis/storageadapter/physical-drive #

Command	Description
show physical-drive	

## scope port

To enter the Fibre Channel port command mode, use the **scope port** command.

scope port

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to enter the Fibre Channel port command mode.

```
Server # scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope port
Server /chassis/adapter/host-fc-if/port #
```

Command	Description
set max-target-luns	
set outstanding-io-count	

# scope port-f-logi

To enter the Fibre Channel fabric login command mode, use the scope port-f-logi command.

scope port-f-logi

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

### **Examples**

This example shows how to enter the Fibre Channel fabric login command mode:

```
Server # scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope port-f-logi
Server /chassis/adapter/host-fc-if/port-f-logi #
```

Command	Description
set flogi-retries	
set flogi-timeout	

## scope port-p-logi

To enter the Fibre Channel port login command mode, use the **scope port-p-logi** command.

scope port-p-logi

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to enter the Fibre Channel port login command mode:

```
Server # scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope port-p-logi
Server /chassis/adapter/host-fc-if/port-p-logi #
```

Command	Description
set plogi-retries	
set plogi-timeout	

## scope recv-queue

To enter the receive queue command mode, use the scope recv-queue command.

scope recv-queue

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Host Ethernet interface (/chassis/adapter/host-eth-if)

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

VM FEX (/chassis/adapter/vmfex)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added in the VM FEX command mode.

## **Examples**

This example shows how to enter the Fibre Channel receive queue command mode:

```
Server# scope chassis
```

Server /chassis # scope adapter 1

Server /chassis/adapter # scope host-fc-if fc0

Server /chassis/adapter/host-fc-if # scope recv-queue

Server /chassis/adapter/host-fc-if/recv-queue #

Command	Description
set rq-count	
set rq-ring-size	

# scope role-group

To enter the command mode of an Active Directory role group, use the scope role-group command.

scope role-group index

### **Syntax Description**

index	The numeric identifier	of the available role groups,	from 1 to 5.
		or the available role groups	110111 1 00 0.

### **Command Default**

None

### **Command Modes**

LDAP (/ldap)

## **Command History**

Release	Modification
1.4(1)	This command was introduced.

### **Usage Guidelines**

Use this command to enter the command mode of an Active Directory (AD) authorization (role) group.

## **Examples**

This example shows how to enter the command mode of AD role group number 1:

```
Server# scope ldap
Server /ldap # scope role-group 1
Server /ldap/role-group #
```

Command	Description
set name	
set domain	
set role	

## scope rss

To enter the Receive-Side Scaling (RSS) command mode, use the **scope rss** command.

scope rss

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Ethernet host interface (/chassis/adapter/host-eth-if)

VM FEX (/chassis/adapter/vmfex)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added in the VM FEX command mode.

## **Examples**

This example shows how to enter the Receive-Side Scaling (RSS) command mode:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope rss
```

Server /chassis/adapter/host-eth-if/rss #

Command	Description
set rss	

## scope scsi-io

To enter the SCSI I/O command mode, use the scope scsi-io command.

scope scsi-io

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

SCSI-IO (/chassis/adapter/host-fc-if/scsi-io)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to enter the the SCSI I/O command mode:

```
Server # scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope scsi-io
Server /chassis/adapter/host-fc-if/scsi-io #
```

Command	Description
set cdb-wq-count	

## scope sel

To enter sel mode, use the **scope sel** command.

scope sel

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

System event log (/sel)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

You use sel mode to perform the following tasks:

- Clear the system event log
- Show configuration and system event log entries

## **Examples**

This example shows how to enter sel mode:

server# scope sel
server /sel #

Command	Description
show entries	
show sel	

## scope sensor

To enter sensor mode, use the **scope sensor** command.

scope sensor

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Sensor (/sensor)

## **Command History**

Release	Modification
1.0(1X)	This command was introduced.

## **Usage Guidelines**

You use sensor mode to display fan, psu, psu-redundancy, temperature, and voltage sensors information.

## **Examples**

This example shows how to enter sensor mode:

server# scope sensor
server /sensor #

Command	Description
show fan	
show voltage	

## scope server-management

To enter the server management BIOS command mode, use the scope server-management command.

scope server-management

## **Syntax Description:**

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

### **Examples**

This example enters the server management BIOS command mode:

Server# scope bios

Server /bios # scope server-management Server /bios/server-management #

Command	Description
show server-management	

# scope server (log)

To enter the command mode for a remote syslog server profile, use the scope server command.

scope server {1| 2}

## **Syntax Description**

1	Selects remote syslog server profile number 1.
2	Selects remote syslog server profile number 2.

#### **Command Default**

None

#### **Command Modes**

CIMC log (/cimc/log)

## **Command History**

Release	Modification
1.1(2)	This command was introduced.

## **Usage Guidelines**

You can configure two remote syslog server profiles for sending CIMC log entries to different destinations. Use this command to select a profile and enter the command mode for that profile.

#### **Examples**

This example shows how to access and configure syslog server profile number 2:

```
server# scope cimc
server /cimc # scope log
server /cimc/log # scope server 2
server /cimc/log/server # set server-ip 192.0.2.34
server /cimc/log/server *# set enabled yes
server /cimc/log/server *# commit
server /cimc/log/server ##
```

Command	Description
set enabled (server)	
set server-ip	

## scope snmp

To enter the SNMP command mode, use the **scope snmp** command.

scope snmp

## **Syntax Description:**

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

SNMP (/snmp)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

### **Usage Guidelines**

You can use the SNMP command mode to configure SNMP parameters such as location and contact.

## **Examples**

This example shows how to enter SNMP command mode:

server# scope snmp
server /snmp #

Command	Description
scope trap-destination	
show snmp	

## scope sol

To enter sol mode, use the **scope sol** command.

scope sol

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Serial over LAN (/sol)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

You use sol mode to perform the following tasks:

- Enable or disable SoL
- Set the baud rate

## **Examples**

This example shows how to enter sol mode:

server# scope sol
server /sol #

Command	Description
set baud-rate	
show sol	

## scope ssh

To enter ssh mode, use the scope ssh command.

scope ssh

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Secure Shell (/ssh)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

You use ssh mode to perform the following tasks:

- · Enable or disable SSH
- Set the SSH port number and connection timeout interval

## **Examples**

This example shows how to enter ssh mode:

server# scope ssh
server /ssh #

Command	Description
set timeout (/ssh)	
show ssh	

## scope storageadapter

To enter the storageadapter command mode, use the scope storageadapter command.

scope storageadapterslot

### **Syntax Description**

slot

The PCI slot name or number of the storage adapter.

### **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

### **Usage Guidelines**

You can use the storage adapter command mode to view storage adapter parameters such as the following:

- Firmware images and versions
- PCI information
- Manufacturing information
- Battery backup unit information
- Supported RAID levels
- Harware information
- Error counters

## **Examples**

This example shows how to enter storage adapter command mode for the adapter in slot 2:

```
Server# scope chassis
Server /chassis # scope storageadapter SLOT-2
Server /chassis/storageadapter #
```

Command	Description
show storageadapter	

# scope tech-support (cimc)

To enter tech-support mode, use the **scope tech-support** command in cimc mode.

scope tech-support

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Technical support (/cimc/tech-support)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

### **Usage Guidelines**

You use tech-support mode to set up the TFTP path and server address.

### **Examples**

This example shows how to enter tech-support mode:

server# scope cimc
server /cimc # scope tech-support
server /cimc/tech-support #

Command	Description
show tech-support	
start	

## scope trans-queue

To enter the transmit queue command mode, use the **scope trans-queue** command.

scope trans-queue

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Ethernet host interface (/chassis/adapter/host-eth-if)

Fibre Channel host interface (/chassis/adapter/host-fc-if)

VM FEX (/chassis/adapter/vmfex)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added in the VM FEX command mode.

## **Examples**

This example shows how to enter the Ethernet transmit queue command mode:

```
Server # scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope trans-queue
Server /chassis/adapter/host-eth-if/trans-queue #
```

Command	Description
set wq-count	
set wq-ring-size	

## scope trap-destination

To enter trap-destination command mode, use the **scope trap-destination** command.

scope trap-destination trap-destination-index

#### **Syntax Description**

trap-destination-index	The index of a specific trap destination profile.

### **Command Default**

None

### **Command Modes**

Trap destination (/snmp/trap-destination)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.
1.4(1)	This command was moved from the fault command mode to the snmp command mode.

### **Usage Guidelines**

Use this command to access the four configurable trap destination profiles, identified by *index* numbers 1 through 4.

### **Examples**

This example shows how to enter trap-destination mode:

```
Server# scope fault
Server /snmp # scope trap-destination 4
Server /snmp/trap-destination #
```

Command	Description
set addr (trap-destination)	
show trap-destination	

## scope user

To enter user mode, use the **scope user** command.

scope user {1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15}

## **Syntax Description**

1 through Specifies users 1 through 15.

**Command Default** 

None

15

**Command Modes** 

User (/user)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

You use user mode to perform the following tasks:

- Enable user services
- Create user names, roles, and passwords

## **Examples**

This example shows how to enter user mode:

```
server# scope user 1
server /user #
```

Command	Description
set user-name	
show user	

# scope user-session

To enter user-session mode, use the **scope user-session** command.

scope user-session index

## **Syntax Description**

index	The session ID of a specific user	session.

**Command Default** 

None

**Command Modes** 

User session (/user-session)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

You use user-session mode to display details about user sessions.

### **Examples**

This example shows how to enter user-session mode:

server# scope user-session 31

server /user-session #

Command	Description
show user	
show user-session	

# scope v3users

To enter the command mode for an SNMPv3 user, use the **scope v3users** command.

scope v3users user-index

**Syntax Description** 

The number of the user to configure. user-index

**Command Default** 

None

**Command Modes** 

SNMP (/snmp)

**Command History** 

Release	Modification
1.4(1)	This command was introduced.

### **Usage Guidelines**

Use this command to enter the command mode for an SNMPv3 user. Specify a user number between 1 and 15.

## **Examples**

This example enters the command mode for SNMPv3 user number 1:

Server# scope snmp

Server /snmp # scope v3users 1 Server /snmp/v3users #

Command	Description
show v3users	

# scope virtual-drive

To enter the virtual drive command mode, use the scope virtual-drive command.

scope virtual-drive drive-number

#### **Syntax Description**

The drive number of the virtual drive-number drive.

**Command Default** 

None

**Command Modes** 

Storage adapter (/chassis/storageadapter)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

### **Examples**

This example shows how to enter the virtual drive command mode for virtual drive number 1 on the storage adapter named SAS:

server# scope chassis

server /chassis # scope storageadapter SAS

server /chassis/storageadapter # scope virtual-drive 1
server /chassis/storageadapter/virtual-drive #

Command	Description
show virtual-drive	

# scope vmedia

To enter vmedia mode, use the scope vmedia command.

scope vmedia

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Virtual media (/vmedia)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

You use vmedia mode to perform the following tasks:

- Enable virtual media services
- Enable encryption

## **Examples**

This example shows how to enter vmedia mode:

server# scope vmedia
server /vmedia #

Command	Description
set	
show vmedia	

## scope vmfex

To enter the VM FEX command mode, use the **scope vmfex** command.

scope vmfex port-id

#### **Syntax Description**

port-id	The name or number of the host Ethernet interface.
portiu	The name of number of the nost Emernet interface.

**Command Default** 

None

**Command Modes** 

Adapter (/chassis/adapter)

### **Command History**

Release	Modification
1.4(1)	This command was introduced.

### **Usage Guidelines**

Use this command to enter the virtual machine fabric extender (VM FEX) command mode for the specified host Ethernet interface. NIV mode must be enabled.

## **Examples**

This example shows how to enter the VM FEX command mode for the host Ethernet interface named pts0:

Server# scope chassis

Server /chassis # scope adapter 1

Server /chassis/adapter # scope vmfex pts0

Server /chassis/adapter/vmfex #

Command	Description
show vmfex	

# sendSNMPtrap

To send a test message to the SNMP trap destination, use the **sendSNMPtrap** command.

sendSNMPtrap

**Syntax Description:** 

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

SNMP trap destination (/snmp/trap-destination)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.
1.4(1)	This command was moved from the fault scope to the snmp scope.

### **Usage Guidelines**

Use this command to send an SNMPv1 test trap to the SNMP trap destination. The trap must be configured and enabled in order to send a test message.

### **Examples**

This example sends a test message to SNMP trap destination 1:

Server# scope snmp

Server /snmp # scope trap-destination 1
Server /snmp/trap-destination # sendSNMPtrap

SNMP Test Trap sent to Destination:1
Server /snmp/trap-destination #

Command	Description
scope trap-destination	

## set ACPI10Support

To specify whether the BIOS publishes the ACPI 1.0 version, use the **set ACPI10Support** command.

set ACPI10Support {Disabled| Enabled}

#### **Syntax Description**

Disabled	The ACPI 1.0 version is not published.
Enabled	The ACPI 1.0 version is published.

#### **Command Default**

The ACPI 1.0 version is not published.

#### **Command Modes**

Server Management BIOS (/bios/server-management)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether the BIOS publishes the Advanced Configuration and Power Interface (ACPI) 1.0 version of the fixed ACPI description table (FADT) in the Root System Description table. This version may be required for compatibility with OS versions that support only ACPI 1.0.

#### Examples

This example configures the BIOS to publish the ACPI 1.0 version and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set ACPI10Support Enabled
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
show server-management	

## set action (pef)

To set up an action for a performance event filter, use the **set action** command in pef mode.

set action{none | power-off | reboot | power-cycle}

### **Syntax Description**

none	Specifies no action.
power-off	Specifies that the server power off.
reboot	Specifies that the server reboots.
power-cycle	Specifies that the server power cycle.

#### **Command Default**

None

#### **Command Modes**

Performance event filters (/fault/pef)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

Following is a list of the performance event filter indexes:

- 1—Temperature Critical Assert Filter
- 2—Temperature Warning Assert Filter
- 3—Voltage Critical Assert Filter
- 4—Current Assert Filter
- 5—Fan Critical Assert Filter
- 6—Processor Assert Filter
- 7—Power Supply Critical Assert Filter
- 8—Power Supply Warning Assert Filter
- 9—Power Supply Redundancy Lost Filter
- 10—Discrete Power Supply Assert Filter
- 11—Memory Assert Filter
- 12—Drive Slot Assert Filter

## **Examples**

This example shows how to set up an action for performance event filter 3:

```
server# scope fault
server /fault # scope pef 3
server /fault/pef # set action power-cycle
server /fault/pef* # commit
server /fault/pef #
```

Command	Description
show pef	

## set ActiveVideo

To specify how the server displays video, use the **set ActiveVideo** command.

set ActiveVideo {Auto| Onboard\_Device}

## **Syntax Description**

Auto	The server uses an external graphics adapter for display if one is available.
Onboard_Device	The server always uses its internal graphics adapter even if an external graphics adapter is available.

#### **Command Default**

The server uses an external graphics adapter for display if one is available (Auto).

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Examples**

This example specifies that the server always uses its internal graphics adapter and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ActiveVideo Onboard_Device
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set addr (trap-destination)

To assign an IP address to an SNMP trap destination index, use the **set addr** command in trap-destination mode.

set addr ip-address

### **Syntax Description**

#### **Command Default**

None

#### **Command Modes**

SNMP trap destination (/snmp/trap-destination)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.
1.4(1)	This command was moved from the fault scope to the snmp scope.

## **Examples**

This example shows how to assign an IP address to a trap destination index:

```
server# scope snmp
server /snmp # scope trap-destination 3
server /snmp/trap-destination # set addr 209.165.200.225
server /snmp/trap-destination* # commit
server /snmp/trap-destination #
```

Command	Description
show trap-destination	

## set AdjacentCacheLinePrefetch

To specify whether the processor uses the Intel Adjacent Cache Line Prefetch mechanism, use the **set AdjacentCacheLinePrefetch** command.

set AdjacentCacheLinePrefetch {Disabled| Enabled}

## **Syntax Description**

Disabled	The Adjacent Cache Line Prefetch mechanism is not used.
Enabled	The Adjacent Cache Line Prefetch mechanism is used when cache issues are detected.

#### **Command Default**

The Adjacent Cache Line Prefetch mechanism is used when cache issues are detected.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification	
1.3(1)	This command was introduced.	

## **Usage Guidelines**

Use this command to specify whether the processor uses the Intel Adjacent Cache Line Prefetch mechanism to fetch data when necessary.

You must select the **Custom** option in the **set CPUPerformance** command in order to specify this value. For any value other than **Custom**, this setting is overridden by the setting in the selected CPU performance profile.

#### **Examples**

This example specifies that the processor uses the Adjacent Cache Line Prefetch mechanism when necessary and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set CPUPerformance Custom
Server /bios/advanced # set AdjacentCacheLinePrefetch Enable
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set CPUPerformance	
show advanced	

## set alternate-dns-server

To specify the IP address of the secondary DNS server, use the **set alternate-dns-server** command.

set alternate-dns-server dns2-ipv4-address

## **Syntax Description**

1 0		1 1
dns2-	-ipv4-a	address

The IP address of the secondary DNS server.

#### **Command Default**

None

#### **Command Modes**

Network (/cimc/network)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example specifies the IP address of the secondary DNS server:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set alternate-dns-server 192.0.20.2
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
set preferred-dns-server	
show network	

## set Altitude

To specify the approximate number of meters above sea level at which the physical server is installed, use the **set Altitude** command.

set Altitude {Auto| 300 M| 900 M| 1500 M| 3000 M}

### **Syntax Description**

Auto	The CPU determines the physical elevation.
300_M	The server is approximately 300 meters above sea level.
900_M	The server is approximately 900 meters above sea level.
1500_M	The server is approximately 1500 meters above sea level.
3000_M	The server is approximately 3000 meters above sea level.

#### **Command Default**

The server is approximately 300 meters above sea level.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(5)	This command was introduced.

## **Examples**

This example specifies that the server is installed at approximately 900 meters above sea level and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set Altitude 900_M
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set AssertNMIOnPERR

To specify whether the BIOS generates a non-maskable interrupt (NMI) and logs an error when a processor bus parity error (PERR) occurs, use the **set AssertNMIOnPERR** command.

set AssertNMIOnPERR {Disabled| Enabled}

### **Syntax Description**

Disabled	The BIOS does not generate an NMI or log an error when a PERR occurs.
Enabled	The BIOS generates an NMI and logs an error when a PERR occurs.

#### **Command Default**

Enabled

#### **Command Modes**

Server Management BIOS (/bios/server-management)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

# Usage Guidelin

Note

If you enable an NMI when a PERR occurs, you must also enable an NMI when a SERR occurs, using the **set AssertNMIonSERR** command.

#### **Examples**

This example configures the BIOS to not generate an NMI or log an error when a PERR occurs, and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set AssertNMIOnPERR Disabled
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
set AssertNMIOnSERR	
show server-management	

## set AssertNMIOnSERR

To specify whether the BIOS generates a non-maskable interrupt (NMI) and logs an error when a system error (SERR) occurs, use the **set AssertNMIOnSERR** command.

set AssertNMIOnSERR {Disabled| Enabled}

### **Syntax Description**

Disabled	The BIOS does not generate an NMI or log an error when a SERR occurs.
Enabled	The BIOS generates an NMI and logs an error when a SERR occurs.

#### **Command Default**

Enabled

#### **Command Modes**

Server Management BIOS (/bios/server-management)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## Usage Guidelin

Note

If you enable an NMI when a PERR occurs, using the **set AssertNMIonPERR** command, you must also enable an NMI when a SERR occurs, using this command.

#### **Examples**

This example configures the BIOS to not generate an NMI or log an error when a SERR occurs, and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set AssertNMIOnSERR Disabled
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
set AssertNMIOnPERR	
show server-management	

## set ATS

To specify whether the processor supports Intel VT-d Address Translation Services (ATS), use the **set ATS** command.

#### set ATS {Disabled| Enabled}

## **Syntax Description**

Disabled	The processor does not support ATS.
Enabled	The processor uses VT-d ATS as required.

#### **Command Default**

The processor uses VT-d ATS as required.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example specifies that the processor does not support ATS and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ATS Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set attribute

To specify the LDAP attribute, use the **set attribute** command.

set attribute attribute-name

## **Syntax Description**

attribute-name	The name of the attribute. The name can be up to 64 characters.
titi. to tite	The hame of the attitudes the hame take of the or enalacters.

#### **Command Default**

None

#### **Command Modes**

LDAP (/ldap)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify an LDAP attribute that contains the role and locale information for the user. This property is always a name-value pair. The system queries the user record for the value that matches this attribute name.

You can use an existing LDAP attribute that is mapped to the CIMC user roles and locales or you can create a custom attribute, such as the CiscoAVPair attribute, which has the following attribute ID:

```
1.3.6.1.4.1.9.287247.1
```



Note

If you do not specify this property, user access is restricted to read-only.

#### **Examples**

This example specifies the attribute as the CiscoAVPair attribute:

```
server# scope ldap
server /ldap # set enabled yes
server /ldap* # set attribute CiscoAVPair
server /ldap* # commit
server /ldap #
```

Command	Description
show ldap	

## set base-dn

To specify the top level domain name of the LDAP hierarchy, use the **set base-dn** command.

set base-dn base-dn-name

## **Syntax Description**

base-dn-name	The name of the LDAP Base DN. The name can contain up to 63 characters.
--------------	---

**Command Default** 

None

**Command Modes** 

LDAP (/ldap)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example specifies the base-dn as cisco.com:

```
server# scope ldap
server /ldap # set enabled yes
server /ldap* # set base-dn cisco.com
server /ldap* # commit
server /ldap #
```

Command	Description
show ldap	

## set baud-rate

To specify the baud rate for serial over LAN (SoL) communications, use the set baud-rate command.

set baud-rate {9.6k| 19.2k| 38.4k| 57.6k| 115.2k}

## **Syntax Description**

9.6k	The baud rate is 9600 bps.
19.2k	The baud rate is 19200 bps.
38.4k	The baud rate is 38400 bps.
57.6k	The baud rate is 57600 bps.
115.2k	The baud rate is 115200 bps.

#### **Command Default**

The baud rate is 115200 bps.

#### **Command Modes**

Serial over LAN (/sol)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## Usage Guidelin

Note

This setting must match the setting on the remote terminal application.

#### **Examples**

This example configures a baud rate of 57600 bps on the serial port and commits the transaction:

```
Server# scope sol
Server /sol # set baud-rate 57.6k
Server /sol *# set enabled yes
Server /sol *# commit
Server /sol #
```

Command	Description
show sol	

## set BaudRate

To specify the baud rate for serial port communications, use the set BaudRate command.

set BaudRate {9.6k| 19.2k| 38.4k| 57.6k| 115.2k}

#### **Syntax Description**

9.6k	The baud rate is 9600 bps.
19.2k	The baud rate is 19200 bps.
38.4k	The baud rate is 38400 bps.
57.6k	The baud rate is 57600 bps.
115.2k	The baud rate is 115200 bps.

#### **Command Default**

The baud rate is 9600 bps.

#### **Command Modes**

Server Management BIOS (/bios/server-management)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify the baud rate for serial port communications. If you disable Console Redirection, this option is not available.



Note

This setting must match the setting on the remote terminal application.

## **Examples**

This example configures a baud rate of 115200 bps on the serial port and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set BaudRate 115.2k
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
show server-management	

## set BMCPnP

To specify whether the system automatically detects the BMC in ACPI-compliant operating systems, use the **set BMCPnP** command.

set BMCPnP {Disabled| Enabled}

### **Syntax Description**

Disabled	The system never automatically detects the BMC.
Enabled	The system automatically detects the BMC whenever possible.

**Command Default** 

Disabled

**Command Modes** 

Server Management BIOS (/bios/server-management)

## **Command History**

Release	Modification	
1.3(1)	This command was introduced.	

## **Examples**

This example configures the BIOS to automatically detect the BMC whenever possible and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set BMCPnP Enabled
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
show server-management	

## set boot

To enable or disable remote boot for an adapter interface, use the **set boot** command.

set boot {disable| enable}

## **Syntax Description**

disable	Disables remote boot.
enable	Enables remote boot.

#### **Command Default**

Remote boot is disabled for default vHBAs and user-created vNICs, and enabled for default vNICs.

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

#### **Usage Guidelines**

Use this command to specify whether a vNIC can boot from PXE or whether a vHBA can boot from SAN.

## **Examples**

This example shows how to enable SAN boot for the host Fibre Channel interface fc0:

```
Server# scope chassis
Server/chassis # scope adapter 1
Server/chassis/adapter # scope host-fc-if fc0
Server/chassis/adapter/host-fc-if # set boot enable
Server/chassis/adapter/host-fc-if *# commit
Server/chassis/adapter/host-fc-if #
```

Command	Description
create-boot-entry	

## set boot-order

To set the boot order for the server, use the **set boot-order** command in BIOS mode.

set boot-order boot-list

#### **Syntax Description**

boot-list	A comma-separated list of boot devices.
-----------	---

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

For the *boot-list* argument, type the boot devices in the desired boot order using commas as delimiters, with no spaces between devices. The device names are not case sensitive. Use one or more of the following boot device arguments:

- hdd
- pxe
- fdd
- efi
- cdrom

Installed boot devices not listed in this command will be appended to the boot order. If a listed device is not present, it will be removed from the boot order configuration.

Do not disable boot options in the BIOS menus.

## **Examples**

This example shows how to specify the boot order for the server:

```
server# scope bios
server /bios # set boot-order efi,hdd,fdd,cdrom,pxe
server /bios* # commit
server /bios #
```

Command	Description
show bios	
show actual-boot-order	

# set BootOptionRetry

To specify whether the BIOS retries NON-EFI based boot options without waiting for user input, use the **set BootOptionRetry** command.

set BootOptionRetry {Disabled| Enabled}

### **Syntax Description**

Disabled	The BIOS waits for user input before retrying NON-EFI based boot options.
Enabled	The BIOS continually retries NON-EFI based boot options without waiting for user input.

#### **Command Default**

The BIOS waits for user input before retrying NON-EFI based boot options.

#### **Command Modes**

Main BIOS (/bios/main)

Server /bios/main #

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example configures the BIOS to continually retry NON-EFI based boot options without waiting for user input and commits the transaction:

```
Server# scope bios
Server /bios # scope main
Server /bios/main # set BootOptionRetry Enabled
Server /bios/main *# commit
Server /bios/main *# show detail
Set-up parameters:
Boot option retry: Enabled
POST Error Pause: Disabled
```

Command	Description
scope main	
show main	

## set boot-override

To specify a device that will override the default boot priority the next time the server boots, use the **set boot-override** command.

set boot-override {None| SCU| HV| HUU}

#### **Syntax Description**

None	The server uses the default boot order.
SCU	The server boots from the Cisco UCS Server Configuration Utility.
HV	The server boots from the VMware Hypervisor.
HUU	The server boots from the Cisco Host Upgrade Utility.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

### **Command History**

Release	Modification
1.3(3)	This command was introduced.

## **Usage Guidelines**

Use this command to specify a device that will override the default boot priority the next time the server is restarted, regardless of the default boot order defined for the server. The specified device is used only once. After the server has rebooted, this option is ignored. The available devices are virtual drives on the Cisco Flexible Flash card.



Note

This function is available only on platforms that support the Cisco Flexible Flash controller.

Before you reboot the server, ensure that the device you select is enabled on the Cisco Flexible Flash card.

#### **Examples**

This example shows how to specify that the server boots from the Cisco UCS Server Configuration Utility:

```
server# scope bios
server /bios # set boot-override SCU
server /bios* # commit
server /bios #
```

Command	Description
show bios	

## set cdb-wq-count

To set the number of command descriptor block (CDB) transmit queue resources to allocate, use the **set cdb-wq-count** command.

set cdb-wq-count count

### **Syntax Description**

count	The number of command descriptor block (CDB) transmit queue resources
	to allocate. The range is 1 to 8. The default count is 1.

#### **Command Default**

The default count is 1.

#### **Command Modes**

SCSI-IO (/chassis/adapter/host-fc-if/scsi-io)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

### **Examples**

This example shows how to set the command descriptor block (CDB) transmit queue resources of the host Fibre Channel interface:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
server /chassis/adapter/host-fc-if # scope scsi-io
Server /chassis/adapter/host-fc-if/scsi-io # set cdb-wq-count 4
Server /chassis/adapter/host-fc-if/scsi-io *# commit
Server /chassis/adapter/host-fc-if/scsi-io #
```

Command	Description
set cdb-wq-ring-size	

# set cdb-wq-ring-size

To set the number of descriptors in the command descriptor block (CDB) transmit queue, use the **set cdb-wq-ring-size** command.

set cdb-wq-ring-size size

### **Syntax Description**

size	The number of descriptors in the command descriptor block (CDB)
	transmit queue. The range is 64 to 512.

#### **Command Default**

The default descriptor number is 512.

## **Command Modes**

SCSI-IO (/chassis/adapter/host-fc-if/scsi-io)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the number of descriptors in the command descriptor block (CDB) transmit queue:

```
Server # scope chassis

Server /chassis # scope adapter 1

Server /chassis/adapter # scope host-fc-if fc0

Server /chassis/adapter/host-fc-if # scope scsi-io

Server /chassis/adapter/host-fc-if/scsi-io # set cdb-wq-ring-size 78

Server /chassis/adapter/host-fc-if/scsi-io *# commit

Server /chassis/adapter/host-fc-if/scsi-io #
```

Command	Description
set cdb-wq-count	

## set channel-number

To specify the Network Interface Virtualization (NIV) channel number, use the **set channel-number** command.

set channel-number number

#### **Syntax Description**

numh	ov

The NIV channel number. Specify a number between 1 and 1000.

#### **Command Default**

None

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

#### **Command History**

Release	Modification	
1.3(1)	This command was introduced.	

## Usage Guidelin

#### Note

To use this command, you must enable NIV mode for the adapter.

#### **Examples**

This example shows how to set the NIV channel number on interface eth0 on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # set niv-mode enabled
Server /chassis/adapter *# scope host-eth-if eth0
Server /chassis/adapter/host-eth-if *# set channel-number 5
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description
set niv-mode	
show host-eth-if	

## set ChannelInterLeave

To specify how the CPU performs interleaving of memory blocks, use the **set ChannelInterLeave** command.

set ChannelInterLeave {Auto| 1\_Way| 2\_Way| 4\_Way| 8\_Way}

#### **Syntax Description**

Auto	The CPU determines what interleaving is done.
1_Way	Some channel interleaving is used.
2_Way	Additional channel interleaving is used.
4_Way	Additional channel interleaving is used.
8_Way	The maximum amount of channel interleaving is used.

#### **Command Default**

The CPU determines what interleaving is done.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(5)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify how the CPU divides memory blocks and spreads contiguous portions of data across interleaved channels to enable simultaneous read operations.

## **Examples**

This example configures the CPU to perform the maximum amount of channel interleaving and commits the transaction:

Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ChannelInterLeave 8\_Way
Server /bios/advanced \*# commit
Server /bios/advanced #

Command	Description
show advanced	

# set Ck410bConfigSpreadSpectrumEnable

To enable spread spectrum clock modulation for EMI reduction, use the **set Ck410bConfigSpreadSpectrumEnable** command.

set Ck410bConfigSpreadSpectrumEnable {Disabled| Enabled}

#### **Syntax Description**

Disabled	The server does not use the spread spectrum function.
Enabled	The server uses the spread spectrum function.

#### **Command Default**

The server uses the spread spectrum function.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(3)	This command was introduced.

## **Usage Guidelines**

Use this command to enable spread spectrum clock modulation. Spread Spectrum modulates the pulses produced by the clock on the motherboard in order to reduce the EMI (Electromagnetic Interference) generated by those pulses.

#### **Examples**

This example specifies that the server uses the spread spectrum function and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set Ck410bConfigSpreadSpectrumEnable Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description

# set CkeLowPolicy

To specify the DIMM power savings mode policy, use the **set CkeLowPolicy** command.

set CkeLowPolicy {Auto| Disabled| Fast| Slow}

## **Syntax Description**

Auto	The BIOS controls when a DIMM enters power saving mode based on the DIMM configuration.
Disabled	DIMMs do not enter power saving mode.
Fast	DIMMs enter power saving mode as often as possible.
Slow	DIMMs can enter power saving mode, but the requirements are higher. Therefore, DIMMs enter power saving mode less frequently.

#### **Command Default**

The BIOS controls when a DIMM enters power saving mode (Auto).

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Examples**

This example specifies that DIMMs enter power saving mode as often as possible and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set CkeLowPolicy Fast
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set cli output

To change the CLI output, use the set cli output command.

set cli output {default | yaml}

## **Syntax Description**

cli output	Specifies server CLI output.
default	Sets CLI output to default.
yaml	Sets CLI ouput to YAML (YAML Ain't Markup Language).

**Command Default** 

None

**Command Modes** 

Any command mode

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to change the CLI output to YAML:

server# set cli output yaml
CLI output format set to yaml
server#

## set coalescing-time

To set the time to wait between interrupts or the idle period that must be encountered before an interrupt is sent, use the **set coalescing-time** command.

set coalescing-time usec

#### **Syntax Description**

Usec The time to wait between interrupts or the idle period that must be countered before an interrupt is sent. The range is 1 to 65535 microseconds; the default is 125. To turn off coalescing enter 0 (zero).

**Command Default** 

The default is 125.

**Command Modes** 

Interrupt (/chassis/adapter/host-eth-if/interrupt)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the coalescing time:

```
Server# scope chassis
Server /chassis/ # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope interrupt
Server /chassis/adapter/host-eth-if/interrupt # set coalescing-time 65
Server /chassis/adapter/host-eth-if/interrupt *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
```

Command	Description
set coalescing-type	

# set coalescing-type

To set the coalescing type of the host Ethernet interface, use the **set coalescing-type** command.

set coalescing-type {idle| min}

## **Syntax Description**

idle	The system does not send an interrupt until there is a period of no activity lasting as least as long as the time specified in the coalescing time configuration.
min	The system waits for the time specified in the coalescing time configuration before sending another interrupt event.

#### **Command Default**

The default is min.

#### **Command Modes**

Interrupt (/chassis/adapter/host-eth-if/interrupt)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to set the coalescing type:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Srver /chassis/adapter/host-eth-if scope interrupt
Server /chassis/adapter/host-eth-if/interrupt # set coalescing-type idle
Server /chassis/adapter/host-eth-if/interrupt *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/interrupt #
```

Command	Description
set coalescing-time	

# set CoherencySupport

To specify whether the processor supports Intel VT-d Coherency, use the **set CoherencySupport** command.

set CoherencySupport {Disabled| Enabled}

## **Syntax Description**

Disabled	The processor does not support coherency.
Enabled	The processor uses Intel VT-d Coherency as required.

**Command Default** 

The processor does not support Intel VT-d Coherency.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example specifies that the processor supports VT-d Coherency and commits the transaction:

Server# scope bios

Server /bios # scope advanced

Server /bios/advanced # set CoherencySupport Enabled

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
show advanced	

# set community-str

To specify the SNMP community name, use the **set community-str** command.

set community-str community

#### **Syntax Description**

community	The SNMP v1 or v2c community name or SNMP v3 username.
-----------	--

#### **Command Default**

None

#### **Command Modes**

SNMP (/snmp)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.
1.4(1)	This command was moved from the fault command mode.

### **Usage Guidelines**

Use this command to specify the SNMP v1 or v2c community name or SNMP v3 username that CIMC includes on any trap messages it sends to the SNMP host. The name can be up to 18 characters.

SNMP must be enabled and saved before this command can be accepted.

## **Examples**

This example configures the SNMP parameters and commits the transaction:

```
Server# scope snmp
Server /snmp # set enabled yes
Server /snmp *# commit
Server /snmp # set community-str cimcpublic
Server /snmp *# set sys-contact "User Name <username@example.com> +1-408-555-1212"
Server /snmp *# set sys-location "San Jose, California"
Server /snmp *# commit
Server /snmp # show detail
SNMP Settings:
    SNMP Port: 161
    System Contact: User Name <username@example.com> +1-408-555-1212
    System Location: San Jose, California
   SNMP Community: cimcpublic
    SNMP Trap community: 0
    Enabled: yes
    SNMP Trap Version: 1
    SNMP Inform Type: inform
Server /snmp #
```

Command	Description
show snmp	

## set comport

To set the serial port through which the system routes serial over LAN (SoL) communications, use the **set comport** command.



This field is only available on some C-Series servers. If it is not available, the server always uses COM port 0 for SoL communication.

set comport {com0| com1}

## **Syntax Description**

com0	SoL communication is routed through COM port 0, an externally accessible serial port that supports either a physical RJ45 connection to an external device or a virtual SoL connection
	to a network device.
	If you select this option, the system enables SoL and disables the RJ45 connection, which means that the server can no longer support an external serial device.
com1	SoL communication is routed through COM port 1, an internal port accessible only through SoL.
	If you select this option, you can use SoL on COM port 1 and the physical RJ45 connection on COM port 0.

#### **Command Default**

None

#### **Command Modes**

Serial over LAN (/sol)

## **Command History**

Release	Modification
1.4(6)	This command was introduced.

## **Usage Guidelines**

Use this command to specify the COM port for serial port communications.



Note

Changing the comport setting disconnects any existing SoL sessions.

## **Examples**

This example configures SoL communication to be routed through COM port 1 on the serial port and commits the transaction:

```
Server# scope sol
Server /sol # set comport com1
Server /sol *# set enabled yes
Server /sol *# commit
Server /sol #
```

Command	Description
show sol	

# set ConfigSATAMode

To specify the mode in which the SATA controller runs, use the **set ConfigSATAMode** command.

set ConfigSATAMode {AHCI| Compatibility| Enhanced| S/W\_RAID}

## **Syntax Description**

The controller enables the Advanced Host Controller Interface (AHCI) and disables RAID.
The controller disables both AHCI and RAID and runs in IDE emulation mode.
The controller enables both AHCI and RAID.
The controller enables RAID and disables the AHCI.

#### **Command Default**

The controller enables both AHCI and RAID.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

# Usage Guidelin

Note

This command is not available on all models and configurations.

## **Examples**

This example specifies that the controller disables both AHCI and RAID and runs in IDE emulation mode and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ConfigSATAMode Compatibility
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set ConsoleRedir

To allow a serial port to be used for console redirection during POST and BIOS booting, use the **set ConsoleRedir** command.

set ConsoleRedir {Disabled| Serial Port A}

#### **Syntax Description**

Disabled	No console redirection occurs during POST.
Serial_Port_A	Enables serial port A for console redirection during POST. This option is valid for blade servers and rack-mount servers.

### **Command Default**

Disabled

#### **Command Modes**

Server Management BIOS (/bios/server-management)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

### **Usage Guidelines**

Use this command to allow a serial port to be used for console redirection during POST and BIOS booting. After the BIOS has booted and the operating system is responsible for the server, console redirection is irrelevant and has no effect.



Note

By enabling this option, you also disable the display of the Quiet Boot logo screen during POST.

#### **Examples**

This example configures the BIOS to allow serial port A to be used for console redirection during POST and BIOS booting and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set ConsoleRedir Serial_Port_A
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
show server-management	

# set CoreMultiProcessing

To set the state of logical processor cores in a package, use the **set CoreMultiProcessing** command.

set CoreMultiProcessing {All| number}

## **Syntax Description**

All	Enables multi processing on all logical processor cores.
number	The number of logical processor cores that can run on the server.

#### **Command Default**

Multi processing is enabled on all logical processor cores.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

To disable multi processing and have only one logical processor core running on the server, set *number* to 1. When only one logical processor core is running on the server, Hyper Threading is also disabled.



Note

We recommend that you contact your operating system vendor to make sure the operating system supports this feature.

### **Examples**

This example specifies that two processor cores can be run on the server and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set CoreMultiProcessing 2
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set cos

To specify the CoS value to be marked by an interface, use the **set cos** command.

set cos cos-value

#### **Syntax Description**

cos-value	Specifies a CoS value to be marked.

#### **Command Default**

None

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify the class of service (CoS) to be marked on received packets unless the interface is configured to trust host CoS. Valid CoS values are 0 to 6; the default is 0. Higher values indicate more important traffic.

### **Examples**

This example shows how to specify a CoS value of 5 for the Ethernet host interface eth0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # set cos 5
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description
set trust-host-cos	

# set CpuEngPerfBias

To specify whether system performance or energy efficiency is more important on this server, use the **set CpuEngPerfBias** command.

set CpuEngPerfBias {Balanced Energy| Balanced Performance| Energy Efficient| Performance}

## **Syntax Description**

Balanced_Energy	Balanced, but energy efficiency is more important.
Balanced_Performance	Balanced, but performance is more important.
Energy_Efficient	Energy efficiency is most important.
Performance	Performance is most important.

#### **Command Default**

**Balanced Performance** 

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(4)	This command was introduced.

# Usage Guidelin

Note

The server ignores the setting for this command unless **Power Management** is set to **Custom** in the GUI, or the **set CPUPowerManagement** command is set to **Custom** in the CLI.

In addition, some operating systems, such as Windows 2008, ignore this parameter in favor of their own power plan.

### **Examples**

This example specifies that energy efficiency is most important on this server and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set CpuEngPerfBias Energy_Efficient
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set CPUPowerManagement	

# set CpuFreqFloor

To specify whether the CPU is allowed to drop below the maximum non-turbo frequency when idle, use the **set CpuFreqFloor** command.

set CpuFreqFloor {Disabled| Enabled}

## **Syntax Description**

Disabled	The CPU can drop below the maximum non-turbo frequency when idle. This option decreases power consumption but may reduce system performance.
Enabled	The CPU cannot drop below the maximum non-turbo frequency when idle. This option improves system performance but may increase power consumption.

### **Command Default**

The CPU can drop below the maximum non-turbo frequency when idle.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

### **Command History**

Release	Modification
1.4(5)	This command was introduced.

## **Examples**

This example configures the CPU to prevent dropping below the maximum non-turbo frequency when idle and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set CpuFreqFloor Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set CPUPerformance

To set the CPU performance profile for the server, use the **set CPUPerformance** command.

set CPUPerformance {Custom| Enterprise| HPC| High\_Throughput}

## **Syntax Description**

Custom	All performance profile options can be configured from the BIOS setup on the server.
Enterprise	Only the Data Cache Unit (DCU) IP Prefetcher is enabled. All other options are disabled.
НРС	Data Reuse Optimization is disabled and all other options are enabled. This setting is also known as high performance computing (HPC).
High_Throughput	All options are enabled.

#### **Command Default**

The processor classifies memory areas.

### **Command Modes**

Advanced BIOS (/bios/advanced)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

### **Usage Guidelines**

Use this command to set the CPU performance profile for the server. The performance profile consists of the following options:

- Adjacent Cache-Line Prefetch
- Data Reuse Optimization
- Data Cache Unit (DCU) Streamer Prefetcher
- DCU IP Prefetcher
- Hardware Prefetcher

When the Custom option is selected, you can also configure the listed options using their individual commands.

## **Examples**

This example specifies that the processor uses the Custom performance profile and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set CPUPerformance Custom
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set AdjacentCacheLinePrefetch	
set DcuIpPrefetch	
set DcuStreamerPrefetch	
set HardwarePrefetch	

# set CPUPowerManagement

To configure the CPU power management settings, use the **set CPUPowerManagement** command.

set CPUPowerManagement {Custom| Disabled| Energy\_Efficient}

#### **Syntax Description**

Custom	The server uses the individual settings for a set of BIOS parameters.
Disabled	The server performs no CPU power management.
Energy_Efficient	The server determines the best settings for CPU power management.

#### **Command Default**

The server determines the best settings for CPU power management.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(4)	This command was introduced.

### **Usage Guidelines**

Use this command to configure the CPU power management settings for the following options:

- Enhanced Intel Speedstep Technology
- Intel Turbo Boost Technology
- Processor Power State C6

The CPU power management setting can be one of the following:

- **Custom**—The server uses the individual settings for the BIOS parameters mentioned above. You must select this option if you want to change any of these BIOS parameters.
- **Disabled**—The server does not perform any CPU power management and any settings for the BIOS parameters mentioned above are ignored.
- **Energy\_Efficient**—The server determines the best settings for the BIOS parameters mentioned above and ignores the individual settings for these parameters.

#### **Examples**

This example enables the individual settings for the related BIOS parameters and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set CPUPowerManagement Custom
```

Server /bios/advanced \*# commit Server /bios/advanced #

Command	Description
set EnhancedIntelSpeedStep	
set IntelTurboBoostTech	
set ProcessorC6Report	

## set cq-count

To set the number of completion queue resources to allocate, use the set cq-count command.

set cq-count count

#### **Syntax Description**

count	The number of completion queue resources to allocate. The range is 1 to 512.
Court	The number of completion queue resources to unocute. The runge is 1 to 512.

#### **Command Default**

The default count is 5.

#### **Command Modes**

Completion queue (/chassis/adapter/host-eth-if/comp-queue)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Usage Guidelines**

In general, the number of completion queues equals the number of transmit queues plus the number of receive queues.

## **Examples**

This example shows how to set the number of completion queue resources to allocate:

```
Server # scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope comp-queue
Server /chassis/adapter/host-eth-if/comp-queue # set cq-count 59
Server /chassis/adapter/host-eth-if/comp-queue *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/comp-queue #
```

Command	Description
show comp-queue	

## set dc

To specify an Active Directory domain controller, use the **set dc** command.

set dcn dc-host

## **Syntax Description**

n	The index of the AD domain controller entry.	
dc-host	The host name or IP address of the AD domain controller.	

## **Command Default**

None

## **Command Modes**

LDAP (/ldap)

### **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify the host name or IP address of an Active Directory (AD) domain controller (DC). CIMC can store up to three DCs for AD. Use an *index* number of 1 to 3 to store the server information.

### **Examples**

This example shows how to store an AD domain controller IP address as DC number 2:

```
Server# scope ldap
Server /ldap # set dc2 192.0.20.123
Server /ldap* # commit
Server /ldap #
```

Command	Description
set gc	
show ldap	

# set DculpPrefetch

To enable or disable the DCU IP prefetcher, use the set DcuIpPrefetch command.

set DcuIpPrefetch {Disabled| Enabled}

## **Syntax Description**

Disabled	The DCU IP prefetcher is disabled.
Enabled	The DCU IP prefetcher is enabled.

#### **Command Default**

The DCU IP prefetcher is enabled.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(4)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether the processor uses the Data Cache Unit (DCU) Instruction Pointer-based (IP) Prefetch mechanism to analyze historical cache access patterns and preload the most relevant lines in the L1 cache. This can be one of the following:

- **Disabled**—The processor does not preload any cache data.
- **Enabled**—The DCU IP prefetcher preloads the L1 cache with the data it determines to be the most relevant.

### **Examples**

This example enables the DCU IP prefetcher and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set DcuIpPrefetch Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set CPUPerformance	
set DcuStreamerPrefetch	

## set DcuStreamerPrefetch

To specify whether the processor uses the Data Cache Unit (DCU) Prefetch mechanism, use the **set DcuStreamerPrefetch** command.

set DcuStreamerPrefetch {Disabled| Enabled}

## **Syntax Description**

Disabled	The DCU Prefetch mechanism is disabled.
Enabled	The DCU Prefetch mechanism is enabled.

#### **Command Default**

The DCU Prefetch mechanism is enabled.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(4)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether the processor uses the Data Cache Unit (DCU) Prefetch mechanism to determine if the processor should fetch the next line in the L1 cache before the line is actually requested. This can be one of the following:

- **Disabled**—The processor does not try to anticipate cache read requirements and only fetches explicitly requested lines.
- **Enabled**—The DCU prefetcher analyzes the cache read pattern and prefetches the next line in the cache if it determines that it may be needed.

#### **Examples**

This example enables the DCU Prefetch mechanism and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set DcuStreamerPrefetch Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set CPUPerformance	
set DcuIpPrefetch	

# set delay

To specify whether server power is restored after a fixed or random time, use the set delay command.

set delay {fixed| random}

#### **Syntax Description**

fixed	Server power is restored after a fixed time.
random	Server power is restored after a random time.

#### **Command Default**

Server power is restored after a fixed time.

#### **Command Modes**

Chassis (/chassis)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether server power is restored after a fixed or random time after an outage. When the selected action is **fixed**, the delay time is configured by the **set delay-value** command.

### **Examples**

This example sets the power restore policy to power-on with a fixed delay of 180 seconds (3 minutes) and commits the transaction:

```
Server# scope chassis
Server /chassis # set policy power-on
Server /chassis *# set delay fixed
Server /chassis *# set delay-value 180
Server /chassis *# commit
Server /chassis # show detail
Chassis:
    Power: on
    Serial Number: QCI1404A1IT
    Product Name: UCS C200 M1
    PID : R200-1120402
    UUID: 01A6E738-D8FE-DE11-76AE-8843E138AE04
    Locator LED: off
    Description: Testing power restore
    Power Restore Policy: power-on
    Power Delay Type: fixed
    Power Delay Value(sec): 180
Server /chassis #
```

Command	Description
set policy	
set delay-value	

# set delay-value

To specify the delay time for restoring server power after an outage, use the set delay-value command.

set delay-value delay

#### **Syntax Description**

delay	The delay time in seconds.
actay	The delay time in seconds.

**Command Default** 

The default delay is 0 seconds.

**Command Modes** 

Chassis (/chassis)

#### **Command History**

Release	Modification	
1.3(1)	This command was introduced.	

#### **Usage Guidelines**

Use this command to specify the delay time in seconds for restoring server power after an outage. The range is 0 to 240; the default is 0.

This command is operative only when the power restore policy is **power-on** with a fixed delay.

### **Examples**

This example sets the power restore policy to power-on with a fixed delay of 180 seconds (3 minutes) and commits the transaction:

```
Server# scope chassis
Server /chassis # set policy power-on
Server /chassis *# set delay fixed
Server /chassis *# set delay-value 180
Server /chassis *# commit
Server /chassis # show detail
Chassis:
    Power: on
    Serial Number: QCI1404A1IT
    Product Name: UCS C200 M1
    PID : R200-1120402
    UUID: 01A6E738-D8FE-DE11-76AE-8843E138AE04
    Locator LED: off
    Description: Testing power restore
    Power Restore Policy: power-on
    Power Delay Type: fixed Power Delay Value(sec): 180
Server /chassis #
```

Command	Description
set policy	
set delay	

# set DemandScrub

To specify whether the system corrects single bit memory errors encountered when the CPU or I/O makes a demand read, use the **set DemandScrub** command.

set DemandScrub {Disabled| Enabled}

## **Syntax Description**

Disabled	Single bit memory errors are not corrected.
Enabled	Single bit memory errors are corrected in memory and the corrected data is set in response to the demand read.

**Command Default** 

Single bit memory errors are corrected.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(5)	This command was introduced.

## **Examples**

This example disables single bit memory errors and commits the transaction:

Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set DemandScrub Disabled
Server /bios/advanced \*# commit
Server /bios/advanced #

Command	Description
show advanced	

# set description (chassis)

To set up a description for the chassis, use the **set description** command in chassis mode.

set description chassis-description

## **Syntax Description**

chassis-description	The description of the chassis. The	e range of valid values is 1 to 64.

## **Command Default**

None

### **Command Modes**

Chassis (/chassis)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to:

```
server# scope chassis
server /chassis # set description testServer
server /chassis* # commit
server /chassis #
```

Command	Description
show chassis	

# set dhcp-enabled

To specify whether the CIMC uses DHCP to obtain an IP address, use the set dhcp-enabled command.

set dhcp-enabled {no| yes}

#### **Syntax Description**

no	The CIMC does not use DHCP to obtain an IP address.
yes	The CIMC uses DHCP to obtain an IP address.

#### **Command Default**

The CIMC does not use DHCP to obtain an IP address.

#### **Command Modes**

Network (/cimc/network)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## Usage Guidelin

Note

If DHCP is enabled, we recommend that the DHCP server be configured to reserve a single IP address for the CIMC. If the CIMC is reachable through multiple ports on the server, the single IP address must be reserved for the full range of MAC addresses of those ports.

## **Examples**

This example specifies that the CIMC uses DHCP to obtain an IP address:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set dhcp-enabled yes
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
show network	

## set DirectCacheAccess

To specify whether the processor can increase I/O performance by placing data from I/O devices directly into the processor cache, use the **set DirectCacheAccess** command.

set DirectCacheAccess {Disabled| Enabled}

## **Syntax Description**

Disabled	Data from I/O devices is not placed directly into the processor cache.
Enabled	Data from I/O devices is placed directly into the processor cache.

#### **Command Default**

Data from I/O devices is placed directly into the processor cache.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example specifies that the processor does not place data from I/O devices directly into the processor cache and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set DirectCacheAccess Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set DisableSCU

To specify whether the onboard software RAID controller is available to the server, use the **set DisableSCU** command.

set DisableSCU {Disabled| Enabled}

## **Syntax Description**

Disabled	The software RAID controller is not available.
Enabled	The software RAID controller is available.

#### **Command Default**

The software RAID controller is not available.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(5)	This command was introduced.

## **Examples**

This example specifies that the onboard software RAID controller is available to the server and commits the transaction:

Server# scope bios

Server /bios # scope advanced

Server /bios/advanced # set DisableSCU Enabled

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
show advanced	

# set dns-use-dhcp

To specify whether the CIMC uses DHCP to obtain DNS server addresses, use the **set dns-use-dhcp** command.

set dns-use-dhcp {no| yes}

## **Syntax Description**

no	The CIMC does not use DHCP to obtain DNS server addresses.
yes	The CIMC uses DHCP to obtain DNS server addresses.

## **Command Default**

The CIMC does not use DHCP to obtain DNS server addresses.

#### **Command Modes**

Network (/cimc/network)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## Usage Guidelin

Note

If DHCP is enabled, we recommend that the DHCP server be configured to reserve a single IP address for the CIMC. If the CIMC is reachable through multiple ports on the server, the single IP address must be reserved for the full range of MAC addresses of those ports.

## **Examples**

This example specifies that the CIMC uses DHCP to obtain DNS server addresses:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set dns-use-dhcp yes
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
show network	

## set domain

To specify the Active Directory domain for an authorization group, use the **set domain** command.

set domain domain-name

#### **Syntax Description**

domain-name	The Active Directory domain in which the group must
	reside.

#### **Command Default**

None

#### **Command Modes**

LDAP role group (/ldap/role-group)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

### **Usage Guidelines**

Use this command to specify the Active Directory (AD) domain for an authorization group.

## **Examples**

This example configures the domain name and other settings for an AD authorization group:

```
Server# scope ldap
Server /ldap # set group-auth yes
Server /ldap *# scope role-group 5
Server /ldap/role-group *# set name Training
Server /ldap/role-group *# set domain example.com
Server /ldap/role-group *# set role readonly
Server /ldap/role-group # commit
Server /ldap/role-group #
```

Command	Description
scope role-group	

## set enabled

To enable or disable functions and actions on the server, use the **set enabled** command.

set enabled {no| yes}

## **Syntax Description**

no	Disables the function or action.
yes	Enables the function or action.

### **Command Default**

See the Usage Guidelines.

### **Command Modes**

CIMC log server (/cimc/log/server)

HTTP (/http)

IP blocking (/cimc/chassis/ipblocking)

IPMI (/ipmi)

Keyboard Video Mouse (/kvm)

LDAP (/ldap)

Secure shell (/ssh)

Serial over LAN (/sol)

Trap destination (/fault/trap-destination)

User (/user)

Virtual media (/vmedia)

XML API (/xmlapi)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.
1.1(2)	This command was introduced for the CIMC log server command mode.
1.4(1)	This command was introduced for the XML API command mode.

## **Usage Guidelines**

Use this command to enable or disable a function or action. For the supported command modes, the following actions are enabled when **yes** is selected:

- CIMC log server Enables the sending of CIMC log entries to a remote syslog server. The default is disabled.
- HTTP Enables HTTP services on the server. The default is enabled.
- IP blocking Enables the blocking of login after several failed attempts. The default is disabled.
- IPMI Enables IPMI on the server. The default is enabled.
- Keyboard Video Mouse Enables KVM connections to CIMC. The default is enabled.
- LDAP Enables IPMI services on the server. The default is disabled.
- Secure shell Enables SSH services on the server. The default is enabled.
- Serial over LAN Enables SoL on the server. The default is disabled.
- Trap destination Enables SNMP trap destination services. The default is disabled.
- User Enables the user account.
- Virtual media Enables virtual media services on the server. The default is enabled.
- XML API Enables XML API access to CIMC on the server.

#### **Examples**

This example shows how to configure a remote syslog server profile and enable the sending of CIMC log entries:

```
server# scope cimc
server /cimc # scope log
server /cimc/log # scope server 2
server /cimc/log/server # set server-ip 192.0.2.34
server /cimc/log/server *# set enabled yes
server /cimc/log/server *# commit
server /cimc/log/server #
```

## **Related Commands**

Command Description

# set encrypted

To enable or disable the encryption of information, use the **set encrypted** command.

set encrypted {no | yes}

## **Syntax Description**

no	Information is not encrypted.
yes	Information is encrypted.

## **Command Default**

Video information sent through the KVM is not encrypted.

The Active Directory is not encrypted. Virtual media data is not encrypted.

#### **Command Modes**

KVM (/kvm)

LDAP (/ldap)

Virtual media (/vmedia)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Usage Guidelines**

Use this command to enable or disable the encryption of data in the following command modes:

- KVM command mode Enables or disables the encryption of video information sent through the KVM.
- LDAP command mode Enables or disables the encryption of the Active Directory.
- Virtual media command mode Enables or disables the encryption of virtual media data.

### **Examples**

This example enables the encryption of video information sent through the KVM:

```
server# scope kvm
server /kvm # set enabled yes
server /kvm* # set encrypted yes
server /kvm* # commit
server /kvm #
```

Command	Description
show kvm	

Command	Description
show ldap	
show vmedia	

# set encryption-key

To specify the encryption key for IPMI communications, use the set encryption-key command.

set encryption-key encryption-key

## **Syntax Description**

encryption-key	The encryption key for IPMI communications. The key value must be 40
	hexadecimal numbers.

### **Command Default**

None

#### **Command Modes**

IPMI (/ipmi)

### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to set the IPMI encryption key:

```
server# scope ipmi
server /ipmi # set enabled yes
server /ipmi* # set encryption-key a9 62 b5 0a 68 6e e3 02 72 ce af f1 39 f8 1e 05 f5
19 d5 e1 7f f4 71 b9 9a 41 be e3 f5 06 4e cc 0f 63 67 2e a2 9c 74 d0
server /ipmi* # commit
server /ipmi #
```

Command	Description
show ipmi	

# set EnhancedIntelSpeedStep

To specify whether the processor uses Enhanced Intel SpeedStep Technology, use the **set EnhancedIntelSpeedStep** command.

set EnhancedIntelSpeedStep {Disabled| Enabled}

#### **Syntax Description**

Disabled	The processor never dynamically adjusts its voltage or frequency.
Enabled	The processor uses Enhanced Intel SpeedStep Technology if required.

#### **Command Default**

The processor uses Enhanced Intel SpeedStep Technology if required.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Enhanced Intel SpeedStep Technology allows the system to dynamically adjust the processor voltage and core frequency. This technology can result in decreased average power consumption and decreased average heat production.

We recommend that you contact your operating system vendor to make sure the operating system supports this feature.



Note

The server ignores the setting for this command unless **Power Management** is set to **Custom** in the GUI, or the **set CPUPowerManagement** command is set to **Custom** in the CLI.

### **Examples**

This example specifies that the processor never dynamically adjusts its voltage or frequency and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set EnhancedIntelSpeedStep Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set CPUPowerManagement	

## set error-count-threshold

To specify the number of errors that can occur before CIMC decides that the Cisco Flexible Flash card has failed, use the **set error-count-threshold** command.

set error-count-threshold count

#### **Syntax Description**

count	Enter a number between 0 and 255.

#### **Command Default**

#### **Command Modes**

FlexFlash operational profile (/chassis/flexflash/operational-profile)

## **Command History**

Release	Modification
1.3(3)	This command was introduced.

### **Usage Guidelines**

Use this command to specify the number of errors that can occur before CIMC decides that the Cisco Flexible Flash card has failed. Once this threshold has been reached, you must reset the Cisco Flexible Flash card before CIMC attempts to access it again.

Enter an integer between 1 and 255, or enter 0 (zero) if you want CIMC to continue using the card no matter how many errors it encounters.

## **Examples**

This example shows how to set the error count threshold to 100 for the first flash device:

```
Server# scope chassis
Server /chassis # scope flexflash FlexFlash-0
Server /chassis/flexflash # scope operational-profile
Server /chassis/flexflash/operational-profile # set error-count-threshold 100
Server /chassis/flexflash/operational-profile *# commit
Server /chassis/flexflash/operational-profile #
```

Command	Description
scope operational-profile	

## set error-detect-timeout

To set the error detection timeout value (EDTOV), use the set error-detect-timeout command.

set error-detect-timeout msec

## **Syntax Description**

msec Specifies the error detect timeout value (EDTOV), the number of milliseconds to wait before the system assumes that an error has occurred. The range is 1000 to 100000; the default is 2000 milliseconds.

**Command Default** 

The default is 2000 milliseconds.

**Command Modes** 

Fibre Channel host interface (/chassis/adapter/host-fc-if)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to set the error detection timeout value to 5000 milliseconds:

```
Server# scope chassis
Server /chassis/ # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # set error-detect-timeout 5000
Server /chassis/adapter/host-fc-if *# commit
Server /chassis/adapter/host-fc-if #
```

### **Related Commands**

Command	Description
set resource-allocation-timeout	

Cisco UCS C-Series Servers Integrated Management Controller CLI Command Reference, Release 1.4

## set ExecuteDisable

To classify memory areas on the server to specify where application code can execute, use the **set ExecuteDisable** command.

set ExecuteDisable {Disabled| Enabled}

#### **Syntax Description**

Disabled	The processor does not classify memory areas.
Enabled	The processor classifies memory areas.

#### **Command Default**

The processor classifies memory areas.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

By using memory classification, the processor disables code execution if a malicious worm attempts to insert code in the buffer. This setting helps to prevent damage, worm propagation, and certain classes of malicious buffer overflow attacks.



Note

We recommend that you contact your operating system vendor to make sure the operating system supports this feature.

### **Examples**

This example specifies that the processor does not classify memory and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ExecuteDisable Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set fail-count

To specify a limit on the number of unsuccessful login attempts, use the set fail-count command.

set fail-count fail-count

## **Syntax Description**

fail-count	The number of times a user can attempt to log in unsuccessfully before the system
	locks that user out for a specified length of time. The range of valid values is 3 to 10.

#### **Command Default**

The default failure count is 5 attempts.

## **Command Modes**

IP blocking (/cimc/network/ipblocking)

#### **Command History**

Release	Modification
1.0(1X)	This command was introduced.

#### **Usage Guidelines**

The number of unsuccessful login attempts must occur within the time frame specified in the IP Blocking Fail Window setting.

## **Examples**

This example sets the IP blocking failure count to 3 attempts:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # scope ipblocking
server /cimc/network/ipblocking # set enable yes
server /cimc/network/ipblocking* # set fail-count 3
server /cimc/network/ipblocking* # commit
server /cimc/network/ipblocking #
```

Command	Description
set fail-window	
show ipblocking	

## set fail-window

To specify a time window for unsuccessful login attempts, use the set fail-window command.

set fail-window fail-window

## **Syntax Description**

fail-window	The length of time, in seconds, in which the unsuccessful login attempts must occur	
	in order for the user to be locked out. The range of valid values is 60 to 120.	

#### **Command Default**

The default failure window is 60 seconds.

#### **Command Modes**

IP blocking (/cimc/network/ipblocking)

#### **Command History**

Release	Modification
1.0(1X)	This command was introduced.

#### **Examples**

This example sets the IP blocking failure window to 90 seconds:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # scope ipblocking
server /cimc/network/ipblocking # set enable yes
server /cimc/network/ipblocking* # set fail-window 90
server /cimc/network/ipblocking* # commit
server /cimc/network/ipblocking #
```

Command	Description
set fail-count	
show ipblocking	

# set fc-rq-ring-size

To specify the receive queue ring size for the Fibre Channel interface, use the set fc-rq-ring-size command.

set fc-rq-ring-size size

## **Syntax Description**

size	The Fibre Channel receive queue ring size. Specify a number between 64
	and 128.

#### **Command Default**

The receive queue ring size is 64.

## **Command Modes**

Fibre Channel receive queue (/chassis/adapter/host-fc-if/recv-queue)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to set the receive queue ring size to 128 on interface fc0 on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope recv-queue
Server /chassis/adapter/host-fc-if/recv-queue # set fc-rq-ring-size 128
Server /chassis/adapter/host-fc-if/recv-queue *# commit
Server /chassis/adapter/host-fc-if/recv-queue #
```

Command	Description
show recv-queue	

# set fc-wq-ring-size

To specify the transmit queue ring size for the Fibre Channel interface, use the **set fc-wq-ring-size** command.

set fc-wq-ring-size size

## **Syntax Description**

size	The Fibre Channel transmit queue ring size. Specify a number between
	64 and 128.

#### **Command Default**

The transmit queue ring size is 64.

#### **Command Modes**

Fibre Channel transmit queue (/chassis/adapter/host-fc-if/trans-queue)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to set the transmit queue ring size to 128 on interface fc0 on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope trans-queue
Server /chassis/adapter/host-fc-if/trans-queue # set fc-wq-ring-size 128
Server /chassis/adapter/host-fc-if/trans-queue *# commit
Server /chassis/adapter/host-fc-if/trans-queue #
```

Command	Description
show trans-queue	

# set fcp-error-recovery

To set the FCP Error Recovery, use the set fcp-error-recovery command.

set fcp-error-recovery {disable| enable}

#### **Syntax Description**

disable	Disables FCP Error Recovery.
enable	Enables FCP Error Recovery.

#### **Command Default**

The default is disable.

#### **Command Modes**

Error-recovery (/chassis/adapter/host-fc-if/error-recovery)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

## **Examples**

This example shows how to set the FCP-error recovery:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope error-recovery
Server /chassis/adapter/host-fc-if/error-recovery # set fcp-error-recovery enable
Server /chassis/adapter/host-fc-if/error-recovery *# commit
Committed host-fc-if fc0 settings will take effect upon the next server reset
Server /chassis/adapter/host-fc-if/error-recovery #
```

Command	Description
set link-down-timeout	
set port-down-io-retry-count	

## set fip-mode

To enable or disable FCoE Initialization Protocol (FIP) on the adapter card, use the set fip-mode command.

set fip-mode {disabled| enabled}

### **Syntax Description**

disabled	Disables FIP mode on the card.
enabled	Enables FIP mode on the card.

**Command Default** 

FIP mode is enabled.

**Command Modes** 

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

## Usage Guidelin

Note

Note: We recommend that you disable this option only when explicitly directed to do so by a technical support representative.

## **Examples**

This example shows how to enable FIP mode on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # set fip-mode enabled
Server /chassis/adapter *# commit
Server /chassis/adapter #
```

Command	Description
show adapter detail	

# set flogi-retries

To specify the fabric login (FLOGI) retries value, use the set flogi-retries command.

set flogi-retries {infinite| count}

## **Syntax Description**

infinite	Specifies infinite FLOGI retries.
count	Specifies the number of FLOGI retries. Enter a number between 0 and 4294967295.

#### **Command Default**

The default is infinite retries.

#### **Command Modes**

Port-f-logi (/chassis/adapter/host-fc-if/port-f-logi)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

### **Examples**

This example shows how to set the fabric login retries:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope port-f-logi
Server /chassis/adapter/host-fc-if/port-f-logi # set flogi-retries 4294967295
Server /chassis/adapter/host-fc-if/port-f-logi *# commit
Server /chassis/adapter/host-fc-if/port-f-logi #
```

Command	Description
set flogi-timeout	

## set flogi-timeout

To set the fabric login (FLOGI) timeout value, use the set flogi-timeout command.

set flogi-timeout msec

#### **Syntax Description**

msec	The number of milliseconds that the system waits before it tries to log in aga	
	The range is 1 to 255000.	

#### **Command Default**

The default *msec* value is 2000 milliseconds.

#### **Command Modes**

Port-f-logi (/chassis/adapter/host-fc-if/port-f-logi)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the fabric login timeout:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope port-f-logi
Server /chassis/adapter/host-fc-if/port-f-logi # set flogi-timeout 10003
Server /chassis/adapter/host-fc-if/port-f-logi *# commit
Server /chassis/adapter/host-fc-if/port-f-logi #
```

Command	Description
set flogi-retries	

## set FlowCtrl

To specify whether a handshake protocol is used for flow control, use the set FlowCtrl command.

set FlowCtrl {None| RTS-CTS}

### **Syntax Description**

None	No flow control is used.
RTS-CTS	RTS/CTS is used for flow control.

## **Command Default**

No flow control is used.

#### **Command Modes**

Server Management BIOS (/bios/server-management)

#### **Command History**

Release	Modification	
1.3(1)	This command was introduced.	

## **Usage Guidelines**

Use this command to specify whether a handshake protocol is used for flow control. Request to Send / Clear to Send (RTS/CTS) helps to reduce frame collisions that can be introduced by a hidden terminal problem.



Note

This setting must match the setting on the remote terminal application.

#### **Examples**

This example configures the BIOS to use RTS/CTS protocol for flow control and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set FlowCtrl RTS-CTS
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
show server-management	

## set FRB-2

To specify whether the FRB2 timer is used by CIMC to recover the system if it halts during POST, use the **set FRB-2** command.

#### set FRB-2 {Disabled| Enabled}

#### **Syntax Description**

Disabled	The FRB2 timer is not used.
Enabled	The FRB2 timer is started during POST and used to recover the system if necessary.

#### **Command Default**

The FRB2 timer is started during POST and used to recover the system if necessary.

#### **Command Modes**

Server Management BIOS (/bios/server-management)

### **Command History**

Release	Modification	
1.3(1)	This command was introduced.	

## **Usage Guidelines**

Use this command to specify whether the Fault Resilient Booting (FRB) level 2 timer is used by CIMC to recover the system from a watchdog timeout during power-on self test (POST).

#### **Examples**

This example configures the BIOS to not use the FRB2 timer to recover if a watchdog timeout occurs during POST, and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set FRB-2 Disabled
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
show server-management	

## set gc

To specify an Active Directory global catalog server, use the set gc command.

set gcn gc-host

## **Syntax Description**

n	The index of the AD global catalog server entry.	
gc-host	The host name or IP address of the AD global catalog server.	

## **Command Default**

None

#### **Command Modes**

LDAP (/ldap)

#### **Command History**

Release	Modification	
1.4(1)	This command was introduced.	

## **Usage Guidelines**

Use this command to specify the host name or IP address of an Active Directory (AD) global catalog (GC) server. CIMC can store up to three GC servers for AD. Use an *index* number of 1 to 3 to store the server information.

## **Examples**

This example shows how to store an AD global catalog server IP address as GC server number 2:

```
Server# scope ldap
Server /ldap # set gc2 192.0.20.11
Server /ldap* # commit
Server /ldap #
```

Command	Description
set dc	
show ldap	

## set group-auth

To enable Active Directory authorization groups, use the **set group-auth** command.

set group-auth {yes| no}

#### **Syntax Description**

yes	AD authorization groups are enabled.
no	AD authorization groups are disabled.

#### **Command Default**

AD authorization groups are disabled.

#### **Command Modes**

LDAP (/ldap)

#### **Command History**

Release	Modification	
1.4(1)	This command was introduced.	

## **Usage Guidelines**

Use this command to enable Active Directory (AD) authorization groups. When AD groups are enabled, user authentication is also done on the group level for users who are not found in the local user database or who are not individually authorized to use CIMC in the Active Directory.

#### **Examples**

This example shows how to enable AD authorization groups:

```
Server# scope ldap
Server /ldap # set group-auth yes
Server /ldap* # commit
Server /ldap #
```

Command	Description
scope role-group	

## set HardwarePrefetch

To specify whether the processor uses the Intel hardware prefetcher, use the **set HardwarePrefetch** command.

set HardwarePrefetch {Disabled| Enabled}

## **Syntax Description**

Disabled	The hardware prefetcher is not used.
Enabled	The hardware prefetcher is used when cache issues are detected.

#### **Command Default**

The hardware prefetcher is used when cache issues are detected.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether the processor uses the Intel hardware prefetcher to fetch streams of data and instruction from memory into the unified second-level cache when necessary.

You must select the **Custom** option in the **set CPUPerformance** command in order to specify this value. For any value other than **Custom**, this setting is overridden by the setting in the selected CPU performance profile.

### **Examples**

This example specifies that the processor uses the hardware prefetcher when necessary and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set CPUPerformance Custom
Server /bios/advanced # set HardwarePrefetch Enable
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set CPUPerformance	
show advanced	

## set hostname

To specify the host name of the server, use the **set hostname** command.

set hostname host-name

## **Syntax Description**

host-name	The host name of the server. The host name can contain up to 63 characters, and
	will be used as the CLI prompt.

#### **Command Default**

None

#### **Command Modes**

Network (/cimc/network)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example sets the host name of the server to SanJose:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set hostname SanJose
server /cimc/network* # commit
SanJose /cimc/network #
```

Command	Description
show network	

# set http-port

To set the port number for Hyper Text Transfer Protocol (HTTP) services on the server, use the **set http-port** command.

set http-port port-number

## **Syntax Description**

port-number	The HTTP port number of the server. The range of valid values is 1 to 65536.

**Command Default** 

The default HTTP port number is 80.

**Command Modes** 

HTTP (/http)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to set the HTTP port number to 8080:

```
Server# scope http
Server /http # set http-port 8080
Server /http* # commit
Server /http #
```

Command	Description
show http-port	
show https-port	

# set http-redirect

To redirect HTTP requests to HTTPS on the server, use the **set http-redirect** command.

set http-redirect {yes| no}

## **Syntax Description**

yes	HTTP requests are redirected to HTTPS.
no	HTTP requests are not redirected to HTTPS.

**Command Default** 

HTTP requests are redirected to HTTPS.

**Command Modes** 

HTTP (/http)

## **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Examples**

This example shows how to redirect HTTP requests to HTTPS on the server:

```
Server# scope http
Server /http # set http-redirect yes
Server /http* # commit
Server /http #
```

Command	Description
set https-port	

# set https-port

To set the port number for Hyper Text Transfer Protocol (HTTPS) services on the server, use the **set https-port** command in http mode.

set https-port port-number

## **Syntax Description**

port-number	The HTTPS port number of the server. The range of valid values is 1 to
	65536.

**Command Default** 

The default port number is 443.

**Command Modes** 

HTTP (/http)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to set the HTTPS port number:

```
server# scope http
server /http # set https-port 443
server /http* # commit
server /http #
```

Description	Command

## set inform-type

To specify whether SNMP notification messages are sent as simple traps or as inform requests, use the **set inform-type** command.

set inform-type {inform| trap}

## **Syntax Description**

inform	SNMP notification messages are sent as inform requests.
trap	SNMP notification messages are sent as simple traps.

#### **Command Default**

SNMP notification messages are sent as simple traps.

#### **Command Modes**

SNMP (/snmp)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether SNMP notification messages are sent as simple traps or as inform requests requiring acknowledgment by the receiver.

SNMP must be enabled and saved before this command can be accepted.

## **Examples**

This example specifies that notifications are sent as inform requests and commits the transaction:

```
scope snmp
Server /snmp # set enabled yes
Server /snmp *# commit
Server /snmp # set inform-type inform
Server /snmp *# commit
Server /snmp # show detail
SNMP Settings:
    SNMP Port: 161
    System Contact:
    System Location:
    SNMP Community:
    SNMP Trap community: public-trap
    Enabled: yes
    SNMP Trap Version: 1
    SNMP Inform Type: inform
Server /snmp #
```

Command	Description
show snmp	

## set IntelHyperThread

To specify whether the processor uses Intel Hyper-Threading Technology, use the **set IntelHyperThread** command.

set IntelHyperThread {Disabled| Enabled}

#### **Syntax Description**

Disabled	The processor does not permit hyperthreading.
Enabled	The processor allows for the parallel execution of multiple threads.

#### **Command Default**

The processor allows for the parallel execution of multiple threads.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Intel Hyper-Threading Technology allows multithreaded software applications to execute threads in parallel within each processor.



Note

We recommend that you contact your operating system vendor to make sure the operating system supports this feature.

#### **Examples**

This example specifies that the processor does not permit hyperthreading and commits the transaction:

Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set IntelHyperThread Disabled
Server /bios/advanced \*# commit
Server /bios/advanced #

Command	Description
show advanced	

## set IntelTurboBoostTech

To specify whether the processor uses Intel Turbo Boost Technology, use the **set IntelTurboBoostTech** command.

set IntelTurboBoostTech {Disabled| Enabled}

#### **Syntax Description**

Disabled	The processor does not automatically increase its frequency.
Enabled	The processor uses Intel Turbo Boost Technology if required.

#### **Command Default**

The processor uses Intel Turbo Boost Technology if required.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Intel Turbo Boost Technology allows the processor to automatically increase its frequency if it is running below power, temperature, or voltage specifications.



Note

The server ignores the setting for this command unless **Power Management** is set to **Custom** in the GUI, or the **set CPUPowerManagement** command is set to **Custom** in the CLI.

## **Examples**

This example specifies that Intel Turbo Boost Technology is not used and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set IntelTurboBoostTech Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set CPUPowerManagement	

## set IntelVT

To specify whether the processor uses Intel Virtualization Technology, use the set IntelVT command.

set IntelVT {Disabled| Enabled}

#### **Syntax Description**

Disabled	The processor does not permit virtualization.
Enabled	The processor allows virtualization.

#### **Command Default**

The processor allows virtualization.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether the processor uses Intel Virtualization Technology (VT), which allows a platform to run multiple operating systems and applications in independent partitions.



Note

If you change this option, you must power cycle the server before the setting takes effect.

#### **Examples**

This example specifies that the processor does not permit virtualization and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set IntelVT Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set IntelVTD

To specify whether the processor uses Intel Virtualization Technology for Directed I/O (VT-d), use the **set IntelVTD** command.

set IntelVTD {Disabled| Enabled}

## **Syntax Description**

Disabled	The processor does not use virtualization technology for directed I/O.
Enabled	The processor uses virtualization technology for directed I/O.

#### **Command Default**

The processor uses virtualization technology for directed I/O.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example specifies that the processor does not use virtualization technology for directed I/O and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set IntelVTD Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set interrupt-count

To specify the number of interrupt resources, use the **set interrupt-count** command.

set interrupt-count count

#### **Syntax Description**

count	The number of interrupt resources.	The range is 1 to 514.

#### **Command Default**

The default is 8.

#### **Command Modes**

Interrupt (/chassis/adapter/host-eth-if/interrupt)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the interrupt count:

```
Server# scope chassis
```

Server /chassis # scope adapter 1

Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope interrupt

Server /chassis/adapter/host-eth-if/interrupt # set interrupt-count 10

Server /chassis/adapter/host-eth-if/interrupt \*# commit

Committed host-eth-if eth0 settings will take effect upon the next server reset

Server /chassis/adapter/host-eth-if/interrupt #

Command	Description
set coalescing-time	
set coalescing-type	

## set interrupt-mode

To set the Ethernet interrupt mode, use the set interrupt-mode command.

set interrupt-mode{intx| msi| msix}

## **Syntax Description**

intx	Line-based interrupt (PCI INTx).
msi	Message-Signaled Interrupt (MSI).
msix	Message Signaled Interrupts with the optional extension (MSI-X). This is the recommended and default option.

#### **Command Default**

The default option is msix.

## **Command Modes**

Interrupt (/chassis/adapter/host-eth-if/interrupt)

Interrupt (/chassis/adapter/host-fc-if/interrupt)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to set the interrupt mode:

```
Server# scope chassis
Server /chassis/ # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if/ # scope interrupt
Server /chassis/adapter/host-eth-if/interrupt # set interrupt-mode msix
Server /chassis/adapter/host-eth-if/interrupt *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/interrupt #
```

Command	Description
set interrupt-count	

# set InterruptRemap

To specify whether the processor supports Intel VT-d Interrupt Remapping, use the **set InterruptRemap** command.

set InterruptRemap {Disabled| Enabled}

## **Syntax Description**

Disabled	The processor does not support remapping.
Enabled	The processor uses VT-d Interrupt Remapping as required.

**Command Default** 

The processor uses VT-d Interrupt Remapping as required.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example specifies that the processor does not use remapping and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set InterruptRemap Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set kvm-port

To specify the port used for KVM communication, use the set kvm-port command.

set kvm-port port-number

### **Syntax Description**

port-number

The port used for KVM communication.

#### **Command Default**

Port number 2068 is used for KVM communication.

## **Command Modes**

KVM (/kvm)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example specifies that port number 2068 is used for KVM communication:

```
server# scope kvm
server /kvm # set enabled yes
server /kvm* # set kvm-port 2068
server /kvm* # commit
server /kvm #
```

Command	Description
show kvm	

# set LaunchPXEOptionROM

To specify whether the server can perform a PXE boot, use the **set LaunchPXEOptionROM** command.

set LaunchPXEOptionROM {Disabled| Enabled}

#### **Syntax Description**

Disabled	The server cannot perform a PXE boot.
Enabled	The server can perform a PXE boot.

**Command Default** 

The server can perform a PXE boot.

**Command Modes** 

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(4)	This command was introduced.

## **Examples**

This example specifies that the server can perform a PXE boot and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set LaunchPXEOptionROM Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

# set LegacyOSRedir

To specify whether redirection from a legacy operating system, such as DOS, is enabled on the serial port, use the **set LegacyOSRedir** command.

set LegacyOSRedir {Disabled| Enabled}

### **Syntax Description**

Disabled	The serial port enabled for console redirection is hidden from the legacy operating system.
Enabled	The serial port enabled for console redirection is visible to the legacy operating system.

#### **Command Default**

Disabled

#### **Command Modes**

Server Management BIOS (/bios/server-management)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example makes the serial port enabled for console redirection visible to the legacy operating system and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set LegacyOSRedir Enabled
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
show server-management	

# set LegacyUSBSupport

To specify whether the system supports legacy USB devices, use the set Legacy USB Support command.

set LegacyUSBSupport {Auto| Disabled| Enabled}

### **Syntax Description**

Auto	Disables legacy USB support if no USB devices are connected.
Disabled	USB devices are available only to EFI applications.
Enabled	Legacy USB support is always available.

**Command Default** 

Legacy USB support is always available.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(4)	This command was introduced.

## **Examples**

This example specifies that legacy USB support is always available and commits the transaction:

Server# scope bios

Server /bios # scope advanced

Server /bios/advanced # set LegacyUSBSupport Enabled

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
set UsbEmul6064	

## set link-down-timeout

msec

To set the link down timeout of the host Fibre Channel Interface, use the **set link-down-timeout** command.

set link-down-timeout msec

#### **Syntax Description**

Specifies the link down timeout value, the number of milliseconds the uplink port should be offline before it informs the system that the uplink port is down and fabric connectivity has been lost. The range is 0 to 240000.

**Command Default** 

The default is 30000 milliseconds.

**Command Modes** 

Error-recovery (/chassis/adapter/host-fc-if/error-recovery)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.

### **Examples**

This example shows how to set the link down timeout:

```
Server# scope chassis
Server /chassis/ # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope error-recovery
Server /chassis/adapter/host-fc-if/error-recovery # set link-down-timeout 2000
Server /chassis/adapter/host-fc-if/error-recovery *# commit
Committed host-fc-if fc0 settings will take effect upon the next server reset
```

## set local-syslog-severity

To specify the lowest level of messages that will be included in the CIMC log, use the **set local-syslog-severity** command.

set local-syslog-severity level

### **Syntax Description**

level	The lowest level of messages that will be included in the CIMC log. See the Usage
	Guidelines for valid values.

#### **Command Default**

Messages of level Debug and higher are logged.

#### **Command Modes**

CIMC log (/cimc/log)

#### **Command History**

Release	Modification
1.4(3)	This command was introduced.

#### **Usage Guidelines**

The severity level can be one of the following, in decreasing order of severity:

- · emergency
- alert
- · critical
- error
- · warning
- notice
- informational
- debug

CIMC does not log any messages with a severity below the selected severity. For example, if you select **error**, the CIMC log will contain all messages with the severity Emergency, Alert, Critical, or Error. It will not show Warning, Notice, Informational, or Debug messages.

#### **Examples**

This example shows how to configure the logging of messages with a minimum severity of Warning:

```
Server# scope cimc
Server /cimc # scope log
Server /cimc/log # set local-syslog-severity warning
```

Server /cimc/log \*# commit
Server /cimc/log #

Command	Description
show local-syslog-severity	

## set local-video

To enable or disable the display of the KVM session on any monitor attached to the server, use the **set local-video** command.

set local-video {no | yes}

### **Syntax Description**

no	The KVM session is not displayed on any monitor attached to the server.
yes	The KVM session is displayed on any monitor attached to the server.

#### **Command Default**

The KVM session is displayed on any monitor attached to the server.

#### **Command Modes**

KVM (/kvm)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example enables the display of the KVM session on any monitor attached to the server:

```
server# scope kvm
server /kvm # set enabled yes
server /kvm* # set local-video yes
server /kvm* # commit
server /kvm #
```

Command	Description
show kvm	

## set locator-led

To turn the server locator LED on or off, use the set locator-led command.

set locator-led {off| on}

## **Syntax Description**

off	Turns the locator LED off.
on	Turns the locator LED on.

## **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

Physical drive (/chassis/storageadapter/physical-drive)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.
1.4(1)	This command was added in the physical drive mode.

## **Usage Guidelines**

Use this command to turn on or off the locator LED for the chassis or a physical drive.

#### **Examples**

This example shows how to turn on the locator LED for the chassis:

```
server# scope chassis
server /chassis # set locator-led on
server /chassis* # commit
server /chassis #
```

Command	Description
show chassis	
show led	

# set LomOpromControlPortn

To specify whether Option ROM is available on a legacy LOM port, use the **set LomOpromControlPortn** command.

set LomOpromControlPortn {Disabled| Enabled}

#### **Syntax Description**

n	Specifies a legacy LOM port number.
Disabled	Option ROM is not available on the specified LOM port.
Enabled	Option ROM is available on the specified LOM port.

#### **Command Default**

Option ROM is available on legacy LOM ports.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(5)	This command was introduced.

### **Usage Guidelines**

Use this command to specify whether Option ROM is available on the legacy LOM port designated by n in the command name **set LomOpromControlPort**n.

## **Examples**

This example specifies that Option ROM is not available on the legacy LOM port 2 and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set LomOpromControlPort2 Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set LvDDRMode

To specify whether the system prioritizes low voltage or high frequency memory operations, use the **set LvDDRMode** command.

set LvDDRMode {Performance Mode| Power Saving Mode}

# **Syntax Description**

Performance_Mode	The system prioritizes high frequency operations over low voltage operations.
Power_Saving_Mode	The system prioritizes low voltage memory operations over high frequency memory operations. This mode may lower memory frequency in order to keep the voltage low.

#### **Command Default**

The system prioritizes low voltage memory operations over high frequency memory operations.

## **Command Modes**

Advanced BIOS (/bios/advanced)

# **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Examples**

This example specifies that high frequency memory operations are optimized and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set LvDDRMode Performance_Mode
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set mac-addr

To specify a MAC address for an interface, use the **set mac-addr** command.

set mac-addr mac-addr

# **Syntax Description**

mac-addr	Specifies a MAC address in the form hh:hh:hh:hh:hh or
	hhhh:hhhh.

## **Command Default**

None

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

# Examples

This example shows how to specify a MAC address for the Fibre Channel host interface fc0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # set mac-addr 0123:4567:89ab
Server /chassis/adapter/host-fc-if *# commit
Server /chassis/adapter/host-fc-if #
```

Command	Description

# set MakeUSBDeviceNonBootable

To specify whether the server can boot from a USB device, use the **set MakeUSBDeviceNonBootable** command.

set MakeUSBDeviceNonBootable {Disabled| Enabled}

# **Syntax Description**

Disabled	The server can boot from a USB device.
Enabled	The server cannot boot from a USB device.

#### **Command Default**

The server can boot from a USB device.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Examples**

This example allows the server to boot from a USB device and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set MakeUSBDeviceNonBootable Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set USBController	
show advanced	

# set ManagedBootRule

To specify how the server changes the boot order list defined through the CIMC GUI or CLI when there are no devices of a particular device type available or when the user defines a different boot order using the server's BIOS Setup Utility, use the **set ManagedBootRule** command.

#### set ManagedBootRule {Strict| Loose}

# Syntax Description

#### Strict

When no devices of a particular type are available, the system creates a placeholder for that device type in the boot order list. When a device of that type becomes available, it is added to the boot order in the previously defined position.

If the user defines a boot order through the server's BIOS Setup Utility, that boot order is given priority over the boot order configured through the CIMC GUI or CLI. All device types defined through CIMC that are not present in the boot order defined through the BIOS Setup Utility are removed from the boot order list.

#### Loose

When no devices of a particular type are available, the system removes that device type from the boot order. When a device of that type becomes available, the system adds it to the end of the boot order list.

If the boot order is configured through the server's BIOS Setup Utility, that boot order is given priority over the boot order configured through the CIMC GUI or CLI. All device types defined through CIMC that are not present in the boot order defined through the BIOS Setup Utility are moved to the end of the boot order list.

#### **Command Default**

The Boot Order Rules option is loose.

#### **Command Modes**

Server Management BIOS (/bios/server-management)

## **Command History**

Release	Modification
1.4(6)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify how the server changes the boot order list defined through the CIMC GUI or CLI when there are no devices of a particular device type available or when the user defines a different boot order using the server's BIOS Setup Utility, use the **set ManagedBootRule** command.

The supported device types are:

- HDD—Hard disk drive
- FDD—Floppy disk drive

- CDROM—Bootable CD-ROM or DVD
- PXE—PXE boot
- **EFI**—Extensible Firmware Interface

# **Examples**

This example changes the Boot Order Rules option to strict and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set ManagedBootRule Strict
Server /bios/server-management *# commit
Server /bios/server-management #
```

## **Related Commands**

Command	Description
---------	-------------

show actual-boot-order (bios)

# set max-data-field-size

To specify the maximum data field size for the Fibre Channel interface, use the **set max-data-field-size** command.

set max-data-field-size size

# **Syntax Description**

0170	

The maximum data field size. Specify a number between 256 and 2112.

## **Command Default**

The maximum data field size is 2112.

#### **Command Modes**

Fibre Channel host interface (/chassis/adapter/host-fc-if)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example shows how to set the maximum data field size to 1024 on interface fc0 on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # set max-data-field-size 1024
Server /chassis/adapter/host-fc-if *# commit
Server /chassis/adapter/host-fc-if #
```

Command	Description
show host-fc-if detail	

# set max-sessions

To specify the maximum number of concurrent KVM sessions allowed, use the set max-sessions command.

set max-sessions sessions

# **Syntax Description**

sessions	The maximum number of concurrent KVM sessions allowed. This can be an integer
between 1 and 4.	

## **Command Default**

A maximum of four concurrent KVM sessions is allowed.

#### **Command Modes**

KVM (/kvm)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example specifies that a maximum of two concurrent KVM sessions is allowed:

```
server# scope kvm
server /kvm # set enabled yes
server /kvm* # set max-sessions 2
server /kvm* # commit
server /kvm #
```

Command	Description
show kvm	

# set max-target-luns

To set the maximum logical unit numbers (LUNs) per target, use the set max-target-luns command.

set max-target-luns count

#### **Syntax Description**

count	The maximum logical unit numbers (LUNs) per target; the maximum number of LUNs
	that the driver will discover. The range is 1 to 1024.

**Command Default** 

The default is 256 LUNs.

**Command Modes** 

Port (/chassis/adapter/host-fc-if/port)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to set the max-target-luns:

```
Server# scope chassis
Server /chassis scope adapter 1
Server /chassis/adapter scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope port
Server /chassis/adapter/host-fc-if/port # set max-target-luns 334
Server /chassis/adapter/host-fc-if/port *# commit
Server /chassis/adapter/host-fc-if/port #
```

#### **Related Commands**

None

# set MemoryMappedIOAbove4GB

To enable or disable memory mapped I/O of 64-bit PCI devices to 4GB or greater address space, use the **set MemoryMappedIOAbove4GB** command.

set MemoryMappedIOAbove4GB {Disabled| Enabled}

#### **Syntax Description**

Disabled	The server does not map I/O of 64-bit PCI devices to 4GB or greater address space.
Enabled	The server maps I/O of 64-bit PCI devices to 4GB or greater address space.

#### **Command Default**

The server does not map I/O of 64-bit PCI devices to 4GB or greater address space.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to enable or disable memory mapped I/O of 64-bit PCI devices to 4GB or greater address space. Legacy option ROMs are not able to access addresses above 4GB. PCI devices that are 64-bit compliant but use a legacy option ROM may not function correctly with this setting enabled.

### **Examples**

This example allows the server to map I/O of 64-bit PCI devices to 4GB or greater address space and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set MemoryMappedIOAbove4GB Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set MirroringMode

To specify how memory is mirrored, use the **set MirroringMode** command.

set MirroringMode {Intersocket| Intrasocket}

# **Syntax Description**

Intersocket	Each IMC is mirrored across two sockets.
Intrasocket	One IMC is mirrored with another IMC in the same socket.

#### **Command Default**

One IMC is mirrored with another IMC in the same socket.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(1)	This command was introduced.

# **Usage Guidelines**

Use this command to specify how memory is mirrored. Mirroring is supported across Integrated Memory Controllers (IMCs) where one memory riser is mirrored with another.



Note

This command is operative only if the set SelectMemoryRAS command is set to Mirroring.

## **Examples**

This example configures memory mirroring across two sockets and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set SelectMemoryRAS Mirroring
Server /bios/advanced *# set MirroringMode Intersocket
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set SelectMemoryRAS	
show advanced	

# set mode

To specify the server NIC mode, use the **set mode** command.

set mode {dedicated| shared\_lom| shared\_lom\_10g| cisco\_card| shipping}

# **Syntax Description**

dedicated	The management Ethernet port is used to access the CIMC.	
shared_lom	The LAN On Motherboard (LOM) Ethernet host ports are used to access the CIMC.	
	<b>Note</b> If you select Shared LOM, make sure that all host ports belong to the same subnet.	
shared_lom_10g	(If supported) The 10G LOM Ethernet host ports are used to access the CIMC.	
cisco_card	The ports on the installed adapter card are used to access the CIMC.	
shipping	(If supported) The management Ethernet port or ports provide a limited factory default configuration for initial connection. Select another mode for normal operation.	

## **Command Default**

None

# **Command Modes**

Network (/cimc/network)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.
1.0(1x)	The <b>shipping</b> keyword was introduced.

# **Examples**

This example sets the server NIC mode to dedicated:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set mode dedicated
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
show network	

# set mtu

To specify an MTU for a vNIC, use the set mtu command.

set mtu mtu-value

# **Syntax Description**

mtu-value	Specifies the maximum transmission unit (MTU) or packet size that the
	vNIC accepts. Valid MTU values are 1500 to 9000 bytes; the default is
	1500.

#### **Command Default**

The MTU is 1500 bytes.

## **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

# **Command History**

Release	Modification
1.2(1)	This command was introduced.

# **Examples**

This example shows how to specify an MTU of 9000 for the Ethernet host interface eth0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # set mtu 9000
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description

# set name

To specify a user name, use the **set name** command.

set name user-name

# **Syntax Description**

user-name	The name of the user. The name
	can contain up to 70 characters.

**Command Default** 

None

**Command Modes** 

User (/user)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example configures a user name, password, and role:

```
server# scope user
server /user # set enabled yes
server /user* # set name user15
server /user* # set password cisco123
server /user* # set role read-only
server /user* # commit
server /user #
```

Command	Description
show user	

# set NIC-ROM

To enable or disable an onboard NIC ROM, use the set NIC-ROM command.

set NIC-n-ROM {Disabled| Enabled}

# **Syntax Description**

n	The number of the onboard NIC ROM.
Disabled	The onboard NIC ROM is disabled.
Enabled	The onboard NIC ROM is enabled.

**Command Default** 

The onboard NIC ROM is enabled.

**Command Modes** 

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Usage Guidelines**

Use this command to enable or disable an onboard network interface card (NIC) ROM.

# **Examples**

This example disables the onboard NIC 2 ROM and commits the transaction:

Server# scope bios

Server /bios # scope advanced

Server /bios/advanced # set NIC-2-ROM Disabled

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
show advanced	

# set niv-mode

To enable or disable Network Interface Virtualization (NIV) on the adapter card, use the **set niv-mode** command.

set niv-mode {disabled| enabled}

# **Syntax Description**

disabled	Disables NIV mode on the card.
enabled	Enables NIV mode on the card.

#### **Command Default**

NIV mode is disabled.

#### **Command Modes**

Adapter (/chassis/adapter)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Usage Guidelines**

Use this command to enable or disable NIV mode on the adapter card. When NIV mode is enabled, vNICs have the following features:

- Can be assigned to a specific channel
- Can be associated with a port profile
- Can fail over to another vNIC if there are communication problems

# **Examples**

This example shows how to enable NIV mode on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # set niv-mode enabled
Server /chassis/adapter *# commit
Server /chassis/adapter #
```

Command	Description
show adapter	

# set non-compliance-action

To specify the action the system should take if power capping is enabled and the server requests more than its peak power allotment, use the **set non-compliance-action** command.

set non-compliance-action {force-power-reduction| none| power-off-host| throttle}

#### **Syntax Description**

force-power-reduction	The server is forced to reduce its power consumption by any means necessary. This option is not available on some server models.
none	No action is taken and the server is allowed to use more power than specified in the peak power setting.
power-off-host	The server is shut down.
throttle	Processes running on the server are throttled to bring the total power consumption down.

### **Command Default**

None

#### **Command Modes**

Power cap (/power-cap)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the action the system should take if power capping is enabled and the server requests more than its peak power allotment.

### **Examples**

This example sets the non-compliance action to throttle processes on the server and commits the transaction:

```
Server# scope power-cap
Server /power-cap # set enabled yes
Server /power-cap *# set peak-power 1000
Server /power-cap *# set non-compliance-action throttle
Server /power-cap *# commit
Server /power-cap # show detail
Cur Consumption (W): 688
Max Consumption (W): 1620
Min Consumption (W): 48
Minimum Configurable Limit (W): 500
Maximum Configurable Limit (W): 2000
Power Cap Enabled: yes
Peak Power: 1000
Non Compliance Action: throttle
```

Server /power-cap #

Command	Description
set peak-power	
show power-cap	

# set NUMAOptimize

To specify whether the BIOS supports Non-Uniform Memory Access (NUMA), use the **set NUMAOptimize** command.

set NUMAOptimize {Disabled| Enabled}

#### **Syntax Description**

Disabled	The BIOS does not support NUMA.
Enabled	The BIOS includes the ACPI tables that are required for NUMA-aware operating systems.

**Command Default** 

NUMA support is enabled.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify whether the BIOS supports NUMA. When NUMA support is enabled, the BIOS includes the ACPI tables that are required for NUMA-aware operating systems.



Note

If you enable this option, the system must disable Inter-Socket Memory interleaving on some platforms.

# **Examples**

This example disables NUMA support in the BIOS and commits the transaction:

Server# scope bios

Server /bios # scope advanced

Server /bios/advanced # set NUMAOptimize Disabled

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
show advanced	

# set **OEMAESNIC**ontrol

To specify whether the server uses the AES-NI encryption instruction set, use the **set OEMAESNIControl** command.

set OEMAESNIControl {Disabled| Enabled}

# **Syntax Description**

Disabled	The server does not use the AES-NI instruction set.
Enabled	The server uses the AES-NI instruction set when possible.

#### **Command Default**

The server does not use the AES-NI instruction set.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(3)	This command was introduced.

# **Usage Guidelines**

Use this command to specify whether the server uses the processor's AES-NI (New Instructions) encryption instruction set that improves on the Advanced Encryption Standard (AES) algorithm.

## **Examples**

This example specifies that the server uses the processor's AES-NI instruction set and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set OEMAESNIControl Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description

# set OnboardNic1

To enable or disable the first onboard Network Interface Card (NIC) on the server, use the **set OnboardNic1** command.

set OnboardNic1 {Disabled| Enabled}

# **Syntax Description**

Disabled	NIC 1 is not available.
Enabled	NIC 1 is available.

**Command Default** 

NIC 1 is available.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Usage Guidelines**

By replacing the numeral 1 in the command with the numeral 2, you can modify this command to specify whether the onboard NIC2 is available. For example, to enable or disable NIC 2, use the **set OnboardNic2** command.

## **Examples**

This example disables NIC 1 and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set OnboardNic1 Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set OnboardNic1ROM	
show advanced	

# set OnboardNic1ROM

To specify whether the system loads the embedded PXE option ROM for the first onboard NIC on the server, use the **set OnboardNic1ROM** command.

set OnboardNic1ROM {Disabled| Enabled}

#### **Syntax Description**

Disabled	The PXE option ROM is not available for NIC 1.
Enabled	The PXE option ROM is available for NIC 1.

#### **Command Default**

The PXE option ROM is available for NIC 1.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Usage Guidelines**

By replacing the numeral 1 in the command with the numeral 2, you can modify this command to specify whether the PXE option ROM for onboard NIC2 is available. For example, to specify the option ROM for NIC 2, use the **set OnboardNic2ROM** command.

#### **Examples**

This example specifies that the PXE option ROM is available for NIC 1 and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set OnboardNic1ROM Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set OnboardNic1	
show advanced	

# set OnboardSATA

To specify whether the server uses its onboard built-in SATA controller, use the set OnboardSATA command.

set OnboardSATA {Disabled| Enabled}

# **Syntax Description**

Disabled	The server does not use its onboard built-in SATA controller.
Enabled	The server uses its onboard built-in SATA controller.

**Command Default** 

The server uses its onboard built-in SATA controller.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

# Usage Guidelin

Note

This command is not available on all models and configurations.

# **Examples**

This example specifies that the server does not use its onboard built-in SATA controller and commits the transaction:

Server# scope bios

Server /bios # scope advanced

Server /bios/advanced # set OnboardSATA Disabled

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
show advanced	

# set OptionROMPriority

To specify which Option ROM the server should launch, use the set OptionROMPriority command.

set OptionROMPriority {EFI\_Compatible\_ROM| Legacy\_ROM| Enabled}

# **Syntax Description**

EFI_Compatible_ROM	The server launches the EFI compatible PCI Option ROM.
Legacy_ROM	The server launches the legacy PCI Option ROM.

#### **Command Default**

The server launches the EFI compatible PCI Option ROM.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(4)	This command was introduced.

# **Usage Guidelines**

If the server has both legacy and EFI compatible PCI Option ROMs, this command specifies which Option ROM the server should launch.

# **Examples**

This example specifies that the server launches the EFI compatible PCI Option ROM and commits the transaction:

```
Server# scope bios
```

Server /bios # scope advanced

Server /bios/advanced # set OptionROMPriority EFI Compatible ROM

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
set MemoryMappedIOAbove4GB	

# set order

To specify the relative order of this device for PCI bus device number assignment, use the **set order** command.

set order {any| order}

### **Syntax Description**

any	No relative order is specified.
order	Specifies a relative order. The range is 0 to 99.

#### **Command Default**

No relative order is specified.

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

Fibre Channel host interface (/chassis/adapter/host-fc-if)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify the order of PCI bus number assignment of this device relative to other PCI bus devices. PCI bus numbers are assigned to devices by increasing relative order followed by devices for which no order is specified.

# **Examples**

This example shows how to specify a relative PC bus number assignment order of 30 for the Fibre Channel host interface fc0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # set order 30
Server /chassis/adapter/host-fc-if *# commit
Server /chassis/adapter/host-fc-if #
```

Command	Description

# set OSBootWatchdogTimer

To specify whether the BIOS programs the operating system boot watchdog timer with a timeout value, use the **set OSBootWatchdogTimer** command.

set OSBootWatchdogTimer {Disabled| Enabled}

# **Syntax Description**

Disabled	The OS boot watchdog timer is disabled.
Enabled	The OS boot watchdog timer is enabled.

#### **Command Default**

The OS boot watchdog timer is disabled.

#### **Command Modes**

Server Management BIOS (/bios/server-management)

#### **Command History**

Release	Modification
1.4(4)	This command was introduced.

# **Usage Guidelines**

Use this command to specify whether the BIOS programs the operating system (OS) boot watchdog timer with a timeout value. This can be one of the following:

- **Disabled**—The watchdog timer is not used to track how long the server takes to boot.
- Enabled—The watchdog timer tracks how long the server takes to boot. If the server does not boot within the length of time specified by the **set OSBootWatchdogTimerTimeout** command, the CIMC logs an error and takes the action specified by the **set OSBootWatchdogTimerPolicy** command.

## **Examples**

This example enables the OS boot watchdog timer with a duration of 10 minutes and an action of reset and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set OSBootWatchdogTimer Enabled
Server /bios/server-management *# set OSBootWatchdogTimerTimeout 10_mins
Server /bios/server-management *# set OSBootWatchdogTimerPolicy Reset
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
set OSBootWatchdogTimerPolicy	

Command	Description
set OSBootWatchdogTimerTimeout	

# set OSBootWatchdogTimerPolicy

To specify what action the system takes if the operating system boot watchdog timer expires, use the **set OSBootWatchdogTimerPolicy** command.

set OSBootWatchdogTimerPolicy {Do Nothing| Power Down| Reset}

#### **Syntax Description**

Do_Nothing	No action is taken if the timer expires.
Power_Down	The server is powered off if the timer expires.
Reset	The server is reset if the timer expires.

#### **Command Default**

The server is reset if the timer expires.

#### **Command Modes**

Server Management BIOS (/bios/server-management)

#### **Command History**

Release	Modification
1.4(4)	This command was introduced.

## **Usage Guidelines**

Use this command to specify what action the system takes if the operating system (OS) boot watchdog timer expires. This can be one of the following:

- **Do\_Nothing**—No action is taken if the OS boot watchdog timer expires.
- **Power\_Down**—The server is powered off if the server does not boot before the OS boot watchdog timer expires.
- **Reset**—The server is reset if the server does not boot before the OS boot watchdog timer expires.

The duration of the OS boot watchdog timer is specified by the **set OSBootWatchdogTimerTimeout** command.



Note

This command is operative only if the OS boot watchdog timer is enabled by the **set OSBootWatchdogTimer** command.

## **Examples**

This example enables the OS boot watchdog timer with a duration of 10 minutes and an action of reset and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set OSBootWatchdogTimer Enabled
Server /bios/server-management *# set OSBootWatchdogTimerTimeout 10_mins
Server /bios/server-management *# set OSBootWatchdogTimerPolicy Reset
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
set OSBootWatchdogTimer	
set OSBootWatchdogTimerTimeout	

# set OSBootWatchdogTimerTimeout

To specify the duration of the operating system boot watchdog timer, use the **set OSBootWatchdogTimerTimeout** command.

set OSBootWatchdogTimerTimeout {5 mins| 10 mins| 15 mins| 20 mins}

#### **Syntax Description**

5_mins	The timer duration is 5 minutes.
10_mins	The timer duration is 10 minutes.
15_mins	The timer duration is 15 minutes.
20_mins	The timer duration is 20 minutes.

#### **Command Default**

The timer duration is 10 minutes.

#### **Command Modes**

Server Management BIOS (/bios/server-management)

## **Command History**

Release	Modification
1.4(4)	This command was introduced.

# **Usage Guidelines**

Use this command to specify the duration of the operating system (OS) boot watchdog timer. If the server does not boot within the length of time specified by this command, the CIMC logs an error and takes the action specified by the **set OSBootWatchdogTimerPolicy** command.



Note

This command is operative only if the OS boot watchdog timer is enabled by the **set OSBootWatchdogTimer** command.

### **Examples**

This example enables the OS boot watchdog timer with a duration of 10 minutes and an action of reset and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set OSBootWatchdogTimer Enabled
Server /bios/server-management *# set OSBootWatchdogTimerTimeout 10_mins
Server /bios/server-management *# set OSBootWatchdogTimerPolicy Reset
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
set OSBootWatchdogTimer	
set OSBootWatchdogTimerPolicy	

# set outstanding-io-count

To set the outstanding IO count of the host Fibre Channel interface, use the **set outstanding-io-count** command.

set outstanding-io-count count

# **Syntax Description**

count	Specifies the number of I/O operations that can be pending in the vHBA at one time.
	The range is 1 to 1024.

#### **Command Default**

The default is 512 operations.

# **Command Modes**

Port (/chassis/adapter/host-fc-if/port)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

# **Examples**

This example shows how to set the outstanding-io-count:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope port
Server /chassis/adapter/host-fc-if/port # set outstanding-io-count 343
Server /chassis/adapter/host-fc-if/port *# commit
Server /chassis/adapter/host-fc-if/port #
```

#### **Related Commands**

None

# set PackageCStateLimit

To specify the amount of power available to the server components when they are idle, use the **set PackageCStateLimit** command.

set PackageCStateLimit {C0 state| C1 state| C3 state| C6 state| C7 state| No Limit}

#### **Syntax Description**

Cn_state	Depending on $n$ , the server provides full power to minimal power to the components. See the Usage Guidelines.
No_Limit	The server may enter any available C state.

#### **Command Default**

The default limit is C3 state.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the amount of power available to the server components when they are idle. This can be one of the following:

- **C0\_state**—The server provides all server components with full power at all times. This option maintains the highest level of performance and requires the greatest amount of power.
- C1\_state—When the CPU is idle, the system slightly reduces the power consumption. This option requires less power than C0 and allows the server to return quickly to high performance mode.
- C3\_state—When the CPU is idle, the system reduces the power consumption further than with the C1 option. This requires less power than C1 or C0, but it takes the server slightly longer to return to high performance mode.
- C6\_state—When the CPU is idle, the system reduces the power consumption further than with the C3 option. This option saves more power than C0, C1, or C3, but there may be performance issues until the server returns to full power.
- C7\_state—When the CPU is idle, the server makes a minimal amount of power available to the components. This option saves the maximum amount of power but it also requires the longest time for the server to return to high performance mode.
- No Limit—The server may enter any available C state.



Note

This command is operative only if the **set ProcessorCcxEnable** command is set to **Enabled**.

# **Examples**

This example specifies that a minimal amount of power is made available to the components when the CPU is idle and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ProcessorCcxEnable Enabled
Server /bios/advanced # set PackageCStateLimit C7_state
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set ProcessorCcxEnable	
show advanced	

# set PassThroughDMA

To specify whether the processor supports Intel VT-d Pass-through DMA, use the set PassThroughDMA command.

set PassThroughDMA {Disabled| Enabled}

# **Syntax Description**

Disabled	The processor does not support pass-through DMA.
Enabled	The processor uses VT-d Pass-through DMA as required.

**Command Default** 

The processor uses VT-d Pass-through DMA as required.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Examples**

This example specifies that the processor does not support VT-d Pass-through DMA and commits the transaction:

Server# scope bios Server /bios # scope advanced Server /bios/advanced # set PassThroughDMA Disabled Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
show advanced	

# set password

To specify a user password, use the **set password** command.

set password user-password

# **Syntax Description**

user-password	The password of the user. The
	password can contain up to 80
	characters

**Command Default** 

None

**Command Modes** 

User (/user)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example configures a user name, password, and role:

```
server# scope user
server /user # set enabled yes
server /user* # set name user15
server /user* # set password cisco123
server /user* # set role read-only
server /user* # commit
server /user #
```

Command	Description
show user	

# set path (tech-support)

To set the TFTP path, use the **set path** command in tech-support mode.

set path tftp-path

### **Syntax Description**

tftp-path

The TFTP path.

#### **Command Default**

None

## **Command Modes**

Technical support (/cimc/tech-support)

## **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

#### **Usage Guidelines**

Specifies the path to the support data file should be stored.

Perform this task along with **set tftp-ip** when requested by the Cisco Technical Assistance Center (TAC). This utility creates a summary report containing configuration information, logs and diagnostic data that will help TAC in troubleshooting and resolving technical issues.

#### **Examples**

This example shows how to set the TFTP path:

```
server# scope cimc
server /cimc # scope tech-support
server /cimc/tech-support # set path /test/test.bin
server /cimc/tech-support* # commit
server /cimc/tech-support #
```

Command	Description
set tftp-ip	
show tech-support	

## set PatrolScrub

To specify whether the system actively searches for, and corrects, single bit memory errors, use the **set PatrolScrub** command.

set PatrolScrub {Disabled| Enabled}

#### **Syntax Description**

Disabled	The system checks for memory ECC errors only when the CPU reads or writes a memory address.
Enabled	The system periodically reads and writes memory searching for ECC errors.

#### **Command Default**

The system periodically reads and writes memory searching for ECC errors.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether the system actively searches for, and corrects, single bit memory errors even in unused portions of the memory on the server. If enabled and any errors are found, the system attempts to fix them. This option may correct single bit errors before they become multi-bit errors, but it may adversely affect performance when the patrol scrub is running.

When this function is disabled, the system checks for memory ECC errors only when the CPU reads or writes a memory address.

#### **Examples**

This example specifies that the system actively searches for and corrects single bit memory errors and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set PatrolScrub Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set PatrolScrubDuration	

Command	Description
show advanced	

## set PatrolScrubDuration

To specify the interval between each patrol scrub memory access, use the **set PatrolScrubDuration** command.

set PatrolScrubDuration interval

## **Syntax Description**

interval

A value between 5 and 23.

#### **Command Default**

The interval is 8.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the interval between each patrol scrub memory access. A lower interval scrubs the memory more often but requires more memory bandwidth.



Note

This command is operative only if the set PatrolScrub command is set to Enabled.

## **Examples**

This example specifies an interval of 20 between each patrol scrub memory access and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set PatrolScrub Enabled
Server /bios/advanced # set PatrolScrubDuration 20
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set PatrolScrub	
show advanced	

# set Pci-Opt-Roms

To specify whether the server can use the PCIe Option ROM expansion slots, use the **set Pci-Opt-Roms** command.

set Pci-Opt-Roms {Disabled| Enabled}

## **Syntax Description**

Disabled	The PCIe Option ROMs are not available.
Enabled	The PCIe Option ROMs are available.

**Command Default** 

The PCIe Option ROMs are available.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example specifies that the PCIe Option ROMs are not available and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set Pci-Opt-Roms Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set PciMezzOptionROM

To specify whether the PCIe mezzanine slot expansion ROM is available to the server, use the **set PciMezzOptionROM** command.

set PciMezzOptionROM {Disabled| Enabled}

## **Syntax Description**

Disabled	The PCIe mezzanine slot expansion ROM is not available to the server.
Enabled	The PCIe mezzanine slot expansion ROM is available to the server.

### **Command Default**

The PCIe mezzanine slot expansion ROM is available to the server.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification	
1.4(5)	This command was introduced.	

## **Examples**

This example specifies that the PCIe mezzanine slot expansion ROM is available to the server and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set PciMezzOptionROM Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set PcieOptionROMs

To specify whether the server can use the PCIe Option ROM expansion slots, use the **set PcieOptionROMs** command.

set PcieOptionROMs {Disabled| Enabled}

## **Syntax Description**

Disabled	The PCIe Option ROMs are not available.
Enabled	The PCIe Option ROMs are available.

**Command Default** 

The PCIe Option ROMs are available.

**Command Modes** 

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(5)	This command was introduced.

## **Examples**

This example specifies that the PCIe Option ROMs are not available and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set PcieOptionROMs Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set PcieSlotnOptionROM

To specify whether a PCIe Option ROM expansion slot is available to the server, use the **set PcieSlotnOptionROM** command.

set PcieSlotnOptionROM {Disabled| Enabled}

## **Syntax Description**

n	The number or letter of the PCIe slot.
Disabled	The specified expansion slot is not available.
Enabled	The specified expansion slot is available.

#### **Command Default**

The PCIe Option ROM expansion slot is available.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(5)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the availability of the PCIe Option ROM expansion slot designated by n in the command name **set** PcieSlotnOptionROM.

### **Examples**

This example specifies that PCIe Option ROM expansion slot 2 is not available and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set PcieSlot2OptionROM Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set PciOptRomsDisable

To specify whether the server can use the PCIe Option ROM expansion slots, use the **set PciOptRomsDisable** command.

set PciOptRomsDisable {Disabled| Enabled}

## **Syntax Description**

Disabled	The PCIe Option ROMs are not available.
Enabled	The PCIe Option ROMs are available.

**Command Default** 

The PCIe Option ROMs are available.

**Command Modes** 

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example specifies that the PCIe Option ROMs are not available and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set PciOptRomsDisable Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set peak-power

To specify the maximum number of watts that can be allocated to the server, use the **set peak-power** command.

set peak-power watts

#### **Syntax Description**

watts	The maximum number of watts that can be allocated to the server.
watts	The maximum number of watts that can be allocated to the server.

#### **Command Default**

Zero watts are allocated.

#### **Command Modes**

Power cap (/power-cap)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the maximum number of watts that can be allocated to this server. Enter a number of *watts* within the range defined by the **Minimum Configurable Limit** field and the **Maximum Configurable Limit** field of the **show power-cap detail** command output. These fields are determined by the server model.

If the server requests more power than specified in this command, the system takes the action defined by the **set non-compliance-action** command.

#### **Examples**

This example sets the maximum number of watts allocated to 1000 and commits the transaction:

Command	Description
set non-compliance-action	

Command	Description
show power-cap	

# set penalty-time

To specify a blocking time after multiple login failures, use the **set penalty-time** command.

set penalty-time penalty-seconds

## **Syntax Description**

penalty-seconds	The number of seconds the user remains locked out after exceeding the maximum
	number of login attempts within the specified time window. The range of valid
	values is 300 to 900.

#### **Command Default**

The default blocking time is 300 seconds.

#### **Command Modes**

IP blocking (/cimc/network/ipblocking)

## **Command History**

Release	Modification
1.0(1X)	This command was introduced.

## **Examples**

This example sets the IP blocking time to 600 seconds:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # scope ipblocking
server /cimc/network/ipblocking # set enable yes
server /cimc/network/ipblocking* # set penalty-time 600
server /cimc/network/ipblocking* # commit
server /cimc/network/ipblocking #
```

Command	Description
set fail-count	
show ipblocking	

# set persistent-lun-binding

To enable or disable the persistent binding for the vHBA, use the **set persistent-lun-binding** command.

set persistent-lun-binding {disable| enable}

#### **Syntax Description**

disable	Disables persistent-lun binding.
enable	Enables persistent-lun binding.

#### **Command Default**

None

### **Command Modes**

Persistent binding (/chassis/adapter/host-fc-if/perbi)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

## **Examples**

This example shows how to enable the persistent-lun binding of the host Fibre Channel interface:

```
Server# scope chassis
Server/chassis # scope adapter 1
Server/chassis/adapter # scope host-fc-if fc0
Server/chassis/adapter/host-fc-if # scope perbi
Server/chassis/adapter/host-fc-if/perbi # set persistent-lun-binding enable
Server/chassis/adapter/host-fc-if/perbi *# commit
Server/chassis/adapter/host-fc-if/perbi ##
```

#### **Related Commands**

None

# set platform-event-enabled

To enable or disable platform event alerts, use the **set platform-event-enabled** command.

set platform-event-enabled {no | yes}

## **Syntax Description**

no	Disables platform event alerts.
yes	Enables platform event alerts.

**Command Default** 

Platform event alerts are enabled.

**Command Modes** 

Fault (/fault)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example enables platform event alerts:

```
server# scope fault
server /fault # set platform-event-enabled yes
server /fault* # commit
server /fault #
```

Command	Description
show fault	
show pef	

# set plogi-retries

To set the port login (PLOGI) retries value, use the set plogi-retries command.

set plogi-retries count

#### **Syntax Description**

count	Specifies the number of times that the system tries to log in to the fabric
	after the first failure. The range is 0 and 255.

#### **Command Default**

The default is 8 retries.

#### **Command Modes**

Port-p-logi (/chassis/adapter/host-fc-if/port-p-logi)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the plogi-retries of the host Fibre Channel interface:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope port-p-logi
Server /chassis/adapter/host-fc-if/port-p-logi # set plogi-retries 03
Server /chassis/adapter/host-fc-if/port-p-logi *# commit
Server /chassis/adapter/host-fc-if/port-p-logi #
```

Command	Description
set plogi-timeout	

## set plogi-timeout

To set the port login (PLOGI) timeout value of the host Fibre Channel interface, use the **set plogi-timeout** command.

set plogi-timeout msec

#### **Syntax Description**

msec	Specifies the number of milliseconds that the system waits before it tries to log in
	again. The range is 1 to 255000.

#### **Command Default**

The default is 2000 milliseconds.

#### **Command Modes**

Port-p-logi (/chassis/adapter/host-fc-if/port-p-logi)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to set the port login (PLOGI) timeout value of the host Fibre Channel Interface:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if
Server/chassis/adapter/host-fc-if # scope port-p-logi
Server/chassis/adapter/host-fc-if/port-p-logi # set plogi-timeout 203
Server/chassis/adapter/host-fc-if/port-p-logi *# commit
Server/chassis/adapter/host-fc-if/port-p-logi #
```

Command	Description
set port-plogi-retries	

## set policy

To specify the action to be taken when chassis power is restored, use the **set policy** command.

set policy {power-off| power-on| restore-last-state}

#### **Syntax Description**

<b>power-off</b> Server power will remain off until manually turned on.	
power-on	Server power will be turned on when chassis power is restored.
restore-last-state	Server power will return to the state before chassis power was lost.

#### **Command Default**

The default action is **power-off**.

#### **Command Modes**

Chassis (/chassis)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the action to be taken when chassis power is restored after an outage.

When the selected action is **power-on**, you can select a delay in the restoration of power to the server.

#### **Examples**

This example sets the power restore policy to power-on with a fixed delay of 180 seconds (3 minutes) and commits the transaction:

```
Server# scope chassis
Server /chassis # set policy power-on
Server /chassis *# set delay fixed
Server /chassis *# set delay-value 180
Server /chassis *# commit
Server /chassis # show detail
Chassis:
    Power: on
    Serial Number: QCI1404A1IT
    Product Name: UCS C200 M1
    PID : R200-1120402
    UUID: 01A6E738-D8FE-DE11-76AE-8843E138AE04
    Locator LED: off
    Description: Testing power restore
    Power Restore Policy: power-on
    Power Delay Type: fixed
    Power Delay Value(sec): 180
Server /chassis #
```

Command	Description
set delay	
set delay-value	

## set port-down-io-retry-count

To set the port-down-io-retry-count of the host Fibre Channel interface, use the **set port-down-io-retry-count** command.

set port-down-io-retry-count count

#### **Syntax Description**

count	The number of times an I/O request to a port is returned because the port is busy before
	the system decides the port is unavailable. The range is 0 to 255.

#### **Command Default**

The default is 8 retries.

#### **Command Modes**

Error-recovery (/chassis/adapter/host-fc-if/error-recovery)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the port-down-io-retry-count:

```
Server# scope chassis
Server /chassis/ # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if/ # scope error-recovery
Server /chassis/adapter/host-fc-if/error-recovery # set port-down-io-retry-count 200
Server /chassis/adapter/host-fc-if/error-recovery *# commit
Committed host-fc-if fc0 settings will take effect upon the next server reset
Server /chassis/adapter/host-fc-if/error-recovery #
```

Command	Description
set port-down-timeout	

## set port-down-timeout

msec

To set the port-down-timeout, use the **set port-down-timeout** command.

set port-down-timeout msec

#### **Syntax Description**

Specifies the number of milliseconds the uplink port should be offline before it informs the system that the uplink port is down and fabric connectivity has been lost. The range is 0 to 240000.

#### **Command Default**

The default is 10000 milliseconds.

#### **Command Modes**

Error-recovery (/chassis/adapter/host-fc-if/error-recovery)

### **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to set the port-down-io-retry-timeout:

```
Server# scope chassis
Server /chassis/ # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope error-recovery
Server /chassis/adapter/host-fc-if/error-recovery # set port-down-timeout 9343
Server /chassis/adapter/host-fc-if/error-recovery *# commit
Committed host-fc-if fc0 settings will take effect upon the next server reset
Server /chassis/adapter/host-fc-if/error-recovery #
```

Command	Description
set port-down-io-retry-count	

# set port-profile (host-eth-if)

To specify a port profile that should be associated with the vNIC, use the **set port-profile** command in host-eth-if mode.

set port-profile name

#### **Syntax Description**

name	The name of a port pr	ofile
iame	The name of a port pr	ome.

#### **Command Default**

None

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## Usage Guidelin

Note

To use this command, you must enable NIV mode for the adapter.

The name must be a port profile defined on the switch to which this server is connected.

## **Examples**

This example shows how to specify a port profile on interface eth0 on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # set niv-mode enabled
Server /chassis/adapter *# scope host-eth-if eth0
Server /chassis/adapter/host-eth-if *# set port-profile TestProfile5
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description
set niv-mode	
show port-profiles	

## set port-profile (network)

To configure the server to connect to the network using a port profile, use the **set port-profile** command in network mode.

set port-profile name

#### **Syntax Description**

name

Specifies the port profile CIMC should use to configure the management interface, the virtual Ethernet, and the VIF on supported adapter cards such as the Cisco UCS VIC1225 Virtual Interface Card.

Enter up to 80 alphanumeric characters. You cannot use spaces or other special characters except for - (hyphen) and (underscore). In addition, the port profile name cannot begin with a hyphen.

**Note** The port profile must be defined on the switch to which this server is connected.

#### **Command Default**

None

#### **Command Modes**

network (/network)

#### **Command History**

Release	Modification	Modification	
1.4(6)	This command was introduced.		

#### **Usage Guidelines**

Use this command to configure the network using a port profile.

## **Examples**

This example connects to port profile abcde12345:

```
Server# scope cimc
Server /cimc # scope network
Server /cimc/network # set port-profile abcde12345
Server /cimc/network *# commit
Server /cimc/network # show detail
Network Setting:
    IPv4 Address: 10.193.66.174
    IPv4 Netmask: 255.255.248.0
    IPv4 Gateway: 10.193.64.1
    DHCP Enabled: no
    Obtain DNS Server by DHCP: no
    Preferred DNS: 0.0.0.0
    Alternate DNS: 0.0.0.0
    VLAN Enabled: no
    VLAN ID: 1
    VLAN Priority: 0
    Port Profile: abcde12345
    Hostname: Server
    MAC Address: 50:3D:E5:9D:63:3C
   NIC Mode: dedicated
```

NIC Redundancy: none

Server /cimc/network #

## set POSTErrorPause

To specify the action when the server encounters a critical error during power-on self test (POST), use the **set POSTErrorPause** command.

set POSTErrorPause {Disabled| Enabled}

#### **Syntax Description**

Disabled	The BIOS continues to attempt to boot the server when a critical error occurs during POST.
Enabled	The BIOS pauses the attempt to boot the server and opens the Error Manager when a critical error occurs during POST.

#### **Command Default**

The BIOS continues to attempt to boot the server when a critical error occurs during POST.

#### **Command Modes**

Main BIOS (/bios/main)

#### **Command History**

Release	Modification	
1.3(1)	This command was introduced.	

#### **Examples**

This example configures the boot to pause when a critical error occurs during POST and commits the transaction:

```
Server# scope bios
Server /bios # scope main
Server /bios/main # set POSTErrorPause Enabled
Server /bios/main *# commit
Server /bios/main *# show detail
Set-up parameters:
Boot option retry: Disabled
POST Error Pause: Enabled

Server /bios/main #
```

Command	Description
show main	

# set preferred-dns-server

To specify the IP address of the primary DNS server, use the **set preferred-dns-server** command.

set preferred-dns-server dns1-ipv4-address

## **Syntax Description**

dus	!-ipv4	-ada	lress
uns	$-\iota \rho \nu \tau$	-иии	1633

The IP address of the primary DNS server.

**Command Default** 

None

**Command Modes** 

Network (/cimc/network)

#### **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

#### **Examples**

This example specifies the IP address of the primary DNS server:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set preferred-dns-server 192.0.20.1
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
set alternate-dns-server	
show network	

## set privilege-level

To specify the highest privilege level that can be assigned to an IPMI session, use the **set privilege-level** command.

set privilege-level {admin| readonly| user}

## **Syntax Description**

admin	IPMI users can perform all available actions.
readonly	IPMI users can view information but cannot make any changes.
user	IPMI users can perform some functions but cannot perform administrative tasks.

#### **Command Default**

IPMI users can perform all available actions.

#### **Command Modes**

IPMI (/ipmi)

## **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

#### **Usage Guidelines**

Use this command to specify the highest privilege level that can be assigned to an IPMI session on this server. This can be one of the following levels:

- admin IPMI users can perform all available actions. If you select this option, IPMI users with the "Administrator" user role can create admin, user, and read-only sessions on this server.
- **readonly** IPMI users can view information but cannot make any changes. If you select this option, IPMI users with the "Administrator", "Operator", or "User" user roles can only create read-only IPMI sessions, regardless of their other IPMI privileges.
- user IPMI users can perform some functions but cannot perform administrative tasks. If you select this option, IPMI users with the "Administrator" or "Operator" user role can create user and read-only sessions on this server.

#### **Examples**

This example sets the highest privilege level that can be assigned to an IPMI session to read-only:

```
server# scope ipmi
server /ipmi # set enabled yes
server /ipmi* # set privilege-level readonly
server /ipmi* # commit
server /ipmi #
```

Command	Description
show ipmi	

## set ProcessorC1eEnable

To specify whether the CPU transitions to its minimum frequency when entering the C1 state, use the **set ProcessorC1eEnable** command.

set ProcessorC1eEnable {Disabled| Enabled}

#### **Syntax Description**

Disabled	The CPU continues to run at its maximum frequency in the C1 state.
Enabled	The CPU transitions to its minimum frequency. This option saves the maximum amount of power in the C1 state.

#### **Command Default**

The CPU transitions to its minimum frequency in C1 state.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify whether the CPU transitions to its minimum frequency when entering the C1 state. Enabling this option saves the maximum amount of power in the C1 state.



Note

This command is operative only if the set ProcessorCcxEnable command is set to Enabled.

## **Examples**

This example configures the CPU to run at its maximum frequency in the C1 state and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ProcessorCleEnable Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set ProcessorCcxEnable	

Command	Description
show advanced	

# set ProcessorC1EReport

To specify whether the CPU transitions to its minimum frequency when entering the C1 state, use the **set ProcessorC1EReport** command.

set ProcessorC1EReport {Disabled| Enabled}

#### **Syntax Description**

Disabled	The CPU continues to run at its maximum frequency in the C1 state.
Enabled	The CPU transitions to its minimum frequency. This option saves the maximum amount of power in the C1 state.

#### **Command Default**

The CPU transitions to its minimum frequency in C1 state.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(5)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify whether the CPU transitions to its minimum frequency when entering the C1 state. Enabling this option saves the maximum amount of power in the C1 state.

## **Examples**

This example configures the CPU to run at its maximum frequency in the C1 state and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ProcessorC1EReport Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set ProcessorC3Report

To specify whether the BIOS sends the C3 report to the operating system, use the **set ProcessorC3Report** command.

set ProcessorC3Report {Disabled| ACPI C2| ACPI C3}

#### **Syntax Description**

Disabled	The BIOS does not send the C3 report.
ACPI_C2	The BIOS sends the C3 report using the ACPI C2 format.
ACPI_C3	The BIOS sends the C3 report using the ACPI C3 format.

#### **Command Default**

The BIOS does not send the C3 report.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify whether the BIOS sends the C3 report to the operating system. When the OS receives the report, it can transition the processor into the lower C3 power state to decrease energy usage while maintaining optimal processor performance. This can be one of the following:

- **Disabled**—The BIOS does not send the C3 report.
- ACPI\_C2—The BIOS sends the C3 report using the ACPI C2 format, allowing the OS to transition the processor to the C3 low power state.
- ACPI\_C3—The BIOS sends the C3 report using the ACPI C3 format, allowing the OS to transition the processor to the C3 low power state.

#### **Examples**

This example specifies that the BIOS sends the C3 report using the ACPI C3 format and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ProcessorC3Report ACPI_C3
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set ProcessorC6Report

To specify whether the BIOS sends the C6 report to the operating system, use the **set ProcessorC6Report** command.

set ProcessorC6Report {Disabled| Enabled}

#### **Syntax Description**

Disabled	The BIOS does not send the C6 report.
Enabled	The BIOS sends the C6 report.

#### **Command Default**

The BIOS sends the C6 report.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether the BIOS sends the C6 report to the operating system. When the OS receives the report, it can transition the processor into the lower C6 power state to decrease energy usage while maintaining optimal processor performance. This can be one of the following:

- **Disabled**—The BIOS does not send the C6 report.
- **Enabled**—The BIOS sends the C6 report, allowing the OS to transition the processor to the C6 low power state.

## **Examples**

This example specifies that the BIOS does not send the C6 report and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ProcessorC6Report Disable
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set ProcessorC7Report

To specify whether the processor sends the C7 report to the operating system, use the **set ProcessorC7Report** command.

set ProcessorC7Report {Disabled| Enabled}

## **Syntax Description**

Disabled	The processor does not send the C7 report.
Enabled	The processor sends the C7 report.

#### **Command Default**

The processor does not send the C7 report.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Examples**

This example specifies that the processor sends the C7 report and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ProcessorC7Report Enable
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set ProcessorCcxEnable

To specify whether the system can enter a power savings mode during idle periods, use the **set ProcessorCcxEnable** command.

set ProcessorCcxEnable {Disabled| Enabled}

## **Syntax Description**

Disabled	The system remains in high performance state even when idle.
Enabled	The system can reduce power to system components such as the DIMMs and CPUs.

#### **Command Default**

The system can reduce power to system components when idle.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether the system can enter a power savings mode during idle periods. The amount of power reduction is specified by the **set PackageCStateLimit** command.

#### **Examples**

This example specifies that the system remains in high performance state even when idle and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set ProcessorCcxEnable Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

# set QPILinkFrequency

To specify the Intel QuickPath Interconnect (QPI) link frequency in gigatransfers per second (GT/s), use the **set QPILinkFrequency** command.

set QPILinkFrequency {Auto| 6.4 GT/s| 7.2 GT/s| 8.0 GT/s}

## **Syntax Description**

Auto	The CPU determines the QPI link frequency.
6.4_GT/s	The QPI link frequency is 6.4 GT/s.
7.2_GT/s	The QPI link frequency is 7.2 GT/s.
8.0_GT/s	The QPI link frequency is 8.0 GT/s.

#### **Command Default**

The CPU determines the QPI link frequency.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

## **Command History**

Release	Modification
1.4(5)	This command was introduced.

## **Examples**

This example specifies that the QPI link frequency is 6.4 GT/s and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set QPILinkFrequency 6.4_GT/s
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

## set raid-primary-member

To specify the slot in which the primary copy of the data resides, use the set raid-primary-member command.

set raid-primary-member {slot1| slot2}

#### **Syntax Description**

slot1	The primary copy of the data resides in slot 1.
slot2	The primary copy of the data resides in slot 2.

## **Command Default**

The primary copy of the data resides in slot 1.

#### **Command Modes**

FlexFlash operational profile (/chassis/flexflash/operational-profile)

#### **Command History**

Release	Modification
1.3(3)	This command was introduced.

## **Usage Guidelines**

Use this command to specify the slot in which the primary copy of the data resides.



Note

Currently, Cisco Flexible Flash cards are supported only in slot 1.

#### **Examples**

This example shows how to specify that the primary copy of the data resides in slot 1:

```
Server# scope chassis
```

Server /chassis # scope flexflash FlexFlash-0

Server /chassis/flexflash # scope operational-profile

Server /chassis/flexflash/operational-profile # set raid-primary-member slot1

Server /chassis/flexflash/operational-profile \*# commit

Server /chassis/flexflash/operational-profile #

Command	Description
scope operational-profile	

### set RankInterLeave

To specify how the CPU performs interleaving of physical ranks of memory, use the **set RankInterLeave** command.

 $set\ RankInterLeave\ \{Auto|\ 1\_Way|\ 2\_Way|\ 4\_Way|\ 8\_Way\}$ 

#### **Syntax Description**

Auto	The CPU determines what interleaving is done.
1_Way	Some rank interleaving is used.
2_Way	Additional rank interleaving is used.
4_Way	Additional rank interleaving is used.
8_Way	The maximum amount of rank interleaving is used.

#### **Command Default**

The CPU determines what interleaving is done.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(5)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify how the CPU interleaves physical ranks of memory so that one rank can be accessed while another is being refreshed.

#### **Examples**

This example configures the CPU to perform the maximum amount of rank interleaving and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set RankInterLeave 8_Way
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

### set rate-limit

To specify a maximum data rate for the host interface, use the **set rate-limit** command.

set rate-limit {off| rate}

#### **Syntax Description**

off	Rate limiting is disabled.
rate	Specifies the rate limit in Mbps. The range is 1 to 10000.

#### **Command Default**

Rate limiting is disabled.

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to specify a rate limit of 500 Mbps on interface eth0 on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # set rate-limit 500
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description
show host-eth-if	

# set redundancy

To specify the server NIC redundancy mode when the NIC mode is Shared LOM, use the **set redundancy** command.

set redundancy {none| active-active| active-standby}

#### **Syntax Description**

none	The LAN On Motherboard (LOM) Ethernet ports operate independently and do not fail over if there is a problem.
active-active	If supported, all LOM Ethernet ports are utilized.
active-standby	If one LOM Ethernet port fails, traffic fails over to another LOM port.

#### **Command Default**

None

#### **Command Modes**

Network (/cimc/network)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example sets the server NIC redundancy mode to active-standby:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set redundancy active-standby
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
set mode	
show network	

# set remote-syslog-severity

To specify the lowest level of CIMC log messages that will be sent to the remote syslog server, use the **set remote-syslog-severity** command.

set remote-syslog-severity level

#### **Syntax Description**

level	The lowest level of messages that will be sent to the remote syslog server. See the
	Usage Guidelines for valid values.

#### **Command Default**

Messages of level Warning and higher are sent.

#### **Command Modes**

CIMC log (/cimc/log)

#### **Command History**

Release	Modification
1.4(3)	This command was introduced.

#### **Usage Guidelines**

The severity level can be one of the following, in decreasing order of severity:

- · emergency
- alert
- · critical
- error
- · warning
- notice
- informational
- debug

CIMC does not send any log messages with a severity below the selected severity. For example, if you select **error**, CIMC will send all messages with the severity Emergency, Alert, Critical, or Error. It will not send Warning, Notice, Informational, or Debug messages.

#### **Examples**

This example shows how to configure the sending of CIMC log entries with a minimum severity level of Warning:

```
Server# scope cimc
Server /cimc # scope log
```

```
Server /cimc/log # set remote-syslog-severity warning
Server /cimc/log *# commit
Server /cimc/log #
```

Command	Description
show remote-syslog-severity	

### set resource-allocation-timeout

To set the the resource allocation timeout value (RATOV), use the **set error-detect-timeout** command.

set resource-allocation-timeout msec

#### **Syntax Description**

*msec* Specifies the resource allocation timeout value (RATOV), the number of milliseconds to wait before the system assumes that a resource cannot be properly allocated. The range is 5000 to 100000; the default is 10000 milliseconds.

#### **Command Default**

The default is 10000 milliseconds.

#### **Command Modes**

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the resource allocation timeout value to 5000 milliseconds:

```
Server# scope chassis
Server /chassis/ # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # set resource-allocation-timeout 5000
Server /chassis/adapter/host-fc-if *# commit
Server /chassis/adapter/host-fc-if #
```

Command	Description
set error-detect-timeout	

### set role

To specify a user role, use the **set role** command.

set role {admin| readonly| user}

#### **Syntax Description**

admin	The user can perform all configuration and control tasks.
readonly	The user can only read configuration and status.
user	The user can perform control tasks but cannot change the configuration.

#### **Command Default**

None

#### **Command Modes**

LDAP role group (/ldap/role-group)

User (/user)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.
1.4(1)	This command was added in the LDAP role group command mode.

#### **Usage Guidelines**

Use this command to specify the permission level (role) for a user. A user can be assigned one of the following roles:

- admin—The user can perform all actions available.
- user—The user can perform the following tasks:
  - View all information
  - Manage the power control options such as power on, power cycle, and power off
  - Launch the KVM console and virtual media
  - Clear all logs
  - Toggle the locator LED
- readonly—The user can view information but cannot make any changes.

#### **Examples**

This example configures a user name, password, and role for user number 15:

```
Server# scope user 15
Server /user # set enabled yes
Server /user* # set name user15
Server /user* # set password ex4mpl3
Server /user* # set role readonly
Server /user* # commit
Server /user #
```

Command	Description
show user	

### set rq-count

To set the receive queue count of the host Ethernet interface, use the set rq-count command.

set rq-count count

#### **Syntax Description**

count The number of receive queue resources to allocate. The range is 1 to 256.

#### **Command Default**

The default is 4.

#### **Command Modes**

Receive queue (/chassis/adapter/host-eth-if/recv-queue)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the number of receive queue resources to allocate:

```
Server# scope chassis
```

Server /chassis/ # scope adapter 1

Server /chassis/adapter # scope host-eth-if eth0

Server /chassis/adapter/host-eth-if # scope recv-queue

Server /chassis/adapter/host-eth-if/recv-queue # set rq-count 3

Server /chassis/adapter/host-eth-if/recv-queue \*# commit

Committed host-eth-if eth0 settings will take effect upon the next server reset

Server /chassis/adapter/host-eth-if/recv-queue #

Command	Description
set rq-ring-size	

# set rq-ring-size

To set the receive queue ring size, use the **set rq-ring-size** command.

set rq-ring-size size

#### **Syntax Description**

size	The number of descriptors in the receive queue. The range is 64 to 4094; the default
	is 512.

#### **Command Default**

The default is 512.

#### **Command Modes**

Receive queue (/chassis/adapter/host-eth-if/recv-queue)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the number of descriptors in the receive queue:

```
Server# scope chassis
Server /chassis/ # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope recv-queue
Server /chassis/adapter/host-eth-if/recv-queue # set eth-rq-ring-size 68
Server /chassis/adapter/host-eth-if/recv-queue *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/recv-queue #
```

Command	Description
set rq-count	

### set rss

To enable or disable Receive-side Scaling (RSS), use the set rss command.

set rss {disable| enable}

#### **Syntax Description**

disable	Disables RSS.
enable	Enables RSS.

#### **Command Default**

The default is enable for the two default vNICs and disable for user-created vNICs.

#### **Command Modes**

RSS (/chassis/adapter/host-eth-if/rss)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to enable or disable RSS, which allows the efficient distribution of network receive processing across multiple CPUs in multiprocessor systems.

#### **Examples**

This example shows how to disable RSS:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope rss
Server /chassis/adapter/host-eth-if/rss # set rss disable
Server /chassis/adapter/host-eth-if/rss *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/rss #
```

Command	Description
set rss-hash-ipv4	
set rss-hash-ipv6	

# set rss-hash-ipv4

To enable or disable the IPv4 RSS of the host Ethernet interface, use the set rss-hash-ipv4 command.

set rss-hash-ipv4 {disable| enable}

#### **Syntax Description**

disable	Disables IPv4 RSS.
enable	Enables IPv4 RSS.

**Command Default** 

The default is enable.

**Command Modes** 

RSS (/chassis/adapter/host-eth-if/rss)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the rss-hash-ipv4:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope rss
Server /chassis/adapter/host-eth-if/rss # set rss-hash-ipv4 disable
Server /chassis/adapter/host-eth-if/rss *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/rss #
```

Command	Description
set rss-hash-ipv6	
set rss	

# set rss-hash-ipv6

To enable or disable the IPv6 RSS of the host Ethernet interface, use the set rss-hash-ipv6 command.

set rss-hash-ipv6 {disable| enable}

#### **Syntax Description**

disable	Disables IPv6 RSS.
enable	Enables IPv6 RSS.

#### **Command Default**

The default is enable.

#### **Command Modes**

RSS (/chassis/adapter/host-eth-if/rss)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the rss-hash-ipv6:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope rss
Server /chassis/adapter/host-eth-if/rss # set rss-hash-ipv6 disable
Server /chassis/adapter/host-eth-if/rss *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/rss #
```

Command	Description
set rss-hash-ipv4	
set rss	

# set rss-hash-ipv6-ex

To enable or disable the IPv6 Extension RSS of the host Ethernet interface, use the **set rss-hash-ipv6-ex** command.

set rss-hash-ipv6-ex {disable| enable}

#### **Syntax Description**

disable	Disables IPv6 extension RSS.
enable	Enables IPv6 extension RSS.

#### **Command Default**

The default is disable.

#### **Command Modes**

RSS (/chassis/adapter/host-eth-if/rss)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the rss-hash-ipv6-ex:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope rss
Server /chassis/adapter/host-eth-if/rss # set rss-hash-ipv6-ex disable
Server /chassis/adapter/host-eth-if/rss *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/rss #
```

Command	Description
set rss-hash-ipv6	
set rss	

# set rss-hash-tcp-ipv4

To enable or disable TCP/IPv4 RSS on the host Ethernet interface, use the set rss-hash-tcp-ipv4 command.

set rss-hash-tcp-ipv4 {disable| enable}

#### **Syntax Description**

disable	Disables TCP/IPv4 RSS.
enable	EnablesTCP/IPv4 RSS.

**Command Default** 

The default is enable.

**Command Modes** 

RSS (/chassis/adapter/host-eth-if/rss)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to enable TCP/IPv4 RSS:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope rss
Server /chassis/adapter/host-eth-if/rss # set rss-hash-tcp-ipv4 enable
Server /chassis/adapter/host-eth-if/rss *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/rss #
```

Command	Description
set rss	
set rss-hash-tcp-ipv6	

# set rss-hash-tcp-ipv6

To enable or disable the TCP/IPv6 RSS of the host Ethernet interface, use the set rss-hash-tcp-ipv6 command.

set rss-hash-tcp-ipv6 {disable| enable}

#### **Syntax Description**

disable	Disables TCP/IPv6 RSS.
enable	Enables TCP/IPv6 RSS.

**Command Default** 

The default is enable.

**Command Modes** 

RSS (/chassis/adapter/host-eth-if/rss)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the rss-hash-tcp-ipv6:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope rss
Server /chassis/adapter/host-eth-if/rss # set rss-hash-tcp-ipv6 disable
Server /chassis/adapter/host-eth-if/rss *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/rss #
```

Command	Description
set rss-hash-tcp-ipv4	
set rss	

# set rss-hash-tcp-ipv6-ex

To set the TCP/IPv6 Extension RSS of the host Ethernet interface, use the set rss-hash-tcp-ipv6-ex command.

set rss-hash-tcp-ipv6-ex {disable | enable}

#### **Syntax Description**

disable	Disables TCP/IPv6 extension RSS.
enable	Enables TCP/IPv6 extension RSS.

#### **Command Default**

The default is disable.

#### **Command Modes**

RSS (/chassis/adapter/host-eth-if/rss)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the rss-hash-tcp-ipv6-ex:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope rss
Server /chassis/adapter/host-eth-if/rss # set rss-hash-tcp-ipv6-ex
Server /chassis/adapter/host-eth-if/rss *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/rss #
```

Command	Description
set rss-hash-tcp-ipv4-ex	
set rss	

# set SelectMemoryRAS

To specify how the memory reliability, availability, and serviceability (RAS) is configured for the server, use the **set SelectMemoryRAS** command.

 $set\ Select Memory RAS\ \{Lockstep|\ Maximum\_Performance|\ Mirroring|\ Sparing\}$ 

#### **Syntax Description**

Lockstep	If the DIMM pairs in the server have an identical type, size, and organization and are populated across the SMI channels, you can enable lockstep mode to minimize memory access latency and provide better performance. This option offers better system performance than Mirroring and better reliability than Maximum Performance but lower reliability than Mirroring and lower system performance than Maximum Performance.
Maximum_Performance	System performance is optimized.
Mirroring	System reliability is optimized by using half the system memory as backup.
Sparing	The system reserves some memory for use in the event a DIMM fails. If that happens, the server takes the DIMM offline and replaces it with the reserved memory. This option provides less redundancy than mirroring, but it leaves more of the memory available for programs running on the server.

#### **Command Default**

System performance is optimized.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.
1.4(4)	This command was modified to add the <b>Lockstep</b> keyword.

# Usage Guidelin

Note

This command is not available on all models and configurations. Some keywords are not supported on all models and configurations.

#### **Examples**

This example configures memory mirroring for system reliability and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set SelectMemoryRAS Mirroring
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set MirroringMode	
set SparingMode	

# set send-alert (pef)

To enable performance event filter alerts on the server, use the **set send-alert** command in pef mode.

set send-alert {no | yes}

#### **Syntax Description**

no	Specifies that performance event filter alerts are not enabled.
yes	Specifies that performance event filter alerts are enabled.

#### **Command Default**

None

#### **Command Modes**

Performance event filters (/fault/pef)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example shows how to enable performance event filter alerts on the server:

```
server# scope fault
server /fault # scope pef 3
server /fault/pef # set send-alert yes
server /fault/pef* # commit
server /fault/pef #
```

Command	Description
show pef	

### set Serial-PortA

To enable or disable serial port A, use the **set Serial-PortA** command.

 $set\ Serial\text{-}PortA\ \{Disabled|\ Enabled\}$ 

#### **Syntax Description**

Disabled	The port is disabled.
Enabled	The port is enabled.

#### **Command Default**

The port is enabled.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

### Usage Guidelin

#### Note

This command is not available on all models and configurations.

#### **Examples**

This example disables serial port A and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set Serial-PortA Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set SerialPortAAddress	
show advanced	

### set SerialPortAAddress

To specify the address to be used by serial port A, use the set SerialPortAAddress command.

set SerialPortAAddress {2E8| 3E8| 3F8}

#### **Syntax Description**

2E8	The port uses address 2E8.
3E8	The port uses address 3E8.
3F8	The port uses address 3F8.

#### **Command Default**

The port uses address 3F8.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

By replacing the port letter A in the command with the letter B, you can modify this command to specify an address for serial port B. For example, to specify an address for serial port B, use the **set SerialPortBAddress** command.



This command is not available on all models and configurations.

#### **Examples**

This example specifies that serial port A uses address 3E8 and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set SerialPortAAddress 3E8
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set Serial-PortA	
show advanced	

### set Serial-PortB

To enable or disable serial port B, use the **set Serial-PortB** command.

set Serial-PortB {Disabled| Enabled}

#### **Syntax Description**

Disabled	The port is disabled.
Enabled	The port is enabled.

#### **Command Default**

The port is enabled.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

### Usage Guidelin

Note

This command is not available on all models and configurations.

#### **Examples**

This example disables serial port B and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set Serial-PortB Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set SerialPortBAddress	
show advanced	

### set SerialPortBAddress

To specify the address to be used by serial port B, use the **set SerialPortBAddress** command.

set SerialPortBAddress {2E8| 2F8| 3E8| 3F8}

#### **Syntax Description**

2E8	The port uses address 2E8.
2F8	The port uses address 2F8.
3E8	The port uses address 3E8.
3F8	The port uses address 3F8.

**Command Default** 

The port uses address 2F8.

**Command Modes** 

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

# Usage Guidelin

Note

This command is not available on all models and configurations.

#### **Examples**

This example specifies that serial port B uses address 3E8 and commits the transaction:

Server# scope bios

Server /bios # scope advanced

Server /bios/advanced # set SerialPortBAddress 3E8

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
set Serial-PortB	
show advanced	

# set server-ip

To specify the IP address of a remote server, use the **set server-ip** command.

set server-ip ip-address

#### **Syntax Description**

note server.
1

#### **Command Default**

None

#### **Command Modes**

CIMC log server (/cimc/log/server)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.
1.1(2)	This command was added to the CIMC log server command mode.
1.4(1)	This command was removed from the LDAP command mode.

#### **Usage Guidelines**

Use this command to configure the IP address of a remote syslog server for sending CIMC log entries.

#### **Examples**

This example shows how to configure a remote syslog server profile and enable the sending of CIMC log entries:

```
Server# scope cimc
Server /cimc # scope log
Server /cimc/log # scope server 2
Server /cimc/log/server # set server-ip 192.0.2.34
Server /cimc/log/server *# set enabled yes
Server /cimc/log/server *# commit
Server /cimc/log/server #
```

Command	Description
show server	

### set Slot-n-ROM

To enable or disable a PCIe slot ROM, use the set Slot-n-ROM command.

set Slot-n-ROM {Disabled| Enabled}

#### **Syntax Description**

n	The number or letter of the PCIe slot.
Disabled	The PCIe slot ROM is disabled.
Enabled	The PCIe slot ROM is enabled.

#### **Command Default**

The PCIe slot ROM is enabled.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to enable or disable a Peripheral Component Interconnect Express (PCIe) slot ROM designated by *n* in the command name **Slot**-*n*-**ROM**.

#### **Examples**

This example disables the PCIe slot 2 ROM and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set Slot-2-ROM Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
show advanced	

### set Slot1Disable

To specify whether the PCIe expansion slot 1 is available to the server, use the set Slot1Disable command.

set Slot1Disable {Disabled| Enabled}

#### **Syntax Description**

Disabled	The expansion slot is not available.
Enabled	The expansion slot is available.

#### **Command Default**

The expansion slot is available.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

By replacing the numeral 1 in the command with the number of another PCIe expansion slot, you can modify this command to specify whether other expansion slots are available. For example, to configure expansion slot 2, use the **set Slot2Disable** command.

#### **Examples**

This example specifies that PCIe expansion slot 1 is not available and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set Slot1Disable Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set SlotMezzDisable	
show advanced	

## set SlotMezzDisable

To specify whether the PCIe mezzanine slot expansion ROM is available to the server, use the **set SlotMezzDisable** command.

set SlotMezzDisable {Disabled| Enabled}

#### **Syntax Description**

Disabled	The mezzanine slot is not available.
Enabled	The mezzanine slot is available.

**Command Default** 

The mezzanine slot is available.

**Command Modes** 

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example specifies that the PCIe mezzanine slot expansion ROM is not available and commits the transaction:

Server# scope bios

Server /bios # scope advanced

Server /bios/advanced # set SlotMezzDisable Disabled

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
set Slot1Disable	
show advanced	

# set SparingMode

To specify how spared memory is allocated, use the **set SparingMode** command.

set SparingMode {Rank\_Sparing| DIMM\_Sparing}

#### **Syntax Description**

Rank_Sparing	Spared memory is allocated at the rank level.
DIMM_Sparing	Spared memory is allocated at the DIMM level.

#### **Command Default**

Spared memory is allocated at the rank level.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify how spared memory is allocated.



Note

This command is operative only if the **set SelectMemoryRAS** command is set to **Sparing**.

#### **Examples**

This example configures allocation of spared memory at the DIMM level and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set SelectMemoryRAS Sparing
Server /bios/advanced *# set SparingMode DIMM_Sparing
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set SelectMemoryRAS	
show advanced	

# set ssh-port

To specify the port number for SSH connections to CIMC, use the set ssh-port command.

set ssh-port port-number

#### **Syntax Description**

port-number

The port number for SSH connections to CIMC.

**Command Default** 

The default port number is 22.

**Command Modes** 

Secure shell (/ssh)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example configures a port number of 22 for SSH connections:

```
server# scope ssh
server /ssh # set enabled yes
server /ssh* # set ssh-port 22
server /ssh* # commit
server /ssh #
```

Command	Description
show ssh	

### set sys-contact

To specify the SNMP system contact information, use the **set sys-contact** command.

set sys-contact contact

#### **Syntax Description**

**Command Default** 

None

**Command Modes** 

SNMP (/snmp)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the system contact person responsible for the SNMP implementation. The contact information can be up to 254 characters, such as an email address or a name and telephone number. To enter a value that contains spaces, you must enclose the entry with quotation marks.

SNMP must be enabled and saved before this command can be accepted.

#### **Examples**

This example configures the SNMP parameters and commits the transaction:

```
scope snmp
Server /snmp # set enabled yes
Server /snmp *# commit
Server /snmp # set community-str cimcpublic
Server /snmp *# set sys-contact "User Name <username@example.com> +1-408-555-1212"
Server /snmp *# set sys-location "San Jose, California"
Server /snmp *# commit
Server /snmp # show detail
SNMP Settings:
    SNMP Port: 161
    System Contact: User Name <username@example.com> +1-408-555-1212
    System Location: San Jose, California
    SNMP Community: cimcpublic
    SNMP Trap community: 0
    Enabled: yes
    SNMP Trap Version: 1
    SNMP Inform Type: inform
Server /snmp #
```

Command	Description
scope snmp	
show snmp	

# set sys-location

To specify the SNMP system server location, use the set sys-location command.

set sys-location location

#### **Syntax Description**

location	The SNMP system server location information.

**Command Default** 

None

**Command Modes** 

SNMP (/snmp)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the location of the host on which the SNMP agent (server) runs. The location information can be up to 254 characters. To enter a value that contains spaces, you must enclose the entry with quotation marks.

SNMP must be enabled and saved before this command can be accepted.

#### **Examples**

This example configures the SNMP parameters and commits the transaction:

```
scope snmp
Server /snmp # set enabled yes
Server /snmp *# commit
Server /snmp # set community-str cimcpublic
Server /snmp *# set sys-contact "User Name <username@example.com> +1-408-555-1212"
Server /snmp *# set sys-location "San Jose, California"
Server /snmp *# commit
Server /snmp # show detail
SNMP Settings:
   SNMP Port: 161
    System Contact: User Name <username@example.com> +1-408-555-1212
    System Location: San Jose, California
   SNMP Community: cimcpublic
    SNMP Trap community: 0
    Enabled: yes
    SNMP Trap Version: 1
    SNMP Inform Type: inform
Server /snmp #
```

Command	Description
scope snmp	
show snmp	

# set tcp-large-receive-offload

To enable or disable the TCP Large Packet Receive Offload, use the set tcp-large-receive offload command.

 $settcp-large-receive-offload \{disable|\ enable\}$ 

#### **Syntax Description**

disable	The CPU processes all large packets.
enable	The hardware reassembles all segmented packets before sending them to the CPU. This option may reduce CPU utilization and increase inbound throughput.

#### **Command Default**

The default is enable.

#### **Command Modes**

Offload (/chassis/adapter/host-eth-if/offload)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the TCP Large Packet Receive Offload:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope offload
Server /chassis/adapter/host-eth-if/offload # set tcp-large-receive-offload disable
Server /chassis/adapter/host-eth-if/offload *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/offload #
```

Command	Description
set tcp-tx-checksum-offload	

# set tcp-rx-checksum-offload

To enable or disable the TCP receive checksum validation offload, use the **set tcp-rx-checksum-offload** command.

set tcp-rx-checksum-offload {disable| enable}

#### **Syntax Description**

disable	The CPU validates all packet checksums.
enable	The CPU sends all packet checksums to the hardware for validation. This option may reduce CPU overhead.

**Command Default** 

The default is enable.

**Command Modes** 

Offload (/chassis/adapter/host-eth-if/offload)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the TCP rx checksum offload:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope offload
Server /chassis/adapter/host-eth-if/offload # set tcp-rx-checksum-offload disable
Server /chassis/adapter/host-eth-if/offload *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/offload #
```

Command	Description
set tcp-tx-checksum-offload	
set tcp-segment-offload	

# set tcp-segment-offload

To enable or disable the TCP segment offload, use the set tcp-segment-offload command.

set tcp-segment-offload {disable | enable}

### **Syntax Description**

disable	Disables the CPU segments large TCP packets.
enable	Enables the CPU to send large TCP packets to the hardware to be segmented.

#### **Command Default**

The default is enable.

#### **Command Modes**

Offload (/chassis/adapter/host-eth-if/offload)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

## **Examples**

This example shows how to set the TCP segment offload:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope offload
Server /chassis/adapter/host-eth-if/offload # set tcp-segment-offload disable
Server /chassis/adapter/host-eth-if/offload *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/offload #
```

Command	Description
set tcp-tx-checksum-offload	
set tcp-rx-checksum-offload	

# set tcp-tx-checksum-offload

To enable or disable the TCP Transmit Offload Checksum Validation, use the **set tcp-tx-checksum-offload** command.

set tcp-tx-checksum-offload {disable | enable}

#### **Syntax Description**

disable	The CPU validates all packet checksums.
enable	The CPU sends all packet checksums to the hardware for validation. This option may reduce CPU overhead.

#### **Command Default**

The default is enable.

#### **Command Modes**

Offload (/chassis/adapter/host-eth-if/offload)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to set the TCP rx checksum offload:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope offload
Server /chassis/adapter/host-eth-if/offload # set tcp-tx-checksum-offload disable
Server /chassis/adapter/host-eth-if/offload *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/offload #
```

Command	Description
set tcp-tx-checksum-offload	
set tcp-rx-checksum-offload	

# set TerminalType

To specify the type of character formatting for console redirection, use the **set TerminalType** command.

set TerminalType {PC-ANSI| VT100| VT-100-PLUS| VT-UTF8}

#### **Syntax Description**

PC-ANSI	The PC-ANSI terminal font is used.
VT-UTF8	A video terminal with the UTF-8 character set is used.
VT100	A supported vt100 video terminal and its character set are used.
VT-100-PLUS	A supported vt100-plus video terminal and its character set are used.

#### **Command Default**

A supported vt100 video terminal and its character set are used.

#### **Command Modes**

Server Management BIOS (/bios/server-management)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the type of character formatting for console redirection.



Note

This setting must match the setting on the remote terminal application.

## **Examples**

This example specifies a video terminal with the UTF-8 character set and commits the transaction:

```
Server# scope bios
Server /bios # scope server-management
Server /bios/server-management # set TerminalType VT-UTF8
Server /bios/server-management *# commit
Server /bios/server-management #
```

Command	Description
show server-management	

# set tftp-ip (tech-support)

To set the TFTP server IP address, use the **set tftp-ip** command in tech-support mode.

set tftp-ip ip-address

#### **Syntax Description**

<i>ip-adaress</i> The IP address of the IFIP server. The format is A.A.A.	ip-address	The IP address of the TFTP server. The format is X.X.X.X
---	------------	--

#### **Command Default**

None

#### **Command Modes**

Technical support (/cimc/tech-support)

#### **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

#### **Usage Guidelines**

Specifies the IP address of the TFTP server on which the support data file should be stored.

Perform this task along with **set path** when requested by the Cisco Technical Assistance Center (TAC). This utility creates a summary report containing configuration information, logs and diagnostic data that will help TAC in troubleshooting and resolving technical issues.

#### **Examples**

This example shows how to set the TFTP server IP address:

```
server# scope cimc
server /cimc # scope tech-support
server /cimc/tech-support # set tftp-ip 209.165.200.225
server /cimc/tech-support* # commit
server /cimc/tech-support #
```

Command	Description
set tftp-path	
show tech-support	

## set timeout

To specify a timeout period, use the **set timeout** command.

set timeout time

#### **Syntax Description**

time

The timeout period, in seconds.

#### **Command Default**

The default HTTP timeout is 1800 seconds.

The default LDAP timeout is 60 seconds.

The default SSH timeout is 1800 seconds.

#### **Command Modes**

HTTP (/http)

LDAP (/ldap)

Secure shell (/ssh)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

In the HTTP and SSH scopes, use this command to specify the connection timeout period in seconds.

In the LDAP scope, use this command to specify the period in seconds until the LDAP search operation times out.

For different types of connections, the timeout period ranges and defaults are as follows:

- HTTP The range is 60 to 10800; the default is 1800.
- LDAP The range is 0 to 1800; the default is 60.
- SSH The range is 60 to 10800; the default is 1800.

## **Examples**

This example shows how to set the HTTP connection timeout to 600 seconds:

```
server# scope http
server /http # set timeout 600
server /http* # commit
server /http #
```

Command	Description
show http	
show ldap	
show ssh	

## set TPMAdminCtrl

To specify whether the server uses the Trusted Platform Module (TPM) to ensure all data is securely encrypted, use the **set TPMAdminCtrl** command.

## set TPMAdminCtrl {Disabled| Enabled}

#### **Syntax Description**

Disabled	The server does not use the TPM for data encryption.
Enabled	Data encryption is handled by the TPM.

#### **Command Default**

The server does not use the TPM for data encryption.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

### **Command History**

Release	Modification
1.4(3)	This command was introduced.

## **Examples**

This example specifies that the server uses the TPM to ensure all data is securely encrypted and commits the transaction:

```
Server# scope bios
```

Server /bios # scope advanced

Server /bios/advanced # set TPMAdminCtrl Enable

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
show advanced	

# set trap-community-str

To specify the SNMP community to which trap information should be sent, use the **set trap-community-str** command.

set trap-community-str trap-community

#### **Syntax Description**

4	The CNIMD of the 2
trap-community	The SNMP v1 or v2c community name or SNMP v3 username.

#### **Command Default**

None

#### **Command Modes**

SNMP (/snmp)

## **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the SNMP community to which trap information should be sent.

SNMP must be enabled and saved before this command can be accepted.

#### **Examples**

This example configures the SNMP parameters and commits the transaction:

#### scope snmp

```
Server /snmp # set enabled yes
Server /snmp *# commit
Server /snmp # set trap-community-str public-trap
Server /snmp *# commit
Server /snmp # show detail
SNMP Settings:
    SNMP Port: 161
    System Contact:
    System Location:
    SNMP Community:
    SNMP Trap community: public-trap
    Enabled: yes
    SNMP Trap Version: 1
    SNMP Inform Type: inform
Server /snmp #
```

Command	Description
show snmp	

## set trap-ver

To specify the SNMP version of trap messages, use the set trap-ver command.

set trap-ver {1| 2| 3}

#### **Syntax Description**

1 | 2 | 3

The SNMP version number of trap messages.

**Command Default** 

Trap messages are of type SNMPv1.

**Command Modes** 

SNMP (/snmp)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the SNMP version number for trap messages. Valid values are 1, 2, or 3 for SNMP v1, v2c, or v3.



Note

SNMPv3 traps will be delivered only to locations where the SNMPv3 user and key values are configured correctly.

SNMP must be enabled and saved before this command can be accepted.

## **Examples**

This example specifies SNMPv3 trap messages and commits the transaction:

#### scope snmp

```
Server /snmp # set enabled yes
Server /snmp *# commit
Server /snmp # set trap-ver 3
Server /snmp *# commit
Server /snmp # show detail
SNMP Settings:
    SNMP Port: 161
    System Contact: User Name <username@example.com> +1-408-555-1212
    System Location: San Jose, California
    SNMP Community: cimcpublic
    SNMP Trap community: 0
    Enabled: yes
    SNMP Trap Version: 3
    SNMP Inform Type: inform

Server /snmp #
```

Command	Description
scope trap-destination	

## set trust-host-cos

To specify whether the vNIC will trust host CoS or will remark packets, use the **set trust-host-cos** command.

set trust-host-cos {disable| enable}

#### **Syntax Description**

disable	Received packets are remarked with the configured CoS value.
enable	The existing CoS value of received packets is preserved.

#### **Command Default**

Received packets are remarked.

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify whether the vNIC will trust host CoS or will remark packets. By default, the received host CoS is not trusted, and the vNIC will remark the packets with the CoS value configured by the **set cos** command or with a value of zero (0) if no CoS value is configured. If this command is enabled, the vNIC will preserve the CoS value of received packets.

#### **Examples**

This example shows how to specify that received CoS values are preserved (trusted) by Ethernet host interface eth0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # set trust-host-cos enable
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description
set cos	

# set uplink

To specify the uplink port associated with a vNIC, use the set uplink command.

set uplink  $\{0|1\}$ 

### **Syntax Description**

0	All traffic for this vNIC goes through uplink port 0.
1	All traffic for this vNIC goes through uplink port 1.

## **Command Default**

None

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to associate uplink port 1 with the Ethernet host interface eth0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # set uplink 1
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description
show host-eth-if	

# set uplink-failback-timeout

To specify the NIV uplink failback timeout for the host interface, use the **set uplink-failback-timeout** command.

set uplink-failback-timeout seconds

#### **Syntax Description**

seconds Specifies the timeout in seconds. The range is 0 to 600.
--

#### **Command Default**

None

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Usage Guidelines**

After a vNIC has started using its secondary interface, this setting controls how long the primary interface must be available before the system resumes using the primary interface for the vNIC.



Note

To use this command, you must enable NIV mode for the adapter.

#### **Examples**

This example shows how to specify an NIV uplink failback timeout of 60 seconds on interface eth0 on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # set niv-mode enabled
Server /chassis/adapter *# scope host-eth-if eth0
Server /chassis/adapter/host-eth-if *# set uplink-failover enabled
Server /chassis/adapter/host-eth-if *# set uplink-failback-timeout 60
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description
set niv-mode	
set uplink-failover	

## set uplink-failover

To allow the vNIC to fail over to the secondary interface, use the set uplink-failover command.

set uplink-failover {disabled| enabled}

#### **Syntax Description**

disabled	Disables failover.
enabled	Allows failover.

#### **Command Default**

None

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Enable this setting if traffic on this vNIC should fail over to the secondary interface if there are communication problems.



Note

To use this command, you must enable NIV mode for the adapter.

#### **Examples**

This example shows how to enable uplink failover on interface eth0 on adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # set niv-mode enabled
Server /chassis/adapter *# scope host-eth-if eth0
Server /chassis/adapter/host-eth-if *# set uplink-failover enabled
Server /chassis/adapter/host-eth-if *# set uplink-failback-timeout 60
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description
set niv-mode	
set uplink-failback-timeout	

## set **USBController**

To specify whether the server uses its built-in USB controller, use the set USBController command.

set USBController {Disabled| Enabled}

## **Syntax Description**

Disabled	The server does not use its built-in USB controller.
Enabled	The server uses its built-in USB controller.

**Command Default** 

The server uses its built-in USB controller.

**Command Modes** 

Advanced BIOS (/bios/advanced)

### **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Examples**

This example disables the built-in USB controller and commits the transaction:

Server# scope bios

Server /bios # scope advanced

Server /bios/advanced # set USBController Disabled

Server /bios/advanced \*# commit

Server /bios/advanced #

Command	Description
set MakeUSBDeviceNonBootable	
show advanced	

## set UsbEmul6064

To specify whether the system supports 60h/64h emulation for complete USB keyboard legacy support, use the **set UsbEmul6064** command.

#### set UsbEmul6064 {Disabled| Enabled}

### **Syntax Description**

Disabled	60h/64 emulation is not supported.
Enabled	60h/64 emulation is supported.

#### **Command Default**

60h/64 emulation is supported.

#### **Command Modes**

Advanced BIOS (/bios/advanced)

#### **Command History**

Release	Modification
1.4(4)	This command was introduced.

## **Usage Guidelines**

Use this command to specify whether the system supports 60h/64h emulation for complete USB keyboard legacy support. You should select this option if you are using a non-USB aware operating system on the server.

#### **Examples**

This example enables 60h/64 emulation and commits the transaction:

```
Server# scope bios
Server /bios # scope advanced
Server /bios/advanced # set UsbEmul6064 Enabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Command	Description
set LegacyUSBSupport	

## set v3add

To add or modify an SNMPv3 user, use the set v3add command.

set v3add {yes| no}

#### **Syntax Description**

yes	This user is enabled as an SNMPv3 user and is allowed to access the SNMP OID tree.
no	This user configuration is deleted.

### **Command Default**

None

#### **Command Modes**

SNMPv3 users (/snmp/v3users)

### **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Usage Guidelines**

Use this command to add or delete the configuration for an SNMPv3 user. You can configure up to 15 users.



Note

When you add a user configuration, you must also configure the security name and security level at the same time or the user addition will fail.

#### **Examples**

This example adds and then deletes SNMPv3 user number 2:

```
Server# scope snmp
Server /snmp # scope v3users 2
Server /snmp/v3users # set v3add yes
Server /snmp/v3users *# set v3security-name ucsSNMPV3user
Server /snmp/v3users *# set v3security-level noauthnopriv
Server /snmp/v3users *# commit
Settings are being applied ... allow a few minutes for the process to complete
Server /snmp/v3users # show detail
User 2:
   Add User: yes
    Security Name: ucsSNMPV3user
    Security Level: noauthnopriv
    Auth Type: (N/A)
    Auth Key: *****
    Encryption: (N/A)
    Private Key: *****
Server /snmp/v3users # set v3add no
```

Warning: Are you sure you want to delete the user? If not, use "discard" to cancel this operation

Server /snmp/v3users \*# commit

All parameters discarded and user disabled.

Server /snmp/v3users #

Command	Description
set v3security-level	
set v3security-name	

# set v3auth-key

To specify an authorization key for an SNMPv3 user, use the set v3auth-key command.

## set v3auth-key

This command has no arguments or keywords.

### **Command Default**

None

#### **Command Modes**

SNMPv3 users (/snmp/v3users)

### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify an authorization key for an SNMPv3 user. When you enter the command, you are prompted to type an authorization key twice.

#### **Examples**

This example specifies an authorization key for SNMPv3 user number 2:

```
Server# scope snmp
Server /snmp # scope v3users 2
Server /snmp/v3users # set v3add yes
Server /snmp/v3users *# set v3security-name ucsSNMPV3user
Server /snmp/v3users *# set v3security-level authnopriv
Server /snmp/v3users *# set v3proto SHA
Server /snmp/v3users *# set v3auth-key
Please enter v3auth-key:ex4mplek3y
Please confirm v3auth-key:ex4mplek3y
Server /snmp/v3users *# commit
Settings are being applied ... allow a few minutes for the process to complete
Server /snmp/v3users #
```

Command	Description
set v3proto	

# set v3priv-auth-key

To specify a private encryption key for an SNMPv3 user, use the **set v3priv-auth-key** command.

set v3priv-auth-key

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

SNMPv3 users (/snmp/v3users)

### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify a private encryption key (privacy password) for an SNMPv3 user. When you enter the command, you are prompted to type an encryption key twice.

#### **Examples**

This example specifies an encryption key for SNMPv3 user number 2:

```
Server# scope snmp
Server /snmp # scope v3users 2
Server /snmp/v3users # set v3add yes
Server /snmp/v3users *# set v3security-name ucsSNMPV3user
Server /snmp/v3users *# set v3security-level authpriv
Server /snmp/v3users *# set v3proto SHA
Server /snmp/v3users *# set v3auth-key
Please enter v3auth-key:ex4mplek3y
Please confirm v3auth-key:ex4mp1ek3y
Server /snmp/v3users *# set v3priv-proto AES
Server /snmp/v3users *# set v3priv-auth-key
Please enter v3priv-auth-key:!102#3$4%5^6&7*8
Please confirm v3priv-auth-key: !1@2#3$4%5^6&7*8
Server /snmp/v3users *# commit
Settings are being applied ... allow a few minutes for the process to complete
Server /snmp/v3users #
```

Command	Description
set v3priv-proto	

## set v3priv-proto

To specify the data encryption protocol for an SNMPv3 user, use the **set v3priv-proto** command.

set v3priv-proto {DES| AES}

## **Syntax Description**

DES	Specifies encryption using the Data Encryption Standard (DES) protocol.
AES	Specifies encryption using the Advanced Encryption Standard (AES) protocol.

#### **Command Default**

None

#### **Command Modes**

SNMPv3 users (/snmp/v3users)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

### **Usage Guidelines**

Use this command to specify the data encryption protocol for an SNMPv3 user. AES is more secure than DES but requires more computation power and may not be supported in older systems.

#### **Examples**

This example specifies AES encryption for SNMPv3 user number 2:

```
Server# scope snmp
Server /snmp # scope v3users 2
Server /snmp/v3users # set v3add yes
Server /snmp/v3users *# set v3security-name ucsSNMPV3user
Server /snmp/v3users *# set v3security-level authpriv
Server /snmp/v3users *# set v3proto SHA
Server /snmp/v3users *# set v3auth-key
Please enter v3auth-key:ex4mp1ek3y
Please confirm v3auth-kev:ex4mplek3v
Server /snmp/v3users *# set v3priv-proto AES
Server /snmp/v3users *# set v3priv-auth-key
Please enter v3priv-auth-key:!1@2#3$4%5^6&7*8
Please confirm v3priv-auth-key:!102#3$4%5^6&7*8
Server /snmp/v3users *# commit
Settings are being applied \dots allow a few minutes for the process to complete
Server /snmp/v3users #
```

Command	Description
set v3priv-auth-key	

## set v3proto

To specify the authentication protocol for an SNMPv3 user, use the **set v3proto** command.

set v3proto {MD5| SHA}

## **Syntax Description**

MD5	Specifies authentication using the Message Digest 5 (MD5) protocol.
SHA	Specifies encryption using the Secure Hash Algorithm (SHA) protocol.

#### **Command Default**

None

#### **Command Modes**

SNMPv3 users (/snmp/v3users)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

## **Usage Guidelines**

Use this command to specify the authentication protocol for an SNMPv3 user. SHA is more secure but requires more computation power and may not be supported in older systems.

#### **Examples**

This example specifies SHA authentication for SNMPv3 user number 2:

```
Server# scope snmp
Server /snmp # scope v3users 2
Server /snmp/v3users # set v3add yes
Server /snmp/v3users *# set v3security-name ucsSNMPV3user
Server /snmp/v3users *# set v3security-level authnopriv
Server /snmp/v3users *# set v3proto SHA
Server /snmp/v3users *# set v3auth-key
Please enter v3auth-key:ex4mplek3y
Please confirm v3auth-key:ex4mplek3y
Server /snmp/v3users *# commit
Settings are being applied ... allow a few minutes for the process to complete
Server /snmp/v3users #
```

Command	Description
set v3auth-key	

## set v3security-level

To specify the security level for an SNMPv3 user, use the set v3security-level command.

set v3security-level {noauthnopriv| authnopriv| authpriv}

#### **Syntax Description**

noauthnopriv	The user does not require an authorization or privacy password.
authnopriv	The user requires an authorization password but not a privacy password.
authpriv	The user requires both an authorization password and a privacy password.

## **Command Default**

None

#### **Command Modes**

SNMPv3 users (/snmp/v3users)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the security level for an SNMPv3 user. If authentication is required, you must configure an authentication protocol and key. If privacy (encryption) is required, you must configure a private encryption protocol and key (privacy password).

### **Examples**

This example specifies authentication but no privacy for SNMPv3 user number 2:

```
Server# scope snmp
Server /snmp # scope v3users 2
Server /snmp/v3users # set v3add yes
Server /snmp/v3users *# set v3security-name ucsSNMPV3user
Server /snmp/v3users *# set v3security-level authnopriv
Server /snmp/v3users *# set v3proto SHA
Server /snmp/v3users *# set v3auth-key
Please enter v3auth-key:ex4mplek3y
Please confirm v3auth-key:ex4mplek3y
Server /snmp/v3users *# commit
Settings are being applied ... allow a few minutes for the process to complete
Server /snmp/v3users #
```

Command	Description
set v3auth-key	

Command	Description
set v3proto	
set v3priv-auth-key	
set v3priv-proto	

# set v3security-name

To specify a security name for an SNMPv3 user, use the set v3security-name command.

set v3security-name security-name

#### **Syntax Description**

securit	v_name
securu	v-nume

The security name for the SNMPv3 user.

#### **Command Default**

None

#### **Command Modes**

SNMPv3 users (/snmp/v3users)

Server /snmp/v3users #

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the security name for an SNMPv3 user.

#### **Examples**

This example specifies a the security name for SNMPv3 user number 2:

```
Server# scope snmp
Server /snmp # scope v3users 2
Server /snmp/v3users # set v3add yes
Server /snmp/v3users *# set v3security-name ucsSNMPV3user
Server /snmp/v3users *# set v3security-level noauthnopriv
Server /snmp/v3users *# commit
Settings are being applied ... allow a few minutes for the process to complete
```

Command	Description
set v3security-level	

## set v4-addr

To specify the IPv4 address of the server, use the **set v4-addr** command.

set v4-addr ip-address

## **Syntax Description**

ip-address	An IPv4 address in the format X.X.X.X.
ip diddi ess	in it it deadless in the format it.it.i.

**Command Default** 

None

**Command Modes** 

Network (/cimc/network)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example sets the IPv4 address of the server:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set v4-addr 192.0.20.111
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
show network	

# set v4-gateway

To specify the IPv4 address of the local gateway, use the set v4-gateway command.

set v4-gateway ip-address

## **Syntax Description**

ip-address

An IPv4 address in the format X.X.X.X.

**Command Default** 

None

**Command Modes** 

Network (/cimc/network)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example specifies the IPv4 address of the gateway:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set v4-gateway 192.0.20.254
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
show network	

## set v4-netmask

To specify the IPv4 netmask of the server, use the set v4-netmask command.

set v4-netmask ip-address

## **Syntax Description**

ip-ad	dress	
ub-uu	uress	

An IPv4 netmask in the format X.X.X.X.

#### **Command Default**

None

#### **Command Modes**

Network (/cimc/network)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example specifies the IPv4 netmask of the server:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set v4-netmask 255.255.240.0
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
show network	

## set virtual-drives-enabled

To specify the virtual drives to be made available to the server, use the **set virtual-drives-enabled** command.

set virtual-drives-enabled drive-list

#### **Syntax Description**

drive-list

A list of virtual drives. See the Usage Guidelines for options and format.

#### **Command Default**

None

#### **Command Modes**

FlexFlash operational profile (/chassis/flexflash/operational-profile)

#### **Command History**

Release	Modification
1.3(3)	This command was introduced.

#### **Usage Guidelines**

Use this command to specify the virtual drives to be made available to the server as a USB-style drive. List each virtual drive you want the server to access. The options are as follows:

- SCU—The server can access the Cisco UCS Server Configuration Utility.
- **DRIVERS**—The server can access the Cisco drivers volume.
- **HV**—The server can access the user-installed hypervisor.
- HUU—The server can access the Cisco Host Upgrade Utility.

When listing more than one option, you must enclose the list in quotation marks (").

#### **Examples**

This example shows how to specify the virtual drives to be made available to the server for the first flash device:

```
Server# scope chassis
Server /chassis # scope flexflash FlexFlash-0
Server /chassis/flexflash # scope operational-profile
Server /chassis/flexflash/operational-profile # set virtual-drives-enabled "SCU DRIVERS"
Server /chassis/flexflash/operational-profile *# commit
Server /chassis/flexflash/operational-profile #
```

Command	Description
scope operational-profile	

## set vlan

To specify the assigned VLAN for an interface, use the set vlan command.

set vlan {none| vlan-id}

### **Syntax Description**

none	The interface belongs to no VLAN. This is the default.
vlan-id	The interface belongs to the specified VLAN. Valid VLAN identifiers are 1 to 4094.

#### **Command Default**

The interface belongs to no VLAN.

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Usage Guidelines**

In an FCoE application, use this command to associate the vHBA with the FCoE VLAN.

## **Examples**

This example shows how to assign the Fibre Channel host interface fc0 to VLAN 5:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # set vlan 5
Server /chassis/adapter/host-fc-if *# commit
Server /chassis/adapter/host-fc-if #
```

Command	Description

## set vlan-enabled

To enable or disable VLAN membership for the server, use the set vlan-enabled command.

set vlan-enabled {no| yes}

## **Syntax Description**

no	VLAN membership is disabled.
yes	VLAN membership is enabled.

**Command Default** 

VLAN membership is disabled.

**Command Modes** 

Network (/cimc/network)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example configures a VLAN connection for the CIMC to VLAN 200:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set vlan-enabled yes
server /cimc/network* # set vlan-id 200
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
set vlan-id	
show network	

## set vlan-id

To specify the VLAN number for connection to the server, use the **set vlan-id** command.

set vlan-id id

## **Syntax Description**

id

The VLAN number.

#### **Command Default**

None

#### **Command Modes**

Network (/cimc/network)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example configures a VLAN connection for the CIMC to VLAN 200:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set vlan-enabled yes
server /cimc/network* # set vlan-id 200
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
set vlan-enabled	
show network	

## set vlan-mode

To specify the VLAN mode for a vNIC, use the set vlan-mode command.

set vlan-mode {access| trunk}

### **Syntax Description**

access	The vNIC belongs to only one VLAN.
trunk	The vNIC can belong to more than one VLAN.

#### **Command Default**

The vNIC can belong to more than one VLAN.

#### **Command Modes**

Ethernet host interface (/chassis/adapter/host-eth-if)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

## **Examples**

This example shows how to specify trunk VLAN mode for the Ethernet host interface eth0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # set vlan-mode trunk
Server /chassis/adapter/host-eth-if *# commit
Server /chassis/adapter/host-eth-if #
```

Command	Description	

# set vlan-priority

To specify the VLAN priority, use the **set vlan-priority** command.

set vlan-priority priority

### **Syntax Description**

priority	The VLAN priority. The range is 0
	to 7.

**Command Default** 

The default VLAN priority is 0.

**Command Modes** 

Network (/cimc/network)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example configures a VLAN connection with a priority of 5:

```
server# scope cimc
server /cimc # scope network
server /cimc/network # set vlan-enabled yes
server /cimc/network* # set vlan-id 200
server /cimc/network* # set vlan-priority 5
server /cimc/network* # commit
server /cimc/network #
```

Command	Description
set vlan-enabled	
show network	

## set wq-count

To set the transmit queue count of the host Ethernet interface, use the set wq-count command.

set wq-count count

#### **Syntax Description**

the number of transfint queue resources to anocate. The range is 1 to 250	count	The number of transmit queue resources to	allocate. The range is 1 to 256.
---	-------	---	----------------------------------

**Command Default** 

The default is 1.

**Command Modes** 

Transmit queue (/chassis/adapter/host-eth-if/trans-queue)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to set the number of transmit queue resources to allocate:

```
Server# scope chassis
```

```
Server /chassis/ # scope adapter 1
```

Server /chassis/adapter # scope host-eth-if eth0

Server /chassis/adapter/host-eth-if # scope trans-queue

Server /chassis/adapter/host-eth-if/trans-queue # set wq-count 3

Server /chassis/adapter/host-eth-if/trans-queue \*# commit

Committed host-eth-if eth0 settings will take effect upon the next server reset

Server /chassis/adapter/host-eth-if/trans-queue #

Command	Description
set wq-ring-size	

## set wq-ring-size

To set the transmit queue ring size, use the set wq-ring-size command.

set wq-ring-size size

#### **Syntax Description**

size	The number of descriptors in the transmit queue. The range is 64 to 4094; the default
	is 256.

#### **Command Default**

The default is 256.

#### **Command Modes**

Transmit queue (/chassis/adapter/host-eth-if/trans-queue)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

#### **Examples**

This example shows how to set the number of descriptors in the transmit queue:

```
Server# scope chassis
Server /chassis/ # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # scope trans-queue
Server /chassis/adapter/host-eth-if/trans-queue # set wq-ring-size 68
Server /chassis/adapter/host-eth-if/trans-queue *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapter/host-eth-if/trans-queue #
```

Command	Description
set rq-count	

### set wwnn

To specify the WWNN for an interface, use the **set wwnn** command.

set wwnn wwnn

#### **Syntax Description**

wwnn	Specifies a unique World Wide Node Name (WWNN) for the adapter in
	the form hh:hh:hh:hh:hh:hh.

#### **Command Default**

None

#### **Command Modes**

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

#### **Examples**

This example shows how to assign a WWNN to the Fibre Channel host interface fc0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # set wwnn 01:23:45:67:89:ab:cd:ef
Server /chassis/adapter/host-fc-if *# commit
Server /chassis/adapter/host-fc-if #
```

Command	Description
set wwpn	

### set wwpn

To specify the WWPN for an interface, use the **set wwpn** command.

set wwpn wwpn

#### **Syntax Description**

wwpn	Specifies a unique World Wide Port Name (WWPN) for the adapter in
_	the form hh:hh:hh:hh:hh:hh.

#### **Command Default**

None

#### **Command Modes**

Fibre Channel host interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

#### **Examples**

This example shows how to assign a WWPN to the Fibre Channel host interface fc0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # set wwpn 01:23:45:67:89:ab:cd:ef
Server /chassis/adapter/host-fc-if *# commit
Server /chassis/adapter/host-fc-if #
```

Command	Description
set wwnn	

# show (firmware)

To show whether basic server component firmware needs to be updated, use the **show** command.



Caution

This command should only be used under the direction of Cisco TAC.

show

**Command Default** 

None

**Command Modes** 

Firmware (/chassis/firmware)

#### **Command History**

Release	Modification
1.4(5)	This command was introduced.

#### **Examples**

This example shows how to update server firmware:

server# scope chassis
server /chassis # scope firmware
server /chassis/firmware # show

Firmware update not required, all components are up to date

Command	Description
update-all	

# show actual-boot-order (bios)

To display the actual boot order, use the **show actual-boot-order** command in bios mode.

show actual-boot-order [detail]

#### **Syntax Description**

-		
М	etail	

(Optional) Displays detailed information about the actual boot order in list format.

#### **Command Default**

None

#### **Command Modes**

BIOS (/bios)

#### **Command History**

Release	Modification
1.0(1x)	This command was introduced.

#### **Examples**

This example shows how to display the actual boot order:

server# scope bios

server /bios # show actual-boot-order

1 CD/DVD CD-ROM	
CD/DVD Cisco Virtual CD/DVD 1.18  Network Device (PXE) Cisco NIC 23:0.0  Network Device (PXE) MBA v5.0.5 Slot 0100  Network Device (PXE) MBA v5.0.5 Slot 0200  Network Device (PXE) MBA v5.0.5 Slot 0200  Network Device (PXE) MBA v5.0.5 Slot 0201  Internal EFI Shell Cisco NIC 22:0.0  Internal EFI Shell Internal EFI Shell  Cisco Virtual HDD 1.18  TDD Cisco Virtual Floppy 1.18	

server /bios #

Command	Description
set boot-order	

## show adapter

To show the adapter properties, use the **show adapter** command.

show adapter index [detail]

#### **Syntax Description**

index	The PCI slot number of the adapter card.
detail	(Optional) Displays detailed adapter properties in list form.

#### **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to display information about the adapter:

```
Server# scope chassis
Server /chassis # show adapter 1
```

```
PCI Slot Product Name Serial Number Product ID
                                                      Vendor
         UCS VIC P81E
                        QCI1421A6SI
                                       N2XX-ACPCI01
                                                      Cisco Systems Inc
         UCS VIC P81E
                        QCI1409A1RY
                                       N2XX-ACPCI01
                                                      Cisco Systems Inc
Server /chassis # show adapter 1 detail
PCI Slot 1:
    Product Name: UCS VIC P81E
    Serial Number: QCI1421A6SI
    Product ID: N2XX-ACPCI01
    Adapter Hardware Revision: 4
    Current FW Version: 1.6(0.11)
    NIV: Enabled
   FIP: Enabled
    Configuration Pending: no
    CIMC Management Enabled : no
    VID: V00
    Vendor: Cisco Systems Inc
    Description: LA-s4a
    FW Image 1 Version: 1.6(0.11)
    FW Image 1 State: RUNNING ACTIVATED
    FW Image 2 Version: 1.3(1.114)
    FW Image 2 State: BACKUP INACTIVATED
    FW Update Status: Idle
    FW Update Error: No error
    FW Update Stage: No operation (0%)
    FW Update Overall Progress: 0%
```

Server /chassis #

Command	Description
activate-adapter-fw	
update-adapter-fw	

### show advanced

To display the advanced BIOS configuration settings, use the **show advanced** command.

#### show advanced [detail]

#### **Syntax Description**

**detail** (Optional) Displays detailed advanced BIOS configuration settings in list format.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example displays the advanced BIOS configuration details:

```
Server# scope bios
Server /bios # show advanced detail
Set-up parameters:
    Intel(R) VT-d Address Translati: Enabled
    Adjacent Cache Line prefetch: Enabled
    CPU Performance: Enterprise
    Intel(R) VT-d Coherency Support: Disabled
   Number of enabled cores: All
    Direct Cache Access: Enabled
    Enhanced Intel Speedstep(R) Tec: Enabled
    Execute Disable: Enabled
    Hardware Prefetcher: Enabled
    Intel(R) Hyper-Threading Techno: Enabled
    Intel(R) Turbo Boost Technology: Enabled
    Intel(R) Virtualization Technol: Enabled
    Intel(R) VT for Directed IO: Enabled
    Intel(R) VT-d Interrupt Remappi: Enabled
    Low Voltage DDR Mode: Power Saving Mode
    Make Device Non Bootable: Disabled
    Memory Mapped I/O above 4GB: Disabled
    NUMA Optimized: Enabled
    Onboard Gbit NIC 1: Enabled Onboard Gbit NIC 1 ROM: Enabled
    Onboard Gbit NIC 2: Enabled
    Onboard Gbit NIC 2 ROM: Enabled
    Intel(R) VT-d PassThrough DMA: Enabled
    PCIe OptionROMs: Enabled
    Processor C3 Report: Disabled
    Processor C6 Report: Enabled
    Select Memory RAS: Maximum Performance
    Serial A Enable: Enabled
    Serial A Address: 3F8h
    PCIe Slot A ROM: No
    PCIe Slot B ROM: No
```

PCIe Slot C ROM: No PCIe Slot D ROM: No PCIe Slot E ROM: Enabled USB Controller: Enabled

Server /bios #

Command	Description
scope advanced	

### show bbu

To display battery backup information for a storage adapter, use the **show bbu** command.

show bbu[detail]

#### **Syntax Description**

**detail** (Optional) Displays detailed information in list format.

**Command Default** 

None

**Command Modes** 

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display battery backup information for a storage adapter in the SAS PCI slot:

server# scope chassis

server /chassis # scope storageadapter SAS

server /chassis/storageadapter # show bbu

Controller Battery Type Battery Present Voltage Current Charge Charging State
-----SAS iBBU true 4.021 V 0.000 A 100% fully charged

server /chassis/storageadapter #

Command	Description
show storageadapter	

### show bios

To display information about the BIOS, use the show bios command.

show bios [detail]

#### **Syntax Description**

М	eta	il	

(Optional) Displays detailed information about the bios, in list format.

#### **Command Default**

None

#### **Command Modes**

Root (server#)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

**show bios** displays the server boot order. **show bios detail** and **show detail** in bios mode displays the server boot order and firmware update/recovery information.

When you use the **detail** keyword, the boot order of the following available boot devices displays:

- CDROM—Bootable CD-ROM
- FDD—Floppy disk drive
- HDD-Hard disk drive
- PXE—PXE boot
- EFI—Extensible Firmware Interface

#### **Examples**

This example shows how to display the server boot order:

server# show bios

BIOS Version Boot Order

C250.1.1.0.6.031920100857 (none)

server#

Command	Description
set boot-order	

Command	Description
recover	

### show boot

To display information about the boot table of the host Fibre Channel interface, use the **show boot** command.

show boot [detail]

#### **Syntax Description**

detail	(Optional) Displays detailed information about the boot table in list format	t
uctan	(Optional) Displays detailed information about the boot table in list format	ι.

#### **Command Default**

None

#### **Command Modes**

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to display the boot table of the host Fibre Channel interface.

Command	Description
create-boot-entry	
delete boot	

# show capabilities

To display RAID levels supported by a storage adapter, use the **show capabilities** command.

#### show capabilities[detail]

#### **Syntax Description**

detail	Optional) Displays detailed information in list format	
uctan	Optional) Displays detailed information in list format	

**Command Default** 

None

**Command Modes** 

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display RAID levels supported by a storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show capabilities
PCI Slot SAS:
        RAID-0
        RAID-1
        RAID-5
        RAID-6
        RAID-00
        RAID-10
        RAID-50
        RAID-60
        RAID-1e-rlq0
        RAID-1e0-rlq0
        RAID-srl-03
server /chassis/storageadapter #
```

Command	Description
show storageadapter	

### show certificate

To display informaion about the server certificate, use the **show certificate** command.

show certificate [detail]

#### **Syntax Description**

detail (Optional)	Displays the whole certificate.
-------------------	---------------------------------

#### **Command Default**

None

#### **Command Modes**

Root (server#)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

**show certificate** displays the serial number of the certificate, and the dates the certificate is valid for. **show certificate detail** in root mode and **show detail** in certificate mode displays the whole certificate.

#### **Examples**

This example shows how to display the serial number of the certificate, and the dates the certificate is valid for:

server# show certificate

```
      Serial Number
      Valid From
      Valid To

      001
      Apr 13 13:49:00 2009 GMT Apr 11 13:49:00 2019 GMT
```

server#

This example shows how to display the whole certificate:

server# show certificate detail

```
Certificate Information:
    Serial Number: 00
    Subject Country Code (CC): US
    Subject State (S): California
    Subject Locality (L): San Jose
    Subject Organization (O): ABC Inc.
    Subject Organizational Unit (OU):
    Subject Common Name (CN): abcinc.com
    Issuer Country Code (CC): US
    Issuer State (S): California
    Issuer Locality (L): San Jose
    Issuer Organization (O): Cisco Systems Inc.
    Issuer Organizational Unit (OU):
    Issuer Common Name (CN): cisco.com
    Valid From: Sep 8 22:53:59 2009 GMT
```

Valid To: Sep 6 22:53:59 2019 GMT

server#

Command	Description
generate-csr	
upload	

### show chassis

To display information about the chassis, use the **show chassis** command.

show chassis [detail]

#### **Syntax Description**

detail	(Optional) Displays detailed information about the chassis, in list format.
uctan	(Optional) Displays detailed information about the chassis, in list format.

#### **Command Default**

None

#### **Command Modes**

Root (server#)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

**show chassis** displays information about the chassis in table format. **show chassis detail** and **show detail** in chassis mode displays serial number, product name, PID, UUID, and description. Additionally, it displays chassis power state and the state of the locator LED.

#### **Examples**

This example shows how to display information about the chassis in table format:

server# show chassis

Power Serial Number Product Name UUID
on QTF-0934-00 R100-1120402 208F4277020FBADBADBEA80000DEAD00
server#

Command	Description
set locator-led	

### show cimc

To display information about CIMC, use the **show cimc** command.

show cimc [detail]

#### **Syntax Description**

detail	(O	ptional	) Dis	plays	detailed	inform	nation	about	CIMC,	in	list f	ormat.
--------	----	---------	-------	-------	----------	--------	--------	-------	-------	----	--------	--------

**Command Default** 

None

**Command Modes** 

Root (server#)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

**show cimc** displays information about CIMC in table format. **show cimc detail** and **show detail** in cimc mode displays firmware version and boot loader version.

#### **Examples**

This example shows how to display information about CIMC in table format:

server# show cimc

server#

Firmware Version	Current	Time	
1.0(0.86)	Fri Oct	2 12:19:17	2009

Command	Description
show firmware	
show log (cimc)	

## show comp-queue

To display information about the completion queue of the host Ethernet interface, use the **show comp-queue** command.

#### show comp-queue [detail]

#### **Syntax Description**

<b>detail</b> (Optional) Displays detailed infor	mation in list format.
--	------------------------

#### **Command Default**

None

#### **Command Modes**

Host Ethernet interface (/chassis/adapter/host-eth-if)

VM FEX interface (/chassis/adapter/vmfex)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added to the VM FEX interface.

#### **Examples**

This example shows how to display information about the completion queue of the host Ethernet interface:

Command	Description
set cq-count	

# show configuration pending

To display uncommitted configuration commands, use the **show configuration pending** command.

show configuration pending

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Any command mode

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example displays uncommitted configuration commands:

server /cimc/network \*# show configuration pending

Modify /cimc/network hostname SanJoseServer3 dhcp-enabled yes v4-addr 10.20.30.111 dns-use-dhcp yes

server /cimc/network \*#

Command	Description
commit	
discard	

## show cpu (chassis)

To display information about the CPU, use the show cpu command in the chassis mode.

show cpu [detail]

#### **Syntax Description**

		1	•	 	.1	
detail						

(Optional) Displays detailed information about the CPU, in list format.

#### **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

show cpu displays a list of CPUs. show cpu detail displays information for each CPU.

Following are commands you use to manage your view of the list of CPUs:

- Enter key—Next line
- Space bar—Next page
- q key—Quit
- r key—Show the rest

#### **Examples**

This example shows how to display detailed information about the CPUs:

```
server# scope chassis
server /chassis # show cpu detail
Name CPU1:
    Manufacturer: Intel(R) Corporation
    Family: Xeon
    Thread Count: 8
    Cores : 4
    Serial No.: Not Specified
    Version: Intel(R) Xeon(R) CPU
                                               L5520 @ 2.27GHz
    Speed (Mhz): 2266
    Max. Speed (Mhz): 4000
Signature: "Signature: Type 0, Family 6, Model 26, Stepping 5
    Status: Enabled
Name CPU2:
    Manufacturer: Intel(R) Corporation
    Family: Xeon
    Thread Count: 8
```

Cores: 4
Serial No.: Not Specified
Version: Intel(R) Xeon(R) CPU L5520 @ 2.27GHz
Speed (Mhz): 2266
Max. Speed (Mhz): 4000
Signature: "Signature: Type 0, Family 6, Model 26, Stepping 5
Status: Enabled

server /chassis #

Command	Description
show dimm	
show psu	

## show current (sensor)

To display information about the status of the current sensors, use the **show current** command in sensor mode.

#### show current [detail]

#### **Syntax Description**

detail	(Optional) Displays detailed information about the status of the voltage sensors in
	list form.

#### **Command Default**

None

#### **Command Modes**

Sensor (/sensor)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example shows how to display information about the status of the current sensors:

```
server# scope sensor
server /sensor # show current detail
Name VR_CPU1_IOUT:
    Sensor Status: Normal
    Reading: 15.65
    Units: AMP
   Min. Warning: N/A
   Max. Warning: 152.68
   Min. Failure: N/A
   Max. Failure: 164.04
Name VR CPU2 IOUT:
   Sensor Status: Normal
    Reading: 11.39
   Units: AMP
   Min. Warning: N/A
   Max. Warning: 152.68
   Min. Failure: N/A
   Max. Failure: 164.04
server /sensor #
```

## show dimm (chassis)

To display information about the DIMMs (dual inline memory modules) in the chassis, use the **show dimm** command in chassis mode.

#### show dimm [detail]

#### **Syntax Description**

<b>detail</b> (Optional) Displays detailed information about the	e DIMMs, in list format.
--	--------------------------

#### **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.
1.3(1)	This command was modified to display enhanced property information.

#### **Usage Guidelines**

This command can display many screen pages of information. Following are commands you use to manage your view of the list of DIMMs:

- Enter key-Next line
- Space bar—Next page
- q key—Quit
- r key—Show the rest

The detailed enhanced properties are described in the following table:

Name	Description
Name column	The name of the DIMM slot in which the memory module is installed.
Capacity column	The size of the DIMM.
Channel Speed column	The clock speed of the memory channel, in megahertz.
Channel Type column	The type of memory channel.
Memory Type Detail column	The type of memory used in the device.

Name	Description	
Bank Locator column	The location of the DIMM within the memory bank.	
Manufacturer column	The vendor ID of the manufacturer. This can be one of the following:	
	• 0x2C00—Micron Technology, Inc.	
	• <b>0x5105</b> —Qimonda AG i. In.	
	• 0x802C—Micron Technology, Inc.	
	• 0x80AD—Hynix Semiconductor Inc.	
	• 0x80CE—Samsung Electronics, Inc.	
	• <b>0x8551</b> —Qimonda AG i. In.	
	• 0xAD00—Hynix Semiconductor Inc.	
	• 0xCE00—Samsung Electronics, Inc.	
Serial Number column	The serial number of the DIMM.	
Asset Tag column	The asset tag associated with the DIMM, if any.	
Part Number column	The part number for the DIMM assigned by the vendor.	
Visibility column	Whether the DIMM is available to the server.	
Operability column	Whether the DIMM is currently operating correctly.	
Data Width column	The amount of data the DIMM supports, in bits.	

#### **Examples**

This example shows how to display detailed information about the DIMMs:

```
server /chassis # show dimm detail
Name MEM1 DIMM 1B:
    Capacity: \overline{8}192 MB
    Channel Speed (MHz): 1067
    Channel Type: DDR3
    Memory Type Detail: Synchronous
Bank Locator: MEM1 SLOT
    Visibility: Yes
    Operability: NA
    Manufacturer: 0x802C
    Part Number: 36JSZS1G72PY-1G1A1
    Serial Number: 0xEA27C463
    Asset Tag: Unknown
    Data Width: 72 bits
Name MEM1 DIMM 1A:
    Capacity: 8192 MB
Channel Speed (MHz): 1067
    Channel Type: DDR3
    Memory Type Detail: Synchronous
    Bank Locator: MEM1 SLOT
    Visibility: Yes
```

server# scope chassis

Operability: NA
Manufacturer: 0x802C
Part Number: 36JSZS1G72PY-1G1A1
--More--

Command	Description
show cpu	

## show entries (log)

To display the CIMC event log, use the **show entries** command in log mode.

show entries [detail]

#### **Syntax Description**

detail	Optional) Displays the CIMC event log in	detail.
uctuii	optional) Bisplays the Chile event log in	actuii.

**Command Default** 

None

**Command Modes** 

Log (/cimc/log)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

**show entries** displays trace log entries in continuous string format. **show entries detail** displays time, source, and description for each trace log entry, in list format.

Following are commands you use to manipulate your view of the log:

- Enter key—Next line
- Space bar—Next page
- q key—Quit
- r key—Show the rest

#### **Examples**

This example shows how to display the detailed event log:

```
server# scope cimc
server /cimc # scope log
server /cimc/log # show entries detail
Trace Log:
    Time: 2010 Jun 6 15:52:18
    Source: BMC:AUDIT:-
    Description: Session open (user:admin, ip:10.21.115.69, id:45, type:CLI)
    Order: 0
Trace Log:
    Time: 2010 Jun 6 15:52:18
    Source: BMC:dropbear:-
Description: " pam_session from 10.21.115.69 by (uid=0) "
                    pam_session_manager(sshd:session): session (45) opened for user admin
    Order: 1
Trace Log:
    Time: 2010 Jun 6 15:52:18
```

```
Source: BMC:AUDIT:-
Description: Login success (user:admin, ip:10.21.115.69, service:sshd)
Order: 2
Trace Log:
Time: 2010 Jun 6 15:52:18
Source: BMC:dropbear:-
Description: " pam_auth_status(sshd:session): Login Successfull for user=admin, host=10.21.115.69 "
Order: 3
Trace Log:
--More--
```

Command	Description
show entries (sel)	

## show entries (sel)

To display the system event log, use the **show entries** command in sel mode.

show entries [detail]

#### **Syntax Description**

detail	(Optional) Displays the system event log in detail.

#### **Command Default**

None

#### **Command Modes**

SEL (/sel)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

**show entries** displays system event log entries in continuous strings. **show entries detail** displays time, source, and description for each system event log entry, in list format.

Following are commands you use to manipulate your view of the log:

- Enter key—Next line
- Space bar—Next page
- q key—Quit
- r key—Show the rest

#### **Examples**

This example shows how to display the system event log:

```
server# scope sel
server /sel # show entries

System Event Log:
    Time: 2010-06-05 22:19:55
    Severity: Warning
    Description: " FRU_RAM P1V5_IOH: Voltage sensor for FRU_RAM, failure event was deasserted"

System Event Log:
    Time: 2010-06-05 22:19:55
    Severity: Critical
    Description: " FRU_RAM P1V5_IOH: Voltage sensor for FRU_RAM, non-recoverable event was deasserted"

System Event Log:
    Time: 2010-06-05 22:19:49
    Severity: Non-Recoverable
    Description: " FRU_RAM P1V5_IOH: Voltage sensor for FRU_RAM, non-recoverable event was asserted"
```

```
System Event Log:
   Time: 2010-06-05 22:19:49
   Severity: Critical
   Description: " FRU_RAM P1V5_IOH: Voltage sensor for FRU_RAM, failure event was asserted"

System Event Log:
   Time: 2010-06-05 19:45:32
   Severity: Warning
--More--
```

#### **Related Commands**

Command	Description
---------	-------------

show entries (log)

### show error-counters

To display the number of errors seen by a storage adapter, use the **show error-counters** command.

show error-counters[detail]

#### **Syntax Description**

detail	(Optional) Displays detailed information in list format.
uctan	(Optional) Displays actuiled information in list format.

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display the number of errors seen by a storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show error-counters
PCI Slot SAS:
    Memory Correctable Errors: 0
    Memory Uncorrectable Errors: 0
server /chassis/storageadapter #
```

Command	Description
show storageadapter	

## show error-recovery

To display information about the Fibre Channel error recovery, use the **show error-recovery** command.

show error-recovery [detail]

#### **Syntax Description**

**detail** (Optional) Displays detailed information about the error-recovery in list format.

**Command Default** 

None

**Command Modes** 

Host Fibre Channel Interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to show details of the host Fibre Channel interface error recovery.

#### **Examples**

This example shows how to display the error recovery of the host Fibre Channel interface:

Server# scope chassis

Server /chassis # scope adapter 1

Server /chassis/adapter # scope host-fc-if fc0

Server /chassis/adapter/host-fc-if show error-recovery

Error Recovery Link Down Timeout(ms) Port Down Timeout(ms)

Disabled 30000 10000

Server /chassis/adapter/host-fc-if/error-recovery #

Command	Description
set cq-count	

### show ext-eth-if

To display information about the external Ethernet interface, use the **show ext-eth-if** command.

show ext-eth-if [detail]

#### **Syntax Description**

detail	(O)	ntional	) Dis	nlav	s detailed	informati	on ir	ı list f	format.
actuii	$\sim$	puonar	, 1010	piuy	5 actuired	minormut	.011 11.	1 1100 1	ormat.

#### **Command Default**

None

#### **Command Modes**

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to display the external Ethernet interface:

```
Server# scope chassis
```

Server /chassis # scope adapter 1

Server /chassis/adapter # show ext-eth-if

Port ID Uplink port MAC address Link State Encapsulation Mode

0 00:22:BD:D6:40:E0 Link Up CE

1 00:22:BD:D6:40:E1 SFP Not Installed CE

Server /chassis/adapter #

#### **Related Commands**

Command	Description
show host-eth-if	

Cisco UCS C-Series Servers Integrated Management Controller CLI Command Reference, Release 1.4

# show fan (sensor)

To display information about the fan sensors, use the **show fan** command in sensor mode.

show fan [detail]

**Syntax Description** 

detail

(Optional) Displays .

**Command Default** 

None

**Command Modes** 

Sensor (/sensor)

**Command History** 

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example shows how to display information about the fan sensors:

Server# scope sensor Server /sensor # show fan

Name Min. Failure	Sensor Status Max. Failure	Reading	Units	Min. Warning	Max. Warning
PSU1_FAN_1 N/A	Normal N/A	6592	RPM	N/A	N/A
PSU2_FAN_1 N/A	Normal N/A	2560	RPM	N/A	N/A
W793_FAN1_TACH1 800	N/A Normal N/A	5300	RPM	N/A	N/A
000 W793_FAN1_TACH2 800	N/A Normal N/A	5400	RPM	N/A	N/A
000 W793_FAN2_TACH1 800	N/A Normal N/A	5500	RPM	N/A	N/A
000 W793_FAN2_TACH2 800	N/A Normal N/A	5400	RPM	N/A	N/A
W793_FAN3_TACH1 800	Normal N/A	5300	RPM	N/A	N/A
000 W793_FAN3_TACH2 800	N/A Normal N/A	5500	RPM	N/A	N/A
000 W793_FAN4_TACH1 800	N/A Normal N/A	5300	RPM	N/A	N/A
000 W793_FAN4_TACH2 800	N/A Normal N/A	5500	RPM	N/A	N/A
More					

Server /sensor # show fan detail

Name PSU1 FAN 1:

Sensor Status: Normal Reading: 7872

Units: RPM

```
Min. Warning: N/A
   Max. Warning: N/A
   Min. Failure: N/A
   Max. Failure: N/A
Name PSU2_FAN_1:
    Sensor Status: Normal
    Reading: 2496
    Units: RPM
   Min. Warning: N/A
   Max. Warning: N/A
   Min. Failure: N/A
   Max. Failure: N/A
Name W793 FAN1 TACH1:
   Sensor Status: Normal
    Reading: 5300
    Units: RPM
   Min. Warning: N/A
   Max. Warning: N/A
   Min. Failure: 800
   Max. Failure: N/A
Name W793 FAN1 TACH2:
    Sensor Status: Normal
    Reading: 5400
    Units: RPM
   Min. Warning: N/A
   Max. Warning: N/A
   Min. Failure: 800
   Max. Failure: N/A
Name W793_FAN2_TACH1:
    Sensor Status: Normal
    Reading: 5500
    Units: RPM
   Min. Warning: N/A
   Max. Warning: N/A
   Min. Failure: 800
   Max. Failure: N/A
Name W793 FAN2 TACH2:
   Sensor Status: Normal
--More--
```

Command	Description
show cpu	

### show fault

To display whether platform event alerts are enabled or disabled on the server, use the **show fault** command.

show fault [detail]

#### **Syntax Description**

	(0 (1 1) D) 1 1 (1 1) 0 (1 1 1 (0) D) D
detail	(Optional) Displays detailed information about SNMP services, in list format.

#### **Command Default**

None

#### **Command Modes**

Root (server#)

#### **Command History**

Release	Modification	
1.0(1)	This command was introduced.	
1.4(1)	This command was modified to remove display of the SNMP community string.	

#### **Usage Guidelines**

This command displays whether platform event alerts are enabled or disabled.

#### **Examples**

This example shows how to display whether platform event alerts are enabled or disabled:

server# show fault

Platform Event Enabled

yes

server#

Command	Description
show pef	
show trap-destination	

# show firmware (cimc)

To display information about the firmware on the server, use the **show firmware** command in cimc mode.

show firmware [detail]

#### **Syntax Description**

detail	(Optional) Displays detailed information about firmware, in list format.
uctan	(Optional) Displays detailed information about infilware, in list format.

#### **Command Default**

None

#### **Command Modes**

CIMC (/cimc)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Usage Guidelines**

**show firmware** displays information about firmware in table format. **show firmware detail** and **show detail** in firmware mode display information about updates, firmware version, and boot loader version.

### **Examples**

This example shows how to display information about updates, firmware version, and boot loader version:

```
server# scope cimc
server /cimc # show firmware detail
Firmware Image Information:
    Update Stage: NONE
    Update Progress: 0
    Current FW Version: 1.1(0.3)
    FW Image 1 Version: 1.1(0.3)
    FW Image 1 State: BACKUP INACTIVATED
    FW Image 2 Version: 1.1(0.3)
    FW Image 2 State: RUNNING ACTIVATED
    Boot-loader Version: 1.1(0.3)
server /cimc #
```

Command	Description	
show cime		
show version		

# show firmware-versions

To display firmware version information for a storage adapter, use the **show firmware-versions** command.

# show firmware-versions[detail]

#### **Syntax Description**

detail (	O	ptional`	) Dis	play	s d	letailed	info	ormation	in	list	format.

**Command Default** 

None

**Command Modes** 

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display firmware version information for a storage adapter in the SAS PCI slot:

server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show firmware-versions
PCI Slot SAS:
 Product Name: LSI MegaRAID SAS 9260-8i
 Serial No: SV93404392
 Firmware Package Build: 12.12.0-0038

server /chassis/storageadapter #

Command	Description
show storageadapter	

# show flexflash

To display summary information about installed Cisco Flexible Flash controllers, use the **show flexflash** command.

#### show flexflash[ index ] [detail]

# **Syntax Description**

index	(Optional) The name of the Cisco Flexible Flash controller.
detail	(Optional) Displays detailed information in list format.

#### **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

# **Command History**

Release	Modification
1.3(3)	This command was introduced.

# **Examples**

This example shows how to display information about the first flash device:

#### Server# scope chassis

Server /chassis # show flexflash FlexFlash-0

Server /chassis #

Command	Description
show operational-profile	

# show hdd (chassis)

To display information about installed hard disk drives (HDD) in the chassis, use the **show hdd** command.

# show hdd [detail]

#### **Syntax Description**

**Command Default** 

None

**Command Modes** 

Chassis (/chassis)

#### **Command History**

Release	Modification		
1.0(1)	This command was introduced.		

#### **Examples**

This example shows how to display information about hard disk drives in the chassis:

```
Server# scope chassis
Server /chassis # show hdd
Name
                        Status
HDD 01 STATUS
                        present
HDD_02_STATUS
HDD_03_STATUS
                        present
                        present
HDD 04 STATUS
                        present
Server /chassis # show hdd detail
Name HDD_01_STATUS:
Status : present
Name HDD_02_STATUS:
    Status : present
Name HDD 03 STATUS:
    Status : present
Name HDD_04_STATUS:
     Status : present
Server /chassis #
```

Command	Description
show psu	

# show host-eth-if

To display information about a host Ethernet interface, use the **show host-eth-if** command.

show host-eth-if [eth0| eth1| name][detail]

# **Syntax Description**

eth0	(Optional) Displays information about the eth0 Ethernet interface.
eth1	(Optional) Displays information about the eth1 Ethernet interface.
name	(Optional) Displays information about the named Ethernet interface.
detail	(Optional) Displays detailed information in list form.

#### **Command Default**

None

#### **Command Modes**

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

# **Examples**

This example shows how to display information about the eth0 Ethernet interface of adapter card 1:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # show host-eth-if eth0
Name MTU Uplink Port MAC Address CoS VLAN PXE Boot-eth0 1500 0 00:22:BD:D6:40:E3 0 NONE enabled
Server /chassis/adapter #
```

Command	Description
show ext-eth-if	

# show host-fc-if

To display information about the host Fibre Channel interface, use the show host-fc-if command.

show host-fc-if [fc0| fc1| name][detail]

# **Syntax Description**

fc0	(Optional) Displays information about vHBA fc0.
fc1	(Optional) Displays information about vHBA fc1.
name	(Optional) Displays information about a user-defined vHBA.
detail	(Optional) Displays detailed information in list form.

#### **Command Default**

None

#### **Command Modes**

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification			
1.2(1)	This command was introduced.			
1.4(1)	This command was modified to add the <i>name</i> variable.			

# **Examples**

This example shows how to display all vHBAs on adapter card 1 and the detailed properties of fc0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # show host-fc-if
Name
        World Wide Port Name
                               FC SAN Boot Uplink Port
fc0
         20:00:00:22:BD:D6:5C:35 Enabled
                                              0
         20:00:00:22:BD:D6:5C:36 Disabled
fc1
Server /chassis/adapter # show host-fc-if fc0 detail
Name fc0:
    World Wide Node Name: 10:00:00:22:BD:D6:5C:35
    World Wide Port Name: 20:00:00:22:BD:D6:5C:35
    FC SAN Boot: Enabled
    Persistent LUN Binding: Disabled
   Uplink Port: 0
   MAC Address: 00:22:BD:D6:5C:35
    CoS: 3
    VLAN: NONE
   Rate Limiting: OFF
    PCIe Device Order: ANY
    EDTOV: 2000
    RATOV: 10000
```

Maximum Data Field Size: 2112 Channel Number: 3 Port Profile:

Server /chassis/adapter #

Command	Description
create host-fc-if	

# show http

To display information about HTTP services on the server, use the **show http** command.

show http [detail]

### **Syntax Description**

detail

(Optional) Displays detailed information in list format.

**Command Default** 

None

**Command Modes** 

Root (server#)

#### **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

#### **Usage Guidelines**

Use this command to display information about HTTP ports, session timeout, and session activity.

#### **Examples**

This example shows how to display information about HTTP services:

Server#

Command	Description
set http-port	
set https-port	

# show hw-config

To display hardware information for a storage adapter, use the **show hw-config** command.

show hw-config[detail]

#### **Syntax Description**

detail (	(O	ptional	) I	Disp	lav	S	detailed	in	format	ion	in	list	format

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display hardware information for a storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show hw-config
PCI Slot SAS:
   SAS Address 0: 500605b0000272bf
    SAS Address 1: 0000000000000000
   SAS Address 2: 0000000000000000
   SAS Address 3: 0000000000000000
    SAS Address 4: 0000000000000000
    SAS Address 5: 0000000000000000
    SAS Address 6: 0000000000000000
    SAS Address 7: 0000000000000000
   BBU Present: true
   NVRAM Present: true
    Serial Debugger Present: true
   Memory Present: true
    Flash Present: true
   Memory Size: 512 MB
    Cache Memory Size: 394 MB
    Number of Backend Ports: 8
server /chassis/storageadapter #
```

Command	Description
show storageadapter	

# show interrupt

To display information about the interrupt of the host Ethernet interface or the host Fibre Channel Interface, use the **show interrupt** command.

#### show interrupt

### **Syntax Description**

detail (Optio	nal) Displays detailed information in list format.
---------------	--

#### **Command Modes**

Host Ethernet interface (/chassis/adapter/host-eth-if)

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

VM FEX interface (/chassis/adapter/vmfex)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added to the VM FEX interface.

#### **Examples**

This example shows how to display the interrupt of the host Ethernet interface:

Command	Description
set interrupt-type	

# show ipblocking (network)

To display information about the network IP blocking configuration, use the **show ipblocking** command in network mode.

show ipblocking [detail]

### **Syntax Description**

detail	(Optional) Displays detailed information about the IP blocking configuration in
	list format.

**Command Default** 

None

**Command Modes** 

IP blocking (/cimc/network)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

### **Examples**

This example shows how to display information about the IP blocking configuration:

```
server# scope cimc
Server /cimc # scope network
server /cimc/network # show ipblocking detail

IP Blocking Setting:
    Enabled: no
    Fail Count: 5
    Fail Window: 60
    Blocking Time: 300

server /cimc/network #
```

Command	Description
show network	

# show ipmi

To display information about the configuration and status of IPMI (Intelligent Platform Management Interface) on the server, use the **show ipmi** command.

#### show ipmi [detail]

### **Syntax Description**

detail	(Optional) Displays detailed iinformation about the configuration and status of IPMI
	on the server in list format.

#### **Command Default**

None

#### **Command Modes**

Root (server#)

# **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

# **Examples**

This example shows how to display information about the configuration and status of IPMI:

server# show ipmi detail

IPMI over LAN Settings:
 Enabled: yes
 Encryption Key: abcdef01234567890abcdef01234567890abcdef
 Privilege Level Limit: admin

server#

Command	Description
set enabled (ipmi)	
set encryption-key (ipmi)	

# show kvm

To display information about the KVM, use the **show kvm** command.

show kvm [detail]

**Syntax Description** 

(Optional) Displays detailed information about the KVM in list format.

**Command Default** 

None

detail

**Command Modes** 

Root (server#)

**Command History** 

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to display information about the KVM:

server# show kvm

Encryption Enabled Local Video Active Sessions Enabled KVM Port no no 0 yes 2068

server#

Command	Description
set kvm-port	
set max-sessions (kvm)	

# show Idap

To display information about the configuration and status of Active Directory, use the **show ldap** command.

# show ldap [detail]

### **Syntax Description**

detail	(Optional) Displays detailed information about the configuration and status of Active
	Directory in list format.

#### **Command Default**

None

#### **Command Modes**

Root (server#)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example shows how to display information about the configuration and status of Active Directory:

```
Server# show ldap detail
```

```
LDAP Settings:

Domain Controller 1: 192.0.20.123
Domain Controller 2: 0.0.0.0
Domain Controller 3: 0.0.0.0
BaseDN: example.com
Encrypted: no
Timeout: 60
Enabled: no
Attribute: CiscoAvPair
Group Authorization: yes
Global Catalog 1: 192.0.20.11
Global Catalog 2: 0.0.0.0
Global Catalog 3: 0.0.0.0
```

#### Server#

Command	Description
set base-dn	
set dc	

# show led (chassis)

To display information about the server LEDs, use the **show led** command in the chassis command mode.

show led [detail]

# **Syntax Description**

detail

(Optional) Displays detailed information about the server LEDs in list format.

**Command Default** 

None

**Command Modes** 

Chassis (/chassis)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example shows how to display information about the server LEDs:

server# scope chassis
server /chassis # show led

LED Name	LED State	LED Color
DDR3 P2 D1 INFO	OFF	AMBER
DDR3 P1 A1 INFO	OFF	RED
LED HLTH STATUS	ON	GREEN
LED FPID	OFF	BLUE
LED PSU STATUS	OFF	AMBER
LED DIMM STATUS	ON	GREEN
LED CPU STATUS	ON	GREEN

Command	Description
set locator-led	

# show local-syslog-severity

To display the lowest level of messages that are included in the CIMC log, use the **show local-syslog-severity** command.

show local-syslog-severity [detail]

### **Syntax Description**

detail	Displays output in list form.
--------	-------------------------------

#### **Command Default**

None

#### **Command Modes**

CIMC log (/cimc/log)

#### **Command History**

Release	Modification
1.4(3)	This command was introduced.

#### **Usage Guidelines**

Use this command to display the lowest level of messages that are included in the CIMC log. The displayed minimum severity level can be one of the following, in decreasing order of severity:

- emergency
- alert
- · critical
- error
- · warning
- notice
- informational
- debug

#### **Examples**

This example displays the lowest level of messages that are included in the CIMC log:

```
Server# scope cimc
Server /cimc # scope log
Server /cimc/log # show local-syslog-severity
        Local Syslog Severity: warning
Server /cimc/log #
```

Command	Description
set local-syslog-severity	

# show lom-mac-list

To display the MAC addresses of the LAN On Motherboard (LOM) Ethernet host ports, use the **show lom-mac-list** command.

show lom-mac-list [detail]

### **Syntax Description**

(Optional) Displays detailed information in list format.

**Command Default** 

None

**Command Modes** 

Network (/cimc/network)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to display the MAC addresses of the LAN On Motherboard (LOM) Ethernet host ports.

#### **Examples**

This example shows how to display the MAC addresses of the LOM ports:

Server# scope cimc

Server /cimc # scope network

Server /cimc/network # show lom-mac-list

Interface MAC Address

eth0 01000002000 eth1 01000002000

Server /cimc/network #

#### **Related Commands**

Command	Description
set mode	

OL-23494-08

# show main

To display the main BIOS configuration settings, use the **show main** command.

show main [detail]

# **Syntax Description**

A	240	.:1
"	eta	

(Optional) Displays detailed main BIOS configuration settings in list format.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Examples**

This example displays the main BIOS configuration details:

Server# scope bios
Server /bios # show main detail
Set-up parameters:
Boot option retry: Disabled
POST Error Pause: Disabled

Server /bios #

Command	Description
scope main	

# show mfg-data

To display manufacturer data for a storage adapter, use the show mfg-data command.

# show mfg-data[detail]

### **Syntax Description**

detail	0	ptional`	) Dis	play	VS (	detailed	inf	ormation	in	list	format.
actuii	$\sim$	pullinar	, 210	pray	,	actanca		Officiali	111	1100	Torride.

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification			
1.3(1)	This command was introduced.			

#### **Examples**

This example shows how to display manufacturer data for a storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show mfg-data
PCI Slot SAS:
    Manufactured Date: 2009-09-19
    Rework Date:
    Revision No:
    Battery FRU:
server /chassis/storageadapter #
```

Command	Description
show storageadapter	

# show network (cimc)

To display information about the server network configuration, use the **show network** command in cimc mode.

show network [detail]

# **Syntax Description**

detail	(Optional) Displays detailed information about the server network configuration in
	list format.

**Command Default** 

None

**Command Modes** 

CIMC (/cimc)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to display information about the server network configuration:

```
server# scope cimc
server /cimc # show network

DHCP Enabled VLAN Enabled
-----
no no
server#
```

Command	Description
set dhcp-enabled	
show ipblocking	

# show offload

To display information about TCP offload of the host interface, use the **show offload** command.

# show offload [detail]

#### **Syntax Description**

**detail** (Optional) Displays detailed information in list format.

#### **Command Default**

None

#### **Command Modes**

Host Ethernet interface (/chassis/adapter/host-eth-if)

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

VM FEX interface (/chassis/adapter/vmfex)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added to the VM FEX interface.

# **Examples**

This example shows how to display the TCP offload of the host Ethernet interface:

Server# scope chassis

Server /chassis # scope adapter 1

Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # show offload

TCP Segment Offload TCP Rx Checksum TCP Tx Checksum Large Receive
-----Enabled Enabled Enabled Enabled

Server /chassis/adapter/host-eth-if #

Command	Description
set tcp-segment-offload	
set tcp-rx-checksum-offload	
set tcp-tx-checksum-offload	

# show operational-profile

To display operational profile information about a Cisco Flexible Flash controller, use the **show operational-profile** command.

show operational-profile [detail]

#### **Syntax Description**

detail	(Optional)	Displays	s detailed	information	in list format.

#### **Command Default**

None

#### **Command Modes**

FlexFlash (/chassis/flexflash)

#### **Command History**

Release	Modification
1.3(3)	This command was introduced.

#### **Examples**

This example shows how to display operational profile information about the first flash device:

```
Server# scope chassis
Server /chassis # scope flexflash FlexFlash-0
Server /chassis/flexflash # show operational-profile detail
FlexFlash Operational Profile:
    Primary Member Slot: slot1
    I/O Error Threshold: 0
    Host Accessible VDs: SCU HV Drivers HUU
```

Server /chassis/flexflash #

Command	Description
scope operational-profile	

# show pci-adapter

To display the properties of installed PCI adapters, use the **show pci-adapter** command.

# show pci-adapter [detail]

# **Syntax Description**

(Optional) Displays detailed properties of installed PCI adapters in list format.

**Command Default** 

None

detail

**Command Modes** 

Chassis (/chassis)

#### **Command History**

Release	Modification	
1.3(1)	This command was introduced.	

# **Examples**

This example displays the pci-adapter configuration details:

Server# scope chassis

Name	Slot	Vendor ID	Device ID	Product Name
PCIe Adapter1	7	0x8086	0x10fb	Intel 10 Gbps 2 port x
PCIe Adapter2	6	0x14e4	0x164f	Broadcom 57711 10 Gbps
PCIe Adapter3	3	0x8086	0x10e8	Intel 1 Gbps 4 port E1
PCIe Adapter4	2	0x1077	0x8000	Qlogic QLE 8152-CNA 10

Server /chassis #

Command	Description
scope chassis	

# show pci-info

To display PCI information for a storage adapter, use the **show pci-info** command.

show pci-info[detail]

### **Syntax Description**

_		
	etail	
"	егип	

(Optional) Displays detailed information in list format.

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification	
1.3(1)	This command was introduced.	

#### **Examples**

This example shows how to display PCI information for a storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show pci-info
PCI Slot SAS:
    Vendor ID: 1000
    Device ID: 79
    SubVendor ID: 1000
    SubDevice ID: 9261
server /chassis/storageadapter #
```

Command	Description
show storageadapter	

# show pef (fault)

To display information about the configuration and status of PEFs (Platform Event Filters), use the **show pef** command in fault mode.

show pef [pef-number][detail]

### **Syntax Description**

pef-number	Displays information about the specified PEF. If the <i>pef-number</i> variable is omitted, the command displays information about all PEFs.
detail	(Optional) Displays detailed information in list form.

**Command Default** 

None

**Command Modes** 

Fault (/fault)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to display information about the configuration and status of all PEFs:

Server# scope fault
Server /fault # show pef

Platform Event Filter	Event	Action	Send Alert
1	Temperature Critical Assert Filter	none	no
2	Temperature Warning Assert Filter	none	no
2	Voltage Critical Assert Filter		
3	2	none	no
4	Voltage Warning Assert Filter	none	no
5	Current Assert Filter	none	no
6	Fan Critical Assert Filter	none	no
7	Fan Warning Assert Filter	none	no
8	Processor Assert Filter	none	no
9	Power Supply Critical Assert Filter	none	no
10	Power Supply Warning Assert Filter	none	no
11	Power Supply Redundancy Lost Filter	none	no
12	Discrete Power Supply Assert Filter	none	no
13	Memory Assert Filter	none	no
14	Drive Slot Assert Filter	none	no

server /fault #

Command	Description
set platform-event-enabled	

# show perbi

To display information about the persistent LUN binding of the host Fibre Channel interface, use the **show perbi** command.

#### show perbi [detail]

### **Syntax Description**

detail	(Optional) Displays detailed information about the persistent LUN binding in list
	format.

#### **Command Default**

None

#### **Command Modes**

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

# **Command History**

Release	Modification	
1.2(1)	This command was introduced.	

# **Examples**

This example shows how to display information about the persistent LUN binding of the host Fibre Channel interface:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc 1
Server /chassis/adapter/host-fc-if # scope perbi
Server /chassis/adapter/host-fc-if/perbi # show
Server /chassis/adapter/host-fc-if/perbi #
```

Command	Description
scope perbi	

# show physical-drive

To display physical drive information for a storage adapter or for a virtual drive, use the **show physical-drive** command.

show physical-drivedrive-number [detail]

#### **Syntax Description**

drive-number	(Optional) The drive number of the physical drive.
detail	(Optional) Displays detailed information in list format.

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

Virtual drive (/chassis/storageadapter/virtual-drive)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Examples**

This example shows how to display detailed physical drive information for physical drive number 1 on the storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show physical-drive 1 detail
Slot Number 1:
    Controller: SAS
    Status: online
    Manufacturer: FUJITSU
    Model: MBD2300RC
    Predictive Failure Count: 0
    Drive Firmware: 5701
    Coerced Size: 285568 MB
    Type: HDD
server /chassis/storageadapter #
```

Command	Description
show storageadapter	

# show physical-drive-count

To display the number of physical drives for a storage adapter, use the **show physical-drive-count** command.

show physical-drive-count [detail]

#### **Syntax Description**

detail	(Optional) Displays detailed
	information in list format.

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display the number of physical drives on the storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show physical-drive-count
PCI Slot SAS:
    Physical Drive Count: 12
    Critical Physical Drive Count: 1
    Failed Physical Drive Count: 0
server /chassis/storageadapter #
```

Command	Description
show storageadapter	

# show port

To display port information about the host Fibre Channel interface, use the **show port** command.

show port [detail]

### **Syntax Description**

detail	Or	tional	) D	ispla	vs (	detailed	port	inforr	nation	in	list	format.
uctuii ,	$\sim$ $\sim$	, ti Olitti	, –	10pia	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	actarrea	POIL	1111011	iiutioii	111	1100	TOTTIME.

#### **Command Default**

None

#### **Command Modes**

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to display port information for the host Fibre Channel interface:

Command	Description
show port-p-logi	
show port-f-logi	

# show port-f-logi

To display information about the Fibre Channel fabric login, use the **show port-f-logi** command.

show port-f-logi [detail]

#### **Syntax Description**

<b>detail</b> (Optional) Displays detailed information about the fabric login in list formation
---

**Command Default** 

None

**Command Modes** 

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to display information about the fabric login of the host interface:

Server# scope chassis

Server /chassis # scope adapter 1

Server /chassis/adapter # scope host-fc-if fc0

Server /chassis/adapter/host-fc-if # show port-f-logi

FLOGI Retries FLOGI Timeout (milli-secs)

INFINITE 2000

Server /chassis/adapter/host-fc-if #

Command	Description
show port-p-logi	

# show port-p-logi

To display information about the Fibre Channel port login, use the **show port-p-logi** command.

show port-p-logi [detail]

### **Syntax Description**

	-		ъ.		4	1	. •		. 1					
letail	(U	ptional)	) Dis	play	s detaile	l intorm	ation	about	the 1	port lo	gin	ın lıst	tormat.	

#### **Command Default**

None

#### **Command Modes**

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

#### **Examples**

This example shows how to display information about the port login of the host Fibre Channel interface:

Command	Description
show port-f-logi	

# show port-profiles

To display information about port profiles of the adapter card, use the **show port-profiles** command.

# show port-profiles[detail]

# **Syntax Description**

detail	Optional) Displays detailed information in list form	mat.
40000	, percentar, 2 is prays <b>actualled</b> infrommenton in fist for	

**Command Default** 

None

**Command Modes** 

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Examples**

This example shows how to display the port profiles of adapter card 1:

Server# scope chassis

Server /chassis # scope adapter 1

Server /chassis/adapter # show port-profiles

Port Profile Name

\_\_\_\_\_

Server /chassis/adapter #

Command	Description
set port-profile	

# show power-cap

To display the server power consumption statistics and the power cap policy, use the **show power-cap** command.

# show power-cap [detail]

# **Syntax Description**

detail	(Optional) Displays detailed information about the power consumption statistics and
	the power cap policy, in list format.

**Command Default** 

None

**Command Modes** 

Root (/server#)

# **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Usage Guidelines**

The displayed fields are described in the following table:

Name	Description
<b>Current Consumption</b>	The power currently being used by the server, in watts.
Maximum Consumption	The maximum number of watts consumed by the server since the last time it was rebooted.
Minimum Consumption	The minimum number of watts consumed by the server since the last time it was rebooted.
Minimum Configurable Limit	The minimum amount of power that can be specified as the peak power cap for this server, in watts.
Maximum Configurable Limit	The maximum amount of power that can be specified as the peak power cap for this server, in watts.

Additional fields are described in the following table:

Name	Description
<b>Enable Power Capping</b>	If power capping is enabled, the system monitors how much power is allocated to the server and takes the specified action if the server goes over its maximum allotment.
Peak Power	The maximum number of watts that can be allocated to this server. If the server requests more power than specified in this field, the system takes the action defined in the <b>Non-Compliance Action</b> field.
	Enter a number of watts within the range defined by the <b>Minimum</b> Configurable Limit field and the Maximum Configurable Limit field.
Non-Compliance Action	The action the system should take if power capping is enabled and the server requests more than its peak power allotment. This can be one of the following:
	• <b>force-power-reduction</b> —The server is forced to reduce its power consumption by any means necessary. This option is available only on some C-Series servers.
	<ul> <li>none—No action is taken and the server is allowed to use more power than specified in the Peak Power field.</li> </ul>
	• power-off-host—The server is shut down.
	• throttle—Processes running on the server are throttled to bring the total power consumption down.

# **Examples**

This example shows how to display detailed information about the DIMMs:

```
server# show power-cap detail
Cur Consumption (W): 247
Max Consumption (W): 286
Min Consumption (W): 229
Minimum Configurable Limit (W): 285
Maximum Configurable Limit (W): 1250
Power Cap Enabled: yes
Peak Power: 0
Non Compliance Action: throttle
```

Server#

Command	Description
set peak-power	
set non-compliance-action	

# show psu (chassis)

To display information about the PSUs (power supply units), use the **show psu** command in chassis mode.

show psu [detail]

#### **Syntax Description**

(Optional) Displays detailed information about the PSUs in list format.

#### **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

#### **Command History**

Release	Modification			
1.0(1)	This command was introduced.			

#### **Examples**

This example shows how to display information about the chassis PSUs:

```
server# scope chassis
server /chassis # show psu detail

Name PSU1:
    In. Power (Watts): 103
    Out. Power (Watts): 0
    Firmware :
    Status : Present

server /chassis #
```

Command	Description
show voltage	

# show psu (sensor)

To display information about the status of the PSU (power supply unit) sensors, use the **show psu** command in sensor mode.

show psu [detail]

## **Syntax Description**

#### **Command Default**

None

#### **Command Modes**

Sensor (/sensor)

#### **Command History**

Release	Modification			
1.0(1)	This command was introduced.			

## **Examples**

This example shows how to display information about the status of the PSU sensors:

server# scope sensor
server /sensor # show psu

Name Min. Failure	Sensor Status Max. Failure	Reading	Units	Min. Warning	Max. Warning
PSU1_POUT N/A	Normal 680	68	Watts	N/A	652
PSU1_PIN N/A	Normal 680	76	Watts	N/A	652
PSU1_STATUS	Normal	present			
PSU2_STATUS	Critical	absent			
server /sensor #					

Command	Description
show voltage	

# show psu-redundancy (sensor)

To display information about the status of PSU (power supply unit) redundancy, use the **show psu-redundancy** command in sensor mode.

show psu-redundancy [detail]

## **Syntax Description**

detail	(Optional) Displays detailed information about the status of PSU redundancy in
	list format.

**Command Default** 

None

**Command Modes** 

Sensor (/sensor)

server /sensor #

## **Command History**

Release	Modification			
1.0(1)	This command was introduced.			

#### **Examples**

This example shows how to display information about the status of PSU redundancy:

```
server# scope sensor
server /sensor # show psu-redundancy detail

Name PS_RDNDNT_MODE:
    Reading: full
    Sensor Status: Normal
```

Command	Description
show psu	

# show recv-queue

To display information about the host interface receive queue, use the **show recv-queue** command.

show recv-queue [detail]

#### **Syntax Description**

detail	Ontic	nal)	Dist	olavs	detailed	information	on in	list format	
actun	(Optite	,,,,,,	215	Jiuys	actuited	minormati	,11 111	mot format	

#### **Command Default**

None

#### **Command Modes**

Host Ethernet interface (/chassis/adapter/host-eth-if)

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

VM FEX interface (/chassis/adapter/vmfex)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added to the VM FEX interface.

# **Examples**

This example shows how to display information about the host Ethernet interface receive queue:

Command	Description			
scope recv-queue				

# show remote-syslog-severity

To display the lowest level of CIMC log messages that are sent to the remote syslog server, use the **show remote-syslog-severity** command.

show remote-syslog-severity [detail]

## **Syntax Description**

detail	Displays output in list form.
--------	-------------------------------

#### **Command Default**

None

#### **Command Modes**

CIMC log (/cimc/log)

# **Command History**

Release	Modification
1.4(3)	This command was introduced.

#### **Usage Guidelines**

Use this command to display the lowest level of CIMC log messages that are sent to a remote syslog server. The displayed minimum severity level can be one of the following, in decreasing order of severity:

- emergency
- alert
- · critical
- error
- warning
- notice
- informational
- debug

## **Examples**

This example displays the lowest level of CIMC log messages that are sent to a remote syslog server:

```
Server# scope cimc
Server /cimc # scope log
Server /cimc/log # show remote-syslog-severity
Remote Syslog Severity: warning
Server /cimc/log #
```

Command	Description	Description			
set remote-syslog-severity					

# show role-group

To display the properties of an Active Directory role group, use the **show role-group** command.

show role-group [ index ] [detail]

## **Syntax Description**

index	(Optional) The numeric identifier of the specific role group, from 1 to 5.
detail	(Optional) Displays detailed information in list form.

## **Command Default**

None

#### **Command Modes**

LDAP (/ldap)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

# **Usage Guidelines**

Use this command to display the properties of an Active Directory (AD) authorization (role) group. Five role groups are available, with index numbers 1 to 5. To display the properties of a single group, enter its index. To display the properties of all groups, omit the index.

## **Examples**

This example shows how to display the properties of all AD role groups:

	er# <b>scope ldap</b> er /ldap # <b>show</b>		
Group	o Name	Domain	Role
1 2 3 4 5	(n/a) (n/a) Training (n/a) (n/a)	(n/a) (n/a) example.com (n/a) (n/a)	admin user readonly (n/a) (n/a)
Serve	er /ldap #		

Command	Description
scope role-group	

# show rss

To display information about the Receive-side Scaling (RSS) of the host Ethernet Interface, use the **show rss** command.

#### show rss [detail]

## **Syntax Description**

detail (Optio	nal) Displays detailed information in list format.
---------------	--

#### **Command Default**

None

#### **Command Modes**

Host Ethernet interface (/chassis/adapter/host-eth-if)

VM FEX interface (/chassis/adapter/vmfex)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added to the VM FEX interface.

## **Examples**

This example shows how to display information about RSS:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # show rss
TCP Rx Side Scaling
------
Enabled
```

Server /chassis/adapter/host-eth-if #

Command	Description
scope rss	
set rss	

# show running-firmware-images

To display running firmware information for a storage adapter, use the **show running-firmware-images** command.

show running-firmware-images[detail]

#### **Syntax Description**

detail (	Optional	) Displays	detailed	information	in li	st format.

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display running firmware information for a storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show running-firmware-images
PCI Slot SAS:
    Firmware Version: 2.120.13-1133
    BIOS Version: 3.20.00 4.11.05.00 0x0418A000
    Preboot CLI Version: 04.04-017:#%00008
    WebBIOS Version: 6.0-34-e_29-Rel
    NVDATA Version: 2.09.03-0009
    Boot Block Version: 2.02.00.00-0000
    BOOT Version: 01.250.04.219

server /chassis/storageadapter #
```

Command	Description
show storageadapter	

# show scsi-io

To display information about the SCSI-IO of the host Fibre Channel interface, use the **show scsi-io** command.

#### show scsi-io

This command has no arguments or keywords.

#### **Command Default**

None

#### **Command Modes**

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.

## **Examples**

This example shows how to display the SCSI-IO of the host Fibre Channel interface:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # scope scsi-io
Server /chassis/adapter/host-fc-if/scsi io # show
CDB Transmit Queue Count CDB Transmit Ring Size

1 512
Server /chassis/adapter/host-fc-if/scsi io #
```

Command	Description
scope scsi-io	

# show server

To display the configured remote syslog servers, use the **show server** command.

show server [detail]

## **Syntax Description**

detail	Displays output in list form.
--------	-------------------------------

## **Command Default**

None

## **Command Modes**

CIMC log (/cimc/log)

Server /cimc/log #

## **Command History**

Release	Modification
1.1(2)	This command was introduced.

## **Examples**

This example displays the configured remote syslog servers:

Command	Description
scope log	

# show server-management

To display the server management BIOS configuration settings, use the **show server-management** command.

show server-management [detail]

#### **Syntax Description**

detail	(Optional) Displays detailed server management BIOS configuration settings in
	list format.

**Command Default** 

None

**Command Modes** 

BIOS (/bios)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example displays the server management BIOS configuration details:

Server# scope bios
Server /bios # show server-management detail
Set-up parameters:
 ACPI1.0 Support: Disabled
 Assert NMI on PERR: Enabled
 Assert NMI on SERR: Enabled
 PlugNPlay BMC detection: Disabled
 Baud rate: 9.6k
 Console redirection: Disabled
 FRB2 Enable: Enabled
 Flow Control: None
 Legacy OS redirection: Disabled
 Terminal type: VT100

Server /bios #

Command	Description
scope server-management	

# show settings

To display firmware settings for a storage adapter, use the **show settings** command.

show settings[detail]

#### **Syntax Description**

**detail** (Optional) Displays detailed information in list format.

**Command Default** 

None

**Command Modes** 

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display firmware settings for a storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show settings
PCI Slot SAS:
   Predictive Fail Poll Interval: 300 sec
   Rebuild Rate: 50 MB/s
   Patrol Read Rate: 30 MB/s
   Consistency Check Rate: 30 MB/s
   Reconstruction Rate: 30 MB/s
    Cache Flush Interval: 4 sec
   Max Drives to Spin Up at Once: 4
    Delay Among Spinup Groups: 2 sec
    Physical Drive Coercion Mode: None
    Cluster Mode: false
    Battery Warning: true
   ECC Bucket Leak Rate: 1440 min
    Expose Enclosure Devices: true
   Maintain PD Fail History: true
    Enable Copyback on SMART: false
    Enable Copyback to SSD on SMART Error: true
   NCQ: false
    Enable Spin Down of Unconfigured Drives: true
   Enable SSD Patrol Read: false
   AutoEnhancedImport: false
server /chassis/storageadapter #
```

Command	Description
show storageadapter	

# show snmp

To display the SNMP configuration, use the **show snmp** command.

## show snmp [detail]

#### **Syntax Description**

(	Optional <sup>3</sup>	) Displays	detailed SNMP	configuration	information	in list format
(	Optional,	Dispinys	actuited by titl	comingulation	minum	III IISt TOTTILL.

**Command Default** 

None

detail

**Command Modes** 

Root (server#)

## **Command History**

Release	Modification
1.3(1)	This command was introduced.

## **Usage Guidelines**

Use this command to display the following SNMP configuration information:

Name	Description
SNMP Port	The UDP port on which the SNMP agent receives requests.
System Contact	The system contact person responsible for the SNMP implementation.
System Location	The location of the host on which the SNMP agent runs.
SNMP Community	The SNMP v1 or v2c community name or SNMP v3 username that CIMC includes on any trap messages it sends to the SNMP host.
Enabled	Whether the SNMP agent is enabled or disabled.

#### **Examples**

This example displays the SNMP configuration details:

```
Server# show snmp detail
SNMP Settings:
    SNMP Port: 161
    System Contact: User Name <username@example.com> +1-408-555-1212
    System Location: San Jose, California
    SNMP Community: cimcpublic
    Enabled: yes
```

Server#

Command	Description
scope snmp	

# show sol

To display information about the SoL (Serial over LAN) configuration, use the show sol command.

show sol [detail]

## **Syntax Description**

detail	(Optional) Displays detailed information about the SoL (serial over LAN)
	configuration in list format.

#### **Command Default**

None

#### **Command Modes**

Root (/server#)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to display information about the SoL configuration:

server# show sol detail

Serial Over LAN:
Enabled: no
Baud Rate(bps): 115200

server#

Command	Description
set baud-rate	

# show ssh

To display information about the SSH (Secure Shell) configuration on the server, use the **show ssh** command.

show ssh [detail]

## **Syntax Description**

<b>detail</b> (Optional) Displays detailed information about the SSH configuration in list format.
--

**Command Default** 

None

**Command Modes** 

Root (server#)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to display information about the SSH configuration:

server# show ssh detail

SSH Settings:
 SSH Port: 22
 Timeout: 10800
 Max Sessions: 4
 Active Sessions: 1
 Enabled: yes

server#

Command	Description
set enabled (ssh)	
set ssh-port (ssh)	

# show startup-firmware-images

To display firmware images to be activated onstartup for a storage adapter, use the **show startup-firmware-images** command.

show startup-firmware-images[detail]

# **Syntax Description**

detail (Option	nal) Displays detailed information in list format.
----------------	--

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display startup firmware information for a storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show startup-firmware-images
PCI Slot SAS:
   Startup Firmware Version: N/A
   Startup BIOS Version: N/A
   Startup Preboot CLI Version: N/A
   Startup WebBIOS Version: N/A
   Startup NVDATA Version: N/A
   Startup Boot Block Version: N/A
   Startup BOOT Version: N/A
```

Command	Description
show storageadapter	

# show storageadapter

To display summary information about installed storage adapters, use the **show storageadapter** command.

show storageadapter[ slot ] [detail]

#### **Syntax Description**

slot	(Optional) The PCI slot name or number of a storage adapter.
detail	(Optional) Displays detailed storage adapter information in list format.

## **Command Default**

None

#### **Command Modes**

Chassis (/chassis)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Examples**

This example shows how to display information about the storage adapter in the SAS PCI slot:

```
Server# scope chassis
```

```
Server /chassis # show storageadapter SAS
PCI Slot SAS:
Product Name: LSI MegaRAID SAS 9260-8i
Serial Number: SV93404392
Firmware Package Build: 12.12.0-0038
Product ID: LSI Logic
Battery Status: fully charged
Cache Memory Size: 394 MB
```

Server /chassis #

Command	Description
scope storageadapter	

# show tech-support (cimc)

To display information about the configuration of the tech-support utility, use the **show tech-support** command in cimc mode.

#### show tech-support [detail]

#### **Syntax Description**

detail	(Optional) Displays detailed information about the configuration of the tech-support
	utility in list format.

#### **Command Default**

None

## **Command Modes**

CIMC (/cimc)

## **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

#### **Examples**

This example shows how to display information about the configuration of the tech-support utility:

```
server# scope cimc
server /cimc # show tech-support detail

Tech Support:
    TFTP Server Address: 10.20.30.211
    TFTP Path: /user/tech-support
    Progress(%): 100
    Status: COMPLETED

server /cimc #
```

Command	Description
set path (tech-support)	
set tftp-ip (tech-support)	

# show temperature (sensor)

To display information about the status of the temperature sensors, use the **show temperature** command in sensor mode.

#### show temperature [detail]

# **Syntax Description**

detail	(Optional) Displays detailed information about the status of the temperature sensors
	in list format.

**Command Default** 

None

**Command Modes** 

Sensor (/sensor)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to display information about the status of the temperature sensors:

server# scope sensor
server /sensor # show temperature

Name Min. Failure Max. Failure	Sensor Status	Reading	Units	Min. Warning	Max. Warning
	·				
	-				
IOH TEMP SENS	Normal	42.0	C	N/A	80.0
N/A 85.0					
P2_TEMP_SENS	Normal	43.0	C	N/A	80.0
N/A 81.0					
P1_TEMP_SENS	Normal	45.0	С	N/A	80.0
N/A 81.0	_			,	
DDR3_P2_D1_TMP	Normal	28.0	С	N/A	90.0
N/A 95.0		20.0	~	27/2	00.0
DDR3_P1_A1_TMP	Normal	30.0	С	N/A	90.0
N/A 95.0	37	40.0	0	37 / 7	60 0
PSU1_TEMP_1	Normal	40.0	С	N/A	60.0
N/A 65.0 PSU2 TEMP 1	Normal	40.0	С	N/A	60.0
N/A 65.0	NOTHIAL	40.0	C	IV/ A	00.0
FP AMBIENT TEMP	Normal	22.0	С	N/A	40.0
N/A 45.0	NOTHER	22.0	C	N/A	10.0
10,11					

server /sensor #

# show trans-queue

To display information about the host interface transmit queue, use the **show trans-queue** command.

## show trans-queue [detail]

#### **Syntax Description**

<b>detail</b> (Optional) Displays detailed information in list format.
--

#### **Command Default**

None

#### **Command Modes**

Host Ethernet interface (/chassis/adapter/host-eth-if)

Host Fibre Channel interface (/chassis/adapter/host-fc-if)

VM FEX interface (/chassis/adapter/vmfex)

#### **Command History**

Release	Modification
1.2(1)	This command was introduced.
1.4(1)	This command was added to the VM FEX interface.

#### **Examples**

This example shows how to display information about the transmit queue for the host Ethernet interface:

Command	Description
scope trans-queue	

# show trap-destination

To display information about SNMP trap destinations, use the **show trap-destination** command.

show trap-destination [trap-destination-number] [detail]

## **Syntax Description**

trap-destination-number	Displays information about only the specified SNMP trap destination. If the <i>trap-destination-number</i> variable is omitted, displays information about all SNMP trap destinations.
detail	(Optional) Displays detailed information about SNMP trap destinations in list format.

#### **Command Default**

None

#### **Command Modes**

SNMP (/snmp)

## **Command History**

Release Modification	
1.0(1)	This command was introduced.
1.4(1)	This command was moved from the fault scope to the snmp scope.

# **Examples**

This example shows how to display information about the SNMP trap destinations:

```
server# scope snmp
server /snmp # show trap-destination
```

Trap Destination	IP Address	Enabled
1	209.165.200.225	yes
2	0.0.0.0	no
3	0.0.0.0	no
4	0.0.0.0	no
server /snmp #		

Command	Description	
set addr (trap-destination)		

# show user

To display information about user profiles on the server, use the **show user** command.

show user [user-number] [detail]

## **Syntax Description**

user-number	(Optional) Displays only the specified user profile. If the <i>user-number</i> variable is omitted, displays all user profiles.
detail	(Optional) Displays detailed information in list form.

## **Command Default**

None

# **Command Modes**

Root (server#)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to display information about all user profiles:

server# show user

User	Name	Role	Enabled
0ser 1 2 3 4 5 6 7 8 9 10 11 12 13 14	admin jsmith (n/a) (n/a) bjones (n/a)	Acie admin admin (n/a) (n/a) readonly (n/a)	yes yes no no
15	(n/a)	(n/a)	no

server#

Command	Description
set enabled (user)	
set name (user)	

# show user-session

To display information about current user sessions, use the **show user-session** command.

show user-session [session-number] [detail]

# **Syntax Description**

session-number	Displays information about a specific session.
detail	(Optional) Displays detailed information about current user sessions in list format.

#### **Command Default**

None

#### **Command Modes**

Root (server#)

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to display user session information for all current user sessions:

server# show user-session

ID	Name	IP Address	Type	Killable
4	admin	10.20.30.123	CLI	yes
2	admin	10.20.30.185	vKVM	yes
5	read-only	10.20.30.187	CLI	no

server#

This example shows how to display user session information about a specific user session:

server# show user-session 2

ID	Name	IP Address	Type	Killable
2	admin	10.20.30.185	vKVM	yes

server#

Command	Description
show user	

# show v3users

To display the properties of SNMPv3 users, use the **show v3users** command.

show v3users [ user-index ] [detail]

#### **Syntax Description**

user-index	(Optional) The numeric identifier of a user.
detail	(Optional) Displays detailed information in list format.

#### **Command Default**

None

#### **Command Modes**

SNMP (/snmp)

#### **Command History**

Release	Modification
1.4(1)	This command was introduced.

#### **Usage Guidelines**

Use this command to display the configuration of SNMPv3 users. To display the configuration of a specific user, specify a user number between 1 and 15. To display the configuration of all SNMPv3 users, do not specify a user number.

#### **Examples**

This example displays the configuration for SNMPv3 user number 1:

```
Server# scope snmp
Server /snmp # show v3users 1
User Add User Security Name Security Level

1 no (n/a) (n/a)

Server /snmp # show v3users 1 detail
User 1:

Add User: no
Security Name: (n/a)
Security Level: (n/a)
Auth Type: (n/a)
Auth Key: *****
Encryption: (n/a)
Private Key: *****

Server /snmp #
```

Command	Description
scope v3users	

# show version

To display the version number of the running firmware, use the **show version** command.

show version [detail]

**Syntax Description** 

**detail** (Optional) Displays the version number of the running firmware in list format.

**Command Default** 

None

**Command Modes** 

Root (server#)

**Command History** 

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to display the version of the running firmware:

server# show version

Firmware Version

1.1(0.3)

server#

Command	Description
activate (firmware)	

# show virtual-drive

To display virtual drive information for a storage adapter, use the **show virtual-drive** command.

show virtual-drivedrive-number [detail]

## **Syntax Description**

drive-number	(Optional) The drive number of the virtual drive.		
detail	(Optional) Displays detailed information in list format.		

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

# **Examples**

This example shows how to display virtual drive information for the storage adapter in the SAS PCI slot:

server# scope chassis

server /chassis # scope storageadapter SAS

server /chassis	s/storageadapter # <b>sh</b> o	ow virtual-drive 1			
Virtual Drive	Status	Name	Size	RAID	Level
0	Optimal	SLES1SP1beta5	30720 MB	RAID	0
1	Optimal	RHEL5.5	30720 MB	RAID	0
2	Optimal	W2K8R2 DC	30720 MB	RAID	0
3	Optimal	VD 3	30720 MB	RAID	0
4	Optimal	ESX4.0u2	30720 MB	RAID	0
5	Optimal	VMs	285568 MB	RAID	0
6	Optimal	RHEL6-35GB	35840 MB	RAID	0
7	Optimal	OS Ins Test DR	158720 MB	RAID	0
8	Optimal		285568 MB	RAID	1

server /chassis/storageadapter #

Command	Description
show storageadapter	

# show virtual-drive-count

To display the number of virtual drives for a storage adapter, use the **show virtual-drive-count** command.

show virtual-drive-count [detail]

#### **Syntax Description**

detail	(Optional) Displays detailed
	information in list format

#### **Command Default**

None

#### **Command Modes**

Storage adapter (/chassis/storageadapter)

#### **Command History**

Release	Modification
1.3(1)	This command was introduced.

#### **Examples**

This example shows how to display the number of virtual drives on the storage adapter in the SAS PCI slot:

```
server# scope chassis
server /chassis # scope storageadapter SAS
server /chassis/storageadapter # show virtual-drive-count
PCI Slot SAS:
    Virtual Drive Count: 9
    Degraded Virtual Drive Count: 0
    Offline Virtual Drive Count: 0
server /chassis/storageadapter #
```

Command	Description
show storageadapter	

# show vmedia

To display information about the status and configuration of virtual media, use the **show vmedia** command.

show vmedia [detail]

## **Syntax Description**

detail	(Optional) Displays detailed information about the status and
	configuration of virtual media in list format.

#### **Command Default**

None

#### **Command Modes**

Root (server#)

#### **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

## **Examples**

This example shows how to display information about the status and configuration of virtual media:

#### server# show vmedia

Encryption Enabled Enabled Active Sessions
----no yes 0
server#

Command	Description
set encryption (vmedia)	

# show vmfex

To display the VM FEX properties, use the **show vmfex** command.

show vmfex [ name ] [detail]

## **Syntax Description**

name	The name or number of the VM FEX interface.
detail	(Optional) Displays detailed information in list format.

#### **Command Default**

None

#### **Command Modes**

Adapter (/chassis/adapter)

#### **Command History**

Release	Modification	
1.4(1)	This command was introduced.	

# **Usage Guidelines**

Use this command to display the virtual machine fabric extender (VM FEX) properties for all or for only the specified host interface. NIV mode must be enabled.

#### **Examples**

This example shows how to display the VM FEX properties for the host interface named pts0:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # show vmfex pts0
Name
            MTU Uplink Port MAC Address
                                               CoS VLAN PXE Boot
            1500 0
                             00:00:00:00:00:00 N/A N/A disabled
Server /chassis/adapter # show vmfex pts0 detail
Name pts0:
    MTU: 1500
    Uplink Port: 0
   MAC Address: 00:00:00:00:00
    CoS: N/A
    Trust Host CoS: disabled
    PCI Order: ANY
    VLAN: N/A
    VLAN Mode: N/A
    Rate Limiting: N/A
    PXE Boot: disabled
    Channel Number:
    Port Profile:
    Uplink Failover:
    Uplink Failback Timeout:
Server /chassis/adapter #
```

Command	Description
scope vmfex	

# show voltage (sensor)

To display information about the status of the voltage sensors, use the **show voltage** command in sensor mode.

show voltage [detail]

## **Syntax Description**

detail	(Optional) Displays detailed information about the status of the voltage sensors in
	list form.

**Command Default** 

None

**Command Modes** 

Sensor (/sensor)

## **Command History**

Release	Modification	
1.0(1)	This command was introduced.	

## **Examples**

This example shows how to display information about the status of the voltage sensors:

server# scope sensor
server /sensor # show voltage

Name Min. Failure Max. Failure		-	Units	,	Max. Warning
P3V BAT SCALED	Normal	3.022	V	N/A	N/A
$2.7\overline{9}8$ - 3.088					
P12V_SCALED 11.623 12.331	Normal	12.095	V	N/A	N/A
$11.6\overline{2}3$ $12.331$					
P5V_SCALED	Normal	5.061	V	N/A	N/A
4.844 5.157					
P3V3_SCALED	Normal	3.318	V	N/A	N/A
3.191 3.381	_			,	,
P5V_STBY_SCALED	Normal	4.988	V	N/A	N/A
4.844 5.157		0 040		37 / 3	37 / 3
PV_VCCP_CPU1	Normal	0.940	V	N/A	N/A
0.725 1.391	Normal	0.891	V	N/A	N/A
PV_VCCP_CPU2 0.725 1.391	NOTHIAL	0.091	V	N/A	N/A
P1V5 DDR3 CPU1	Normal	1.499	V	N/A	N/A
1.450 1.548	NOTHIAL	1.499	V	N/A	N/A
P1V5 DDR3 CPU2	Normal	1.499	V	N/A	N/A
1.450 1.548	NOTHIGE	1.100	*	14/ 11	14/ 11
P1V1 IOH	Normal	1.087	V	N/A	N/A
$1.06\overline{8}$					
P1V8 AUX	Normal	1.773	V	N/A	N/A
$1.74\overline{4}$ 1.852					
PSU1 VOUT	Normal	12.000	V	N/A	N/A
N/A 13.000					

show voltage (sensor)

PSU2\_VOUT Normal 12.000 V N/A N/A 13.000

server /sensor #

# start

To start the technical support process, use the **start** command.

start

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Technical support (/cimc/tech-support)

# **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to start the technical support process:

```
server# scope cimc
```

server /cimc # scope tech-support
server /cimc/tech-support # start
Tech Support upload started.
server /cimc/tech-support #

Command	Description
cancel	

# terminate (user-session)

To terminate a CLI session, use the **terminate** command in user-session mode.

terminate

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

User session (/user-session)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

## **Examples**

This example shows how to terminate a CLI session:

server# scope user-session 3
server /user-session # terminate

Command	Description
show user-session	

# top

To return to root mode from any other mode, use the **top** command.

top

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Any command mode

## **Command History**

Release	Modification
1.0(1)	This command was introduced.

# **Examples**

This example shows how to enter root mode from log mode:

server /cimc/log # top

server#

Command	Description
exit	

# update (firmware)

To update server firmware, use the **update** command.

update ip-address file-path

#### **Syntax Description**

ip-address	The IP address of the TFTP server. The format is X.X.X.X.
file-path	The path to the update file on the TFTP server.

#### **Command Default**

None

#### **Command Modes**

Firmware (/cimc/firmware)

#### **Command History**

Release	Modification
1.0(1)	This command was introduced.

#### **Examples**

This example shows how to update server firmware:

```
server# scope cimc
server /cimc # scope firmware
server /cimc/firmware # update 209.165.200.225 //test/cimc66-78.bin
<CR> Press Enter key
Firmware update has started.
Please check the status using "show detail"
server /cimc/firmware #
```

Command	Description
show cime	
show version	

# update-adapter-fw

To update the adapter firmware, use the **update-adapter-fw** command.

**update-adapter-fw** tftp-ip-addresspath-and-filename {activate| no-activate} [ pci-slot ] [ pci-slot ]

#### **Syntax Description**

tftp-ip-address	The IP address of the remote server hosting the adapter firmware.
filename	The path and file name of the adapter firmware on the remote server.
activate	Activates the new firmware on the next boot.
no-activate	The new firmware will not be activated on the next boot.
pci-slot	The PCI slot number of the adapter card.

#### **Command Modes**

Chassis (/chassis)

## **Command History**

Release	Modification
1.2(1)	This command was introduced.

# **Usage Guidelines**

Use this command to download the specified adapter firmware file from the TFTP server, and then install the firmware as the backup image on one or two specified adapters or, if no adapter is specified, on all adapters. If the **activate** keyword is specified, the new firmware is activated on the next boot.

## **Examples**

This example shows how to update and activate the adapter firmware on the adapter in slot 1:

```
Server # scope chassis
Server /chassis # update-adapter-fw 192.0.2.34 /ucs/adapters/adapter4.bin activate 1
Server /chassis #
```

Command	Description
recover-adapter-update	

# update-all

To update basic server component firmware, use the **update-all** command.



Caution

This command should only be used under the direction of Cisco TAC.

update-all

**Command Default** 

None

**Command Modes** 

Firmware (/chassis/firmware)

## **Command History**

Release	Modification
1.4(5)	This command was introduced.

## **Examples**

This example shows how to update server firmware:

server# scope chassis
server /chassis # scope firmware
server /chassis/firmware # update-all

Command	Description
show (firmware)	

# upload (certificate)

To upload a certificate, use the **upload** command in certificate mode.

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Certificate (/certificate)

#### **Command History**

Release	Modification
1.0(1x)	This command was introduced.

#### **Examples**

This example shows how to upload a certificate:

server# scope certificate
server /certificate # upload
Please paste your certificate here, when finished, press CTRL+D.

MIIBOTCCAToCAQAwbDELMAkGA1UEBhMCVVMxCzAJBgNVBAgTAkNBMQ0wCwYDVQQH
EwRoZXJ1MQwwCgYDVQQKEwN0aW0xCzAJBgNVBAsTAjAxMQwwCgYDVQQDEwNib2Ix
GDAWBgkqhkiG9w0BCQEWCW11QG11LmNvbTCBnzANBgkqhkiG9w0BAQEFAAOBjQAw
gYkCgYEAw49pYuDXdOfHtXwBT7k5kX1set/I3e8TtkuO/EQ5HVd9HrPIy4Kpb3Oj
33CkqjysvWBpPSGzWAlEL6cZYs5p6JxR74+tqW5BYpNKRLNFawpsTZvCXhe/n/O2
WYsx1FnW1m6BgQnPKCBCp9R1ESmq9Np24r2c3PEStZEjeIVWbaUCAwEAAAAlMCMG
CSqGSIb3DQEJBzEWExRBIGNoYWxsZW5nZSBwYXNzd29yZDANBgkqhkiG9w0BAQUF
AAOBgQBosXif9feLXHBK19kqeVZ8uqRgoMIcM03aBTImjIO1RgwhRLuMrG21+thA
CT+fbYOYXJ4bHsn25XQjcSdG0uxsti3C2SnK83nKdulpEzBzj545rvH20QK+RtHN
YUBEKvABCeqoIUu+ErMtGvryaQw7WQiQjWf+RTf8IXDGShIQwQ==

server /certificate #

Command	Description
generate-csr (certificate)	
show certificate	

upload (certificate)