



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

First Published: September 06, 2011

Last Modified: August 14, 2012

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Text Part Number: OL-23494-08

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <http://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

© 2009-2012 Cisco Systems, Inc. All rights reserved.



CONTENTS

Preface

Preface xvii

Audience xvii

Organization xvii

Conventions xviii

Related Cisco UCS Documentation xix

Documentation Feedback xix

CHAPTER 1

Overview 1

Overview of the Cisco UCS C-Series Rack-Mount Servers 1

CIMC CLI 1

Command Modes 2

Command Mode Table 3

Complete a Command 5

Command History 6

Committing, Discarding, and Viewing Pending Commands 6

Command Output Formats 6

Online Help for the CLI 7

CHAPTER 2

Commands 9

activate (firmware) 22

activate-adapter-fw 23

adapter-reset 24

adapter-reset-defaults 25

bios-setup-defaults 26

cancel 27

clear (log) 28

clear (sel) 29

clear-cmos	30
commit	31
configure-vmfex	32
connect	33
create-boot-entry	34
create host-eth-if	35
create host-fc-if	36
delete boot	37
delete host-eth-if	38
delete host-fc-if	39
discard	40
exit	41
export-config	42
export-vnic	44
factory-default (cime)	45
generate-csr (certificate)	46
import-config	47
import-vnic	49
locateHDD	50
ping (network)	51
power (chassis)	52
reapply (bios)	54
reboot (chassis)	55
rebuild	56
recover (bios)	57
recover-adapter-update	59
scope adapter	60
scope advanced	61
scope bios	62
scope certificate	63
scope chassis	64
scope cime	65
scope comp-queue	66
scope error-recovery	67
scope fault	68

scope firmware	69
scope flexflash	70
scope host-eth-if	71
scope host-fc-if	72
scope http	73
scope import-export	74
scope interrupt	75
scope ipblocking (network)	76
scope ipmi	77
scope kvm	78
scope ldap	79
scope log (cimc)	80
scope main	81
scope network (cimc)	82
scope offload	83
scope operational-profile	84
scope pef (fault)	85
scope perbi	87
scope physical-drive	88
scope port	89
scope port-f-logi	90
scope port-p-logi	91
scope recv-queue	92
scope role-group	93
scope rss	94
scope scsi-io	95
scope sel	96
scope sensor	97
scope server-management	98
scope server (log)	99
scope snmp	100
scope sol	101
scope ssh	102
scope storageadapter	103
scope tech-support (cimc)	104

scope trans-queue	105
scope trap-destination	106
scope user	107
scope user-session	108
scope v3users	109
scope virtual-drive	110
scope vmedia	111
scope vmfex	112
sendSNMPtrap	113
set ACPI10Support	114
set action (pef)	115
set ActiveVideo	117
set addr (trap-destination)	118
set AdjacentCacheLinePrefetch	119
set alternate-dns-server	120
set Altitude	121
set AssertNMIONPERR	122
set AssertNMIONSERR	123
set ATS	124
set attribute	125
set base-dn	126
set baud-rate	127
set BaudRate	128
set BMCPnP	130
set boot	131
set boot-order	132
set BootOptionRetry	134
set boot-override	135
set cdb-wq-count	137
set cdb-wq-ring-size	138
set channel-number	139
set ChannelInterLeave	140
set Ck410bConfigSpreadSpectrumEnable	141
set CkeLowPolicy	142
set cli output	143

[set coalescing-time](#) 144

[set coalescing-type](#) 145

[set CoherencySupport](#) 146

[set community-str](#) 147

[set comport](#) 149

[set ConfigSATAMode](#) 151

[set ConsoleRedir](#) 153

[set CoreMultiProcessing](#) 155

[set cos](#) 156

[set CpuEngPerfBias](#) 157

[set CpuFreqFloor](#) 159

[set CPUPerformance](#) 160

[set CPUPowerManagement](#) 162

[set cq-count](#) 164

[set dc](#) 165

[set DcuIpPrefetch](#) 166

[set DcuStreamerPrefetch](#) 167

[set delay](#) 168

[set delay-value](#) 170

[set DemandScrub](#) 172

[set description \(chassis\)](#) 173

[set dhcp-enabled](#) 174

[set DirectCacheAccess](#) 175

[set DisableSCU](#) 176

[set dns-use-dhcp](#) 177

[set domain](#) 178

[set enabled](#) 179

[set encrypted](#) 181

[set encryption-key](#) 183

[set EnhancedIntelSpeedStep](#) 184

[set error-count-threshold](#) 186

[set error-detect-timeout](#) 187

[set ExecuteDisable](#) 188

[set fail-count](#) 189

[set fail-window](#) 190

set fc-rq-ring-size	191
set fc-wq-ring-size	192
set fcp-error-recovery	193
set fip-mode	194
set flogi-retries	195
set flogi-timeout	196
set FlowCtrl	197
set FRB-2	198
set gc	199
set group-auth	200
set HardwarePrefetch	201
set hostname	202
set http-port	203
set http-redirect	204
set https-port	205
set inform-type	206
set IntelHyperThread	208
set IntelTurboBoostTech	209
set IntelVT	210
set IntelVTD	211
set interrupt-count	212
set interrupt-mode	213
set InterruptRemap	214
set kvm-port	215
set LaunchPXEOptionROM	216
set LegacyOSRedir	217
set LegacyUSBSupport	218
set link-down-timeout	219
set local-syslog-severity	220
set local-video	222
set locator-led	223
set LomOpromControlPortn	224
set LvDDRMode	225
set mac-addr	226
set MakeUSBDeviceNonBootable	227

[set ManagedBootRule](#) 228

[set max-data-field-size](#) 230

[set max-sessions](#) 231

[set max-target-luns](#) 232

[set MemoryMappedIOAbove4GB](#) 233

[set MirroringMode](#) 234

[set mode](#) 235

[set mtu](#) 236

[set name](#) 237

[set NIC-ROM](#) 238

[set niv-mode](#) 239

[set non-compliance-action](#) 240

[set NUMAOptimize](#) 242

[set OEMAESNICControl](#) 243

[set OnboardNic1](#) 244

[set OnboardNic1ROM](#) 245

[set OnboardSATA](#) 246

[set OptionROMPriority](#) 247

[set order](#) 248

[set OSBootWatchdogTimer](#) 249

[set OSBootWatchdogTimerPolicy](#) 251

[set OSBootWatchdogTimerTimeout](#) 253

[set outstanding-io-count](#) 255

[set PackageCStateLimit](#) 256

[set PassThroughDMA](#) 258

[set password](#) 259

[set path \(tech-support\)](#) 260

[set PatrolScrub](#) 261

[set PatrolScrubDuration](#) 263

[set Pci-Opt-Roms](#) 264

[set PciMezzOptionROM](#) 265

[set PcieOptionROMs](#) 266

[set PcieSlotnOptionROM](#) 267

[set PciOptRomsDisable](#) 268

[set peak-power](#) 269

set penalty-time	271
set persistent-lun-binding	272
set platform-event-enabled	273
set plogi-retries	274
set plogi-timeout	275
set policy	276
set port-down-io-retry-count	278
set port-down-timeout	279
set port-profile (host-eth-if)	280
set port-profile (network)	281
set POSTErrorPause	283
set preferred-dns-server	284
set privilege-level	285
set ProcessorC1eEnable	287
set ProcessorC1EReport	289
set ProcessorC3Report	290
set ProcessorC6Report	292
set ProcessorC7Report	293
set ProcessorCcxEnable	294
set QPILinkFrequency	295
set raid-primary-member	296
set RankInterLeave	297
set rate-limit	298
set redundancy	299
set remote-syslog-severity	300
set resource-allocation-timeout	302
set role	303
set rq-count	305
set rq-ring-size	306
set rss	307
set rss-hash-ipv4	308
set rss-hash-ipv6	309
set rss-hash-ipv6-ex	310
set rss-hash-tcp-ipv4	311
set rss-hash-tcp-ipv6	312

set rss-hash-tcp-ipv6-ex	313
set SelectMemoryRAS	314
set send-alert (pef)	316
set Serial-PortA	317
set SerialPortAAddress	318
set Serial-PortB	319
set SerialPortBAddress	320
set server-ip	321
set Slot-n-ROM	322
set Slot1Disable	323
set SlotMezzDisable	324
set SparingMode	325
set ssh-port	326
set sys-contact	327
set sys-location	329
set tcp-large-receive-offload	331
set tcp-rx-checksum-offload	332
set tcp-segment-offload	333
set tcp-tx-checksum-offload	334
set TerminalType	335
set tftp-ip (tech-support)	337
set timeout	338
set TPMAdminCtrl	340
set trap-community-str	341
set trap-ver	342
set trust-host-cos	344
set uplink	345
set uplink-failback-timeout	346
set uplink-failover	347
set USBController	348
set UsbEmul6064	349
set v3add	350
set v3auth-key	352
set v3priv-auth-key	353
set v3priv-proto	354

[set v3proto](#) 355

[set v3security-level](#) 356

[set v3security-name](#) 358

[set v4-addr](#) 359

[set v4-gateway](#) 360

[set v4-netmask](#) 361

[set virtual-drives-enabled](#) 362

[set vlan](#) 363

[set vlan-enabled](#) 364

[set vlan-id](#) 365

[set vlan-mode](#) 366

[set vlan-priority](#) 367

[set wq-count](#) 368

[set wq-ring-size](#) 369

[set wwnn](#) 370

[set wwpn](#) 371

[show \(firmware\)](#) 372

[show actual-boot-order \(bios\)](#) 373

[show adapter](#) 374

[show advanced](#) 376

[show bbu](#) 378

[show bios](#) 379

[show boot](#) 381

[show capabilities](#) 382

[show certificate](#) 383

[show chassis](#) 385

[show cime](#) 386

[show comp-queue](#) 387

[show configuration pending](#) 388

[show cpu \(chassis\)](#) 389

[show current \(sensor\)](#) 391

[show dimm \(chassis\)](#) 392

[show entries \(log\)](#) 395

[show entries \(sel\)](#) 397

[show error-counters](#) 399

[show error-recovery](#) 400

[show ext-eth-if](#) 401

[show fan \(sensor\)](#) 402

[show fault](#) 404

[show firmware \(cimc\)](#) 405

[show firmware-versions](#) 406

[show flexflash](#) 407

[show hdd \(chassis\)](#) 408

[show host-eth-if](#) 409

[show host-fc-if](#) 410

[show http](#) 412

[show hw-config](#) 413

[show interrupt](#) 414

[show ipblocking \(network\)](#) 415

[show ipmi](#) 416

[show kvm](#) 417

[show ldap](#) 418

[show led \(chassis\)](#) 419

[show local-syslog-severity](#) 420

[show lom-mac-list](#) 422

[show main](#) 423

[show mfg-data](#) 424

[show network \(cimc\)](#) 425

[show offload](#) 426

[show operational-profile](#) 427

[show pci-adapter](#) 428

[show pci-info](#) 429

[show pef \(fault\)](#) 430

[show perbi](#) 432

[show physical-drive](#) 433

[show physical-drive-count](#) 434

[show port](#) 435

[show port-f-logi](#) 436

[show port-p-logi](#) 437

[show port-profiles](#) 438

[show power-cap](#) 439

[show psu \(chassis\)](#) 441

[show psu \(sensor\)](#) 442

[show psu-redundancy \(sensor\)](#) 443

[show recv-queue](#) 444

[show remote-syslog-severity](#) 445

[show role-group](#) 447

[show rss](#) 448

[show running-firmware-images](#) 449

[show scsi-io](#) 450

[show server](#) 451

[show server-management](#) 452

[show settings](#) 453

[show snmp](#) 454

[show sol](#) 456

[show ssh](#) 457

[show startup-firmware-images](#) 458

[show storageadapter](#) 459

[show tech-support \(cimc\)](#) 460

[show temperature \(sensor\)](#) 461

[show trans-queue](#) 462

[show trap-destination](#) 463

[show user](#) 464

[show user-session](#) 465

[show v3users](#) 466

[show version](#) 467

[show virtual-drive](#) 468

[show virtual-drive-count](#) 469

[show vmedia](#) 470

[show vmfex](#) 471

[show voltage \(sensor\)](#) 473

[start](#) 475

[terminate \(user-session\)](#) 476

[top](#) 477

[update \(firmware\)](#) 478

[update-adapter-fw](#) 479
[update-all](#) 480
[upload \(certificate\)](#) 481

APPENDIX A**[VIC Configuration Utility](#) 483**

[Understanding the VIC Configuration Utility](#) 483

[Connecting to the VIC Configuration Utility](#) 484

[VIC Configuration Utility Commands](#) 485

[activate \(VIC\)](#) 486

[export-vnic \(VIC\)](#) 488

[import-vnic \(VIC\)](#) 489

[reset-defaults \(VIC\)](#) 490

[scope adapter \(VIC\)](#) 491

[scope firmware \(VIC\)](#) 492

[show firmware \(VIC\)](#) 493

[techsupport \(VIC\)](#) 494

[update \(VIC\)](#) 495



Preface

This preface includes the following sections:

- [Audience, page xvii](#)
- [Organization, page xvii](#)
- [Conventions, page xviii](#)
- [Related Cisco UCS Documentation, page xix](#)
- [Documentation Feedback, page xix](#)

Audience

This guide is intended primarily for data center administrators with responsibilities and expertise in one or more of the following:

- Server administration
- Storage administration
- Network administration
- Network security

Organization

This document includes the following chapters:

Chapter	Title	Description
Chapter 1	Overview	Describes the CIMC CLI.
Chapter 2	Commands	Describes the CIMC CLI commands.
Appendix A	VIC Configuration Utility	Describes the operation and commands of the Virtual Interface Configuration (VIC) Utility.

Conventions

This document uses the following conventions:

Convention	Indication
bold font	Commands, keywords, GUI elements, and user-entered text appear in bold font.
<i>italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic</i> font.
<code>courierfont</code>	Terminal sessions and information that the system displays appear in <code>courier</code> font.
[]	Elements in square brackets are optional.
{x y z}	Required alternative keywords are grouped in braces and separated by vertical bars.
[x y z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
< >	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.



Note

Means *reader take note*.



Tip

Means *the following information will help you solve a problem*.



Caution

Means *reader be careful*. In this situation, you might perform an action that could result in equipment damage or loss of data.

**Timesaver**

Means *the described action saves time*. You can save time by performing the action described in the paragraph.

**Warning**

Means *reader be warned*. In this situation, you might perform an action that could result in bodily injury.

Related Cisco UCS Documentation

Documentation Roadmaps

For a complete list of all B-Series documentation, see the *Cisco UCS B-Series Servers Documentation Roadmap* available at the following URL: <http://www.cisco.com/go/unifiedcomputing/b-series-doc>.

For a complete list of all C-Series documentation, see the *Cisco UCS C-Series Servers Documentation Roadmap* available at the following URL: <http://www.cisco.com/go/unifiedcomputing/c-series-doc>.

Other Documentation Resources

An ISO file containing all B and C-Series documents is available at the following URL: <http://www.cisco.com/cisco/software/type.html?mdfid=283853163&flowid=25821>. From this page, click **Unified Computing System (UCS) Documentation Roadmap Bundle**.

The ISO file is updated after every major documentation release.

Follow [Cisco UCS Docs on Twitter](#) to receive document update notifications.

Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to ucs-docfeedback@external.cisco.com. We appreciate your feedback.



Overview

This chapter includes the following sections:

- [Overview of the Cisco UCS C-Series Rack-Mount Servers, page 1](#)
- [CIMC CLI, page 1](#)

Overview of the Cisco UCS C-Series Rack-Mount Servers

The Cisco UCS C-Series rack-mount servers include the following models:

- Cisco UCS C200 Rack-Mount Server
- Cisco UCS C210 Rack-Mount Server
- Cisco UCS C220 Rack-Mount Server
- Cisco UCS C240 Rack-Mount Server
- Cisco UCS C250 Rack-Mount Server
- Cisco UCS C260 Rack-Mount Server
- Cisco UCS C460 Rack-Mount Server



Note

To determine which Cisco UCS C-Series rack-mount servers are supported by this firmware release, see the associated *Release Notes*. The C-Series release notes are available at the following URL: http://www.cisco.com/en/US/products/ps10739/prod_release_notes_list.html

CIMC CLI

The CIMC CLI is a command-line management interface for Cisco UCS C-Series servers. You can launch the CIMC CLI and manage the server over the network by SSH or Telnet. By default, Telnet access is disabled.

A user of the CLI will be one of three roles: admin, user (can control, cannot configure), and read-only.

**Note**

To recover from a lost admin password, see the Cisco UCS C-Series server installation and service guide for your platform.

Command Modes

The CLI is organized into a hierarchy of command modes, with the EXEC mode being the highest-level mode of the hierarchy. Higher-level modes branch into lower-level modes. You use the **scope** command to move from higher-level modes to modes in the next lower level, and the **exit** command to move up one level in the mode hierarchy. The **top** command returns to the EXEC mode.

**Note**

Most command modes are associated with managed objects. The **scope** command does not create managed objects and can only access modes for which managed objects already exist.

Each mode contains a set of commands that can be entered in that mode. Most of the commands available in each mode pertain to the associated managed object. Depending on your assigned role, you may have access to only a subset of the commands available in a mode; commands to which you do not have access are hidden.

The CLI prompt for each mode shows the full path down the mode hierarchy to the current mode. This helps you to determine where you are in the command mode hierarchy and can be an invaluable tool when you need to navigate through the hierarchy.

Command Mode Table

The following table lists the first four levels of command modes, the commands used to access each mode, and the CLI prompt associated with each mode.

Mode Name	Command to Access	Mode Prompt
EXEC	top command from any mode	#
bios	scope bios command from EXEC mode	/bios #
advanced	scope advanced command from bios mode	/bios/advanced #
main	scope main command from bios mode	/bios/main #
server-management	scope server-management command from bios mode	/bios/server-management #
certificate	scope certificate command from EXEC mode	/certificate #
chassis	scope chassis command from EXEC mode	/chassis #
adapter	scope adapter <i>index</i> command from chassis mode	/chassis/adapter #
host-eth-if	scope host-eth-if command from adapter mode	/chassis/adapter/host-eth-if #
host-fc-if	scope host-fc-if command from adapter mode	/chassis/adapter/host-fc-if #
port-profiles	scope port-profiles command from adapter mode	/chassis/adapter/port-profiles #
vmfex	scope vmfex <i>index</i> command from adapter mode	/chassis/adapter/vmfex #
dimmm-summary	scope dimm-summary <i>index</i> command from chassis mode	/chassis/dimm-summary #
flexflash	scope flexflash <i>index</i> command from chassis mode	/chassis/flexflash #
operational-profiles	scope operational-profile command from flexflash mode	/chassis/flexflash/operational-profile #

Mode Name	Command to Access	Mode Prompt
storageadapter	scope storageadapter <i>slot</i> command from chassis mode	/chassis/storageadapter #
physical-drive	scope physical-drive command from storageadapter mode	/chassis/storageadapter/physical-drive #
virtual-drive	scope virtual-drive command from storageadapter mode	/chassis/storageadapter/virtual-drive #
cimc	scope cimc command from EXEC mode	/cimc #
firmware	scope firmware command from cimc mode	/cimc/firmware #
import-export	scope import-export command from cimc mode	/cimc/import-export #
log	scope log command from cimc mode	/cimc/log #
server	scope server <i>index</i> command from log mode	/cimc/log/server #
network	scope network command from cimc mode	/cimc/network #
ipblocking	scope ipblocking command from network mode	/cimc/network/ipblocking #
tech-support	scope tech-support command from cimc mode	/cimc/tech-support #
fault	scope fault command from EXEC mode	/fault #
pef	scope pef command from fault mode	/fault/pef #
http	scope http command from EXEC mode	/http #
ipmi	scope ipmi command from EXEC mode	/ipmi #
kvm	scope kvm command from EXEC mode	/kvm #
ldap		/ldap #

Mode Name	Command to Access	Mode Prompt
	scope ldap command from EXEC mode	
role-group	scope role-group command from ldap mode	/ldap/role-group #
power-cap	scope power-cap command from EXEC mode	/power-cap #
sel	scope sel command from EXEC mode	/sel #
sensor	scope sensor command from EXEC mode	/sensor #
snmp	scope snmp command from EXEC mode	/snmp #
trap-destination	scope trap-destination command from snmp mode	/snmp/trap-destination #
v3users	scope v3users command from snmp mode	/snmp/v3users #
sol	scope sol command from EXEC mode	/sol #
ssh	scope ssh command from EXEC mode	/ssh #
user	scope user <i>user-number</i> command from EXEC mode	/user #
user-session	scope user-session <i>session-number</i> command from EXEC mode	/user-session #
vmedia	scope vmedia command from EXEC mode	/vmedia #
xmlapi	scope xmlapi command from EXEC mode	/xmlapi #

Complete a Command

You can use the Tab key in any mode to complete a command. Partially typing a command name and pressing Tab causes the command to be displayed in full or to the point where another keyword must be chosen or an argument value must be entered.

Command History

The CLI stores all commands used in the current session. You can step through the previously used commands by using the Up Arrow or Down Arrow keys. The Up Arrow key steps to the previous command in the history, and the Down Arrow key steps to the next command in the history. If you get to the end of the history, pressing the Down Arrow key does nothing.

All commands in the history can be entered again by simply stepping through the history to recall the desired command and pressing Enter. The command is entered as if you had manually typed it. You can also recall a command and change it before you enter it.

Committing, Discarding, and Viewing Pending Commands

When you enter a configuration command in the CLI, the command is not applied until you enter the **commit** command. Until committed, a configuration command is pending and can be discarded by entering a **discard** command. When any command is pending, an asterisk (*) appears before the command prompt. The asterisk disappears when you enter the **commit** command, as shown in this example:

```
Server# scope chassis
Server /chassis # set locator-led off
Server /chassis *# commit
Server /chassis #
```

You can accumulate pending changes in multiple command modes and apply them together with a single **commit** command. You can view the pending commands by entering the **show configuration pending** command in any command mode.

**Note**

Committing multiple commands together is not an atomic operation. If any command fails, the successful commands are applied despite the failure. Failed commands are reported in an error message.

Command Output Formats

Most CLI **show** commands accept an optional **detail** keyword that causes the output information to be displayed as a list rather than a table. You can configure either of two presentation formats for displaying the output information when the **detail** keyword is used. The format choices are as follows:

- Default—For easy viewing, the command output is presented in a compact list.

This example shows command output in the default format:

```
Server /chassis # set cli output default
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 #
```

- **YAML**—For easy parsing by scripts, the command output is presented in the YAML (YAML Ain't Markup Language) data serialization language, delimited by defined character strings.

This example shows command output in the YAML format:

```
Server /chassis # set cli output yaml
Server /chassis # show hdd detail
---
  name: HDD_01_STATUS
  hdd-status: present

---
  name: HDD_02_STATUS
  hdd-status: present

---
  name: HDD_03_STATUS
  hdd-status: present

---
  name: HDD_04_STATUS
  hdd-status: present

...
Server /chassis #
```

For detailed information about YAML, see <http://www.yaml.org/about.html>.

In most CLI command modes, you can enter **set cli output default** to configure the default format, or **set cli output yaml** to configure the YAML format.

Online Help for the CLI

At any time, you can type the ? character to display the options available at the current state of the command syntax. If you have not typed anything at the prompt, typing ? lists all available commands for the mode you are in. If you have partially typed a command, typing ? lists all available keywords and arguments available at your current position in the command syntax.



Commands

This chapter includes the following commands:

- [activate \(firmware\), page 22](#)
- [activate-adapter-fw, page 23](#)
- [adapter-reset, page 24](#)
- [adapter-reset-defaults, page 25](#)
- [bios-setup-defaults, page 26](#)
- [cancel, page 27](#)
- [clear \(log\), page 28](#)
- [clear \(sel\), page 29](#)
- [clear-cmos, page 30](#)
- [commit, page 31](#)
- [configure-vmfex, page 32](#)
- [connect, page 33](#)
- [create-boot-entry, page 34](#)
- [create host-eth-if, page 35](#)
- [create host-fc-if, page 36](#)
- [delete boot, page 37](#)
- [delete host-eth-if, page 38](#)
- [delete host-fc-if, page 39](#)
- [discard, page 40](#)
- [exit, page 41](#)
- [export-config, page 42](#)
- [export-vnic, page 44](#)
- [factory-default \(cimc\), page 45](#)

- [generate-csr \(certificate\)](#), page 46
- [import-config](#), page 47
- [import-vnic](#), page 49
- [locateHDD](#), page 50
- [ping \(network\)](#), page 51
- [power \(chassis\)](#), page 52
- [reapply \(bios\)](#), page 54
- [reboot \(chassis\)](#), page 55
- [rebuild](#), page 56
- [recover \(bios\)](#), page 57
- [recover-adapter-update](#), page 59
- [scope adapter](#), page 60
- [scope advanced](#), page 61
- [scope bios](#), page 62
- [scope certificate](#), page 63
- [scope chassis](#), page 64
- [scope cimc](#), page 65
- [scope comp-queue](#), page 66
- [scope error-recovery](#), page 67
- [scope fault](#), page 68
- [scope firmware](#), page 69
- [scope flexflash](#), page 70
- [scope host-eth-if](#), page 71
- [scope host-fc-if](#), page 72
- [scope http](#), page 73
- [scope import-export](#), page 74
- [scope interrupt](#), page 75
- [scope ipblocking \(network\)](#), page 76
- [scope ipmi](#), page 77
- [scope kvm](#), page 78
- [scope ldap](#), page 79
- [scope log \(cimc\)](#), page 80
- [scope main](#), page 81

- [scope network \(cimc\)](#), page 82
- [scope offload](#), page 83
- [scope operational-profile](#), page 84
- [scope pef \(fault\)](#), page 85
- [scope perbi](#), page 87
- [scope physical-drive](#), page 88
- [scope port](#), page 89
- [scope port-f-logi](#), page 90
- [scope port-p-logi](#), page 91
- [scope recv-queue](#), page 92
- [scope role-group](#), page 93
- [scope rss](#), page 94
- [scope scsi-io](#), page 95
- [scope sel](#), page 96
- [scope sensor](#), page 97
- [scope server-management](#), page 98
- [scope server \(log\)](#), page 99
- [scope snmp](#), page 100
- [scope sol](#), page 101
- [scope ssh](#), page 102
- [scope storageadapter](#), page 103
- [scope tech-support \(cimc\)](#), page 104
- [scope trans-queue](#), page 105
- [scope trap-destination](#), page 106
- [scope user](#), page 107
- [scope user-session](#), page 108
- [scope v3users](#), page 109
- [scope virtual-drive](#), page 110
- [scope vmedia](#), page 111
- [scope vmfex](#), page 112
- [sendSNMPtrap](#), page 113
- [set ACPI10Support](#), page 114
- [set action \(pef\)](#), page 115

- [set ActiveVideo](#), page 117
- [set addr \(trap-destination\)](#), page 118
- [set AdjacentCacheLinePrefetch](#), page 119
- [set alternate-dns-server](#), page 120
- [set Altitude](#), page 121
- [set AssertNMIONPERR](#), page 122
- [set AssertNMIONSERR](#), page 123
- [set ATS](#), page 124
- [set attribute](#), page 125
- [set base-dn](#), page 126
- [set baud-rate](#), page 127
- [set BaudRate](#), page 128
- [set BMCPnP](#), page 130
- [set boot](#), page 131
- [set boot-order](#), page 132
- [set BootOptionRetry](#), page 134
- [set boot-override](#), page 135
- [set cdb-wq-count](#), page 137
- [set cdb-wq-ring-size](#), page 138
- [set channel-number](#), page 139
- [set ChannelInterLeave](#), page 140
- [set Ck410bConfigSpreadSpectrumEnable](#), page 141
- [set CkeLowPolicy](#), page 142
- [set cli output](#), page 143
- [set coalescing-time](#), page 144
- [set coalescing-type](#), page 145
- [set CoherencySupport](#), page 146
- [set community-str](#), page 147
- [set comport](#), page 149
- [set ConfigSATAMode](#), page 151
- [set ConsoleRedir](#), page 153
- [set CoreMultiProcessing](#), page 155
- [set cos](#), page 156

- [set CpuEngPerfBias, page 157](#)
- [set CpuFreqFloor, page 159](#)
- [set CPUPerformance, page 160](#)
- [set CPUPowerManagement, page 162](#)
- [set cq-count, page 164](#)
- [set dc, page 165](#)
- [set DcuIpPrefetch, page 166](#)
- [set DcuStreamerPrefetch, page 167](#)
- [set delay, page 168](#)
- [set delay-value, page 170](#)
- [set DemandScrub, page 172](#)
- [set description \(chassis\), page 173](#)
- [set dhcp-enabled, page 174](#)
- [set DirectCacheAccess, page 175](#)
- [set DisableSCU, page 176](#)
- [set dns-use-dhcp, page 177](#)
- [set domain, page 178](#)
- [set enabled, page 179](#)
- [set encrypted, page 181](#)
- [set encryption-key, page 183](#)
- [set EnhancedIntelSpeedStep, page 184](#)
- [set error-count-threshold, page 186](#)
- [set error-detect-timeout, page 187](#)
- [set ExecuteDisable, page 188](#)
- [set fail-count, page 189](#)
- [set fail-window, page 190](#)
- [set fc-rq-ring-size, page 191](#)
- [set fc-wq-ring-size, page 192](#)
- [set fcp-error-recovery, page 193](#)
- [set fip-mode, page 194](#)
- [set flogi-retries, page 195](#)
- [set flogi-timeout, page 196](#)
- [set FlowCtrl, page 197](#)

- [set FRB-2, page 198](#)
- [set gc, page 199](#)
- [set group-auth, page 200](#)
- [set HardwarePrefetch, page 201](#)
- [set hostname, page 202](#)
- [set http-port, page 203](#)
- [set http-redirect, page 204](#)
- [set https-port, page 205](#)
- [set inform-type, page 206](#)
- [set IntelHyperThread, page 208](#)
- [set IntelTurboBoostTech, page 209](#)
- [set IntelVT, page 210](#)
- [set IntelVTD, page 211](#)
- [set interrupt-count, page 212](#)
- [set interrupt-mode, page 213](#)
- [set InterruptRemap, page 214](#)
- [set kvm-port, page 215](#)
- [set LaunchPXEOptionROM, page 216](#)
- [set LegacyOSRedir, page 217](#)
- [set LegacyUSBSupport, page 218](#)
- [set link-down-timeout, page 219](#)
- [set local-syslog-severity, page 220](#)
- [set local-video, page 222](#)
- [set locator-led, page 223](#)
- [set LomOpromControlPortn, page 224](#)
- [set LvDDRMMode, page 225](#)
- [set mac-addr, page 226](#)
- [set MakeUSBDeviceNonBootable, page 227](#)
- [set ManagedBootRule, page 228](#)
- [set max-data-field-size, page 230](#)
- [set max-sessions, page 231](#)
- [set max-target-luns, page 232](#)
- [set MemoryMappedIOAbove4GB, page 233](#)

- [set MirroringMode, page 234](#)
- [set mode, page 235](#)
- [set mtu, page 236](#)
- [set name, page 237](#)
- [set NIC-ROM, page 238](#)
- [set niv-mode, page 239](#)
- [set non-compliance-action, page 240](#)
- [set NUMAOptimize, page 242](#)
- [set OEMAESNIControl, page 243](#)
- [set OnboardNic1, page 244](#)
- [set OnboardNic1ROM, page 245](#)
- [set OnboardSATA, page 246](#)
- [set OptionROMPriority, page 247](#)
- [set order, page 248](#)
- [set OSBootWatchdogTimer, page 249](#)
- [set OSBootWatchdogTimerPolicy, page 251](#)
- [set OSBootWatchdogTimerTimeout, page 253](#)
- [set outstanding-io-count, page 255](#)
- [set PackageCStateLimit, page 256](#)
- [set PassThroughDMA, page 258](#)
- [set password, page 259](#)
- [set path \(tech-support\), page 260](#)
- [set PatrolScrub, page 261](#)
- [set PatrolScrubDuration, page 263](#)
- [set Pci-Opt-Roms, page 264](#)
- [set PciMezzOptionROM, page 265](#)
- [set PcieOptionROMs, page 266](#)
- [set PcieSlotnOptionROM, page 267](#)
- [set PciOptRomsDisable, page 268](#)
- [set peak-power, page 269](#)
- [set penalty-time, page 271](#)
- [set persistent-lun-binding, page 272](#)
- [set platform-event-enabled, page 273](#)

- [set plogi-retries, page 274](#)
- [set plogi-timeout, page 275](#)
- [set policy, page 276](#)
- [set port-down-io-retry-count, page 278](#)
- [set port-down-timeout, page 279](#)
- [set port-profile \(host-eth-if\), page 280](#)
- [set port-profile \(network\), page 281](#)
- [set POSTErrorPause, page 283](#)
- [set preferred-dns-server, page 284](#)
- [set privilege-level, page 285](#)
- [set ProcessorC1eEnable, page 287](#)
- [set ProcessorC1EReport, page 289](#)
- [set ProcessorC3Report, page 290](#)
- [set ProcessorC6Report, page 292](#)
- [set ProcessorC7Report, page 293](#)
- [set ProcessorCcxEnable, page 294](#)
- [set QPILinkFrequency, page 295](#)
- [set raid-primary-member, page 296](#)
- [set RankInterLeave, page 297](#)
- [set rate-limit, page 298](#)
- [set redundancy, page 299](#)
- [set remote-syslog-severity, page 300](#)
- [set resource-allocation-timeout, page 302](#)
- [set role, page 303](#)
- [set rq-count, page 305](#)
- [set rq-ring-size, page 306](#)
- [set rss, page 307](#)
- [set rss-hash-ipv4, page 308](#)
- [set rss-hash-ipv6, page 309](#)
- [set rss-hash-ipv6-ex, page 310](#)
- [set rss-hash-tcp-ipv4, page 311](#)
- [set rss-hash-tcp-ipv6, page 312](#)
- [set rss-hash-tcp-ipv6-ex, page 313](#)

- [set SelectMemoryRAS, page 314](#)
- [set send-alert \(pef\), page 316](#)
- [set Serial-PortA, page 317](#)
- [set SerialPortAAddress, page 318](#)
- [set Serial-PortB, page 319](#)
- [set SerialPortBAddress, page 320](#)
- [set server-ip, page 321](#)
- [set Slot-n-ROM, page 322](#)
- [set Slot1Disable, page 323](#)
- [set SlotMezzDisable, page 324](#)
- [set SparingMode, page 325](#)
- [set ssh-port, page 326](#)
- [set sys-contact, page 327](#)
- [set sys-location, page 329](#)
- [set tcp-large-receive-offload, page 331](#)
- [set tcp-rx-checksum-offload, page 332](#)
- [set tcp-segment-offload, page 333](#)
- [set tcp-tx-checksum-offload, page 334](#)
- [set TerminalType, page 335](#)
- [set tftp-ip \(tech-support\), page 337](#)
- [set timeout, page 338](#)
- [set TPMAdminCtrl, page 340](#)
- [set trap-community-str, page 341](#)
- [set trap-ver, page 342](#)
- [set trust-host-cos, page 344](#)
- [set uplink, page 345](#)
- [set uplink-failback-timeout, page 346](#)
- [set uplink-failover, page 347](#)
- [set USBController, page 348](#)
- [set UsbEmul6064, page 349](#)
- [set v3add, page 350](#)
- [set v3auth-key, page 352](#)
- [set v3priv-auth-key, page 353](#)

- [set v3priv-proto, page 354](#)
- [set v3proto, page 355](#)
- [set v3security-level, page 356](#)
- [set v3security-name, page 358](#)
- [set v4-addr, page 359](#)
- [set v4-gateway, page 360](#)
- [set v4-netmask, page 361](#)
- [set virtual-drives-enabled, page 362](#)
- [set vlan, page 363](#)
- [set vlan-enabled, page 364](#)
- [set vlan-id, page 365](#)
- [set vlan-mode, page 366](#)
- [set vlan-priority, page 367](#)
- [set wq-count, page 368](#)
- [set wq-ring-size, page 369](#)
- [set wwnn, page 370](#)
- [set wwpn, page 371](#)
- [show \(firmware\), page 372](#)
- [show actual-boot-order \(bios\), page 373](#)
- [show adapter, page 374](#)
- [show advanced, page 376](#)
- [show bbu, page 378](#)
- [show bios, page 379](#)
- [show boot, page 381](#)
- [show capabilities, page 382](#)
- [show certificate, page 383](#)
- [show chassis, page 385](#)
- [show cimc, page 386](#)
- [show comp-queue, page 387](#)
- [show configuration pending, page 388](#)
- [show cpu \(chassis\), page 389](#)
- [show current \(sensor\), page 391](#)
- [show dimm \(chassis\), page 392](#)

- [show entries \(log\), page 395](#)
- [show entries \(sel\), page 397](#)
- [show error-counters, page 399](#)
- [show error-recovery, page 400](#)
- [show ext-eth-if, page 401](#)
- [show fan \(sensor\), page 402](#)
- [show fault, page 404](#)
- [show firmware \(cimc\), page 405](#)
- [show firmware-versions, page 406](#)
- [show flexflash, page 407](#)
- [show hdd \(chassis\), page 408](#)
- [show host-eth-if, page 409](#)
- [show host-fc-if, page 410](#)
- [show http, page 412](#)
- [show hw-config, page 413](#)
- [show interrupt, page 414](#)
- [show ipblocking \(network\), page 415](#)
- [show ipmi, page 416](#)
- [show kvm, page 417](#)
- [show ldap, page 418](#)
- [show led \(chassis\), page 419](#)
- [show local-syslog-severity, page 420](#)
- [show lom-mac-list, page 422](#)
- [show main, page 423](#)
- [show mfg-data, page 424](#)
- [show network \(cimc\), page 425](#)
- [show offload, page 426](#)
- [show operational-profile, page 427](#)
- [show pci-adapter, page 428](#)
- [show pci-info, page 429](#)
- [show pef \(fault\), page 430](#)
- [show perbi, page 432](#)
- [show physical-drive, page 433](#)

- [show physical-drive-count](#), page 434
- [show port](#), page 435
- [show port-f-logi](#), page 436
- [show port-p-logi](#), page 437
- [show port-profiles](#), page 438
- [show power-cap](#), page 439
- [show psu \(chassis\)](#), page 441
- [show psu \(sensor\)](#), page 442
- [show psu-redundancy \(sensor\)](#), page 443
- [show recv-queue](#), page 444
- [show remote-syslog-severity](#), page 445
- [show role-group](#), page 447
- [show rss](#), page 448
- [show running-firmware-images](#), page 449
- [show scsi-io](#), page 450
- [show server](#), page 451
- [show server-management](#), page 452
- [show settings](#), page 453
- [show snmp](#), page 454
- [show sol](#), page 456
- [show ssh](#), page 457
- [show startup-firmware-images](#), page 458
- [show storageadapter](#), page 459
- [show tech-support \(cimc\)](#), page 460
- [show temperature \(sensor\)](#), page 461
- [show trans-queue](#), page 462
- [show trap-destination](#), page 463
- [show user](#), page 464
- [show user-session](#), page 465
- [show v3users](#), page 466
- [show version](#), page 467
- [show virtual-drive](#), page 468
- [show virtual-drive-count](#), page 469

- [show vmedia](#), page 470
- [show vmfex](#), page 471
- [show voltage \(sensor\)](#), page 473
- [start](#), page 475
- [terminate \(user-session\)](#), page 476
- [top](#), page 477
- [update \(firmware\)](#), page 478
- [update-adapter-fw](#), page 479
- [update-all](#), page 480
- [upload \(certificate\)](#), page 481

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 #
```

Related Commands

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

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

Command Default

None

Command Modes

Chassis (/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
Server /chassis #
```

Related Commands

Command	Description
show adapter detail	

adapter-reset

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



Note

Resetting the adapter also resets the host.

adapter-reset *index*

Syntax Description

<i>index</i>	The PCI slot number 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] y
Server /chassis #
```

Related Commands

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	<i>index</i>	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 <i>index</i> 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 #
```

Related Commands	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]y
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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] y
```

```
server /bios #
```

Related Commands

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 #
```

Related Commands

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

<i>port-count</i>	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 #
```

Related Commands

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
```

Related Commands

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

<i>wwpn</i>	The World Wide Port Name (WWPN) for the boot target.
<i>lun-id</i>	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: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 fcl
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 #
```

Related Commands

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

<i>name</i>	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 #
```

Related Commands

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

<i>name</i>	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 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 #
```

Related Commands

Command	Description
delete host-fc-if	

delete boot

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

delete boot *entry*

Syntax Description

<i>entry</i>	The boot table 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:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc1
Server /chassis/adapter/host-fc-if # show boot
Boot Table Entry Boot Target WWPN Boot LUN ID
-----
0 20:00:00:11:22:33:44:55 3
1 20:00:00:11:22:33:44:56 5
Server /chassis/adapter/host-fc-if # delete boot 1
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 # show boot
Boot Table Entry Boot Target WWPN Boot LUN ID
-----
0 20:00:00:11:22:33:44:55 3
Server /chassis/adapter/host-fc-if #
```

Related Commands

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

<i>name</i>	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 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 #
```

Related Commands

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

<i>name</i>	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 #
```

Related Commands

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#
```

Related Commands

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#
```

Related Commands

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

<i>tftp-ip-address</i>	The IP address of a remote TFTP server hosting the CIMC configuration file.
<i>path-and-filename</i>	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 #
```

Related Commands

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	<div> <div><i>tftp-address</i></div> <div>The IP address of a remote TFTP server hosting the adapter configuration file.</div> </div> <div> <div><i>path/name</i></div> <div>The absolute path to the file on the remote server along with the name of the adapter configuration file to be exported.</div> </div>	
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	<p>This example shows how to export the adapter vNIC configuration:</p> <pre>Server# scope chassis Server /chassis # scope adapter 1 Server /chassis/adapter # export-vnic 192.0.2.34 /backup/P81E.cfg Server /chassis/adapter #</pre>	
Related Commands	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 Management 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.

generatcsr

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] y

-----BEGIN CERTIFICATE REQUEST-----
MIIB0TCCAToCAQAwbDELMAkGA1UEBhMCVVMxCzAJBgNVBAsTAjAxMQwwCgYDVQQDEwNib2Ix
GDAWBgkqhkiG9w0BCQEWCW1lQG1lLmNvbTCBnzANBgkqhkiG9w0BAQEFAAOBjQAw
gYkCgYEAw49pYuDxdOfHtXwBT7k5kX1set/I3e8TtkuO/EQ5HVD9HrPIy4Kpb3Oj
33CkqjysVVBpPSGzWAlEL6cZYs5p6JxR74+tgW5BYpNKRLNFawpsTZvCXhe/n/O2
WYsxlFnWlm6BgQnPKCBCp9R1ESmq9Np24r2c3PEStZEjeIVWbaUCAwEAAaAlMCMG
CSqGSIB3DQEJBzEWExRBIGNoYWxsZW5nZSBwYXNzd29yZDANBgkqhkiG9w0BAQUF
AAOBgQBosXif9feLXHBK19kqeVZ8uqRgoMIcM03aBTImjIO1RgwhRLuMrG2l+thA
CT+fbYOYXJ4bHsn25XQjcSdG0uxsti3C2SnK83nKdulpEzBzj545rvH20QK+RtHN
YUBEKvABCeqoIUu+ErMtGvryaQw7WQiQjWf+RTf8IXDGShIQwQ==
-----END CERTIFICATE REQUEST-----

server /certificate #
```

Related Commands

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

<i>tftp-ip-address</i>	The IP address of a remote TFTP server hosting the CIMC configuration file.
<i>path-and-filename</i>	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 #
```

Related Commands

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

<i>tftp-address</i>	The TFTP address of the server.
<i>path/name</i>	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 #
```

Related Commands

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

<i>drivenum</i>	The HDD number.
{1 2}	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 #
```

Related Commands

Command	Description
show hdd	

ping (network)

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

ping *address*

Syntax Description

<i>address</i>	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=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.

Related Commands

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 #
```

Related Commands

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
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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]**y**

```
server /bios #
```



Note

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

Related Commands

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

<i>pci-slot</i>	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 #
```

Related Commands

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

pci-slot

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
show bios	
show firmware	

scope flexflash

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

scope flexflash*index*

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 #
```

Related Commands

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.
<i>name</i>	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 #
```

Related Commands

Command	Description
scope host-fc-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.
<i>name</i>	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 #
```

Related Commands

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:

- Enabling 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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
set max-sessions	
show kvm	

scope ldap

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>pef-index</i>	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 performance 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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

scope port-f-logs

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

scope port-f-logs

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-logs
Server /chassis/adapter/host-fc-if/port-f-logs #
```

Related Commands

Command	Description
set flogi-retries	
set flogi-timeout	

scope port-p-logs

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

scope port-p-logs

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-logs
Server /chassis/adapter/host-fc-if/port-p-logs #
```

Related Commands

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 #
```

Related Commands

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

<i>index</i>	The numeric identifier of the available role groups, from 1 to 5.
--------------	---

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
set timeout (/ssh)	
show ssh	

scope storageadapter

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

scope storageadapter*slot*

Syntax Description	
<i>slot</i>	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
- Hardware 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 #
```

Related Commands	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 #
```

Related Commands

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/adapters/host-eth-if)

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

VM FEX (/chassis/adapters/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/adapters # scope host-eth-if eth0
Server /chassis/adapters/host-eth-if # scope trans-queue
Server /chassis/adapters/host-eth-if/trans-queue #
```

Related Commands

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

<i>trap-destination-index</i>	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 #
```

Related Commands

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 15	Specifies users 1 through 15.
----------------------------------	-------------------------------

Command Default

None

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 #
```

Related Commands

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 #
```

Related Commands

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	<i>user-index</i>	The number of the user to configure.
--------------------	-------------------	--------------------------------------

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 #
```

Related Commands	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		
	<i>drive-number</i>	The drive number of the virtual 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 #
```

Related Commands	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 #
```

Related Commands

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

<i>port-id</i>	The name or number of the host Ethernet 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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>ip-address</i>	The IP address of the trap destination. The format is x.x.x.x.
-------------------	--

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 #
```

Related Commands

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 #
```

Related Commands

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

dns2-ipv4-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 #
```

Related Commands

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 #
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
show advanced	

set attribute

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

set attribute *attribute-name*

Syntax Description

<i>attribute-name</i>	The name of the attribute. The name can be up to 64 characters.
-----------------------	---

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 #
```

Related Commands

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

<i>base-dn-name</i>	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 #
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>boot-list</i>	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 #
```


Related Commands

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)

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

Server /bios/main #
```

Related Commands

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 #
```

 set boot-override**Related Commands**

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

<i>count</i>	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 #
```

Related Commands

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

<i>size</i>	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 #
```

Related Commands

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

<i>number</i>	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 Guidelines

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 output 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

<i>usec</i>	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
```

Related Commands

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
Server /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 #
```

Related Commands

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 #
```

Related Commands

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	<div><div><i>community</i></div><div>The SNMP v1 or v2c community name or SNMP v3 username.</div></div>							
Command Default	None							
Command Modes	SNMP (/snmp)							
Command History	<table><tr><th>Release</th><th>Modification</th></tr><tr><td>1.3(1)</td><td>This command was introduced.</td></tr><tr><td>1.4(1)</td><td>This command was moved from the fault command mode.</td></tr></table>		Release	Modification	1.3(1)	This command was introduced.	1.4(1)	This command was moved from the fault command mode.
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 cimcpbublic
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: cimcpbublic
  SNMP Trap community: 0
  Enabled: yes
  SNMP Trap Version: 1
  SNMP Inform Type: inform

Server /snmp #
```

Related Commands

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.

**Note**

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 #
```

Related Commands

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

AHCI	The controller enables the Advanced Host Controller Interface (AHCI) and disables RAID.
Compatibility	The controller disables both AHCI and RAID and runs in IDE emulation mode.
Enhanced	The controller enables both AHCI and RAID.
S/W_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 Guidelines

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 #
```

Related Commands

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 #
```

Related Commands

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.
<i>number</i>	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 #
```

Related Commands

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

<i>cos-value</i>	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 #
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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 #
```

Related Commands

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.
HPC	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 #
```

Related Commands

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 #
```

Related Commands

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

<i>count</i>	The number of completion queue resources to allocate. The range 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 #
```

Related Commands

Command	Description
show comp-queue	

set dc

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

set dc *n dc-host*

Syntax Description

<i>n</i>	The index of the AD domain controller entry.
<i>dc-host</i>	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 #
```

Related Commands

Command	Description
set gc	
show ldap	

set DcuIpPrefetch

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>delay</i>	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 #
```

Related Commands

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 #
```

Related Commands

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	<i>chassis-description</i>	The description of the chassis. The 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 #
```

Related Commands	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 Guidelines

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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	
<i>domain-name</i>	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 #
```

Related Commands	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 #
```

Related Commands

Command	Description
show kvm	

 set encrypted

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

<i>encryption-key</i>	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 #
```

Related Commands

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 #
```

Related Commands

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

<i>count</i>	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 #
```

Related Commands

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	
<i>msec</i>	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	

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 #
```

Related Commands

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

<i>fail-count</i>	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 #
```

Related Commands

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

<i>fail-window</i>	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 #
```

Related Commands

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	<i>size</i>	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 #
```

Related Commands	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

<i>size</i>	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 #
```

Related Commands

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 #
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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.
<i>count</i>	Specifies the number of FLOGI retries. Enter a number between 0 and 4294967295.

Command Default

The default is infinite retries.

Command Modes

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

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-logs
Server /chassis/adapter/host-fc-if/port-f-logs # set flogi-retries 4294967295
Server /chassis/adapter/host-fc-if/port-f-logs *# commit
Server /chassis/adapter/host-fc-if/port-f-logs #
```

Related Commands

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	
<i>msec</i>	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 <i>msec</i> value is 2000 milliseconds.
-----------------	---

Command Modes	Port-f-logs (/chassis/adapter/host-fc-if/port-f-logs)
---------------	---

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-logs
Server /chassis/adapter/host-fc-if/port-f-logs # set flogi-timeout 10003
Server /chassis/adapter/host-fc-if/port-f-logs *# commit
Server /chassis/adapter/host-fc-if/port-f-logs #
```

Related Commands	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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
show server-management	

set gc

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

set gc *n gc-host*

Syntax Description

<i>n</i>	The index of the AD global catalog server entry.
<i>gc-host</i>	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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>host-name</i>	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 #
```

Related Commands

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

<i>port-number</i>	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 #
```

Related Commands

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 #
```

Related Commands

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

<i>port-number</i>	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 #
```

Related Commands

Command	Description

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>count</i>	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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>port-number</i>	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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
show server-management	

set LegacyUSBSupport

To specify whether the system supports legacy USB devices, use the **set LegacyUSBSupport** 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 #
```

Related Commands

Command	Description
set UsbEmul6064	

set link-down-timeout

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

<i>msec</i>	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

<i>level</i>	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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>n</i>	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 LomOpromControlPortn**.

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>mac-addr</i>	Specifies a MAC address in the form hh:hh:hh:hh:hh:hh or hhhh: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 #
```

Related Commands

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 #
```

Related Commands

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	<p>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.</p> <p>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.</p>
Loose	<p>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.</p> <p>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.</p>

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

<i>size</i>	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 #
```

Related Commands

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

<i>sessions</i>	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 #
```

Related Commands

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

<i>count</i>	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 #
```

Related Commands

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 #
```

Related Commands

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. Note 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 shipping 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 #
```

Related Commands

Command	Description
show network	

set mtu

To specify an MTU for a vNIC, use the **set mtu** command.

set mtu *mtu-value*

Syntax Description

<i>mtu-value</i>	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 #
```

Related Commands

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 #
```

Related Commands

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

<i>n</i>	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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
show advanced	

set OEMAESNIControl

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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 #
```

Related Commands

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.
<i>order</i>	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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>count</i>	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 <i>n</i> , 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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
show advanced	

set password

To specify a user password, use the **set password** command.

set password *user-password*

Syntax Description	<i>user-password</i>	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 #
```

Related Commands	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	
<i>tftp-path</i>	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	<p>Specifies the path to the support data file should be stored.</p> <p>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.</p>
------------------	---

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 #
```

Related Commands	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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>n</i>	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 #
```

Related Commands

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 #
```

Related Commands

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

<i>watts</i>	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:

```
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 #
```

Related Commands

Command	Description
set non-compliance-action	

 set peak-power

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

<i>penalty-seconds</i>	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 #
```

Related Commands

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 #
```

Related Commands

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-logs (/chassis/adapters/host-fc-if/port-p-logs)

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/adapters # scope host-fc-if fc0
Server /chassis/adapters/host-fc-if # scope port-p-logs
Server /chassis/adapters/host-fc-if/port-p-logs # set plogi-retries 03
Server /chassis/adapters/host-fc-if/port-p-logs *# commit
Server /chassis/adapters/host-fc-if/port-p-logs #
```

Related Commands

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

<i>msec</i>	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-logic (/chassis/adapter/host-fc-if/port-p-logic)

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-logic
Server/chassis/adapter/host-fc-if/port-p-logic # set plogi-timeout 203
Server/chassis/adapter/host-fc-if/port-p-logic *# commit
Server/chassis/adapter/host-fc-if/port-p-logic #
```

Related Commands

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

power-off	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 #
```


Related Commands

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

<i>count</i>	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 #
```

Related Commands

Command	Description
set port-down-timeout	

set port-down-timeout

To set the port-down-timeout, use the **set port-down-timeout** command.

set port-down-timeout *msec*

Syntax Description

<i>msec</i>	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 #
```

Related Commands

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

<i>name</i>	The name of a port profile.
-------------	-----------------------------

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

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 #
```

Related Commands

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

<i>name</i>	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
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
```

set port-profile (network)

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 #
```

Related Commands

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

dns1-ipv4-address

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 #
```

Related Commands

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 #
```

 set privilege-level**Related Commands**

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 ProcessorC1eEnable Disabled
Server /bios/advanced *# commit
Server /bios/advanced #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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.
<i>rate</i>	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 #
```

Related Commands

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 #
```

Related Commands

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

<i>level</i>	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 #
```

Related Commands

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

<i>msec</i>	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 #
```

Related Commands

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 #
```

Related Commands

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

<i>count</i>	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 #
```

Related Commands

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

<i>size</i>	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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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	Enables TCP/IPv4 RSS.

Command Default

The default is enable.

Command Modes

RSS (/chassis/adapters/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/adapters # scope host-eth-if eth0
Server /chassis/adapters/host-eth-if # scope rss
Server /chassis/adapters/host-eth-if/rss # set rss-hash-tcp-ipv4 enable
Server /chassis/adapters/host-eth-if/rss *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapters/host-eth-if/rss #
```

Related Commands

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 #
```

Related Commands

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/adapters/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/adapters # scope host-eth-if eth0
Server /chassis/adapters/host-eth-if # scope rss
Server /chassis/adapters/host-eth-if/rss # set rss-hash-tcp-ipv6-ex
Server /chassis/adapters/host-eth-if/rss *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapters/host-eth-if/rss #
```

Related Commands

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 SelectMemoryRAS {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 Lockstep keyword.

Usage Guidelines

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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
show pef	

set Serial-PortA

To enable or disable serial port A, use the **set Serial-PortA** command.

set Serial-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 Guidelines

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 #
```

Related Commands

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.



Note

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 #
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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 Guidelines

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 #
```

Related Commands

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	<i>ip-address</i>	Specifies the IP address of a remote server.
--------------------	-------------------	--

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 #
```

Related Commands	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

<i>n</i>	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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>contact</i>	The SNMP contact 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 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 cimcpbublic
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: cimcpbublic
  SNMP Trap community: 0
  Enabled: yes
  SNMP Trap Version: 1
  SNMP Inform Type: inform

Server /snmp #
```

Related Commands

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

<i>location</i>	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 cimcpbublic
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: cimcpbublic
  SNMP Trap community: 0
  Enabled: yes
  SNMP Trap Version: 1
  SNMP Inform Type: inform

Server /snmp #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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/adapters/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/adapters # scope host-eth-if eth0
Server /chassis/adapters/host-eth-if # scope offload
Server /chassis/adapters/host-eth-if/offload # set tcp-segment-offload disable
Server /chassis/adapters/host-eth-if/offload *# commit
Committed host-eth-if eth0 settings will take effect upon the next server reset
Server /chassis/adapters/host-eth-if/offload #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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-address</i>	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	<p>Specifies the IP address of the TFTP server on which the support data file should be stored.</p> <p>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.</p>
------------------	---

Examples	<p>This example shows how to set the TFTP server IP address:</p>
----------	--

```
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 #
```

Related Commands	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

<i>time</i>	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 #
```

Related Commands

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 #
```

Related Commands

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	<i>trap-community</i>	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 #
```

Related Commands	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: cimcpbublic
  SNMP Trap community: 0
  Enabled: yes
  SNMP Trap Version: 3
  SNMP Inform Type: inform

Server /snmp #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>seconds</i>	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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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:ex4mplek3y
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:!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 #
```

Related Commands

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:ex4mplek3y
Please confirm v3auth-key:ex4mplek3y
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:!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 #
```

Related Commands

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 #
```

Related Commands

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 #
```

Related Commands

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

<i>security-name</i>	The security name for the SNMPv3 user.
----------------------	--

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 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
Server /snmp/v3users #
```

Related Commands

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

<i>ip-address</i>	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 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 #
```

Related Commands

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 #
```

Related Commands

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

<i>ip-address</i>	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 #
```

Related Commands

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

<i>drive-list</i>	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 #
```

Related Commands

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.
<i>vlan-id</i>	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 #
```

Related Commands

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 #
```

Related Commands

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	<i>id</i>	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 #
```

Related Commands	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 #
```

Related Commands

Command	Description

set vlan-priority

To specify the VLAN priority, use the **set vlan-priority** command.

set vlan-priority *priority*

Syntax Description	<i>priority</i>	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 #
```

Related Commands	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

<i>count</i>	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 #
```

Related Commands

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

<i>size</i>	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 #
```

Related Commands

Command	Description
set rq-count	

set wwnn

To specify the WWNN for an interface, use the **set wwnn** command.

set wwnn *wwnn*

Syntax Description

<i>wwnn</i>	Specifies a unique World Wide Node Name (WWNN) for the adapter in the form hh:hh: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 #
```

Related Commands

Command	Description
set wwpn	

set wwpn

To specify the WWPN for an interface, use the **set wwpn** command.

set wwpn *wwpn*

Syntax Description	<i>wwpn</i>	Specifies a unique World Wide Port Name (WWPN) for the adapter in the form hh:hh: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 #
```

Related Commands	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
```

Related Commands

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	detail (Optional) Displays detailed information about the actual boot order in list format.				
Command Default	None				
Command Modes	BIOS (/bios)				
Command History	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>1.0(1x)</td><td>This command was introduced.</td></tr> </table>	Release	Modification	1.0(1x)	This command was introduced.
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
```

Boot Order	Type	Boot Device
1	CD/DVD	CD-ROM
2	CD/DVD	Cisco Virtual CD/DVD 1.18
3	Network Device (PXE)	Cisco NIC 23:0.0
4	Network Device (PXE)	MBA v5.0.5 Slot 0100
5	Network Device (PXE)	MBA v5.0.5 Slot 0101
6	Network Device (PXE)	MBA v5.0.5 Slot 0200
7	Network Device (PXE)	MBA v5.0.5 Slot 0201
8	Network Device (PXE)	Cisco NIC 22:0.0
9	Internal EFI Shell	Internal EFI Shell
10	FDD	Cisco Virtual HDD 1.18
11	FDD	Cisco Virtual Floppy 1.18

```
server /bios #
```

Related Commands	Command	Description
	set boot-order	

show adapter

To show the adapter properties, use the **show adapter** command.

show adapter *index* [**detail**]

Syntax Description	<p><i>index</i> The PCI slot number of the adapter card.</p> <p>detail (Optional) Displays detailed adapter properties in list form.</p>				
Command Default	None				
Command Modes	Chassis (/chassis)				
Command History	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>1.2(1)</td><td>This command was introduced.</td></tr> </table>	Release	Modification	1.2(1)	This command was introduced.
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
-----
1 UCS VIC P81E QCI1421A6SI N2XX-ACPCI01 Cisco Systems Inc
2 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 #
```

Related Commands

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	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>1.3(1)</td><td>This command was introduced.</td></tr> </table>	Release	Modification	1.3(1)	This command was introduced.
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 #
```

Related Commands

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 #
```

Related Commands

Command	Description
show storageadapter	

show bios

To display information about the BIOS, use the **show bios** command.

show bios [detail]

Syntax Description	detail	(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#
```

Related Commands	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.
--------------------	--------	---

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.

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-fc-if fc0
Server /chassis/adapter/host-fc-if # show boot
Boot Table Entry Boot Target WWPN Boot LUN ID
-----
0 20:00:00:11:22:33:44:55 3
1 20:00:00:11:22:33:44:56 5

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

Related Commands	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.
---------------	--

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 #
```

Related Commands

Command	Description
show storageadapter	

show certificate

To display information 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
```

 show certificate

```
Valid To: Sep  6 22:53:59 2019 GMT
server#
```

Related Commands

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.
---------------	---

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#
```

Related Commands

Command	Description
set locator-led	

show cimc

To display information about CIMC, use the **show cimc** command.

show cimc [detail]

Syntax Description

detail	(Optional) Displays detailed information about CIMC, in list format.
---------------	--

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

Firmware Version      Current Time
-----
1.0(0.86)             Fri Oct  2 12:19:17 2009

server#
```

Related Commands

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	detail	(Optional) 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 the completion queue 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 comp-queue
Completion Queue Count    Completion Queue Ring Size
-----
5                          1
Server /chassis/adapter/host-eth-if #
```

Related Commands	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 *#
```

Related Commands

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	detail (Optional) Displays detailed information about the CPU, in list format.				
Command Default	None				
Command Modes	Chassis (/chassis)				
Command History	<table><thead><tr><th>Release</th><th>Modification</th></tr></thead><tbody><tr><td>1.0(1)</td><td>This command was introduced.</td></tr></tbody></table>	Release	Modification	1.0(1)	This command was introduced.
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
```

show cpu (chassis)

```
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 #
```

Related Commands

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	<table><tr><th>Release</th><th>Modification</th></tr><tr><td>1.0(1)</td><td>This command was introduced.</td></tr></table>	Release	Modification	1.0(1)	This command was introduced.
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

detail	(Optional) Displays detailed information about the 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: <ul style="list-style-type: none"> • 0x2C00—Micron Technology, Inc. • 0x5105—Qimonda AG i. In. • 0x802C—Micron Technology, Inc. • 0x80AD—Hynix Semiconductor Inc. • 0x80CE—Samsung Electronics, Inc. • 0x8551—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# scope chassis
server /chassis # show dimm detail

Name MEM1 DIMM 1B:
  Capacity: 8192 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
```

 show dimm (chassis)

```
Operability: NA
Manufacturer: 0x802C
Part Number: 36JSZS1G72PY-1G1A1
--More--
```

Related Commands

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.				
Command Default	None				
Command Modes	Log (/cimc/log)				
Command History	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>1.0(1)</td><td>This command was introduced.</td></tr> </table>	Release	Modification	1.0(1)	This command was introduced.
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_manager(sshd:session): session (45) opened for user admin
from 10.21.115.69 by (uid=0) "
Order: 1
Trace Log:
Time: 2010 Jun 6 15:52:18
```

show entries (log)

```
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--
```

Related Commands

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"
```

show entries (sel)

```
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.
--------------------	--------	--

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 #
```

Related Commands	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 #
```

Related Commands	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	(Optional) Displays detailed information in list format.
--------------------	--------	--

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	

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	Sensor Status	Reading	Units	Min. Warning	Max. Warning
Min. Failure	Max. Failure				
PSU1_FAN_1	Normal	6592	RPM	N/A	N/A
N/A	N/A				
PSU2_FAN_1	Normal	2560	RPM	N/A	N/A
N/A	N/A				
W793_FAN1_TACH1	Normal	5300	RPM	N/A	N/A
800	N/A				
W793_FAN1_TACH2	Normal	5400	RPM	N/A	N/A
800	N/A				
W793_FAN2_TACH1	Normal	5500	RPM	N/A	N/A
800	N/A				
W793_FAN2_TACH2	Normal	5400	RPM	N/A	N/A
800	N/A				
W793_FAN3_TACH1	Normal	5300	RPM	N/A	N/A
800	N/A				
W793_FAN3_TACH2	Normal	5500	RPM	N/A	N/A
800	N/A				
W793_FAN4_TACH1	Normal	5300	RPM	N/A	N/A
800	N/A				
W793_FAN4_TACH2	Normal	5500	RPM	N/A	N/A
800	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--

```

Related Commands

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

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#
```

Related Commands

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.
--------------------	--------	--

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 #
```

Related Commands	Command	Description
	show cimc	
	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	(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 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 #
```

Related Commands

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	<i>index</i>	(Optional) The name of the Cisco Flexible Flash controller.
	<i>detail</i>	(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
Controller  Product Name      Has Error  Firmware Version  Vendor      Internal State
-----
FlexFlash-0  Cisco FlexFlash  No         1.2 build 247     Cypress     Connected

Server /chassis #
```

Related Commands	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	detail	(Optional) Displays detailed information about the HDDs in list form.
--------------------	--------	---

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                     present
HDD_03_STATUS                     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 #
```

Related Commands	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.
<i>name</i>	(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 #
```

Related Commands

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.
<i>name</i>	(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
fc1       20:00:00:22:BD:D6:5C:36      Disabled   1

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 #
```

Related Commands

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# show http
HTTP Port  HTTPS Port  Timeout  Active Sessions  Enabled  HTTP Redirected
-----
80          443          1800     0                 yes      yes
Server#
```

Related Commands

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	(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 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 #
```

Related Commands

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	(Optional) 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:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # show interrupt
Interrupt Count Coalescing Time (us) Coalescing Type Interrupt Mode
-----
8               125                MIN             MSIx
Server /chassis/adapter/host-eth-if #
```

Related Commands

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 #
```

Related Commands

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 information 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#
```

Related Commands	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

detail	(Optional) Displays detailed information about the KVM 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 KVM:

```
server# show kvm
```

Encryption Enabled	Local Video	Active Sessions	Enabled KVM Port
no	no	0	yes 2068

```
server#
```

Related Commands

Command	Description
set kvm-port	
set max-sessions (kvm)	

show ldap

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#
```

Related Commands	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

Related Commands	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 #
```


Related Commands

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

detail	(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           010000002000
eth1           010000002000

Server /cimc/network #
```

Related Commands

Command	Description
set mode	

show main

To display the main BIOS configuration settings, use the **show main** command.

show main [detail]

Syntax Description	detail (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 #
```

Related Commands	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	(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 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 #
```

Related Commands

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#
```

Related Commands

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 #
```

Related Commands

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 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 #
```

Related Commands	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

detail	(Optional) Displays detailed properties of installed PCI adapters in list format.
---------------	---

Command Default

None

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
Server /chassis # show pci-adapter
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 El...
PCIe Adapter4  2      0x1077         0x8000         Qlogic QLE 8152-CNA 10...

Server /chassis #
```

Related Commands

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	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 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 #
```

Related Commands	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

<i>pef-number</i>	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
3	Voltage Critical Assert Filter	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 #
```

Related Commands

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 #
```

Related Commands

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-drive*drive-number* [**detail**]

Syntax Description	<i>drive-number</i>	(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 #
```

Related Commands	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 #
```

Related Commands

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	(Optional) Displays detailed port information 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 port information for 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 port
I/O Throttle Count    Maximum LUNS per Target
-----
512                    256

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

Related Commands	Command	Description
	show port-p-logi	
	show port-f-logi	

show port-f-logs

To display information about the Fibre Channel fabric login, use the **show port-f-logs** command.

show port-f-logs [detail]

Syntax Description

detail	(Optional) Displays detailed information about the fabric login in list format.
---------------	---

Command Default

None

Command Modes

Host Fibre Channel interface (/chassis/adapters/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/adapters # scope host-fc-if fc0
Server /chassis/adapters/host-fc-if # show port-f-logs
FLOGI Retries FLOGI Timeout (milli-secs)
-----
INFINITE      2000
Server /chassis/adapters/host-fc-if #
```

Related Commands

Command	Description
show port-p-logs	

show port-p-logs

To display information about the Fibre Channel port login, use the **show port-p-logs** command.

show port-p-logs [detail]

Syntax Description	detail (Optional) Displays detailed information about the port login 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 port login 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 port-p-logs
PLOGI Retries PLOGI Timeout (milli-secs)
-----
8                2000
Server /chassis/adapter/host-fc-if #
```

Related Commands	Command	Description
	show port-f-logs	

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 format.
---------------	--

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 #
```

Related Commands

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
Current Consumption	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
Enable Power Capping	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	<p>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 Non-Compliance Action field.</p> <p>Enter a number of watts within the range defined by the Minimum Configurable Limit field and the Maximum Configurable Limit field.</p>
Non-Compliance Action	<p>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:</p> <ul style="list-style-type: none"> • force-power-reduction—The server is forced to reduce its power consumption by any means necessary. This option is available only on some C-Series servers. • none—No action is taken and the server is allowed to use more power than specified in the Peak Power field. • 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#
```

Related Commands

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	detail	(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 #
```

Related Commands	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

detail	(Optional) Displays detailed information about the PSU 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 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 #
```

Related Commands

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)

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
```

```
server /sensor #
```

Related Commands

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	(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 host Ethernet interface receive queue:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapter/ # scope host-eth-if eth0
Server /chassis/adapter/host-eth-if # show recv-queue
Receive Queue Count Receive Queue Ring Size
-----
4                    512

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

Related Commands

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 #
```

 show remote-syslog-severity**Related Commands**

Command	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

<i>index</i>	(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:

```
Server# scope ldap
Server /ldap # show role-group
Group  Name                Domain                Role
-----
1      (n/a)                   (n/a)                admin
2      (n/a)                   (n/a)                user
3      Training                example.com          readonly
4      (n/a)                   (n/a)                (n/a)
5      (n/a)                   (n/a)                (n/a)

Server /ldap #
```

Related Commands

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	(Optional) Displays detailed information in list format.
--------	--

Command Default

None

Command Modes

Host Ethernet interface (/chassis/adapters/host-eth-if)
VM FEX interface (/chassis/adapters/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/adapters # scope host-eth-if eth0
Server /chassis/adapters/host-eth-if # show rss
TCP Rx Side Scaling
-----
Enabled

Server /chassis/adapters/host-eth-if #
```

Related Commands

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 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 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 #
```

Related Commands

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 #
```

Related Commands

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)
----------------------	----------------------

Command History	Release	Modification
	1.1(2)	This command was introduced.

Examples

This example displays the configured remote syslog servers:

```
Server# scope cimc
Server /cimc # scope log
Server /cimc/log # show server
Syslog Server      IP Address      Enabled
-----
1                  192.0.20.3      yes
2                  0.0.0.0         no

Server /cimc/log #
```

Related Commands	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	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>1.3(1)</td><td>This command was introduced.</td></tr> </table>	Release	Modification	1.3(1)	This command was introduced.
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 #
```

Related Commands	<table> <tr> <th>Command</th><th>Description</th></tr> <tr> <td>scope server-management</td><td></td></tr> </table>	Command	Description	scope server-management	
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 #
```

Related Commands

Command	Description
show storageadapter	

show snmp

To display the SNMP configuration, use the **show snmp** command.

show snmp [detail]

Syntax Description

detail	(Optional) Displays detailed SNMP configuration information in list format.
---------------	---

Command Default

None

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: cimcpbublic
  Enabled: yes

Server#
```

Related Commands

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#
```

Related Commands

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

detail	(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#
```

Related Commands

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	(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 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

server /chassis/storageadapter #
```

Related Commands

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

<i>slot</i>	(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 #
```

Related Commands

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 #
```

Related Commands	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	Sensor	Status	Reading	Units	Min. Warning	Max. Warning
Min. Failure	Max. Failure					
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	C	N/A	80.0
N/A	81.0					
DDR3_P2_D1_TMP		Normal	28.0	C	N/A	90.0
N/A	95.0					
DDR3_P1_A1_TMP		Normal	30.0	C	N/A	90.0
N/A	95.0					
PSU1_TEMP_1		Normal	40.0	C	N/A	60.0
N/A	65.0					
PSU2_TEMP_1		Normal	40.0	C	N/A	60.0
N/A	65.0					
FP_AMBIENT_TEMP		Normal	22.0	C	N/A	40.0
N/A	45.0					

```
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

detail	(Optional) Displays detailed information in list format.
---------------	--

Command Default

None

Command Modes

Host Ethernet interface (/chassis/adapters/host-eth-if)
Host Fibre Channel interface (/chassis/adapters/host-fc-if)
VM FEX interface (/chassis/adapters/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:

```
Server# scope chassis
Server /chassis # scope adapter 1
Server /chassis/adapters/ # scope host-eth-if eth0
Server /chassis/adapters/host-eth-if # show trans-queue
Transmit Queue Count Transmit Queue Ring Size
-----
1                      256

Server /chassis/adapters/host-eth-if #
```

Related Commands

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

<i>trap-destination-number</i>	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 #
```

Related Commands

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

<i>user-number</i>	(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
1	admin	admin	yes
2	jsmith	admin	yes
3	(n/a)	(n/a)	no
4	(n/a)	(n/a)	no
5	bjones	readonly	yes
6	(n/a)	(n/a)	no
7	(n/a)	(n/a)	no
8	(n/a)	(n/a)	no
9	(n/a)	(n/a)	no
10	(n/a)	(n/a)	no
11	(n/a)	(n/a)	no
12	(n/a)	(n/a)	no
13	(n/a)	(n/a)	no
14	(n/a)	(n/a)	no
15	(n/a)	(n/a)	no

```
server#
```

Related Commands

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

<i>session-number</i>	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#
```

Related Commands

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

<i>user-index</i>	(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 #
```

Related Commands

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#
```

Related Commands	Command	Description
	activate (firmware)	

show virtual-drive

To display virtual drive information for a storage adapter, use the **show virtual-drive** command.

show virtual-drive*drive-number* [**detail**]

Syntax Description

<i>drive-number</i>	(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/storageadapter # show 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 #
```

Related Commands

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 #
```

Related Commands	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#
```

Related Commands

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
-----
pts0           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: 00:00:00:00:00:00
  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 #
```

 show vmfex**Related Commands**

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	Sensor	Status	Reading	Units	Min.	Warning	Max.	Warning
Min.	Failure	Max.	Failure					

P3V_BAT_SCALED		Normal	3.022	V	N/A		N/A	
2.798	3.088							
P12V_SCALED		Normal	12.095	V	N/A		N/A	
11.623	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							
PV_VCCP_CPU1		Normal	0.940	V	N/A		N/A	
0.725	1.391							
PV_VCCP_CPU2		Normal	0.891	V	N/A		N/A	
0.725	1.391							
P1V5_DDR3_CPU1		Normal	1.499	V	N/A		N/A	
1.450	1.548							
P1V5_DDR3_CPU2		Normal	1.499	V	N/A		N/A	
1.450	1.548							
P1V1_IOH		Normal	1.087	V	N/A		N/A	
1.068	1.136							
P1V8_AUX		Normal	1.773	V	N/A		N/A	
1.744	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
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 #
```

Related Commands

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
```

Related Commands

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#
```

Related Commands

Command	Description
exit	

update (firmware)

To update server firmware, use the **update** command.

update *ip-address file-path*

Syntax Description

<i>ip-address</i>	The IP address of the TFTP server. The format is X.X.X.X.
<i>file-path</i>	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 #
```

Related Commands

Command	Description
show cimc	
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

<i>tftp-ip-address</i>	The IP address of the remote server hosting the adapter firmware.
<i>filename</i>	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.
<i>pci-slot</i>	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 #
```

Related Commands

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
```

Related Commands

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.

MIIB0TCCAToCAQAwbDELMAkGA1UEBhMCVVMxCzAJBgNVBAGTAkNBMQ0wCwYDVQQH
EwRoZXJlMQwwCgYDVQQKEwN0aW0xCzAJBgNVBAsTAjAxMQwwCgYDVQQDEwNib2Ix
GDAWBgkqhkiG9w0BCQEWCW1lQG1lLmNvbTCBnzANBgkqhkiG9w0BAQEFAAOBjQAw
gYkCgYEAw49pYuDXdOfHtXwBT7k5kX1set/I3e8TtkuO/EQ5HVd9HrPIy4Kpb3Oj
33CkqjysVWBpPSGzWAlEL6cZYs5p6JxR74+tgW5BYpNKRLNFawpsTZvCXhe/n/O2
WYsx1FnWlm6BgQnPKCBCp9R1ESmq9Np24r2c3PEStZEjeIVWbaUCawEAAaAlMCMG
CSqGSIB3DQEJBzEWEeXRBIGNoYWxsZW5nZSBwYXNzd29yZDANBgkqhkiG9w0BAQUF
AAOBgQBosXi9feLXHBK19kqeVZ8uqRgoMIcM03aBTImjIO1RgwhRLuMrG2l+thA
CT+fbYOYXJ4bHsn25XQjcSdG0uxsti3C2SnK83nKdulpeZBzj545rvH20QK+RtHN
YUBEKvABCeqoIUu+ErMtGvryaQw7WQiQjWf+RTf8IXDGShIQwQ==

server /certificate #
```

Related Commands

Command	Description
generate-csr (certificate)	
show certificate	

 **upload (certificate)**



VIC Configuration Utility

This chapter includes the following sections:

- [Understanding the VIC Configuration Utility, page 483](#)
- [Connecting to the VIC Configuration Utility, page 484](#)
- [VIC Configuration Utility Commands, page 485](#)

Understanding the VIC Configuration Utility

The Cisco UCS P81E Virtual Interface Card (VIC) can be configured by a KVM connection to the card through the EFI as an alternative to using the CIMC CLI or GUI. The processor on the VIC hosts the VIC Configuration Utility, a CLI providing many commands that are the same or similar to those of the CIMC, as well as a few unique commands.

Shared Commands

Most commands in the adapter command mode (/chassis/adapters) are available in the VIC Configuration Utility. In addition, the following common navigation and general commands are available:

- **commit**
- **connect**
- **discard**
- **exit**
- **scope**
- **set**
- **show**
- **top**

Substitute Commands

For some functions, the VIC Configuration Utility provides a new or modified command as a substitute for a CIMC command. The following table lists these CIMC commands and their corresponding VIC Configuration Utility substitute commands. The substitute commands are described in this chapter.

CIMC Command	VIC Configuration Utility Command
activate-adapter-fw <i>pci-slot image</i>	activate <i>image</i>
adapter-reset-defaults <i>pci-slot</i>	reset-defaults
export-vnic <i>tftp-address path/name</i>	export-vnic <i>path/name</i>
import-vnic <i>tftp-address path/name</i>	import-vnic <i>path/name</i>
scope adapter <i>pci-slot</i>	scope adapter
update <i>ip-address path/name</i>	update <i>path/name</i>

Unique Commands

The following commands are unique to the VIC Configuration Utility and are described in this chapter:

- **scope firmware (adapter)**
- **show firmware (adapter)**
- **techsupport**

Connecting to the VIC Configuration Utility

Before You Begin

For information on using the KVM connection to reach the Extensible Firmware Interface (EFI), see the following documents:

- *Cisco UCS C[xxx] Server installation and Service Guide*
- *Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide*



Note

If you plan to import or export files in the VIC Configuration Utility, you must mount a flash drive as virtual media in the KVM before launching the VIC Configuration Utility.

-
- Step 1** Connect to the server management console either by a local KVM connection or by the virtual KVM in the CIMC GUI.
- Step 2** Perform a hard reset of the server, either by pressing and releasing the server Power button or through the CIMC GUI.
- Step 3** In the KVM console, observe the booting process and press F6 when prompted to enter the BIOS Boot Manager.
- Note** After you press F6, other screens appear briefly before the boot device selection screen appears. Do not press any keys during this time.

Step 4 From the table of boot device options, select **Internal EFI Shell** and press **Enter** to launch the EFI shell.

Step 5 When the EFI shell prompt appears, type **vic-config** to launch the VIC Configuration Utility.

Example:

```
Shell> vic-config
```

Step 6 In the initial screen of the VIC Configuration Utility, choose an adapter from the table by typing the displayed adapter number.

Example:

```
Select Adapter to Configure [type 'e' to exit] : 1
```

Step 7 At the VIC Configuration Utility prompt, type **scope adapter** to enter the adapter command mode.

Example:

```
VIC-P81E-slot-1# scope adapter
VIC-P81E-slot-1 /adapter #
```

What to Do Next

Navigate and operate the VIC Configuration Utility CLI using the same methods as the CIMC CLI.

VIC Configuration Utility Commands

activate (VIC)

To activate an adapter firmware image in the VIC Configuration Utility, use the **activate** command.

activate *image-index*

Syntax Description

<i>image-index</i>	The number of the firmware image to be activated. This can be a number from 0 to 3.
--------------------	---

Command Default

None

Command Modes

VIC firmware (/adapter/firmware)

Command History

Release	Modification
1.2(1)	This command was introduced.

Usage Guidelines

Use this command to select an adapter firmware image to be activated upon the next reboot of the server. Use the **show firmware (VIC)** command to view the status and version information of the installed firmware images.



Note

This command is available only in the VIC Configuration Utility, which is accessible through the EFI.

Examples

This example shows how to activate adapter firmware image 0 in the VIC Configuration Utility:

```
VIC-P81E-slot-1# scope adapter
VIC-P81E-slot-1 /adapter # show firmware
Image index Image type          Image version  Image status
-----
0             APPLICATION_FIRMWARE  1.4 (0.290)
1             APPLICATION_FIRMWARE  1.2 (0.33)    STARTUP, RUNNING
2             BOOT_FIRMWARE         1.4 (0.290)
3             DIAGS_FIRMWARE        2.2.0.2
```

```
VIC-P81E-slot-1 /adapter # scope firmware
VIC-P81E-slot-1 /adapter/firmware # activate 0
Activated adapter firmware image will boot upon the next server reset
VIC-P81E-slot-1 /adapter/firmware #
```

Related Commands

Command	Description
show firmware (VIC)	

export-vnic (VIC)

To export the adapter configuration in the VIC Configuration Utility, use the **export-vnic** command.

export-vnic *path/file*

Syntax Description

<i>path/file</i>	Specifies the path to the file on the EFI file system.
------------------	--

Command Default

None

Command Modes

VIC adapter (/adapter)

Command History

Release	Modification
1.2(1)	This command was introduced.

Usage Guidelines

Use this command to export the adapter configuration to a file on the EFI file system. The storage medium must be a virtually mounted USB drive, mounted in the vKVM before launching the VIC Configuration Utility.



Note

This command is available only in the VIC Configuration Utility, which is accessible through the EFI.

Examples

This example shows how to store the adapter configuration to a file on the EFI file system in the VIC Configuration Utility:

```
VIC-P81E-slot-1# scope adapter
VIC-P81E-slot-1 /adapter # export-vnic /backup/P81E.xml
VIC-P81E-slot-1 /adapter #
```

Related Commands

Command	Description
import-vnic (VIC)	

import-vnic (VIC)

To import the adapter configuration in the VIC Configuration Utility, use the **import-vnic** command.

import-vnic *path/file*

Syntax Description

<i>path/file</i>	Specifies the path to the file on the EFI file system.
------------------	--

Command Default

None

Command Modes

VIC adapter (/adapter)

Command History

Release	Modification
1.2(1)	This command was introduced.

Usage Guidelines

Use this command to import the adapter configuration from a file on the EFI file system. The storage medium must be a virtually mounted USB drive, mounted in the vKVM before launching the VIC Configuration Utility. The imported configuration is applied upon the next server reboot.



Note

This command is available only in the VIC Configuration Utility, which is accessible through the EFI.

Examples

This example shows how to import the adapter configuration from a file on the EFI file system in the VIC Configuration Utility:

```
VIC-P81E-slot-1# scope adapter
VIC-P81E-slot-1 /adapter # import-vnic /backup/P81E.xml
VIC-P81E-slot-1 /adapter #
```

Related Commands

Command	Description
export-vnic (VIC)	

reset-defaults (VIC)

To restore the adapter to the factory default configuration in the VIC Configuration Utility, use the **reset-defaults** command.

reset-defaults

This command has no arguments or keywords.

Command Default

None

Command Modes

VIC adapter (/adapter)

Command History

Release	Modification
1.2(1)	This command was introduced.

Usage Guidelines

Use this command to restore the adapter to the factory default configuration in the VIC Configuration Utility. The default settings are restored upon the next reboot of the server.



Note

This command is available only in the VIC Configuration Utility, which is accessible through the EFI.

Examples

This example shows how to reset the factory default configuration in the VIC Configuration Utility:

```
VIC-P81E-slot-1# scope adapter
VIC-P81E-slot-1 /adapter # reset-defaults
Reset the adapter's VNIC configuration to defaults
Do you want to continue [Y/N]: Y

*****
VNIC configuration reset to defaults

A server reset is required for the default VNIC
configuration to take effect

*****
VIC-P81E-slot-1 /adapter #
```

scope adapter (VIC)

To enter adapter command mode in the VIC Configuration Utility, use the **scope adapter** command.

scope adapter

This command has no arguments or keywords.

Command Default

None

Command Modes

VIC EXEC (/)

Command History

Release	Modification
1.2(1)	This command was introduced.

Usage Guidelines

Use this command to enter adapter command mode in the VIC Configuration Utility.



Note

This command is available only in the VIC Configuration Utility, which is accessible through the EFI.

Examples

This example shows enter adapter command mode in the VIC Configuration Utility:

```
VIC-P81E-slot-1# scope adapter  
VIC-P81E-slot-1 /adapter #
```

scope firmware (VIC)

To enter firmware command mode in the VIC Configuration Utility, use the **scope firmware** command.

scope firmware

This command has no arguments or keywords.

Command Default

None

Command Modes

VIC adapter (/adapter)

Command History

Release	Modification
1.2(1)	This command was introduced.

Usage Guidelines

This command is available only in the VIC Configuration Utility, which is accessible through the EFI.

Examples


This example shows enter firmware command mode in the VIC Configuration Utility:

```
VIC-P81E-slot-1# scope adapter
VIC-P81E-slot-1 /adapter # scope firmware
VIC-P81E-slot-1 /adapter/firmware #
```


show firmware (VIC)

To display information about adapter firmware images in the VIC Configuration Utility, use the **show firmware** command.

show firmware [**detail**]

Syntax Description	detail (Optional) Displays detailed information about adapter firmware images in list format.	
Command Default	None	
Command Modes	VIC adapter (/adapter)	
Command History	Release	Modification
	1.2(1)	This command was introduced.
Usage Guidelines	Use this command to display adapter firmware image information in the VIC Configuration Utility, including image types, image versions, and image status.	
 Note	This command is available only in the VIC Configuration Utility, which is accessible through the EFI.	

Examples

This example shows adapter firmware images in the VIC Configuration Utility:

```
VIC-P81E-slot-1# scope adapter
VIC-P81E-slot-1 /adapter # show firmware
Image index Image type           Image version  Image status
-----
0            APPLICATION_FIRMWARE 1.4 (0.290)
1            APPLICATION_FIRMWARE 1.2 (0.33)     STARTUP, RUNNING
2            BOOT_FIRMWARE        1.4 (0.290)
3            DIAGS_FIRMWARE        2.2.0.2
```

VIC-P81E-slot-1 /adapter #

techsupport (VIC)

To export adapter technical support information in the VIC Configuration Utility, use the **techsupport** command.

techsupport *path/file*

Syntax Description

<i>path/file</i>	Specifies the path to the file on the EFI file system.
------------------	--

Command Default

None

Command Modes

VIC adapter (/adapter)

Command History

Release	Modification
1.2(1)	This command was introduced.

Usage Guidelines

Use this command to export the adapter technical support information to a file on the EFI file system. The storage medium must be a virtually mounted USB drive, mounted in the vKVM before launching the VIC Configuration Utility.



Note

This command is available only in the VIC Configuration Utility, which is accessible through the EFI.

Examples

This example shows how to store the adapter technical support information to a file on the EFI file system in the VIC Configuration Utility:

```
VIC-P81E-slot-1# scope adapter
VIC-P81E-slot-1 /adapter # export-vnic /support/P81E.xml
VIC-P81E-slot-1 /adapter #
```

update (VIC)

To download an adapter firmware image in the VIC Configuration Utility, use the **update** command.

update *path/file*

Syntax Description

<i>path/file</i>	Specifies the path to the file on the EFI file system.
------------------	--

Command Default

None

Command Modes

VIC adapter (/adapter)

Command History

Release	Modification
1.2(1)	This command was introduced.

Usage Guidelines

Use this command to download an adapter firmware image file from the EFI file system. The storage medium must be a virtually mounted USB drive, mounted in the vKVM before launching the VIC Configuration Utility. The downloaded image is stored as a backup image until activated by the **activate** command.



Note

This command is available only in the VIC Configuration Utility, which is accessible through the EFI.

Examples

This example shows how to download an adapter firmware image file from the EFI file system in the VIC Configuration Utility:

```
VIC-P81E-slot-1# scope adapter
VIC-P81E-slot-1 /adapter # update /images/P81E
VIC-P81E-slot-1 /adapter #
```

Related Commands

Command	Description
activate (VIC)	



INDEX

A

activate (firmware) [22](#)
activate (VIC) command [486](#)
activate-adapter-fw [23](#)
adapter-reset [24](#)
adapter-reset-defaults [25](#)

B

bios-setup-defaults command [26](#)

C

cancel [27](#)
CIMC CLI [1](#)
clear (log) [28](#)
clear (sel) [29](#)
clear-cmos [30](#)
commit [31](#)
configure-vmfex command [32](#)
connect [33](#)
create host-eth-if command [35](#)
create host-fc-if command [36](#)
create-boot-entry [34](#)

D

delete boot [37](#)
delete host-eth-if command [38](#)
delete host-fc-if command [39](#)
discard [40](#)

E

EFI [483](#), [484](#)
 adapter configuration [483](#), [484](#)

exit [41](#)
export-config command [42](#)
export-vnic [44](#)
export-vnic (VIC) command [488](#)

F

factory-default (cimc) [45](#)

G

generate-csr (certificate) [46](#)

I

import-config [47](#)
import-vnic [49](#)
import-vnic (VIC) command [489](#)

L

locateHDD command [50](#)

P

ping (network) [51](#)
power (chassis) [52](#)

R

reapply [54](#)
reboot (chassis) [55](#)
rebuild command [56](#)
recover (firmware) [57](#)
recover-adapter-update command [59](#)

reset-defaults (VIC) command [490](#)

S

scope adapter [60](#)
 scope adapter (VIC) command [491](#)
 scope advanced [61](#)
 scope bios [62](#)
 scope certificate [63](#)
 scope chassis [64](#)
 scope cimc [65](#)
 scope comp-queue command [66](#)
 scope description (chassis) [173](#)
 scope error-recovery [67](#)
 scope fault [68](#)
 scope firmware (VIC) command [492](#)
 scope firmware command [69](#)
 scope flexflash command [70](#)
 scope host-eth-if [71](#)
 scope host-fc-if command [72](#)
 scope http [73](#)
 scope import-export [74](#)
 scope interrupt command [75](#)
 scope ipblocking (network) [76](#)
 scope ipmi [77](#)
 scope kvm [78](#)
 scope ldap [79](#)
 scope log (cimc) [80](#)
 scope main [81](#)
 scope network (cimc) [82](#)
 scope offload command [83](#)
 scope operational-profile command [84](#)
 scope pef [85](#)
 scope perbi command [87](#)
 scope physical-drive [88](#)
 scope port [89](#)
 scope port-f-logi command [90](#)
 scope port-p-logi [91](#)
 scope recv-queue command [92](#)
 scope role-group command [93](#)
 scope rss command [94](#)
 scope scsi-io [95](#)
 scope sel [96](#)
 scope sensor [97](#)
 scope server (log) [99](#)
 scope server-management [98](#)
 scope snmp [100](#)
 scope sol [101](#)
 scope ssh [102](#)
 scope storageadapter command [103](#)
 scope tech-support (cimc) [104](#)
 scope trans-queue command [105](#)
 scope trap-destination command [106](#)
 scope user [107](#)
 scope user-session [108](#)
 scope v3users command [109](#)
 scope virtual-drive [110](#)
 scope vmedia [111](#)
 scope vmfex command [112](#)
 sendSNMPtrap command [113](#)
 server overview [1](#)
 set ACPI10Support [114](#)
 set action (pef) [115](#)
 set ActiveVideo command [117](#)
 set addr (trap-destination) command [118](#)
 set AdjacentCacheLinePrefetch command [119](#)
 set alternate-dns-server [120](#)
 set Altitude command [121](#)
 set AssertNMIONPERR [122](#)
 set AssertNMIONSERR [123](#)
 set ATS [124](#)
 set attribute [125](#)
 set base-dn [126](#)
 set baud-rate [127](#)
 set BaudRate [128](#)
 set BMCPnP [130](#)
 set boot command [131](#)
 set boot-order command [132](#)
 set boot-override command [135](#)
 set BootOptionRetry [134](#)
 set cdb-wq-count command [137](#)
 set cdb-wq-ring-size [138](#)
 set channel-number command [139](#)
 set ChannelInterLeave command [140](#)
 set Ck410bConfigSpreadSpectrumEnable command [141](#)
 set CkeLowPolicy command [142](#)
 set cli output [143](#)
 set coalescing-time command [144](#)
 set coalescing-type command [145](#)
 set CoherencySupport [146](#)
 set community-str command [147](#)
 set comport [149](#)
 set ConfigSATAMode [151](#)
 set ConsoleRedir [153](#)
 set CoreMultiProcessing [155](#)
 set cos command [156](#)
 set CpuEngPerfBias command [157](#)
 set CpuFreqFloor command [159](#)
 set CPUPerformance command [160](#)
 set CPUPowerManagement command [162](#)
 set cq-count command [164](#)
 set dc command [165](#)
 set DcuIpPrefetch command [166](#)
 set DcuStreamerPrefetch command [167](#)
 set delay [168](#)
 set delay-value [170](#)

- set DemandScrub command 172
- set dhcp-enabled 174
- set DirectCacheAccess 175
- set DisableSCU command 176
- set dns-use-dhcp 177
- set domain command 178
- set enabled command 179
- set encrypted 181
- set encryption-key 183
- set EnhancedIntelSpeedStep 184
- set error-count-threshold command 186
- set error-detect-timeout command 187
- set ExecuteDisable 188
- set fail-count 189
- set fail-window 190
- set fc-rq-ring-size command 191
- set fc-wq-ring-size command 192
- set fcp-error-recovery command 193
- set fip-mode command 194
- set flogi-retries command 195
- set flogi-timeout command 196
- set FlowCtrl 197
- set FRB-2 command 198
- set gc command 199
- set group-auth command 200
- set HardwarePrefetch command 201
- set hostname 202
- set http-port command 203
- set http-redirect command 204
- set https-port 205
- set inform-type command 206
- set IntelHyperThread 208
- set IntelTurboBoostTech 209
- set IntelVT 210
- set IntelVTD 211
- set interrupt-count command 212
- set interrupt-mode command 213
- set InterruptRemap 214
- set kvm-port 215
- set LaunchPXEOptionROM command 216
- set LegacyOSRedir 217
- set LegacyUSBSupport command 218
- set link-down-timeout 219
- set local-syslog-severity command 220
- set local-video 222
- set locator-led command 223
- set LomOpromControlPortn command 224
- set LvDDRMode 225
- set mac-addr command 226
- set MakeUSBDeviceNonBootable command 227
- set ManagedBootRule command 228
- set max-data-field-size command 230
- set max-sessions 231
- set max-target-luns command 232
- set MemoryMappedIOAbove4GB 233
- set MirroringMode command 234
- set mode 235
- set mtu command 236
- set name 237
- set NIC-ROM command 238
- set niv-mode command 239
- set non-compliance-action 240
- set NUMAOptimize 242
- set OEMAESNICControl command 243
- set OnboardNicl command 244
- set OnboardNiclROM command 245
- set OnboardSATA 246
- set OptionROMPriority command 247
- set order command 248
- set OSBootWatchdogTimer command 249
- set OSBootWatchdogTimerPolicy command 251
- set OSBootWatchdogTimerTimeout command 253
- set outstanding-io-count command 255
- set PackageCStateLimit command 256
- set PassThroughDMA 258
- set password 259
- set path (tech-support) 260
- set PatrolScrub command 261
- set PatrolScrubDuration command 263
- set Pci-Opt-Roms command 264
- set PcieOptionROMs command 266
- set PcieSlotnOptionROM command 267
- set PciMezzOptionROM command 265
- set PciOptRomsDisable command 268
- set peak-power 269
- set penalty-time 271
- set persistent-lun-binding command 272
- set platform-event-enabled 273
- set plogi-retries 274
- set plogi-timeout 275
- set policy 276
- set port-down-io-retry-count command 278
- set port-down-timeout 279
- set port-profile 280, 281
 - host-eth-if mode 280
 - network 281
- set POSTErrorPause 283
- set preferred-dns-server 284
- set privilege-level 285
- set ProcessorC1eEnable command 287
- set ProcessorC1EReport command 289
- set ProcessorC3Report command 290
- set ProcessorC6Report command 292
- set ProcessorC7Report command 293
- set ProcessorCcxEnable command 294
- set QPILinkFrequency command 295
- set raid-primary-member command 296
- set RankInterLeave command 297

- set rate-limit command 298
- set redundancy 299
- set remote-syslog-severity command 300
- set resource-allocation-timeout command 302
- set role command 303
- set rq-count command 305
- set rq-ring-size command 306
- set rss command 307
- set rss-hash-ipv4 command 308
- set rss-hash-ipv6 command 309
- set rss-hash-ipv6-ex command 310
- set rss-hash-tcp-ipv4 command 311
- set rss-hash-tcp-ipv6 command 312
- set rss-hash-tcp-ipv6-ex command 313
- set SelectMemoryRAS command 314
- set send-alert (pef) 316
- set Serial-PortA 317
- set Serial-PortB 319
- set SerialPortAAddress 318
- set SerialPortBAddress 320
- set server-ip command 321
- set Slot-n-ROM command 322
- set Slot1Disable 323
- set SlotMezzDisable 324
- set SparingMode command 325
- set ssh-port 326
- set sys-contact command 327
- set sys-location command 329
- set tcp-rx-checksum-offload command 331, 332
- set TerminalType 335
- set tftp-ip (tech-support) 337
- set timeout command 338
- set TPMAdminCtrl command 340
- set trap-community-str command 341
- set trap-ver command 342
- set trust-host-cos command 344
- set uplink command 345
- set uplink-failback-timeout command 346
- set uplink-failover command 347
- set USBController 348
- set UsbEmul6064 command 349
- set v3add command 350
- set v3auth-key command 352
- set v3priv-auth-key command 353
- set v3priv-proto command 354
- set v3proto command 355
- set v3security-level command 356
- set v3security-name command 358
- set v4-addr 359
- set v4-gateway 360
- set v4-netmask 361
- set virtual-drives-enabled command 362
- set vlan command 363
- set vlan-enabled 364
- set vlan-id 365
- set vlan-mode command 366
- set vlan-priority 367
- set wq-count command 368
- set wq-ring-size command 369
- set wwnn command 370
- set wwpn command 371
- show (firmware) 372
- show actual-boot-order (bios) 373
- show adapter command 374
- show advanced 376
- show bbu 378
- show bios 379
- show boot command 381
- show capabilities 382
- show certificate 383
- show chassis 385
- show cimc 386
- show comp-queue command 387
- show configuration pending 388
- show cpu (chassis) 389
- show dimm (chassis) 392
- show entries (log) 395
- show entries (sel) 397
- show error-counters 399
- show error-recovery command 400
- show ext-eth-if 401
- show fan (sensor) 402
- show fault command 404
- show firmware 405
- show firmware (VIC) command 493
- show firmware-versions 406
- show flexflash command 407
- show hdd (chassis) 408
- show host-eth-if command 409
- show host-fc-if command 410
- show http command 412
- show hw-config 413
- show interrupt command 414
- show ipblocking (network) 415
- show ipmi 416
- show kvm 417
- show ldap command 418
- show led (chassis) 419
- show local-syslog-severity command 420
- show lom-mac-list command 422
- show main 423
- show mfg-data 424
- show network (cimc) 425
- show offload command 426
- show operational-profile command 427
- show pci-adapter 428
- show pci-info 429
- show pef (fault) 430

show perbi command [432](#)
show physical-drive [433](#)
show physical-drive-count [434](#)
show port command [435](#)
show port-f-logi command [436](#)
show port-p-logi command [437](#)
show port-profiles command [438](#)
show power-cap [439](#)
show psu (chassis) [441](#)
show psu (sensor) [442](#)
show psu-redundancy (sensor) [443](#)
show recv-queue command [444](#)
show remote-syslog-severity command [445](#)
show role-group command [447](#)
show rss command [448](#)
show running-firmware-images [449](#)
show scsi-io [450](#)
show server command [451](#)
show server-management [452](#)
show settings [453](#)
show snmp [454](#)
show sol [456](#)
show ssh [457](#)
show startup-firmware-images [458](#)
show storageadapter command [459](#)
show tech-support (cimc) [460](#)
show temperature (sensor) [461](#)
show trans-queue command [462](#)
show trap-destination command [463](#)
show user [464](#)
show user-session [465](#)
show v3users command [466](#)
show version [467](#)
show virtual-drive [468](#)
show virtual-drive-count [469](#)

show vmedia [470](#)
show vmfex command [471](#)
show voltage (sensor) [391, 473](#)
start [475](#)

T

techsupport (VIC) command [494](#)
Telnet [1](#)
terminate (usser-session) [476](#)
top [477](#)

U

update (firmware) [478](#)
update (VIC) command [495](#)
update-adapter-fw command [479](#)
update-all [480](#)
upload (certificate) [481](#)

V

VIC Configuration Utility [483, 484](#)
 connecting [484](#)
 understanding [483](#)

Y

YAML [6](#)

