



## Cisco IOS XR Task ID Reference Guide

Cisco IOS XR Software Release 4.1

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## Preface

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This document describes the Task ID requirements for all commands (except debug commands) currently implemented for Cisco IOS XR software. The preface for *Cisco IOS XR Task ID Reference Guide* contains the following sections:

- [Changes to This Document, page 1](#)
- [Obtaining Documentation and Submitting a Service Request, page 1](#)

## Changes to This Document

[Table 1](#) lists the technical changes made to this document since it was first printed.

**Table 1      Changes to This Document**

Revision	Date	Change Summary
OL-25172-01	April 2011	Initial release of this document.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

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**Changes to This Document**



# Cisco IOS XR Task IDs

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This reference guide identifies the task IDs that enable users to perform operations for Cisco IOS XR commands. The operational tasks that enable users to control, configure, and monitor Cisco IOS XR software are represented by task IDs. A *task ID* defines the permission needed to perform a command. Users are associated with sets of task IDs that define the capabilities of their authorized access to the Cisco CRS Router, Cisco XR 12000 Series Routers, and Cisco ASR 9000 Series Aggregation Services Routers.

Task IDs are assigned to users through the following means. Each user is associated with one or more user groups. Each user group is associated with one or more task groups; in turn, every task group is defined by a set of task IDs. Consequently, the association of a user with a particular user group links that user to a particular set of task IDs. A user that is associated with a task ID can perform any command operation associated with that task ID.

This module consists of the following tables that correspond to Cisco IOS XR command references:

- [Task IDs for the Cisco IOS XR Advanced System Commands, page 2](#)
- [Task IDs for the Cisco IOS XR Carrier Grade NAT Commands, page 8](#)
- [Task IDs for the Cisco IOS XR Interface and Hardware Component Commands, page 11](#)
- [Task IDs for the Cisco IOS XR IP Addresses and Services Commands, page 28](#)
- [Task IDs for the Cisco IOS XR Modular Quality of Service Commands, page 39](#)
- [Task IDs for the Cisco IOS XR MPLS Commands, page 42](#)
- [Task IDs for the Cisco IOS XR Multicast Commands, page 53](#)
- [Task IDs for the Cisco IOS XR Netflow Commands, page 59](#)
- [Task IDs for the Cisco IOS XR Routing Commands, page 60](#)
- [Task IDs for the Cisco IOS XR System Management Commands, page 80](#)
- [Task IDs for the Cisco IOS XR System Monitoring Commands, page 94](#)
- [Task IDs for the Cisco IOS XR System Security Commands, page 100](#)
- [Task IDs for the Cisco IOS XR Virtual Firewall Commands, page 108](#)
- [Task IDs for the Cisco IOS XR Virtual Private Network Commands, page 108](#)

## General Usage Guidelines

Task IDs grant permission to perform certain tasks; task IDs do not deny permission to perform tasks.

Permissions for task ID operations can be one, all, or a combination of the following:

- R—A designation that permits only a read operation.
- W—A designation that permits a change operation and implicitly allows a read operation.
- E—A designation that permits an access operation (such as ping and Telnet).
- D—A designation that permits a debug operation.

Multiple task ID operations separated by a slash (such as R/W) mean that both operations should be applied to the specified task ID.

Multiple task ID operations, separated by a comma (such as R, R/W), mean that both operations should be applied to the respective task IDs. For example, the **copy access-list ipv4** command in the *Task IDs for IP Addresses and Services Commands* should have the read and write operations applied to the acl task ID and the execute operation applied to the file system task ID.

If the task ID and operations columns have none specified, then the command can be used without previous user association to a task ID and operation. In addition, users do not need to be associated to task IDs to use ROM monitor commands.

Users may need to be associated to additional task IDs to use a command if the command is used in a specific configuration submode. For example, to execute the **vrrp assume-ownership disable** command in the *Task IDs for IP Addresses and Services Commands*, a user needs to be associated to both the rib (R/W) and vrrp (R/W) task IDs and operations because the **router vrrp** configuration submode requires the additional rib task ID as follows:

```
RP/0/RP0/CPU0:router# configure
RP/0/RP0/CPU0:router(config)# router vrrp
RP/0/RP0/CPU0:router(config-vrrp)# interface MgmtEth 0/RP0/CPU0/0
RP/0/RP0/CPU0:router(config-vrrp-if)# vrrp 1 assume-ownership
```

## Task IDs for Advanced System Commands

**Table 1** is a task ID reference for the commands in the *Cisco IOS XR Advanced System books*. Commands are listed in alphabetic order within each module.

**Table 1** Task IDs for the Cisco IOS XR Advanced System Commands

Cisco IOS XR Advanced System Commands	Task IDs	Operations
<b>ASIC Driver Commands</b>		
asic-scan egressq (block number)	drivers	R/W
asic-scan egressq disable	drivers	R/W
asic-scan egressq enable	drivers	R/W
asic-scan egressq help-block	drivers	R/W
asic-scan egressq location	drivers	R/W
asic-scan egressq quick-scan	drivers	R/W
asic-scan pse egress (block number)	drivers	R/W
asic-scan pse egress disable	drivers	R/W
asic-scan pse egress enable	drivers	R/W
asic-scan pse egress help-block	drivers	R/W

**Table 1** Task IDs for the Cisco IOS XR Advanced System Commands

Cisco IOS XR Advanced System Commands	Task IDs	Operations
asic-scan pse egress location	drivers	R/W
asic-scan pse egress quick-scan	drivers	R/W
asic-scan pse ingress (block number)	drivers	R/W
asic-scan pse ingress disable	drivers	R/W
asic-scan pse ingress enable	drivers	R/W
asic-scan pse ingress help-block	drivers	R/W
asic-scan pse ingress location	drivers	R/W
asic-scan pse ingress quick-scan	drivers	R/W
clear controller egressq queue	root-system, basic-services, drivers	R, R/W, R/W
clear controller egressq queue all	drivers	R/W
clear controller egressq statistics	drivers	R/W
clear controller pse statistics	interface, drivers	R/W, R/W
show controllers cputctl cdma channel	drivers, interface	R, R
show controllers cputctl clients	drivers, interface	R, R
show controllers cputctl devices	drivers, interface	R, R
show controllers cputctl error	drivers, interface	R, R
show controllers cputctl internal	drivers, interface	R, R
show controllers cputctl ports	drivers, interface	R, R
show controllers cputctl ports cputctl pio	drivers, interface	R, R
show controllers cputctl summary	drivers, interface	R, R
show controllers cputctl trace	drivers, interface	R, R
show controllers cputctl vcdma	drivers, interface	R, R
show controllers egressq eio links	drivers, interface	R, R
show controllers egressq group	drivers, interface	R, R
show controllers egressq interface	drivers, interface	R, R
show controllers egressq port	drivers, interface	R, R
show controllers egressq queue	drivers, interface	R, R
show controllers egressq resources	drivers, interface	R, R
show controllers egressq statistics	drivers, interface	R, R
show controllers egressq trace	cisco-support, interface	R, R
show controllers ingressq backpressure	interface, drivers	R, R
show controllers ingressq block	interface, drivers	R, R
show controllers plim asic egress-channel bay	interface, root-system	R, R
show controllers plim asic ether queues	interface, drivers	R, R
show controllers plim asic ingress-channel bay	interface, root-system	R, R

**Table 1** Task IDs for the Cisco IOS XR Advanced System Commands

Cisco IOS XR Advanced System Commands	Task IDs	Operations
show controllers plim asic pla	interface, drivers, cisco-support	R, R, R
show controllers plim asic pla768	interface, drivers, cisco-support	R, R, R
show controllers plim asic plaspa	interface, drivers, cisco-support	R, R, R
show controllers plim asic SPAQFPBridgeCtrl	interface, root-system	R, R
show controllers plim asic spa bay	interface, root-system	R, R
show controllers plim asic statistics	interface, root-system	R, R
show controllers plim asic summary	interface, root-system	R, R
show controllers pse	interface, drivers	R, R
show controllers pse eio links	drivers, interface	R, R
show controllers pse ipc	interface, drivers	R, R
show controllers pse mem	interface, drivers	R, R
show controllers pse mp	interface, drivers	R, R
show controllers pse qfp statistics	interface, cisco-support	R, R
show controllers pse qfp system state	interface, cisco-support	R, R
show controllers pse statistics	interface, drivers	R, R
show controllers pse summary	interface, drivers	R, R
show controllers pse tcam	acl, interface, drivers	R, R, R
show controllers pse uidb	interface, cisco-support	R, R
show controllers pse utilization	interface, drivers	R, R
show packet-memory	basic-services	R
<b>Troubleshooting Commands</b>		
show arp trace	cisco-support	R
show captured packets	cisco-support	R
show cfgmgr trace	cisco-support	R
show im chains	cisco-support	R
show imds interface brief	cisco-support	R
show im database	cisco-support, interface	R, R
show netio idb	cisco-support	R
show sysdb connections	sysmgr, cisco-support	R, R
show sysdb trace verification location	sysmgr, cisco-support	R, R
show sysdb trace verification shared-plane	cisco-support	R
show tbm hardware	cisco-support	R
show uidb data	cisco-support	R
show uidb trace	cisco-support	R

**Table 1** Task IDs for the Cisco IOS XR Advanced System Commands

Cisco IOS XR Advanced System Commands	Task IDs	Operations
show uidb index	cisco-support	R
watchdog threshold memory	cisco-support	R/W
<b>Fabric Management Commands</b>		
clear controller fabric statistics	root-system, fabric	R/W/E, R/W
clear controller fabricq statistics	root-system, drivers	E, R/W
clear controller ingressq statistics	drivers	R/W
clear fabricq counters all	root-system	R
clear fabricq counters frfab	root-system	R
clear fabricq counters tofab	root-system	R
controllers fabric bundle port	fabric	R/W
controllers fabric plane oim	fabric	R/W
controllers fabric plane shutdown	fabric	R/W
controllers fabric rack	fabric	R/W
controllers fabric statistics collection	fabric	R/W
show controllers fabric	root-system	R/W
show controllers fabric bundle	fabric	R
show controllers fabric connectivity	fabric	R
show controllers fabric driver instance summary	fabric	R
show controllers fabric fgid resource	fabric	R
show controllers fabric fgid statistics	fabric, root-system	R, R/E
show controllers fabric fsdb-pla rack all	fabric	R
show controllers fabric link port	fabric	R
show controllers fabric plane	root-system	R/W
show controllers fabric rack all	fabric	R
show controllers fabric sfe	fabric	R
show controllers fabricq barriers	root-system	R/W
show controllers fabricq block	root-system	R/W
show controllers fabricq drop	root-system	R/W
show controllers fabricq eio	root-system	R/W
show controllers fabricq errors	root-system	R/W
show controllers fabricq fabric-backpressure	fabric, interface, drivers	R, R, R
show controllers fabricq frfab	root-system	R/W
show controllers fabricq health	interface, drivers	R/W, R/W
show controllers fabricq link-info	root-system	R/W
show controllers fabricq output	root-system	R/W
show controllers fabricq queue	root-system	R/W

**Table 1** Task IDs for the Cisco IOS XR Advanced System Commands

Cisco IOS XR Advanced System Commands	Task IDs	Operations
show controllers fabricq registers	root-system	R/W
show controllers fabricq statistics	interface, drivers	R, R
show controllers fabricq summary	interface, drivers	R/W, R/W
show controllers fabricq tofab	root-system	R/W
show controllers ingressq capacity	interface, drivers	R, R
show controllers ingressq clients	interface, drivers	R, R
show controllers ingressq eio	interface, drivers	R, R
show controllers ingressq fabric	interface, drivers	R, R
show controllers ingressq interfaces	interface, drivers	R, R
show controllers ingressq queues	interface, drivers	R, R
show controllers ingressq statistics	interface, drivers	R, R
show controllers ingressq vports	interface, drivers	R, R
<b>Tech-Support Commands</b>		
show system verify	system	R
show tech-support	basic-services	R
show tech-support aps	basic-services	R
show tech-support asic	admin	R
show tech-support bcdl	basic-services or cisco-support, sysmgr	R, R
show tech-support bundles	cisco-support	R
show tech-support cef	basic-services or cisco-support and cef	R
show tech-support cfgmgr	cisco-support	R
show tech-support chdlc	cisco-support	R
show tech-support control-ethernet	admin	R
show tech-support dsc	admin	R
show tech-support ethernet	cisco-support	R
show tech-support fabric	admin	R
show tech-support gsp	basic-services or cisco-support and sysmgr	R
show tech-support igmp snooping	cisco-support	R
show tech-support install	basic-services or cisco-support and pkg-mgmt	R
show tech-support l2tp	cisco-support	R
show tech-support l2vpn	cisco-support	R
show tech-support lrd	cisco-support	R
show tech-support mpls ldp	cisco-support, mpls-ldp	R, R

**Table 1** Task IDs for the Cisco IOS XR Advanced System Commands

Cisco IOS XR Advanced System Commands	Task IDs	Operations
show tech-support mpls optical-uni	cisco-support, ouni	R, R
show tech-support mpls rsvp	cisco-support and mpls-te or ouni	R
show tech-support mpls traffic-eng	cisco-support, mpls-te	R, R
show tech-support multicast	basic-services or cisco-support and multicast	R
show tech-support netflow	cisco-support	R
show tech-support nrs	cisco-support	R
show tech-support password	basic-services	R
show tech-support performance-traffic	cisco-support	R
show tech-support pfi	basic-services, cisco-support	R, R
show tech-support placement	cisco-support, sysmgr	R, R
show tech-support platform	basic-services	R
show tech-support pos	cisco-support	R
show tech-support ppp	cisco-support	R
show tech-support qos	basic-services, cisco-support	R, R
show tech-support rdsfs	cisco-support	R
show tech-support rib	cisco-suppor	R
show tech-support routing bfd	basic-services	R
show tech-support routing isis	basic-services	R
show tech-support routing ospf	basic-services	R
show tech-support routing ospfv3	basic-services	R
show tech-support routing rpl	basic-services	R
show tech-support sanitized	basic-services	R
show tech-support serial	cisco-support	R
show tech-support services	cisco-support	R
show tech-support snmp	basic-services, cisco-support	R, R
show tech-support spaipc	cisco-suppor	R
show tech-support sysdb	cisco-support	R
show tech-support terminal	basic-services	R
<b>Watchdog Commands</b>		
show critmon context	cisco-support	R
show critmon deadline	cisco-support	R
show critmon statistics	cisco-support	R
show critmon trace all	cisco-support	R
show critmon trace error	cisco-support	R
show critmon trace info	cisco-support	R

**Table 1** Task IDs for the Cisco IOS XR Advanced System Commands

Cisco IOS XR Advanced System Commands	Task IDs	Operations
show critmon trace lib-error	cisco-support	R
show critmon trace lib-info	cisco-support	R
show reboot first	system	R
show reboot graceful	system	R
show reboot history	system	R
show reboot last	system	R
show reboot pcds	system	R
show watchdog	basic-services	R

## Task IDs for Carrier Grade NAT Commands

**Table 2** is a task ID reference for the commands in the *Cisco IOS XR Carrier Grade NAT* book for the Cisco CRS Router. Commands are listed in alphabetic order within each module.

**Table 2** Task IDs for the Cisco IOS XR Carrier Grade NAT Commands

Cisco IOS XR Carrier Grade NAT Commands	Task IDs	Operations
<b>Carrier Grade NAT Commands</b>		
address (CGN NetflowV9 logging)	cgn	R/W
address (CGN static-forward)	cgn	R/W
address-family ipv4 (CGN)	cgn	R/W
address-family ipv6	cgn	R/W
alg ActiveFTP (CGN)	cgn	R/W
alg rtsp	cgn	R/W
br	cgn	R/W
clear cgn address-family	cgn	R
clear cgn nat44	cgn	R
clear cgn nat44 nat inside-vrf	cgn	R
clear cgn nat44 nat2 ipaddress	cgn	R
clear cgn nat44 nat2 statistics	cgn	R
clear cgn nat44 nat2 port	cgn	R
clear cgn nat44 nat2 protocol	cgn	R
clear cgn nat44 statistics	cgn	R
df-override	cgn	R/W
external-logging (CGN)	cgn	R/W
hw-module service cgn location	cgn, root-lr	R/W, R/W
inside-vrf (CGN)	cgn	R/W

**Table 2** Task IDs for the Cisco IOS XR Carrier Grade NAT Commands (continued)

Cisco IOS XR Carrier Grade NAT Commands	Task IDs	Operations
interface ServiceApp (CGN)	interface	R/W
interface ServiceInfra (CGN)	interface	R/W
ipv4 prefix (6rd)	cgn	R/W
ipv4 suffix (6rd)	cgn	R/W
ipv6-prefix (6rd)	cgn	R/W
map (CGN)	cgn	R/W
mss (CGN)	cgn	R/W
path-mtu (6rd)	cgn	R/W
path-mtu (CGN)	cgn	R/W
portlimit (CGN)	cgn	R/W
protocol (CGN)	cgn	R/W
Protocol (CGN-NAT44)	cgn	R/W
protocol icmp reset-mtu (CGN)	cgn	R/W
reassembly-enable	cgn	R/W
refresh-direction (CGN)	cgn	R/W
refresh-rate (CGN)	cgn	R/W
reset-df-bit	cgn	R/W
server (CGN)	cgn	R/W
service cgn	cgn	R/W
service-type nat44 (CGN)	cgn	R/W
service-type nat64 (CGN)	cgn	R/W
service-type tunnel	cgn	R/W
service-location (CGN)	cgn	R/W
service-location (interface)	cgn	R/W
session (CGN)	cgn	R/W
show cgn nat44 inside-translation	cgn	R
show cgn nat44 outside-translation	cgn	R
show cgn nat44 pool-utilization	cgn	R
show cgn nat44 statistics	cgn	R
show cgn tunnel v6rd statistics	cgn	R
source-address (6rd)	cgn	R/W
static-forward inside (CGN)	cgn	R/W
tcp mss	cgn	R/W
timeout (CGN)	cgn	R/W
timeout (CGN logging)	cgn	R/W
tos (CGN)	cgn	R/W

**Table 2** Task IDs for the Cisco IOS XR Carrier Grade NAT Commands (continued)

Cisco IOS XR Carrier Grade NAT Commands	Task IDs	Operations
traceroute (CGN)	cgn	R/W
traffic-class (CGN)	cgn	R/W
ttl (6rd)	cgn	R/W
ubit-reserved (CGN)	cgn	R/W
unicast address (6rd)	cgn	R/W
vrf (cgn)	ip-services	R/W

# Task IDs for Interface and Hardware Component Commands

**Table 3** is a task ID reference for the commands in *Cisco IOS XR Interface and Hardware Component* books. Commands are listed in alphabetic order within each module.

**Table 3 Task IDs for the Cisco IOS XR Interface and Hardware Component Commands**

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
<b>Inter-rack Switch Control Network Commands</b>		
clear controller switch	root-system	E
clear controller switch errdisable	root-system	E
clear controller switch inter-rack	root-system	E
show controllers switch	fabric, root-system	R, R
show controllers switch inter-rack ports	fabric, root-system, admin	R, R, R
show controllers switch inter-rack statistics	fabric, root-system, admin	R, R, R
show controllers switch inter-rack stp	fabric, root-system, admin	R, R, R
show controllers switch inter-rack udld	fabric, root-system, admin	R, R, R
show controllers switch stp location	fabric, root-system	R, R
show controllers switch stp ports	fabric, root-system	R, R
show controllers switch stp region	fabric, root-system	R, R
show controllers switch udld location	fabric, root-system	R, R
show controllers switch udld ports	fabric, root-system	R, R
<b>SONET Controller commands</b>		
ais-shut (SONET)	sonet-sdh	R/W
ais-shut (SONET path)	sonet-sdh	R/W
aps group	sonet-sdh	R/W
aps group (global)	sonet-sdh	R/W
au	sonet-sdh	R/W
authenticate (PGP)	sonet-sdh	R/W
b3-ber-prdi	sonet-sdh	R/W
channel local	sonet-sdh	R/W
channel remote	sonet-sdh	R/W
clear counters sonet	sonet-sdh, basic-services	R/W, R/W
clock source (SONET)	sonet-sdh	R/W
controller (SONET)	interface	R/W
delay clear	sonet-sdh	R/W
delay trigger	sonet-sdh	R/W
down-when-looped	sonet-sdh	R/W
force	sonet-sdh	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
framing (SONET)	sonet-sdh	R/W
line delay clear	sonet-sdh	R/W
line delay trigger	sonet-sdh	R/W
lockout	sonet-sdh	R/W
loopback (SONET)	sonet-sdh	R/W
manual	sonet-sdh	R/W
mode	sonet-sdh	R/W
overhead (SONET)	sonet-sdh	R/W
overhead (SONET path)	sonet-sdh	R/W
path delay clear	sonet-sdh	R/W
path delay trigger	sonet-sdh	R/W
path (SONET)	sonet-sdh	R/W
report (SONET)	sonet-sdh	R/W
report (SONET path)	sonet-sdh	R/W
revert	sonet-sdh	R/W
scrambling disable (SONET path)	sonet-sdh	R/W
show aps	sonet-sdh	R
show aps agents	sonet-sdh	R
show aps group	sonet-sdh	R
show controllers pos	interface	R
show controllers sonet	interface	R
shutdown (SONET)	sonet-sdh	R/W
signalling	sonet-sdh	R/W
sts	sonet-sdh	R/W
timers (APS)	sonet-sdh	R/W
threshold (SONET)	sonet-sdh	R/W
threshold (SONET path)	sonet-sdh	R/W
tug3	sonet-sdh	R/W
uneq-shut (SONET path)	sonet-sdh	R/W
unidirectional	sonet-sdh	R/W
width	sonet-sdh	R/W
<b>T3 or E3 and T1 or E1 Controller Commands</b>		
bert e1	sonet-sdh	R/W
bert e3	sonet-sdh	R/W
bert error	sonet-sdh	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
bert interval	sonet-sdh	R/W
bert pattern	sonet-sdh	R/W
bert t1	sonet-sdh	R/W
bert t3	sonet-sdh	R/W
cablelength	sonet-sdh	R/W
cablelength long	sonet-sdh	R/W
cablelength short	sonet-sdh	R/W
channel-group	sonet-sdh	R/W
clear controller lnm	sonet-sdh, dwdm, interface	R/W/E, R/W, R/W
clock source (T1/E1)	sonet-sdh	R/W
clock source (T3/E3)	sonet-sdh	R/W
controller e1	interface	R/W
controller e3	interface	R/W
controller t1	interface	R/W
controller t3	interface	R/W
delay clear (T1/E1)	sonet-sdh	R/W
delay clear (T3/E3)	sonet-sdh	R/W
delay trigger (T1/E1)	sonet-sdh	R/W
delay trigger (T3/E3)	sonet-sdh	R/W
description (T1/E1)	sonet-sdh, interface	R/W, R/W
description (T3/E3)	sonet-sdh, interface	R/W, R/W
down-when-looped (T1/E1)	sonet-sdh, interface	R/W, R/W
down-when-looped (T3/E3)	sonet-sdh, interface	R/W, R/W
dsu bandwidth	sonet-sdh	R/W
dsu mode	sonet-sdh	R/W
dsu remote	sonet-sdh	R/W
fdl	sonet-sdh	R/W
framing (E1)	sonet-sdh	R/W
framing (E3)	sonet-sdh	R/W
framing (T1)	sonet-sdh	R/W
framing (T3)	sonet-sdh	R/W
hw-module subslot cardtype	root-lr	R/W
linecode	sonet-sdh	R/W
lnm major-warning	sonet-sdh	R/W
lnm minor-warning	sonet-sdh	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
lnm remove	sonet-sdh	R/W
lnm syslog	sonet-sdh	R/W
loopback (T1/E1)	sonet-sdh	R/W
loopback (T3/E3)	sonet-sdh	R/W
mdl	sonet-sdh	R/W
mode	sonet-sdh	R/W
national bits (E1)	sonet-sdh	R/W
national bits (E3)	sonet-sdh	R/W
show controllers e1	interface	R
show controllers e3	interface	R
show controllers lnm	sonet-sdh	R
show controllers t1	interface	R
show controllers t3	interface	R
shutdown (T1/E1)	sonet-sdh	R/W
shutdown (T3/E3)	sonet-sdh	R/W
speed (DS0)	sonet-sdh	R/W
timeslots	sonet-sdh	R/W
yellow	sonet-sdh	R/W
<b>Dense Wavelength Division Multiplexing Commands</b>		
admin-state	dwdm	R/W
controller dwdm	sonet-sdh, dwdm, interface	R/W, R/W, R/W
g709 bdi-to-client-gais	dwdm	R/W
g709 disable	dwdm	R/W
g709 fec	dwdm	R/W
g709 odu overhead tti	dwdm	R/W
g709 odu report disable	dwdm	R/W
g709 otu overhead tti	dwdm	R/W
g709 otu report disable	dwdm	R/W
g709 otu threshold	dwdm	R/W
g709 tim-to-client-gais	dwdm	R/W
g709 tti-processing	dwdm	R/W
laser	dwdm	R/W
log signal	dwdm	R/W
loopback (DWDM)	dwdm	R/W
maintenance disable	dwdm, interface	R, R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
network connection id	dwdm	R/W
dwdmnetwork srlg	dwdm	R/W
pm fec report enable	dwdm	R/W
pm fec threshold	dwdm	R/W
pm optics report enable	dwdm	R/W
pm optics threshold	dwdm	R/W
pm otn report enable	dwdm	R/W
pm otn threshold	dwdm	R/W
proactive	dwdm	R/W
proactive revert threshold	dwdm	R/W
proactive revert window	dwdm	R/W
rx-los-threshold	dwdm	R/W
show controller dwdm	dwdm, interface, sonet-sdh	R, R, R
show controller dwdm pm	dwdm, interface, sonet-sdh	R, R, R
shutdown (DWDM)	dwdm	R/W
transmit-power	dwdm	R/W
wavelength	dwdm	R/W
<b>Internal Ethernet Control Network Commands</b>		
clear controller backplane ethernet clients	system	E
clear controller backplane ethernet statistics	system	E
show controllers backplane ethernet brief	fabric, system	R, R
show controllers backplane ethernet clients	fabric, system	R, R
show controllers backplane ethernet detail	fabric, system	R, R
show controllers backplane ethernet manageability bridge basic	fabric, system	R, R
show controllers backplane ethernet manageability bridge fdb-entry	fabric, system	R, R
show controllers backplane ethernet manageability bridge forwarding	fabric, system	R, R
show controllers backplane ethernet manageability bridge list	fabric, system	R, R
show controllers backplane ethernet manageability bridge port	fabric, system	R, R
show controllers backplane ethernet manageability bridge span-tree	fabric, system	R, R
show controllers backplane ethernet manageability bridge transparent	fabric, system	R, R

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
show controllers backplane ethernet manageability interface attributes	fabric, system	R, R
show controllers backplane ethernet manageability interface list	fabric, system	R, R
show controllers backplane ethernet manageability interface mau-autonet-info	fabric, system	R, R
show controllers backplane ethernet manageability interface mau-info	fabric, system	R, R
show controllers backplane ethernet manageability interface mau-jack-type	fabric, system	R, R
show controllers backplane ethernet manageability interface statistics	fabric, system	R, R
show controllers backplane ethernet multicast groups	fabric, system	R, R
show controllers switch ports	fabric, root-system	R, R
show controllers switch statistics	fabric, root-system	R, R
show spantree	root-system, system	R, R
<b>Global Interface Commands</b>		
bandwidth (global)	interface, basic-services	E, R/W
clear interface	interface, basic-services	E, R/W
controller SYSCLOCK	interface	R/W
dampening	interface	R/W
interface (global)	interface	R/W
mtu	interface	R/W
show im dampening	interface	R
show interfaces	interface	R
shutdown (global)	interface	R/W
<b>Management Ethernet Interface</b>		
duplex (Management Ethernet)	interface	R/W
interface MgmtEth	interface	R/W
mac-address (Management Ethernet)	interface	R/W
speed (Management Ethernet)	interface	R/W
<b>Multilink commands</b>		
bundle	sonet-sdh	R/W
controller MgmtMultilink	interface	R/W
interface Multilink	interface	R/W
multilink	hdlc	R/W
multilink fragment-size	hdlc	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
multilink group	hdlc	R/W
multilink interleave	hdlc	R/W
ppp multilink minimum-active links	ppp	R/W
show controller mgmtmultilink	interface	R
show interfaces multilink	interface	R
<b>Packet-over-SONET/SDH Interface Commands</b>		
crc (POS)	pos-dpt	R/W
encapsulation (POS)	hdlc, interface	R/W, R/W
interface pos	interface	R/W
keepalive (POS)	hdlc	R/W
pos	pos-dpt	R/W
show interfaces pos	interface	R
transmit-delay	pos-dpt	R/W
<b>SRP Commands</b>		
clear srp counters	pos-dpt	R/W
hw-module port	root-lr	R/W
interface srp	interface	R/W
show controllers srp	interface	R
show srp	pos-dpt	R
srp ips delay trigger-keepalive	pos-dpt	R/W
srp ips request forced-switch	pos-dpt	R/W
srp ips timer	pos-dpt	R/W
srp ips wtr-timer	pos-dpt	R/W
srp mac-count	pos-dpt	R/W
srp mac-reject	pos-dpt	R/W
srp manual-switch	pos-dpt	R/W
srp shutdown	pos-dpt	R/W
srp topology-timer	pos-dpt	R/W
<b>Ethernet Interface Commands</b>		
action capabilities-conflict	ethernet-services	R/W
action critical-event	ethernet-services	R/W
action discovery-timeout	ethernet-services	R/W
action dying-gasp	ethernet-services	R/W
action link-fault	ethernet-services	R/W
action session-up	ethernet-services	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
action session-down	ethernet-services	R/W
action remote-loopback	ethernet-services	R/W
action wiring-conflict	ethernet-services	R/W
aggregate	ethernet-services	R/W
buckets archive	ethernet-services	R/W
buckets size	ethernet-services	R/W
clear ethernet sla statistics	ethernet-services	R/W
clear lldp	ethernet-services	R/W
cos (SLA)	ethernet-services	R/W
carrier-delay	interface	R/W
clear mac-accounting (Ethernet)	interface, basic-services	R/W, R/W
clear ethernet oam statistics	ethernet-services	E
connection timeout	ethernet-services	R/W
continuity-check archive hold-time	ethernet-services	R/W
continuity-check loss auto-traceroute	ethernet-services	R/W
continuity-check interval	ethernet-services	R/W
duplex full (Fast Ethernet)	interface	R/W
duplex half (Fast Ethernet)	interface	R/W
domain	ethernet-services	R/W
ethernet oam	ethernet-services	R/W
ethernet cfm mep	ethernet-services	R/W
ethernet sla	ethernet-services	R/W
ethernet cfm	ethernet-services	R/W
ethernet oam loopback	ethernet-services	E
ethernet oam profile	ethernet-services	R/W
flow-control	interface	R/W
frame window	ethernet-services	R/W
frame threshold	ethernet-services	R/W
frame-period window	ethernet-services	R/W
frame-period threshold	ethernet-services	R/W
frame-seconds window	ethernet-services	R/W
frame-seconds threshold	ethernet-services	R/W
interface (Ethernet)	interface	R/W
link-monitor	ethernet-services	R/W
lldp	ethernet-services	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
lldp (interface)	interface, ethernet-services	R/W, R/W
lldp holdtime	ethernet-services	R/W
lldp reinit	ethernet-services	R/W
lldp timer	ethernet-services	R/W
lldp tlv-select disable	ethernet-services	R/W
log	ethernet-services	R/W
l2protocol (Ethernet)	l2vpn	R/W
loopback (Ethernet)	interface	R/W
mac-accounting	interface	R/W
maximum-meps	ethernet-services	R/W
mac-address (Ethernet)	interface	R/W
mep crosscheck	ethernet-services	R/W
mib-retrieval	ethernet-services	R/W
mip auto-create	ethernet-services	R/W
monitoring disable	ethernet-services	R/W
mode (Ethernet OAM)	ethernet-services	R/W
negotiation auto	interface	R/W
packet-gap non-standard	interface	R/W
profile (CFM)	ethernet-services	R/W
packet size	ethernet-services	R/W
priority (SLA)	ethernet-services	R/W
probe	ethernet-services	R/W
profile (SLA)	ethernet-services	R/W
receive disable	interface, ethernet-services	R/W, R/W
remote-loopback	ethernet-services	R/W
require-remote	ethernet-services	R/W
service	ethernet-services	R/W
schedule (SLA)	ethernet-services	R/W
send (SLA)	ethernet-services	R/W
show ethernet sla configuration-errors	ethernet-services	R/W
show ethernet sla operations	ethernet-services	R/W
show ethernet sla statistics	ethernet-services	R/W
sla operation	ethernet-services	R/W
statistics measure	ethernet-services	R/W
show controllers (Ethernet)	interface	R

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
show ethernet oam configuration	ethernet-services	R
show ethernet oam discovery	ethernet-services	R
show ethernet oam statistics	ethernet-services	R
show ethernet oam interfaces	ethernet-services	R
show ethernet cfm local maintenance-points	interface	R/W
show ethernet cfm configuration-errors	interface	R/W
show ethernet cfm local meps	interface	R/W
show ethernet cfm peer meps	interface	R/W
show lldp	ethernet-services	R
show lldp entry	ethernet-services	R
show lldp errors	ethernet-services	R
show lldp interface	ethernet-services	R
show lldp neighbors	ethernet-services	R
show lldp traffic	ethernet-services	R
symbol-period window	ethernet-services	R/W
symbol-period threshold	ethernet-services	R/W
show mac-accounting (Ethernet)	interface	R
speed (Fast Ethernet)	interface	R/W
traceroute cache	ethernet-services	R/W
transmit disable	interface, ethernet-services	R/W, R/W
transport-mode	interface	R/W
<b>Ethernet OAM Commands</b>		
action capabilities-conflict	ethernet-services	R/W
action critical-event	ethernet-services	R/W
action discovery-timeout	ethernet-services	R/W
action dying-gasp	ethernet-services	R/W
action high-threshold	ethernet-services	R/W
action link-fault	ethernet-services	R/W
action remote-loopback	ethernet-services	R/W
action session-down	ethernet-services	R/W
action session-up	ethernet-services	R/W
action uni-directional link-fault	ethernet-services	R/W
action wiring-conflict	ethernet-services	R/W
aggregate	ethernet-services	R/W
ais transmission	ethernet-services	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
ais transmission up	ethernet-services	R/W
buckets archive	ethernet-services	R/W
buckets size	ethernet-services	R/W
clear ethernet cfm ccm-learning-database location	ethernet-services	E
clear ethernet cfm interface statistics	ethernet-services	E
clear ethernet cfm local meps	ethernet-services	E
clear ethernet cfm peer meps	ethernet-services	E
clear ethernet cfm traceroute-cache	ethernet-services	E
clear ethernet lmi interfaces	ethernet-services	R/W
clear ethernet oam statistics	interface, basic-services	R/W, R/W
clear ethernet sla statistics all	ethernet-services	E
clear ethernet sla statistics on-demand	ethernet-services	E
clear ethernet sla statistics profile	ethernet-services	E
connection timeout	ethernet-services	R/W
continuity-check archive hold-time	ethernet-services	R/W
continuity-check interval	ethernet-services	R/W
continuity-check loss auto-traceroute	ethernet-services	R/W
cos (CFM)	ethernet-services	R/W
debug ethernet cfm packets	ethernet-services	R
debug ethernet cfm protocol-state	ethernet-services	R
domain	ethernet-services	R/W
efd	ethernet-services	R/W
ethernet cfm (global)	ethernet-services	R/W
ethernet cfm (interface)	ethernet-services	R/W
ethernet cfm mep	ethernet-services	R/W
ethernet lmi	ethernet-services	R/W
ethernet oam	ethernet-services	R/W
ethernet oam loopback	ethernet-services	E
ethernet oam profile	ethernet-services	R/W
ethernet sla	ethernet-services	R/W
ethernet sla on-demand operation type cfm-delay-measurement probe	ethernet-services	E
ethernet sla on-demand operation type cfm-loopback probe	ethernet-services	E
ethernet uni id	interface	R/W
extension remote-uni disable	ethernet-services	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
frame-period threshold	ethernet-services	R/W
frame-period window	ethernet-services	R/W
frame-seconds threshold	ethernet-services	R/W
frame-seconds window	ethernet-services	R/W
frame threshold	ethernet-services	R/W
frame window	ethernet-services	R/W
hello-interval	ethernet-services	R/W
link-monitor	ethernet-services	R/W
log disable	ethernet-services	R/W
polling-verification-timer	ethernet-services	R/W
uni-directional link-fault detection	ethernet-services	R/W
show ethernet cfm ccm-learning-database	ethernet-services	R
show ethernet cfm interfaces statistics	ethernet-services	R
show ethernet cfm local maintenance-points	ethernet-services	R
show ethernet cfm local meps	ethernet-services	R
show ethernet cfm traceroute-cache	ethernet-services	R
show ethernet lmi interfaces	ethernet-services	R
status-counter	ethernet-services	R/W
<b>802.1Q VLAN Subinterface Commands</b>		
dot1q native vlan	vlan	R/W
dot1q tunneling ethertype	vlan	R/W
dot1q vlan	vlan	R/W
interface (VLAN)	vlan	R/W
l2protocol (VLAN)	l2vpn	R/W
show vlan interface	vlan	R
show vlan tags	vlan	R
show vlan trunks	vlan	R
<b>Serial Interface Commands</b>		
clear iphc ipv4	ip-services	R/W
description (IPHC Profile)	ip-services	R/W
encapsulation (serial)	hdlc, interface	R/W, R/W
feedback disable	ip-services	R/W
fragment end-to-end	interface	R/W
invert	hdlc	R/W
iphc tcp connections	ip-services	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
ipv4 iphc profile	ip-services, ipv4	R/W, R/W
iphc non-tcp connections	ip-services	R/W
iphc profile	ip-services	R/W
keepalive (serial)	hdlc	R/W
max-header	ip-services	R/W
non-tcp compression	ip-services	R/W
non-tcp context absolute	ip-services	R/W
pvc (serial)	fr	R/W
rtp	ip-services	R/W
refresh max-period	ip-services	R/W
refresh max-time	ip-services	R/W
refresh rtp	ip-services	R/W
scramble	hdlc	R/W
show iphc idb	ip-services	R
show iphc ipv4 rtp	ip-services	R
show iphc ipv4 tcp	ip-services	R
show iphc platform trace	ip-services	R
show iphc profile	ip-services	R
show iphc trace all	ip-services	R
show tech-support iphc	ipv4, basic-services	R, R
serial	hdlc	R/W
transmit-delay (serial)	hdlc	R/W
tcp compression	ip-services	R/W
tcp context absolute	ip-services	R/W
<b>ATM Commands</b>		
atm address-registration	atm	R/W
atm ilmi-config disable	atm	R/W
atm ilmi-keepalive	atm	R/W
atm ilmi-trap disable	atm	R/W
atm maxvpi-bits 12	atm	R/W
atm mcpt-timers	atm	R/W
atm oam flush	atm	R/W
cell-packing	atm	R/W
class-int	atm	R/W
class-vc	atm	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
encapsulation (ATM)	atm	R/W
f4oam disable	atm	R/W
interface atm	interface	R/W
l2transport (ATM)	l2vpn	R/W
oam ais-rdi	atm	R/W
oam-pvc manage	atm	R/W
oam retry	atm	R/W
ping atm interface atm	basic-services, atm	E, R
pvc (ATM)	atm	R/W
pvp (ATM)	atm	R/W
shape	atm	R/W
show atm cell-packing	atm	R
show atm class-link	atm	R
show atm ilmi-status	atm	R
show atm interface atm	atm	R
show atm pvc	atm	R
show atm pvp	atm	R
show atm vc-class	atm	R
show atm vp-tunnel	atm	R
show controllers atm	interface	R
shutdown (ATM)	interface	R/W
vc-class atm	atm	R/W
vp-tunnel	atm	R/W
<b>Null Interface Commands</b>		
interface null 0	interface	R/W
show controllers null interface	interface, sysmgr	R, R
show interfaces null0	interface	R
<b>Link Bundling Commands</b>		
backbone interface	config-services	R/W
bundle-hash	bundle	R
bundle-id	bundle	R/W
bundle load-balancing hash	bundle	R/W
bundle load-balancing hash (EFP)	vlan	R/W
bundle maximum-active links	bundle	R/W
bundle minimum-active bandwidth	bundle	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
bundle minimum-active links	bundle	R/W
bundle port-priority	bundle	R/W
clear lacp counters	bundle, basic-services	E, R/W
interface (bundle)	bundle	R/W
interface Bundle-POS	bundle	R/W
isolation recovery-delay	config-services	R/W
lacp cisco enable	bundle	R/W
lacp period short	bundle	R/W
lacp system-priority	bundle	R/W
member neighbor	config-services	R/W
redundancy iccp group	config-services	R/W
redundancy one-way	l2vpn	R/W
show bundle	bundle	R
show bundle brief	bundle	R
show bundle load-balancing brief	bundle	R
show iccp group	mpls-ldp	R
show lacp bundle	bundle	R
show lacp counters	bundle	R
show lacp port	bundle	R
show lacp system-id	bundle	R
<b>PPP Commands</b>		
encapsulation ppp	ppp, interface	R/W, R/W
redundancy	config-services	R/W
multi-router aps	config-services	R/W
ppp authentication	ppp, aaa	R/W, R/W
ppp chap password	ppp, aaa	R/W, R/W
ppp chap refuse	ppp, aaa	R/W, R/W
ppp max-bad-auth	ppp, aaa	R/W, R/W
ppp max-configure	ppp	R/W
ppp max-failure	ppp	R/W
ppp max-terminate	ppp	R/W
ppp ms-chap password	ppp	R/W
ppp ms-chap refuse	ppp	R/W
ppp pap refuse	ppp, aaa	R/W, R/W
ppp pap sent-username password	ppp, aaa	R/W, R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
ppp timeout authentication	ppp	R/W
ppp timeout retry	ppp	R/W
show ppp interfaces	ppp	R
<b>Bidirectional Forwarding Detection Commands</b>		
address-family ipv4 unicast (BFD)	static	R/W
bfd	bgp, ospf, isis, mpls?-te	R/W, R/W, R/W, R/W
bfd address-family ipv4 destination	bundle	R/W
bfd address-family ipv4 fast-detect	bundle	R/W
bfd address-family ipv4 minimum-interval	bundle	R/W
bfd address-family ipv4 multiplier	bundle	R/W
bfd address-family ipv4 timers	bundle	R/W
bfd fast-detect	bgp, ospf, isis, mpls-te, multicast	R/W, R/W, R/W, R/W, R/W
bfd minimum-interval	bgp	R/W
bfd multiplier	bgp	R/W
clear bfd counters	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
dampening (BFD)	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
echo disable	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
echo ipv4 source	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
echo latency detect	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
echo startup validate	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
interface (BFD)	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
ipv6 checksum	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
show bfd	bgp, ospf, isis, mpls-te	R, R, R, R
show bfd client	bgp, ospf, isis, mpls-te	R, R, R, R
show bfd counters	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
show bfd mib session	bgp, ospf, isis, mpls-te	R, R, R, R
show bfd relation	bgp, ospf, isis, mpls-te	R, R, R, R

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
show bfd session	bgp, ospf, isis, mpls-te	R/W, R/W, R/W, R/W
<b>Frame Relay Service Configuration</b>		
clear frame-relay multilink	interface, basic-services	E, R/W
clear frame-relay lmi	interface, basic-services	E, R/W
encap (PVC)	fr	R/W
encapsulation frame-relay	interface, fr	R/W
encapsulation (serial)	hdlc, interface	R/W, R/W
fragment end-to-end	interface	R/W
frame-relay intf-type	fr	R/W
frame-relay lmi disable	fr	R/W
frame-relay lmi-n391dte	fr	R/W
frame-relay lmi-n392dce	fr	R/W
frame-relay lmi-n392dte	fr	R/W
frame-relay lmi-n393dce	fr	R/W
frame-relay lmi-n393dte	fr	R/W
frame-relay lmi-t391dte	fr	R/W
frame-relay lmi-t392dce	fr	R/W
frame-relay lmi-type	fr	R/W
frame-relay multilink ack	fr	R/W
frame-relay multilink bandwidth-class	fr	R/W
frame-relay multilink bid	fr	R/W
frame-relay multilink hello	fr	R/W
frame-relay multilink lid	fr	R/W
frame-relay multilink retry	fr	R/W
pvc (frame relay)	fr	R/W
show frame-relay lmi	fr	R
show frame-relay lmi-info	fr	R
show frame-relay multilink	fr	R
show frame-relay pvc	fr	R
show frame-relay vcm-info	fr	R
show frame-relay vcm-info interface	fr	R
show interfaces (frame-relay)	fr	R
snmp-server traps frame-relay pvc	snmp, fr	R/W, R/W
<b>Diagnostics Commands</b>		
diagnostic bootup level	diag	R/W

**Table 3** Task IDs for the Cisco IOS XR Interface and Hardware Component Commands

Cisco IOS XR Interface and Hardware Component Commands	Task IDs	Operations
diagnostic load	diag	E
diagnostic monitor	diag	R/W
diagnostic monitor interval	diag	R/W
diagnostic monitor syslog	diag	R/W
diagnostic monitor threshold	diag	R/W
diagnostic ondemand action-on-failure	diag	R/W
diagnostic ondemand iterations	diag	R/W
diagnostic schedule	diag	R/W
diagnostic start	diag	E
diagnostic stop	diag	E
diagnostic unload	diag	E
ping (administration EXEC)	diag	E
show diag	sysmgr	R
show diagnostic bootup level	diag	R
show diagnostic content	diag	R
show diagnostic ondemand settings	diag	R
show diagnostic result	diag	R
show diagnostic schedule	diag	R
show diagnostic status	diag	R
show hw-module subslot brief	root-lr	R
<b>Integrated Routing and Bridging Commands</b>		
interface bvi	interface	R/W
routed interface bvi	l2vpn	R/W
show interfaces bvi	interface	R

## Task IDs for IP Addresses and Services Commands

Table 4 is a task ID reference for the commands in the *Cisco IOS XR IP Addresses and Services* books. Commands are listed in alphabetic order within each module.

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
<b>Access List Commands</b>		
clear access-list ipv4	basic-services, acl, bgp	R/W, R/W, R/W/E

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
clear access-list ipv6	basic-services, acl, network	R/W, R/W, R/W
copy access-list ipv4	acl, filesystem	R/W, E
copy access-list ipv6	acl, filesystem	R/W, E
deny (IPv4)	acl, ipv4	R/W, R/W
deny (IPv6)	acl	R/W
ipv4 access-group	acl, network	R/W, R/W
ipv4 access-list	acl	R/W
ipv4 access-list log-update rate	ipv4, acl	R/W, R/W
ipv4 access-list log-update threshold	basic-services, acl	R/W, R/W
ipv6 access-group	acl, ipv6	R/W, R/W,
ipv6 access-list	acl, ipv6	R/W, R/W
ipv6 access-list log-update rate	ipv6, acl	R/W, R/W
ipv6 access-list log-update threshold	acl, ipv6	R/W, R/W
ipv6 access-list maximum ace threshold	ipv6, acl	R/W, R/W
ipv6 access-list maximum acl threshold	ipv6, acl	R/W, R/W
permit (IPv4)	acl	R/W
permit (IPv6)	acl	R/W
remark (IPv4)	ipv4, acl	R/W
remark (IPv6)	acl	R/W
resequence access-list ipv4	acl	R/W
resequence access-list ipv6	acl	R/W
show access-lists afi-all	acl	R
show access-lists ipv4	acl	R
show access-lists ipv4 standby	acl	R
show access-lists ipv6	acl	R
show access-lists ipv6 standby	acl	R
<b>ARP Commands</b>		
arp	cef	R/W
arp dagr	cef	W
arp purge-delay	cef	R/W
arp timeout	cef	R/W,
clear arp-cache	cef	E
peer (DAGR)	cef	W
priority-timeout	cef	W
proxy-arp	cef	R/W

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
route distance	cef	W
route metric	cef	W
show arp	cef	R
show arp dagr	cef	R/W
show arp traffic	cef	R
timers (DAGR)	cef	W
<b>Cisco Express Forwarding Commands</b>		
cef load-balancing fields	ipv4	R/W
clear adjacency statistics	basic-services, cef	R/W, R/W
clear cef ipv4 drops	basic-services, cef	R/W, R/W
clear cef ipv4 exceptions	basic-services, cef	R/W, R/W
clear cef ipv4 interface bgp-policy-statistics	basic-services, cef	R/W, R/W
clear cef ipv4 interface rpf-statistics	cef	R
clear cef ipv6 drops	basic-services, cef	R/W, R/W
clear cef ipv6 exceptions	basic-services, cef	R/W, R/W
clear cef ipv6 interface bgp-policy-statistics	basic-services, cef	R/W, R/W
clear cef ipv6 interface rpf-statistics	cef	R
ipv4 bgp policy accounting	network	R/W
ipv4 bgp policy propagation	ipv4, network	R/W, R/W
ipv4 verify unicast source reachable-via	network	R/W
ipv6 bgp policy accounting	network	R/W
ipv6 verify unicast source reachable-via	network, ipv6	R/W, R/W
rp mgmtethernet forwarding	cef	R/W
show adjacency	cef	R
show cef	cef	R
show cef bgp-attribute	cef	R
show cef external	cef	R
show cef ipv4	cef	R
show cef ipv4 adjacency	cef	R
show cef ipv4 adjacency hardware	cef	R
show cef ipv4 drops	cef	R
show cef ipv4 exact-route	cef	R
show cef ipv4 exceptions	cef	R
show cef ipv4 hardware	cef	R
show cef ipv4 interface	cef	R
show cef ipv4 interface bgp-policy-statistics	cef	R

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
show cef ipv4 non-recursive	cef	R
show cef ipv4 resource	cef	R
show cef ipv4 summary	cef	R
show cef ipv4 unresolved	cef	R
show cef ipv6	cef	R
show cef ipv6 adjacency	cef	
show cef ipv6 adjacency hardware	cef	R
show cef ipv6 drops	cef	R
show cef ipv6 exact-route	cef	R
show cef ipv6 exceptions	cef	R
show cef ipv6 hardware	cef	R
show cef ipv6 interface bgp-policy-statistics	cef	R
show cef ipv6 interface rpf-statistics	cef	R
show cef ipv6 non-recursive	cef	R
show cef ipv6 resource	cef	R
show cef ipv6 summary	cef	R
show cef ipv6 unresolved	cef	R
show cef mpls adjacency	cef	R
show cef mpls adjacency hardware	cef	R
show cef mpls interface	cef	R
show cef mpls unresolved	cef	R
show cef recursive-nexthop	cef	R
show cef summary	cef	R
show cef vrf	cef	R
<b>DHCP Commands</b>		
allow-hint	ip-services	R/W
broadcast-flag policy check	ip-services	R/W
clear dhcp ipv4 snoop binding	ip-services	R/W
clear dhcp ipv6 binding	ip-services	E
database	ip-services	R/W
destination (DHCP IPv6)	ip-services	R/W
dhcp ipv4	ip-services	R/W
dhcp ipv6	ip-services	R/W
distance	ip-services	R/W
domain-name (DHCP ipv6 pool)	ip-services	R/W
dns-server	ip-services	R/W

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
duid	ip-services	R/W
giaddr policy	ip-services	R/W
helper-address	ip-services	R/W
interface (DHCP)	ip-services	R/W
interface (relay profile)	ip-services	R/W
pd (prefix-delegation - DHCP IPv6 interface)	ip-services	R/W
pd (prefix-delegation - DHCP IPv6 pool)	ip-services	R/W
pool (dhcp ipv6)	ip-services	R/W
preference	ip-services	R/W
profile relay	ip-services	R/W
rapid-commit	ip-services	R/W
relay information check	ip-services, basic-services	R/W, R/W
relay information option	ip-services, basic-services	R/W, R/W
relay information option allow-untrusted	ip-services, basic-services	R/W, R/W
relay information policy	ip-services, basic-services	R/W, R/W
show dhcp ipv4 relay profile	ip-services	R
show dhcp ipv4 relay profile name	ip-services	R
show dhcp ipv4 relay statistics	ip-services	R
show dhcpipv4 snoop binding	ip-services	R
show dhcp ipv4 snoop statistics	ip-services	R
show dhcp ipv6	ip-services	R
show dhcp ipv6 binding	ip-services	R
show dhcp ipv6 database	ip-services	R
show dhcp ipv6 interface	ip-services	R
show dhcp ipv6 pool	ip-services	R
show dhcp relay	ip-services	R
sip address	ip-services	R/W
sip domain-name	ip-services	R/W
vrf (relay profile)	ip-services	R/W
<b>Host Services and Applications Commands</b>		
cinetd rate-limit	ip-services	R/W
clear host	ip-services	E
domain ipv4 host	ip-services	R/W, R/W
domain ipv6 host	ip-services	R/W
domain list	ip-services	R/W
domain lookup disable	ip-services	R/W

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
domain name (global)	ip-services	R/W
domain name-server	ip-services	R/W
ftp client anonymous-password	ip-services	R/W
ftp client passive	ip-services	R/W
ftp client password	ip-services	R/W
ftp client username	ip-services	R/W
ftp client anonymous-password	ip-services	R/W
ftp client source-interface	ip-services	R/W
ping (network)	basic-services	R/W/E
rcp client source-interface	ip-services	R/W
rcp client username	ip-services	R/W
show cinetd services	ip-services	R
show hosts	ip-services	R
telnet	basic-services	R/W/E
telnet client source-interface	ipv4, ip-services	R/W, R/W
telnet dscp	ipv4, ip-services	R/W, R/W
telnet server	ipv4, ip-services	R/W, R/W
telnet transparent	tty-access	R/W
tftp client source-interface	ip-services	R/W
tftp server	ipv4, ip-services	R/W, R/W
traceroute	basic-services	R/W/E
<b>HSRP Commands</b>		
hsrp authentication	hsrp	R/W
hsrp bfd fast-detect	hsrp	R/W
hsrp bfd minimum-interval	hsrp	R/W
hsrp bfd multiplier	hsrp	R/W
hsrp delay	hsrp	R/W
hsrp ipv4	hsrp	R/W
hsrp mac-address	hsrp	R/W
hsrp preempt	hsrp	R/W
hsrp priority	hsrp	R/W
hsrp redirects	hsrp	R/W
hsrp timers	hsrp	R/W
hsrp track	hsrp	R/W
hsrp use-bia	hsrp	R/W
interface (HSRP)	hsrp	R/W

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
router hsrp	hsrp	R/W
show hsrp	hsrp	R
<b>LPTS Commands</b>		
clear lpts ifib statistics	lpts	E
clear lpts pifib hardware statistics	lpts	E
clear lpts pifib statistics	lpts	E
flow (LPTS)	config-services	R/W
lpts pifib hardware police	lpts, config-services	R/W, R/W
show lpts bindings	lpts	R
show lpts clients	lpts	R
show lpts flows	lpts	R
show lpts ifib	lpts	R
show lpts ifib slices	lpts	R
show lpts ifib statistics	lpts	R
show lpts ifib times	lpts	R
show lpts mpa groups	lpts, network	R, R
show lpts pifib	lpts	R
show lpts pifib hardware entry	lpts	R
show lpts pifib hardware usage	lpts	R
show lpts pifib hardware context	lpts	R
show lpts pifib hardware police	lpts	R
show lpts pifib statistics	lpts	R
show lpts port-arbitrator-statistics	lpts	R
show lpts vrf	lpts	R
<b>Network Stack IPv4 and IPv6 Commands</b>		
clear ipv6 duplicate address	network, ipv6	R/W, E
clear ipv6 neighbors	network, ipv6	R/W, E
icmp ipv4 rate-limit unreachable	network, ipv4	R/W, R/W
icmp source	network	R, W
ipv4 address (network)	network, ipv4	R/W, R/W
ipv4 assembler max-packets	network, ipv4	R/W, R/W
ipv4 assembler timeout	network, ipv4	R/W, R/W
ipv6 nd scavenge-timeout	ipv6	R/W
ipv4 conflict-policy	ipv4, ip-services	R/W, R/W
ipv4 directed-broadcast	network, ipv4	R/W, R/W
ipv4 helper-address	network, ipv4	R/W, R/W

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
ipv4 mask-reply	network, ipv4	R/W, R/W
1pv4 mtu	network, ipv4	R/W, R/W
ipv4 redirects	network, ipv4	R/W, R/W
ipv4 source-route	network, ipv4	R/W, R/W
ipv4 unnumbered (point-to-point)	network, ipv4	R/W, R/W
ipv4 unreachable disable	network, ipv4	R/W, R/W
ipv4 virtual address	ipv4, network	R/W, R/W
ipv6 address	network, ipv6	R/W, R/W
ipv6 address link-local	network, ipv6	R/W, R/W
ipv6 conflict-policy	ipv6, ip-services	R/W, R/W
ipv6 enable	network, ipv6	R/W, R/W
ipv6 hop-limit	network	R/W
ipv6 icmp error-interval	network, ipv6	R/W, R/W
ipv6 mtu	network, ipv6	R/W, R/W
ipv6 nd dad attempts	ipv6	R
ipv6 nd managed-config-flag	network, ipv6	R/W, R/W
ipv6 nd ns-interval	network, ipv6	R/W, R/W
ipv6 nd other-config-flag	network, ipv6	R/W, R/W
ipv6 nd prefix	network, ipv6	R/W, R/W
ipv6 nd ra-interval	network, ipv6	R/W, R/W
ipv6 nd ra-lifetime	network, ipv6	R/W, R/W
ipv6 nd reachable-time	network, ipv6	R/W, R/W
ipv6 nd redirects	network, ipv6	R/W, R/W
ipv6 nd scavenge-timeout	network, ipv6	R/W, R/W
ipv6 nd suppress-ra	network, ipv6	R/W, R/W
ipv6 neighbor	network, ipv6	R/W, R/W
ipv6 unreachable disable	network, ipv6	R/W, R/W
local pool	network, ipv6, ipv4	R/W, R/W, R/W
show arm conflicts	network	R
show arm database	network	R
show arm router-ids	network	R
show arm registrations producers	network	R
show arm summary	network	R
show arm vrf-summary	network	R
show clns statistics	isis	R

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
show ipv4 interface	ipv4, network	R, R
show local pool	ipv4, network	R, R
show ipv4 traffic	ipv4, network	R, R
show ipv6 interface	ipv6	R
show ipv6 neighbors	ipv6	R
show ipv6 neighbors summary	ipv6	R
show mpa client	network	R
show mpa groups	network	R
show mpa ipv4	network	R
show mpa ipv6	network	R
show ipv6 traffic	ipv6, network	R, R
show local pool	ipv4, network	R, R
show vrf	network	R,W
vrf	ip-services	R,W
vrf(address-family)	ip-services	R,W
vrf(description)	ip-services	R,W
vrf (mhost)	ip-services	R,W
<b>Prefix List Commands</b>		
clear prefix-list ipv4	acl	R/W
clear prefix-list ipv6	acl	R/W
copy prefix-list ipv4	acl, filesystem	R/W, E
copy prefix-list ipv6	acl, filesystem	R/W, E
deny (prefix-list)	acl	R/W
ipv4 prefix-list	acl, ipv4	R/W, R/W
ipv6 prefix-list	acl, ipv6	R/W, R/W
permit (prefix-list)	acl	R/W
remark (prefix-list)	acl	R/W
resequence prefix-list ipv4	acl	R/W
resequence prefix-list ipv6	acl	R/W
show prefix-list	acl	R
show prefix-list afi-all	acl	R
show prefix-list ipv4	acl	R
show prefix-list ipv4 standby	acl	R
show prefix-list ipv6	acl	R
<b>Transport Stack Commands</b>		
clear nsr ncd client	transport	E

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
clear nsr ncd queue	transport	E
clear raw statistics pcb	transport	E
clear tcp nsr client	transport	E
clear tcp nsr pcb	transport	E
clear tcp nsr session-set	transport	E
clear tcp nsr statistics client	transport	E
clear tcp nsr statistics pcb	transport	E
clear tcp nsr statistics session-set	transport	E
clear tcp nsr statistics summary	transport	E
clear tcp pcb	transport	E
clear tcp statistics	transport	E
clear udp statistics	transport	E
forward-protocol udp	transport	R/W
nsr process-failures switchover	transport	R/W
service tcp-small-servers	ipv4, ip-services	R/W, R/W
service udp-small-servers	ipv6, ip-services	R/W, R/W
show nsr ncd client	transport	R
show nsr ncd queue	transport	R
show raw brief	transport	R
show raw detail pcb	transport	R
show raw statistics pcb	transport	R
show raw extended-filters	transport	R
show sctp association brief	transport	R
show sctp association detail	transport	R
show sctp pcb brief	transport	R
show sctp pcb detail	transport	R
show sctp statistics	transport	R
show sctp summary	transport	R
show tcp brief	transport	R
show tcp detail	transport	R
show tcp extended-filters	transport	R
show tcp nsr brief	transport	R
show tcp nsr client brief	transport	R
show tcp nsr detail client	transport	R
show tcp nsr detail pcb	transport	R
show tcp nsr detail session-set	transport	R

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
show tcp nsr session-set brief	transport	R
show tcp statistics	transport	R
show tcp nsr statistics client	transport	R
show tcp nsr statistics pcb	transport	R
show tcp nsr statistics session-set	transport	R
show tcp nsr statistics summary	transport	R
show udp brief	transport	R
show udp detail pcb	transport	R
show udp extended-filters	transport	R
show udp statistics	transport	R
tcp mss	transport	R/W
tcp path-mtu-discovery	transport	R/W
tcp selective-ack	transport	R/W
tcp synwait-time	transport	R/W
tcp timestamp	transport	R/W
tcp window-size	transport	R/W
<b>VRRP Commands</b>		
accept-mode	vrrp	R/W
address-family	vrrp	R/W
address	vrrp	R/W
address global	vrrp	R/W
address linklocal	vrrp	R/W
address secondary	vrrp	R/W
bfd minimum-interval	vrrp	R/W
bfd multiplier	vrrp	R/W
clear vrrp statistics	vrrp	R/W
delay	vrrp	R/W
interface (VRRP)	vrrp	R/W
message state disable	vrrp	R/W
router vrrp	vrrp	R/W
show vrrp	vrrp	R
snmp-server traps vrrp events	snmp	R/W
vrrp	vrrp	R/W
vrrp assume-ownership disable	vrrp	R/W
vrrp bfd fast-detect	vrrp	R/W
vrrp bfd minimum-interval	vrrp	R/W

**Table 4** Task IDs for the Cisco IOS XR IP Addresses and Services Commands (continued)

Cisco IOS XR IP Addresses and Services Commands	Task IDs	Operations
vrrp bfd multiplier	vrrp	R/W
vrrp delay	vrrp	R/W
vrrp ipv4	vrrp	R/W
vrrp preempt	vrrp	R/W
vrrp priority	vrrp	R/W
vrrp text-authentication	vrrp	R/W
vrrp timer	vrrp	R/W
vrrp track interface	vrrp	R/W

## Task IDs for Modular Quality of Service Commands

Table 5 is a task ID reference for the commands in the *Cisco IOS XR Modular Quality of Service Commands* books. Commands are listed in alphabetic order within each module.

**Table 5** Task IDs for the Cisco IOS XR Modular Quality of Service Commands

Cisco IOS XR Modular Quality of Service Commands	Task IDs	Operations
<b>Quality of Service Commands</b>		
ancp	ancp	R/W
ancp an-port circuit-id	ancp	R/W
ancp neighbor	ancp	R/W
ancp rate-adjustment	ancp	R/W
ancp server sender-name	ancp	R/W
bandwidth (QoS)	qos	R/W
bandwidth remaining	qos	R/W
child-conform-aware	qos	R/W
class (policy-map)	qos	R/W
class-map	qos	R/W
clear ancp neighbor	ancp	R/W
clear ancp summary statistics	ancp	R/W
clear qos counters (shared-policy-instance)	qos	R/W
clear qos counters	qos	R/W
clear qos counters interface	qos	R/W
clear ancp an-port	ancp	R/W
compress header ip	qos	R/W
conform-action	qos	R/W
conform-color	qos	R/W

**Table 5** Task IDs for the Cisco IOS XR Modular Quality of Service Commands (continued)

Cisco IOS XR Modular Quality of Service Commands	Task IDs	Operations
end-class-map	qos	R/W
encap-sequence	qos	R/W
end-policy-map	qos	R/W
exceed-action	qos	R/W
exceed-color	qos	R/W
hw-module mrq-polling	drivers, root-lr	R/W, R/W
hw-module qos acc-l2-with-additional	qos, root-lr	R/W, R/W
hw-module qos acl-deny enable	qos-ea	W
hw-module queue-defrag location	sysmgr, execute	root-lr, read
hw-module qos account layer2 encapsulation	qos, root-lr	R/W, R/W
hw-module qos if-ref-bw	qos, root-lr	R/W, R/W
hw-module qos input police granularity location	root-lr	R/W
hw-module qos multicast	qos, root-lr	R/W, R/W
hw-module qos multicast priorityq disable	qos, root-lr	R/W, R/W
hw-module qos output police granularity location	root-lr	R/W
hw-module qos output shape granularity location	root-lr	R/W
hw-module qos pol-gran location	qos, root-lr	R/W, R/W
hw-module qos queue-auto-defrag	qos, root-lr	R/W, R/W
hw-module qos queue-auto-defrag disable location	qos, root-lr	R/W, R/W
hw-module sanity	drivers, root-lr	R/W, R/W
match access-group	qos	R/W
match atm	qos	R/W
match cos	qos	R/W
match dei	qos	R/W
match destination-address	qos	R/W
match discard-class	qos	R/W
match dscp	qos	R/W
match ethertype	qos	R/W
match fr-de	qos	R/W
match frame-relay dlci	qos	R/W
match mpls experimental topmost	qos	R/W
match precedence	qos	R/W
match protocol	qos	R/W
match qos-group	qos	R/W
match source-address	qos	R/W
match vlan	qos	R/W

**Table 5** Task IDs for the Cisco IOS XR Modular Quality of Service Commands (continued)

Cisco IOS XR Modular Quality of Service Commands	Task IDs	Operations
match vpls	qos	R/W
police rate	qos	R/W
policy-map	qos	R/W
priority (QoS)	qos	R/W
queue-limit	qos	R/W
random-detect	qos	R/W
random-detect cos	qos	R/W
random-detect discard-class	qos	R/W
random-detect dscp	qos	R/W
random-detect exp	qos	R/W
random-detect precedence	qos	R/W
service-policy (interface)	qos	R/W
service-policy (policy map class)	qos	R/W
set atm-clp	qos	R/W
set cos	qos	R/W
set dei	qos	R/W
set discard-class	qos	R/W
set dscp	qos	R/W
set fr-de	qos	R/W
set mpls experimental	qos	R/W
set precedence	qos	R/W
set qos-group	qos	R/W
set srp-priority	qos	R/W
shape average	qos	R/W
show ancp an-port	ancp	R
show ancp an-port circuit-id	ancp	R
show ancp an-port interface	ancp	R
show ancp an-port neighbor	ancp	R
show ancp an-port state	ancp	R
show ancp neighbor	ancp	R/W
show ancp neighbor summary	ancp	R/W
show ancp redundancy iccp	ancp	R
show ancp redundancy iccp group	ancp	R
show ancp summary	ancp	R
show controllers egressq enaq location	interface, drivers	R, R
show controllers sanity	interface, drivers	R, R

**Table 5** Task IDs for the Cisco IOS XR Modular Quality of Service Commands (continued)

Cisco IOS XR Modular Quality of Service Commands	Task IDs	Operations
show fmgr fabqos	qos	R
show fmgr interface	qos	R
show fmgr map interface	qos	R
show hw-module multicast qos	multicast	R
show hw-module qos input police granularity location		
show hw-module qos output police granularity location		
show hw-module qos output shape granularity location		
show policy-map interface	qos	R
show policy-map shared-policy-instance	qos	R/W
show policy-map targets	qos	R
show qos acl-deny enable	qos-ea	W
show qos ea trace	qos	R
show qos if-ref-bw	qos	R
show qos inconsistency	qos	R
show qos interface	qos	R
show qos pol-gran location	qos	R
show qos redq	qos	R
show qos shared-policy-instance	qos	R/W
show qos summary	qos	R/W
show qos wred-curve	qos	R
switch-fabric service-policy	qos	R/W
violate-action	qos	R/W

## Task IDs for MPLS Commands

Table 6 is a task ID reference for the commands in the *Cisco IOS XR MPLS* books. Commands are listed in alphabetic order within each module.

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands

Cisco IOS XR MPLS Commands	Task IDs	Operations
<b>MPLS Label Distribution Protocol Commands</b>		
backoff	mpls-ldp	R/W
clear mpls ldp forwarding	mpls-ldp	R/W
clear mpls ldp msg-counters neighbor	mpls-ldp	R/W
clear mpls ldp neighbor	mpls-ldp	R/W
default-route	mpls-ldp	R/W

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
discovery hello	mpls-ldp	R/W
discovery instance-tlv disable	mpls-ldp	R/W
discovery targeted-hello	mpls-ldp	R/W
discovery transport-address	mpls-ldp	R/W
downstream-on-demand	mpls-ldp	R/W
explicit-null	mpls-ldp	R/W
graceful-restart (MPLS LDP)	mpls-ldp	R/W
holdtime (MPLS LDP)	mpls-ldp	R/W
igp auto-config disable	mpls-ldp	R/W
igp sync delay	mpls-ldp	R/W
igp sync delay on-proc-restart	mpls-ldp	R/W
interface (MPLS LDP)	mpls-ldp	R/W
label accept	mpls-ldp	R/W
label advertise	mpls-ldp	R/W
label allocate	mpls-ldp	R/W
log graceful-restart	mpls-ldp	R/W
log nsr	mpls-ldp	R/W
log neighbor	mpls-ldp	R/W
log session-protection	mpls-ldp	R/W
maximum interfaces (MPLS LDP)	mpls-ldp	R/W
mpls ldp nsr	mpls-ldp	R/W
neighbor password	mpls-ldp	R/W
neighbor password disable	mpls-ldp	R/W
neighbor targeted	mpls-ldp	R/W
nsr (MPLS-LDP)	mpls-ldp	R/W
router-id (MPLS LDP)	mpls-ldp	R/W
session protection	mpls-ldp	R/W
show mpls ldp backoff	mpls-ldp	R
show mpls ldp bindings	mpls-ldp	R
show mpls ldp discovery	mpls-ldp	R
show mpls ldp forwarding	mpls-ldp	R
show mpls ldp graceful-restart	mpls-ldp	R
show mpls ldp igp sync	mpls-ldp	R
show mpls ldp interface	mpls-ldp	R
show mpls ldp neighbor	mpls-ldp	R
show mpls ldp parameters	mpls-ldp, network	R, R

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
show mpls ldp statistics msg-counters	mpls-ldp	R
show mpls ldp summary	mpls-ldp	R
signalling dscp (LDP)	mpls-ldp	R/W
snmp-server traps mpls ldp	mpls-ldp, mpls-te, snmp	R/W, R/W, R/W
mpls ldp	mpls-ldp	R
<b>MPLS Traffic Engineering Commands</b>		
adjustment-threshold (MPLS-TE)	none	—
admin-weight	mpls-te	R/W
affinity	mpls-te	R/W
affinity-map	mpls-te	R/W
application (MPLS-TE)	mpls-te	R/W
attribute-affinity-flags	mpls-te	R/W
attribute-flags	mpls-te	R/W
attribute-names	mpls-te	R/W
auto-bw (MPLS-TE)	mpls-te	R/W
auto-bw collect frequency (MPLS-TE)	mpls-te	R/W
auto-tunnel backup (MPLS-TE)	mpls-te	R/W
autoroute announce	mpls-te	R/W
autoroute metric	mpls-te	R/W
backup-bw	mpls-te	R/W
backup-path tunnel-te	mpls-te	R/W
bw-limit (MPLS-TE)	mpls-te	R/W
clear mpls lmp	mpls-te	R/W
clear mpls traffic-eng auto-bw (MPLS-TE EXEC)	mpls-te	E
clear mpls traffic-eng auto-bw (MPLS-TE global)	mpls-te	R/W
clear mpls traffic-eng auto-tunnel backup unused	mpls-te	E
clear mpls traffic-eng counters auto-tunnel backup	mpls-te	E
clear mpls traffic-eng counters global	mpls-te	E
clear mpls traffic-eng counters signaling	mpls-te	R/W
clear mpls traffic-eng counters tunnels	mpls-te	R/W
clear mpls traffic-eng fast-reroute log	mpls-te	R/W
clear mpls traffic-eng link-management statistics	mpls-te	R/W
clear mpls traffic-eng pce	mpls-te	E
collect-bw-only (MPLS-TE)	mpls-te	R/W
destination (MPLS-TE)	mpls-te	R/W

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
direction (GMPLS)	mpls-te	R/W
disable (explicit-path)	mpls-te	R/W
disable (P2MP TE)	mpls-te	R/W
ds-te bc-model	mpls-te	R/W
ds-te mode	mpls-te	R/W
ds-te te-classes	mpls-te	R/W
exclude srlg (auto-tunnel backup)	mpls-te	R/W
explicit-path	mpls-te	R/W
fast-reroute	mpls-te	R/W
fast-reroute protect	mpls-te	R/W
fast-reroute timers promotion	mpls-te	R/W
flooding-igp (GMPLS)	mpls-te	R/W
flooding thresholds	mpls-te	R/W
forwarding-adjacency	mpls-te	R/W
index exclude-address	mpls-te	R/W
index exclude-srlg	mpls-te	R/W
index next-address	mpls-te	R/W
interface (MPLS-TE)	mpls-te	R/W
interface (SRLG)	mpls-te	R/W
interface tunnel-gte	interface	R/W
interface tunnel-mte	interface	R/W
interface tunnel-te	interface	R/W
ipcc interface (MPLS-TE)	mpls-te	R/W
ipcc routed (MPLS-TE)	mpls-te	R/W
ipv4 unnumbered (MPLS)	network	R/W
link-management timers bandwidth-hold	mpls-te	R/W
link-management timers periodic-flooding	mpls-te	R/W
lmp neighbor (MPLS-TE)	mpls-te	R/W
lmp router-id (MPLS-TE)	mpls-te	R/W
load-share	mpls-te	R/W
load-share unequal	mpls-te	R/W
logging events link-status (MPLS-TE)	interface	R/W
logging events lsp-status (MPLS-TE)	mpls-te	R/W
logging events sub-lsp-status state (MPLS-TE)	mpls-te	R/W
lmp hello (GMPLS)	mpls-te	R/W
lmp router-id	mpls-te	R/W

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
match (GMPLS)	mpls-te	R/W
maxabs (MPLS-TE)	mpls-te	R/W
mpls traffic-eng	mpls-te	R/W
mpls traffic-eng auto-bw apply (MPLS-TE)	mpls-te	E
mpls traffic-eng ds-te bc-model	mpls-te	R/W
disable (P2MP-TE)	mpls	R/W
mpls traffic-eng ds-te de-classes	mpls-te	R/W
mpls traffic-eng ds-te mode	mpls-te	R/W
mpls traffic-eng ds-te te-classes	mpls-te	R/W
mpls traffic-eng fast-reroute promote	mpls-te	R/W
mpls traffic-eng path-protection switchover tunnel-te	mpls-te	E
mpls traffic-eng fast-reroute timers promotion	mpls-te	R/W
mpls traffic-eng interface	mpls-te	R/W
mpls traffic-eng level	isis	R/W
mpls traffic-eng link-management flood	mpls-te	R/W
mpls traffic-eng link-management timers bandwidth-hold	mpls-te	R/W
mpls traffic-eng link-management timers periodic-flooding	mpls-te	R/W
mpls traffic-eng lmp router-id	mpls-te	R/W
mpls traffic-eng maximum tunnels	mpls-te	R/W
mpls traffic-eng path-protection switchover (GMPLS)	mpls-te	R/W
mpls traffic-eng path-selection ignore overload	mpls-te	R/W
mpls traffic-eng path-selection loose-expansion affinity	mpls-te	R/W
mpls traffic-eng path-selection loose-expansion metric	mpls-te	R/W
mpls traffic-eng path-selection metric	mpls-te	R/W
mpls traffic-eng pce activate-pcep	mpls-te	R/W/E
mpls traffic-eng pce address	mpls-te	R/W
mpls traffic-eng pce peer	mpls-te	R/W
mpls traffic-eng pce reoptimize	mpls-te	R/W/E
mpls traffic-eng reoptimize (global)	mpls-te	R/W
mpls traffic-eng reoptimize (EXEC)	mpls-te	R/W
mpls traffic-eng reoptimize timers delay	mpls-te	R/W
mpls traffic-eng router-id (MPLS-TE router)	mpls-te	R/W
mpls traffic-eng router-id secondary	mpls-te	R/W
mpls traffic-eng signalling advertise explicit-null	mpls-te	R/W

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
mpls traffic-eng srlg	mpls-te	R/W
mpls traffic-eng timers loose-path	mpls-te	R/W
mpls traffic-eng topology holddown sigerr	mpls-te	R/W
nhop-only (auto-tunnel backup)	mpls-te	R/W
overflow threshold (MPLS-TE)	mpls-te	R/W
passive (GMPLS)	mpls-te	R/W
path-option (MPLS-TE)	mpls-te	R/W
path-option (P2MP TE)	mpls-te	R/W
path-protection (MPLS-TE)	mpls-te	R/W
path-protection timers reopt-after-switchover	mpls-te	R/W
path-selection ignore overload (MPLS-TE)	mpls-te	R/W
path-selection loose-expansion affinity (MPLS-TE)	mpls-te	R/W
path-selection loose-expansion metric (MPLS-TE)	mpls-te	R/W
path-selection metric (MPLS-TE)	mpls-te	R/W
path-selection metric (interface)	mpls-te	R/W
pce address (MPLS-TE)	mpls-te	R/W
pce deadtimer (MPLS-TE)	mpls-te	R/W
pce keepalive (MPLS-TE)	mpls-te	R/W
pce peer (MPLS-TE)	mpls-te	R/W
pce reoptimize (MPLS-TE)	mpls-te	R/W
pce request-timeout (MPLS-TE)	mpls-te	R/W
pce tolerance keepalive (MPLS-TE)	mpls-te	R/W
policy-class	mpls-te	R/W
priority (MPLS-TE)	mpls-te	R/W
record-route	mpls-te	R/W
remote (GMPLS)	mpls-te	R/W
reoptimize (MPLS-TE)	mpls-te	R/W
reoptimize timers delay (MPLS-TE)	mpls-te	R/W
router-id secondary (MPLS-TE)	mpls-te	R/W
show explicit-paths	mpls-te	R
show mpls traffic-eng affinity-map	mpls-te	R
show mpls traffic-eng autoroute	mpls-te	R
show mpls traffic-eng auto-tunnel backup	mpls-te	R
show mpls traffic-eng collaborator-timers	mpls-te	R
show mpls traffic-eng counters signaling	mpls-te	R
show mpls traffic-eng counters tunnel	mpls-te	R

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
show mpls traffic-eng ds-te te-class	mpls-te	R/W
show mpls traffic-eng forwarding	mpls-te	R
show mpls traffic-eng forwarding-adjacency	mpls-te	R
show mpls traffic-eng igp-areas	mpls-te	R
show mpls traffic-eng link-management admission-control	mpls-te	R
show mpls traffic-eng link-management advertisements	mpls-te	R
show mpls traffic-eng link-management bandwidth-allocation	mpls-te	R
show mpls traffic-eng link-management bfd-neighbors	network, mpls-te	R, R
show mpls traffic-eng link-management igp-neighbors	mpls-te	R
show mpls traffic-eng link-management interfaces	mpls-te	R
show mpls traffic-eng link-management statistics	mpls-te	R
show mpls traffic-eng link-management summary	mpls-te	R
show mpls traffic-eng lmp	mpls-te	R
show mpls traffic-eng maximum tunnels	mpls-te	R
show mpls traffic-eng pce peer	mpls-te	R
show mpls traffic-eng pce tunnels	mpls-te	R
show mpls traffic-eng topology	mpls-te	R/W
show mpls traffic-eng tunnels	mpls-te	R/W
show mpls traffic-eng tunnels auto-bw brief	mpls-te	R
show srlg	ip-services	R
signalled-bandwidth	mpls-te	R/W
signalled-name	mpls-te	R/W
signalling advertise explicit-null (MPLS-TE)	mpls-te	R/W
snmp traps mpls traffic-eng	mpls-te	R/W
srlg	mpls-te	R/W
switching (GMPLS)	mpls-te	R/W
switching endpoint (GMPLS)	mpls-te	R/W
switching transit (GMPLS)	mpls-te	R/W
timers removal unused (auto-tunnel backup)	mpls-te	R/W
tunnel-id (auto-tunnel backup)	mpls-te	R/W
<b>MPLS OAM Commands</b>		
clear mpls oam counters	mpls-te, mpls-ldp, mpls-static	E, E, E
clear mpls oam echo	mpls-te, mpls-ldp, mpls-static	E, E, E

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
echo disable-vendor-extension	mpls-te, mpls-ldp, mpls-static	R/W, R/W, R/W
echo revision	mpls-te, mpls-ldp, mpls-static	R/W, R/W, R/W
mpls oam	mpls-te, mpls-ldp, mpls-static	R/W, R/W, R/W
ping mpls ipv4	mpls-te, mpls-ldp	R/W, R/W
ping mpls pseudowire	mpls-te, mpls-ldp	R/W, R/W
ping mpls traffic-eng	mpls-te, mpls-ldp	R/W, R/W
ping mpls traffic-eng tunnel-mte (P2MP)	mpls-te or mpls-ldp, basic-services	R, E
ping mpls traffic-eng tunnel-te (P2P)	mpls-te, mpls-ldp	R/W, R/W
ping pseudowire (AToM)	mpls-te, mpls-ldp	R/W, R/W
ping pseudowire multisegment	mpls-te, mpls-ldp	R/W, R/W
show mpls oam	mpls-te, mpls-ldp, mpls-static	R/W, R/W, R/W
show mpls oam database	mpls-te, mpls-ldp, mpls-static	R/W, R/W, R/W
timers loose-path (MPLS-TE)	mpls-te	R/W
timers removal unused (auto-tunnel backup)	mpls-te	R/W
topology holddown sigerr (MPLS-TE)		
traceroute mpls ipv4	mpls-te, mpls-ldp	R/W, R/W
traceroute mpls multipath	mpls-te, mpls-ldp	R/W, R/W
traceroute mpls traffic-eng	mpls-te, mpls-ldp	R/W, R/W
traceroute mpls traffic-eng tunnel-mte (P2MP)	mpls-te, mpls-ldp	R, R
traceroute mpls traffic-eng tunnel-te (P2P)	mpls-te, mpls-ldp	R, R
traceroute pseudowire multisegment	mpls-te, mpls-ldp	R/W, R/W
<b>MPLS Forwarding Commands</b>		
clear mpls forwarding counters	mpls-te, mpls-ldp, mpls-static	R/W, R/W, R/W
mpls ip-ttl-propagate	mpls-te, mpls-ldp	R/W, R/W
mpls label range	mpls-te, mpls-ldp	R/W, R/W
mpls mtu	mpls-te or mpls-ldp or mpls-static	R/W, R/W, R/W
show mpls forwarding	mpls-te or mpls-ldp or mpls-static	R/W, R/W, R/W
show mpls forwarding exact-route	mpls-te or mpls-ldp or mpls-static	R/W, R/W, R/W

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
show mpls interfaces	mpls-te or mpls-ldp or mpls-static	R/W, R/W, R/W
show mpls label range	mpls-te or mpls-ldp or mpls-static	R/W, R/W, R/W
show mpls label table	mpls-te or mpls-ldp or mpls-static	R/W, R/W, R/W
show mpls lsd applications	mpls-te or mpls-ldp or mpls-static	R/W, R/W, R/W
show mpls lsd clients	mpls-te or mpls-ldp or mpls-static	R/W, R/W, R/W
show mpls traffic-eng fast-reroute database	mpls-te	R
show mpls traffic-eng fast-reroute log	mpls-te	R
<b>RSVP Infrastructure Commands</b>		
authentication (RSVP)	mpls-te, ouni	R/W, R/W
bandwidth (RSVP)	mpls-te, ouni	R/W, R/W
bandwidth mam (RSVP)	mpls-te, ouni	R/W, R/W
bandwidth rdm (RSVP)	mpls-te, ouni	R/W, R/W
clear rsvp aunthentication	mpls-te, ouni	E, E
clear rsvp counters all	mpls-te, ouni	R/W, R/W
clear rsvp counters authentication	mpls-te, ouni	E, E
clear rsvp counters chkpt	mpls-te, ouni	R/W, R/W
clear rsvp counters events	mpls-te, ouni	R/W, R/W
clear rsvp counters messages	mpls-te, ouni	R/W, R/W
clear rsvp counters oor	mpls-te, ouni	R/W, R/W
clear rsvp counters prefix-filtering	mpls-te, ouni	R/W, R/W
key-source key-chain (RSVP)	mpls-te, ouni	R/W, R/W
life-time (RSVP)	mpls-te, ouni	R/W, R/W
rsvp interface	mpls-te, ouni	R/W, R/W
rsvp neighbor	mpls-te, ouni	R/W, R/W
show rsvp aunthentication	mpls-te, ouni	R, R
show rsvp counters	mpls-te or ouni	R/W, R/W
show rsvp counters oor	mpls-te, ouni	R/W, R/W
show rsvp counters prefix-filtering	mpls-te, ouni	R/W, R/W
show rsvp fast-reroute	mpls-te, ouni	R/W, R/W
show rsvp graceful-restart	mpls-te or ouni	R/W, R/W
show rsvp hello instance	mpls-te or ouni	R/W, R/W
show rsvp hello instance interface-based	mpls-te or ouni	R/W, R/W
show rsvp interface	mpls-te or ouni	R/W, R/W

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
show rsvp neighbor	mpls-te or ouni	R/W, R/W
show rsvp request	mpls-te or ouni	R/W, R/W
show rsvp reservation	mpls-te or ouni	R/W, R/W
show rsvp sender	mpls-te or ouni	R/W, R/W
show rsvp session	mpls-te or ouni	R/W, R/W
signalling dscp (RSVP)	mpls-te, ouni	R/W, R/W
signalling graceful-restart	mpls-te, ouni	R/W, R/W
signalling graceful-restart restart-time	mpls-te, ouni	R/W, R/W
signalling hello graceful-restart interface-based	mpls-te, ouni	R/W, R/W
signalling hello graceful-restart refresh interval	mpls-te, ouni	R/W, R/W
signalling hello graceful-restart refresh misses	mpls-te, ouni	R/W, R/W
signalling prefix-filtering access-list	mpls-te, ouni	R/W, R/W
signalling prefix-filtering default-deny-action	mpls-te, ouni	R/W, R/W
signalling rate-limit	mpls-te, ouni	R/W, R/W
signalling refresh interval	mpls-te, ouni	R/W, R/W
signalling refresh missed	mpls-te, ouni	R/W, R/W
signalling refresh reduction bundle-max-size	mpls-te, ouni	R/W, R/W
signalling refresh reduction disable	mpls-te, ouni	R/W, R/W
signalling refresh reduction reliable	mpls-te, ouni	R/W, R/W
signalling refresh reduction summary	mpls-te	R/W
window-size (RSVP)	mpls-te, ouni	R/W, R/W
MPLS Optical User Network Interface Commands		
destination address ipv4	ouni	R/W
ipcc routed	ouni	R/W
lmp neighbor (MPLS O-UNI)	ouni	R/W
neighbor (O-UNI)	ouni	R/W
passive (MPLS O-UNI)	ouni	R/W
remote interface-id	ouni	R/W
remote node-id	ouni	R/W
router-id (MPLS O-UNI)	ouni	R/W
show mpls lmp clients	ouni	R
show mpls lmp interface-id	ouni	R
show mpls optical-uni	ouni	R
show mpls optical-uni checkpoint	ouni	R
show mpls optical-uni diagnostics	ouni	R
show mpls optical-uni interface	ouni	R

**Table 6** Task IDs for the Cisco IOS XR MPLS Commands (continued)

Cisco IOS XR MPLS Commands	Task IDs	Operations
show mpls optical-uni lmp	ouni	R
show mpls optical-uni timers all	ouni	R
show mpls optical-uni timers global	ouni	R
show mpls optical-uni timers interfaces	ouni	R
show mpls optical-uni timers nodes	ouni	R
tna ipv4	ouni	R/W
<b>Virtual Private LAN Services Commands</b>		
action (VPLS)	l2vpn	R/W
aging (VPLS)	l2vpn	R/W
bridge-domain (VPLS)	l2vpn	R/W
bridge group (VPLS)	l2vpn	R/W
clear l2vpn bridge-domain (VPLS)	l2vpn	R/W
flooding disable (VPLS)	l2vpn	R/W
interface (VPLS)	l2vpn	R/W
learning disable (VPLS)	l2vpn	R/W
limit (VPLS)	l2vpn	R/W
mac (VPLS)	l2vpn	R/W
maximum (VPLS)	l2vpn	R/W
mpls static label (VPLS)	l2vpn	R/W
mtu (VPLS)	l2vpn	R/W
neighbor (VPLS)	l2vpn	R/W
notification (VPLS)	l2vpn	R/W
pw-class (VFI)	l2vpn	R/W
show l2vpn bridge-domain (VPLS)	l2vpn	R
show l2vpn forwarding bridge-domain (VPLS)	l2vpn	R
show l2vpn forwarding bridge-domain mac-address (VPLS)	l2vpn	R
shutdown (Bridge Domain)	l2vpn	R/W
shutdown (VFI)	l2vpn	R/W
static-address (VPLS)	l2vpn	R/W
static-mac-address (VPLS)	l2vpn	R/W
time (VPLS)	l2vpn	R/W
type (VPLS)	l2vpn	R/W
vfi (VPLS)	l2vpn	R/W
withdrawal (VPLS)	l2vpn	R/W

# Task IDs for Multicast Commands

**Table 7** is a task ID reference for the commands in the *Cisco IOS XR Multicast* books. Commands are listed in alphabetic order within each module.

**Table 7      Task IDs for the Cisco IOS XR Multicast Commands**

Cisco IOS XR Multicast Commands	Task IDs	Operations
<b>Multicast IGMP and MLD Commands</b>		
access-group (IGMP/MLD)	multicast	R/W
clear igmp counters	multicast	E
clear igmp group	multicast	E
clear igmp reset	multicast	E
clear mld counters	multicast	E
clear mld group	multicast	E
clear mld reset	multicast	E
explicit-tracking	multicast	R/W
join-group	multicast	R/W
maximum groups	multicast	R/W
maximum groups-per-interface	multicast	R/W
nsf lifetime (IGMP/MLD)	multicast	R/W
query-interval	multicast	R/W
query-max-response-time	multicast	R/W
query-timeout	multicast	R/W
robustness-count	multicast	R/W
router	multicast	R/W
router igmp	multicast, rib	R/W, R/W
router mld	multicast	R/W
show igmp groups	multicast	R
show igmp interface	multicast	R
show igmp nsf	multicast	R
show igmp ssm map	multicast	R
show igmp summary	multicast	R
show igmp traffic	multicast	R
show mld groups	multicast	R
show mld interface	multicast	R
show mld nsf	multicast	R
show mld ssm map	multicast	R
show mld summary	multicast	R
show mld traffic	multicast	R

**Table 7** Task IDs for the Cisco IOS XR Multicast Commands (continued)

Cisco IOS XR Multicast Commands	Task IDs	Operations
ssm map static	multicast	R/W
static-group	multicast	R/W
version	multicast	R/W
vrf (igmp)	multicast	R/W
<b>Multicast PIM Commands</b>		
accept-register	multicast	R/W
auto-rp candidate-rp	multicast	R/W
auto-rp listen disable	multicast	R/W
auto-rp mapping-agent	multicast	R/W
bsr-border	multicast	R/W
bsr candidate-bsr	multicast	R/W
bsr candidate-rp	multicast	R/W
clear pim autorp	multicast	R/W
clear pim bsr	multicast	R/W
clear pim counters	multicast	R/W
clear pim topology	multicast	R/W
dr-priority	multicast	R/W
embedded-rp	multicast	R/W
embedded-rp disable	multicast	R/W
global maximum	multicast	R/W
hello-interval (PIM)	multicast	R/W
interface (PIM)	multicast	R/W
interface all disable	multicast	R/W
join-prune-interval	multicast	R/W
maximum autorp mapping-agent-cache	multicast	R/W
maximum group-mappings autorp	multicast	R/W
maximum register-states	multicast	R/W
maximum route-interfaces	multicast	R/W
maximum routes	multicast	R/W
mofrr	multicast	R/W
neighbor-check-on-recv enable	multicast	R/W
neighbor-check-on-send enable	multicast	R/W
neighbor-filter	multicast	R/W
nsf lifetime (PIM)	multicast	R/W
old-register-checksum	multicast	R/W
router pim	multicast	R/W

**Table 7** Task IDs for the Cisco IOS XR Multicast Commands (continued)

Cisco IOS XR Multicast Commands	Task IDs	Operations
rp-address	multicast	R/W
rpf topology route-policy	multicast	R/W
rpf-vector	multicast	R/W
rp-static-deny	multicast	R/W
show auto-rp candidate-rp	multicast	R
show auto-rp mapping-agent	multicast	R
show pim bgp-safi	multicast	R
show pim bsr candidate-rp	multicast	R
show pim bsr election	multicast	R
show pim bsr rp-cache	multicast	R
show pim context	multicast	R
show pim context detail	multicast	R
show pim context table	multicast	R
show pim df election-state	multicast	R
show pim df winner	multicast	R
show pim group-map	multicast	R
show pim interface	multicast	R
show pim join-prune statistic	multicast	R
show pim mdt	multicast	R
show pim mstatic	multicast	R
show pim neighbor	multicast	R
show pim nsf	multicast	R
show pim range-list	multicast	R
show pim rpf	multicast	R
show pim rpf hash	multicast	R
show pim rpf route-policy statistics	multicast	R
show pim rpf route-policy test	multicast	R
show pim rpf summary	multicast	R
show pim summary	multicast	R
show pim table-context	none	—
show pim topology	multicast	R
show pim topology detail	multicast	R
show pim topology entry-flag	multicast	R
show pim topology interface-flag	multicast	R
show pim topology summary	multicast	R
show pim topology table-context	multicast	R

**Table 7** Task IDs for the Cisco IOS XR Multicast Commands (continued)

Cisco IOS XR Multicast Commands	Task IDs	Operations
show pim traffic	multicast	R
show pim tunnel info	multicast	R
spt-threshold infinity	multicast	R/W
ssm	multicast	R/W
<b>Multicast Routing and Forwarding Commands</b>		
accounting per-prefix	multicast	R/W
accounting per-prefix forward-only	multicast	R/W
address-family (multicast)	multicast	R/W
boundary	multicast	R/W
clear mfib counter	multicast	R/W
clear mfib database	multicast	R/W/E
clear mfib hardware adjacency-counters	multicast	R/W/E
clear mfib hardware route statistics	multicast	R/W/E
clear mfib hardware resource-counters	multicast	R/W/E
disable (multicast)	multicast	R/W
enable (multicast)	multicast	R/W
forwarding-latency	multicast	R/W
interface (multicast)	multicast	R/W
interface all enable	multicast	R/W
interface-inheritance disable	multicast	R/W
log-traps	multicast	R/W
maximum disable	multicast	R/W
maximum groups-per-interface	multicast	R/W
mdt data	multicast	R/W
mdt default	multicast	R/W
mdt mtu	multicast	R/W
mdt source	multicast	R/W
mhost default-interface	multicast	R/W
multicast-routing	multicast	R/W
multipath	multicast	R/W
nsf (multicast)	multicast	R/W
oom-handling	multicast	R/W
rate-per-route	multicast	R/W
show mfib connections	multicast	R
show mfib counter	multicast	R
show mfib encap-info	multicast	R

**Table 7** Task IDs for the Cisco IOS XR Multicast Commands (continued)

Cisco IOS XR Multicast Commands	Task IDs	Operations
show mfib hardware api-counter	multicast	R
show mfib hardware interface	multicast	R
show mfib hardware ltrace	multicast	R
show mfib hardware mlc	multicast	R
show mfib hardware resource-counters	multicast	R
show mfib hardware route accept-bitmap	multicast	R
show mfib hardware route egress	multicast	R
show mfib hardware route ingress	multicast	R
show mfib hardware route internal	multicast	R
show mfib hardware route location	multicast	R
show mfib hardware route mofrr	multicast	R
show mfib hardware route olist	multicast	R
show mfib hardware route qos	multicast	R
show mfib hardware route statistics	multicast	R
show mfib hardware route summary	multicast	R
show mfib hardware session-info	multicast	R
show mfib hardware table	multicast	R
show mfib hardware trace	multicast	R
show mfib interface	multicast	R
show mfib mdt statistics	multicast	R
show mfib nsf	multicast	R
show mfib route	multicast	R
show mfib table-info	multicast	R
show mhost default-interface	network	R
show mhost groups	network	R
show mrib client	multicast	R
show mrib fgid	multicast	R
show mrib label-table-info	multicast	R
show mrib mdt-interface	multicast	R
show mrib nsf	multicast	R
show mrib platform trace	multicast	R
show mrib route	multicast	R
show mrib route outgoing-interface	multicast	R
show mrib route-collapse	multicast	R
show mrib table-info	multicast	R
show mrib mpls route	multicast	R

**Table 7** Task IDs for the Cisco IOS XR Multicast Commands (continued)

Cisco IOS XR Multicast Commands	Task IDs	Operations
show mrib mpls forwarding	multicast	R
show mrib mpls fast	multicast	R
show mrib mpls traffic-eng fast-reroute	multicast	R
show mrib tlc	multicast	R
static-rpf	multicast	R/W
ttl-threshold (multicast)	multicast	R/W
vrf (multicast)	multicast	R/W
<b>Multicast Source Discovery Protocol Commands</b>		
cache-sa holdtime	multicast	R/W
cache-sa-state	multicast	R/W
clear msdp peer	multicast	E
clear msdp sa-cache	multicast	E
clear msdp stats	multicast	E
connect-source	multicast	R/W
default-peer	multicast	R/W
description (peer)	multicast	R/W
maximum external-sa	multicast	R/W
maximum peer-external-sa	multicast	R/W
mesh-group (peer)	multicast	R/W
originator-id	multicast	R/W
password (peer)	multicast	R/W
peer (MSDP)	multicast	R/W
remote-as (multicast)	multicast	R/W
sa-filter	multicast	R/W
show msdp globals	multicast	R
show msdp peer	multicast	R
show msdp rpf	multicast	R
show msdp sa-cache	multicast	R
show msdp statistics peer	multicast	R
show msdp summary	multicast	R
shutdown (MSDP)	multicast	R/W
ttl-threshold (MSDP)	multicast	R/W
<b>Multicast Tool and Utility Commands</b>		
mrinfo	multicast	E
mtrace	multicast	E
sap cache-timeout	multicast	R/W

**Table 7** Task IDs for the Cisco IOS XR Multicast Commands (continued)

Cisco IOS XR Multicast Commands	Task IDs	Operations
sap listen	multicast	R/W
show sap	multicast	R
<b>Video Monitoring Commands</b>		
clear performance traffic clone profile	netflow	R/W
clear performance traffic statistics	netflow	R/W
show performance traffic alerts	netflow	R
show performance traffic clone profile	netflow	R
show policy-map type performance-traffic	netflow	R

## Task IDs for Netflow Commands

**Table 8** is a task ID reference for the commands in the *Cisco IOS XR Netflow* books. Commands are listed in alphabetic order within each module.

**Table 8** Task IDs for the Cisco IOS XR Netflow Commands

Cisco IOS XR Netflow Commands	Task IDs	Operations
<b>Netflow Commands</b>		
cache entries	netflow	R/W
cache permanent	netflow	R/W
cache timeout	netflow	R/W
clear flow exporter	basic-services, netflow	R/W, R/W
clear flow monitor	netflow	R/W
clear flow platform producer statistics location	netflow	R/W
destination	netflow	R/W
dscp	netflow	R/W
exporter	netflow	R/W
flow	netflow	R/W
flow exporter-map	netflow	R/W
flow monitor-map	netflow	R/W
options	netflow	R/W
random 1 out-of	netflow	R/W
record ipv4	netflow	R/W
record ipv6	netflow	R/W
record mpls	netflow	R/W
sampler-map	netflow	R/W
show controllers pse qfp feature fnf datapath	netflow	R

**Table 8** Task IDs for the Cisco IOS XR Netflow Commands (continued)

Cisco IOS XR Netflow Commands	Task IDs	Operations
show flow exporter	netflow	R
show flow exporter-map	netflow	R
show flow monitor	netflow	R
show flow monitor-map	netflow	R
show flow platform pal-cpp chkpt object	netflow	R
show flow platform pal-cpp object	netflow	R
show flow platform producer statistics location	netflow	R
show flow platform nfea sampler	netflow	R
show flow platform nfea interface	netflow	R
show flow platform nfea sp location	netflow	R
show flow platform nfea policer np	netflow	R
show flow platform nfea bundle	netflow	R
show flow platform nfea chkp	netflow	R
show flow trace platform producer location	netflow	R
show flow trace ea location	netflow	R
show performance traffic clone profile		
show sampler-map	netflow	R
source (NetFlow)	netflow	R/W
template	netflow	R/W
transport udp	netflow	R/W
version v9	netflow	R/W

## Task IDs for Routing Commands

**Table 9** is a task ID reference for the commands in the *Cisco IOS XR Routing* books. Commands are listed in alphabetic order within each module.

**Table 9** Task IDs for the Cisco IOS XR Routing Commands

Cisco IOS XR Routing Commands	Task IDs	Operations
<b>BGP Commands</b>		
additional-paths install backup	bgp	R/W
additional-paths receive	bgp	R/W
additional-paths selection	bgp	R/W
additional-paths send	bgp	R/W
address-family (BGP)	bgp	R/W
advertise best-external	bgp	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
advertisement-interval	bgp	R/W
af-group	bgp	R/W
aggregate-address	bgp	R/W
aigp	bgp	R/W
aigp send-cost-community	bgp	R/W
allocate-label	bgp	R/W
allowas-in	bgp	R/W
as-override	bgp	R/W
as-format	bgp	R/W
bfd (BGP)	none	—
bgp as-path-loopcheck	bgp	R/W
bgp attribute-download	bgp	R/W
bgp auto-policy-soft-reset disable	bgp	R/W
bgp bestpath as-path ignore	bgp	R/W
bgp bestpath compare-routerid	bgp	R/W
bgp bestpath cost-community ignore	bgp	R/W
bgp bestpath med always	bgp	R/W
bgp bestpath med confed	bgp	R/W
bgp bestpath med missing-as-worst	bgp	R/W
bgp client-to-client reflection disable	none	—
bgp cluster-id	bgp	R/W
bgp confederation identifier	bgp	R/W
bgp confederation peers	bgp	R/W
bgp dampening	bgp	R/W
bgp default local-preference	bgp	R/W
bgp enforce-first-as disable	bgp	R/W
bgp fast-external-failover disable	bgp	R/W
bgp graceful-restart	bgp	R/W
bgp graceful-restart graceful-reset	bgp	R/W
bgp graceful-restart purge-time	bgp	R/W
bgp graceful-restart restart-time	bgp	R/W
bgp graceful-restart stalepath-time	bgp	R/W
bgp log neighbor changes disable	bgp	R/W
bgp maximum neighbor	bgp	W
bgp redistribute-internal	bgp	R/W
bgp router-id	bgp	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
bgp scan-time	bgp	R/W
bgp update-delay	bgp	R/W
bgp write-limit	bgp	R/W
capability additional-paths receive	bgp	R/W
capability additional-paths send	bgp	R/W
capability orf prefix	bgp	R/W
capability suppress 4-byte-as	bgp	R/W
clear bgp	bgp	E
clear bgp current-mode	bgp	E
clear bgp dampening	bgp	E
clear bgp external	bgp	E
clear bgp flap-statistics	bgp	E
clear bgp nexthop performance-statistics	bgp	E
clear bgp nexthop registration	bgp	E
clear bgp peer-drops	bgp	E
clear bgp performance-statistics	bgp	E
clear bgp self-originated	bgp	E
clear bgp shutdown	bgp	E
clear bgp soft	bgp	E
cluster-id	bgp	R/W
default-information originate (BGP)	bgp	R/W
default-metric (BGP)	bgp	R/W
default-originate	bgp	R/W
description (BGP)	bgp	R/W
distance bgp	bgp	R/W
distributed speaker	bgp	R/W
dmz-link-bandwidth	bgp	R/W
dscp (BGP)	bgp	R/W
ebgp-multihop	bgp	R/W
enforce-first-as	bgp	R/W
enforce-first-as-disable	bgp	R/W
export route-policy	bgp, ip-services	R/W, R/W
export route-target	bgp, ip-services	R/W, R/W
ibgp policy out enforce-modifications	bgp	R/W
ignore-connected-check	bgp	R/W
import route-policy	bgp, ip-services	R/W, R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
import route-target	bgp, ip-services	R/W, R/W
keychain	bgp	R/W
keychain inheritance-disable	bgp	R/W
keychain-disable	bgp	R/W
label-allocation-mode	bgp	R/W
local-as	bgp	R/W
maximum-paths (BGP)	bgp	R/W
maximum-prefix (BGP)	bgp	R/W
mpls activate (BGP)	bgp	R/W
neighbor (BGP)	bgp	R/W
neighbor-group	bgp	R/W
network (BGP)	bgp	R/W
network backdoor	bgp	R/W
next-hop-self	bgp	R/W
next-hop-unchanged	bgp	R/W
nexthop route-policy	bgp	R/W
nexthop trigger-delay	bgp	R/W
nsr (BGP)	bgp	R/W
orf	bgp	R/W
password (BGP)	bgp	R/W
password-disable	bgp	R/W
precedence	bgp	R/W
rd	bgp	R/W
receive-buffer-size	bgp	R/W
redistribute (BGP)	bgp	R/W
remote-as (BGP)	bgp	R/W
remove-private-as	bgp	R/W
retain route-target	bgp	R/W
retain local-label	bgp	R/W
route-policy (BGP)	bgp	R/W
route-reflector-client	bgp	R/W
router bgp	bgp, rib	R/W, R/W
selective-vrf-download disable	ip-services	R/W
send-buffer-size	bgp	R/W
send-community-ebgp	bgp	R/W
send-extended-community-ebgp	bgp	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
session-group	bgp	R/W
session-open-mode	bgp	R/W
show bgp	bgp	R
show bgp advertised	bgp	R
show bgp af-group	bgp	R
show bgp attribute-key	bgp	R
show bgp cidr-only	bgp	R
show bgp community	bgp	R
show bgp convergence	bgp	R
show bgp dampened-paths	bgp	R
show bgp flap-statistics	bgp	R
show bgp inconsistent-as	bgp	R
show bgp l2vpn rd	bgp	R
show bgp l2vpn vpls	bgp	R
show bgp labels	bgp	R
show bgp neighbor-group	bgp	R
show bgp neighbors	bgp	R
show bgp neighbors nsr	bgp	R
show bgp nexthops	bgp	R
show bgp nsr	bgp	R
show bgp paths	bgp	R
show bgp policy	bgp	R
show bgp process	bgp	R
show bgp regexp	bgp	R
show bgp route-policy	bgp	R
show bgp sessions	bgp	R
show bgp session-group	bgp	R
show bgp summary	bgp	R
show bgp summary nsr	bgp	R
show bgp table	bgp	R
show bgp truncated-communities	bgp	R
show bgp update-group	bgp	R
show bgp vrf imported-routes	bgp	R
show protocols (BGP)	bgp, rib	R, R
show svd role	ip-services	R
show svd state	ip-services	R

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
shutdown (BGP)	bgp	R/W
signalling disable	bgp	R/W
site-of-origin (BGP)	bgp	R/W
socket receive-buffer-size	bgp	R/W
socket send-buffer-size	bgp	R/W
soft-reconfiguration inbound	bgp	R/W
speaker-id	bgp	R/W
table-policy	bgp	R/W
timers (BGP)	bgp	R/W
timers bgp	bgp	R/W
ttl-security	bgp	R/W
update-source	bgp	R/W
use	bgp	R/W
vrf (BGP)	bgp	R/W
weight	bgp	R/W
weight reset-on-import	bgp	R/W
weight reset-on-import disable	bgp	R/W
<b>EIGRP Commands</b>		
address-family (EIGRP)	eigrp	R/W
authentication keychain	eigrp	R/W
auto-summary (EIGRP)	eigrp	R/W
autonomous-system	eigrp	R/W
bandwidth-percent (EIGRP)	eigrp	R/W
clear eigrp neighbors	eigrp	R/W
clear eigrp topology	eigrp	R/W
default-information	eigrp	R/W
default-metric (EIGRP)	eigrp	R/W
distance (EIGRP)	eigrp	R/W
hello-interval (EIGRP)	eigrp	R/W
hold-time (EIGRP)	eigrp	R/W
interface (EIGRP)	eigrp	R/W
log-neighbor-changes	eigrp	R/W
log-neighbor-warnings	eigrp	R/W
maximum-paths (EIGRP)	eigrp	R/W
maximum-prefix (EIGRP)	eigrp	R/W
metric maximum-hops	eigrp	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
metric weights	eigrp	R/W
neighbor (EIGRP)	eigrp	R/W
neighbor maximum-prefix	eigrp	R/W
next-hop-self disable	eigrp	R/W
passive-interface (EIGRP)	eigrp	R/W
redistribute (EIGRP)	eigrp	R/W
redistribute maximum-prefix	eigrp	R/W
route-policy (EIGRP)	eigrp	R/W
router eigrp	eigrp	R/W
router-id (EIGRP)	eigrp	R/W
show eigrp accounting	eigrp	R
show eigrp interfaces	eigrp	R
show eigrp neighbors	eigrp	R
show eigrp topology	eigrp	R
show eigrp traffic	eigrp	R
show protocols (EIGRP)	eigrp	R
site-of-origin (EIGRP)	eigrp	R
split-horizon disable (EIGRP)	eigrp	R/W
stub (EIGRP)	eigrp	R/W
summary-address (EIGRP)	eigrp	R/W
timers active-time	eigrp	R/W
timers nsf route-hold (EIGRP)	eigrp	R/W
variance	eigrp	R/W
vrf (EIGRP)	eigrp	R/W
<b>IS-IS Commands</b>		
address-family (IS-IS)	isis	R/W
address-family multicast topology (IS-IS)	isis	R/W
adjacency-check disable	isis	R/W
attached-bit receive ignore	isis	R/W
attached-bit send	isis	R/W
circuit-type	isis	R/W
clear isis process	isis	R/W
clear isis route	isis, rib, basic-services	E, R/W, R/W
clear isis statistics	isis, rib, basic-services	E, R/W, R/W
csnp-interval	isis, rib, basic-services	E, R/W, R/W
default-information originate (IS-IS)	isis	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
disable (IS-IS)	isis	R/W
distance (IS-IS)	isis	R/W
fast-reroute per-link priority-limit (IS-IS)	isis	R/W
fast-reroute per-prefix load-sharing disable (IS-IS)	isis	R/W
fast-reroute per-prefix tiebreaker (IS-IS)	isis	R/W
hello-interval (IS-IS)	isis	R/W
hello-multiplier	isis	R/W
hello-padding	isis	R/W
hello-password	isis	R/W
hello-password keychain	isis	R/W
hello-password accept	isis	R/W
hostname dynamic disable	isis	R/W
ignore-lsp-errors	isis	R/W
interface (IS-IS)	isis	R/W
ipfrr lfa	isis	R/W
ipfrr lfa exclude interface	isis	R/W
ispf	isis	R/W
is-type	isis	R/W
log adjacency changes (IS-IS)	isis	R/W
log pdu drops	isis	R/W
lsp fast-flood threshold	isis	R/W
lsp-gen-interval	isis	R/W
lsp-interval	isis	R/W
lsp-mtu	isis	R/W
lsp-password	isis	R/W
lsp-password accept	isis	R/W
lsp-refresh-interval	isis	R/W
maximum-paths (IS-IS)	isis	R/W
maximum-redistributed-prefixes (IS-IS)	isis	R/W
max-lsp-lifetime	isis	R/W
mesh-group (IS-IS)	isis	R/W
metric (IS-IS)	isis	R/W
metric-style narrow	isis	R/W
metric-style transition	isis	R/W
metric-style wide	isis	R/W
min-lsp-arrivaltime	isis	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
mpls ldp auto-config	isis	R/W
mpls ldp sync (IS-IS)	isis	R/W
mpls traffic-eng (IS-IS)	isis	R/W
mpls traffic-eng multicast-intact (IS-IS)	isis	R/W
mpls traffic-eng path-selection ignore overload	mpls-te	R/W
mpls traffic-eng router-id (IS-IS)	isis	R/W
mpls traffic-eng srlg (IS-IS)	isis, mpls-te	R/W, R/W
net	isis	R/W
nsf (IS-IS)	isis	R/W
nsf interface-expires	isis	R/W
nsf interface-timer	isis	R/W
nsf lifetime (IS-IS)	isis	R/W
passive (IS-IS)	isis	R/W
point-to-point	isis	R/W
priority (IS-IS)	isis	R/W
propagate level	isis	R/W
redistribute (IS-IS)	isis	R/W
retransmit-interval (IS-IS)	isis	R/W
retransmit-throttle-interval	isis	R/W
router isis	isis	R/W
set-attached-bit	isis	R/W
set-overload-bit	isis	R/W
show isis	isis	R
show isis adjacency	isis	R
show isis adjacency-log	isis	R
show isis checkpoint adjacency	isis	R
show isis checkpoint interface	isis	R
show isis checkpoint lsp	isis	R
show isis database	isis	R
show isis database-log	isis	R
show isis fast-reroute	isis	R
show isis hostname	isis	R
show isis interface	isis	R
show isis lsp-log	isis	R
show isis mesh-group	isis	R
show isis mpls traffic-eng adjacency-log	isis	R

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
show isis mpls traffic-eng advertisements	isis	R
show isis mpls traffic-eng tunnel	isis	R
show isis neighbors	isis	R
show isis protocol	isis	R
show isis route	isis	R
show isis spf-log	isis	R
show isis statistics	isis	R
show isis topology	isis	R
show protocols (IS-IS)	isis, rib	R, R
shutdown (IS-IS)	isis	R/W
single-topology	isis	R/W
snmp-server traps isis	isis	R/W
spf-interval	isis	R/W
spf prefix-priority	isis	R/W
summary-prefix (IS-IS)	isis	R/W
suppressed	isis	R/W
tag (IS-IS)	isis	R/W
topology-id	isis	R/W
trace (IS-IS)	isis	R/W
<b>OSPF Commands</b>		
address-family (OSPF)	ospf	R/W
area (OSPF)	ospf	R/W
authentication (OSPF)	ospf	R/W
authentication-key (OSPF)	ospf	R/W
auto-cost (OSPF)	ospf	R/W
capability opaque disable	ospf	R/W
clear ospf process	ospf	R/W
clear ospf redistribution	ospf	R/W
clear ospf routes	ospf	R/W
clear ospf statistics	ospf	R/W
clear ospf statistics interface	ospf	R/W
cost (OSPF)	ospf	R/W
cost-fallback (OSPF)	ospf	R/W
database-filter all out (OSPF)	ospf	R/W
dead-interval (OSPF)	ospf	R/W
default-cost (OSPF)	ospf	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
default-information originate (OSPF)	ospf	R/W
default-metric (OSPF)	ospf	R/W
demand-circuit (OSPF)	ospf	R/W
disable-dn-bit-check	ospf	R/W
distance (ospf)	ospf	R/W
distance OSPF	ospf	R/W
distribute-list	ospf	R/W
domain-id	ospf	R/W
domain-tag	ospf	R/W
flood-reduction (OSPF)	ospf	R/W
hello-interval (OSPF)	ospf	R/W
ignore lsa mospf	ospf	R/W
interface (OSPF)	ospf	R/W
fast-reroute per-link enable	ospf	R/W
fast-reroute per-link disable	ospf	R/W
fast-reroute per-link exclude interface	ospf	
log adjacency changes (OSPF)	ospf	R/W
max-lsa	ospf	R/W
max-metric	ospf	R/W
maximum interfaces (OSPF)	ospf	R/W
maximum paths (OSPF)	ospf	R/W
maximum redistributed-prefixes (OSPF)	ospf	R/W
message-digest-key	ospf	R/W
mpls ldp auto-config (OSPF)	ospf	R/W
mpls ldp sync (OSPF)	ospf	R/W
mpls ldp sync-igp-shortcuts	ospf	R/W
mpls traffic-eng (OSPF)	ospf	R/W
mpls traffic-eng igrp-intact (OSPF)	ospf	R/W
mpls traffic-eng multicast-intact (OSPF)	ospf	R/W
mpls traffic-eng router-id (OSPF)	ospf	R/W
mtu-ignore (OSPF)	ospf	R/W
multi-area-interface	ospf	R/W
neighbor (OSPF)	ospf	R/W
nsr (OSPF)	ospf	R/W
neighbor (OSPF)	ospf	R/W
neighbor database-filter all out	ospf	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
network (OSPF)	ospf	R/W
nsf (OSPF)	ospf	R/W
nsf flush-delay-time (OSPF)	ospf	R/W
nsf interval (OSPF)	ospf	R/W
nsf lifetime (OSPF)	ospf	R/W
nssa (OSPF)	ospf	R/W
ospf name-lookup	ospf	R/W
packet-size	ospf	R/W
passive (OSPF)	ospf	R/W
priority (OSPF)	ospf	R/W
protocol shutdown	ospf	R/W
queue dispatch flush-lsa	ospf	R/W
queue dispatch incoming	ospf	R/W
queue dispatch rate-limited-lsa	ospf	R/W
queue dispatch spf-lsa-limit	ospf	R/W
queue limit	ospf	R/W
range (OSPF)	ospf	R/W
redistribute (OSPF)	ospf	R/W
retransmit-interval (OSPF)	ospf	R/W
route policy (OSPF)	ospf	R/W
router-id (OSPF)	ospf	R/W
router ospf	ospf, rib	R/W, R/W
security ttl (OSPF)	ospf	R/W
sham-link	ospf	R/W
security ttl (OSPF)	ospf	R/W
show ospf	ospf	R
show ospf border-routers	ospf	R
show ospf database	ospf	R
show ospf flood-list	ospf	R
show ospf interface	ospf	R
show ospf message-queue	ospf	R
show ospf mpls traffic-eng	ospf	R
show ospf neighbor	ospf	R
show ospf request-list	ospf	R
show ospf retransmission-list	ospf	R
show ospf routes	ospf	R

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
show ospf sham-links	ospf	R
show ospf statistics interface	ospf	R
show ospf summary-prefix	ospf	R
show ospf virtual-links	ospf	R
show protocols (OSPF)	ospf, rib	R, R
spf prefix-priority route-policy (OSPF)	ospf	R/W
stub (OSPF)	ospf	R/W
summary-prefix (OSPF)	ospf	R/W
timers lsa group-pacing	ospfsa	R/W
timers lsa min-arrival	ospf	R/W
timers lsa refresh	ospf	R/W
timers throttle lsa all (OSPF)	ospf	R/W
timers throttle spf (OSPF)	ospf	R/W
transmit-delay (OSPF)	ospf	R/W
virtual-link (OSPF)	ospf	R/W
vrf	ospf	R/W
<b>OSPFv3 Commands</b>		
address-family (OSPFv3)	ospf	R/W
area (OSPFv3)	ospf	R/W
authentication (OSPFv3)	ospf	R/W
auto-cost (OSPFv3)	ospf	R/W
clear ospfv3 process	ospf	R/W
clear ospfv3 redistribution	ospf	R/W
clear ospfv3 routes	ospf	R/W
clear ospfv3 statistics	ospf	R/W
cost (OSPFv3)	ospf	R/W
database-filter all out (OSPFv3)	ospf	R/W
dead-interval (OSPFv3)	ospf	R/W
default-cost (OSPFv3)	ospf	R/W
default-information originate (OSPFv3)	ospf	R/W
default-metric (OSPFv3)	ospf	R/W
demand-circuit (OSPFv3)	ospf	R/W
distance ospfv3	ospf	R/W
distribute-list prefix-list in	ospf	R/W
distribute-list prefix-list out	ospf	R/W
encryption	ospf	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
flood-reduction (OSPFv3)	ospf	R/W
graceful-restart (OSPFv3)	ospf	R/W
hello-interval (OSPFv3)	ospf	R/W
instance	ospf	R/W
interface (OSPFv3)	ospf	R/W
log adjacency changes (OSPFv3)	ospf	R/W
maximum interfaces (OSPFv3)	ospf	R/W
maximum paths (OSPFv3)	ospf	R/W
maximum redistributed-prefixes	ospf	R/W
mtu-ignore (OSPFv3)	ospf	R/W
neighbor (OSPFv3)	ospf	R/W
network (OSPFv3)	ospf	R/W
nssa (OSPFv3)	ospf	R/W
ospfv3 name-lookup	ospf	R/W
packet-size	ospf	R/W
passive (OSPFv3)	ospf	R/W
priority (OSPFv3)	ospf	R/W
range (OSPFv3)	ospf	R/W
redistribute (OSPFv3)	ospf	R/W
retransmit-interval (OSPFv3)	ospf	R/W
router-id (OSPFv3)	ospf	R/W
router ospfv3	ospf	R/W
show ospfv3	ospf	R
show ospfv3 border-routers	ospf	R
show ospfv3 database	ospf	R
show ospfv3 flood-list	ospf	R
show ospfv3 interface	ospf	R
show ospfv3 neighbor	ospf	R
show ospfv3 request-list	ospf	R
show ospfv3 retransmission-list	ospf	R
show ospfv3 routes	ospf	R
show ospfv3 summary-prefix	ospf	R
show ospfv3 virtual-links	ospf	R
show protocols (OSPFv3)	ospf	R
stub (OSPFv3)	ospf	R/W
summary-prefix (OSPFv3)	ospf	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
timers lsa arrival	ospf	R/W
timers pacing flood	ospf	R/W
timers pacing lsa-group	ospf	R/W
timers pacing retransmission	ospf	R/W
timers throttle lsa-all	ospf	R/W
timers throttle spf (OSPFv3)	ospf	R/W
trace	ospf	R/W
transmit-delay (OSPFv3)	ospf	R/W
virtual-link (OSPFv3)	ospf	R/W
<b>RIB Commands</b>		
address-family next-hop dampening disable	rib	R/W
clear route	rib	R/W
maximum prefix (RIB)	rib	R/W
rcc	ipv4	R/W
recursion-depth-max	rib	R/W
router rib	bgp, ospf, hsrp, isis	R/W, R/W, R/W, R/W
rump always-replicate	rib	R/W
show rcc	ipv4	R
show rib	ipv4	R
show rib afi-all	ipv4	R
show rib attributes	rib	R
show rib client-id	rib	R
show rib clients	rib	R
show rib extcomms	rib	R
show rib firsthop	rib	R
show rib history	rib	R
show rib next-hop	rib	R
show rib opaques	rib	R
show rib protocols	rib	R
show rib recursion-depth-max	rib	R
show rib statistics	rib	R
show rib tables	rib	R
show rib trace	rib	R
show rib vpn-attributes	rib	R
show rib vrf	rib	R

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
show route	rib	R
show route backup	rib	R
show route best-local	rib	R
show route connected	rib	R
show route local	rib	R
show route longer-prefixes	rib	R
show route next-hop	rib	R
show route quarantined	rib	R
show route resolving-next-hop	rib	R
show route static	rib	R
show route summary	rib	R
<b>RIP Commands</b>		
auto-summary (RIP)	rip	R/W
broadcast-for-v2	rip	R/W
clear rip	rip	R
clear rip database	rip	R/W
clear rip interface	rip	R/W
clear rip out-of-memory	rip	R/W
clear rip statistics	rip	R/W
default-information originate (RIP)	rip	R/W
default-metric (RIP)	rip	R/W
distance (RIP)	rip	R/W
interface (RIP)	rip	R/W
maximum-paths (RIP)	rip	R/W
metric-zero-accept	rip	R/W
neighbor (RIP)	rip	R/W
nsf (RIP)	rip	R/W
output-delay	rip	R/W
passive-interface (RIP)	rip	R/W
poison-reverse	rip	R/W
receive version	rip	R/W
redistribute (RIP)	rip	R/W
router rip	rip	R/W
route-policy (RIP)	rip	R/W
send version	rip	R/W
show protocols (RIP)	rip	R

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
show rip	rip	R
show rip database	rip	R
show rip interface	rip	R
show rip statistics	rip	R
site-of-origin (RIP)	rip	R/W
split-horizon disable (RIP)	rip	R/W
timers basic	rip	R/W
validate-update-source-disable	rip	R/W
vrf (RIP)	rip	R/W
<b>Routing Policy Language Commands</b>		
abort	route-policy	R/W
add	route-policy	R/W
apply	route-policy	R/W
as-path in	route-policy	R/W
as-path is-local	route-policy	R/W
as-path length	route-policy	R/W
as-path neighbor-is	route-policy	R/W
as-path originates-from	route-policy	R/W
as-path passes-through	route-policy	R/W
as-path-set	route-policy	R/W
as-path unique-length	route-policy	R/W
community is-empty	route-policy	R/W
community matches-any	route-policy	R/W
community matches-every	route-policy	R/W
community-set	route-policy	R/W
delete community	route-policy	R/W
delete extcommunity rt	route-policy	R/W
destination in	route-policy	R/W
done	route-policy	R/W
drop	route-policy	R/W
edit	route-policy	R/W
end-global	route-policy	R/W
end-policy	route-policy	R/W
end-set	route-policy	R/W
extcommunity is-empty	route-policy	R/W
extcommunity matches-any	route-policy	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
extcommunity matches-every	route-policy	R/W
extcommunity soo is-empty	route-policy	R/W
extcommunity soo matches-any	route-policy	R/W
extcommunity soo matches-every	route-policy	R/W
if	route-policy	R/W
med	route-policy	R/W
next-hop in	route-policy	R/W
origin is	route-policy	R/W
pass	route-policy	R/W
path-type is	route-policy	R/W
policy-global	route-policy	R/W
prefix-set	route-policy	R/W
prepend as-path	route-policy	R/W
protocol	route-policy	R/W
rd in	route-policy	R/W
rd-set	route-policy	R/W
replace as-path	route-policy	R/W
rib-has-route	route-policy	R/W
route-has-label	route-policy	R/W
route-policy (RPL)	route-policy	R/W
route-type is	route-policy	R/W
rpl editor	route-policy	R/W
rpl maximum	route-policy	R/W
set aigp-metric	route-policy	R/W
set community	route-policy	R/W
set dampening	route-policy	R/W
set eigrp-metric	route-policy	R/W
set extcommunity cost	route-policy	R/W
set extcommunity rt	route-policy	R/W
set ip-precedence	route-policy	R/W
set isis-metric	route-policy	R/W
set label	route-policy	R/W
set level	route-policy	R/W
set local-preference	route-policy	R/W
set med	route-policy	R/W
set metric	route-policy	R/W

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
set metric-type (IS-IS)	route-policy	R/W
set metric-type (OSPF)	route-policy	R/W
set next-hop	route-policy	R/W
set origin	route-policy	R/W
set ospf-metric	route-policy	R/W
set path-selection	route-policy	R/W
set qos-group	route-policy	R/W
set rib-metric	route-policy	R/W
set rip-metric	route-policy	R/W
set rip-tag	route-policy	R/W
set tag	route-policy	R/W
set rpf-topology	multicast	R
set traffic-index	route-policy	R/W
set vpn-distinguisher	route-policy	R/W
set weight	route-policy	R/W
show rpl	route-policy	R/W
show rpl active as-path-set	route-policy	R
show rpl active community-set	route-policy	R
show rpl active extcommunity-set	route-policy	R
show rpl active prefix-set	route-policy	R
show rpl active rd-set	route-policy	R
show rpl active route-policy	route-policy	R
show rpl active prefix-set	route-policy	R
show rpl as-path-set	route-policy	R
show rpl as-path-set attachpoints	route-policy	R
show rpl as-path-set references	route-policy	R
show rpl community-set	route-policy	R
show rpl community-set attachpoints	route-policy	R
show rpl community-set references	route-policy	R
show rpl extcommunity-set	route-policy	R
show rpl inactive as-path-set	route-policy	R
show rpl inactive community-set	route-policy	R
show rpl inactive extcommunity-set	route-policy	R
show rpl inactive prefix-set	route-policy	R
show rpl inactive rd-set	route-policy	R
show rpl inactive route-policy	route-policy	R

**Table 9** Task IDs for the Cisco IOS XR Routing Commands (continued)

Cisco IOS XR Routing Commands	Task IDs	Operations
show rpl maximum	route-policy	R
show rpl policy-global references	route-policy	R
show rpl prefix-set	route-policy	R
show rpl prefix-set attachpoints	route-policy	R
show rpl prefix-set references	route-policy	R
show rpl route-policy attachpoints	route-policy	R
show rpl rd-set	route-policy	R
show rpl rd-set attachpoints	route-policy	R
show rpl rd-set references	route-policy	R
show rpl route-policy	route-policy	R
show rpl route-policy attachpoints	route-policy	R
show rpl route-policy inline	route-policy	R
show rpl route-policy references	route-policy	R
show rpl route-policy uses	route-policy	R
show rpl unused as-path-set	route-policy	R
show rpl unused community-set	route-policy	R
show rpl unused extcommunity-set	route-policy	R
show rpl unused prefix-set	route-policy	R
show rpl unused rd-set	route-policy	R
show rpl unused route-policy	route-policy	R
source in	route-policy	R/W
suppress-route	route-policy	R/W
tag	route-policy	R/W
unsuppress-route	route-policy	R/W
vpn-distinguisher is	route-policy	R/W
<b>Static Routing Commands</b>		
address-family (static)	static	R/W
maximum path (static)	static	R/W
route (static)	static	R/W
router static	static, bgp, ospf, hsrp, isis, vrrp, multicast, or network	R/W, R/W
vrf (static)	static	R/W

# Task IDs for System Management Commands

**Table 10** is a task ID reference for the commands in the *Cisco IOS XR System Management* books. Commands are listed in alphabetic order within each module.

**Table 10      Task IDs for the Cisco IOS XR System Management Commands**

Cisco IOS XR System Management Commands	Task IDs	Operations
<b>Bulk Content Downloader (BCDL) Commands</b>		
show bcdl	sysmgr	R
show bcdl consumers	sysmgr	R
show bcdl queues	sysmgr	R
show bcdl tables	sysmgr	R
show bcdl trace	sysmgr	R
<b>Boot Commands</b>		
config-register	root-lr	R/W
mirror	root-lr	R/W
mirror pause	root-lr	R/W
mirror resume	root-lr	R/W
mirror verify	root-lr	R/W
reload	root-lr	E
reload (administration) EXEC	root-system	E
show epm trace boot	basic-services	R
show mirror	filesystem	R
show reboot	system	R
show system backup	root-lr	E
show variables boot	root-lr	R
show variables system	basic-services	R
system backup	root-lr	R/W
system boot-sequence	root-lr	R/W
<b>Call Home Commands</b>		
active	call-home	R/W
alert-group disable	call-home	R/W
call-home	call-home	R/W
call-home request	call-home	R/W
call-home send	call-home	R/W
call-home send alert-group inventory	call-home	R/W
call-home test	call-home	R/W
contact-email-addr	call-home	R/W
contract-id	call-home	R/W

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
customer-id	call-home	R/W
destination address	call-home	R/W
destination message-size-limit	call-home	R/W
destination preferred-msg-format	call-home	R/W
destination transport-method	call-home	R/W
mail-server	call-home	R/W
phone-number	call-home	R/W
profile	call-home	R/W
rate-limit	call-home	R/W
sender	call-home	R/W
service active	call-home	R/W
show call-home	call-home	R
show call-home alert-group	call-home	R
show call-home mail-server status	call-home	R
show call-home profile	call-home	R
show call-home statistics	call-home	R
show call-home trace	call-home	R
site-id	call-home	R/W
street-address	call-home	R/W
subscribe-to-alert-group environment	call-home	R/W
subscribe-to-alert-group inventory	call-home	R/W
subscribe-to-alert-group syslog	call-home	R/W
<b>CDP Commands</b>		
cdp	cdp	R/W
cdp advertise v1	cdp	R/W
cdp holdtime	cdp	R/W
cdp log adjacency changes	cdp	R/W
cdp timer	cdp	R/W
clear cdp counters	cdp	R/W
clear cdp table	cdp	R/W
show cdp	cdp	R
show cdp entry	cdp	R/W
show cdp interface	cdp	R/W
show cdp neighbors	cdp	R
show cdp traffic	cdp	R
<b>Clock Commands</b>		

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
clock read-calendar	host-services	E
clock set	host-services	E
clock summer-time	host-services	R/W
clock timezone	host-services	R/W
clock update-calendar	host-services	E
locale country	host-services	R/W
locale language	host-services	R/W
show clock	basic-services	R
show clock sync	ip-services, basic-services	R, R
<b>Configuration Management Commands</b>		
abort	This command requires the taskID for the feature or configuration sub-mode impacted by the command.	
admin	admin	R/W/E
alias	logging	R/W
apply-template	config-services	R/W
clear (exec)	This command requires the taskID for the feature or configuration sub-mode impacted by the command.	
clear comment	This command requires the task ID for the feature or configuration submode impacted by the command.	
clear configuration commits	config-services	E
clear configuration inconsistency	config-services	E
clear configuration inconsistency replica	config-services	E
clear configuration sessions	config-services	E
commit	This command requires the taskID for the feature or configuration sub-mode impacted by the command.	
configuration commit auto-save	config-services	W
description (interface)	interface	R/W

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
do	Task ID for the EXEC command that you are using	R
end	config-services	R/W
end-template	config-services	R/W
exit	config-services	R/W
hostname	root-lr	R/W
load	config-services	R/W
load commit changes	config-services	R/W
load configuration failed	config-services	R/W
load configuration removed	config-services	R/W
load rollback changes	config-services	R/W
man	basic-services	R
more	filesystem	E
rollback configuration	root-lr (EXEC), root-system (administration EXEC)	R/W, R/W
root	config-services	R
save configuration	config-services	R
save configuration changes	config-services	R
save configuration commit changes	config-services	R
save configuration failed	config-services	R
save configuration merge	config-services	R
save configuration removed	config-services	R
save rollback changes	config-services	R
set default-afi	basic-services	R/W
set default-safi	basic-services	R/W
set default-vrf	basic-services	R/W
show	This command requires the taskID for the feature used with the show command. For example, the command show interfaces requires read privileges in the interface task ID.	
show aliases	basic-services	R
show configuration (config)	basic-services	R

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
show configuration changes	config-services, basic-services	R, R
show configuration commit changes	config-services	R
show configuration commit list	config-services	R
show configuration failed (config)	basic-services	R
show configuration failed incompatible	config-services	R
show configuration failed remove	config-services	R
show configuration failed rollback	config-services, root-lr	R, R
show configuration failed startup	config-services	R
show configuration history	config-services	R
show configuration inconsistency replica	config-services	R
show configuration persistent	config-services	R
show configuration removed	config-services	R
show configuration running	basic-services	R
show configuration running-config	basic-services	R
show configuration sessions	config-services	R
show default-afi-safi-vrf	basic-services	R
show history	config-services, basic-services	R, R
show running-config	config-services	R
show xml schema	config-services	R
template	config-services	R/W
<b>Distributed Route Processor Commands</b>		
location (drp)	system	R/W
pairing (drp)	system	R/W
<b>Software Entitlement Commands</b>		
clear license	pkg-mgmt	E
clear license log	pkg-mgmt	R
hw-module linecard throughput	interface	R/W
license add	pkg-mgmt	E
license backup	pkg-mgmt	E
license move	pkg-mgmt	E
license move slot	pkg-mgmt	E
license pool create	pkg-mgmt	E
license pool remove	pkg-mgmt	E
license restore	pkg-mgmt	E
show hw-module linecard throughput	interface, drivers	R, R

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
show license	pkg-mgmt	R
show license active	pkg-mgmt	R
show license allocated	pkg-mgmt	R
show license available	pkg-mgmt	R
show license backup	pkg-mgmt	R
show license evaluation	pkg-mgmt	R
show license expired	pkg-mgmt	R
show license log	pkg-mgmt	R
show license pools	pkg-mgmt	R
show license udi	pkg-mgmt	R
<b>File System Commands</b>		
cd	filesystem	R
cfs check	root-lr	R/W
clear-classic-config	config-services	E
copy	filesystem	E
delete	filesystem	E
dir	filesystem	E
erase nvram:	filesystem	E
erase nvram-raw:	filesystem	E
format	root-lr (EXEC), root-system (administration EXEC)	E, E
fsck	filesystem	E
mkdir	filesystem	E
pwd	filesystem	R
rmdir	filesystem	E
show filesystem	basic-services	R
show media	filesystem	R
squeeze	basic-services	E
undelete	filesystem	E
unmount	root-lr (EXEC), root-system (administration EXEC)	E, E
<b>Hardware Redundancy and Node Administration</b>		
ce tftp server	root-system	R/W
clear mbus-statistics location	sysmgr	E
dsc serial	system	R/W

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
env disable	system	R/W
env power-supply disable	system	R/W
facility-alarm contacts	root-system	R
fpd auto-upgrade	system	R/W
hw-module boot override	root-system, root-lr	R/W, R/W
hw-module location (Cisco XR 12000 Series Router)	root-lr, sysmgr	root-lr: R (EXEC, administration EXEC, administration configuration)  W (administration configuration) E (EXEC, administration EXEC)  sysmgr: R (administration configuration) W (administration configuration)
hw-module location (Cisco CRS)	root-lr, sysmgr	E, E
hw-module port	root-lr	R/W
hw-module power	root-system, root-lr	R/W, R/W
hw-module power disable	sysmgr, root-lr	R/W, R/W
hw-module profile feature	system, root-lr	R/W, R/W
hw-module reset auto	root-system, root-lr	R/W, R/W
hw-module reset auto disable	sysmgr, root-lr	R/W, R/W
hw-module service firewall location	root-lr	R/W
hw-module service maintenance-mode location	root-lr	R/W
hw-module service offline location	root-lr	R/W
hw-module service sbc location	sbc, root-lr	R/W, R/W
hw-module shutdown	root-system, sysmgr, root-lr	R/W, R/W, R/W
hw-module subslot reload	root-lr	R/W
hw-module subslot shutdown	root-lr	R/W
power budget enforcement disable	root-system	R/W
power budget reservation	root-system	R/W
redundancy switchover	root-lr	R/W
service-location (firewall, SBC, VASI)	firewall, sbc	R/W, R/W
show dsc	system	R
show environment	system	R
show fpd package	sysmgr	R

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
show hw-module fpd	sysmgr, root-lr	R, R
show hw-module subslot brief	root-lr	R
show hw-module subslot config	root-lr	R
show hw-module subslot counters	root-lr	R
show hw-module subslot errors	root-lr	R
show hw-module subslot plim-subblock	root-lr	R
show hw-module subslot registers	root-lr	R
show hw-module subslot status	root-lr	R
show inventory	sysmgr	R
show led	system	R
show mbus	sysmgr	R
show operational	The required task ID depends on the MDA class for which you are displaying the information.	
show platform	sysmgr, system, root-system	R, R, R
show redundancy	system, basic-services	R, R(for statistics keyword)
show screddrv	system	R
show services role	sbc	R
show version	basic-services	R
upgrade all	sysmgr	R/W
upgrade cputctrlbits	system	R/W
upgrade fabric-downloader	sysmgr	R/W
upgrade hw-module fpd	system, sysmgr	R/W, R/W
upgrade mbus	sysmgr	R/W
Software Package Management Commands		
clear install boot options	pkg-mgmt	R/W
clear install label	pkg-mgmt	R/W
clear install log-history oldest	pkg-mgmt	R/W
clear install rollback oldest	pkg-mgmt	R/W
install abort	pkg-mgmt	R/W
install activate	pkg-mgmt	E
install add	pkg-mgmt	E
install attach	pkg-mgmt	R/W
install auto-abort-timer stop	pkg-mgmt	R/W

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
install boot-options	pkg-mgmt	R/W
install commit	pkg-mgmt	R/W
install deactivate	pkg-mgmt	E
install label	pkg-mgmt	R/W
install remove	pkg-mgmt	E
install rollback to	pkg-mgmt	R/W
install verify healthcheck	pkg-mgmt	E
install verify packages	pkg-mgmt	E
license	pkg-mgmt	R/W
license save credential	pkg-mgmt	E
show install	pkg-mgmt	R
show install active	pkg-mgmt	R
show install audit	pkg-mgmt	R
show install auto-abort-timer	pkg-mgmt	R
show install boot-options	pkg-mgmt	R
show install committed	pkg-mgmt	R
show install inactive	pkg-mgmt	R
show install log	pkg-mgmt	R
show install package	pkg-mgmt	R
show install pie-info	pkg-mgmt	R
show install request	pkg-mgmt	R
show install rollback	pkg-mgmt	R
show install which	pkg-mgmt	R
show license file	pkg-mgmt	R
show license status	pkg-mgmt	R
<b>Manageability Commands</b>		
disable (VRF)	config-services	R/W
http server	config-services	R/W
session timeout	config-services	R/W
show xml sessions	config-services	R
vrf (XML)	config-services	R/W
xml agent	config-services	R/W
xml agent ssl	config-services	R/W
xml agent corba	config-services	R/W
xml agent corba hostname	config-services	R/W
xml agent tty	config-services	R/W

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
<b>NTP Commands</b>		
access-group (NTP)	ip-services	R/W
authenticate (NTP)	ip-services	R/W
authentication-key (NTP)	ip-services	R/W
broadcast	ip-services	R/W
broadcast client	ip-services	R/W
broadcast delay	ip-services	R/W
interface (NTP)	ip-services	R/W
master	ip-services	R/W
max-associations	ip-services	R/W
multicast client	ip-services	R/W
multicast destination	ip-services	R/W
ntp	ip-services	R/W
ntp clear	ip-services	R/W
peer (NTP)	ip-services	R/W
server (NTP)	ip-services	R/W
show calendar	basic-services	R/W
show ntp associations	ip-services	R
show ntp status	ip-services	R
source (NTP)	ip-services	R/W
trusted-key	ip-services	R/W
update-calender	ip-services	R/W
<b>Object Tracking Command</b>		
delay	sysmgr	R/W
interface (track)	sysmgr	R/W
line-protocol track	sysmgr	R/W
object	sysmgr	R/W
route ipv4	sysmgr	R/W
show track	sysmgr	R
track	sysmgr	R/W
type line-protocol state	sysmgr	R/W
type list boolean	sysmgr	R/W
type route reachability	sysmgr	R/W
vrf (track)	sysmgr	R/W
<b>Process and Memory Management Commands</b>		
affinity location-set	sysmgr	R/W

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
affinity location-type	sysmgr	R/W
affinity program	sysmgr	R/W
affinity self	sysmgr	R/W
clear context	diag	E
dumpcore	diag	R/W
exception filepath	diag	R/W
exception pakmem	diag	R/W
exception sparse	diag	R/W
exception sprsize	diag	R/W
follow	basic-services	R
monitor processes	basic-services	E
monitor threads	basic-services	E
placement memory	sysmgr	R/W
placement program	sysmgr	R/W
placement reoptimize	sysmgr	R/W
process	root-lr	E
process core	root-lr	E
process mandatory	root-lr	E
show context	diag	R
show dll	basic-services	R
show exception	diag	R
show memory	basic-services	R
show memory compare	basic-services	R
show memory heap	basic-services	R
show placement location	sysmgr	R
show placement policy	sysmgr	R
show placement program	sysmgr	R
show placement reoptimize	sysmgr	R
show processes	basic-services	R
slow-migration-interval	sysmgr	R/W
show upgrade	sysmgr	R/W
upgrade bsl	sysmgr	R/W
<b>Secure Domain Router Commands</b>		
location (SDR)	system	R/W
pair (SDR)	system	R/W
sdr	system	R/W

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
show sdr	system	R
<b>SNMP Server Commands</b>		
clear snmp counters	snmp	R/W
index persistence	snmp	R/W
iteration	config-services	R/W
notification linkupdown disable	snmp	R/W
show snmp	snmp	R
show snmp context	snmp	R
show snmp context-mapping	snmp	R
show snmp engineid	snmp	R
show snmp group	snmp	R
show snmp host	snmp	R
show snmp interface	snmp	R
show snmp interface notification	snmp	R
show snmp interface regular-expression	snmp	R
show snmp mib	snmp	R
show snmp request duplicates	snmp	R
show snmp users	snmp	R
show snmp view	snmp	R
snmp-server entityindex persist	snmp	R/W
snmp-server interface subset	snmp	R/W
snmp-server mibs cbqosmib cache	snmp	R/W
snmp-server mibs cbqosmib persist	snmp	R/W
show license features	pkg-mgmt	R
snmp-server chassis-id	snmp	R/W
snmp-server community	snmp	R/W
snmp-server community-map	snmp	R/W
snmp-server contact	snmp	R/W
snmp-server context	snmp	R/W
snmp-server engineid	snmp	R/W
snmp-server group	snmp	R/W
snmp-server host	snmp	R/W
snmp-server ifindex persist	snmp	R/W
snmp-server ifmib ifalias long	snmp	R/W
snmp-server ifmib stats cache	snmp	R/W
snmp-server interface	snmp	R/W

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
snmp-server ipv4 dscp	snmp	R/W
snmp-server ipv4 precedence	snmp	R/W
snmp-server location	snmp	R/W
snmp-server notification-log-mib	snmp	R/W
snmp-server packet-size	snmp	R/W
snmp-server queue-length	snmp	R/W
snmp-server target list	snmp	R/W
snmp-server throttle-time	snmp	R/W
snmp-server timeouts subagent	snmp	R/W
snmp-server trap link ietf	snmp	R/W
snmp-server traps	snmp	R/W
snmp-server traps bgp	snmp, bgp	R/W, R/W
snmp-server traps mpls l3vpn	snmp	R/W
snmp-server traps ospf errors	snmp	R/W
snmp-server traps ospf lsa	snmp	R/W
snmp-server traps ospf retransmit	snmp	R/W
snmp-server traps ospf state-change neighbor-state-change	snmp	R/W
snmp-server traps pim interface-state-change	snmp	R/W
snmp-server traps pim invalid-message-received	snmp	R/W
snmp-server traps pim neighbor-change	snmp	R/W
snmp-server traps pim rp-mapping-change	snmp	R/W
snmp-server traps snmp	snmp	R/W
snmp-server traps syslog	snmp	R/W
snmp-server trap-source	snmp	R/W
snmp-server trap-timeout	snmp	R/W
snmp-server user	snmp	R/W
snmp-server view	snmp	R/W
snmp-server vrf	snmp	R/W
xml agent ssl	config-services	R/W
<b>Terminal Services Commands</b>		
absolute-timeout	tty-access	R/W
access-class	tty-access	R/W
autocommand	tty-access	R/W
banner exec	tty-access	R/W
banner incoming	tty-access	R/W

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
banner login	tty-access	R/W
banner motd	tty-access	R/W
banner prompt-timeout	tty-access	R/W
clear line	tty-access	E
clear line vty	tty-access	E
cli interactive syntax check	tty-access	R/W
cli whitespace completion	tty-access	R/W
databits	tty-access	R/W
disconnect	tty-access	R/W
disconnect-character	tty-access	R/W
escape-character	tty-access	R/W
exec-timeout	tty-access	R/W
flowcontrol hardware	tty-access	R/W
length	tty-access	R/W
line	tty-access	R/W
parity	tty-access	R/W
resume	tty-access	R/W
send	tty-access	R/W
session-limit	tty-access	R/W
session-timeout	tty-access	R/W
show line	tty-access	R
show sessions	tty-access	R
show terminal	tty-access	R
show users	tty-access	R
stopbits	tty-access	R/W
terminal exec	tty-access	R
terminal length	tty-access	R/W
terminal monitor	logging	E
terminal width	tty-access	R/W
timestamp	tty-access	R/W
transport input	tty-access	R/W
transport output	tty-access	R/W
transport preferred	tty-access	R/W
vty-pool	tty-access	R/W
width(display)	tty-access	R/W
<b>Utility Commands</b>		

**Table 10** Task IDs for the Cisco IOS XR System Management Commands (continued)

Cisco IOS XR System Management Commands	Task IDs	Operations
utility bc	universal	E
utility cut	universal	E
utility date	universal	E
utility date set	universal	E
utility df	universal	E
utility du	universal	E
utility egrep	universal	E
utility fgrep	universal	E
utility find	universal	E
utility head	universal	E
utility less	universal	E
utility mv	universal	E
utility sort	universal	E
utility tail	universal	E
utility uniq	universal	E
utility wc	universal	E
utility which	universal	E
utility xargs	universal	E

## Task IDs for System Monitoring Commands

**Table 11** is a task ID reference for the commands in the *Cisco IOS XR System Monitor* books. Commands are listed in alphabetic order within each module.

**Table 11** Task IDs for the Cisco IOS XR System Monitoring Commands

Cisco IOS XR System Monitoring Commands	Task IDs	Operations
<b>Alarm Management and Logging Correlation Commands</b>		
alarm	logging	R/W
all-alarms	logging	R/W
all-of-router	logging	E
clear logging correlator delete	logging	E
clear logging events delete	logging	E
clear logging events reset	logging	E
context-correlation	logging	R/W
logging correlator apply rule	logging	R/W
logging correlator apply ruleset	logging	R/W

**Table 11** Task IDs for the Cisco IOS XR System Monitoring Commands (continued)

Cisco IOS XR System Monitoring Commands	Task IDs	Operations
logging correlator buffer-size	logging	R/W
logging correlator rule	logging	R/W
logging correlator ruleset	logging	R/W
logging events buffer-size	logging	R/W
logging events display-location	logging	R/W
logging events level	logging	R/W
logging events threshold	logging	R/W
logging suppress apply rule	logging	R/W
logging suppress rule	logging	R/W
nonrootcause	logging	R/W
reissue-nonbistate	logging	R/W
reparent	logging	R/W
rootcause	logging	R/W
show logging correlator buffer	logging	R
show logging correlator info	logging	R
show logging correlator rule	logging	R
show logging correlator ruleset	logging	R
show logging events buffer	logging	R
show logging events info	logging	R
show logging suppress rule	logging	R
source	logging	E
timeout	logging	R,W
timeout-rootcause	logging	R,W
<b>Embedded Event Manager Commands</b>		
event manager directory user	eem	R/W
event manager environment	eem	R/W
event manager policy	eem	R/W
event manager refresh-time	eem	R/W
event manager run	eem	R
event manager scheduler suspend	eem	R/W
show event manager directory user	eem	R
show event manager environment	eem	R
show event manager metric hardware	eem	R
show event manager metric process	eem	R
show event manager policy available	eem	R
show event manager policy registered	eem	R

**Table 11** Task IDs for the Cisco IOS XR System Monitoring Commands (continued)

Cisco IOS XR System Monitoring Commands	Task IDs	Operations
show event manager refresh-time	eem	R
show event manager statistics-table	eem	R
<b>IP Service Level Agreement Commands</b>		
access-list	monitor	R/W
action (IP SLA)	monitor	R/W
ageout	monitor	R/W
buckets (history)	monitor	R/W
buckets (statistics hourly)	monitor	R/W
buckets (statistics interval)	monitor	R/W
control disable	monitor	R/W
datasize request	monitor	R/W
destination address (IP SLA)	monitor	R/W
destination port	monitor	R/W
distribution count	monitor	R/W
distribution interval	monitor	R/W
exp	monitor	R/W
filter	monitor	R/W
force explicit-null	monitor	R/W
frequency (IP SLA)	monitor	R/W
history	monitor	R/W
interval	monitor	R/W
ipsla	monitor	R/W
key-chain	monitor	R/W
life	monitor	R/W
lives	monitor	R/W
low-memory	monitor	R/W
lsp selector ipv4	monitor	R/W
lsr-path	monitor	R/W
maximum hops	monitor	R/W
maximum paths (IP SLA)	monitor	R/W
monitor	monitor	R/W
mpls discovery vpn	monitor	R/W
mpls lsp-monitor	monitor	R/W
operation	monitor	R/W
output interface	monitor	R/W
output nexthop	monitor	R/W

**Table 11** Task IDs for the Cisco IOS XR System Monitoring Commands (continued)

Cisco IOS XR System Monitoring Commands	Task IDs	Operations
packet count	monitor	R/W
packet interval	monitor	R/W
path discover	monitor	R/W
path discover echo	monitor	R/W
path discover path	monitor	R/W
path discover scan	monitor	R/W
path discover session	monitor	R/W
react	monitor	R/W
react lpd	monitor	R/W
reaction monitor	monitor	R/W
reaction operation	monitor	R/W
reaction trigger	monitor	R/W
responder	monitor	R/W
recurring	monitor	R/W
reply dscp	monitor	R/W
reply mode	monitor	R/W
samples	monitor	R/W
scan delete-factor	monitor	R/W
scan interval	monitor	R/W
schedule monitor	monitor	R/W
schedule operation	monitor	R/W
schedule period	monitor	R/W
show ipsla application	monitor	R
show ipsla history	monitor	R
show ipsla mpls discovery vpn	monitor	R
show ipsla mpls lsp-monitor lpd	monitor	R
show ipsla mpls lsp-monitor scan-queue	monitor	R
show ipsla mpls lsp-monitor summary	monitor	R
show ipsla responder statistics ports	monitor	R
show ipsla statistics	monitor	R
show ipsla statistics aggregated	monitor	R
show ipsla statistics enhanced aggregated	monitor	R
source address	monitor	R/W
source port	monitor	R/W
start-time	monitor	R/W
statistics	monitor	R/W

**Table 11** Task IDs for the Cisco IOS XR System Monitoring Commands (continued)

Cisco IOS XR System Monitoring Commands	Task IDs	Operations
tag (IP SLA)	monitor	R/W
target ipv4	monitor	R/W
target pseudowire	monitor	R/W
target traffic-eng	monitor	R/W
threshold	monitor	R/W
threshold type average	monitor	R/W
threshold type consecutive	monitor	R/W
threshold type immediate	monitor	R/W
threshold type xofy	monitor	R/W
timeout (IP SLA)	monitor	R/W
tos	monitor	R/W
ttl	monitor	R/W
type icmp echo	monitor	R/W
type icmp path-echo	monitor	R/W
type icmp path-jitter	monitor	R/W
type mpls lsp ping	monitor	R/W
type mpls lsp trace	monitor	R/W
type udp echo	monitor	R/W
type udp jitter	monitor	R/W
type udp ipv4 address	monitor	R/W
verify-data	monitor	R/W
vrf (IP SLA)	monitor	R/W
vrf (IP SLA MPLS LSP monitor)	monitor	R/W
<b>Logging Services Commands</b>		
archive-length	logging	R/W
archive-size	logging	R/W
clear logging	logging	E
device	logging	R/W
file-size	logging	R/W
frequency (logging)	logging	R/W
logging	logging	R/W
logging archive	logging	R/W
logging buffered	logging	R/W
logging console	logging	R/W
logging disable	logging	R/W
logging events link-status	logging	R/W

**Table 11** Task IDs for the Cisco IOS XR System Monitoring Commands (continued)

Cisco IOS XR System Monitoring Commands	Task IDs	Operations
logging events link-status (interface)	logging	R/W
logging facility	logging	R/W
logging history	logging	R/W
logging history size	logging	R/W
logging hostnameprefix	logging	R/W
logging localfilesize	logging	R/W
logging monitor	logging	R/W
logging source-interface	logging	R/W
logging suppress deprecated	logging	R/W
logging suppress duplicates	logging	R/W
logging trap	logging	R/W
service timestamps	logging	R/W
severity	logging	R/W
show logging	logging	R
show logging history	logging	R
terminal monitor (logging)	logging	E
<b>Onboard Failure Logging Commands</b>		
clear logging onboard	logging	R
hw-module logging onboard	logging, root-lr	R/W, R/W
show logging onboard	logging	R
<b>Performance Management Commands</b>		
monitor controller fabric	fabric, basic-services, monitor	R, E, R
monitor controller sonet	fabric, basic-services, monitor	R, E, R
monitor interface	basic-services, monitor	E, R
performance-mgmt apply monitor	monitor	R/W/E
performance-mgmt apply statistics	monitor	R/W/E
performance-mgmt apply thresholds	monitor	R/W/E
performance-mgmt regular-expression	monitor	R/W
performance-mgmt resources dump local	monitor	R/W
performance-mgmt resources memory	monitor	R/W
performance-mgmt resources tftp-server	monitor	R/W
performance-mgmt statistics	monitor	R/W
performance-mgmt thresholds	monitor	R/W
show performance-mgmt bgp	monitor	R
show performance-mgmt interface	monitor	R
show performance-mgmt mpls	monitor	R

**Table 11** Task IDs for the Cisco IOS XR System Monitoring Commands (continued)

Cisco IOS XR System Monitoring Commands	Task IDs	Operations
show performance-mgmt node	monitor	R
show performance-mgmt ospf	monitor	R/W
show running performance-mgmt	monitor	R/W
<b>Statistics Service Commands</b>		
clear counters	interface	E
load-interval	interface	R/W

## Task IDs for System Security Commands

Table 12 is a task ID reference for the commands in the *Cisco IOS XR System Security* books. Commands are listed in alphabetic order within each module.

**Table 12** Task IDs for the Cisco IOS XR System Security Commands

Cisco IOS XR System Security Commands	Task IDs	Operations
<b>Authentication, Authorization, and Accounting Commands</b>		
aaa accounting	aaa	R/W
aaa accounting system default	aaa	R/W
aaa accounting update	aaa	R/W
aaa authentication	aaa	R/W
aaa authorization	aaa	R/W
aaa default-taskgroup	aaa	R/W
aaa group server radius	aaa	R/W
aaa group server tacacs+	aaa	R/W
accounting (line)	aaa	R/W
authorization	aaa	R/W
deadtime (server-group configuration)	aaa	R/W
description (AAA)	aaa	R/W
group (AAA)	aaa	R/W
inherit taskgroup	aaa	R/W
inherit usergroup	aaa	R/W
key (RADIUS)	aaa	R/W
key (TACACS+)	aaa	R/W
login authentication	aaa, tty-access	R/W, R/W
password (AAA)	aaa	R/W
radius-server dead-criteria time	aaa	R/W
radius-server dead-criteria tries	aaa	R/W

**Table 12** Task IDs for the Cisco IOS XR System Security Commands (continued)

Cisco IOS XR System Security Commands	Task IDs	Operations
radius-server deadtime	aaa	R/W
radius-server host	aaa	R/W
radius-server key	aaa	R/W
radius-server retransmit	aaa	R/W
radius-server timeout	aaa	R/W
radius source-interface	aaa	R/W
retransmit (RADIUS)	aaa	R/W
secret	aaa	R/W
server (RADIUS)	aaa	R/W
server (TACACS+)	aaa	R/W
server-private (RADIUS)	aaa	R/W
show aaa	aaa	R
show radius	aaa	R
show radius accounting	aaa	R
show radius authentication	aaa	R
show radius client	aaa	R
show radius dead-criteria	aaa	R
show radius server-groups	aaa	R
show tacacs	aaa	R
show tacacs server-groups	aaa	R
show task supported	none	—
show user	none	—
single-connection	aaa	R/W
tacacs-server host	aaa	R/W
tacacs-server key	aaa	R/W
tacacs-server timeout	aaa	R/W
tacacs source-interface	aaa	R/W
task	aaa	R/W
taskgroup	aaa	R/W
timeout (RADIUS)	aaa	R/W
timeout (TACACS+)	aaa	R/W
timeout login response	aaa	R/W
usergroup	aaa	R/W
username	aaa	R/W
users group	aaa	R/W
vrf (RADIUS)	aaa	R/W

**Table 12** Task IDs for the Cisco IOS XR System Security Commands (continued)

Cisco IOS XR System Security Commands	Task IDs	Operations
<b>Internet Key Exchange Security Protocol Commands</b>		
accounting (IKE)	crypto	R/W
acl	crypto	R/W
address	crypto	R/W
authentication (IKE policy)	crypto	R/W
auto-update client	crypto	R/W
backup-server	crypto	R/W
banner	crypto	R/W
browser-proxy	crypto	R/W
clear crypto isakmp	crypto	E
clear crypto isakmp call admission statistics	crypto	E
clear crypto isakmp errors	crypto	E
clear crypto session	crypto	E
client authentication list	crypto	R/W
client single-sa-per-inft	crypto	R/W
configuration url	crypto	R/W
configuration version	crypto	R/W
crypto ipsec server send-update	crypto	E
crypto isakmp	crypto	R/W
crypto isakmp call admission limit	crypto	R/W
crypto isakmp client configuration group	crypto	R/W
crypto isakmp identity	crypto	R/W
crypto isakmp keepalive	crypto	R/W
crypto isakmp peer	crypto	R/W
crypto isakmp policy	crypto	R/W
crypto isakmp policy-set	crypto	R/W
crypto isakmp profile	crypto	R/W
crypto keyring	crypto	R/W
crypto logging	crypto	R/W
description (IKE policy)	crypto	R/W
description (ISAKMP peer)	crypto	R/W
description (ISAKMP policy-set)	crypto	R/W
description (keyring)	crypto	R/W
dns	crypto	R/W
domain (isakmp-group)	crypto	R/W
encryption (IKE policy)	crypto	R/W

**Table 12** Task IDs for the Cisco IOS XR System Security Commands (continued)

Cisco IOS XR System Security Commands	Task IDs	Operations
firewall are-u-there	crypto	R/W
group (IKE policy)	crypto	R/W
group-lock	crypto	R/W
hash (IKE policy)	crypto	R/W
include-local-lan	crypto	R/W
isakmp authorization list	crypto	R/W
keepalive (ISAKMP profile)	crypto	R/W
key (IKE)	crypto	R/W
keyring	crypto	R/W
key-string (IKE)	crypto	R/W
lifetime (IKE policy)	crypto	R/W
local-address (keyring)	crypto	R/W
match identity	crypto	R/W
match identity (ISAKMP policy-set)	crypto	R/W
match identity (ISAKMP profile)	crypto	R/W
max-logins	crypto	R/W
max-users	crypto	R/W
netmask	crypto	R/W
policy (ISAKMP policy-set)	crypto	R/W
pfs	crypto	R/W
pool (isakmp-group)	crypto	R/W
pre-shared-key	crypto	R/W
proxy	crypto	R/W
rsa-pubkey	crypto	R/W
save-password	crypto	R/W
self-identity	crypto	R/W
set interface	crypto	R/W
set interface service-gre	crypto	R/W
set interface service-ipsec	crypto	R/W
set interface tunnel-ipsec	crypto	R/W
set ipsec-profile	crypto	R/W
show crypto isakmp call admission statistics	crypto	R
show crypto isakmp errors	crypto	R
show crypto isakmp key	crypto	R
show crypto isakmp peers	crypto	R
show crypto isakmp policy	crypto	R

**Table 12** Task IDs for the Cisco IOS XR System Security Commands (continued)

Cisco IOS XR System Security Commands	Task IDs	Operations
show crypto isakmp profile	crypto	R
show crypto isakmp sa	crypto	R
show crypto isakmp sa count	crypto	R
show crypto isakmp sa detail	crypto	R
show crypto stats	crypto	R
show crypto key pubkey-chain rsa	crypto	R
show crypto session	crypto	R
split-dns	crypto	R/W
wins	crypto	R/W
<b>IPSec Network Security Commands</b>		
clear crypto engine statistics	crypto	E
clear crypto ipsec sa	crypto	E
clear crypto ipsec sa interface	crypto	E
crypto ipsec df-bit (global)	crypto	R/W
crypto ipsec df-bit (interface)	crypto	R/W
crypto mib ipsec flowmib history failure size	crypto	R/W
crypto ipsec pmtu	crypto	R/W
crypto ipsec pre-fragmentation disable	crypto	R/W
crypto ipsec profile	crypto	R/W
crypto ipsec nat-transparency disable	crypto	R/W
crypto ipsec security-association idle-time	crypto	R/W
crypto ipsec security-association lifetime	crypto	R/W
crypto ipsec security-association replay disable	crypto	R/W
crypto ipsec security-association replay window-size	crypto	R/W
crypto ipsec transform-set	crypto	R/W
crypto ipsec transport	crypto	R/W
description (IPSec profile)	profile configuration	R/W
interface service-ipsec	interface	R/W
interface tunnel-ip (GRE)	interface	R/W
interface service-gre	interface	R/W
interface tunnel-ipsec	interface	R/W
match transform-set	crypto	R/W
profile	crypto	R/W
reverse-route	crypto	R/W
service-location	interface	R/W
set pfs	crypto	R/W

**Table 12** Task IDs for the Cisco IOS XR System Security Commands (continued)

Cisco IOS XR System Security Commands	Task IDs	Operations
set security-association idle-time	crypto	R/W
set security-association lifetime	crypto	R/W
set security-association replay disable	crypto	R/W
set session-key inbound ah	crypto	R/W
set session-key inbound esp	crypto	R/W
set session-key outbound ah	crypto	R/W
set session-key outbound esp	crypto	R/W
set transform-set	crypto	R/W
set type	crypto	R/W
show crypto engine statistics	crypto	R
show crypto ipsec interface	crypto	R
show crypto ipsec profile	crypto	R
show crypto ipsec sa	crypto	R
show crypto ipsec statistics	crypto	R
show crypto ipsec summary	crypto	R
show crypto ipsec transform-set	crypto	R
tunnel destination (IPSec)	interface	R/W
tunnel mode (IP)	tunnel, interface	R/W, R/W
tunnel ttl (IP)	tunnel, interface	R/W, R/W
tunnel dfbit disable (IP)	tunnel, interface	R/W, R/W
tunnel tos (IP)	tunnel, interface	R/W, R/W
tunnel source (IPSec)	interface	R/W
tunnel source (IP)	interface	R/W
tunnel vrf (IPSec)	interface	R/W
<b>Public Key Infrastructure Commands</b>		
clear crypto ca certificates	crypto	E
clear crypto ca crl	crypto	E
crl optional (trustpoint)	crypto	R/W
crypto ca authenticate	crypto	E
crypto ca cancel-enroll	crypto	E
crypto ca enroll	crypto	E
crypto ca import	crypto	E
crypto ca trustpoint	crypto	E
crypto key import authentication rsa	crypto	E
crypto key generate dsa	crypto	E
crypto key generate rsa	crypto	E

**Table 12** Task IDs for the Cisco IOS XR System Security Commands (continued)

Cisco IOS XR System Security Commands	Task IDs	Operations
crypto key zeroize dsa	crypto	E
crypto key zeroize rsa	crypto	E
description (trustpoint)	crypto	R/W
enrollment retry count	crypto	R/W
enrollment retry period	crypto	R/W
enrollment terminal	crypto	R/W
enrollment url	crypto	R/W
ip-address (trustpoint)	crypto	R/W
query url	crypto	R/W
rsakeypair	crypto	R/W
serial-number (trustpoint)	crypto	R/W
sftp-password (trustpoint)	crypto	R/W
sftp-username (trustpoint)	crypto	R/W
show crypto ca certificates	crypto	R
show crypto ca crls	crypto	R
show crypto key mypubkey dsa	crypto	R
show crypto key mypubkey rsa	crypto	R
subject-name (trustpoint)	crypto	R/W
<b>Secure Shell Commands</b>		
clear ssh	crypto	E
sftp	crypto, basic-services	E, E
sftp (Interactive Mode)	crypto, basic-services	E, E
show ssh	crypto	R
show ssh session details	crypto	R
ssh	crypto, basic-services	E, E
ssh client knownhost	crypto	R/W
ssh client source-interface	crypto	R/W
ssh client vrf	crypto	R/W
ssh server	crypto	R/W
ssh server rate-limit	crypto	R/W
ssh server session-limit	crypto	R/W
ssh server v2	crypto	R/W
ssh timeout	crypto	R/W
<b>Secure Socket Layer Protocol Commands</b>		
show ssl	crypto	R
<b>Software Authentication Manager Commands</b>		

**Table 12** Task IDs for the Cisco IOS XR System Security Commands (continued)

Cisco IOS XR System Security Commands	Task IDs	Operations
sam add certificate	crypto	E
sam delete certificate	crypto	E
sam prompt-interval	crypto	R/W
sam verify	crypto	E
show sam certificate	none	—
show sam crl	crypto	R
show sam log	crypto	R
show sam package	crypto	R
show sam sysinfo	crypto	R
<b>Keychain Management Commands</b>		
accept-lifetime	system	R/W
accept-tolerance	system	R/W
cryptographic-algorithm	system	R/W
key (key chain)	system	R/W
key chain (key chain)	system	R/W
key-string (keychain)	system	R/W
send-lifetime	system	R/W
show key chain	system	R
<b>Management Plane Protection Commands</b>		
address ipv4 (MPP)	system	R/W
address ipv6 (MPP)	system	R/W
allow	system	R/W
control-plane	system	R/W
inband	system	R/W
interface (MPP)	system	R/W
management-plane	system	R/W
out-of-band	system	R/W
show mgmt-plane	system	R
vrf (MPP)	system	R
<b>Lawful Intercept Commands</b>		
lawful-intercept disable	li	R/W
<b>Traffic Storm Control Commands</b>		
storm-control	l2vpn	R/W

# Task IDs for Virtual Firewall Commands

**Table 13** is a task ID reference for the commands in the Cisco IOS XR Virtual Firewall Books. Commands are listed in alphabetic order within each module.

**Table 13** Task IDs for the Cisco IOS XR Virtual Firewall Commands

Cisco IOS XR Virtual Firewall Commands	Task IDs	Operations
<b>Virtual Firewall Commands</b>		
default-interface-name	firewall	R/W
failure-action	firewall	R/W
firewall	firewall	R/W
firewall (interface)	interface	R/W
hw-module service firewall location	root	R/W
interface firewall Management	interface	R/W
service firewall attach location	firewall	E
show services firewall attachments	firewall	R
show services firewall interfaces	firewall, interface	R, R
<b>VASI Commands</b>		
interface vasi	interface	R/W
show interfaces vasi	interface	R/W
show services vasi status	interface	R/W

# Task IDs for Virtual Private Network Commands

**Table 14** is a task ID reference for the commands in the Cisco IOS XR Virtual Firewall Books. Commands are listed in alphabetic order within each module.

**Table 14** Task IDs for the Cisco IOS XR Virtual Private Network Commands

Cisco IOS XR Virtual Private Network Commands	Task IDs	Operations
<b>Point to Point Layer 2 Services Commands</b>		
backup (L2VPN)	l2vpn	R/W
backup disable (L2VPN)	l2vpn	R/W
clear l2vpn collaborators	l2vpn	R/W
clear l2vpn counters bridge mac-withdrawal	l2vpn	R/W
clear l2vpn forwarding counters	l2vpn	R/W
clear l2vpn forwarding mac-address-table	l2vpn	R/W
clear l2vpn forwarding message counters	l2vpn	R/W
clear l2vpn forwarding table	l2vpn	R/W
dynamic-arp-inspection	l2vpn	R/W

**Table 14** Task IDs for the Cisco IOS XR Virtual Private Network Commands (continued)

Cisco IOS XR Virtual Private Network Commands	Task IDs	Operations
interface (p2p)	l2vpn	R/W
interworking ipv4	l2vpn	R/W
ip-source-guard	l2vpn	R/W
l2transport	l2vpn	R/W
l2transport cell-packing	l2vpn, atm	R/W, R/W
l2transport l2protocol	l2vpn, atm	R/W, R/W
l2transport propagate	l2vpn	R/W
l2transport service-policy	l2vpn, atm	R/W, R/W
l2vpn	l2vpn	R/W
l2vpn resynchronize forwarding mac-address-table location	l2vpn	R/W, E
l2vpn switchover	l2vpn	R/W, E
load-balancing flow	l2vpn	R/W
load-balancing pw-label	l2vpn	R/W
logging (l2vpn)	l2vpn	R/W
mpls static label (L2VPN)	l2vpn	R/W
neighbor (L2VPN)	l2vpn	R/W
preferred-path	l2vpn	R/W
pw-class (L2VPN)	l2vpn	R/W
pw-class encapsulation mpls	l2vpn	R/W
p2p	l2vpn	R/W
sequencing (L2VPN)	l2vpn	R/W
show l2vpn collaborators	l2vpn	R/W
show l2vpn forwarding	l2vpn	R
show l2vpn pw-class	l2vpn	R
show l2vpn resource	l2vpn	R
show l2vpn xconnect	l2vpn	R/W
switching-tlv (L2VPN)	l2vpn	R/W
tag-rewrite	l2vpn	R/W
transport mode (L2VPN)	l2vpn	R/W
xconnect group	l2vpn	R/W
<b>Virtual Private LAN Services Commands</b>		
flooding unknown-unicast disable (VPLS)	l2vpn	R/W
port-down flush disable (VPLS)	l2vpn	R/W
<b>Ethernet Interfaces Commands</b>		
carrier-delay	interface	R/W

**Table 14** Task IDs for the Cisco IOS XR Virtual Private Network Commands (continued)

Cisco IOS XR Virtual Private Network Commands	Task IDs	Operations
encapsulation default	interface	R/W
ethernet egress-filter	interface	R/W
ethernet oam loopback	interface, basic-services	R/W, R/W
flow-control	interface	R/W
interface GigabitEthernet	interface	R/W
interface TenGigE	interface	R/W
l2protocol (Ethernet)	l2vpn	R/W
l2transport (Ethernet)	l2vpn	R/W
loopback (Ethernet)	interface	R/W
negotiation auto	interface	R/W
negotiation auto	interface	R/W
show controllers (Ethernet)	interface	R
show ethernet oam configuration	interface	R
show mac-accounting (Ethernet)	interface	R
show spanning-tree mst	interface	R
<b>Link Bundling Commands</b>		
bundle id	bundle	R/W
bundle-hash	bundle	R
bundle maximum-active links	bundle	R/W
bundle minimum-active bandwidth	bundle	R/W
bundle minimum-active bandwidth	bundle	R/W
bundle port-priority	bundle	R/W
clear lacp counters	bundle, basic-services	E, R/W
interface (bundle)	bundle	R/W
lacp period short	bundle	R/W
lacp system-priority	bundle	R/W
show lacp system-id	bundle	R
show bundle Bundle-Ether	bundle	R
show bundle Bundle-POS	bundle	R
show lacp bundle	bundle	R
show lacp counters	bundle	R
<b>Multipoint Layer 2 Services Commands</b>		
action (VPLS)	l2vpn	R/W
aging (VPLS)	l2vpn	R/W
aps-channel	l2vpn	R/W
bridge-domain (VPLS)	l2vpn	R/W

**Table 14** Task IDs for the Cisco IOS XR Virtual Private Network Commands (continued)

Cisco IOS XR Virtual Private Network Commands	Task IDs	Operations
bridge group (VPLS)	l2vpn	R/W
clear l2vpn bridge-domain (VPLS)	l2vpn	R/W
description	l2vpn	R/W
dhcp ipv4 snoop (VPLS)	l2vpn	R/W
ethernet ring g8032	l2vpn	R/W
ethernet ring g8032 profile	ethernet-services	R/W
exclusion-list	l2vpn	R/W
flooding disable	l2vpn	R/W
flooding unknown-unicast disable (VPLS)	l2vpn	R/W
inclusion-list	l2vpn	R/W
instance (G.8032)	l2vpn	R/W
interface (VPLS)	l2vpn	R/W
isolation recovery-delay	config-services	R/W
learning disable (VPLS)	l2vpn	R/W
level	l2vpn	R/W
limit (VPLS)	l2vpn	R/W
mac (VPLS)	l2vpn	R/W
mac secure	l2vpn	R/W
maximum (VPLS)	l2vpn	R/W
monitor interface (port0)	l2vpn	R/W
monitor interface (port1)	l2vpn	R/W
mpls static label (VPLS)	l2vpn	R/W
mtu (VPLS)	l2vpn	R/W
neighbor (VPLS)	l2vpn	R/W
notification (VPLS)	l2vpn	R/W
open ring	l2vpn	R/W
port0 interface	l2vpn	R/W
port1	l2vpn	R/W
port-down flush disable (VPLS)	l2vpn	R/W
profile	l2vpn	R/W
pw-class (VFI)	l2vpn	R/W
pw-status	l2vpn	R/W
rpl	l2vpn	R/W
show ethernet ring g8032	vlan, interface, ethernet-services	R, R, R
show l2vpn bridge-domain (VPLS)	l2vpn	R

**Table 14** Task IDs for the Cisco IOS XR Virtual Private Network Commands (continued)

Cisco IOS XR Virtual Private Network Commands	Task IDs	Operations
show l2vpn ethernet ring g8032	l2vpn	R
show l2vpn forwarding bridge-domain (VPLS)	l2vpn	R
show l2vpn forwarding bridge-domain mac-address (VPLS)	l2vpn	R
show l2vpn forwarding ethernet ring g8032	l2vpn	R
shutdown (Bridge Domain)	l2vpn	R/W
shutdown (VFI)	l2vpn	R/W
split-horizon group	l2vpn	R/W
static-address (VPLS)	l2vpn	R/W
tcn-propagation	l2vpn	R/W
time (VPLS)	l2vpn	R/W
type (VPLS)	l2vpn	R/W
vfi (VPLS)	l2vpn	R/W
withdraw disable (VPLS)	l2vpn	R/W
<b>Multiple Spanning Tree Protocol Commands</b>		
bridge-id	interface	R/W
COST	interface	R/W
edge-mode	ethernet-services	R/W
external-cost (MSTAG)	interface	R/W
external-cost (MSTP)	interface	R/W
forward-delay	interface	R/W
guard root	interface	R/W
guard topology-change	interface	R/W
hello-time (MSTAG)	interface	R/W
hello-time (MSTP)	interface	R/W
instance	interface	R/W
instance cost	interface	R/W
instance port-priority	interface	R/W
interface (MSTAG)	interface	R/W
interface (MSTP)	interface	R/W
interface (PVSTAG/PVRSTAG)	ethernet-services	R/W
link-type	interface	R/W
name (MSTAG)	interface	R/W
name (MSTP)	interface	R/W
max age	interface	R/W
maximum (MSTP)	interface	R/W

**Table 14** Task IDs for the Cisco IOS XR Virtual Private Network Commands (continued)

Cisco IOS XR Virtual Private Network Commands	Task IDs	Operations
portfast	interface	R/W
port-id	interface	R/W
port-priority	interface	R/W
priority	interface	R/W
provider-bridge (MSTAG)	interface	R/W
provider-bridge (MSTAG)	interface	R/W
revision (MSTAG)	interface	R/W
revision (MSTP)	interface	R/W
root-cost	ethernet-services	R/W
show spanning-tree mst	interface	R
show spanning-tree pvrstag	interface	R
show spanning-tree pvstag	interface	R
spanning-tree mst	interface	R/W
spanning-tree pvrstag	ethernet-services	R/W
spanning-tree pvstag	ethernet-services	R/W
spanning-tree ring-termination	interface	R/W
transmit hold-count	interface	R/W
vlan (PVSTAG/PVRSTAG)	interface	R/W
vlan-id	interface	R/W
<b>Ethernet Connectivity Fault Management Commands</b>		
show ethernet cfm configuration-errors	interface	R/W
show ethernet cfm interfaces status	interface	R/W
show ethernet cfm peer meps	interface	R/W
traceroute ethernet cfm (basic linktrace)	interface	R
traceroute ethernet cfm (exploratory linktrace)	interface	R
<b>Layer 2 Access List Commands</b>		
copy access-list ethernet-service	acl, filesystem	R/W, E
deny (ES ACL)	acl	R/W
ethernet-service access-group	acl	R/W
ethernet-services access-list	acl	R/W
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show access-list ethernet-service usage pfilter	acl	R/W
<b>Virtual Private Network Commands</b>		

**Table 14** Task IDs for the Cisco IOS XR Virtual Private Network Commands (continued)

Cisco IOS XR Virtual Private Network Commands	Task IDs	Operations
authentication (L2TP)	l2vpn	R/W
backup (L2VPN)	l2vpn	R/W
backup disable (L2VPN)	l2vpn	R/W
clear l2tp counters control session	l2vpn	R/W
clear l2tp counters control tunnel	l2vpn	R/W
clear l2tp tunnel	l2vpn	R/W
clear l2vpn counters bridge mac-withdrawal	l2vpn	R/W
digest (L2TP)	l2vpn	R/W
hello-interval (L2TP)	l2vpn	R/W
hidden (L2TP)	l2vpn	R/W
hostname (L2TP)	l2vpn	R/W
interface (p2p)	l2vpn	R/W
l2tp-class	l2vpn	R/W
l2tp-class configuration	l2vpn	R/W
l2transport cell-packing	l2vpn, atm	R/W, R/W
l2transport l2protocol	l2vpn, atm	R/W, R/W
l2transport service-policy	l2vpn, atm	R/W, R/W
password (L2TP)	l2vpn	R/W
receive-window (L2TP)	l2vpn	R/W
retransmit (L2TP)	l2vpn	R/W
show l2tp counters forwarding session	l2vpn	R/W
show l2tp session	l2vpn	R/W
show l2tp session	l2vpn	R/W
show l2tp tunnel	l2vpn	R/W
show l2vpn forwarding l2tp	l2vpn	R
timeout setup (L2TP)	l2vpn	R/W



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- aaa group server tacacs + **100**
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- accept-mode **38**
- accept-register **54**
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