



Cisco IOS-XR Task ID Reference Guide

Cisco IOS-XR Software Release 2.0

Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

Text Part Number: OL-6555-01



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

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

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

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

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

CCSP, the Cisco Square Bridge logo, Cisco Unity, Follow Me Browsing, FormShare, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, ProConnect, RateMUX, Registrar, ScriptShare, SlideCast, SMARTnet, StrataView Plus, SwitchProbe, TeleRouter, The Fastest Way to Increase Your Internet Quotient, TransPath, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0406R)

Cisco IOS-XR Task ID Reference Guide

Copyright © 2004 Cisco Systems, Inc. All rights reserved.



Cisco IOS-XR Task ID Reference Guide

The operational tasks that enable users to control, configure, and monitor the Cisco IOS-XR software are represented by task IDs. A task ID defines the permission to execute an operation for a command. Users are associated with sets of task IDs that define the breadth of their authorized access to the Cisco CRS-1 Series router.

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

This reference guide identifies the set of task IDs that enable users to perform operations for Cisco IOS-XR commands, and consists of the following tables that correspond to Cisco IOS-XR command reference technology books:

- Task IDs for the Cisco IOS-XR IP Addresses and Services Commands, page 3
- Task IDs for the Cisco IOS-XR Interface and Hardware Component Commands, page 9
- Task IDs for the Cisco IOS-XR Multicast Commands, page 13
- Task IDs for the Cisco IOS-XR MPLS Commands, page 16
- Task IDs for the Cisco IOS-XR Routing Commands, page 20
- Task IDs for the Cisco IOS-XR System Management Commands, page 32
- Task IDs for the Cisco IOS-XR System Security Commands, page 39

General Usage Guidelines

Here are some general guidelines to follow when using this reference guide.

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

Task ID operations can be one, all, or a combination of the following:

- R—A designation that permits a read (only) 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).
- N—A designation that is reserved for future use.

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 **mpls traffic-eng area** command should have the read operation applied to the mpls-te task ID, and the read and write operations applied to the ospf task ID.

If the task ID and operations columns have N/A 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 while in a specific configuration submode. For example, to execute the **vrrp assume-ownership** command, 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:

```
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
```

Table 1 is a task ID reference for the commands in the *Cisco IOS-XR IP Addresses and Services* chapter. Commands are listed in alphabetical order within each chapter.

Table 1 Task IDs for the Cisco IOS-XR IP Addresses and Services Commands

Cisco IOS-XR IP Addresses and Services Commands	Task IDs	Operations
Access List Commands		
clear ipv4 access-list	acl	R/W
clear ipv6 access-list	acl, network	R/W, R/W
copy ipv4 access-list	acl, filesystem	R/W, E
copy ipv6 access-list	acl, filesystem	R/W, E
deny (IPv4)	acl	R/W
deny (IPv6)	acl	R/W
ipv4 access-group	acl, network	R/W, R/W
ipv4 access-list	acl, basic-services	R/W, R/W
ipv4 access-list log-update threshold	basic-services, acl	R/W, R/W
ipv6 access-group	network, acl	R/W, R/W
ipv6 access-list	network, acl	R/W, R/W
ipv6 access-list log-update threshold	network, acl	R/W, R/W
permit (IPv4)	acl, basic-services	R/W, R/W
permit (IPv6)	acl	R/W
remark (IPv4)	acl	R/W
remark (IPv6)	acl	R/W
resequence ipv4 access-list	acl, basic-services	R/W, R/W
resequence ipv6 access-list	acl, basic-services	R/W, R/W
show ipv4 access-lists	ack, basic-services	R, R
show ipv6 access-lists	acl, network	R, R
ARP Commands		
arp	cef	R/W
arp timeout	cef	R/W
clear arp-cache	cef	R
proxy-arp	cef	R/W
show arp (cache)	cef	R
Cisco Express Forwarding Commands		
cef ipv4 unicast check-consistency	cef	R/W
clear adjacency ipv4	cef	R/W
clear adjacency statistics	cef	R
clear cef ipv4 drop	cef	R/W
clear cef ipv4 exceptions	cef	R/W
clear cef ipv4 prefix	cef	R/W

Table 1 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 cef ipv4 prefix-statistics	cef	R/W
clear cef ipv6 drop	cef	R/W
clear cef ipv6 exceptions	cef	R/W
ip cef accounting non-recursive	cef, basic-services	R/W, R/W
ip cef purge-delay	cef, basic-services	R/W, R/W
ipv4 verify unicast source reachable-via	network	R/W
ipv6 verify unicast source reachable-via any	network	R/W
rp mgmtethernet forwarding	cef	R/W
show adjacency	cef	R
show cef ipv4	cef	R
show cef ipv4 drop	cef	R
show cef ipv4 exceptions	cef	R
show cef ipv4 interface	cef	R
show cef ipv4 non-recursive	cef	R
show cef ipv4 summary	cef	R
show cef ipv4 unicast check-consistency	cef	R
show cef ipv4 unresolved	cef	R
show cef ipv6	cef	R
show cef ipv6 drop	cef	R
show cef ipv6 exceptions	cef	R
show cef ipv6 non-recursive	cef	R
show cef ipv6 unresolved	cef	R
DHCP Commands		
dhcp relay information check disable	ip-services	R/W
dhcp relay information options	ip-services	R/W
dhcp relay information policy	ip-services	R/W
dhcp server	ip-services	R/W
Host Services and Applications Commands		
cinetd rate-limit	ip-services	R/W
clear host	ip-services	R/W
domain ipv4 host	ip-services, basic-services	R/W, R/W
domain ipv6 host	ip-services, basic-services	R/W, R/W
domain list	ip-services, basic-services	R/W, R/W
domain lookup disable	ip-services, basic-services	R/W, R/W
domain name	ip-services, basic-services	R/W, R/W
domain name-server	ip-services, basic-services	R/W, R/W

Table 1 Task IDs for the Cisco IOS-XR IP Addresses and Services Commands (continued)

Cisco IOS-XR IP Addresses and Services Commands	Task IDs	Operations
ftp client anonymous-password	ext-access	R/W
ftp client passive	ext-access	R/W
ftp client source-interface	ext-access	R/W
ping (EXEC)	basic-services	R/W
rcp client source-interface	ext-access	R/W
rcp client username	ext-access	R/W
show cinetd services	ip-services	R
show hosts	ip-services	R
telnet	ext-access	E
telnet server	ext-access	R/W
telnet transparent	tty-access	R/W
tftp client source-interface	ext-access	R/W
tftp server	ip-services, ext-access	R/W, R/W
traceroute ipv4	basic-services	R/W
traceroute ipv6	basic-services	R/W
HSRP Commands		
hsrp authentication	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
router hsrp	hsrp, rib	R/W, R/W
show hsrp	hsrp	R
LPTS Commands		
clear lpts ifib statistics	lpts	R/W
clear lpts pifib statistics	lpts	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

Table 1 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 lpts ifib statistics	lpts	R
show lpts ifib times	lpts	R
show lpts mpa groups	lpts	R
show lpts pifib	lpts	R
show lpts pifib lookup	lpts	R
show lpts pifib statistics	lpts	R
Network Stack IPv4 and IPv6 Commands		
clear clns traffic	isis	R/W
clear ipv6 neighbors	network	R/W
icmp ipv4 rate-limit unreachable	network	R/W
ipv4 address	network	R/W
ipv4 directed-broadcast	network	R/W
ipv4 helper-address	network	R/W
ipv4 mask-reply	network	R/W
ipv4 redirects disable	network	R/W
ipv4 source-route disable	network, basic-services	R/W, R/W
ipv4 unnumbered	network	R/W
ipv4 unreachable disable	network	R/W
ipv4 virtual address	ip-services, basic-services	R/W, R/W
ipv6 address	network	R/W
ipv6 address link-local	network	R/W
ipv6 enable	network	R/W
ipv6 hop-limit	network	R/W
ipv6 icmp error-interval	network	R/W
ipv6 nd dad attempts	network	R/W
ipv6 nd managed-config-flag	network	R/W
ipv6 nd ns-interval	network	R/W
ipv6 nd other-config-flag	network	R/W
ipv6 nd prefix	network	R/W
ipv6 nd ra-interval	network	R/W
ipv6 nd ra-lifetime	network	R/W
ipv6 nd reachable-time	network	R/W
ipv6 nd redirects	network	R/W
ipv6 nd scavenge-timeout	network	R/W
ipv6 nd suppress-ra	network	R/W
ipv6 neighbor	network	R/W

Table 1 Task IDs for the Cisco IOS-XR IP Addresses and Services Commands (continued)

Cisco IOS-XR IP Addresses and Services Commands	Task IDs	Operations
mhost ipv4 default-interface	ip-services	R/W
mtu	interface	R/W
router-id	ip-services	R/W
show arm conflicts	ip-services	R
show arm database	ip-services	R
show arm registrations consumers routerid	ip-services	R
show arm registrations producers	ip-services	R
show arm summary	ip-services	R
show clns statistics	isis	R
show ipv4 interface	basic-services, network	R, R
show ipv4 traffic	basic-services, network	R, R
show ipv6 interface	network	R
show ipv6 neighbors	network	R
show ipv6 traffic	network	R
show mhost ipv4 default-interface	network	R
show mhost ipv4 groups	network	R
Prefix List Commands		
clear ipv4 prefix-list	acl	R/W
clear ipv6 prefix-list	acl, network	R/W, R/W
copy ipv4 prefix-list	acl, filesystem	R/W, E
copy ipv6 prefix-list	acl, filesystem	R/W, E
deny (prefix-list)	acl, basic-services	R/W, R/W
ipv4 prefix-list	acl, basic-services	R/W, R/W
ipv6 prefix-list	acl, basic-services	R/W, R/W
permit (prefix-list)	acl, basic-services	R/W, R/W
remark (prefix-list)	acl, basic-services	R/W, R/W
resequence prefix-list	acl, basic-services	R/W, R/W
show ipv4 prefix-list	basic-services, acl	R, R
show ipv6 prefix-list	network, acl	R, R
Quality of Service Commands		
bandwidth	qos	R/W
bandwidth remaining	qos	R/W
class (policy-map)	qos	R/W
class-map	qos	R/W
clear qos counters	qos	R/W
match access-group	qos	R/W

Table 1 Task IDs for the Cisco IOS-XR IP Addresses and Services Commands (continued)

Cisco IOS-XR IP Addresses and Services Commands	Task IDs	Operations
match any	qos	R/W
match discard-class	qos	R/W
match dscp	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
police	qos	R/W
policy-map	qos	R/W
priority	qos	R/W
queue-limit	qos	R/W
random-detect	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	qos	R/W
set discard-class	qos	R/W
set dscp	qos	R/W
set mpls experimental topmost	qos	R/W
set precedence	qos	R/W
set qos-group	qos	R/W
shape	qos	R/W
show policy-map interface	qos	R
show qos interface	qos	R
Transport Stack Commands		
clear raw statistics pcb	transport	R/W
clear tcp pcb	transport	R/W
clear tcp statistics	transport	R/W
clear udp statistics	transport	R/W
forward-protocol udp	transport	R/W
service tcp-small-servers	system, transport	R/W, R/W
service udp-small-servers	system, transport	R/W, R/W
show raw brief	transport	R
show raw pcb	transport	R
show raw statistics pcb	transport	R

Table 1 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 brief	transport	R
show tcp pcb	transport	R
show tcp statistics	transport	R
show udp brief	transport	R
show udp pcb	transport	R
show udp statistics	transport	R
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
VRRP Commands		
interface (VRRP)	vrrp	R/W
router vrrp	vrrp, rib	R/W, R/W
show vrrp	vrrp	R
vrrp assume-ownership	vrrp	R/W
vrrp ipv4	vrrp	R/W
vrrp md5-authentication	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	vrrp	R/W

Table 2 is a task ID reference for the commands in the *Cisco IOS-XR Interface and Hardware Component* chapter. Commands are listed in alphabetical order within each chapter.

Table 2 Task IDs for the Cisco IOS-XR Interface and Hardware Component Commands

Cisco IOS-XR Interface and Hardware Component Commands	Task IDs	Operations
Hardware Redundancy and Node Administration Commands		
hw-module node power	root-system, basic-services	R/W, R/W
hw-module node reload	root-system, basic-services	R/W, R/W
hw-module node shutdown	root-system, basic-services	R/W, R/W
led mode	root-system	R/W
redundancy	system	R/W
redundancy failover	system	R/W

Table 2 Task IDs for the Cisco IOS-XR Interface and Hardware Component Commands (continued)

Cisco IOS-XR Interface and Hardware Component Commands	Task IDs	Operations
show diags	sysmgr	R
show environment	root-system	R
show led location	sysmgr	R
show platform	root-system	R
show redundancy	system	R
show version	sysmgr	R
SONET APS Commands		
aps group	sonet-sdh	R/W
authenticate	sonet-sdh	R/W
channel local	sonet-sdh	R/W
channel remote	sonet-sdh	R/W
force	sonet-sdh	R/W
lockout	sonet-sdh	R/W
manual	sonet-sdh	R/W
revert	sonet-sdh	R/W
show aps	sonet-sdh	R
show aps agents	sonet-sdh	R
show aps group	sonet-sdh	R
signalling	sonet-sdh	R/W
timers	sonet-sdh	R/W
unidirectional	sonet-sdh	R/W
cHDLC Commands		
keepalive	hdlc	R/W
encapsulation hdlc	hdlc, interface	R/W, R/W
Ethernet Switch and Server Platform Commands		
clear controller backplane ethernet location clients statistics	root-system, basic-services	R, R/W
clear controller backplane ethernet location statistics	root-system, basic-services	R, R/W
show controllers backplane ethernet local	root-system, interface	R, R
show controllers backplane ethernet local clients	root-system, interface	R, R
show controllers backplane ethernet location	root-system, interface	R, R
show controllers backplane ethernet location clients	root-system, interface	R, R
show controllers switch ports	root-system, interface	R, R
show controllers switch stats	root-system, interface	R, R
Fabric Management Commands		
clear controller fabric statistics	root-system, fabric	R/W/E, R/W

Table 2 Task IDs for the Cisco IOS-XR Interface and Hardware Component Commands (continued)

Cisco IOS-XR Interface and Hardware Component Commands	Task IDs	Operations
clear controller fabricq counters all	root-system, drivers, basic-services	R, R/W, R/W
controllers fabric plane shutdown	root-system, fabric	R/W, R/W
controllers fabric statistics collection	root-system, fabric	R/W, R/W
show controllers fabric connectivity	root-system, fabric	R/E, R
show controllers fabric fgid statistics	root-system, fabric	R/E, R
show controllers fabric plane	root-system, fabric	R/E, R
show controllers fabricq packet-stats	drivers, interface	R, R
show controllers ingressq statistics	drivers, interface	R, R
Cisco CRS-1 Platform and Driver Commands		
full-duplex	interface	R/W
half-duplex	interface	R/W
mac-address	interface	R/W
show controllers mgmteth	interface	R
speed	interface	R/W
LPTS Platform Commands		
show lpts pifib hardware entry	lpts	R
show lpts pifib hardware usage	lpts	R
Packet Forwarding Infrastructure Commands		
clear interface	interface	E
dampening	interface	R/W
encapsulation (interface)	interface	R/W
interface	interface	R/W
load-interval	interface	R/W
mtu	interface	R/W
show im dampening	interface	R
show interfaces	interface	R
shutdown (interface)	interface	R/W
PPP Commands		
encapsulation ppp	ppp, interface	R/W, R/W
ppp authentication	ppp, aaa	R/W, R/W
ppp chap hostname	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

Table 2 Task IDs for the Cisco IOS-XR Interface and Hardware Component Commands (continued)

Cisco IOS-XR Interface and Hardware Component Commands	Task IDs	Operations
ppp max-failure	ppp	R/W
ppp max-terminate	ppp	R/W
ppp pap refuse	ppp, aaa	R/W, R/W
ppp pap sent-username password	ppp, aaa	R/W, R/W
ppp timeout authentication	ppp	R/W
ppp timeout ncp	ppp	R/W
ppp timeout retry	ppp	R/W
show ppp interfaces	ppp	R
Packet-over-SONET User Interface and SONET Layer 1 Commands		
ais-shut (SONET)	sonet-sdh	R/W
ais-shut (SONET path)	sonet-sdh	R/W
clear counters sonet	sonet-sdh	R/W
clock source (SONET)	sonet-sdh	R/W
controller	interface	R/W
crc	pos-dpt	R/W
delay trigger	sonet-sdh	R/W
framing (SONET)	sonet-sdh	R/W
loopback (SONET)	sonet-sdh	R/W
overhead (SONET)	sonet-sdh	R/W
overhead (SONET path)	sonet-sdh	R/W
path (SONET)	sonet-sdh	R/W
pos	pos-dpt	R/W
pos transmit-delay	pos-dpt	R/W
report (SONET)	sonet-sdh	R/W
report (SONET path)	sonet-sdh	R/W
scrambling (SONET path)	sonet-sdh	R/W
show controllers pos	interface	R
show controllers sonet	interface	R
shutdown (SONET)	sonet-sdh	R/W
threshold (SONET)	sonet-sdh	R/W
threshold (SONET path)	sonet-sdh	R/W
uneq-shut (SONET path)	sonet-sdh	R/W

Table 3 is a task ID reference for the commands in the *Cisco IOS-XR Multicast* chapter. Commands are listed in alphabetical order within each chapter.

Table 3 Task IDs for the Cisco IOS-XR Multicast Commands

Cisco IOS-XR Multicast Commands	Task IDs	Operations
Multicast IGMP Commands		
access-group (IGMP)	multicast	R/W
clear igmp counters	multicast	R/W
clear igmp group	multicast	R/W
clear igmp reset	multicast	R/W
explicit-tracking	multicast	R/W
interface (IGMP)	multicast	R/W
interface all router disable (IGMP)	multicast	R/W
join-group	multicast	R/W
maximum groups	multicast	R/W
maximum groups per-interface	multicast	R/W
nsf lifetime (IGMP)	multicast	R/W
query-interval	multicast	R/W
query-max-response-time	multicast	R/W
query-timeout	multicast	R/W
router	multicast	R/W
router igmp	multicast, rib	R/W, R/W
show igmp groups	multicast	R
show igmp interface	multicast	R
show igmp nsf	multicast	R
show igmp summary	multicast	R
show igmp traffic	multicast	R
version	multicast	R/W
Multicast PIM Commands		
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
clear pim autorp	multicast	R/W
clear pim counters	multicast	R/W
clear pim topology	multicast	R/W
dr-priority	multicast	R/W
hello-interval	multicast	R/W
interface (PIM)	multicast	R/W

Table 3 Task IDs for the Cisco IOS-XR Multicast Commands (continued)

Cisco IOS-XR Multicast Commands	Task IDs	Operations
interface all disable	multicast	R/W
join-prune-interval	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
neighbor-filter	multicast	R/W
nsf lifetime (PIM)	multicast	R/W
old-register-checksum	multicast	R/W
router pim	multicast, rib	R/W, R/W
rp-address	multicast	R/W
show auto-rp candidate-rp	multicast	R
show auto-rp mapping-agent	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 neighbor	multicast	R
show pim nsf	multicast	R
show pim range-list	multicast	R
show pim rpf	multicast	R
show pim summary	multicast	R
show pim topology	multicast	R
show pim traffic	multicast	R
show pim tunnel info	multicast	R
spt-threshold infinity	multicast	R/W
ssm	multicast	R/W
Multicast Routing and Forwarding Commands		
boundary	multicast	R/W
clear mfib counter	multicast	R/W
clear mfib hardware resource-counters	basic-services, multicast	R/W, R/W
clear mfib hardware route statistics	basic-services, multicast	R/W, R/W
interface (multicast)	multicast	R/W
interface all enable	multicast	R/W
mhost default-interface	ip-services	R/W

Table 3 Task IDs for the Cisco IOS-XR Multicast Commands (continued)

Cisco IOS-XR Multicast Commands	Task IDs	Operations
multicast ttl-threshold	multicast	R/W
multicast-routing	multicast	R/W
nsf	multicast	R/W
show mfib counter	multicast	R
show mfib hardware interface	multicast	R
show mfib hardware resource-counters	multicast	R
show mfib hardware route accept-bitmap	multicast	R
show mfib hardware route olist	multicast	R
show mfib hardware route statistics	multicast	R
show mfib interface	multicast	R
show mfib nsf	multicast	R
show mfib route	multicast	R
show mhost default-interface	network	R
show mhost groups	network	R
show mrib client	multicast	R
show mrib nsf	multicast	R
show mrib route	multicast	R
static-rpf	multicast	R/W
Multicast Source Discovery Protocol Commands		
cache-sa-holdtime	multicast	R/W
cache-sa-state	multicast	R/W
clear msdp peer	multicast	R/W
clear msdp sa-cache	multicast	R/W
clear msdp stats	multicast	R/W
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	multicast	R/W
originator-id	multicast	R/W
peer	multicast	R/W
remote-as	multicast	R/W
router msdp	multicast, rib	R/W, R/W
sa-filter	multicast	R/W
show msdp globals	multicast	R

Table 3 Task IDs for the Cisco IOS-XR Multicast Commands (continued)

Cisco IOS-XR Multicast Commands	Task IDs	Operations
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	multicast	R/W
ttl-threshold	multicast	R/W
Multicast Tool and Utility Commands		
mrinfo	multicast	E
mtrace	multicast	E
sap cache-timeout	multicast	R/W
sap listen	multicast	R/W
show sap	multicast	R

Table 4 is a task ID reference for the commands in the *Cisco IOS-XR MPLS* chapter. Commands are listed in alphabetical order within each chapter.

Table 4 Task IDs for the Cisco IOS-XR MPLS Commands

Cisco IOS-XR MPLS Commands	Task IDs	Operations
MPLS Label Distribution Protocol Commands		
backoff	mpls-ldp	R/W
clear mpls ldp msg-counters neighbor	mpls-ldp	R/W
discovery	mpls-ldp	R/W
discovery transport-address	mpls-ldp	R/W
explicit-null	mpls-ldp	R/W
graceful-restart	mpls-ldp	R/W
holdtime	mpls-ldp	R/W
interface (MPLS LDP)	mpls-ldp	R/W
log neighbor changes	mpls-ldp	R/W
mpls ldp restart session	mpls-ldp	R/W
neighbor implicit-withdraw	mpls-ldp	R/W
neighbor password	mpls-ldp	R/W
router-id	mpls-ldp	R/W
show mpls ldp backoff	mpls-ldp	R
show mpls ldp bindings	mpls-ldp	R
show ldp discovery	mpls-ldp	R
show ldp forwarding	mpls-ldp	R

Table 4 Task IDs for the Cisco IOS-XR MPLS Commands (continued)

Cisco IOS-XR MPLS Commands	Task IDs	Operations
show ldp graceful-restart	mpls-ldp	R
show ldp neighbor	mpls-ldp	R
show ldp parameters	mpls-ldp	R
show ldp statistics msg-counters	mpls-ldp	R
show ldp summary	mpls-ldp	R
snmp-server enable traps mpls ldp	mpls-ldp, mpls-te, snmp	R/W, R/W, R/W
MPLS Traffic Engineering Commands		
admin-weight	mpls-te	R/W
affinity	mpls-te	R/W
attribute-flags	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
bandwidth	mpls-te	R/W
clear mpls traffic-eng counters tunnels	mpls-te	R/W
clear mpls traffic-eng link-management statistics	mpls-te	R/W
disable (explicit-path)	mpls-te	R/W
exclude-address	mpls-te	R/W
explicit-path	mpls-te	R/W
fast-reroute	mpls-te	R/W
flooding thresholds	mpls-te	R/W
index (explicit path)	mpls-te	R/W
interface tunnel-te	interface	R/W
ipv4 unnumbered (interface)	network	R/W
mpls traffic-eng area	mpls-te, ospf	R, R/W
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	W/E
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 maximum tunnels	mpls-te	R/W
mpls traffic-eng path-selection metric	mpls-te	R/W

Table 4 Task IDs for the Cisco IOS-XR MPLS Commands (continued)

Cisco IOS-XR MPLS Commands	Task IDs	Operations
mpls traffic-eng reoptimize (configuration)	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	ospf	R/W
mpls traffic-eng signalling advertise explicit-null	mpls-te	R/W
mpls traffic-eng topology holddown sigerr	mpls-te	R/W
next-address	mpls-te	R/W
path-option	mpls-te	R/W
path-selection metric	mpls-te	R/W
priority	mpls-te	R/W
record route	mpls-te	R/W
show explicit-paths	mpls-te	R
show mpls traffic-eng autoroute	mpls-te	R
show mpls traffic-eng counters tunnel	mpls-te	R
show mpls traffic-eng forwarding	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 igp-neighbors	mpls-te	R
show mpls traffic-eng link-management interface	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 maximum tunnels	mpls-te	R
show mpls traffic-eng topology	mpls-te	R
show mpls traffic-eng tunnels	mpls-te	R
snmp-server enable traps mpls traffic-eng	mpls-te, mpls-ldp, snmp	R/W, R/W, R/W
MPLS Forwarding Commands		
clear mpls forwarding counters	mpls-te, mpls-ldp, mpls-static	R/W, R/W, R/W
clear mpls packet counters	mpls-te, mpls-ldp, mpls-static	R/W, R/W, R/W
clear mpls traffic-eng fast-reroute log	mpls-te	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

Table 4 Task IDs for the Cisco IOS-XR MPLS Commands (continued)

Cisco IOS-XR MPLS Commands	Task IDs	Operations
show mpls forwarding	mpls-te, mpls-ldp, mpls-static	R, R, R
show mpls forwarding hw	mpls-te, mpls-ldp	R, R
show mpls interfaces	mpls-te, mpls-ldp, mpls-static	R, R, R
show mpls label range	mpls-te, mpls-ldp, mpls-static	R, R, R
show mpls label table	mpls-te, mpls-ldp, mpls-static	R, R, R
show mpls lsd applications	mpls-te, mpls-ldp, mpls-static	R, R, R
show mpls lsd clients	mpls-te, mpls-ldp, mpls-static	R, R, R
show mpls packet counters	mpls-te, mpls-ldp, mpls-static	R, R, R
show mpls traffic-eng fast-reroute database	mpls-te	R
show mpls traffic-eng fast-reroute log	mpls-te	R
RSVP Infrastructure Commands		
bandwidth (RSVP)	mpls-te, oui	R/W, R/W
clear rsvp counters all	mpls-te, oui	R/W, R/W
clear rsvp counters events	mpls-te, oui	R/W, R/W
clear rsvp counters messages	mpls-te, oui	R/W, R/W
rsvp	mpls-te, oui	R/W, R/W
rsvp interface	mpls-te, oui	R/W, R/W
rsvp signalling graceful-restart	mpls-te, oui	R/W, R/W
rsvp signalling hello graceful-restart refresh interval	mpls-te, oui	R/W, R/W
rsvp signalling hello graceful-restart refresh misses	mpls-te, oui	R/W, R/W
rsvp signalling graceful-restart restart-time	mpls-te, oui	R/W, R/W
show rsvp counters	mpls-te OR oui	R, R
show rsvp graceful-restart	mpls-te OR oui	R, R
show rsvp hello instance	mpls-te OR oui	R, R
show rsvp interface	mpls-te OR oui	R, R
show rsvp request	mpls-te OR oui	R, R
show rsvp reservation	mpls-te OR oui	R, R
show rsvp sender	mpls-te OR oui	R, R
signalling dscp	mpls-te, oui	R/W, R/W
signalling rate-limit	mpls-te, oui	R/W, R/W
signalling refresh interval	mpls-te, oui	R/W, R/W
signalling refresh missed	mpls-te, oui	R/W, R/W
signalling refresh reduction disable	mpls-te, oui	R/W, R/W
signalling refresh reduction reliable	mpls-te, oui	R/W, R/W
signalling refresh reduction summary	mpls-te	R/W

Table 4 Task IDs for the Cisco IOS-XR MPLS Commands (continued)

Cisco IOS-XR MPLS Commands	Task IDs	Operations
MPLS Optical User Network Interface Commands		
destination address ipv4	ouni	R/W
interface pos	ouni	R/W
ipcc routed	ouni	R/W
lmp data-link adjacency	ouni	R/W
lmp neighbor	ouni	R/W
mpls optical-uni	ouni	R/W
neighbor	ouni	R/W
passive	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
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

Table 5 is a task ID reference for the commands in the *Cisco IOS-XR Routing* chapter. Commands are listed in alphabetical order within each chapter.

Table 5 Task IDs for the Cisco IOS-XR Routing Commands

Cisco IOS-XR Routing Commands	Task IDs	Operations
BGP Commands		
address-family (BGP)	bgp	R/W
advertise-map	bgp	R/W
advertisement-interval	bgp	R/W
af-group	bgp	R/W
aggregate-address	bgp	R/W
bgp as-path-loopcheck	bgp	R/W

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
bgp auto-policy-soft-reset	bgp	R/W
bgp-bestpath as-path ignore	bgp	R/W
bgp bestpath compare-routerid	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	bgp	R/W
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	bgp	R/W
bgp fast-external-fallover	bgp	R/W
bgp graceful-restart	bgp	R/W
bgp log neighbor changes	bgp	R/W
bgp redistribute-internal	bgp	R/W
bgp router-id	bgp	R/W
bgp scan-time	bgp	R/W
bgp update-delay	bgp	R/W
bgp write-limit	bgp	R/W
capability (bgp af-group)	bgp	R/W
clear bgp	bgp	R/W
clear bgp dampening	bgp	R/W
clear bgp flap-statistics	bgp	R/W
clear bgp peer-drops	bgp	R/W
clear bgp performance-statistics	bgp	R/W
clear bgp self-originated	bgp	R/W
clear bgp soft	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
dmzlink-bw	bgp	R/W
ebgp-multihop	bgp	R/W

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
local-as	bgp	R/W
maximum-paths (BGP)	bgp	R/W
maximum-prefix	bgp	R/W
neighbor	bgp	R/W
neighbor-group	bgp	R/W
network (BGP)	bgp	R/W
network backdoor	bgp	R/W
next-hop-self	bgp	R/W
password (BGP)	bgp	R/W
password-disable	bgp	R/W
policy	bgp	R/W
prefix-list (BGP)	bgp	R/W
receive-buffer-size	bgp	R/W
redistribute (BGP)	bgp	R/W
remote-as	bgp	R/W
remove-private-as	bgp	R/W
route-reflector-client	bgp	R/W
router bgp	bgp	R/W
send-buffer-size	bgp	R/W
send-community-ebgp	bgp	R/W
send-extended-community-ebgp	bgp	R/W
session-group	bgp	R/W
show bgp	bgp	R
show bgp advertised	bgp	R
show bgp af-group	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 neighbor-group	bgp	R
show bgp neighbors	bgp	R
show bgp paths	bgp	R
show bgp policy	bgp	R
show bgp process	bgp	R

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
show bgp regexp	bgp	R
show bgp route-policy	bgp	R
show bgp session-group	bgp	R
show bgp summary	bgp	R
show bgp truncated-communities	bgp	R
show bgp update-group	bgp	R
show protocols (BGP)	bgp, rib	R, R
shutdown	bgp	R/W
socket receive-buffer-size	bgp	R/W
socket-send-buffer-size	bgp	R/W
soft-reconfiguration inbound	bgp	R/W
table-policy	bgp	R/W
timers	bgp	R/W
timers bgp	bgp	R/W
ttl-security	bgp	R/W
unsuppress-map	bgp	R/W
update-source	bgp	R/W
use	bgp	R/W
weight	bgp	R/W
IS-IS Commands		
address-family (IS-IS)	isis	R/W
adjacency-check disable	isis	R/W
circuit-type	isis	R/W
clear isis process	isis	R/W
clear isis route	isis	R/W
csnp-interval	isis	R/W
default-information originate (IS-IS)	isis	R/W
distance (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
hostname dynamic	isis	R/W
ignore-lsp-errors	isis	R/W
interface (IS-IS)	isis	R/W
ispf	isis	R/W

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
ispsf startup-delay	isis	R/W
is-type	isis	R/W
log adjacency changes	isis	R/W
log pdu drops	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-refresh-interval	isis	R/W
maximum-paths (IS-IS)	isis	R/W
maximum-redistributed-prefixes	isis	R/W
max-lsp-lifetime	isis	R/W
mesh-group	isis	R/W
metric	isis	R/W
metric-style narrow	isis	R/W
metric-style transition	isis	R/W
metric-style wide	isis	R/W
mpls traffic-eng (IS-IS)	isis	R/W
mpls traffic-eng router-id (IS-IS)	isis	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)	multicast	R/W
passive (IS-IS)	isis	R/W
prc-interval	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, rib	R/W, R/W
set-attached-bit	isis	R/W
set-overload-bit	isis	R/W
show isis adjacency	isis	R
show isis adjacency-log	isis	R

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
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 hostname	isis	R
show isis interface	isis	R
show isis ispf-log	isis	R
show isis lsp-log	isis	R
show isis mesh-group	isis	R
show isis mpls traffic-eng adjacency-log	isis	R
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 topoogy	isis	R
show protocols (IS-IS)	isis, rib	R, R
shutdown (IS-IS)	isis	R/W
single-topology	isis	R/W
spf-interval	isis	R/W
summary-prefix (IS-IS)	isis	R/W
OSPF Commands		
address-family (OSPF)	ospf	R/W
area	ospf	R/W
authentication	ospf	R/W
authentication-key	ospf	R/W
auto-cost	ospf	R/W
capability opaque	ospf	R/W
clear ospf process	ospf	R/W
clear ospf redistribution	ospf	R/W
clear ospf statistics	ospf	R/W
clear ospf topology	ospf	R/W
cost	ospf	R/W

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
database-filter all out	ospf	R/W
dead-interval	ospf	R/W
default-cost	ospf	R/W
default-information originate (OSPF)	ospf	R/W
default-metric (OSPF)	ospf	R/W
demand-circuit	ospf	R/W
distance (IP)	ospf	R/W
distance ospf	ospf	R/W
distribute-list	ospf	R/W
flood-reduction	ospf	R/W
hello-interval (OSPF)	ospf	R/W
ignore lsa mospf	ospf	R/W
interface (OSPF)	ospf	R/W
log adjacency changes (OSPF)	ospf	R/W
max-metric	ospf	R/W
maximum interfaces	ospf	R/W
maximum paths (OSPF)	ospf	R/W
maximum redistributed-prefixes (OSPF)	ospf	R/W
message-digest-key	ospf	R/W
mpls traffic-eng area	ospf	R/W
mpls traffic-eng router-id (OSPF)	ospf	R/W
mtu-ignore	ospf	R/W
neighbor (OSPF)	ospf	R/W
neighbor database-filter all out	ospf	R/W
network (OSPF)	ospf	R/W
nsf (OSPF)	ospf	R/W
nsf interval (OSPF)	ospf	R/W
nsf lifetime (OSPF)	ospf	R/W
nssa	ospf	R/W
ospf name-lookup	ospf	R/W
packet-size	ospf	R/W
passive	ospf	R/W
priority (OSPF)	ospf	R/W
range	ospf	R/W
redistribute	ospf	R/W
retransmit-interval (OSPF)	ospf	R/W

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
router-id	ospf	R/W
router ospf	ospf, rib	R/W, 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 mpls traffic-eng	ospf	R
show ospf neighbor	ospf	R
show ospf request-list	ospf	R
show ospf retransmission-list	ospf	R
show ospf route	ospf	R
show ospf summary-prefix	ospf	R
show ospf virtual-links	ospf	R
show protocols ospf	ospf, rib	R, R
stub	ospf	R/W
summary-prefix (OSPF)	ospf	R/W
timers lsa gen-interval	ospf	R/W
timers lsa min-arrival	ospf	R/W
timers lsa group-pacing	ospf	R/W
timers throttle spf	ospf	R/W
transmit-delay (OSPF)	ospf	R/W
virtual-link	ospf	R/W
virtual-link message-digest-key md5	ospf	R/W
OSPFv3 Commands		
address-family (OSPFv3)	ospf	R/W
area (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

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
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 (OSPFv3)	ospf	R/W
distribute-list prefix-list out (OSPFv3)	ospf	R/W
flood-reduction (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 adjacencies (OSPFv3)	ospf	R/W
maximum interfaces (OSPFv3)	ospf	R/W
maximum paths (OSPFv3)	ospf	R/W
maximum redistributed-prefixes (OSPFv3)	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
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 route	ospf	R

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
show ospfv3 summary-prefix	ospf	R
show ospfv3 virtual-links	ospf	R
show protocols (OSPFv3)	rib	R
stub (OSPFv3)	ospf	R/W
summary-prefix (OSPFv3)	ospf	R/W
timers lsa arrival	ospf	R/W
timers pacing flood (OSPFv3)	ospf	R/W
timers pacing lsa-group (OSPFv3)	ospf	R/W
timers pacing retransmission (OSPFv3)	ospf	R/W
timers throttle lsa-all (OSPFv3)	ospf	R/W
timers throttle spf (OSPFv3)	ospf	R/W
transmit-delay (OSPFv3)	ospf	R/W
virtual-link (OSPFv3)	ospf	R/W
RIB Commands		
clear route	rib	R/W
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 static	rib	R
show route summary	rib	R
Routing Policy Language Commands		
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-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

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
community-set	route-policy	R/W
delete community	route-policy	R/W
delete extcommunity	route-policy	R/W
destination in	route-policy	R/W
drop	route-policy	R/W
edit	route-policy	R/W
else	route-policy	R/W
elseif	route-policy	R/W
endif	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
extcommunity matches-every	route-policy	R/W
extcommunity-set	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
prefix-set	route-policy	R/W
prepend as-path	route-policy	R/W
route-policy	route-policy	R/W
route-type is	route-policy	R/W
rpl maximum	route-policy	R/W
set community	route-policy	R/W
set cost	route-policy	R/W
set dampening	route-policy	R/W
set extcommunity	route-policy	R/W
set level (IS-IS)	route-policy	R/W
set local-preference	route-policy	R/W
set med	route-policy	R/W
set metric	route-policy	R/W
set metric-type (IS-IS)	route-policy	R/W
set metric-type (OSPF)	route-policy	R/W
set next-hop	route-policy	R/W

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
set origin	route-policy	R/W
set tag	route-policy	R/W
set traffic-index	route-policy	R/W
set weight	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 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 *	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 *	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 extcommunity-set *	route-policy	R
show rpl extcommunity-set attachpoints	route-policy	R
show rpl extcommunity-set references	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 policy	route-policy	R
show rpl inactive prefix-set	route-policy	R
show rpl maximum	route-policy	R
show rpl policy	route-policy	R
show rpl policy *	route-policy	R
show rpl policy attachpoints	route-policy	R
show rpl policy references	route-policy	R
show rpl policy uses	route-policy	R
show rpl prefix-set	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

Table 5 Task IDs for the Cisco IOS-XR Routing Commands (continued)

Cisco IOS-XR Routing Commands	Task IDs	Operations
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 policy	route-policy	R
show rpl unused prefix-set	route-policy	R
source in	route-policy	R/W
suppress-route	route-policy	R/W
tag	route-policy	R/W
Static and Utility Commands		
route maximum	static	R/W
route	static	R/W

Table 6 is a task ID reference for the commands in the *Cisco IOS-XR System Management* chapter. Commands are listed in alphabetical order within each chapter.

Table 6 Task IDs for the Cisco IOS-XR System Management Commands

Cisco IOS-XR System Management Commands	Task IDs	Operations
Alarm Management and Logging Commands		
clear logging correlator delete	logging	R/W/E
clear logging events delete	logging	R/W/E
clear logging events reset	logging	R/W/E
logging correlator apply-rule	logging	R/W
logging correlator buffer-size	logging	R/W
logging correlator rule	logging	R/W
logging events buffer-size	logging	R/W
logging events level	logging	R/W
logging events threshold	logging	R/W
show logging correlator buffer	logging	R
show logging correlator info	logging	R
show logging correlator rule	logging	R
show logging events buffer	logging	R
show logging events info	logging	R
Configuration Management Commands		
abort	N/A	N/A
admin	root-system	E
alias	N/A	N/A
apply-template	config-services	R/W

Table 6 Task IDs for the Cisco IOS-XR System Management Commands (continued)

Cisco IOS-XR System Management Commands	Task IDs	Operations
clear (exec)	basic-services	R/W
clear (global)	N/A	N/A
clear configuration sessions	basic-services, config-services	R/W, R/W
commit	N/A	N/A
configure	N/A	N/A
description	interface	R/W
do	config-services	R
end	N/A	N/A
end-template	config-services	R/W
exit	N/A	N/A
getpriority	basic-services	R/W
hostname	boot	R/W
load	config-services	R/W
man	basic-services	R
more	basic-services	R/W
rollback configuration	root-lr	R/W
setpriority	system	R/W
show	N/A	N/A
show aliases	basic-services	R
show commit changes	config-services	R
show configuration (exec)	config-services	R
show configuration (global)	config-services	R
show configuration sessions	config-services	R
show rollback	config-services	R
show running-config	config-services	R
template	config-services	R/W
Boot Commands		
config-register	boot	R/W
confreg	N/A	N/A
reload	boot	E
show variables	basic-services	R
Cisco Discovery Protocol Commands		
cdp	cdp	R/W
cdp advertise	cdp	R/W
cdp holdtime	cdp	R/W
cdp timer	cdp	R/W

Table 6 Task IDs for the Cisco IOS-XR System Management Commands (continued)

Cisco IOS-XR System Management Commands	Task IDs	Operations
clear cdp counters	cdp	R/W
clear cdp table	cdp	R/W
show cdp	cdp	R
show cdp entry	cdp	R
show cdp interface	cdp	R
show cdp neighbors	cdp	R
show cdp traffic	cdp	R
Clock Commands		
clock read-calendar	host-services	R/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	config-mgmt	R/W
locale language	config-mgmt	R/W
show clock	basic-services	R
Fault Manager Commands		
fault manager environment	fault-mgr	R/W
fault manager policy	fault-mgr	R/W
fault manager schedule-policy suspend	fault-mgr	R/W
fault manager user-lib-directory	fault-mgr	R/W
fault manager user-policy-directory	fault-mgr	R/W
show fault manager environment	fault-mgr	R
show fault manager metric hardware location	fault-mgr	R
show fault manager metric process	fault-mgr	R
show fault manager policy available	fault-mgr	R
show fault manager policy registered	fault-mgr	R
show fault manager statistics-table	fault-mgr	R
show fault manager user-lib-directory	fault-mgr	R
show fault manager user-policy-directory	fault-mgr	R
show processes cpu	fault-mgr, basic-services	R, R
File System Commands		
cd	file-system	R
cfs check	root-lr	R/W
copy	file-system	E
delete	file-system	E

Table 6 Task IDs for the Cisco IOS-XR System Management Commands (continued)

Cisco IOS-XR System Management Commands	Task IDs	Operations
dir	file-system	R
erase nvram:	file-system	E
format	file-system	E
format bootflash:	file-system	E
fsck	root-system	R/W
mkdir	file-system	E
pwd	file-system	R
rmdir	file-system	E
show filesystem	basic-services	R
Logging Services Commands		
clear logging	logging	E
logging	logging	R/W
logging buffered	logging	R/W
logging console	logging	R/W
logging device filepath	logging	R/W
logging events link-status	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 on	logging	R/W
logging source-interface	logging	R/W
logging suppress duplicates	logging	R/W
logging trap	logging	R/W
service timestamps	logging, system	R/W, R/W
show logging	logging	R
show logging history	logging	R
terminal monitor	logging, tty-access	E, R/W
Manageability Commands		
http server	config-services	R/W
xml agent corba	config-services	R/W
NTP Commands		
access-group	ip-services	R/W
authenticate (NTP)	ip-services	R/W

Table 6 Task IDs for the Cisco IOS-XR System Management Commands (continued)

Cisco IOS-XR System Management Commands	Task IDs	Operations
authentication-key (NTP)	ip-services	R/W
broadcast destination	ip-services	R/W
broadcast client	ip-services	R/W
broadcastdelay	ip-services	R/W
interface (NTP)	ip-services	R/W
master	ip-services	R/W
max-associations	ip-services	R/W
ntp	ip-services	R/W
ntp clear	ip-services	R/W
port	ip-services	R/W
peer	ip-services	R/W
server	ip-services	R/W
show calendar	basic-services	R/W
show ntp associations	ip-services	R
show ntp status	ip-services	R
source	ip-services	R/W
trusted-key	ip-services	R/W
update-calendar	ip-services	R/W
Performance Management Commands		
performance-mgmt enable monitor	basic-services	R/W/E
performance-mgmt enable statistics	basic-services	R/W/E
performance-mgmt enable thresholds	basic-services	R/W/E
performance-mgmt resources	basic-services	R/W
performance-mgmt statistics	basic-services	R/W
performance-mgmt thresholds	basic-services	R/W
show running performance-mgmt (PM)	config-services, basic-services	R, R/W
Process and Memory Management Commands		
monitor processes	basic-services	E
monitor threads	basic-services	E
process	sysmgr	E
process core	sysmgr	E
process mandatory	sysmgr	E
show memory	basic-services	R
show memory heap	basic-services	R
show processes	sysmgr, basic-services	R, R

Table 6 Task IDs for the Cisco IOS-XR System Management Commands (continued)

Cisco IOS-XR System Management Commands	Task IDs	Operations
SNMP Server Commands		
show snmp	snmp	R
show snmp engineid	snmp	R
show snmp group	snmp	R
show snmp host	snmp	R
show snmp mib	snmp	R
show snmp users	snmp	R
show snmp view	snmp	R
snmp-server chassis-id	snmp	R/W
snmp-server community	snmp	R/W
snmp-server contact	snmp	R/W
snmp-server enable traps	snmp	R/W
snmp-server enable traps bgp	snmp, bgp	R/W, R/W
snmp-server enable traps snmp	snmp	R/W
snmp-server enable traps syslog	snmp, sysmgr	R/W, R/W
snmp-server engineid local	snmp	R/W
snmp-server group	snmp	R/W
snmp-server host	snmp	R/W
snmp-server interface	snmp	R/W
snmp-server location	snmp	R/W
snmp-server packetsize	snmp	R/W
snmp-server queue-length	snmp	R/W
snmp-server trap link ietf	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
Software Package Management Commands		
install activate	pkg-mgmt	R/W/E
install add	pkg-mgmt	E
install commit	pkg-mgmt	R/W/E
install deactivate	pkg-mgmt	R/W/E
install remove	pkg-mgmt	R/W/E
install rollback	pkg-mgmt	R/W/E
show install active	pkg-mgmt	R
show install committed	pkg-mgmt	R

Table 6 Task IDs for the Cisco IOS-XR System Management Commands (continued)

Cisco IOS-XR System Management Commands	Task IDs	Operations
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 requests	pkg-mgmt	R
show install which	pkg-mgmt	R
Statistics Services Commands		
clear counters	interface	R/W
load-interval	interface	R/W
Terminal Services Commands		
absolute-timeout	tty-access	R/W
access-class	tty-access	R/W
banner exec	tty-access	R/W
banner incoming	tty-access	R/W
banner login	tty-access	R/W
banner motd	tty-access	R/W
banner prompt-timeout	tty-access	R/W
clear line location	tty-access	R/W
clear line vty	tty-access	R/W
databits	tty-access	R/W
disconnect	N/A	N/A
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	N/A	N/A
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

Table 6 Task IDs for the Cisco IOS-XR System Management Commands (continued)

Cisco IOS-XR System Management Commands	Task IDs	Operations
stopbits	tty-access	R/W
transport input	tty-access	R/W
transport preferred	tty-access	R/W
transport output	tty-access	R/W
vty-pool	tty-access	R/W
width	tty-access	R/W

Table 7 is a task ID reference for the commands in the *Cisco IOS-XR System Security* chapter. Commands are listed in alphabetical order within each chapter.

Table 7 Task IDs for the Cisco IOS-XR System Security Commands

Cisco IOS-XR System Security Commands	Task IDs	Operations
Authentication, Authorization, and Accounting Commands		
aaa accounting	aaa	R/W
aaa accounting system default	aaa	R/W
aaa authentication	aaa	R/W
aaa group server tacacs +	aaa	R/W
accounting	aaa	R/W
authorization	aaa	R/W
description	aaa	R/W
group	aaa	R/W
inherit taskgroup	aaa	R/W
inherit usergroup	aaa	R/W
login authentication	aaa	R/W
password	aaa	R/W
secret	aaa	R/W
server	aaa	R/W
show aaa	aaa	R
show tacacs	aaa	R
show task supported	aaa	R
show user	N/A	N/A
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

Table 7 Task IDs for the Cisco IOS-XR System Security Commands (continued)

Cisco IOS-XR System Security Commands	Task IDs	Operations
timeout login response	aaa	R/W
usergroup	aaa	R/W
username	aaa	R/W
users group	aaa	R/W
Internet Key Exchange Security Protocol Commands		
acl	crypto	R/W
address	crypto	R/W
addressed-key	crypto	R/W
authentication (IKE policy)	crypto	R/W
clear crypto isakmp	crypto	E
crypto isakmp chkpt-disabled	crypto	R/W
crypto isakmp client configuration group	crypto	R/W
crypto isakmp enable	crypto	R/W
crypto isakmp identity	crypto	R/W
crypto isakmp keepalive	crypto	R/W
crypto isakmp key	crypto	R/W
crypto isakmp policy	crypto	R/W
crypto key pubkey-chain rsa	crypto	R/W
encryption (IKE policy)	crypto	R/W
group (IKE policy)	crypto	R/W
hash (IKE policy)	crypto	R/W
key	crypto	R/W
key-string (IKE)	crypto	R/W
lifetime (IKE policy)	crypto	R/W
named-key	crypto	R/W
show crypto isakmp key	crypto	R
show crypto isakmp policy	crypto	R
show crypto isakmp sa	crypto	R
show crypto key pubkey-chain rsa	crypto	R
IPSec Network Security Commands		
clear crypto ipsec sa	crypto	E
client authentication list	crypto	R/W
crypto ipsec chkpt-disabled	crypto	R/W
crypto ipsec profile	crypto	R/W
crypto ipsec security-association lifetime	crypto	R/W
crypto ipsec transform-set	crypto	R/W

Table 7 Task IDs for the Cisco IOS-XR System Security Commands (continued)

Cisco IOS-XR System Security Commands	Task IDs	Operations
crypto ipsec transport	crypto	R/W
isakmp authorization list	crypto	R/W
match transform-set	crypto	R/W
profile	crypto	R/W
set pfs	crypto	R/W
set type	crypto	R/W
show crypto ipsec sa	crypto	R
show crypto ipsec summary	crypto	R
tunnel destination (IPSec)	interface	R/W
Public Key Infrastructure Commands		
clear crypto ca certificates	crypto	E
clear crypto ca crl	crypto	E
crypto ca authenticate	crypto	E
crypto ca cancel-enroll	crypto	E
crypto ca enroll	crypto	E
crypto ca trustpoint	crypto	E
crypto key generate dsa	crypto	E
crypto key generate rsa	crypto	E
crypto key zeroize dsa	crypto	E
crypto key zeroize rsa	crypto	E
enrollment retry count	crypto	R/W
enrollment retry period	crypto	R/W
enrollment url	crypto	R/W
query url	crypto	R/W
rsakeypair	crypto	R/W
show crypto ca crls	crypto	R
show crypto key mypubkey dsa	crypto	R
show crypto key mypubkey rsa	crypto	R
Secure Shell Commands		
clear ssh	crypto	E
sftp	crypto	E
show ssh	crypto	R
show ssh session details	crypto	R
ssh	crypto	E
ssh client knownhost	crypto	R/W
ssh server enable	crypto	R/W

Table 7 Task IDs for the Cisco IOS-XR System Security Commands (continued)

Cisco IOS-XR System Security Commands	Task IDs	Operations
ssh server rate-limit	crypto	R/W
ssh server session-limit	crypto	R/W
ssh timeout	crypto	R/W
Secure Socket Layer Protocol Commands		
show ssl	crypto	R
Software Authentication Manager Commands		
sam add certificate	crypto	E
sam delete certificate	crypto	E
sam prompt-interval	crypto	R/W
sam verify	crypto	E
show sam certificate	crypto	R
show sam crl	crypto	R
show sam log	crypto	R
show sam package	crypto	R
show sam sysinfo	crypto	R