



Cisco IOS Master Command List, All Releases

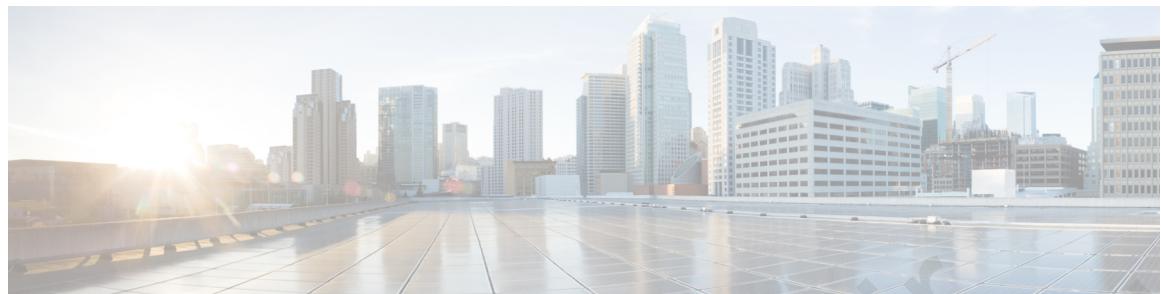
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Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

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CONTENTS

CHAPTER 1

1, a through b 1

Finding IOS Command Information 1

1, a through b 4

CHAPTER 2

ca trust-point through clock mode 37

ca trust-point through clock mode 38

CHAPTER 3

clock rate through cwmp wan default 83

Finding IOS Command Information 83

clock rate through cwmp wan default 86

CHAPTER 4

dampening through debug smrp group 103

Finding IOS Command Information 103

dampening through debug smrp group 106

CHAPTER 5

debug smrp mcache through e 147

Finding IOS Command Information 147

debug smrp mcache through e 150

CHAPTER 6

f through h 187

Finding IOS Command Information 187

f through h 190

CHAPTER 7

icmp idle-timeout through ipv6 nd autoconfig prefix 211

Finding IOS Command Information 211

icmp idle-timeout through ipv6 nd autoconfig prefix 214

CHAPTER 8

ipv6 nd cache expire through l **257**

Finding IOS Command Information **257**

ipv6 nd cache expire through l **260**

CHAPTER 9

m **287**

Finding IOS Command Information **287**

m **290**

CHAPTER 10

n through q **323**

Finding IOS Command Information **323**

n through q **326**

CHAPTER 11

r **359**

Finding IOS Command Information **359**

r **362**

CHAPTER 12

sa ipsec through show dxi pvc interface **379**

Finding IOS Command Information **379**

sa ipsec through show dxi pvc interface **382**

CHAPTER 13

show eap registrations through show mvr source ports **423**

Finding IOS Command Information **423**

show eap registrations through show mvr source ports **426**

CHAPTER 14

show mvrp interface through snmp-server enable traps ospf rate-limit **469**

Finding IOS Command Information **469**

show mvrp interface through snmp-server enable traps ospf rate-limit **472**

CHAPTER 15

snmp-server enable traps ospf retransmit through u **515**

Finding IOS Command Information **515**

snmp-server enable traps ospf retransmit through u **518**

CHAPTER 16

v through z **557**

Finding IOS Command Information **557**

v through z 560

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1, a through b

- [Finding IOS Command Information, page 1](#)
- [1, a through b, page 4](#)

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 1: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference

CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

1, a through b

1

100rel inbound [SBCD](#)

100rel outbound [SBCD](#)

A

aaa accounting [MWG](#), [MWH](#), [IPV6](#), [SEC](#)

aaa accounting (IKEv2 profile) [SEC](#)

aaa accounting connection h323 [SEC](#)

aaa accounting delay-start [SEC](#)

aaa accounting gigawords [SEC](#)

aaa accounting include auth-profile [SEC](#)

aaa accounting jitter maximum [SEC](#)

aaa accounting multicast default [IPV6](#)

aaa accounting nested [SEC](#), [VPD](#)

aaa accounting redundancy [SEC](#), [ISG](#)

aaa accounting resource start-stop group [SEC](#)

aaa accounting resource stop-failure group [SEC](#)

aaa accounting send counters ipv6 [IPV6](#), [SEC](#)

aaa accounting send stop-record always [SEC](#), [IPV6](#)

aaa accounting send stop-record authentication [SEC](#)

aaa accounting session-duration ntp-adjusted [SEC](#)

aaa accounting suppress null-username [SEC](#)

aaa accounting through aaa local authentication attempts max-fail [SEC](#)

aaa accounting update [SEC](#)

aaa accounting vrss [FHP](#)

aaa accounting-list [SEC](#)

aaa attribute [SEC](#)

aaa attribute list [SEC](#)

aaa authentication login [SEC](#)

aaa authentication (IKEv2 profile) [SEC](#)

aaa authentication (WebVPN) [SEC](#)

aaa authentication arap [ATM](#), [SEC](#)

aaa authentication arap through atm sonet stm-1 [ATM](#)

aaa authentication attempts login [SEC](#)

aaa authentication auto (WebVPN) SEC
aaa authentication banner SEC
aaa authentication dot1x SEC
aaa authentication enable default SEC
aaa authentication eou default enable group radius SEC
aaa authentication fail-message SEC
aaa authentication login SEC
aaa authentication nasi SEC
aaa authentication password-prompt SEC
aaa authentication ppp SEC, IPV6
aaa authentication sgbp SEC
aaa authentication suppress null-username SEC
aaa authentication username-prompt SEC
aaa authorization SEC, IPV6
aaa authorization (IKEv2 profile) SEC
aaa authorization cache filterserver SEC
aaa authorization config-commands SEC
aaa authorization configuration default IPV6, DIA
aaa authorization console SEC
aaa authorization ipmobile IMO, MWH
aaa authorization ipmobile through ip mobile host IMO
aaa authorization list SEC
aaa authorization multicast default IPV6
aaa authorization radius-proxy ISG
aaa authorization reverse-access SEC
aaa authorization subscriber-service ISG
aaa authorization template SEC
aaa cache filter SEC
aaa cache filterserver SEC
aaa cache profile SEC
aaa common-criteria policy SEC
aaa configuration SEC
aaa dnis map accounting network SEC
aaa dnis map authentication group SEC
aaa dnis map authorization network group SEC
aaa group server diameter SEC, MWG

```
aaa group server ldap SEC
aaa group server radius SEC, IPV6
aaa group server tacacs+ SEC, IPV6
aaa intercept SEC
aaa local authentication attempts max-fail SEC
aaa max-sessions SEC
aaa max-sessions through algorithm SEC
aaa memory threshold SEC
aaa nas cisco-nas-port use-async-info SEC
aaa nas port extended SEC
aaa nas port option82 SEC
aaa nas port voip VR
aaa nas redirected-station SEC
aaa new-model SEC, IPV6
aaa password SEC
aaa pod server SEC, MWH
aaa preauth SEC
aaa processes SEC
aaa route download SEC, DIA
aaa server radius dynamic-author SEC, ISG
aaa server radius policy-device ISG
aaa server radius proxy ISG
aaa service-profile SEC
aaa session-id SEC
aaa session-mib SEC
aaa traceback recording SEC
aaa user profile SEC
aaa username VR
aaa-authorization HA
aaa-group MWG
aal2-profile custom VR
abr ATM
absolute BSM
absolute-timeout TSV
ac name BBA
ac name through logging rate-limit BBA
```

acc-qos [VR](#)
accelerator [WAN](#)
accelerator through cpu-threshold [WAN](#)
accept-dialin [VPD](#)
accept-dialout [VPD](#)
accept-lifetime [IRI](#), [IPV6](#), [SAF](#)
access (firewall farm) [SLB](#), [SEC](#)
access (server farm) [SLB](#), [SEC](#)
access (virtual server) [SLB](#), [SEC](#)
access-class [SEC](#)
access-class (LAT) [TSV](#)
access-class (X.25) [WAN](#)
access-denied [CBL](#)
access-enable [SEC](#)
access-expression [BR](#), [IBM](#)
access-group (identity policy) [SEC](#)
access-group mode [SEC](#), [IPV6](#)
access-list [MWH](#), [MWP](#), [BR](#), [IBM](#)
access-list (DECnet extended) [DEC](#)
access-list (DECnet standard) [DEC](#)
access-list (IP SLA) [SLA](#)
access-list (IP extended) [SEC](#)
access-list (IP multiplexing) [IMO](#)
access-list (IP standard) [SEC](#)
access-list (IPX extended) [IPX](#)
access-list (IPX standard) [IPX](#)
access-list (NLSP) [SEC](#), [IPX](#)
access-list (SAP filtering) [IPX](#)
access-list (connect initiate) [DEC](#)
access-list (epl-disc) [SLA](#)
access-list (extended-ibm) [BR](#), [IBM](#)
access-list (standard-ibm) [BR](#), [IBM](#)
access-list (type-code-ibm) [BR](#), [IBM](#)
access-list (voice source-group) [VR](#)
access-list additional-zones [ATK](#)
access-list cable-range [ATK](#)

access-list compiled SEC
access-list compiled data-link limit memory SEC
access-list compiled ipv4 limit memory SEC
access-list dynamic-extend SEC
access-list includes ATK
access-list nbp ATK
access-list network ATK
access-list other-access ATK
access-list other-nbps ATK
access-list rate-limit QOS
access-list remark SEC
access-list template BBA
access-list within ATK
access-list zone ATK
access-listcompileddata-linklimitmemory SEC
access-listcompiledipv4limitmemory SEC
access-mode MWG
access-point MWG
access-point-name MWG
access-policy VR
access-profile SEC
access-restrict SEC
access-template SEC
access-type MWG
access-violation deactivate-pdp-context MWG
account QOS
account (session border controller) SBCD
accounting SEC
accounting (DHCP for IPv6) IAD, IPV6
accounting (DHCP) IAD
accounting (SSID configuration mode) WL
accounting (gatekeeper) SEC, VR
accounting (line) SEC
accounting (server-group) SEC
accounting aaa list ISG
accounting acknowledge broadcast SEC

accounting delay (VRRS) **FHP**
accounting dhcp source-ip aaa list **SEC**
accounting method **VR**
accounting method (VRRS) **FHP**
accounting method-list **ISG**
accounting port **ISG**
accounting suppress **VR**
accounting template **VR**
acct-template **VR**
acl (ISAKMP) **SEC**
acl (WSMA) **WSMA**
acl (WebVPN) **SEC**
acl drop **SEC**
action (CAC) **SBCD**
action (NA-) **SBCD**
action (RTG-) **SBCD**
action (SDP) **SBCD**
action (SIP) **SBCD**
action (body editor) **SBCD**
action (body) **SBCD**
action (event) **SNMP**
action (event) through rising (test threshold) **SNMP**
action (header-editor) **SBCD**
action (method profile) **SBCD**
action (method-editor) **SBCD**
action (parameter editor) **SBCD**
action (parameter) **SBCD**
action (policy-react and policy-inline-react) **MM**
action add **EEM**
action append **EEM**
action break **EEM**
action cli **EEM**
action cns-event **EEM**
action comment **EEM**
action context retrieve **EEM**
action context save **EEM**

action continue EEM
action counter EEM
action decrement EEM
action divide EEM
action drop-msg SBCD
action else EEM
action elseif EEM
action end EEM
action exit EEM
action file EEM
action force-switchover EEM
action foreach EEM
action gets EEM
action if EEM
action ifgoto EEM
action increment EEM
action info EEM
action info type interface-names EEM
action info type snmp getid EEM
action info type snmp inform EEM
action info type snmp oid EEM
action info type snmp trap EEM
action info type snmp var EEM
action mail EEM
action multiply EEM
action policy EEM
action publish-event EEM
action puts EEM
action regexp EEM
action reload EEM
action set (EEM) EEM
action snmp-object-value EEM
action snmp-trap EEM
action string compare EEM
action string equal EEM
action string first EEM

action string index [EEM](#)
action string last [EEM](#)
action string length [EEM](#)
action string match [EEM](#)
action string range [EEM](#)
action string replace [EEM](#)
action string tolower [EEM](#)
action string toupper [EEM](#)
action string trim [EEM](#)
action string trimleft [EEM](#)
action string trimright [EEM](#)
action subtract [EEM](#)
action switch ring g8032 clear instance [CE](#)
action switch ring g8032 instance [CE](#)
action syslog [EEM](#)
action track read [EEM](#)
action track set [EEM](#)
action while [EEM](#)
action-type [SEC](#)
activate [SEC](#), [SBCD](#)
activate (bmp) [BGP](#)
activate (billing) [SBCD](#)
activate (enum) [SBCD](#)
activate (radius) [SBCD](#)
activate (session border controller) [SBCD](#)
activate-rule at-byte-count [CBL](#)
activation-character [CF](#)
activation-key [VR](#)
active (call home) [HA](#)
active (diagnostic signature) [HA](#)
active through issu set rollback-timer [HA](#)
active-probe [OER](#)
active-probe (PfR) [PFR](#)
active-probe address source [OER](#)
active-probe address source (PfR) [PFR](#)
active-script-set [SBCD](#)

adapter [IBM](#)
add (WebVPN) [SEC](#)
add (bulk statistics object) [SNMP](#)
add-command [HA](#)
add-paths [EIGRP](#)
additional-paths [BGP](#)
address [SEC](#)
address (bmp) [BGP](#)
address (DNS probe) [SLB](#)
address (HTTP probe) [SLB](#)
address (IKEv2 keyring) [SEC](#), [IPV6](#)
address (Mobile IPv6) [IPV6](#)
address (TCP probe) [SLB](#)
address (WSP probe) [SLB](#)
address (custom UDP probe) [SLB](#)
address (mobile router) [IMO](#)
address (ping probe) [SLB](#)
address (proxy mobile IPv6) [IMO](#)
address (session border controller) [SBCD](#)
address client-id [IAD](#)
address hardware-address [IAD](#)
address ipv4 [SEC](#), [MWG](#)
address ipv4 (GDOI) [SEC](#)
address ipv4 (config-radius-server) [SEC](#)
address ipv4 (session border controller) [SBCD](#)
address ipv6 (TACACS+) [IPV6](#), [SEC](#)
address ipv6 (config-radius-server) [SEC](#)
address prefix [IAD](#), [IPV6](#)
address range [IAD](#)
address-family [MP](#)
address-family (EIGRP) [EIGRP](#), [IPV6](#)
address-family (tgrep) [VR](#)
address-family ipv4 (BGP) [BGP](#), [IPV6](#), [MTR](#)
address-family ipv4 (EIGRP MTR) [MTR](#)
address-family ipv4 (IS-IS) [MTR](#)
address-family ipv4 (OSPF) [MTR](#)

address-family ipv4 (OSPFv3) **IPV6**
address-family ipv6 **IPV6**
address-family ipv6 (IS-IS) **IPV6**
address-family ipv6 (OSPFv3) **IPV6**
address-family l2vpn **BGP, MP**
address-family mvpn **BGP**
address-family nsap **BGP**
address-family rffilter unicast **BGP**
address-family vpng4 **BGP**
address-family vpng6 **IPV6**
address-hiding **VR**
address-pool **SSG**
addressed-key **SEC**
adjacency **SBCD**
adjacency h248 **SBCD**
adjacency timeout **SBCD**
adjacency-check **IPV6**
admin-domain **SBCD**
admin-domain (adjacency) **SBCD**
admin-params **MM**
administrator authentication list **SEC**
administrator authorization list **SEC**
ads-negative-cache **WAN**
advertise **SLB**
advertise (annex g) **VR**
advertise (tgrep) **VR**
advertise additional-paths **BGP**
advertise downlink next-hop **MWG**
advertise passive-only (IPv6) **IPV6, IRS**
advertise-passive-only **IRS**
af-interface **EIGRP**
affinity **MP**
agent **SLB**
ageout **SLA**
aggregate **MWG**
aggregate interval **SLA**

aggregate-address [BGP](#), [IPV6](#)
aggregation interval [SLA](#)
aggregation-type [OER](#)
aggregation-type (PfR) [PFR](#)
air-queue aggregate-limit [QOS](#)
ais [CE](#)
ais through ethernet cfm logging [CE](#)
alarm [CE](#)
alarm severity (policy-react and policy-inline-react) [MM](#)
alarm type (policy-react and policy-inline-react) [MM](#)
alarm-interface [IR](#)
alarm-trigger [VR](#)
alert [SEC](#)
alert (zone-based policy) [SEC](#)
alert-group [HA](#)
alert-group-config snapshot [HA](#)
alert-severity [SEC](#)
alg sip blacklist [IAD](#), [SEC](#)
alg sip processor [IAD](#), [SEC](#)
alg sip timer [IAD](#), [SEC](#)
algorithm [SEC](#)
alias [CF](#), [CBL](#)
alias (session border controller) [SBCD](#)
alias static [VR](#)
all (profile map configuration) [SEC](#)
all profile map configuration through browser-proxy [SEC](#)
all-interfaces [MTR](#)
allocate [MP](#)
allocate lu [IBM](#)
allow diff-med-sig-vpn [SBCD](#)
allow private info [SBCD](#)
allow subscribe [VR](#)
allow-connections [IPV6](#), [VR](#)
allow-list [SAF](#)
allow-mode [SEC](#)
allowed-locator (LISP site) [LISP](#)

alps a1-map a2-map IBM
alps alias IBM
alps ascu IBM
alps auto-reset IBM
alps circuit IBM
alps connection-type permanent IBM
alps default-circuit IBM
alps enable-alarms ascu IBM
alps enable-alarms circuit IBM
alps enable-alarms peer IBM
alps enable-ascu IBM
alps enable-circuit IBM
alps error-display IBM
alps host-hld host-link IBM
alps hostlink IBM
alps idle-timer IBM
alps keepalive IBM
alps lifetime-timer IBM
alps local-hld remote-hld IBM
alps local-peer IBM
alps matip-close-delay IBM
alps max-msg-length IBM
alps mpx IBM
alps n1 IBM
alps n2 IBM
alps n3 IBM
alps poll-pause IBM
alps primary-peer IBM
alps remote-peer IBM
alps retry-option IBM
alps service-msg data-drop IBM
alps service-msg format IBM
alps service-msg status-change IBM
alps service-msg-interval IBM
alps service-msg-list IBM
alps service-msg-list number IBM

alps servlim **IBM**
alps t1 **IBM**
alps t2 **IBM**
alps translate **IBM**
alps update-circuit **IBM**
als **IR**
als restart **IR**
als restart mode **IR**
als restart pulse **IR**
alt-dial **VR**
analysis-module monitoring **IR**
anat **IPV6, VR**
ani mapping **VR**
annex modulation **CBL**
announce config **CNS**
announce interval **IR, CE**
announce timeout **IR, CE**
anonymous user **MWG**
anonymous-reporting-only **HA**
answer-address **VR**
antenna **WL**
api client **OER**
api provider **OER**
api provider (PfR) **PFR**
apn **SLB**
apn (proxy mobile IPv6) **IMO**
append-after **MP**
appfw policy-name **SEC**
appl (webvpn) **SEC**
appletalk access-group **ATK**
appletalk address **ATK**
appletalk alternate-addressing **ATK**
appletalk arp interval **ATK**
appletalk arp retransmit-count **ATK**
appletalk arp-timeout **ATK**
appletalk aarp tickle-time **ATK**

appletalk aarp update-interval ATK
appletalk cable-range ATK
appletalk checksum ATK
appletalk client-mode ATK
appletalk discovery ATK
appletalk distribute-list in ATK
appletalk distribute-list out ATK
appletalk domain hop-reduction ATK
appletalk domain name ATK
appletalk domain remap-range ATK
appletalk domain-group ATK
appletalk eigrp active-time ATK
appletalk eigrp log-neighbor-changes ATK
appletalk eigrp-bandwidth-percentage ATK
appletalk eigrp-splithorizon ATK
appletalk eigrp-timers ATK
appletalk event-logging ATK
appletalk free-trade-zone ATK
appletalk getzonelist-filter ATK
appletalk glean-packets ATK
appletalk ignore-verify-errors ATK
appletalk iptalk ATK
appletalk iptalk-baseport ATK
appletalk lookup-type ATK
appletalk macip dynamic ATK
appletalk macip server ATK
appletalk macip static ATK
appletalk maximum-paths ATK
appletalk name-lookup-interval ATK
appletalk permit-partial-zones ATK
appletalk pre-fdditalk ATK
appletalk protocol ATK
appletalk proxy-nbp ATK
appletalk require-route-zones ATK
appletalk route-cache ATK
appletalk route-redistribution ATK

appletalk routing **ATK**
appletalk rtmp jitter **ATK**
appletalk rtmp-stub **ATK**
appletalk send-rtmps **ATK**
appletalk static cable-range **ATK**
appletalk static network **ATK**
appletalk strict-rtmp-checking **ATK**
appletalk timers **ATK**
appletalk virtual-net **ATK**
appletalk zip-query-interval **ATK**
appletalk zip-reply-filter **ATK**
appletalk zone **ATK**
application (application firewall policy) **SEC**
application (dial-peer) **VR**
application (global) **VR**
application define **OER**
application define (PfR) **PFR**
application redundancy **IAD, SEC**
application-id **CBL**
application-inspect **SEC**
apply (satellite initial configuration) **IR**
aps authenticate **IR**
aps clear sonet **IR**
aps force **IR**
aps force sonet **IR**
aps group **IR, WAN**
aps interchassis group **WAN**
aps lockout **IR**
aps lockout sonet **IR**
aps manual **IR**
aps manual sonet **IR**
aps protect **IR**
aps protect (SONET) **IR**
aps revert **IR**
aps timers **IR**
aps unidirectional **IR**

aps working **IR**
aps-channel **CE**
arap authentication **SEC**
arap callback **DIA**
arap dedicated **TSV**
arap enable **TSV**
arap net-access-list **TSV**
arap network **TSV**
arap require-manual-password **TSV**
arap timelimit **TSV**
arap warningtime **TSV**
arap zonelist **TSV**
archive **CF**
archive config **CF**
archive log config persistent save **CF**
archive tar **CF**
area (IPv6 address family configuration) **IPV6**
area (OSPFv3 router configuration) **IPV6**
area authentication **OSPF**
area authentication (IPv6) **IPV6**
area capability default-exclusion **MTR**
area default-cost **OSPF**
area encryption **IPV6**
area filter-list **OSPF**
area nssa **OSPF**
area nssa translate **OSPF**
area range **IPV6, OSPF**
area sham-link **OSPF**
area sham-link (OSPFv3) **OSPF**
area stub **OSPF**
area virtual-link **OSPF, IPV6**
area virtual-link authentication **IPV6**
area virtual-link encryption **IPV6**
area-address (NLSP) **IPX**
area-password **IRS**
area_(OSPFv3) **IPV6**

arp WAN
arp (global) IAD
arp (interface) IAD, IPV6
arp access-list IAD
arp authorized IAD
arp ignore local ISG
arp log threshold entries IAD
arp packet-priority enable IAD
arp probe interval IAD
arp timeout IAD
arq reject-resource-low VR
arq reject-unknown-prefix VR
as VR
ase collector SEC
ase enable SEC
ase group SEC
ase signature extraction SEC
asp VR
asp addr-offset IBM
asp brdcst-address-mask IBM
asp broadcast-addr IBM
asp dcd always IBM
asp direct IBM
asp enq IBM
asp eof-char IBM
asp ignore-sequence-number IBM
asp retries IBM
asp role IBM
asp rx-if IBM
asp send ack IBM
asp sof-char IBM
asp timer IBM
asserted-id VR
associate application IPV6, VR
associate ccm VR
associate dspfarm profile SBCD

associate profile **IPV6, VR**
associate registered-number **VR**
associate slot **IR**
association **IR**
asymmetric payload **VR**
asymmetric-routing **IAD, SEC**
async default ip address **TSV**
async default routing **DIA**
async dynamic address **DIA**
async dynamic routing **DIA**
async mode dedicated **DIA**
async mode interactive **DIA**
async-bootp **CF**
async-write **WAN**
atm **ATM**
atm aal aal3 4 **ATM**
atm abr rate-factor **ATM**
atm address-registration **ATM**
atm arp-server **ATM**
atm autovc retry **ATM**
atm bandwidth dynamic **ATM**
atm classic-ip-extensions **ATM**
atm clock internal **ATM**
atm compression **ATM**
atm ds3-scramble **ATM**
atm e164 auto-conversion **ATM**
atm e3-scramble **ATM**
atm enable-ilmi-trap **ATM**
atm esi-address **ATM**
atm ether-mac-address **ATM**
atm exception-queue **ATM**
atm framing (DS3) **ATM**
atm framing (E3) **ATM**
atm ilmi-keepalive **ATM**
atm ilmi-pvc-discovery **ATM**
atm lbo **ATM**

atm max-channels [ATM](#)
atm maxvc [ATM](#)
atm mid-per-vc [ATM](#)
atm multicast [ATM](#)
atm multipoint-interval [ATM](#)
atm multipoint-signalling [ATM](#)
atm nsap-address [ATM](#)
atm oam ais alarm [ATM](#)
atm oam flush [ATM](#)
atm over-subscription-factor [ATM](#)
atm oversubscribe [ATM](#)
atm oversubscribe factor [ATM](#)
atm pppatm link reset [BBA](#)
atm pppatm passive [ATM, IPV6](#)
atm pvp [ATM](#)
atm rate-queue [ATM](#)
atm rawq-size [ATM](#)
atm route-bridged [BBA, IPV6](#)
atm rxbuff [ATM](#)
atm scramble-enable [VR](#)
atm sig-traffic-shaping strict [ATM](#)
atm smds-address [ATM](#)
atm sonet [IR](#)
atm sonet ignore s1 [ATM](#)
atm sonet report [ATM](#)
atm sonet stm-1 [ATM](#)
atm sonet threshold [ATM](#)
atm sonet threshold through client-atm-address name [ATM](#)
atm svc-upc-intent [ATM](#)
atm tx-latency [ATM](#)
atm txbuff [ATM](#)
atm uni-version [ATM](#)
atm vc-per-vp [ATM](#)
atm video aesa [VR](#)
atm vp-filter [ATM](#)
atm-address [ATM](#)

atm-address (qos) **QOS**
atmsig close atm **ATM**
attach **CF**
attach (H.248 BAC) **SBCD**
attach (Rf billing) **SBCD**
attach (session border controller) **SBCD**
attach-controllers **SBCD**
attach-controllers (session border controller) **SBCD**
attribute **SSG, QOS**
attribute (EEM) **EEM**
attribute (server-group) **SEC**
attribute acct-session-id overloaded **VR**
attribute h323-remote-id resolved **VR**
attribute list (VRRS) **FHP**
attribute map **SEC**
attribute nas-port format **SEC**
attribute type **SEC**
attributes **CBL**
au-3 **IR**
au-4 tug-3 **IR**
audio **VR**
audio-prompt load **VR**
audit (H.248 BAC) **SBCD**
audit filesize **SEC**
audit interval **SEC**
audit-trail **SEC**
audit-trail (zone) **SEC**
auth-option **IMO**
auth-type **SEC**
auth-type (ISG) **SEC, ISG**
authen-before-forward **VPD**
authenticate (control policy-map class) **VPD, ISG**
authenticate (service policy-map) **ISG**
authenticate redirecting-number **VR**
authentication **IAD, SEC**
authentication (BFD) **IRI**

authentication (IKE policy) SEC, IPV6
authentication (IKEv2 profile) SEC
authentication (L2TP) WAN
authentication (Mobile IPv6) IPV6
authentication (SIP UA) VR
authentication (dial peer) VR
authentication (session border controller) SBCD
authentication bind-first SEC
authentication command SEC
authentication command bounce-port ignore SEC
authentication command disable-port ignore SEC
authentication compare SEC
authentication control-direction SEC
authentication critical recovery delay SEC
authentication event fail SEC
authentication event no-response action SEC
authentication event server alive action reinitialize SEC
authentication event server dead action authorize SEC
authentication fallback SEC
authentication host-mode SEC
authentication key-chain IRS
authentication key-chain (EIGRP) EIGRP, SAF
authentication key-chain (OTV) WAN
authentication key-management WL
authentication list (tti-registrar) SEC
authentication method VR
authentication mode IRS
authentication mode (EIGRP) EIGRP, SAF
authentication mode (OTV) WAN
authentication mode (session border controller) SBCD
authentication network-eap WL
authentication open SEC
authentication open (SSID configuration mode) WL
authentication order SEC
authentication periodic SEC
authentication port ISG

authentication port-control SEC
authentication priority SEC
authentication send-only IRS
authentication send-only (OTV) WAN
authentication shared (SSID configuration mode) WL
authentication terminal SEC
authentication timer inactivity SEC
authentication timer reauthenticate SEC
authentication timer restart SEC
authentication trustpoint SEC
authentication url SEC
authentication violation SEC
authentication-key (LISP site) LISP
authentication-retries TSV
authoization list (global) SEC
authorization SEC, MWG
authorization (server-group) SEC
authorization (tti-registrar) SEC
authorization address ipv4 SEC
authorization identity SEC
authorization list SSG
authorization list (global) SEC
authorization list (tti-registrar) SEC
authorization method VR
authorization method (DHCP) IAD
authorization pending maximum SSG
authorization rate-limit SSG
authorization shared-password IAD
authorization username SEC
authorization username (DHCP) IAD
authorization username (tti-registrar) SEC
authorize accept identity SEC
authorize identifier ISG
auto discovery qos QOS
auto ip sla mpls-lsp-monitor SLA
auto ip sla mpls-lsp-monitor reaction-configuration SLA

auto ip sla mpls-lsp-monitor reset **SLA**
auto ip sla mpls-lsp-monitor schedule **SLA**
auto qos **QOS**
auto qos voip **QOS**
auto qos voip (6500) **QOS**
auto secure **SEC**
auto-bw (LSP Attributes) **MP**
auto-config **VR**
auto-cost **OSPF**
auto-cost (IPv6) **IPV6**
auto-cost (OSPFv3) **IPV6**
auto-cut-through **VR**
auto-enroll **SEC, IPV6**
auto-ip-ring **IAD**
auto-polarity **IR**
auto-retrieve **MWG**
auto-rollover **SEC**
auto-route-target **MP, WAN**
auto-summary (BGP) **BGP**
auto-summary (EIGRP) **EIGRP**
auto-summary (RIP) **RIP**
auto-sync **CF, CBL**
auto-update client **SEC**
autobaud **CF**
autocommand **TSV**
autodetect encapsulation **DIA**
autodiscovery (MPLS) **BGP, MP**
autohangup **DIA**
automate-tester (config-radius-server) **SEC**
autonomic connect **AN**
autonomic registrar **AN**
autonomic service **AN**
autonomous-system (EIGRP) **EIGRP**
autoselect **DIA**
autoupgrade disk-cleanup **CF**
autoupgrade ida url **CF**

autoupgrade status email **CF**
availability algorithm **SLA**
available **ISG**
awrr-queue dscp-map **QOS**

B

b2 sd-ber **IR**
b2 sf-ber **IR**
backbone interface **CE**
backhaul-session-manager **VR**
backoff **OER**
backoff (PfR) **PFR**
backoff exponential **SEC**
backup **VPD**
backup (NetFlow SCTP) **NF**
backup active interface **WAN**
backup delay **IR, DIA**
backup delay (L2VPN local switching) **MP, WAN**
backup excluded **WSMA**
backup group **SEC**
backup hold **WSMA**
backup interface **IR, DIA**
backup interface atm **IR**
backup interface cem **IR**
backup interface dialer **DIA**
backup load **IR, DIA**
backup peer **MP, WAN**
backup-gateway **SEC**
bandwidth **MWG, VR**
bandwidth (LSP Attributes) **MP**
bandwidth (dial peer) **VR**
bandwidth (interface) **SNMP, IR, IPV6**
bandwidth (policy-map class) **QOS**
bandwidth (session border controller) **SBCD**
bandwidth check-destination **VR**
bandwidth qos-reference **QOS**
bandwidth remaining ratio **QOS**

bandwidth remote VR
bandwidth-fields mandatory SBCD
bandwidth-percent EIGRP, SAF
bandwidth-police tman SBCD
bandwidth-pool MWG
bandwidth-resolution PFR
banner SEC
banner (WebVPN) SEC
banner (transport map) TSV
banner exec CF
banner incoming CF
banner login CF
banner motd CF
banner slip-ppp CF
base-dn SEC
basic-mapping-rule IAD
batch IR
batch-size SBCD
batch-time SBCD
battery-reversal VR
bba-group pppoe BBA
bce delete-wait-time IMO
bce lifetime IMO
bce maximum IMO
beacon WL
beacon (multicast routing monitor) IMC
beacon multicast routing monitor through ip dvmrp unicast-routing IMC
bearer-capability clear-channel VR
bert abort controller IR
bert controller IR
bert errors IR
bert pattern IR
bert pattern (T1 E1) IR
bert pattern (T3 E3) IR
bert profile IR
bfd IRI, IPV6

bfd (EIGRP) [EIGRP](#)
bfd all-interfaces [IRI](#), [RIP](#), [IPV6](#)
bfd all-interfaces (OSPFv3) [IPV6](#)
bfd check-ctrl-plane-failure [IRI](#)
bfd echo [IRI](#)
bfd interface [IRI](#)
bfd map [IRI](#)
bfd slow-timers [IRI](#)
bfd template [IRI](#)
bfd-template [IRI](#)
bfe [WAN](#)
bgp graceful-shutdown all [BGP](#)
bgp additional-paths [BGP](#)
bgp additional-paths install [BGP](#), [IPV6](#)
bgp additional-paths select [BGP](#), [SBCD](#)
bgp additional-paths select (additional paths) [BGP](#)
bgp additional-paths select (diverse path) [BGP](#)
bgp advertise-best-external [BGP](#), [IPV6](#)
bgp aggregate-timer [BGP](#)
bgp always-compare-med [BGP](#)
bgp asnotation dot [BGP](#)
bgp bestpath as-path ignore [BGP](#)
bgp bestpath compare-routerid [BGP](#)
bgp bestpath cost-community ignore [BGP](#)
bgp bestpath igp-metric ignore [BGP](#), [SBCD](#)
bgp bestpath med confed [BGP](#)
bgp bestpath med missing-as-worst [BGP](#)
bgp bestpath prefix-validate [BGP](#)
bgp client-to-client reflection [BGP](#)
bgp client-to-client reflection intra-cluster [BGP](#)
bgp cluster-id [BGP](#)
bgp confederation identifier [BGP](#)
bgp confederation peers [BGP](#)
bgp consistency-checker [BGP](#), [SBCD](#)
bgp dampening [BGP](#)
bgp default ipv4-unicast [BGP](#), [MP](#)

bgp default ipv6-nexthop **IPV6**
bgp default local-preference **BGP**
bgp default route-target filter **MP**
bgp deterministic-med **BGP**
bgp dmzlink-bw **BGP**
bgp enforce-first-as **BGP**
bgp enhanced-error **BGP**
bgp fast-external-failover **BGP**
bgp graceful-restart **BGP, IPV6**
bgp inject-map **BGP**
bgp listen **BGP**
bgp log-neighbor-changes **BGP, MP, IPV6**
bgp maxas-limit **BGP**
bgp mpls-local-label **BGP**
bgp next-hop **MP**
bgp nexthop **BGP**
bgp nexthop trigger delay **BGP**
bgp nexthop trigger enable **BGP**
bgp nopeerup-delay **BGP**
bgp recursion host **IPV6, BGP**
bgp redistribute-internal **BGP**
bgp refresh max-eor-time **BGP, SBCD**
bgp refresh stalepath-time **BGP, SBCD**
bgp regexp deterministic **BGP**
bgp route-map priority **BGP**
bgp router-id **BGP, IPV6**
bgp rpki server **BGP**
bgp rr-group **BGP**
bgp scan-time **BGP, MP**
bgp slow-peer detection **BGP**
bgp slow-peer split-update-group dynamic **BGP**
bgp soft-reconfig-backup **BGP**
bgp sso route-refresh-enable **BGP**
bgp suppress-inactive **BGP**
bgp tid **MTR**
bgp transport **BGP**

bgp update-delay **BGP**
bgp update-group split as-override **BGP**
bgp upgrade-cli **BGP**
bgp-policy **BGP**
bidirectional **SEC**
billing **SBCD**
billing (CAC) **SBCD**
billing b-channel **VR**
binary file **SEC**
bind **IPV6, VR**
bind authenticate **SEC**
bind interface **VR**
bindid **SLB**
binding **IPV6**
binding (proxy mobile IPv6) **IMO**
bitrate **SLA**
blacklist **SBCD**
blacklist (profile) **SBCD**
blacklist (sip-opt) **SBCD**
blended-codec-list **SBCD**
blended-transcode **SBCD**
block **VR**
block count **SEC, WL**
block-caller **VR**
block-foreign-ms **MWG**
bmp **BGP**
body **SBCD**
body (editor) **SBCD**
body-editor **SBCD**
body-editor (method) **SBCD**
body-profile **SBCD**
body-profile (sip adj) **SBCD**
boot **CF, CBL**
boot bootldr **CF**
boot bootstrap **CF**
boot config **CF**

1, a through b

boot host **CF**
boot network **CF**
boot system **CF**
boot-end-marker **CF**
boot-start-marker **CF**
bootfile **IAD**
bootup e-lead off **VR**
border **OER**
border (PfR) **PFR**
branch bandwidth-field **SBCD**
branch codec **SBCD**
branch codec-list **SBCD**
branch hold-setting **SBCD**
branch inband-dtmf-mode **SBCD**
branch inbound-policy **SBCD**
branch media bypass **SBCD**
branch media-caps **SBCD**
branch media-description disabled **SBCD**
branch media-type **SBCD**
branch outbound-policy **SBCD**
branch port-range-tag **SBCD**
branch privacy edit-privacy-request **SBCD**
branch privacy privacy-service **SBCD**
branch ptime **SBCD**
branch secure-media **SBCD**
branch sig-qos-profile **SBCD**
branch tel-event payload type **SBCD**
branch video-qos-profile **SBCD**
branch voice-qos-profile **SBCD**
bre-connect **ATM**
break **CBL**
bri **IMO**
bridge acquire **BR, IBM**
bridge address **BR, IBM**
bridge bitswap-layer3-addresses **BR, IBM**
bridge bridge **BR, IBM**

bridge circuit-group pause **BR, IBM**
bridge circuit-group source-based **BR, IBM**
bridge cmf **BR, IBM**
bridge crb **BR, IBM**
bridge domain **BR, IBM**
bridge forward-time **BR, IBM**
bridge hello-time **BR, IBM**
bridge irb **BR, IBM**
bridge lat-service-filtering **BR, IBM**
bridge max-age **BR, IBM**
bridge multicast-source **BR, IBM**
bridge priority **BR, IBM**
bridge protocol **BR, IBM**
bridge protocol ibm **BR, IBM**
bridge route **BR, IBM**
bridge subscriber-policy **BR, IBM**
bridge-domain **ATM, IR, WAN, LSW**
bridge-domain (global) **CE**
bridge-domain (service instance) **WAN, CE**
bridge-domain (subinterface) **IR, LSW**
bridge-domain from-encapsulation **CE**
bridge-dot1q encapsulation **ATM**
bridge-group **BR, IBM, IPV6**
bridge-group aging-time **BR, IBM**
bridge-group cbus-bridging **BR, IBM**
bridge-group circuit-group **BR, IBM**
bridge-group input-address-list **BR, IBM**
bridge-group input-lat-service-deny **BR, IBM**
bridge-group input-lat-service-permit **BR, IBM**
bridge-group input-lsap-list **BR, IBM**
bridge-group input-pattern-list **BR, IBM**
bridge-group input-type-list **BR, IBM**
bridge-group lat-compression **BR, IBM**
bridge-group output-address-list **BR, IBM**
bridge-group output-lat-service-deny **BR, IBM**
bridge-group output-lat-service-permit **BR, IBM**

bridge-group output-lsap-list **BR, IBM**
bridge-group output-pattern-list **BR, IBM**
bridge-group output-type-list **BR, IBM**
bridge-group path-cost **BR, IBM**
bridge-group priority **BR, IBM**
bridge-group spanning-disabled **BR, IBM**
bridge-group sse **BR, IBM**
bridge-group subscriber-loop-control **BR, IBM**
bridge-group subscriber-trunk **BR, IBM**
bridge-vlan **LSW**
broadcast **ATM**
broadcast-key **WL**
browser-attribute import **SEC**
browser-proxy **SEC**
bsc char-set **IBM**
bsc contention **IBM**
bsc dial-contention **IBM**
bsc host-timeout **IBM**
bsc pause **IBM**
bsc poll-timeout **IBM**
bsc primary **IBM**
bsc retries **IBM**
bsc secondary **IBM**
bsc servlim **IBM**
bsc spec-poll **IBM**
bstun group **IBM**
bstun keepalive-count **IBM**
bstun lisnsap **IBM**
bstun peer-map-poll **IBM**
bstun peer-name **IBM**
bstun protocol-group **IBM**
bstun reconnect-interval **IBM**
bstun remote-peer-keepalive **IBM**
bstun route **IBM**
bstun route (BIP) **IBM**
bstun route (Frame Relay) **IBM**

bstun route all apip IBM
buckets-of-history-kept SLA
buffer public ERM
buffer-length BSM
buffer-size (bulk statistics) SNMP
buffers BSM
buffers huge size BSM
buffers tune automatic BSM
bump QOS
bump (Frame Relay VC-bundle-member) WAN
bundle QOS
bundle svc QOS
busy-message TSV
busyout (port) DIA
busyout (privileged EXEC) DIA
busyout (spe) DIA
busyout forced VR
busyout monitor VR
busyout monitor action VR
busyout monitor backhaul VR
busyout monitor gatekeeper VR
busyout monitor probe VR
busyout seize VR

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ca trust-point through clock mode

- ca trust-point through clock mode, page 38

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 2: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference
CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference

IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference

ca trust-point through clock mode

SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

C

ca trust-point SEC

ca trust-point through clear eou SEC

cable acfe enable CBL

cable acfe max-bonus-bandwidth CBL

cable acfe max-eir-ratio CBL

cable admission-control CBL

cable admission-control ds-bandwidth CBL

cable admission-control event CBL

cable admission-control max-reserved-bandwidth CBL

cable admission-control preempt priority-voice CBL

cable admission-control us-bandwidth CBL

cable application-type include CBL

cable application-type name CBL

cable arp CBL

cable arp filter CBL

cable attribute-mask CBL

cable bgsync CBL

cable bgsync active CBL

cable bonding-group-id CBL

cable bonding-group-secondary CBL

cable bundle IR, CBL

cable bundle through clock mode IR

cable clock clear-counters **CBL**
cable clock dti **CBL**
cable clock dti clear-counters **CBL**
cable clock force **CBL**
cable clock source-midplane **CBL**
cable clock upgrade **CBL**
cable cm-status **CBL**
cable cm-status enable **CBL**
cable cmcpe-list valid-time **CBL**
cable config-file **CBL**
cable dci-response **CBL**
cable dci-upstream-disable **CBL**
cable default-phy-burst **CBL**
cable device **CBL**
cable dfo-retry-count **CBL**
cable dhcp-giaddr **CBL**
cable dhcp-insert **CBL**
cable dhcp-parse option **CBL**
cable divert-rate-limit **CBL**
cable docsis30-voice downstream req-attr-mask **CBL**
cable dot1q-vc-map **CBL**
cable downstream annex **CBL**
cable downstream attribute-mask **CBL**
cable downstream channel-id **CBL**
cable downstream dsg chan-list **CBL**
cable downstream dsg dcd-enable **CBL**
cable downstream dsg disable **CBL**
cable downstream dsg rule **CBL**
cable downstream dsg tg **CBL**
cable downstream dsg tg channel **CBL**
cable downstream dsg timer **CBL**
cable downstream dsg vendor-param **CBL**
cable downstream frequency **CBL**
cable downstream if-output **CBL**
cable downstream interleave-depth **CBL**
cable downstream modulation **CBL**

cable downstream override **CBL**
cable downstream qos wfq weight **CBL**
cable downstream rate-limit **CBL**
cable downstream rf-power **CBL**
cable downstream rf-shutdown **CBL**
cable downstream-channel-id automatic **CBL**
cable ds-max-burst **CBL**
cable ds-resiliency **CBL**
cable dsg **CBL**
cable dsg cfr **CBL**
cable dsg chan-list **CBL**
cable dsg client-list **CBL**
cable dsg keepalive **CBL**
cable dsg name-update-interval **CBL**
cable dsg tg **CBL**
cable dsg tg channel **CBL**
cable dsg tg channel ucid **CBL**
cable dsg tg channel vendor-param **CBL**
cable dsg tg default-priority **CBL**
cable dsg tg priority **CBL**
cable dsg timer **CBL**
cable dsg tunnel **CBL**
cable dsg tunnel srv-class **CBL**
cable dsg vendor param **CBL**
cable dynamic-bw-sharing **CBL**
cable dynamic-qos trace **CBL**
cable dynamic-secret **CBL**
cable dynamic-secret exclude **CBL**
cable dynamic-secret tftp insert-upgrade-server **CBL**
cable enable-trap **CBL**
cable event priority **CBL**
cable event syslog-server **CBL**
cable event throttle-interval **CBL**
cable event throttle-threshold **CBL**
cable fiber-node **CBL**
cable filter group **CBL**

cable flap-list aging [CBL](#)
cable flap-list insertion-time [CBL](#)
cable flap-list miss-threshold [CBL](#)
cable flap-list power-adjust threshold [CBL](#)
cable flap-list size [CBL](#)
cable freq-range [CBL](#)
cable helper-address [IR, CBL](#)
cable high-priority-call-window [CBL](#)
cable host access-group [CBL](#)
cable igmp static-group [CBL](#)
cable init-channel-timeout [CBL](#)
cable insertion-interval [CBL](#)
cable intercept [CBL](#)
cable ip-broadcast-echo [CBL](#)
cable ip-init [CBL](#)
cable ip-multicast-echo [CBL](#)
cable ipc-stats [CBL](#)
cable ipv6 source-verify [CBL](#)
cable ipv6 source-verify leasequery-filter downstream [CBL](#)
cable l2-vpn xconnect backup force-switchover [CBL](#)
cable l2-vpn-service atm-vc [CBL](#)
cable l2-vpn-service default-nsi [CBL](#)
cable l2-vpn-service dot1q [CBL](#)
cable l2-vpn-service xconnect [CBL](#)
cable l2vpn [CBL](#)
cable linecard auto-rommon-downgrade [CBL](#)
cable linecard auto-rommon-upgrade [CBL](#)
cable linecard critical-event-poweroff [CBL](#)
cable load-balance d20-ggrp-default [CBL](#)
cable load-balance d30-ggrp-default [CBL](#)
cable load-balance docsis-enable [CBL](#)
cable load-balance docsis-group [CBL](#)
cable load-balance docsis-policy [CBL](#)
cable load-balance docsis30-enable [CBL](#)
cable load-balance exclude [CBL](#)
cable load-balance group [CBL](#)

cable load-balance group (Supporting Dynamic Channel Change) [CBL](#)
cable load-balance group (interface) [CBL](#)
cable load-balance group interval [CBL](#)
cable load-balance group policy [CBL](#)
cable load-balance group policy ugs [CBL](#)
cable load-balance group threshold [CBL](#)
cable load-balance group threshold (Supporting Dynamic Channel Change) [CBL](#)
cable load-balance method-utilization min-threshold [CBL](#)
cable load-balance modem max-failures [CBL](#)
cable load-balance restrict modem [CBL](#)
cable load-balance rule [CBL](#)
cable logging badipsource [CBL](#)
cable logging downstream-index [CBL](#)
cable logging layer2events [CBL](#)
cable map-advance [CBL](#)
cable match address [CBL](#)
cable max-hosts [CBL](#)
cable metering data-per-session [CBL](#)
cable metering destination [CBL](#)
cable metering filesystem [CBL](#)
cable metering ipdr [CBL](#)
cable metering ipdr-d3 [CBL](#)
cable metering source-interface [CBL](#)
cable modem access-group [CBL](#)
cable modem change-frequency [CBL](#)
cable modem max-cpe [CBL](#)
cable modem max-hosts [CBL](#)
cable modem qos profile [CBL](#)
cable modem remote-query [CBL](#)
cable modem service-class-name [CBL](#)
cable modem v6-max-cpe-prefix [CBL](#)
cable modem vendor [CBL](#)
cable modulation-profile [CBL](#)
cable modulation-profile global-scheme [CBL](#)
cable monitor [CBL](#)
cable mrc-mode [CBL](#)

cable mtc-mode **CBL**
cable multicast auth enable default-action **CBL**
cable multicast auth profile-name **CBL**
cable multicast group-encryption **CBL**
cable multicast group-qos **CBL**
cable multicast group-qos default **CBL**
cable multicast mdf-disable **CBL**
cable multicast qos group **CBL**
cable multicast ses-cache **CBL**
cable multicast source **CBL**
cable nd **CBL**
cable power **CBL**
cable pre-equalization exclude **CBL**
cable primary-sflow-qos11 keep **CBL**
cable privacy **CBL**
cable privacy bpi-plus-enforce **CBL**
cable privacy bpi-plus-exclude **CBL**
cable privacy bpi-plus-policy **CBL**
cable privacy clone-detect **CBL**
cable privacy eae-exclude **CBL**
cable privacy eae-policy **CBL**
cable privacy encrypt-alg-priority **CBL**
cable privacy hotlist **CBL**
cable privacy kek **CBL**
cable privacy revocation crl skip-sig-check **CBL**
cable privacy revocation enable **CBL**
cable privacy revocation ocsp skip-sig-check **CBL**
cable privacy revocation skip-cm-cert **CBL**
cable privacy revocation timeout **CBL**
cable privacy tek **CBL**
cable proxy-arp **CBL**
cable qos enforce-rule **CBL**
cable qos permission **CBL**
cable qos pre-registration **CBL**
cable qos pro max-ds-burst **CBL**
cable queue-limit **CBL**

ca trust-point through clock mode

cable rate-limit-algorithm min-plus-excess [CBL](#)
cable rcc-template [CBL](#)
cable rcp-control [CBL](#)
cable redundancy hashfilter [CBL](#)
cable redundancy myid [CBL](#)
cable redundancy node [CBL](#)
cable redundancy node frequency [CBL](#)
cable redundancy target [CBL](#)
cable redundancy threshold [CBL](#)
cable registration-timeout [CBL](#)
cable relay-agent-option [CBL](#)
cable resiliency ds-bonding [CBL](#)
cable resiliency traps-interval [CBL](#)
cable rf-adapt timer [CBL](#)
cable rf-bandwidth-percent [CBL](#)
cable rf-change-dampen-time [CBL](#)
cable rf-change-trigger [CBL](#)
cable rf-channel [CBL](#)
cable rfswitch copy [CBL](#)
cable rfswitch delete [CBL](#)
cable rfswitch reboot [CBL](#)
cable rfswitch set-active [CBL](#)
cable rsvp default-scn [CBL](#)
cable service attribute ds-bonded downstream-type bonding-enabled [CBL](#)
cable service attribute non-ds-bonded downstream-type bonding-disabled [CBL](#)
cable service attribute non-ds-bonded legacy-ranging downstream-type [CBL](#)
cable service attribute voice-enabled [CBL](#)
cable service class [CBL](#)
cable service flow activity-timeout [CBL](#)
cable service flow inactivity-threshold [CBL](#)
cable service type [CBL](#)
cable service-flow inactivity-timeout [CBL](#)
cable set mpls-experimental [CBL](#)
cable sflog [CBL](#)
cable shared-secondary-secret [CBL](#)
cable shared-secret [CBL](#)

cable sid-cluster-group [CBL](#)
cable sid-cluster-switching [CBL](#)
cable source-route [CBL](#)
cable source-verify [CBL](#)
cable source-verify enable-sav-static [CBL](#)
cable source-verify group [CBL](#)
cable source-verify leasequery-filter downstream [CBL](#)
cable source-verify leasequery-filter upstream [CBL](#)
cable spectrum-group (global) [CBL](#)
cable spectrum-group (interface) [CBL](#)
cable spectrum-group hop period [CBL](#)
cable spectrum-group hop threshold [CBL](#)
cable spectrum-group shared [CBL](#)
cable submgmt default [CBL](#)
cable sync-interval [CBL](#)
cable tag [CBL](#)
cable telco-return enable [CBL](#)
cable telco-return interval [CBL](#)
cable telco-return registration-ip [CBL](#)
cable telco-return spd dhcp-authenticate [CBL](#)
cable telco-return spd dhcp-server [CBL](#)
cable telco-return spd dial-timer [CBL](#)
cable telco-return spd factory-default [CBL](#)
cable telco-return spd manual-dial [CBL](#)
cable telco-return spd password [CBL](#)
cable telco-return spd phonenum [CBL](#)
cable telco-return spd ppp-authenticate [CBL](#)
cable telco-return spd radius-realm [CBL](#)
cable telco-return spd service-provider [CBL](#)
cable telco-return spd threshold [CBL](#)
cable telco-return spd username [CBL](#)
cable tftp-enforce [CBL](#)
cable throttle-modem [CBL](#)
cable throttle-ranging [CBL](#)
cable time-server [CBL](#)
cable trust [CBL](#)

cable tx-power-headroom CBL
cable udc-capability CBL
cable upstream active-codes CBL
cable upstream admission-control CBL
cable upstream attribute-mask CBL
cable upstream bonding-group CBL
cable upstream chan-class-id CBL
cable upstream channel-width CBL
cable upstream codes-per-minislot CBL
cable upstream concatenation CBL
cable upstream connector CBL
cable upstream data-backoff CBL
cable upstream description CBL
cable upstream differential-encoding CBL
cable upstream docsis-mode CBL
cable upstream dpon CBL
cable upstream equalization-coefficient CBL
cable upstream equalization-error-recovery CBL
cable upstream ext-power CBL
cable upstream fec CBL
cable upstream fec-strength CBL
cable upstream fragment-force CBL
cable upstream fragmentation CBL
cable upstream freq-adj averaging CBL
cable upstream frequency CBL
cable upstream hop-priority CBL
cable upstream hopping blind CBL
cable upstream ingress-noise-cancellation CBL
cable upstream load-balance group CBL
cable upstream maintain-psd CBL
cable upstream max-channel-power-offset CBL
cable upstream max-codes-per-subframe CBL
cable upstream max-interleave-step CBL
cable upstream max-logical-chans CBL
cable upstream max-ports CBL
cable upstream minislot-size CBL

cable upstream modulation-profile **CBL**
cable upstream power-adjust **CBL**
cable upstream power-level **CBL**
cable upstream qos wfq **CBL**
cable upstream range-backoff **CBL**
cable upstream ranging-init-technique **CBL**
cable upstream ranging-poll **CBL**
cable upstream rate-adapt (global) **CBL**
cable upstream rate-adapt (interface) **CBL**
cable upstream rate-limit **CBL**
cable upstream rate-limit-bwreq exempted-priority **CBL**
cable upstream rate-limit-ccf **CBL**
cable upstream resiliency **CBL**
cable upstream rf-adapt **CBL**
cable upstream rf-adapt (logical channel) **CBL**
cable upstream rng-holdoff **CBL**
cable upstream scheduling type **CBL**
cable upstream scrambler **CBL**
cable upstream shutdown **CBL**
cable upstream snr-pollling **CBL**
cable upstream spectrum-group **CBL**
cable upstream spreading-interval **CBL**
cable upstream threshold **CBL**
cable upstream threshold hysteresis **CBL**
cable upstream threshold rf-adapt **CBL**
cable upstream timing-adjust **CBL**
cable upstream unfrag-slot-jitter **CBL**
cable util-interval **CBL**
cable vc-map **CBL**
cable vrf-steering cable-modem **CBL**
cable wideband auto-reset **CBL**
cable-detect **VR**
cable-detect-poll-timer **VR**
cable-modem compliant bridge **CBL**
cable-modem dhcp-proxy **CBL**
cable-modem downstream saved channel **CBL**

cable-modem fast-search **CBL**
cable-modem qos drop-ack **CBL**
cable-modem upstream preamble qpsk **CBL**
cable-modem voip best-effort **CBL**
cable-modem voip clock-internal **CBL**
cablelength **IR**
cablelength (E1 controller) **IR**
cablelength long **IR**
cablelength short **IR**
cabundle url **SEC**
cac master **VR**
cac master through call application stats **VR**
cac-policy **MWG**
cac-policy-set **SBCD**
cac-policy-set (admin-domain) **SBCD**
cac-policy-set global **SBCD**
cac-scope **SBCD**
cac-table **SBCD**
cac_off **VR**
cache **NF, IPV6**
cache (Flexible NetFlow) **FNF**
cache (Flexible NetFlow) through match flow **FNF**
cache (neighbor BE) **VR**
cache (session border controller) **SBCD**
cache authentication profile (server group configuration) **SEC**
cache authorization profile (server group configuration) **SEC**
cache clear age **SEC**
cache disable **SEC**
cache entries **MM**
cache expiry (server group configuration) **SEC**
cache max **SEC**
cache refresh **SEC**
cache reload time (global application configuration mode) **VR**
cache timeout **MM**
cache type **MM**
cache-lifetime **SBCD**

cache-limit **SBCD**
cache-memory-max **IAD**
cache-timeout **NF**
cadence **VR**
cadence-list **VR**
cadence-max-off-time **VR**
cadence-min-on-time **VR**
cadence-variation **VR**
calc-moscqe **SBCD**
calendar set **BSM**
call accounting-template **VR**
call accounting-template voice **VR**
call accounting-template voice reload **VR**
call admission limit **SEC, BBA**
call admission load **BBA**
call application alternate **VR**
call application cache reload time **VR**
call application dump event-log **VR**
call application event-log **VR**
call application event-log dump ftp **VR**
call application event-log error-only **VR**
call application event-log max-buffer-size **VR**
call application global **VR**
call application history session event-log save-exception-only **VR**
call application history session max-records **VR**
call application history session retain-timer **VR**
call application interface dump event-log **VR**
call application interface event-log **VR**
call application interface event-log dump ftp **VR**
call application interface event-log error-only **VR**
call application interface event-log max-buffer-size **VR**
call application interface max-server-records **VR**
call application interface stats **VR**
call application session start (global) **VR**
call application session start (privileged EXEC) **VR**
call application session stop **VR**

ca trust-point through clock mode

call application stats VR
call application voice VR
call application voice access-method VR
call application voice account-id-method VR
call application voice accounting enable VR
call application voice accounting-list VR
call application voice accounting-template VR
call application voice authen-list VR
call application voice authen-method VR
call application voice authentication enable VR
call application voice default disc-prog-ind-at-connect VR
call application voice dsn-script VR
call application voice event-log VR
call application voice fax-dtmf VR
call application voice global-password VR
call application voice language VR
call application voice load VR
call application voice mail-script VR
call application voice mode VR
call application voice pin-len VR
call application voice prompt VR
call application voice redirect-number VR
call application voice retry-count VR
call application voice security trusted VR
call application voice set-location VR
call application voice through call denial VR
call application voice transfer mode VR
call application voice transfer reroute-mode VR
call application voice uid-length VR
call application voice voice-dtmf VR
call application voice warning-time VR
call fallback VR
call fallback active VR
call fallback cache-size VR
call fallback cache-timeout VR
call fallback expect-factor VR

call fallback icmp-ping VR
call fallback icmp-ping (dial peer) VR
call fallback instantaneous-value-weight VR
call fallback jitter-probe dscp VR
call fallback jitter-probe num-packets VR
call fallback jitter-probe precedence VR
call fallback jitter-probe priority-queue VR
call fallback key-chain VR
call fallback map address-list VR
call fallback map subnet VR
call fallback monitor VR
call fallback probe-timeout VR
call fallback reject-cause-code VR
call fallback threshold delay loss VR
call fallback threshold icpif VR
call fallback through called-number (dial peer) VR
call fallback wait-timeout VR
call filter match-list VR
call forward all VR
call forward cancel VR
call guard-timer SEC
call history max VR
call language voice VR
call language voice load VR
call leg dump event-log VR
call leg event-log VR
call leg event-log dump ftp VR
call leg event-log errors-only VR
call leg event-log max-buffer-size VR
call leg history event-log save-exception-only VR
call preserve VR
call progress tone country DIA
call rscmon update-timer VR
call rsvp-sync VR
call rsvp-sync resv-timer VR
call service stop IPV6, VR

call spike VR
call start VR
call threshold global VR
call threshold interface VR
call threshold poll-interval VR
call treatment action VR
call treatment cause-code VR
call treatment isdn-reject VR
call treatment on VR
call-agent VR
call-block (dial peer) VR
call-denial VR
call-forward-to-voicemail VR
call-history-mib VR
call-home (global configuration) HA
call-home diagnostic-signature HA
call-home reporting HA
call-home request HA
call-home send HA
call-home send alert-group HA
call-home test HA
call-policy-set SBCD
call-policy-set (admin-domain) SBCD
call-policy-set default SBCD
call-progress-analysis VR
call-route VR
call-router h323-annexg VR
call-routing hunt-scheme VR
call-type DIA
call-type cas DIA
call-waiting VR
callback forced-wait DIA
callback nodsr-wait DIA
called-number (dial peer) VR
called-number (modem pool) DIA
callee codec SBCD

callee inband-dtmf-mode **SBCD**
callee media bypass **SBCD**
callee media-description disabled **SBCD**
callee media-type **SBCD**
callee port-range-tag **SBCD**
callee ptime **SBCD**
callee secure-media **SBCD**
callee tel-event payload type **SBCD**
callee-bandwidth-field **SBCD**
callee-codec-list **SBCD**
callee-hold-setting **SBCD**
callee-inbound-policy **SBCD**
callee-media-caps **SBCD**
callee-outbound-policy **SBCD**
callee-privacy edit-privacy-request **SBCD**
callee-privacy privacy-service **SBCD**
callee-sig-qos-profile **SBCD**
callee-video-qos-profile **SBCD**
callee-voice-qos-profile **SBCD**
caller codec **SBCD**
caller inband-dtmf-mode **SBCD**
caller media bypass **SBCD**
caller media-description disabled **SBCD**
caller media-type **SBCD**
caller port-range-tag **SBCD**
caller ptime **SBCD**
caller secure-media **SBCD**
caller tel-event payload type **SBCD**
caller-bandwidth-field **SBCD**
caller-codec-list **SBCD**
caller-hold-setting **SBCD**
caller-id (dial peer) **VR**
caller-id (dial peer) through ccm-manager switchover-to-backup **VR**
caller-id alerting dsp-pre-alloc **VR**
caller-id alerting line-reversal **VR**
caller-id alerting pre-ring **VR**

ca trust-point through clock mode

caller-id alerting ring VR
caller-id attenuation VR
caller-id block VR
caller-id enable VR
caller-id mode VR
caller-inbound-policy SBCD
caller-media-caps SBCD
caller-number (dial peer) VR
caller-outbound-policy SBCD
caller-privacy edit-privacy-request SBCD
caller-privacy privacy-service SBCD
caller-sig-qos-profile SBCD
caller-video-qos-profile SBCD
caller-voice-qos-profile SBCD
calling-info pstn-to-sip VR
calling-info sip-to-pstn VR
calling-number outbound VR
calling-station-id SLB
calling-station-id format ISG
callmonitor VR
calltracker call-record DIA
calltracker enable DIA
calltracker history max-size DIA
calltracker history retain-mins DIA
calltracker timestamp DIA
cancel-call-waiting VR
cap-list vfc VR
capability lls OSPF
capability transit OSPF
capability vrf-lite OSPF
capability vrf-lite (OSPFv3) OSPF
capacity update interval (dial peer) VR
capacity update interval (trunk group) VR
card IR
card type (T1-E1) IR, VR
card type (T3-E3) IR, VR

card type (T3/E3) [ATM](#)
carrier-delay [IR](#)
carrier-delay (tracking) [IAP](#)
carrier-delay (tracking) through forwarding-agent [IAP](#)
carrier-id (dial peer) [VR](#)
carrier-id (global) [VR](#)
carrier-id (trunk group) [VR](#)
carrier-id (voice source group) [VR](#)
cas-custom [DIA](#)
cas-group (E1 controller) [DIA](#)
cas-group (T1 controller) [DIA](#)
category [MWG](#)
category (NA-) [SBCD](#)
category (ips) [SEC](#)
cause [SBCD](#)
cause-code [VR](#)
ccharge [VR](#)
cbr [ATM](#)
ccfh [MWG](#)
ccm-manager application redundant-link port [VR](#)
ccm-manager config [VR](#)
ccm-manager download-tones [VR](#)
ccm-manager fallback-mgcp [VR](#)
ccm-manager fax protocol [VR](#)
ccm-manager mgcp [VR](#)
ccm-manager music-on-hold [VR](#)
ccm-manager music-on-hold bind [VR](#)
ccm-manager redundant-host [VR](#)
ccm-manager sccp [VR](#)
ccm-manager sccp local [VR](#)
ccm-manager shut-backhaul-interfaces [VR](#)
ccm-manager shut-interfaces-tftp-fails [VR](#)
ccm-manager switchback [VR](#)
ccm-manager switchover-to-backup [VR](#)
ccs connect (controller) [VR](#)
ccs connect (controller) through clear vsp statistics [VR](#)

ca trust-point through clock mode

ccs connect (interface) VR
ccs encaps frf11 VR
cd CF
cdma pdsn a10 ahdlc engine MWP
cdma pdsn a10 ahdlc trailer MWP
cdma pdsn a10 always-on keepalive MWP
cdma pdsn a10 gre sequencing MWP
cdma pdsn a10 init-ppp-after-airlink-start airlink-start-timeout MWP
cdma pdsn a10 max-lifetime MWP
cdma pdsn a11 dormant ppp-idle-timeout send-termreq MWP
cdma pdsn a11 dormant sdb-indication gre-flags MWP
cdma pdsn a11 dormant sdb-indication match-qos-group MWP
cdma pdsn a11 mandate presence airlink-setup MWP
cdma pdsn a11 receive de-reg send-termreq MWP
cdma pdsn a11 reject airlink-start active MWP
cdma pdsn a11 reject airlink-stop dormant MWP
cdma pdsn a11 session-update MWP
cdma pdsn accounting local-timezone MWP
cdma pdsn accounting prepaid MWP
cdma pdsn accounting prepaid threshold MWP
cdma pdsn accounting send cdma-ip-tech MWP
cdma pdsn accounting send ipv6-flows MWP
cdma pdsn accounting send start-stop MWP
cdma pdsn accounting time-of-day MWP
cdma pdsn age-idle-users MWP
cdma pdsn attribute send MWP
cdma pdsn attribute send a3 MWP
cdma pdsn attribute send meid-optional MWP
cdma pdsn cluster controller MWP
cdma pdsn cluster controller closed-rp MWP
cdma pdsn cluster controller member periodic-update MWP
cdma pdsn cluster controller session-high MWP
cdma pdsn cluster controller session-low MWP
cdma pdsn cluster member MWP
cdma pdsn cluster member periodic-update MWP
cdma pdsn compliance MWP

cdma pdsn compliance iosv4.1 session-reference **MWP**
cdma pdsn debug show-conditions **MWP**
cdma pdsn failure-history **MWP**
cdma pdsn ingress-address-filtering **MWP**
cdma pdsn ipv6 **IPV6, MWP**
cdma pdsn maximum pcf **MWP**
cdma pdsn maximum sessions **MWP**
cdma pdsn mobile-advertisement-burst **MWP**
cdma pdsn msid-authentication **MWP**
cdma pdsn pcf default closed-rp **MWP**
cdma pdsn radius disconnect **MWP**
cdma pdsn redundancy **MWP**
cdma pdsn redundancy accounting send vsa swact **MWP**
cdma pdsn redundancy accounting update-periodic **MWP**
cdma pdsn retransmit a11-update **MWP**
cdma pdsn secure cluster **MWP**
cdma pdsn secure pcf **MWP**
cdma pdsn selection interface **MWP**
cdma pdsn selection keepalive **MWP**
cdma pdsn selection load-balancing **MWP**
cdma pdsn selection session-table-size **MWP**
cdma pdsn send-agent-adv **MWP**
cdma pdsn timeout **MWP**
cdma pdsn timeout mobile-ip-registration **MWP**
cdma pdsn virtual-template **MWP**
cdp advertise-v2 **CDP**
cdp advertise-v2 through show cdp traffic **CDP**
cdp enable **CDP**
cdp holdtime **CDP**
cdp log mismatch duplex **CDP**
cdp run **CDP**
cdp source-interface **CDP**
cdp timer **CDP**
cdp tlv **CDP**
cdp-url **SEC**
cdr **SBCD**

cdr alarm (XML Billing) **SBCD**
cdr path **SBCD**
cdr suppression **MWG**
cdr suppression prepaid **MWG**
cdr-format **VR**
cef table consistency-check **ISW, IPV6**
cef table consistency-check through clear pxf **ISW**
cef table download **ISW**
cef table output-chain build **ISW**
cef table rate-monitor-period **ISW**
cell-packing **MP, WAN**
cellular lte profile **DIA**
cellular lte sms delete **DIA**
cellular lte sms send **DIA**
cellular lte sms view summary **DIA**
cem **IR**
cem-group **IR**
certificate **SEC**
certificate reload **IBM**
ces **ATM**
ces aal1 clock **ATM**
ces aal1 service **ATM**
ces circuit **ATM**
ces dsx1 clock source **ATM**
ces dsx1 framing **ATM**
ces dsx1 lbo **ATM**
ces dsx1 linecode **ATM**
ces dsx1 loopback **ATM**
ces dsx1 signalmode robbedbit **ATM**
ces partial-fill **ATM**
ces pvc **ATM**
ces-cdv **ATM**
ces-clock **VR**
cfm encapsulation **CE**
cfm mep domain **CE**
cgma-agent **VR**

chain-validation SEC
chain-validation (ca-trustpool) SEC
channel WL
channel-group IR, CBL, VR, DIA
channel-group (interface) IR, CE
channel-id VR
channel-id (cable configuration file) CBL
channel-protocol IBM
channel-protocol (interface) IR
channelized IR
charging profile MWG
chat-script DIA
cifs-url-list SEC
cipher WAN
cipher-list WAN
cipherkey SEC
ciphervalue SEC
cisco (ips-auto-update) SEC
cisp enable SEC
citrix enabled SEC
class MP, WAN
class (DHCP) IAD
class (EtherSwitch) QOS
class (MPLS) MP
class (controller) DIA
class (map-list) WAN
class (policy-map) QOS
class arp-peruser QOS
class type control ISG
class type inspect SEC, IPV6
class type tag QOS
class type traffic ISG
class type urlfilter SEC
class-bundle QOS
class-int ATM
class-map MP, QOS, MM

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class-map arp-peruser QOS
class-map type control ISG
class-map type inspect SEC, IPV6
class-map type multicast-flows IMC
class-map type traffic ISG
class-map type urlfilter SEC
class-map type waas WAN
class-range BBA
class-vc ATM
classname ISG
claw (backup) IBM
claw (primary) IBM
clear aaa cache filterserver acl SEC
clear aaa cache filterserver group SEC
clear aaa cache group SEC
clear aaa counters server sg MWG
clear aaa counters servers SEC
clear aaa local user fail-attempts SEC
clear aaa local user lockout SEC
clear access-list counters SEC, IPV6
clear access-template SEC
clear adjacency ISW
clear adjacency epoch ISW
clear aim IR
clear alps circuits IBM
clear alps counters IBM
clear appfw dns cache SEC
clear appletalk arp ATK
clear appletalk neighbor ATK
clear appletalk route ATK
clear appletalk traffic ATK
clear archive log config CF
clear arp interface IAD
clear arp-cache IAD
clear arp-cache counters ha IAD
clear ase signatures SEC

clear atm arp ATM
clear atm atm-vc ATM
clear atm signalling statistics ATM
clear atm vc ATM
clear authentication sessions SEC
clear autonomic AN
clear backhaul-session-manager group stats VR
clear bgp ipv6 IPV6
clear bgp ipv6 dampening IPV6
clear bgp ipv6 external IPV6
clear bgp ipv6 flap-statistics IPV6
clear bgp ipv6 peer-group IPV6
clear bgp l2vpn evpn BGP
clear bgp nsap BGP
clear bgp nsap dampening BGP
clear bgp nsap external BGP
clear bgp nsap flap-statistics BGP
clear bgp nsap peer-group BGP
clear bridge IBM
clear bridge multicast IBM
clear bridge-domain mac-table CE
clear cable admission control counters CBL
clear cable arp-filter CBL
clear cable bgsync counters CBL
clear cable dsg CBL
clear cable flap-list CBL
clear cable hop CBL
clear cable host CBL
clear cable ipc-stats CBL
clear cable load-balance CBL
clear cable logging CBL
clear cable modem attribute-masks CBL
clear cable modem cm-status CBL
clear cable modem counters CBL
clear cable modem delete CBL
clear cable modem flap-counters CBL

ca trust-point through clock mode

clear cable modem lock **CBL**
clear cable modem name **CBL**
clear cable modem rcs-counts **CBL**
clear cable modem reset **CBL**
clear cable modem rf-adapt **CBL**
clear cable modem service-type-id **CBL**
clear cable modem voice **CBL**
clear cable multicast ses-cache **CBL**
clear cable multicast statistics counter **CBL**
clear cable rf-status **CBL**
clear cable secondary-ip **CBL**
clear cable-diagnostics tdr **IR**
clear call admission statistics **BBA**
clear call application interface **VR**
clear call application stats **VR**
clear call fallback cache **VR**
clear call fallback stats **VR**
clear call threshold **VR**
clear call treatment stats **VR**
clear call voice **VR**
clear call-home diagnostic-signature statistics **HA**
clear call-router routes **VR**
clear callmon **VR**
clear catalyst6000 traffic-meter **CF, IR**
clear cdma pdsn cluster controller session records age **MWP**
clear cdma pdsn cluster controller statistics **MWP**
clear cdma pdsn cluster member statistics **MWP**
clear cdma pdsn redundancy statistics **MWP**
clear cdma pdsn selection **MWP**
clear cdma pdsn session **MWP**
clear cdma pdsn statistics **MWP**
clear cdp counters **CDP**
clear cdp table **CDP**
clear cef interface **ISW**
clear cef linecard **ISW**
clear cef load-balance statistics **ISW**

clear cef table **ISW, IPV6**
clear cem **IR**
clear class-map control **ISG**
clear clns cache **ISO**
clear clns es-neighbors **ISO**
clear clns is-neighbors **ISO**
clear clns neighbors **ISO**
clear clns route **ISO**
clear clns traffic **ISO**
clear cns config stats **CNS**
clear cns counters **CNS**
clear cns event stats **CNS**
clear cns image connections **CNS**
clear cns image status **CNS**
clear configuration lock **CF**
clear content-scan **SEC**
clear control-plane **QOS**
clear controller **IR**
clear controller call-counters **VR**
clear controller lex **IR**
clear controller t1 **VR**
clear controller vdsl **IR**
clear controller wanphy **IR**
clear cot summary **DIA**
clear counters **IR**
clear counters (async) **DIA**
clear counters line **DIA**
clear crypto call admission statistics **SEC**
clear crypto ctcp **SEC**
clear crypto datapath **SEC**
clear crypto engine accelerator counter **SEC**
clear crypto gdoi **SEC**
clear crypto gdoi ks cooperative role **SEC**
clear crypto ikev2 sa **SEC, IPV6**
clear crypto ikev2 stat **SEC**
clear crypto ikev2 stats **SEC**

clear crypto ipsec client ezvpn SEC
clear crypto isakmp SEC
clear crypto pki benchmarks SEC
clear crypto pki crls SEC
clear crypto sa SEC
clear crypto session SEC
clear csm-statistics modem VR
clear csm-statistics voice VR
clear data-store statistics MWG
clear decnet accounting DEC
clear decnet counters DEC
clear diagnostic event-log CF, IR
clear dialer DIA
clear dialer dnis DIA
clear dialer sessions DIA
clear dlsw circuit IBM
clear dlsw history IBM
clear dlsw local-circuit IBM
clear dlsw reachability IBM
clear dlsw statistics IBM
clear dlsw transparent IBM
clear dmvpn session SEC, IPV6
clear dmvpn statistics SEC
clear dot11 client WL
clear dot11 hold-list WL
clear dot11 statistics WL
clear dot1x SEC
clear drip counters IBM
clear dsip tracing IR, DIA
clear eap SEC
clear eigrp address-family neighbors EIGRP, IPV6
clear eigrp service-family SAF
clear entry TSV
clear eou SEC
clear ethernet cfm ais CE
clear ethernet cfm errors CE

clear ethernet cfm maintenance-points remote **CE**
clear ethernet cfm statistics **CE**
clear ethernet cfm traceroute-cache **CE**
clear ethernet event microwave data **CE**
clear ethernet event microwave statistics **CE**
clear ethernet lmi statistics **CE**
clear ethernet oam statistics **CE**
clear ethernet ring g8032 statistics **CE**
clear ethernet service instance **CE**
clear extended counters **IBM**
clear facility-alarm **IR, CBL**
clear flow exporter **FNF**
clear flow monitor **FNF**
clear fm netflow counters **NF**
clear fm performance-monitor counters **MM**
clear fm slb counters **SLB**
clear frame-relay-inarp **WAN, IPV6**
clear ggsn quota-server statistics **MWG**
clear gprs access-point statistics **MWG**
clear gprs charging cdr **MWG**
clear gprs charging cdr all no-transfer **MWG**
clear gprs gtp pdp-context **MWG**
clear gprs gtp statistics **MWG**
clear gprs iscsi statistics **MWG**
clear gprs redundancy statistics **MWG**
clear gprs service-aware statistics **MWG**
clear gprs slb statistics **MWG**
clear gprs statistics all **MWG**
clear gvrp statistics **LSW**
clear h323 gatekeeper call **VR**
clear h323 gatekeeper endpoint **VR**
clear h323 gatekeeper stats **VR**
clear h323 gateway **VR**
clear hccp counters **CBL**
clear hccp linecard **CBL**
clear host **IAD**

ca trust-point through clock mode

clear http client statistics **VR**
clear hub **IR**
clear hub counters **IR**
clear interface **IR**
clear interface cable-modem **VR**
clear interface cem **IR**
clear interface fastethernet **IR**
clear interface gigabitethernet **IR**
clear interface serial **IR**
clear interface virtual-access **DIA**
clear interface vlan **IR**
clear ip access-list counters **IPV6, SEC**
clear ip access-list counters through crl-cache none **SEC**
clear ip access-template **SEC**
clear ip accounting **IAP**
clear ip admission cache **SEC**
clear ip arp inspection log **IAD**
clear ip arp inspection statistics **IAD**
clear ip arp poll statistics **IAD**
clear ip audit configuration **SEC**
clear ip audit statistics **SEC**
clear ip auth-proxy cache **SEC**
clear ip auth-proxy watch-list **SEC**
clear ip bgp **BGP**
clear ip bgp dampening **BGP**
clear ip bgp external **BGP**
clear ip bgp flap-statistics **BGP**
clear ip bgp in prefix-filter **BGP**
clear ip bgp ipv4 **BGP**
clear ip bgp ipv6 **BGP**
clear ip bgp l2vpn **BGP**
clear ip bgp mvpn **BGP**
clear ip bgp peer-group **BGP**
clear ip bgp rpkı server **BGP**
clear ip bgp table-map **BGP**
clear ip bgp topology **MTR**

clear ip bgp update-group **BGP**
clear ip bgp vpnv4 **BGP**
clear ip bgp vpnv4 unicast dampening **BGP**
clear ip bgp vpnv6 **BGP**
clear ip bgp vpnv6 unicast dampening **BGP**
clear ip cache **ISW**
clear ip cef epoch **ISW**
clear ip cef epoch full **ISW**
clear ip cef event-log **ISW**
clear ip cef inconsistency **ISW**
clear ip cef prefix-statistics **ISW**
clear ip cgmp **IMC**
clear ip dhcp binding **IAD**
clear ip dhcp conflict **IAD**
clear ip dhcp limit lease **IAD**
clear ip dhcp server statistics **IAD**
clear ip dhcp snooping binding **IAD**
clear ip dhcp snooping database statistics **IAD**
clear ip dhcp snooping statistics **IAD**
clear ip dhcp subnet **IAD**
clear ip dvmrp route **IMC**
clear ip eigrp neighbors **EIGRP**
clear ip eigrp topology **MTR**
clear ip eigrp vrf neighbors **EIGRP**
clear ip flow stats **NF**
clear ip http client cache **CF**
clear ip http client cookie **HTTPS, BBA**
clear ip http client cookie through show ip http server secure status **HTTPS**
clear ip icmp rate-limit **IAP**
clear ip igmp group **IMC**
clear ip igmp snooping filter statistics **IMC**
clear ip igmp snooping statistics **IMC**
clear ip inspect ha **SEC**
clear ip inspect session **SEC**
clear ip interface **IAD, MTR**
clear ip ips configuration **SEC**

clear ip ips statistics SEC
clear ip iscsi statistics MWG
clear ip lisp map-cache LISP
clear ip lisp route-import LISP
clear ip lisp statistics LISP
clear ip mds ISW
clear ip mds forwarding ISW
clear ip mds linecard ISW
clear ip mfib counters IMC
clear ip mobile binding IMO, MWH
clear ip mobile host-counters IMO, MWH
clear ip mobile router agent IMO
clear ip mobile router registration IMO
clear ip mobile router traffic IMO
clear ip mobile secure IMO, MWH
clear ip mobile traffic IMO, MWH
clear ip mobile visitor IMO, MWP
clear ip mrm status-report IMC
clear ip mroute IMC
clear ip msdp peer IMC
clear ip msdp sa-cache IMC
clear ip msdp statistics IMC
clear ip multicast limit IMC
clear ip multicast redundancy statistics IMC
clear ip nat translation IAD
clear ip nat translation redundancy IAD
clear ip nbar QOS
clear ip nbar protocol-discovery QOS
clear ip nhrp IAD
clear ip ospf OSPF
clear ip ospf force-spf OSPF
clear ip ospf traffic OSPF
clear ip pgm host IMC
clear ip pgm router IMC
clear ip pim auto-rp IMC
clear ip pim interface count IMC

clear ip pim rp-mapping **IMC**
clear ip pim snooping statistics **IMC**
clear ip pim snooping vlan **IMC**
clear ip prefix-list **BGP**
clear ip route **IAD**
clear ip route dhcp **IAD**
clear ip route dhcp through ip arp entry learn **IAD**
clear ip route download **DIA**
clear ip route multicast **MTR**
clear ip route topology **MTR**
clear ip route vrf **MP**
clear ip rsvp authentication **QOS**
clear ip rsvp counters **QOS**
clear ip rsvp hello bfd **MP**
clear ip rsvp hello instance counters **MP, QOS**
clear ip rsvp hello instance statistics **MP, QOS**
clear ip rsvp hello statistics **MP, QOS**
clear ip rsvp high-availability counters **QOS, HA**
clear ip rsvp msg-pacing **MP, QOS**
clear ip rsvp reservation **QOS**
clear ip rsvp sender **QOS**
clear ip rsvp signalling fast-local-repair statistics **QOS**
clear ip rsvp signalling rate-limit **QOS**
clear ip rsvp signalling refresh reduction **QOS**
clear ip rtp header-compression **IMC**
clear ip sap **IMC**
clear ip sctp statistics **IAP**
clear ip sdee **SEC**
clear ip sdr **IMC**
clear ip slb connections **SLB**
clear ip slb counters **SLB**
clear ip slb sessions **SLB**
clear ip slb sticky asn msid **SLB**
clear ip slb sticky gtp imsi **SLB**
clear ip slb sticky radius **SLB**
clear ip snat sessions **IAD**

ca trust-point through clock mode

clear ip snat translation distributed IAD
clear ip snat translation peer IAD
clear ip subscriber ISG
clear ip tcp header-compression IAP
clear ip traffic IAP, ISW
clear ip traffic (MTR) MTR
clear ip translation peer IAD
clear ip trigger-authentication SEC
clear ip urlfilter cache SEC
clear ip wccp IAP
clear ipc statistics IR
clear ipv6 access-list IPV6, SEC
clear ipv6 dhcp IAD, IPV6
clear ipv6 dhcp binding IAD, IPV6
clear ipv6 dhcp client IAD, IPV6
clear ipv6 dhcp conflict IAD, IPV6
clear ipv6 dhcp relay binding IAD, IPV6
clear ipv6 dhcp route IAD
clear ipv6 dhcp-ldra statistics IAD
clear ipv6 eigrp IPV6, EIGRP
clear ipv6 flow stats IPV6
clear ipv6 inspect IPV6, SEC
clear ipv6 lisp map-cache LISP
clear ipv6 lisp route-import LISP
clear ipv6 lisp statistics LISP
clear ipv6 mfib counters IPV6
clear ipv6 mld counters IPV6
clear ipv6 mld traffic IPV6
clear ipv6 mobile binding IPV6
clear ipv6 mobile home-agents IPV6
clear ipv6 mobile pmipv6 lma IMO
clear ipv6 mobile pmipv6 mag IMO
clear ipv6 mobile traffic IPV6
clear ipv6 mtu IPV6
clear ipv6 multicast aaa authorization IPV6
clear ipv6 nat translation IAD, IPV6

clear ipv6 nd destination **IPV6**
clear ipv6 nd on-link prefix **IPV6**
clear ipv6 nd router **IPV6**
clear ipv6 neighbors **IPV6**
clear ipv6 nhrp **IPV6**
clear ipv6 ospf **IPV6**
clear ipv6 ospf counters **IPV6**
clear ipv6 ospf events **IPV6**
clear ipv6 ospf traffic **OSPF**
clear ipv6 pim counters **IPV6**
clear ipv6 pim limit **IPV6**
clear ipv6 pim reset **IPV6**
clear ipv6 pim topology **IPV6**
clear ipv6 pim traffic **IPV6**
clear ipv6 prefix-list **IPV6**
clear ipv6 rip **IPV6**
clear ipv6 route **IPV6**
clear ipv6 snooping counters **IPV6, SEC**
clear ipv6 spd **IPV6**
clear ipv6 traffic **IPV6**
clear ipv6 wccp **IPV6**
clear ipx accounting **IPX**
clear ipx cache **IPX**
clear ipx nhrp **IPX**
clear ipx nlsp neighbors **IPX**
clear ipx route **IPX**
clear ipx sap **IPX**
clear ipx traffic **IPX**
clear isis lsp-full **IRS**
clear isis rib redistribution **IRS**
clear issu state **HA**
clear kerberos creds **SEC**
clear l2tp **VPD**
clear l2tp counters session **VPD**
clear l2tp counters tunnel **VPD**
clear l2tun **WAN**

clear l2tun counters WAN
clear l2tun counters tunnel l2tp WAN
clear l2vpn atom fsm MP
clear l2vpn service MP
clear lacp counters IR
clear lane le-arp ATM
clear lane server ATM
clear ldap server SEC
clear license agent CSA
clear license agent through debug license CSA
clear line DIA
clear line async-queue DIA
clear lisp ddt LISP
clear lisp site LISP
clear lldp CE
clear logging CF
clear logging ip access-list cache IAD, SEC
clear logging system CF
clear logging xml CF
clear mac-address-table LSW
clear mcsa statistics IMO
clear mdns cache IAD
clear mdns statistics IAD
clear mediatrace incomplete-sessions MM
clear memory low-water-mark CF
clear mgcp src-stats VR
clear mgcp statistics VR
clear mls acl counters IAP
clear mls cef ip accounting per-prefix ISW
clear mls cef ipv6 accounting per-prefix IPV6
clear mls ip multicast bidir-rpcache IMC
clear mls ip multicast group IMC
clear mls ip multicast statistics IMC
clear mls nde flow counters NF
clear mls netflow NF
clear mls qos QOS

clear mls statistics **CF**
clear modem **DIA**
clear modem counters **DIA**
clear modem log **DIA**
clear modempool-counters **DIA**
clear mpf interface **BBA**
clear mpf punt **BBA**
clear mpls counters **MP**
clear mpls ip iprm counters **MP**
clear mpls ldp checkpoint **MP**
clear mpls ldp neighbor **MP**
clear mpls ldp nsr statistics **MP**
clear mpls traffic-eng auto-bw timers **MP**
clear mpls traffic-eng auto-tunnel backup tunnel **MP**
clear mpls traffic-eng auto-tunnel mesh tunnel **MP**
clear mpls traffic-eng auto-tunnel primary tunnel **MP**
clear mpls traffic-eng tunnel counters **MP**
clear mpoa client cache **ATM**
clear mpoa server cache **ATM**
clear mrcc client statistics **VR**
clear mvr counters **LSW**
clear mvrp statistics **LSW**
clear nat64 statistics **IAD**
clear nat64 translations **IAD**
clear nat64 ha statistics **IAD**
clear nat64 statistics **IAD**
clear ncia circuit **IBM**
clear ncia client **IBM**
clear ncia client registered **IBM**
clear netbios-cache **IBM**
clear netconf **CNS**
clear oer api **OER**
clear oer border **OER**
clear oer master **OER**
clear oer master appl tcp **OER**
clear oer master border **OER**

clear oer master prefix **OER**
clear oer master traffic-class **OER**
clear oer master traffic-class application nbar **OER**
clear ospfv3 counters **IPV6**
clear ospfv3 force-spf **IPV6**
clear ospfv3 process **IPV6**
clear ospfv3 redistribution **IPV6**
clear ospfv3 traffic **IPV6**
clear otv arp-nd **WAN**
clear otv isis **WAN**
clear otv isis lspfull **WAN**
clear otv isis neighbors **WAN**
clear otv isis rib **WAN**
clear packetcable gate counter commit **CBL**
clear packetcable rks **CBL**
clear pagp **LSW**
clear parameter-map type protocol-info **SEC**
clear parser cache **CF**
clear parser statistics **CF**
clear pfr border **PFR**
clear pfr master **PFR**
clear pfr master border **PFR**
clear pfr master export statistics **PFR**
clear pfr master prefix **PFR**
clear pfr master traffic-class **PFR**
clear pfr master traffic-class application nbar **PFR**
clear platform hardware capacity rewrite-engine counter **BSM**
clear platform hardware qfp active feature sbc sfx **SBCD**
clear platform netint **CF, IR**
clear platform software vnic-if-nvtble **IR**
clear platform software wccp **IAP, SBCD**
clear policy-firewall **SEC**
clear policy-firewall stats global **SEC**
clear policy-firewall stats vrf **SEC**
clear policy-firewall stats vrf global **SEC**
clear policy-firewall stats zone **SEC**

clear port **DIA**
clear port log **DIA**
clear port-security **SEC**
clear ppp mux **MWR**
clear ppp subscriber statistics **BBA**
clear pppatm interface atm **ATM, BBA**
clear pppatm statistics **BBA**
clear pppoe **BBA**
clear pppoe derived **BBA**
clear pppoe relay context **BBA**
clear pppoe statistics **BBA**
clear processes interrupt mask **CF**
clear pw-udp vc **MP**
clear pxf **ISW, CBL**
clear pxf statistics drl cable-wan-ip **CBL**
clear pxf statistics drl wan-non-ip **CBL**
clear radius **SEC**
clear radius local-server **SEC, WL**
clear radius-proxy client **ISG**
clear radius-proxy session **ISG**
clear rbscp **IR**
clear record-storage-module stats **MWG**
clear redundancy **CBL**
clear resource-pool **DIA**
clear rif-cache **IBM**
clear rlm group **VR**
clear router-guard ip multicast statistics **IMC**
clear rpms-proc counters **VR**
clear rudpv0 statistics **VR**
clear rudpv1 statistics **VR**
clear sampler **FNF**
clear sbc **SBCD**
clear sbc dbe media-stats **SBCD**
clear sbc dbe media-stats (session border controller) **SBCD**
clear sbc h248 bac **SBCD**
clear sbc sbe adjacency statistics **SBCD**

clear sbc sbe blacklist **SBCD**
clear sbc sbe cac-policy-set-stats **SBCD**
clear sbc sbe cac-rejection-stats **SBCD**
clear sbc sbe call **SBCD**
clear sbc sbe call-policy-set-stats **SBCD**
clear sbc sbe call-rate-stats **SBCD**
clear sbc sbe call-rejection-stats **SBCD**
clear sbc sbe call-stats **SBCD**
clear sbc sbe policy-failure-stats **SBCD**
clear sbc sbe policy-rejection-stats **SBCD**
clear sbc sbe radius-client **SBCD**
clear sbc sbe radius-client-stats **SBCD**
clear sbc sbe script-set-stats **SBCD**
clear sbc sbe sip statistics **SBCD**
clear sbc sbe sip subscriber aor **SBCD**
clear sbc sbe statistics **SBCD**
clear sbc sbe transcoding-stats **SBCD**
clear sccp server statistics **VR**
clear scp accounting **CF**
clear sctp statistics **IAP**
clear sdspfarm counters **VR**
clear service-group traffic-stats **QOS**
clear service-module serial **IR**
clear service-routing capabilities-manager **SAF**
clear service-routing xmcp client **SAF**
clear sgcp statistics **VR**
clear sip-ua statistics **VR**
clear sip-ua tcp connection **VR**
clear sip-ua tcp tls connection **VR**
clear sip-ua udp connection **VR**
clear smrp mcache **ATK**
clear snapshot quiet-time **DIA**
clear sockets **IAP**
clear source-bridge **IBM**
clear spanning-tree detected-protocol **LSW**
clear spe **DIA**

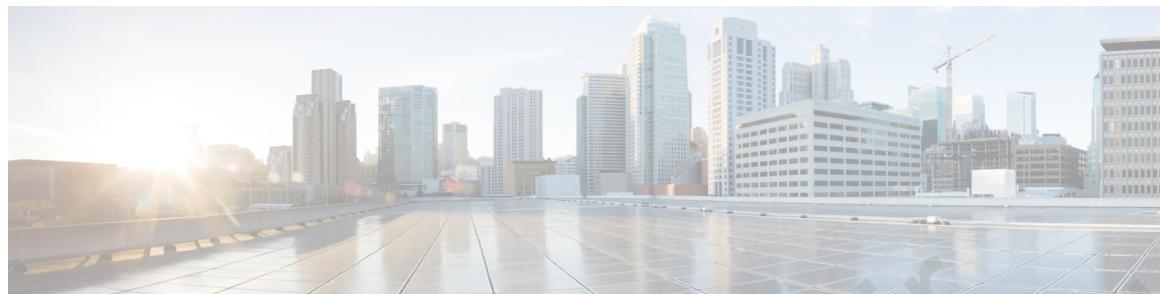
clear spe counters **DIA**
clear spe log **DIA**
clear ss7 sm-stats **VR**
clear sse **IBM**
clear ssg connection **SSG**
clear ssg host **SSG**
clear ssg next-hop **SSG**
clear ssg open-garden **SSG**
clear ssg pass-through-filter **SSG**
clear ssg pending-command **SSG**
clear ssg prepaid default-quota **SSG**
clear ssg radius-proxy client-address **SSG**
clear ssg radius-proxy nas-address **SSG**
clear ssg service **SSG**
clear ssg user transparent all **SSG**
clear ssg user transparent passthrough **SSG**
clear ssg user transparent suspect **SSG**
clear ssg user transparent unidentified **SSG**
clear statistics dial-peer voice **VR**
clear stcapp statistics **VR**
clear subscriber lite-session **ISG**
clear subscriber policy dpm statistics **ISG**
clear subscriber policy peer **ISG**
clear subscriber policy peer session **ISG**
clear subscriber session **ISG**
clear subscriber trace history **ISG**
clear subscription **VR**
clear tarp counters **ISO**
clear tarp ldb-table **ISO**
clear tarp tid-table **ISO**
clear tcp **CF**
clear tcp statistics **IAP**
clear tgrep counters **VR**
clear tgrep neighbor **VR**
clear time-range ipc **IAP**
clear top counters interface report **IR**

clear vlan LSW
clear vlan counters CF, LSW
clear vlan mapping LSW
clear vlan statistics IBM, LSW
clear voice accounting method VR
clear voice dsp VR
clear voice statistics VR
clear voip fpi rtt VR
clear voip fpi stats VR
clear vpdn counters VPD
clear vpdn dead-cache VPD
clear vpdn history failure VPD
clear vpdn redirect VPD
clear vpdn tunnel VPD
clear vpdn tunnel pppoe WAN
clear vsp statistics VR
clear vtemplate redundancy counters VPD
clear vtp counters LSW
clear waas WAN
clear wccp IAP
clear webvpn nbns SEC
clear webvpn session SEC
clear webvpn stats SEC
clear wsma agent WSMA
clear wsma profile WSMA
clear x25 WAN
clear xconnect MP
clear xot WAN
clear xsm SEC
clear zone-pair SEC
cli IOS_TCL
cli (cns) CNS
clid SEC, VR
clid (dial peer) VR
clid (voice service voip) VR
clid group DIA

clid strip **VR**
clid strip reason **VR**
clid through credentials (sip-ua) **VR**
client **SEC**, **ISG**
client recovery-check interval **SEC**
client (ISG RADIUS proxy) **ISG**
client (XMCP) **SAF**
client (virtual server) **SLB**
client authentication list **SEC**
client configuration address **SEC**
client configuration group **SEC**
client connect **SEC**
client inside **SEC**
client ip **IBM**
client ip lu **IBM**
client ip pool **IBM**
client lu maximum **IBM**
client pki authorization list **SEC**
client pool **IBM**
client rekey encryption **SEC**
client rekey hash **SEC**
client transform-sets **SEC**
client unauthenticated (XMCP) **SAF**
client-address **SSG**
client-atm-address name **ATM**
client-identifier **IAD**
client-name **IAD**
clns access-group **ISO**
clns adjacency-filter **ISO**
clns cache-invalidate-delay **ISO**
clns checksum **ISO**
clns cluster-alias **ISO**
clns configuration-time **ISO**
clns congestion-threshold **ISO**
clns dec-compatible **ISO**
clns enable **ISO**

ca trust-point through clock mode

clns erpdu-interval ISO
clns es-neighbor ISO
clns esct-time ISO
clns filter-expr ISO
clns filter-set ISO
clns holding-time ISO
clns host ISO
clns is-neighbor ISO
clns mtu ISO
clns net (global) ISO
clns packet-lifetime ISO
clns rdpdu-interval ISO
clns route (create) ISO
clns route (enter) ISO
clns route default ISO
clns route default discard ISO
clns route discard ISO
clns route-cache ISO
clns router isis ISO
clns router iso-igrp ISO
clns routing ISO
clns security pass-through ISO
clns send-erpdu ISO
clns send-rdpdu ISO
clns split-horizon ISO
clns template-alias ISO
clns want-erpdu ISO
clock CF, IR
clock calendar-valid BSM
clock destination IR, CE
clock initialize nvram CF
clock mode IR



clock rate through cwmp wan default

- Finding IOS Command Information, page 83
- clock rate through cwmp wan default, page 86

Finding IOS Command Information

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IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
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clock rate through cwmp wan default

C

clock rate [IR](#)
clock rate (interface ATM) [IR](#)
clock rate (interface serial) [IR](#)
clock rate network-clock [IR](#)
clock rate through cut-through [IR](#)
clock read-calendar [BSM](#)
clock save interval [BSM](#)
clock set [BSM](#)
clock source [IR](#)
clock source (AS5200) [IR](#)
clock source (CEM) [IR](#)
clock source (CT3IP) [IR](#)
clock source (J1 controller) [IR](#)
clock source (MC3810) [IR](#)
clock source (PTP) [CE](#)
clock source (SONET controller) [IR](#)
clock source (T1 E1 controller) [IR](#)
clock source (T1 E1 interface) [IR](#)
clock source (T3 E3 controller) [IR](#)
clock source (controller) [IR](#)
clock source (interface) [IR](#)
clock source line [DIA](#)
clock source(10GE) [IR](#)
clock summer-time [BSM](#)
clock switchover [IR](#)
clock timezone [BSM](#)
clock update-calendar [BSM](#)
clock-port [IR, CE](#)
clock-rate (RTP parameters) [MM](#)
clock-rate (codec-profile) [VR](#)
clock-rate (policy RTP) [MM](#)
clock-select [VR](#)

clock-tolerance ntp oneway [SLA](#)
clp-bit [WAN](#)
cm-current-enhance [VR](#)
cmns enable [WAN](#)
cmpc [IBM](#)
cmt connect [IR](#)
cmt disconnect [IR](#)
cns aaa authentication [CNS](#)
cns config cancel [CNS](#)
cns config connect-intf [CNS](#)
cns config initial [CNS](#)
cns config notify [CNS](#)
cns config partial [CNS](#)
cns config retrieve [CNS](#)
cns connect [CNS](#)
cns dhcp [CNS](#)
cns event [CNS](#)
cns exec [CNS](#)
cns id [CNS](#)
cns image [CNS](#)
cns image password [CNS](#)
cns image retrieve [CNS](#)
cns image retry [CNS](#)
cns inventory [CNS](#)
cns message format notification [CNS](#)
cns mib-access encapsulation [CNS](#)
cns notifications encapsulation [CNS](#)
cns password [CNS](#)
cns template connect [CNS](#)
cns trusted-server [CNS](#)
codec [SBCD](#)
codec (DSP farm profile) [IPV6, VR](#)
codec (VO profile) [SLA](#)
codec (dial peer) [VR](#)
codec (dsp) [VR](#)
codec (tplt) [SLA](#)

clock rate through cwmp wan default

codec (voice-card) VR
codec aal2-profile VR
codec custom SBCD
codec gsmamr-nb VR
codec ilbc VR
codec list SBCD
codec packetization-period SBCD
codec preference VR
codec profile VR
codec system SBCD
codec variant SBCD
codec-list description SBCD
codec-preference-list SBCD
codec-restrict-to-list SBCD
codecs SBCD
collect application description MM
collect application http FNF, MM
collect application media MM
collect application name FNF, MM
collect application nntp FNF, MM
collect application pop3 FNF, MM
collect application rtsp FNF, MM
collect application sip FNF, MM
collect application smtp FNF, MM
collect application vendor MM
collect application version MM
collect art WAN
collect connection FNF, MM
collect connection client MM
collect connection delay application MM
collect connection delay network MM
collect connection delay response MM
collect connection performance application-delay MM
collect connection performance initiator MM
collect connection performance network-delay MM
collect connection performance new-transaction MM

collect connection performance responder **MM**
collect connection performance total-delay **MM**
collect connection performance total-transaction-time **MM**
collect connection server **MM**
collect connection transaction **MM**
collect counter **FNF, MM**
collect datalink destination-vlan-id **MM**
collect datalink dot1q vlan **FNF**
collect datalink mac **FNF, MM**
collect datalink source-vlan-id **MM**
collect datalink vlan **MM**
collect flow **FNF, MM**
collect identifier **ISG**
collect interface **FNF, MM**
collect ipv4 **FNF, MM**
collect ipv4 destination **FNF, MM**
collect ipv4 fragmentation **FNF, MM**
collect ipv4 initiator **MM**
collect ipv4 responder **MM**
collect ipv4 section **FNF, MM**
collect ipv4 source **FNF, MM**
collect ipv4 total-length **FNF, MM**
collect ipv4 ttl **FNF, MM**
collect ipv6 **FNF, MM**
collect ipv6 destination **FNF, MM**
collect ipv6 extension map **FNF, MM**
collect ipv6 fragmentation **FNF, MM**
collect ipv6 hop-limit **FNF, MM**
collect ipv6 initiator **MM**
collect ipv6 length **FNF, MM**
collect ipv6 responder **MM**
collect ipv6 section **FNF, MM**
collect ipv6 source **FNF, MM**
collect metadata **MM**
collect monitor event **MM**
collect mpls label **FNF**

clock rate through cwmp wan default

collect policy performance-monitor **MM**
collect policy qos classification hierarchy **FNF**
collect policy qos queue index **FNF**
collect routing **FNF, MM**
collect routing is-multicast **FNF, MM**
collect routing multicast replication-factor **FNF, MM**
collect services pfr **FNF**
collect services waas **MM**
collect timestamp absolute **FNF, MM**
collect timestamp interval **MM**
collect timestamp sys-upptime **FNF, MM**
collect top counters interface **LSW**
collect transport **FNF, MM**
collect transport event packet-loss counter **MM**
collect transport icmp ipv4 **FNF, MM**
collect transport icmp ipv6 **FNF, MM**
collect transport initiator port **MM**
collect transport packets **MM**
collect transport responder port **MM**
collect transport rtp jitter **MM**
collect transport tcp **FNF, MM**
collect transport udp **FNF, MM**
collect waas **WAN**
collocated single-tunnel **IMO**
comfort-noise **VR**
commands (view) **SEC**
compand-type **VR**
comparison **SNMP**
compatible rfc1583 **IPV6, OSPF**
compatible rfc1587 **OSPF**
compress **IR**
compress mppc **IR**
compress stac caim **IR**
compression header ip **QOS**
concurrent-requests **SBCD**
condition **VR**

condition (editor) **SBCD**
condition (session border controller) **SBCD**
conditional object **SNMP**
conference **VR**
conference-join custom-cptone **VR**
conference-leave custom-cptone **VR**
config-cli **CNS**
config-exchange **SEC**
config-mode set **SEC**
config-register **CF**
configuration mode exclusive **CF**
configuration url **SEC**
configuration version **SEC**
configure check syntax **CF**
configure confirm **CF**
configure issu set rollback timer **HA**
configure memory **CF**
configure network **CF**
configure overwrite-network **CF**
configure replace **CF**
configure revert **CF**
configure terminal **CF**
confreg **CF, CBL**
congestion sip reject-code **SBCD**
congestion-cleared **SBCD**
congestion-threshold **SBCD**
connect **SEC, TSV**
connect (FRF.5) **WAN**
connect (FRF.8) **WAN**
connect (Frame Relay) **MP, WAN**
connect (L2VPN local switching) **MP, WAN**
connect (channel bank) **VR**
connect (drop-and-insert) **VR**
connect (module) **IR**
connect atm **VR**
connect interval **VR**

connect retries **VR**
connection **VR**
connection request password **BBA**
connection request username **BBA**
connection wait **TSV**
connection-timeout **VR**
cont **CBL**
contact-email-addr **HA**
content dcca profile **MWG**
content postpaid time **MWG**
content postpaid validity **MWG**
content postpaid volume **MWG**
content rulebase **MWG**
content-length **SEC**
content-scan out **SEC**
content-scan whitelisting **SEC**
content-type-verification **SEC**
context **MP, SNMP, IPV6, CBL**
context (bulk statistics) **SNMP**
continue **BGP**
continue (ROM monitor) **CF**
continuity-check **CE**
contract-id **HA**
control **IAD, SLA, SEC**
control (IP SLA) **SLA**
control address aaa **SBCD**
control address h248 index **SBCD**
control address h248 port **SBCD**
control address h248 transport **SBCD**
control-address h248 ipv4 **SBCD**
control-address ipv4 **SBCD**
control-dscp marker-dscp pdr-coefficient **SBCD**
control-lead sampling-rate **IR**
control-lead state **IR**
control-packets vlan cos **BBA**
control-plane **QOS**

control-word **MP**
control-word (MPLS) **MP**
controller **IR**
controller dsl **IR**
controller dwdm **IR**
controller e3 **ATM, IR**
controller h248 **SBCD**
controller integrated-cable **CBL**
controller modular-cable **CBL**
controller shdsl **BBA**
controller sonet **IR**
controller sonet-acr **IR**
controller t3 **ATM, IR**
cops ip dscp **CBL**
cops listeners access-list **CBL**
cops tcp window-size **CBL**
copy **CF**
copy (consent-parameter-map) **SEC**
copy /noverify **CF**
copy erase flash **CF**
copy flash lex **IR**
copy flash vfc **VR**
copy http **CF**
copy http:// **CF**
copy https **CF**
copy https:// **CF**
copy idconf **SEC**
copy interface **QOS**
copy ips-sdf **SEC**
copy logging system **CF**
copy logs **SBCD**
copy modem **DIA**
copy noverify **CF**
copy profile **HA**
copy tftp lex **IR**
copy tftp vfc **VR**

clock rate through cwmp wan default

copy xmodem CF
copy xmodem: CF
copy ymodem CF
copy ymodem: CF
core-adj SBCD
corlist incoming VR, DIA
corlist outgoing VR, DIA
correlate SNMP
cos SLA
cos (CFM) CE
cost SBCD
cost-minimization OER
cost-minimization (PfR) PFR
count OER
count (PfR) PFR
cpa VR
cpd CBL
cpd cr-id CBL
cpe max CBL
cpp authentication DIA
cpp callback accept DIA
cptone VR
cptone call-waiting repetition interval VR
cpu interrupt ERM
cpu process ERM
cpu total ERM
cpu-threshold WAN
cpu_card_type CBL
crashdump-timeout HA
crc IR
crc bits 5 IR
crc-threshold IR
crc4 IR
create on-demand ATM
credential load VR
credentials (HTTP probe) SLB

credentials (SIP UA) [VR](#)
critical rising [ERM](#)
critical-alert-size [SBCD](#)
crl [SEC](#)
crl (cs-server) [SEC](#)
crl best-effort [SEC](#)
crl optional [SEC](#)
crl query [SEC](#)
crl-cache delete-after [SEC](#)
crl-cache none [SEC](#)
crypto aaa attribute list [SEC](#)
crypto aaa attribute list through crypto ipsec transform-set [SEC](#)
crypto ca authenticate [SEC](#)
crypto ca cert validate [SEC](#)
crypto ca certificate chain [SEC](#)
crypto ca certificate map [SEC](#)
crypto ca certificate query (ca-trustpoint) [SEC](#)
crypto ca certificate query (global) [SEC](#)
crypto ca crl request [SEC](#)
crypto ca enroll [SEC](#)
crypto ca export pem [SEC](#)
crypto ca export pkcs12 [SEC](#)
crypto ca identity [SEC](#)
crypto ca import [SEC](#)
crypto ca import pem [SEC](#)
crypto ca import pkcs12 [SEC](#)
crypto ca profile enrollment [SEC](#)
crypto ca trusted-root [SEC](#)
crypto ca trustpoint [SEC](#)
crypto call admission limit [SEC](#)
crypto connect vlan [SEC](#)
crypto ctcp [SEC](#)
crypto dynamic-map [SEC](#)
crypto engine accelerator [SEC](#)
crypto engine aim [SEC](#)
crypto engine em [SEC](#)

crypto engine mode vrf SEC
crypto engine nm SEC
crypto engine onboard SEC
crypto engine slot SEC
crypto engine slot (interface) SEC
crypto gdoi gm SEC
crypto gdoi group SEC
crypto gdoi ks SEC
crypto identity SEC
crypto ikev2 authorization policy SEC
crypto ikev2 certificate-cache SEC
crypto ikev2 cluster SEC
crypto ikev2 cookie-challenge SEC
crypto ikev2 cts SEC
crypto ikev2 diagnose SEC
crypto ikev2 dpd SEC
crypto ikev2 fragmentation SEC
crypto ikev2 http-url SEC
crypto ikev2 keyring SEC
crypto ikev2 limit SEC
crypto ikev2 name mangler SEC
crypto ikev2 nat SEC
crypto ikev2 policy SEC
crypto ikev2 profile SEC
crypto ikev2 proposal SEC
crypto ikev2 redirect SEC
crypto ikev2 window SEC
crypto ipsec client ezvpn (global) SEC
crypto ipsec client ezvpn (interface) SEC
crypto ipsec client ezvpn connect SEC
crypto ipsec client ezvpn xauth SEC
crypto ipsec default transform-set SEC
crypto ipsec df-bit (global) SEC
crypto ipsec df-bit (interface) SEC
crypto ipsec fragmentation (global) SEC
crypto ipsec fragmentation (interface) SEC

crypto ipsec ipv4-deny SEC
crypto ipsec nat-transparency SEC
crypto ipsec optional SEC
crypto ipsec optional retry SEC
crypto ipsec profile SEC, IPV6
crypto ipsec security-association dummy SEC
crypto ipsec security-association idle-time SEC
crypto ipsec security-association lifetime SEC
crypto ipsec security-association replay disable SEC
crypto ipsec security-association replay window-size SEC
crypto ipsec server send-update SEC
crypto ipsec transform-set SEC
crypto ipsec transform-set default SEC
crypto isakmp aggressive-mode disable SEC
crypto isakmp aggressive-mode disable through crypto mib topn SEC
crypto isakmp client configuration address-pool local SEC
crypto isakmp client configuration browser-proxy SEC
crypto isakmp client configuration group SEC
crypto isakmp client firewall SEC
crypto isakmp default policy SEC
crypto isakmp enable SEC
crypto isakmp fragmentation SEC
crypto isakmp identity SEC, IPV6
crypto isakmp invalid-spi-recovery SEC
crypto isakmp keepalive SEC
crypto isakmp key SEC, IPV6
crypto isakmp nat keepalive SEC
crypto isakmp nat keepalive SEC
crypto isakmp peer SEC, IPV6
crypto isakmp policy SEC, IPV6
crypto isakmp profile SEC, IPV6
crypto key decrypt rsa SEC
crypto key encrypt rsa SEC
crypto key export ec SEC
crypto key export rsa pem SEC
crypto key generate ec keysizes SEC

clock rate through cwmp wan default

crypto key generate rsa SEC, IPV6
crypto key import ec SEC
crypto key import rsa pem SEC
crypto key lock rsa SEC
crypto key move rsa SEC
crypto key pubkey-chain rsa SEC
crypto key storage SEC
crypto key unlock rsa SEC
crypto key zeroize ec SEC
crypto key zeroize pubkey-chain SEC
crypto key zeroize rsa SEC
crypto keyring SEC, IPV6
crypto logging ezvpn SEC
crypto logging ikev2 SEC
crypto logging session SEC
crypto map (Xauth) SEC, IPV6
crypto map (global IPsec) MWH, MWP
crypto map (global IPsec) SEC, IPV6
crypto map (interface IPsec) MWH
crypto map (interface IPsec) SEC
crypto map (isakmp) SEC, IPV6
crypto map client configuration address SEC
crypto map gdoi fail-close SEC
crypto map isakmp-profile SEC
crypto map local-address SEC, MWP
crypto map redundancy replay-interval SEC
crypto mib ipsec flowmib history failure size SEC
crypto mib ipsec flowmib history tunnel size SEC
crypto mib topn SEC
crypto pki authenticate IPV6, SEC
crypto pki authenticate through cts xp retry period SEC
crypto pki benchmark SEC
crypto pki cert validate SEC
crypto pki certificate chain SEC
crypto pki certificate map SEC
crypto pki certificate query (ca-trustpoint) SEC

crypto pki certificate storage SEC
crypto pki crl cache SEC
crypto pki crl request SEC
crypto pki enroll SEC, IPV6
crypto pki export pem SEC
crypto pki export pkcs12 SEC
crypto pki export pkcs12 password SEC
crypto pki import SEC, IPV6
crypto pki import pem SEC
crypto pki import pkcs12 SEC
crypto pki import pkcs12 password SEC
crypto pki profile enrollment SEC
crypto pki server SEC
crypto pki server grant SEC
crypto pki server info crt SEC
crypto pki server info requests SEC
crypto pki server password generate SEC
crypto pki server reject SEC
crypto pki server remove SEC
crypto pki server request pkcs10 SEC
crypto pki server revoke SEC
crypto pki server start SEC
crypto pki server stop SEC
crypto pki server trim SEC
crypto pki server trim generate expired-list SEC
crypto pki server unrevote SEC
crypto pki token change-pin SEC
crypto pki token encrypted-user-pin SEC
crypto pki token label SEC
crypto pki token lock SEC
crypto pki token login SEC
crypto pki token logout SEC
crypto pki token max-retries SEC
crypto pki token removal timeout SEC
crypto pki token secondary config SEC
crypto pki token secondary unconfig SEC

clock rate through cwmp wan default

crypto pki token unlock SEC
crypto pki token user-pin SEC
crypto pki trustpoint SEC
crypto pki trustpool import SEC
crypto pki trustpool policy SEC
crypto provisioning petitioner SEC
crypto provisioning registrar SEC
crypto vpn SEC
crypto wui tti petitioner SEC
crypto wui tti registrar SEC
crypto xauth SEC
crypto-engine SEC
csd enable SEC
csg-group MWG
csna IBM
ctcp port SEC
cts authorization list network SEC
cts credentials SEC
cts dot1x SEC
cts manual SEC
cts role-based enforcement SEC
cts role-based sgt-map interface SEC
cts xp connection peer SEC
cts xp default password SEC
cts xp default source-ip SEC
cts xp enable SEC
cts xp log binding-changes SEC
cts xp mapping network-map SEC
cts xp reconciliation period SEC
cts xp retry period SEC
ctunnel destination ISO
ctunnel mode IPV6, IR, ISO
ctype SEC
current15minutes SBCD
current5minutes SBCD
currentday SBCD

currenthour [SBCD](#)
currentindefinite [SBCD](#)
custom-queue-list [QOS](#)
customer-id (call home) [HA](#)
cut-through [IR](#)
cwmp agent [BBA](#)
cwmp wan [BBA](#)
cwmp wan default [BBA](#)

clock rate through cwmp wan default

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dampening through debug smrp group

- [Finding IOS Command Information, page 103](#)
- [dampening through debug smrp group, page 106](#)

Finding IOS Command Information

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SLB	Cisco IOS Server Load Balancing Command Reference
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VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

dampening through debug smrp group

D

dampening [IRI](#)
dampening-change [EIGRP](#), [SAF](#)
dampening-interval [EIGRP](#), [SAF](#)
data [IAD](#), [SEC](#)
data-character-bits [CF](#)
data-glean [IPV6](#)
data-pattern [SLA](#)
data-privacy [HA](#)
data-protection [IR](#)
data-store [MWG](#)
data-strobe [IR](#)
database archive [SEC](#)
database archive through dns [SEC](#)
database level [SEC](#)
database url [SEC](#)
database username [SEC](#)
database-mapping (LISP EID-table) [LISP](#)
database-mapping (LISP dynamic-EID) [LISP](#)
databits [CF](#)
dbs enable [ATM](#)
dce-terminal-timing enable [IR](#)
ddns (DDNS-update-method) [IAD](#)
ddt [LISP](#)
ddt authoritative [LISP](#)
ddt root [LISP](#)
de-bit [WAN](#)
de-bit map-clp [WAN](#)
de-bit through exp [WAN](#)
deact-mode (XML Billing) [SBCD](#)
deact-mode (billing) [SBCD](#)
deactivation-mode [SBCD](#)
deactivation-mode (session border controller) [SBCD](#)

deadtime (server-group configuration) SEC
debounce-time rai DIA
debug ecfmpal DB
debug elb-pal-pd DB
debug epmpal DB
debug aaa accounting DB, MWH
debug aaa accounting through debug auto-config DB
debug aaa authentication DB
debug aaa authorization DB
debug aaa cache filterserver DB
debug aaa cache group DB
debug aaa coa MWG
debug aaa common-criteria DB
debug aaa dead-criteria transactions DB
debug aaa per-user DB
debug aaa pod DB, MWH
debug aaa redundancy DB
debug aaa sg-server selection DB
debug aaa test DB
debug acircuit DB
debug acircuit checkpoint DB
debug adjacency DB, IPV6
debug adjacency (vasi) DB
debug alarm-interface DB
debug alps ascu DB
debug alps circuit event DB
debug alps peer DB
debug alps peer event DB
debug alps snmp DB
debug ancp DB
debug appfw DB
debug apple arp DB
debug apple domain DB
debug apple eigrp-all DB
debug apple errors DB
debug apple events DB

```
debug apple nbp DB
debug apple packet DB
debug apple remap DB
debug apple routing DB
debug apple zip DB
debug appn all DB
debug appn cs DB
debug appn ds DB
debug appn hpr DB
debug appn ms DB
debug appnnof DB
debug appn pc DB
debug appn ps DB
debug appn scm DB
debug appn ss DB
debug appn trs DB
debug arap DB
debug archive config timestamp DB
debug archive log config persistent DB
debug archive versioning DB
debug arp DB
debug ase DB
debug asnl events DB
debug asp packet DB
debug aspp event DB
debug aspp packet DB
debug async async-queue DB
debug atm autovc DB
debug atm bundle error DB
debug atm bundle events DB
debug atm cell-packing DB
debug atm events DB
debug atm ha-error DB
debug atm ha-events DB
debug atm ha-state DB
debug atm l2transport DB
```

debug atm lfi **DB**
debug atm native **DB**
debug atm nbma **DB**
debug atm oam cc **DB**
debug atm oc3 pom **DB**
debug atm t3e3 **DB**
debug audit **DB**
debug authentication **DB**
debug auto-config **DB**
debug autonomic **AN**
debug autoupgrade **DB**
debug backhaul-session-manager session **DB**
debug backhaul-session-manager session through debug channel packets **DB**
debug backhaul-session-manager set **DB**
debug backup **DB**
debug bert **DB**
debug bfd **DB, IPV6**
debug bgp ipv6 dampening **DB, IPV6**
debug bgp ipv6 updates **DB, IPV6**
debug bgp l2vpn vpls updates **DB**
debug bgp nsap **DB**
debug bgp nsap dampening **DB**
debug bgp nsap updates **DB**
debug bgp vpnv6 unicast **DB, IPV6**
debug bri-interface **DB**
debug bsc event **DB**
debug bsc packet **DB**
debug bstun events **DB**
debug bstun packet **DB**
debug bundle errors **DB**
debug bundle events **DB**
debug c10k-jacket **CBL**
debug cable **CBL**
debug cable acfe **CBL**
debug cable acfe filter **CBL**
debug cable admission-control **CBL**

debug cable admission-control flow-categorization **CBL**
debug cable arp **CBL**
debug cable arp filter **CBL**
debug cable bpiatp **CBL**
debug cable bundle **CBL**
debug cable classifiers **CBL**
debug cable cm-ctrl **CBL**
debug cable cm-status **CBL**
debug cable config-file **CBL**
debug cable dbs **CBL**
debug cable dcc **CBL**
debug cable dci **CBL**
debug cable dhcp **CBL**
debug cable dsg **CBL**
debug cable dynamic-qos subscriber **CBL**
debug cable dynamic-qos trace **CBL**
debug cable dynamic-secret **CBL**
debug cable dynsrv **CBL**
debug cable encapsulation **CBL**
debug cable envm **CBL**
debug cable error **CBL**
debug cable flap **CBL**
debug cable fn **CBL**
debug cable freqhop **CBL**
debug cable hw-spectrum **CBL**
debug cable interface **CBL**
debug cable ipv6 **CBL**
debug cable keyman **CBL**
debug cable l2-vpn **CBL**
debug cable load-balance **CBL**
debug cable mac-address **CBL**
debug cable mac-protocol **CBL**
debug cable mac-scheduler **CBL**
debug cable map **CBL**
debug cable md-sg **CBL**
debug cable mdd **CBL**

debug cable metering [CBL](#)
debug cable multicast counter clear [CBL](#)
debug cable multicast counter start [CBL](#)
debug cable multicast counter stop [CBL](#)
debug cable multicast forwarding [CBL](#)
debug cable multicast latency [CBL](#)
debug cable phs [CBL](#)
debug cable phy [CBL](#)
debug cable privacy [CBL](#)
debug cable qos [CBL](#)
debug cable range [CBL](#)
debug cable receive [CBL](#)
debug cable registration [CBL](#)
debug cable remote-query [CBL](#)
debug cable reset [CBL](#)
debug cable rfmib [CBL](#)
debug cable service-ds-selection [CBL](#)
debug cable specmgmt [CBL](#)
debug cable startalloc [CBL](#)
debug cable subscriber-monitoring [CBL](#)
debug cable telco-return [CBL](#)
debug cable telco-return msg [CBL](#)
debug cable tlvs [CBL](#)
debug cable tod [CBL](#)
debug cable transmit [CBL](#)
debug cable ubg [CBL](#)
debug cable ucc [CBL](#)
debug cable ucd [CBL](#)
debug cable upconverter [CBL](#)
debug cable us-adm-ctrl [CBL](#)
debug cable wbcmts [CBL](#)
debug cable wbcmts admission-control [CBL](#)
debug cable wbcmts resiliency [CBL](#)
debug cable-modem bpkm [CBL](#)
debug cable-modem bridge [CBL](#)
debug cable-modem error [CBL](#)

debug cable-modem interrupts **CBL**
debug cable-modem mac log **CBL**
debug cable-modem mac messages **CBL**
debug cable-modem mac messages dynsrv **CBL**
debug cable-modem map **CBL**
debug cable-modem up-dis **CBL**
debug call fallback detail **DB**
debug call fallback probe **DB**
debug call filter detail **DB**
debug call filter inout **DB**
debug call rsvp-sync events **DB**
debug call rsvp-sync func-trace **DB**
debug call threshold **DB**
debug call treatment action **DB**
debug call-home diagnostic-signature **DB**
debug call-mgmt **DB**
debug callback **DB**
debug capf-server **DB**
debug cas **DB**
debug ccaal2 session **DB**
debug cce dp named-db urlfilter **DB**
debug ccfrf11 session **DB**
debug cch323 **DB**
debug cch323 capacity **DB**
debug cch323 h225 **DB**
debug cch323 h245 **DB**
debug cch323 preauth **DB**
debug cch323 ras **DB**
debug cch323 video **DB**
debug ccm-manager **DB**
debug ccsip all **DB**
debug ccsip calls **DB**
debug ccsip dhcp **DB**
debug ccsip error **DB**
debug ccsip events **DB**
debug ccsip info **DB**

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debug ccsip media DB
debug ccsip messages DB
debug ccsip preauth DB
debug ccsip states DB
debug ccsip transport DB
debug ccswvoice vo-debug DB
debug ccswvoice vo-session DB
debug ccswvoice vofr-debug DB
debug ccswvoice vofr-session DB
debug cdapi DB
debug cdma pdsn a10 ahdlc DB
debug cdma pdsn a10 gre DB, MWP
debug cdma pdsn a10 ppp DB, MWP
debug cdma pdsn a11 DB, MWP
debug cdma pdsn accounting DB, MWP
debug cdma pdsn accounting flow DB, MWP
debug cdma pdsn accounting time-of-day DB, MWP
debug cdma pdsn cluster DB, MWP
debug cdma pdsn ipv6 DB, MWP
debug cdma pdsn prepaid DB, MWP
debug cdma pdsn qos DB, MWP
debug cdma pdsn radius disconnect nai MWP
debug cdma pdsn redundancy attributes MWP
debug cdma pdsn redundancy errors MWP
debug cdma pdsn redundancy events MWP
debug cdma pdsn redundancy packets MWP
debug cdma pdsn resource-manager DB, MWP
debug cdma pdsn selection DB, MWP
debug cdma pdsn service-selection DB, MWP
debug cdma pdsn session DB, MWP
debug cdp DB
debug cdp ip DB
debug cef DB
debug cell-hwic driver DB
debug cell-hwic firmware DB
debug cell-hwic virt-con DB
```

dampening through debug smrp group

debug cellular messages all DB
debug cellular messages async DB
debug cellular messages data DB
debug cellular messages dm DB
debug cellular messages management DB
debug cem ls errors DB
debug cem ls events DB
debug ces-conn DB
debug cfm DB
debug channel events DB
debug channel ilan DB
debug channel love DB
debug channel packets DB
debug checkpoint CBL
debug clns esis events DB
debug clns esis events through debug dbconn tcp DB
debug clns esis packets DB
debug clns events DB
debug clns igrp packets DB
debug clns packet DB
debug clns routing DB
debug cls message DB
debug cls vdlc DB
debug cme-xml DB
debug cmts ipc-cable base CBL
debug cmts ipc-cable client CBL
debug dns config DB
debug dns events DB
debug dns exec DB
debug dns image DB
debug dns management DB
debug dns xml DB
debug dns xml-parser DB
debug compress DB
debug condition DB, MWH, MWP
debug condition application voice DB

debug condition calling MWG
debug condition glbp DB
debug condition interface DB
debug condition match-list DB
debug condition standby DB
debug condition voice-port DB
debug condition vrf DB, SBCD, EVN
debug condition xconnect DB
debug configuration lock DB
debug confmodem DB
debug conn DB
debug content-scan DB
debug control-plane DB
debug cops DB
debug cot DB
debug cpd CBL
debug cpp event DB
debug cpp negotiation DB
debug cpp packet DB
debug cr10k-rp CBL
debug cr10k-rp dbs-queue CBL
debug credentials DB
debug crm DB
debug crypto ace b2b DB
debug crypto ace boot DB
debug crypto ace cfgmon DB
debug crypto ace congestion-mgr DB
debug crypto ace dpd DB
debug crypto ace error DB
debug crypto ace hapi DB
debug crypto ace ikea DB
debug crypto ace invspi DB
debug crypto ace ipd DB
debug crypto ace mace DB
debug crypto ace pcp DB
debug crypto ace polo DB

```
debug crypto ace propcfg DB
debug crypto ace qos DB
debug crypto ace rcon DB
debug crypto ace redundancy DB
debug crypto ace spi DB
debug crypto ace stats DB
debug crypto ace syslog DB
debug crypto ace tftp DB
debug crypto ace topn DB
debug crypto ace warning DB
debug crypto condition IPV6
debug crypto condition unmatched DB
debug crypto ctcp DB
debug crypto engine DB
debug crypto engine accelerator logs DB
debug crypto engine ism-vpn DB
debug crypto engine ism-vpn ssl DB
debug crypto engine ism-vpn traffic DB
debug crypto engine ism-vpn traffic selector DB
debug crypto error DB
debug crypto gdoi DB
debug crypto gdoi condition DB
debug crypto ha DB
debug crypto ikev2 DB
debug crypto ipsec DB
debug crypto ipsec client ezvpn DB
debug crypto ipsec ha DB
debug crypto ipv6 ipsec DB, IPV6
debug crypto ipv6 packet DB, IPV6
debug crypto isakmp DB
debug crypto isakmp ha DB
debug crypto key-exchange DB
debug crypto mib DB
debug crypto pki messages DB
debug crypto pki server DB
debug crypto pki transactions DB
```

debug crypto provisioning DB
debug crypto sesmgmt DB
debug csm neat DB
debug csm tgram DB
debug csm voice DB
debug ctl-client DB
debug ctunnel DB
debug custom-queue DB
debug cwmp DB
debug dampening DB
debug data-store DB, MWG
debug data-store detail DB, MWG
debug dbconn all DB
debug dbconn appc DB
debug dbconn config DB
debug dbconn drda DB
debug dbconn event DB
debug dbconn tcp DB
debug decnet adj DB
debug decnet adj through debug dss ipx event DB
debug decnet connects DB
debug decnet events DB
debug decnet packet DB
debug decnet routing DB
debug device-sensor DB
debug dhcp DB
debug dhcp redundancy DB
debug dialer events DB
debug dialer forwarding DB
debug dialer map DB
debug dialpeer DB
debug diameter DB, MWG
debug dlsw DB
debug dmsp doc-to-fax DB
debug dmsp fax-to-doc DB
debug dmvpn DB, IPV6

```
debug dmvpn condition DB, IPV6
debug docsis ssd CBL
debug dot11 DB, WL
debug dot11 aaa DB, WL
debug dot11 cac DB
debug dot11 dot11radio DB, WL
debug dot11 ids DB
debug dot11 ids mfp DB
debug dot1x DB
debug dot1x (EtherSwitch) DB
debug drip event DB
debug drip packet DB
debug dsc clock DB
debug dsip DB
debug dspapi DB
debug dspfarm DB
debug dsip activation DB
debug dsip packet DB
debug dsip state DB
debug dsip trace DB
debug dss ipx event DB
debug eap DB
debug eap through debug hw-module subslot periodic DB
debug ehsa CBL
debug eigrp address-family neighbor DB
debug eigrp address-family notifications DB
debug eigrp frr DB
debug eigrp fsm DB, IPV6
debug eigrp neighbor DB, IPV6
debug eigrp notifications DB
debug eigrp nsf DB
debug eigrp packet IPV6
debug eigrp packets DB
debug eigrp service-family DB, SAF
debug eigrp transmit DB, IPV6
debug emm DB
```

debug eou DB
debug epc DB
debug ephone alarm DB
debug ephone blf DB
debug ephone ccm-compatible DB
debug ephone detail DB
debug ephone error DB
debug ephone extension-assigner DB
debug ephone keepalive DB
debug ephone loopback DB
debug ephone lpcor DB
debug ephone message DB
debug ephone mlpp DB
debug ephone moh DB
debug ephone mwi DB
debug ephone pak DB
debug ephone qov DB
debug ephone raw DB
debug ephone register DB
debug ephone sccp-state DB
debug ephone state DB
debug ephone statistics DB
debug ephone video DB
debug ephone vm-integration DB
debug ephone whisper-intercom DB
debug errors DB
debug eswilp DB
debug ethernet nid DB
debug ethernet cfm all DB
debug ethernet cfm diagnostic DB
debug ethernet cfm error DB
debug ethernet cfm errors DB
debug ethernet cfm ha DB
debug ethernet cfm packets DB
debug ethernet cfm pm DB
debug ethernet event microwave DB

```
debug ethernet l2ctrl DB
debug ethernet lmi DB
debug ethernet oam DB
debug ethernet ring g8032 errors DB
debug ethernet ring g8032 events DB
debug ethernet ring g8032 fsm DB
debug ethernet ring g8032 packets DB
debug ethernet service DB
debug ethernet service instance dynamic DB
debug event manager DB
debug events DB
debug fax dmfp DB
debug fax fmfp DB
debug fax foip DB
debug fax mmoip aaa DB
debug fax msipi DB
debug fax mta DB
debug fax relay t30 DB
debug fddi smt-packets DB
debug filesystem DB
debug firewall DB
debug flow exporter DB, FNF
debug flow monitor DB, FNF
debug flow record DB, FNF
debug flow-sampler DB
debug fm ipv6 pbr DB, IPV6
debug fm performance-monitor MM
debug fm private-hosts DB
debug fm raguard DB, IPV6
debug fmfp receive DB
debug fmfp send DB
debug foip off-ramp DB
debug foip on-ramp DB
debug format DB
debug fpm event DB
debug frame-relay DB
```

debug frame-relay adjacency DB
debug frame-relay callcontrol DB
debug frame-relay end-to-end keepalive DB
debug frame-relay events DB
debug frame-relay foresight DB
debug frame-relay fragment DB
debug frame-relay hqf DB
debug frame-relay informationelements DB
debug frame-relay ip tcp header-compression DB
debug frame-relay lapf DB
debug frame-relay lmi DB
debug frame-relay multilink DB, WAN
debug frame-relay networklayerinterface DB
debug frame-relay packet DB
debug frame-relay ppp DB
debug frame-relay pseudowire DB
debug frame-relay redundancy DB
debug frame-relay switching DB
debug frame-relay vc-bundle DB
debug frame-relay virtual DB
debug fras error DB
debug fras message DB
debug fras state DB
debug fras-host activation DB
debug fras-host error DB
debug fras-host packet DB
debug fras-host snmp DB
debug ftpserver DB
debug gatekeeper gup DB
debug gatekeeper load DB
debug gatekeeper server DB
debug ggsn quota-server DB, MWG
debug glbp errors DB
debug glbp events DB
debug glbp packets DB
debug glbp terse DB

```
debug gprs category fsm event DB, MWG
debug gprs charging DB
debug gprs dcca DB, MWG
debug gprs dfp DB, MWG
debug gprs dhcp DB, MWG
debug gprs gtp DB, MWG
debug gprs gtp parsing DB, MWG
debug gprs gtp ppp DB, MWG
debug gprs gtp ppp-regeneration DB, MWG
debug gprs gtp-director DB
debug gprs iscsi MWG
debug gprs radius DB, MWG
debug gprs redundancy DB, MWG
debug gvRP DB
debug h225 DB
debug h225 asn1 DB
debug h225 events DB
debug h245 asn1 DB
debug h245 events DB
debug h245 srtp DB
debug h323-annexg DB
debug hCCP authentication CBL
debug hCCP channel-switch CBL
debug hCCP doCSIS-recovery CBL
debug hCCP events CBL
debug hCCP fast-failure-detection CBL
debug hCCP inter-db CBL
debug hCCP plane CBL
debug hCCP rfswitch CBL
debug hCCP sync CBL
debug hCCP timing DB, CBL
debug hpi DB
debug http client DB
debug http client cookie DB
debug hw-module all upgrade DB, CBL
debug hw-module bay CBL
```

```
debug hw-module subslot DB
debug hw-module subslot commands DB
debug hw-module subslot errors DB
debug hw-module subslot events DB
debug hw-module subslot interrupts DB
debug hw-module subslot ipcshim DB
debug hw-module subslot oir DB
debug hw-module subslot periodic DB
debug iapp DB
debug iapp through debug ip ftp DB
debug idmgr DB
debug if-mgr efp-ext DB
debug ima DB
debug installer DB
debug interface DB
debug interface counters exceptions DB
debug interface counters protocol memory DB
debug interface states DB
debug interface(vasi) DB
debug iosd issu DB
debug ip access-list hash-generation DB
debug ip access-list intstats DB
debug ip access-list turboacl DB
debug ip admission consent DB
debug ip admission eapoudp DB
debug ip auth-proxy DB
debug ip auth-proxy ezvpn DB
debug ip bgp DB
debug ip bgp event rpki BGP
debug ip bgp groups DB
debug ip bgp igp-metric ignore DB, BGP, SBCD
debug ip bgp import DB, BGP
debug ip bgp range DB
debug ip bgp route-server BGP, SBCD
debug ip bgp sso DB
debug ip bgp updates DB
```

```
debug ip bgp vpng4 checkpoint DB
debug ip bgp vpng4 nsf DB
debug ip bgp vpng4 unicast DB
debug ip bgp vpng6 unicast DB
debug ip casa affinities DB
debug ip casa packets DB
debug ip casa wildcards DB
debug ip cef DB
debug ip cef accounting non-recursive DB
debug ip cef fragmentation DB
debug ip cef hash DB
debug ip cef rrhash DB
debug ip cef subblock DB
debug ip cef table DB
debug ip ddns update DB
debug ip dfp agent DB
debug ip dhcp server DB
debug ip dhcp server redundancy DB
debug ip dhcp server snmp DB
debug ip dns name-list DB
debug ip dns view DB
debug ip dns view-list DB
debug ip drp DB
debug ip dvmrp DB
debug ip eigrp DB
debug ip eigrp notifications DB
debug ip error DB
debug ip flow cache DB, IPV6
debug ip flow export DB, IPV6
debug ip ftp DB
debug ip http all DB
debug ip http all through debug ip rsvp DB
debug ip http authentication DB
debug ip http client DB
debug ip http client cookie DB
debug ip http ezsetup DB
```

```
debug ip http secure-all DB
debug ip http secure-session DB
debug ip http secure-state DB
debug ip http ssi DB
debug ip http ssl error DB
debug ip http token DB
debug ip http transaction DB
debug ip http url DB
debug ip icmp DB
debug ip igmp DB
debug ip igmp snooping DB
debug ip igrp events DB
debug ip igrp transactions DB
debug ip inspect DB
debug ip inspect ha DB
debug ip ips DB
debug ip iscsi MWG
debug ip mbgp dampening DB
debug ip mbgp updates DB
debug ip mcache DB
debug ip mds ipc DB
debug ip mds mevent DB
debug ip mds mpacket DB
debug ip mds process DB
debug ip mfib adjacency DB
debug ip mfib db DB
debug ip mfib fs DB
debug ip mfib init DB
debug ip mfib interface DB
debug ip mfib mrib DB
debug ip mfib nat DB
debug ip mfib pak DB
debug ip mfib platform DB
debug ip mfib ppr DB
debug ip mfib ps DB
debug ip mfib signal DB
```

```
debug ip mfib table DB
debug ip mhbeat DB
debug ip mobile DB, MWH, MWP
debug ip mobile advertise DB, MWH
debug ip mobile cdma ipsec MWP
debug ip mobile dyn-pbr DB
debug ip mobile host DB, MWH
debug ip mobile mib DB
debug ip mobile redundancy DB, MWH
debug ip mobile router DB
debug ip mpacket DB
debug ip mrib DB
debug ip mrm DB
debug ip mrouting DB
debug ip mrouting limits DB
debug ip msdp DB
debug ip msdp resets DB
debug ip multicast hardware-switching DB
debug ip multicast redundancy DB
debug ip multicast rpf tracked DB
debug ip multicast topology DB, SBCD
debug ip nat DB
debug ip nat redundancy DB
debug ip nbar clients DB
debug ip nbar config DB
debug ip nbar platform DB
debug ip nbar trace DB
debug ip ospf adj DB
debug ip ospf database-timer rate-limit DB
debug ip ospf events DB
debug ip ospf mpls traffic-eng advertisements DB
debug ip ospf nsf DB
debug ip ospf packet DB
debug ip ospf rib DB
debug ip ospf spf statistic DB
debug ip packet DB
```

```
debug ip pgm host DB
debug ip pgm router DB
debug ip pim DB
debug ip pim atm DB
debug ip pim auto-rp DB
debug ip policy DB
debug ip rbsep DB
debug ip rbsep ack-split DB
debug ip rgmp DB
debug ip rip DB
debug ip routing DB
debug ip routing static bfd DB
debug ip rsvp DB
debug ip rsvp aggregation DB
debug ip rsvp authentication DB
debug ip rsvp detail DB
debug ip rsvp dump-messages DB
debug ip rsvp errors DB
debug ip rsvp hello DB
debug ip rsvp high-availability DB
debug ip rsvp p2mp DB
debug ip rsvp policy DB
debug ip rsvp rate-limit DB
debug ip rsvp reliable-msg DB
debug ip rsvp sbm DB
debug ip rsvp sso DB
debug ip rsvp summary-refresh DB
debug ip rsvp traffic-control DB
debug ip rsvp wfq DB
debug ip rtp header-compression DB
debug ip rtp header-compression through debug ipv6 icmp DB
debug ip rtp packets DB
debug ip scp DB
debug ip sctp api DB
debug ip sctp congestion DB
debug ip sctp init DB
```

```
debug ip sctp multihome DB
debug ip sctp performance DB
debug ip sctp rcvchunks DB
debug ip sctp rto DB
debug ip sctp segments DB
debug ip sctp segmentsv DB
debug ip sctp signal DB
debug ip sctp sndchunks DB
debug ip sctp state DB
debug ip sctp timer DB
debug ip sctp warnings DB
debug ip sd DB
debug ip sdee DB
debug ip security DB
debug ip sla error DB
debug ip sla ethernet-monitor DB
debug ip sla monitor error DB
debug ip sla monitor mpls-lsp-monitor DB
debug ip sla mpls-lsp-monitor DB
debug ip sla trace DB
debug ip sla trace mpls-lsp-monitor DB
debug ip slb DB
debug ip snat DB
debug ip socket DB
debug ip ssh DB
debug ip subscriber DB, ISG
debug ip subscriber redundancy DB
debug ip tcp congestion DB
debug ip tcp driver DB
debug ip tcp driver-pak DB
debug ip tcp ecn DB
debug ip tcp ha DB
debug ip tcp intercept DB
debug ip tcp packet DB
debug ip tcp transactions DB
debug ip traffic-export events DB
```

```
debug ip trigger-authentication DB
debug ip trm DB
debug ip urd DB
debug ip urlfilter DB
debug ip verify mib DB
debug ip virtual-reassembly DB
debug ip wccp DB, SBCD
debug ipc DB
debug ipc acks DB
debug ipc errors DB
debug ipc events DB
debug ipc fragments DB
debug ipc nacks DB
debug ipc packets DB
debug ipc rpc DB
debug iphc ipc DB
debug ipv6 cef drop DB, IPV6
debug ipv6 cef events DB, IPV6
debug ipv6 cef hash DB, IPV6
debug ipv6 cef receive DB, IPV6
debug ipv6 cef table DB, IPV6
debug ipv6 dhcp DB
debug ipv6 dhcp database DB, IPV6
debug ipv6 dhcp redundancy DB
debug ipv6 dhcp relay DB, IPV6
debug ipv6 eigrp DB, IPV6
debug ipv6 icmp DB, IPV6
debug ipv6 inspect DB, IPV6
debug ipv6 inspect through debug local-ack state DB
debug ipv6 mfib DB, IPV6
debug ipv6 mld DB, IPV6
debug ipv6 mld explicit DB, IPV6
debug ipv6 mld ssm-map DB, IPV6
debug ipv6 mobile DB, IPV6
debug ipv6 mobile lma IMO
debug ipv6 mobile mag DB
```

dampening through debug smrp group

debug ipv6 mobile networks DB, IPV6
debug ipv6 mobile packets DB
debug ipv6 mobile router DB, IPV6
debug ipv6 mrib client DB, IPV6
debug ipv6 mrib io DB, IPV6
debug ipv6 mrib proxy DB, IPV6
debug ipv6 mrib route DB, IPV6
debug ipv6 mrib table DB, IPV6
debug ipv6 multicast aaa DB
debug ipv6 multicast rpf DB
debug ipv6 multicast rwatch DB
debug ipv6 nat DB, IPV6
debug ipv6 nd DB, IPV6
debug ipv6 ospf DB, IPV6
debug ipv6 ospf database-timer rate-limit DB, IPV6
debug ipv6 ospf events DB, IPV6
debug ipv6 ospf graceful-restart DB, IPV6
debug ipv6 ospf lsdb DB, IPV6
debug ipv6 ospf monitor DB, IPV6
debug ipv6 ospf packet DB, IPV6
debug ipv6 ospf spf statistic DB, IPV6
debug ipv6 packet DB, IPV6
debug ipv6 pim DB, IPV6
debug ipv6 pim df-election DB, IPV6
debug ipv6 pim limit DB, IPV6
debug ipv6 policy DB, IPV6
debug ipv6 pool DB, IPV6
debug ipv6 rip DB, IPV6
debug ipv6 routing DB, IPV6
debug ipv6 snooping DB, IPV6
debug ipv6 snooping raguard DB, IPV6
debug ipv6 spd DB, IPV6
debug ipv6 static DB, IPV6
debug ipv6 wccp DB
debug ipx ipxwan DB
debug ipx nasi DB

debug ipx packet DB
debug ipx routing DB
debug ipx sap DB
debug ipx spoof DB
debug ipx spx DB
debug isdn DB
debug isdn event DB
debug isdn q921 DB
debug isdn q931 DB
debug isdn tgram DB
debug isis adj packets DB
debug isis authentication DB
debug isis ipv6 rib DB
debug isis mpls traffic-eng advertisements DB
debug isis mpls traffic-eng events DB
debug isis nsf DB
debug isis rib DB
debug isis rib redistribution DB
debug isis spf statistics DB
debug isis spf-events DB, IPV6
debug isis update-packets DB
debug iua as DB
debug iua asp DB
debug kerberos DB
debug kpml DB
debug kron DB
debug l2ctrl DB
debug l2fib DB
debug l2protocol-tunnel IR
debug l2relay events DB
debug l2relay packets DB
debug l2tp DB
debug l2tp redundancy DB
debug l2vpn acircuit DB
debug l2vpn atom checkpoint DB
debug l2vpn atom event-trace DB

```
debug l2vpn atom fast-failure-detect DB
debug l2vpn atom signaling DB
debug l2vpn atom static-oam DB
debug l2vpn atom vc DB
debug l2vpn atom vc vccv DB
debug l2vpn pseudowire DB
debug l2vpn vfi DB
debug l2vpn xconnect DB
debug l3-mgr tunnel DB
debug l4f DB, WAN
debug lacp DB
debug lane client DB
debug lane config DB
debug lane finder DB
debug lane server DB
debug lane signaling DB
debug lapb DB
debug lapb-ta DB
debug lat packet DB
debug ldap DB
debug lex rcmd DB
debug license DB, CSA
debug link monitor DB
debug lisp control-plane all LISP
debug lisp control-plane configuration LISP
debug lisp control-plane etr-map-server LISP
debug lisp control-plane events LISP
debug lisp control-plane exceptions LISP
debug lisp control-plane forward-api-events LISP
debug lisp control-plane interface-address-watch LISP
debug lisp control-plane lig LISP
debug lisp control-plane local-eid-database LISP
debug lisp control-plane local-rloc LISP
debug lisp control-plane map-request LISP
debug lisp control-plane map-resolver LISP
debug lisp control-plane map-server LISP
```

```
debug lisp control-plane map-server-map-notify LISP
debug lisp control-plane map-server-map-request LISP
debug lisp control-plane map-server-registration LISP
debug lisp control-plane map-server-registration errors LISP
debug lisp control-plane messages LISP
debug lisp control-plane nsf LISP
debug lisp control-plane remote-eid-cache LISP
debug lisp control-plane remote-eid-persistent LISP
debug lisp control-plane remote-rloc-watch LISP
debug lisp control-plane rib-rloc-watch LISP
debug lisp control-plane rib-route-import LISP
debug lisp control-plane solicit-map-request LISP
debug lisp control-plane static-mapping LISP
debug lisp detail LISP
debug lisp filter eid LISP
debug lisp filter instance-id LISP
debug lisp filter rloc LISP
debug lisp filter router-lisp-id LISP
debug lisp forwarding adjacency LISP
debug lisp forwarding alt-prefix LISP
debug lisp forwarding data-signal-map-request LISP
debug lisp forwarding data-signal-status-bits LISP
debug lisp forwarding ipv4-traceroute LISP
debug lisp forwarding ipv6-traceroute LISP
debug lisp forwarding remote-eid-prefix LISP
debug lisp forwarding state LISP
debug lisp forwarding virtual-interface-address LISP
debug list DB
debug llc2 dynwind DB
debug llc2 errors DB
debug llc2 packet DB
debug llc2 state DB
debug lnm events DB
debug lnm llc DB
debug lnm mac DB
debug local-ack state DB
```

debug management event mib DB
debug management event through debug mpls ldp bindings DB
debug management expression DB
debug mdns DB
debug mdss DB
debug media resource provisioning all DB
debug media resource provisioning errors DB
debug media resource provisioning events DB
debug mediacard DB
debug memory DB
debug metadata DB, MD
debug mgcp DB
debug mgcp all DB
debug mgcp endpoint DB
debug mgcp endptdb DB
debug mgcp errors DB
debug mgcp events DB
debug mgcp gcfm DB
debug mgcp inout DB
debug mgcp media DB
debug mgcp nas DB
debug mgcp packets DB
debug mgcp parser DB
debug mgcp src DB
debug mgcp state DB
debug mgcp tracelevel-default DB
debug mgcp voipcac DB
debug mlrib common DB
debug mlrib layer2 DB
debug mls rp DB
debug mls rp ip multicast DB
debug mmoip aaa DB
debug mmoip send email DB
debug mmoip send fax DB
debug mmoip transfer DB
debug modem DB

debug modem csm DB
debug modem dsip DB
debug modem oob DB
debug modem relay errors DB
debug modem relay events DB
debug modem relay packetizer DB
debug modem relay physical DB
debug modem relay sprt DB
debug modem relay udp DB
debug modem relay v14 DB
debug modem relay v42 DB
debug modem trace DB
debug modem traffic DB
debug mpls adjacency DB
debug mpls atm-cos DB
debug mpls atm-ldp api DB
debug mpls atm-ldp failure DB
debug mpls atm-ldp routes DB
debug mpls atm-ldp states DB
debug mpls checkpoint label-binding DB
debug mpls events DB
debug mpls infra label-broker api DB
debug mpls infra label-broker api key DB
debug mpls infra lfd label-block DB
debug mpls infra lfd label-broker key DB
debug mpls ip iprm DB
debug mpls ip iprm cef DB
debug mpls ip iprm events DB
debug mpls ip iprm ldm DB
debug mpls ip iprm mfi DB
debug mpls l2transport checkpoint DB
debug mpls l2transport fast-reroute DB
debug mpls l2transport ipc DB
debug mpls l2transport packet DB
debug mpls l2transport signaling DB
debug mpls l2transport static-oam DB

```
debug mpls l2transport vc DB
debug mpls l2transport vc subscriber DB
debug mpls l2transport vc vccv DB
debug mpls ldp advertisements DB
debug mpls ldp backoff DB
debug mpls ldp bindings DB
debug mpls ldp checkpoint DB
debug mpls ldp checkpoint through debug mwi relay events DB
debug mpls ldp graceful-restart DB
debug mpls ldp igp sync DB
debug mpls ldp messages DB
debug mpls ldp nsr DB
debug mpls ldp peer state-machine DB
debug mpls ldp prev-label DB
debug mpls ldp session io DB
debug mpls ldp session protection DB
debug mpls ldp session state-machine DB
debug mpls ldp targeted-neighbors DB
debug mpls ldp transport connections DB
debug mpls ldp transport events DB
debug mpls lfib cef DB
debug mpls lfib enc DB
debug mpls lfib fast-reroute database DB
debug mpls lfib fast-reroute events DB
debug mpls lfib fast-reroute reroutes DB
debug mpls lfib lsp DB
debug mpls lfib state DB
debug mpls lfib struct DB
debug mpls lspv DB
debug mpls mldp all DB
debug mpls mldp filter opaque_type DB
debug mpls mldp generic DB
debug mpls mldp gr DB
debug mpls mldp mfi DB
debug mpls mldp mrib DB
debug mpls mldp neighbor DB
```

debug mpls mldp packet DB
debug mpls netflow DB, NF
debug mpls packets DB
debug mpls static binding DB
debug mpls tp DB
debug mpls traffic-eng areas DB
debug mpls traffic-eng auto-tunnel backup DB
debug mpls traffic-eng auto-tunnel primary DB
debug mpls traffic-eng autoroute DB
debug mpls traffic-eng filter DB
debug mpls traffic-eng forwarding-adjacency DB
debug mpls traffic-eng ha sso DB
debug mpls traffic-eng link-management admission-control DB
debug mpls traffic-eng link-management advertisements DB
debug mpls traffic-eng link-management bandwidth-allocation DB
debug mpls traffic-eng link-management errors DB
debug mpls traffic-eng link-management events DB
debug mpls traffic-eng link-management igp-neighbors DB
debug mpls traffic-eng link-management links DB
debug mpls traffic-eng link-management preemption DB
debug mpls traffic-eng link-management routing DB
debug mpls traffic-eng load-balancing DB
debug mpls traffic-eng lsd-client DB
debug mpls traffic-eng path DB
debug mpls traffic-eng process-restart DB
debug mpls traffic-eng topology change DB
debug mpls traffic-eng topology lsa DB
debug mpls traffic-eng tunnels errors DB
debug mpls traffic-eng tunnels events DB
debug mpls traffic-eng tunnels labels DB
debug mpls traffic-eng tunnels reoptimize DB
debug mpls traffic-eng tunnels signalling DB
debug mpls traffic-eng tunnels state DB
debug mpls traffic-eng tunnels timers DB
debug mpls vpn ha DB
debug mpls xtagatm cross-connect DB

dampening through debug smrp group

```
debug mpls xtagatm errors DB
debug mpls xtagatm events DB
debug mpls xtagatm vc DB
debug mpoa client DB
debug mpoa server DB
debug mrsp DB
debug mspli receive DB
debug mspli send DB
debug mta receive all DB
debug mta send all DB
debug mta send rcpt-to DB
debug mvrp DB
debug mwi relay errors DB
debug mwi relay events DB
debug nat64 DB
debug ncia circuit DB
debug ncia circuit through debug pxf tbridge DB
debug ncia client DB
debug ncia server DB
debug netbios error DB
debug netbios packet DB
debug netbios-name-cache DB
debug netconf DB
debug nextport vsmgr detail DB
debug nhrp DB, IPV6
debug nhrp condition DB, IPV6
debug nhrp error DB, IPV6
debug nhrp extension DB
debug nhrp options DB
debug nhrp packet DB
debug nhrp rate DB
debug nls CBL
debug ntp DB, IPV6
debug oam DB
debug object-group event DB
debug oer api DB, OER
```

debug oer api client DB, OER
debug oer border DB, OER
debug oer border active-probe DB, OER
debug oer border learn DB, OER
debug oer border routes DB, OER
debug oer border traceroute reporting DB, OER
debug oer cc DB, OER
debug oer master border DB, OER
debug oer master collector DB, OER
debug oer master cost-minimization DB, OER
debug oer master exit DB, OER
debug oer master learn DB, OER
debug oer master prefix DB, OER
debug oer master prefix-list DB, OER
debug oer master process DB, OER
debug oer master traceroute reporting DB, OER
debug ospfv3 DB, IPV6
debug ospfv3 database-timer rate-limit DB, IPV6
debug ospfv3 events DB, IPV6
debug ospfv3 lsdb DB, IPV6
debug ospfv3 packet DB, IPV6
debug ospfv3 spf statistic DB, IPV6
debug otv DB
debug otv isis DB
debug packet DB
debug packet-capture DB
debug packetcable all CBL
debug packetcable cops CBL
debug packetcable gate CBL
debug packetcable hccp CBL
debug packetcable ipc CBL
debug packetcable subscriber CBL
debug pad DB
debug performance monitor MM
debug pfr api PFR
debug pfr border PFR

```
debug pfr border active-probe PFR
debug pfr border bandwidth-resolution PFR
debug pfr border learn PFR
debug pfr border routes PFR
debug pfr border rsvp PFR
debug pfr border traceroute reporting PFR
debug pfr border tunnel PFR
debug pfr cc PFR
debug pfr master bandwidth-resolution PFR
debug pfr master border PFR
debug pfr master collector PFR
debug pfr master cost-minimization PFR
debug pfr master exit PFR
debug pfr master export PFR
debug pfr master export active PFR
debug pfr master export border PFR
debug pfr master export config PFR
debug pfr master export cost-minimization PFR
debug pfr master export link PFR
debug pfr master export option PFR
debug pfr master export passive PFR
debug pfr master export process PFR
debug pfr master export traffic-class PFR
debug pfr master learn PFR
debug pfr master prefix PFR
debug pfr master prefix-list PFR
debug pfr master process PFR
debug pfr master rsvp PFR
debug pfr master target-discovery PFR
debug pfr master traceroute reporting PFR
debug pfr master tunnel PFR
debug pfr mib error PFR
debug pfr mib info PFR
debug pias events DB
debug platform 6rd DB
debug platform hardware qfp active feature evtmon DB
```

debug platform hardware qfp active feature ipsec DB
debug platform hardware qfp active feature wccp DB, SBCD
debug platform hardware qfp active interface frame-relay multilink WAN
debug platform hardware qfp feature DB
debug platform hardware qfp feature otv client DB
debug platform hardware qfp feature sbc SBCD
debug platform link-dc DB, IR
debug platform network-clock IR
debug platform software evtmon DB
debug platform software l2fib DB
debug platform software multicast DB
debug platform software multicast cgmp DB
debug platform software multicast igmp DB
debug platform software multicast ip cmfib DB
debug platform software multicast ip cmfib error DB
debug platform software multicast ip cmfib event DB
debug platform software multicast ip hal DB
debug platform software multicast ipv6 DB
debug platform software multicast ipv6 cmfib DB
debug platform software multicast ipv6 hal DB
debug platform software multicast lc DB
debug platform software multicast mld DB
debug platform software multicast mrouter DB
debug platform software multicast msc DB
debug platform software multicast rgmp DB
debug platform software multicast rpdf DB
debug platform software multicast titan DB
debug platform software otv DB
debug platform software ucse IR
debug platform software wccp DB, SBCD
debug policy-firewall DB
debug policy-firewall mib DB
debug port-channel load-balance DB
debug pots DB
debug pots csm DB
debug ppp DB

```
debug ppp bap DB
debug ppp ip address-save DB
debug ppp multilink events DB
debug ppp multilink fragments DB
debug ppp multilink negotiation DB
debug ppp redundancy DB
debug ppp unique address DB, IPV6
debug pppatm DB
debug pppatm redundancy DB
debug pppoe DB
debug pppoe redundancy DB
debug presence DB
debug priority DB
debug private-hosts DB
debug proxy h323 statistics DB
debug pvcd DB
debug pvdm2dm DB
debug pw-udp DB
debug pxf CBL
debug pxf atom DB, CBL
debug pxf backwalks DB
debug pxf bba DB
debug pxf cef DB
debug pxf dma DB
debug pxf iedge DB
debug pxf ipv6 DB
debug pxf l2less-error DB
debug pxf microcode DB
debug pxf mnode DB
debug pxf mpls DB
debug pxf mroute DB
debug pxf multilink DB
debug pxf netflow DB
debug pxf pbr DB
debug pxf qos DB
debug pxf stats DB
```

debug pxf subblocks **DB**
debug pxf tbridge **DB**
debug qbm **DB**
debug qbm through debug rudpv1 **DB**
debug qllc error **DB**
debug qllc event **DB**
debug qllc packet **DB**
debug qllc state **DB**
debug qllc timer **DB**
debug qllc x25 **DB**
debug qos accounting **DB**
debug qos dsmib error **DB**
debug qos dsmib event **DB**
debug qos dsmib stats **DB**
debug qos ha **DB**
debug radius **DB, MWH**
debug radius local-server **DB, WL**
debug radius-proxy **DB, ISG**
debug rai **DB**
debug ras **DB**
debug record-storage-module **MWG**
debug redundancy **CBL**
debug redundancy (RP) **DB**
debug redundancy application group asymmetric-routing **DB**
debug redundancy application group config **DB**
debug redundancy application group faults **DB**
debug redundancy application group media **DB**
debug redundancy application group protocol **DB**
debug redundancy application group rii **DB**
debug redundancy application group transport **DB**
debug redundancy application group vp **DB**
debug redundancy as5850 **DB**
debug registry **DB**
debug resource policy notification **DB**
debug resource policy registration **DB**
debug resource-pool **DB**

```
debug rgf detailed WAN
debug rgf errors WAN
debug rgf events WAN
debug rif DB
debug route-map ipc DB
debug rpms-proc preauth DB
debug rtspi all DB
debug rtspi errors DB
debug rtspi inout DB
debug rtspi send-nse DB
debug rtspi session DB
debug rtr error DB
debug rtr mpls-lsp-monitor DB
debug rtr trace DB
debug rtsp DB
debug rtsp all DB
debug rtsp api DB
debug rtsp client DB
debug rtsp client session DB
debug rtsp error DB
debug rtsp pmh DB
debug rtsp session DB
debug rtsp socket DB
debug rudpv1 DB
debug saa apm DB
debug saa apm through debug snmp sync DB
debug saa slm DB
debug saa xml DB
debug sampler DB, FNF
debug satellite DB
debug satellite firmware DB
debug sbc alarm-filter SBCD
debug sbc alarm-log-level SBCD
debug sbc asr log-level filter SBCD
debug sbc correlation-logs filter SBCD
debug sbc errors SBCD
```

debug sbc events **SBCD**
debug sbc filter **SBCD**
debug sbc filter (session border controller) **SBCD**
debug sbc filter billing_id **SBCD**
debug sbc filter bm **SBCD**
debug sbc filter cac **SBCD**
debug sbc filter call **SBCD**
debug sbc ha **SBCD**
debug sbc info **SBCD**
debug sbc ips **SBCD**
debug sbc ips (session border controller) **SBCD**
debug sbc log-level **SBCD**
debug sbc log-level console **SBCD**
debug sbc log-level file **SBCD**
debug sbc logging **SBCD**
debug sbc mem-trace dump **SBCD**
debug sbc mpf **SBCD**
debug sbc nbase **SBCD**
debug sbc off **SBCD**
debug sbc pd filter component **SBCD**
debug sbc pd filter context **SBCD**
debug sbc pd filter product **SBCD**
debug sbc pd log-level **SBCD**
debug sccp **DB**
debug sccp config **DB**
debug sdlc **DB**
debug sdlc local-ack **DB**
debug sdlc packet **DB**
debug serial interface **DB**
debug serial lead-transition **DB**
debug serial packet **DB**
debug service-group **DB**
debug service-module **DB**
debug sgbp dial-bids **DB**
debug sgbp error **DB**
debug sgbp hellos **DB**

dampening through debug smrp group

```
debug sgcp DB
debug sgcp errors DB
debug sgcp events DB
debug sgcp packet DB
debug sgi ISG
debug shared-line DB
debug smrp all DB
debug smrp group DB
```



debug smrp mcache through e

- [Finding IOS Command Information, page 147](#)
- [debug smrp mcache through e, page 150](#)

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 5: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference

CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

debug smrp mcache through e

debug smrp mcache through e

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debug smrp mcache DB
debug smrp neighbor DB
debug smrp port DB
debug smrp route DB
debug smrp transaction DB
debug snasw dlc DB
debug snasw ips DB
debug snmp bulkstat DB
debug snmp detail DB
debug snmp mib nhrp DB
debug snmp overhead DB
debug snmp packet DB
debug snmp requests DB
debug snmp sync DB
debug snmp tunnel-mib DB, IR
debug sntp adjust DB
debug sntp adjust through debug tag-switching xtagatm vc DB
debug sntp packets DB
debug sntp select DB
debug software authenticity DB
debug source bridge DB
debug source error DB
debug source event DB
debug span DB
debug spanning-tree DB
debug ss7 mtp1 DB
debug ss7 mtp2 DB
debug ss7 sm DB
debug sse DB
debug ssg ctrl-errors DB
debug ssg ctrl-events DB
debug ssg ctrl-packets DB

debug ssg data DB
debug ssg data-nat DB
debug ssg dhcp DB
debug ssg errors DB
debug ssg events DB
debug ssg packets DB
debug ssg port-map DB
debug ssg tcp-redirect DB
debug ssg transparent login DB
debug ssl DB
debug ssl openssl DB
debug ssm DB, ISG
debug sss aaa authorization event DB
debug sss aaa authorization fsm DB
debug sss error DB
debug sss event DB
debug sss fsm DB
debug standby DB
debug standby errors DB
debug standby events DB
debug standby events icmp DB
debug standby events neighbor DB
debug standby packets DB
debug stun packet DB
debug subscriber aaa authorization DB, ISG
debug subscriber classifier ISG
debug subscriber error DB, ISG
debug subscriber event DB, ISG
debug subscriber feature DB, ISG
debug subscriber fsm DB, ISG
debug subscriber lite-session errors ISG
debug subscriber lite-session events ISG
debug subscriber packet DB, ISG
debug subscriber policy DB, ISG
debug subscriber policy dpm timestamps ISG
debug subscriber service DB, ISG

debug smrp mcache through e

debug subscriber testing DB, ISG
debug sw56 DB
debug syscon perfdata DB
debug syscon sdp DB
debug syslog-server DB
debug tacacs DB, MWH
debug tacacs events DB
debug tag-switching atm-cos DB
debug tag-switching atm-tdp api DB
debug tag-switching atm-tdp routes DB
debug tag-switching atm-tdp states DB
debug tag-switching tdp advertisements DB
debug tag-switching tdp bindings DB
debug tag-switching tdp directed-neighbors DB
debug tag-switching tdp peer state-machine DB
debug tag-switching tdp pies received DB
debug tag-switching tdp pies sent DB
debug tag-switching tdp session io DB
debug tag-switching tdp session state-machine DB
debug tag-switching tdp transport connections DB
debug tag-switching tdp transport events DB
debug tag-switching tdp transport timers DB
debug tag-switching xtagatm cross-connect DB
debug tag-switching xtagatm errors DB
debug tag-switching xtagatm events DB
debug tag-switching xtagatm vc DB
debug tag-template event DB
debug tag-template event through debug voip application vxml DB
debug tarp events DB
debug tarp packets DB
debug tbridge virtual-port DB
debug tcam_mgr DB
debug tcbs signaling DB
debug tdm DB
debug telco-return msg DB
debug telnet DB

debug text-to-fax DB
debug tftp DB
debug tgrep error DB
debug tgrep events DB
debug tgrep fsm DB
debug tgrep io DB
debug tgrep messages DB
debug tgrep msgdump DB
debug tgrep timer-event DB
debug tgrep timers DB
debug tgrep tripr DB
debug tgrm DB
debug tiff reader DB
debug tiff writer DB
debug time-range ipc DB
debug token ring DB
debug topology DB, MTR
debug track DB
debug trifecta DB
debug tsp DB
debug tunnel rbscp DB
debug tunnel route-via DB
debug txconn all DB
debug txconn appc DB
debug txconn config DB
debug txconn data DB
debug txconn event DB
debug txconn tcp DB
debug txconn timer DB
debug udld LSW
debug udptn DB
debug usb CBL
debug usb driver DB
debug user-group DB
debug v120 event DB
debug v120 packet DB

```
■ debug smrp mcache through e
```

```
debug vfi checkpoint DB
debug vg-anylan DB
debug video vicm DB
debug vlan packet DB
debug voice aaa asnl DB
debug voice all DB
debug voice cp DB
debug voice dsp crash-dump DB
debug voice eecm DB
debug voice enum DB
debug voice fastpath DB
debug voice h221 DB
debug voice h324 DB
debug voice mlpp DB
debug voice protocol DB
debug voice register errors DB
debug voice register events DB
debug voice signaling DB
debug voice source-group DB
debug voice statistics DB
debug voice tdsm DB
debug voice translation DB
debug voice uri DB
debug voice vofr DB
debug voip aaa DB
debug voip ais DB
debug voip application DB
debug voip application lpcor DB
debug voip application stcapp all DB
debug voip application stcapp buffer-history DB
debug voip application stcapp error DB
debug voip application stcapp events DB
debug voip application stcapp functions DB
debug voip application stcapp port DB
debug voip application vxml DB
debug voip avlist DB
```

debug voip avlist through debug vpm signaling DB
debug voip ccapi DB
debug voip ccapi error DB
debug voip ccapi inout DB
debug voip confmsp DB
debug voip dcapi DB
debug voip dialpeer DB
debug voip dsm DB
debug voip dsmp DB
debug voip dspapi DB
debug voip dump-file-acct DB
debug voip eddri DB
debug voip enum DB
debug voip event-log DB
debug voip fastpath DB
debug voip fileacct DB
debug voip fpi call-rate DB
debug voip h221 DB
debug voip h324 DB
debug voip hpi DB
debug voip ipigw DB
debug voip ivr DB
debug voip ivr all DB
debug voip ivr applib DB
debug voip ivr callsetup DB
debug voip ivr digitcollect DB
debug voip ivr dynamic DB
debug voip ivr error DB
debug voip ivr redirect DB
debug voip ivr script DB
debug voip ivr settlement DB
debug voip ivr states DB
debug voip ivr supplementary-service DB
debug voip ivr tclcommands DB
debug voip lpcor DB
debug voip profile fax DB

```
debug smrp mcache through e
```

```
debug voip profile help DB
debug voip profile modem DB
debug voip profile voice DB
debug voip rawmsg DB
debug voip rtcp DB
debug voip rtp DB
debug voip settlement all DB
debug voip settlement enter DB
debug voip settlement error DB
debug voip settlement exit DB
debug voip settlement misc DB
debug voip settlement network DB
debug voip settlement security DB
debug voip settlement ssl DB
debug voip settlement transaction DB
debug voip tsp DB
debug voip vtsp DB
debug voip xcodemsp DB
debug vpdn DB, WAN
debug vpdn pppoe-data DB
debug vpdn pppoe-error DB
debug vpdn pppoe-events DB
debug vpdn pppoe-packet DB
debug vpdn redundancy DB
debug vpm all DB
debug vpm dsp DB
debug vpm error DB
debug vpm port DB
debug vpm signal DB
debug vpm signaling DB
debug vpm spi DB
debug vpm spi through voice call debug DB
debug vpm trunk_sc DB
debug vpm voaal2 all DB
debug vpm voaal2 type1 DB
debug vpm voaal2 type3 DB
```

debug vrf DB, SBCD, EVN
debug vrrp all DB
debug vrrp authentication DB
debug vrrp error DB
debug vrrp events DB
debug vrrp ha DB
debug vrrp packets DB
debug vrrp state DB
debug vrrp vrss DB
debug vrss accounting DB
debug vrss all DB
debug vrss database DB
debug vrss infra DB
debug vrss log DB
debug vrss pathway DB
debug vrss plugin DB
debug vsi api DB
debug vsi errors DB
debug vsi events DB
debug vsi packets DB
debug vsi param-groups DB
debug vtemplate DB
debug vtemplate subinterface DB
debug vtsp DB
debug vtsp all DB
debug vtsp dsp DB
debug vtsp error DB
debug vtsp event DB
debug vtsp port DB
debug vtsp rtp DB
debug vtsp send-nse DB
debug vtsp session DB
debug vtsp stats DB
debug vtsp tone DB
debug vtsp vofr subframe DB
debug vwic-mft firmware controller DB

■ debug smrp mcache through e

debug vxml DB
debug waas DB, WAN
debug waas accelerator cifs-express DB
debug waas accelerator http-express DB
debug waas accelerator ssl-express DB
debug warm-reboot DB
debug wccp DB
debug webvpn DB
debug webvpn dtls DB
debug webvpn license DB
debug wlccp ap DB
debug wlccp ap rm enhanced-neighbor-list DB
debug wlccp packet DB
debug wlccp rmlib DB
debug wlccp wds DB
debug wsapi DB
debug wsma agent DB
debug wsma profile DB
debug x25 DB
debug x25 annexg DB
debug x25 aodi DB
debug x25 interface DB
debug x25 vc DB
debug x25 xot DB
debug x28 DB
debug xcctsp all DB
debug xcctsp error DB
debug xcctsp session DB
debug xconnect DB
debug xcsp DB
debug xdsl application DB
debug xdsl driver DB
debug xdsl eoc DB
debug xdsl error DB
debug zone DB
decnet access-group DEC

decnet accounting [DEC](#)
decnet accounting list [DEC](#)
decnet accounting threshold [DEC](#)
decnet accounting transits [DEC](#)
decnet advertise [DEC](#)
decnet area-max-cost [DEC](#)
decnet area-max-hops [DEC](#)
decnet cluster-alias update [DEC](#)
decnet cluster-holdtime [DEC](#)
decnet congestion-threshold [DEC](#)
decnet conversion [DEC](#)
decnet cost [DEC](#)
decnet encapsulation [DEC](#)
decnet hello-timer [DEC](#)
decnet host [DEC](#)
decnet in-routing-filter [DEC](#)
decnet map [DEC](#)
decnet max-address [DEC](#)
decnet max-area [DEC](#)
decnet max-cost [DEC](#)
decnet max-hops [DEC](#)
decnet max-paths [DEC](#)
decnet max-visits [DEC](#)
decnet multicast-map [DEC](#)
decnet node-type [DEC](#)
decnet out-routing-filter [DEC](#)
decnet path-split-mode [DEC](#)
decnet propagate static [DEC](#)
decnet route (interface static route) [DEC](#)
decnet route (specific static route) [DEC](#)
decnet route default (interface default route) [DEC](#)
decnet route default (specific default route) [DEC](#)
decnet route-cache [DEC](#)
decnet router-priority [DEC](#)
decnet routing [DEC](#)
decnet routing-timer [DEC](#)

```
■ debug smrp mcache through e
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decnet split-horizon **DEC**
def-domain **SEC**
default (bmp) **BGP**
default (CEM) **IR**
default (Flexible NetFlow) **FNF**
default (IPv6 OSPF) **IPV6**
default (MGCP profile) **VR**
default (OSPFv3) **IPV6**
default (SAF) **SAF**
default (SIP) **VR**
default (VPDN) **VPD**
default (auto-config application) **VR**
default (auto-config application) through direct-inward-dial **VR**
default (ca-trustpoint) **SEC**
default (ca-trustpool) **SEC**
default (cs-server) **SEC**
default (tracking) **IAP**
default external-client **SAF**
default interface **IR**
default ip nbar protocol-pack **QOS**
default profile **IMO**
default-file vfc **VR**
default-group-policy **SEC**
default-information **EIGRP**
default-information originate (BGP) **BGP**
default-information originate (IPv6 IS-IS) **IPV6**
default-information originate (IPv6 OSPF) **IPV6**
default-information originate (IS-IS) **IRS**
default-information originate (OSPF) **OSPF**
default-information originate (OSPFv3) **IPV6**
default-information originate (RIP) **RIP**
default-mapping-rule **IAD**
default-metric (BGP) **BGP**
default-metric (EIGRP) **EIGRP, IPV6**
default-metric (OSPF) **OSPF**
default-metric (OSPFv3) **IPV6**

default-metric (RIP) [RIP](#)
default-name [ATM](#)
default-port-limit [SBCD](#)
default-profile [IBM](#)
default-router [IAD](#)
default-state [IAP](#)
default-value data-character-bits [CF](#)
default-value exec-character-bits [CF](#)
default-value modem-interval [CF](#)
default-value special-character-bits [CF](#)
define [VR](#)
define interface-range [CF, IR](#)
dejitter-buffer [IR](#)
delay (OER) [OER](#)
delay (PfR) [PFR](#)
delay (firewall farm TCP protocol) [SLB](#)
delay (interface) [IR](#)
delay (tracking) [IAP](#)
delay (virtual server) [SLB](#)
delay-req interval [IR, CE](#)
delegate [LISP](#)
delegate-profile [SBCD](#)
delegate-registration [SBCD](#)
delete [CF](#)
delete vfc [VR](#)
delete-scan-factor [SLA](#)
delta (test threshold) [SNMP](#)
delta interval [SNMP](#)
deny [SEC](#)
deny (Catalyst 6500 series switches) [SEC](#)
deny (IP) [SEC](#)
deny (IPv6) [IPV6, SEC](#)
deny (MAC ACL) [SEC](#)
deny (NLSP) [IPX](#)
deny (SAP filtering) [IPX](#)
deny (WebVPN) [SEC](#)

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■ debug smrp mcache through e
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deny (extended) [IPX](#)
deny (standard) [IPX](#)
deny global-autoconf [IPV6](#)
depi cin-failover [CBL](#)
depi eqam-stats [CBL](#)
depi-class [CBL](#)
depi-tunnel [CBL](#)
description [MWG](#), [VR](#)
description (bmp) [BGP](#)
description (DSP farm profile) [VR](#)
description (EEM) [EEM](#)
description (Ethernet ring) [CE](#)
description (Flexible NetFlow) [FNF](#)
description (IKEv2 keyring) [SEC](#)
description (IP SLA) [SLA](#)
description (L2VPN) [MP](#)
description (LISP site) [LISP](#)
description (Performance Monitor) [MM](#)
description (SCCP Cisco CallManager) [VR](#)
description (VO profile) [SLA](#)
description (VPDN group) [VPD](#)
description (VRF definition) [EVN](#)
description (bonding-group) [CBL](#)
description (cable fiber-node) [CBL](#)
description (class-map) [QOS](#)
description (controller) [IR](#)
description (dial peer) [VR](#)
description (dot1x credentials) [SEC](#)
description (dspfarm) [VR](#)
description (event) [SNMP](#)
description (expression) [SNMP](#)
description (identify zone) [SEC](#)
description (identity policy) [SEC](#)
description (identity profile) [SEC](#)
description (interface) [IR](#), [DIA](#)
description (isakmp peer) [SEC](#)

description (l2 vfi) **MP**
description (mac-tunnel) **CE**
description (mobile networks) **IMO**
description (route server context) **BGP, SBCD**
description (ruleset) **TSV**
description (service group) **QOS**
description (session border controller) **SBCD**
description (sip-opt) **SBCD**
description (trigger) **SNMP**
description (trunk group) **VR**
description (voice source group) **VR**
dest-ip **CBL**
dest-ip (flow) **MM**
destination **FNF, MM**
destination (IP multiplexing) **IMO**
destination (am-group) **SLA**
destination (call home) **HA**
destination access-list **SSG**
destination e164-pattern-map **VR**
destination host **SEC, MWG**
destination range **SSG**
destination realm **SEC, MWG**
destination uri **VR**
destination-glean **IPV6**
destination-pattern **IPV6, VR**
destination-pattern (interface) **VR**
destination-realm **MWG**
detect v54 channel-group **VR**
dev **CBL**
device (identity profile) **SEC**
device-accept **AN**
device-id **VR**
device-role **IPV6, SEC**
device-role (DHCPv6 Guard) **IAD**
device-sensor accounting **SEC**
device-sensor filter-list cdp **SEC**

debug smrp mcache through e

device-sensor filter-list dhcp SEC
device-sensor filter-list lldp SEC
device-sensor filter-spec SEC
device-sensor notify SEC
df QOS
dfs band block WL
dhcp (IKEv2) SEC
dhcp (IP SLA) SLA
dhcp interface VR
dhcp server (isakmp) SEC
dhcp timeout SEC
dhcp-gateway-address MWG
dhcp-server MWG
diag CF
diagnostic bootup level CF
diagnostic dns CF
diagnostic event-log size CF
diagnostic level CF, IR
diagnostic load CBL
diagnostic monitor CF
diagnostic ondemand CF
diagnostic ondemand action-on-failure CBL
diagnostic ondemand iterations CBL
diagnostic schedule module CF
diagnostic start CF
diagnostic stop CF
diagnostic unload CBL
diagnostic-signature HA
dial-control-mib VR
dial-peer cor custom VR, DIA
dial-peer cor list VR, DIA
dial-peer data VR
dial-peer hunt VR
dial-peer inbound selection sip-trunk VR
dial-peer no-match disconnect-cause VR
dial-peer outbound status-check pots VR

dial-peer search type VR
dial-peer terminator VR
dial-peer video VR
dial-peer voice IPV6, VR
dial-plan-suffix SBCD
dial-shelf split backplane-ds0 DIA
dial-shelf split slots DIA
dial-shelf split slots none DIA
dial-shelf split slots remove DIA
dial-tdm-clock IR, DIA
dial-type VR
dialer DIA
dialer aaa SEC
dialer callback-secure DIA
dialer callback-server DIA
dialer called DIA
dialer caller DIA
dialer clid group DIA
dialer congestion-threshold DIA
dialer dnis group DIA
dialer dns DIA
dialer dtr DIA
dialer enable-timeout DIA
dialer extsig VR
dialer fast-idle (interface) DIA
dialer fast-idle (map-class) DIA
dialer hold-queue DIA
dialer idle-timeout (interface) DIA
dialer idle-timeout (template) DIA
dialer in-band DIA
dialer isdn DIA
dialer isdn short-hold DIA
dialer load-threshold DIA
dialer map DIA
dialer map snapshot DIA
dialer max-call DIA

debug smrp mcache through e

dialer order [DIA](#)
dialer outgoing [DIA](#)
dialer persistent [DIA](#)
dialer pool [DIA](#)
dialer pool-member [DIA](#)
dialer pre-classify [DIA](#)
dialer preemption level [VR](#)
dialer priority [DIA](#)
dialer redial [DIA](#)
dialer remote-name [DIA](#)
dialer reserved-links [DIA](#)
dialer rotary-group [DIA](#)
dialer rotor [DIA](#)
dialer string [DIA](#)
dialer string (dialer profiles) [DIA](#)
dialer string (legacy DDR) [DIA](#)
dialer string trunkgroup [DIA](#)
dialer trunkgroup [VR](#)
dialer voice-call [DIA](#)
dialer vpdn [VPD](#), [DIA](#)
dialer wait-for-carrier-time (interface) [DIA](#)
dialer wait-for-carrier-time (map-class) [DIA](#)
dialer wait-for-line-protocol [DIA](#)
dialer watch-disable [DIA](#)
dialer watch-group [DIA](#)
dialer watch-list [DIA](#)
dialer watch-list delay [DIA](#)
dialer-group [BBA](#), [IPV6](#), [DIA](#)
dialer-group (template) [DIA](#)
dialer-list protocol [BBA](#), [IPV6](#)
dialer-list protocol (Dial) [DIA](#)
diameter [SBCD](#)
diameter origin host [SEC](#), [MWG](#)
diameter origin realm [SEC](#), [MWG](#)
diameter peer [SEC](#), [MWG](#)
diameter redundancy [SEC](#), [MWG](#)

diameter timer SEC, MWG
diameter vendor support MWG
diameter vendor supported SEC
digest WAN
digit VR
digit-strip VR
digital-filter VR
dir CF, CBL
direct-inward-dial VR
dis CBL
disable CF
disable (CFM-AIS-link) CE
disable (TN3270) IBM
disable open-media-channel SEC
disable-early-media 180 VR
disable-early-media through dualtone VR
disc_pi_off VR
discard-route OSPF
discard-route (IPv6) IPV6
disconnect DIA
disconnect qdm QOS
disconnect ssh SEC
disconnect-ack VR
disconnect-character CF
discontinuity object (expression) SNMP
discover (cns) CNS
discover (epl) SLA
discover-mn-detach IMO
dispatch-character CF
dispatch-machine CF
dispatch-timeout CF
distance WL
distance (IP) IRI
distance (IPv6 EIGRP) IPV6, EIGRP
distance (IPv6 Mobile) IPV6
distance (IPv6) IPV6

debug smrp mcache through e

distance (ISO CLNS) ISO
distance (OSPF) OSPF
distance (OSPFv3) IPV6
distance bgp BGP
distance bgp (IPv6) IPV6
distance eigrp EIGRP
distance ospf OSPF
distribute-list in IPX
distribute-list in (BGP) BGP
distribute-list in (IP) IRI
distribute-list out IPX
distribute-list out (BGP) BGP
distribute-list out (IP) IRI
distribute-list prefix-list (IPv6 EIGRP) IPV6, EIGRP
distribute-list prefix-list (IPv6 OSPF) IPV6
distribute-list prefix-list (IPv6 RIP) IPV6
distribute-list prefix-list (OSPFv3) IPV6
distribute-sap-list in IPX
distribute-sap-list out IPX
distribution SLA
distributions-of-statistics-kept SLA
div-address SBCD
div-address (header) SBCD
dlsw allroute-netbios IBM
dlsw allroute-sna IBM
dlsw bgroup-list IBM
dlsw bridge-group IBM
dlsw cache-ignore-netbios-datatype IBM
dlsw disable IBM
dlsw duplicate-path-bias IBM
dlsw explorerq-depth IBM
dlsw group-cache disable IBM
dlsw group-cache max-entries IBM
dlsw history-log IBM
dlsw icannotreach saps IBM
dlsw icanreach IBM

dlsw llc2 nornr [IBM](#)
dlsw load-balance [IBM](#)
dlsw local-peer [IBM](#)
dlsw mac-addr [IBM](#)
dlsw max-multiple-rifs [IBM](#)
dlsw multicast [IBM](#)
dlsw netbios-cache-length [IBM](#)
dlsw netbios-keepalive-filter [IBM](#)
dlsw netbios-name [IBM](#)
dlsw peer-ipaddr [SLA](#)
dlsw peer-log-changes [IBM](#)
dlsw peer-on-demand-defaults [IBM](#)
dlsw port-list [IBM](#)
dlsw prom-peer-defaults [IBM](#)
dlsw redundant-rings [IBM](#)
dlsw remote-peer frame-relay [IBM](#)
dlsw remote-peer fst [IBM](#)
dlsw remote-peer interface [IBM](#)
dlsw remote-peer tcp [IBM](#)
dlsw ring-list [IBM](#)
dlsw rsvp [IBM](#)
dlsw timer [IBM](#)
dlsw timer connect-timeout [IBM](#)
dlsw timer local-connect-timeout [IBM](#)
dlsw tos disable [IBM](#)
dlsw tos map [IBM](#)
dlsw transparent map [IBM](#)
dlsw transparent redundancy-enable [IBM](#)
dlsw transparent switch-support [IBM](#)
dlsw transparent timers [IBM](#)
dlsw udp-disable [IBM](#)
dlur [IBM](#)
dlus-backup [IBM](#)
dn [SEC](#)
dn (IKEv2) [SEC](#)
dnis (AAA preauthentication) [SEC](#)

■ debug smrp mcache through e

dnis (DNIS group) VR
dnis (RADIUS) SEC
dnis (VPDN) VPD
dnis bypass (AAA preauthentication configuration) SEC
dnis group DIA
dnis-map VR
dnis-prefix all service SSG
dns SEC
dns (IP SLA) SLA
dns forwarder IAD
dns forwarding IAD
dns forwarding source-interface IAD
dns primary MWG
dns-server IAD
dns-server (IPv6) IAD, IPV6
dns-server (config-dhcp-global-options) IAD
dns-timeout SEC
dnsix-dmdp retries SEC
dnsix-dmdp retries through dynamic SEC
dnsix-nat authorized-redirection SEC
dnsix-nat primary SEC
dnsix-nat secondary SEC
dnsix-nat source SEC
dnsix-nat transmit-count SEC
do CF
docsis cvc mfg CBL
docsis cvc mso CBL
docsis cvc test CBL
docsis-policy CBL
docsis-version CBL
domain VPD, SAF
domain (AAA) SEC
domain (isakmp-group) SEC
domain list IAD
domain lookup IAD
domain multicast IAD

domain name IAD
domain name-server IAD
domain name-server interface IAD
domain resolver source-interface IAD
domain retry IAD
domain round-robin IAD
domain timeout IAD
domain-id IBM, AN
domain-id (OSPF) OSPF
domain-id (OSPFv3) OSPF
domain-name SBCD
domain-name (DHCP) IAD
domain-name (IPv6) IAD, IPV6
domain-name (annex G) VR
domain-password IRS
domain-stripping SEC
domain-tag OSPF
dot11 aaa authentication mac-authen filter-cache WL
dot11 aaa csid WL
dot11 aaa dot1x compliance WL
dot11 activity-timeout WL
dot11 extension aironet WL
dot11 holdoff-time WL
dot11 igmp snooping-helper WL
dot11 location isocc WL
dot11 mbssid WL
dot11 phone WL
dot11 priority-map avid WL
dot11 qos class WL
dot11 qos mode wmm WL
dot11 ssid WL
dot11 syslog WL
dot11 vlan-name WL
dot1q tunneling ethertype IR, LSW
dot1x client-timeout WL
dot1x control-direction SEC

■ debug smrp mcache through e

dot1x credentials SEC
dot1x critical (global configuration) SEC
dot1x critical (interface configuration) SEC
dot1x default SEC
dot1x guest-vlan SEC
dot1x guest-vlan supplicant SEC
dot1x host-mode SEC
dot1x initialize SEC
dot1x mac-auth-bypass SEC
dot1x max-reauth-req SEC
dot1x max-req SEC
dot1x max-start SEC
dot1x multi-hosts SEC
dot1x multiple-hosts SEC
dot1x pae SEC
dot1x port-control SEC
dot1x re-authenticate (EtherSwitch) SEC
dot1x re-authenticate (privileged EXEC) SEC
dot1x re-authentication (EtherSwitch) SEC
dot1x reauth-period WL
dot1x reauthentication SEC
dot1x supplicant interface SEC
dot1x system-auth-control SEC
dot1x timeout SEC
dot1x timeout (EtherSwitch) SEC
down-when-looped IR
downgrade bgp OER
downgrade bgp (PfR) PFR
download CBL
download exclude-profile (SSG PTA-MD) SSG
download exclude-profile (SSG dial-out) SSG
download exclude-profile (SSG-auto-domain) SSG
downstream CBL
downstream cable CBL
downstream integrated-cable rf-channel (interface) CBL
downstream local upstream CBL

downstream modular-cable rf-channel **CBL**
downstream modular-cable rf-channel (interface) **CBL**
downward-compatible-config **CF**
dpd **SEC**
dre upload **WAN**
dre-hints enable **WAN**
drop **QOS**
drop (ISG) **ISG**
drop (type access-control) **SEC**
drop (zone-based policy) **SEC**
drop-last-conferee **VR**
drop-unsecure **IPV6, SEC**
ds0 busyout (channel) **DIA**
ds0 busyout (voice) **VR**
ds0 busyout-threshold **DIA**
ds0-group (E1) **VR**
ds0-group (J1 controller) **IR**
ds0-group (T1) **VR**
ds0-group (controller e1) **DIA**
ds0-num **VR**
dscp **QOS, SBCD**
dscp (Flexible NetFlow) **FNF, MM**
dscp (Frame Relay VC-bundle-member) **WAN**
dscp (IP SLA video) **SLA**
dscp (IP SLA) **SLA**
dscp media **VR**
dscp-profile **VR**
dsl enable-training-log **BBA**
dsl equipment-type **BBA**
dsl gain-setting rx-offset **BBA**
dsl gain-setting tx-offset **BBA**
dsl linerate **BBA**
dsl lom **BBA**
dsl max-tone-bits **BBA**
dsl noise-margin **BBA**
dsl operating-mode **BBA**

■ debug smrp mcache through e

dsl operating-mode (ADSL over ISDN) **BBA**
dsl operating-mode gshdsl **BBA**
dsl power-cutback **BBA**
dsl-group **IR**
dsl-line-info-forwarding **VPD**
dsl-mode shdsl symmetric annex **IR, BBA**
dsn **VR**
dsp allocation signaling dspid **VR**
dsp services dspfarm **VR**
dspfarm (DSP farm) **VR**
dspfarm (voice-card) **VR**
dspfarm confbridge maximum **VR**
dspfarm connection interval **VR**
dspfarm profile **IPV6, VR**
dspfarm rtp timeout **VR**
dspfarm transcoder maximum sessions **VR**
dspint dspfarm **VR**
dspu activation-window **IBM**
dspu default-pu **IBM**
dspu enable-host (QLLC) **IBM**
dspu enable-host (SDLC) **IBM**
dspu enable-host (Token Ring Ethernet)
dspu enable-pu (Ethernet Frame Relay)
dspu enable-pu (QLLC) **IBM**
dspu enable-pu (SDLC) **IBM**
dspu host (Frame Relay) **IBM**
dspu host (QLLC) **IBM**
dspu host (SDLC) **IBM**
dspu host (Token Ring Ethernet)
dspu lu **IBM**
dspu ncia **IBM**
dspu ncia enable-pu **IBM**
dspu notification-level **IBM**
dspu pool **IBM**
dspu pu (Frame Relay) **IBM**
dspu pu (QLLC) **IBM**

dsru pu (SDLC) IBM
dsru pu (Token Ring Ethernet)
dsru rsrb IBM
dsru rsrb enable-host IBM
dsru rsrb enable-pu IBM
dsru rsrb start IBM
dsru start IBM
dsru vdlc IBM
dsru vdlc enable-host IBM
dsru vdlc enable-pu IBM
dsru vdlc start IBM
dst-address SBCD
dst-address (editor) SBCD
dst-adjacency SBCD
dsu bandwidth IR
dsu mode IR
dte-invert-txc IR
dtls port SEC
dtmf disable sip SBCD
dtmf sip SBCD
dtmf timer inter-digit VR
dtmf-duration SBCD
dtmf-duration (session border controller) SBCD
dtmf-interworking VR
dtmf-relay (Voice over Frame Relay) VR
dtmf-relay (Voice over IP) VR
dualtone VR
duplex IR
duration CBL, SBCD
duration (IP SLA video) SLA
duration time SLA
dxi interface-dfa IR
dxi map ATM
dxi pvc ATM
dxs3mode IR
dynamic SEC

■ debug smrp mcache through e

dynamic mag learning IMO

dynamic-eid LISP

E

e164 VR

e2-clockrate IR

e911 VR

eap SEC

eap (IKEv2 profile) SEC

eap-user ignore-open-session ISG

early-media-deny SBCD

early-media-timeout SBCD

early-media-type SBCD

early-offer VR

early-token-release IR

echo IRI, MP

echo-cancel comfort-noise VR

echo-cancel compensation VR

echo-cancel coverage VR

echo-cancel enable VR

echo-cancel enable (controller) VR

echo-cancel erl worst-case VR

echo-cancel loopback VR

echo-cancel mode VR

echo-cancel suppressor VR

echo-interval MWG

eckeypair SEC

edit SBCD

edit-cic SBCD

edit-src SBCD

editing CF

editor SBCD

editor-list SBCD

editor-type SBCD

efci-bit WAN

efm-grp IR

eid-notify authentication-key LISP

eid-notify key **LISP**
eid-prefix (LISP site) **LISP**
eid-table **LISP**
eigrp upgrade-cli **EIGRP**
eigrp default-route-tag **EIGRP**
eigrp delay **MTR**
eigrp event-log-size **EIGRP, IPV6**
eigrp interface **EIGRP, IR, IMO**
eigrp log-neighbor-changes **EIGRP, IPV6, SAF**
eigrp log-neighbor-warnings **EIGRP, IPV6, SAF**
eigrp next-hop-self **MTR**
eigrp router-id **EIGRP, IPV6, SAF**
eigrp shutdown **MTR**
eigrp split-horizon **MTR**
eigrp stub **EIGRP, IPV6**
eigrp stub (service-family) **SAF**
eigrp summary-address **MTR**
element **VR**
email (IKEv2 profile) **SEC**
emm **EMM**
emm clear **EMM**
empty-ssl-fragment-insertion **WAN**
emptycapability **VR**
emulate cisco h323 bandwidth **VR**
emulation-mode **IR**
enable **SEC, CF**
enable (TN3270) **IBM**
enable (bulk statistics) **SNMP**
enable (event) **SNMP**
enable (expression) **SNMP**
enable aaa accounting **IMO**
enable last-resort **CF**
enable password **SEC**
enable secret **SEC**
enable sessionmgr **IMO**
enabled (IPS) **SEC**

debug smrp mcache through e

enabled (aggregation cache) [NF](#)
enabled (enforce-rule) [CBL](#)
encap [WSMA](#)
encap (proxy mobile IPv6) [IMO](#)
encap clear-channel standard [VR](#)
encap-sequence [DIA](#)
encapsulation [IR](#), [IPV6](#)
encapsulation (ATM) [ATM](#)
encapsulation (Any Transport over MPLS) [MP](#), [WAN](#)
encapsulation (Frame Relay VC-bundle) [WAN](#)
encapsulation (L2TP) [WAN](#)
encapsulation (Layer 2 local switching) [ATM](#), [MP](#), [WAN](#)
encapsulation (pseudowire) [MP](#)
encapsulation alc [IBM](#)
encapsulation atm-ces [VR](#)
encapsulation atm-dxi [ATM](#)
encapsulation bstun [IBM](#)
encapsulation cpp [DIA](#)
encapsulation default [WAN](#)
encapsulation dot1ah isid [CE](#)
encapsulation dot1q [MP](#), [LSW](#)
encapsulation dot1q (service instance) [WAN](#)
encapsulation dot1q second-dot1q [WAN](#)
encapsulation frame-relay [WAN](#)
encapsulation frame-relay mfr [WAN](#), [IPV6](#)
encapsulation gtp [MWG](#)
encapsulation isl [LSW](#)
encapsulation l2tpv3 [WAN](#)
encapsulation lapb [WAN](#)
encapsulation priority-tagged [ATM](#)
encapsulation sde [LSW](#)
encapsulation sdlc [IBM](#)
encapsulation sdlc-primary [IBM](#)
encapsulation sdlc-secondary [IBM](#)
encapsulation smds [WAN](#)
encapsulation stun [IBM](#)

encapsulation untagged **WAN**
encapsulation untagged dot1q second-dot1q **ATM**
encapsulation uts **IBM**
encapsulation x25 **WAN**
encoding h450 call-identity **VR**
encoding h450 call-identity itu **VR**
encryption **VR**
encryption (IKE policy) **SEC, IPV6**
encryption (IKEv2 proposal) **SEC**
encryption key **WL**
encryption mode ciphers **WL**
encryption mode wep **WL**
encryption mppe **VPD**
encryptorder **IBM**
end **CF**
end (satellite initial configuration) **IR**
endpoint **SLA**
endpoint alt-ep collect **VR**
endpoint alt-ep h323id **VR**
endpoint circuit-id h323id **VR**
endpoint max-calls h323id **VR**
endpoint naming **VR**
endpoint resource-threshold **VR**
endpoint ttl **VR**
enforce-checksum **SEC**
enforced qos-profile **CBL**
enforcement **IPV6**
engine (IPS) **SEC**
enhanced-history **SLA**
enrollment **SEC**
enrollment command **SEC**
enrollment credential **SEC**
enrollment http-proxy **SEC**
enrollment mode ra **SEC**
enrollment profile **SEC**
enrollment retry count **SEC**

debug smrp mcache through e

enrollment retry period SEC
enrollment selfsigned SEC
enrollment terminal (ca-profile-enroll) SEC
enrollment terminal (ca-trustpoint) SEC, IPV6
enrollment url (ca-profile-enroll) SEC
enrollment url (ca-identity) SEC
enrollment url (ca-profile-enroll) SEC
enrollment url (ca-trustpoint) SEC, IPV6
entry SBCD
entry (enum) SBCD
enum SBCD
environment (diagnostic signature) HA
environment temperature-controlled CF
environment-monitor shutdown temperature CF
eou allow SEC
eou clientless SEC
eou default SEC
eou initialize SEC
eou logging SEC
eou max-retry SEC
eou port SEC
eou rate-limit SEC
eou revalidate SEC
eou timeout SEC
equipment loopback IR
erase CF
erase bootflash CF
erase vfc VR
errdisable detect cause CF, IR
errdisable recovery CF, IR
errdisable recovery cause mac-security CE
errdisable recovery cause mlacp-minlink CE
error throttling IR
error-category VR
error-code-override VR
error-correction VR

error-msg SEC
error-profile SBCD
error-url SEC
escape-character CF
esmc mode ql-disabled IR
esmc process IR
estimate bandwidth QOS
ethernet cfm ais CE
ethernet cfm ais link-status CE
ethernet cfm ais link-status global CE
ethernet cfm alarm CE
ethernet cfm cc CE
ethernet cfm cc enable level evc CE
ethernet cfm cc enable level vlan CE
ethernet cfm distribution enable CE
ethernet cfm domain level CE
ethernet cfm enable CE
ethernet cfm enable (interface) CE
ethernet cfm global CE
ethernet cfm ieee CE
ethernet cfm interface CE
ethernet cfm logging CE
ethernet cfm mep crosscheck CE
ethernet cfm mep crosscheck start-delay CE
ethernet cfm mep crosscheck through location prefer CE
ethernet cfm mep domain mpid CE
ethernet cfm mep level mpid vlan CE
ethernet cfm mip CE
ethernet cfm mip level CE
ethernet cfm slm max CE
ethernet cfm slm timeout CE
ethernet cfm traceroute cache CE
ethernet cfm traceroute cache hold-time CE
ethernet cfm traceroute cache size CE
ethernet echo mpid SLA
ethernet evc WAN, CE

debug smrp mcache through e

ethernet event microwave **CE**
ethernet jitter mpid **SLA**
ethernet lmi **CE**
ethernet lmi ce-vlan map **CE**
ethernet lmi global **CE**
ethernet lmi interface **CE**
ethernet loopback local interface **CE**
ethernet loopback permit **CE**
ethernet mac limit action flooding disable **CE**
ethernet mac limit maximum addresses **CE**
ethernet mac-flush notification mirp **CE**
ethernet mac-tunnel virtual **CE**
ethernet oam **CE**
ethernet oam link-monitor frame **CE**
ethernet oam link-monitor frame-period **CE**
ethernet oam link-monitor frame-seconds **CE**
ethernet oam link-monitor high-threshold action **CE**
ethernet oam link-monitor on **CE**
ethernet oam link-monitor receive-crc **CE**
ethernet oam link-monitor supported **CE**
ethernet oam link-monitor symbol-period **CE**
ethernet oam link-monitor transmit-crc **CE**
ethernet oam mib log size **CE**
ethernet oam remote-loopback **CE**
ethernet oam remote-loopback (interface) **CE**
ethernet ring g8032 **CE**
ethernet ring g8032 profile **CE**
ethernet subscriber **CE**
ethernet subscriber session **CE**
ethernet subscriber static **CE**
ethernet tcn-propagation **CE**
ethernet uni **CE**
ethernet y1731 delay **SLA**
ethernet y1731 delay receive **SLA**
ethernet y1737 loss **SLA**
ethernet-transit-oui **IBM**

eui-interface [IPV6](#)
evaluate [SEC](#)
evaluate (IPv6) [IPV6, SEC](#)
event application [EEM](#)
event cli [EEM](#)
event counter [EEM](#)
event ethernet microwave clear-sd [CE](#)
event ethernet microwave sd [CE](#)
event gold [EEM](#)
event identity [EEM](#)
event interface [EEM](#)
event ioswdsysmon [EEM](#)
event ipsla [EEM](#)
event manager applet [EEM](#)
event manager detector routing [EEM](#)
event manager detector rpc [EEM](#)
event manager directory user [EEM](#)
event manager directory user repository [EEM](#)
event manager environment [EEM](#)
event manager history size [EEM](#)
event manager policy [EEM](#)
event manager run [EEM](#)
event manager scheduler [EEM](#)
event manager scheduler clear [EEM](#)
event manager scheduler hold [EEM](#)
event manager scheduler modify [EEM](#)
event manager scheduler release [EEM](#)
event manager scheduler script [EEM](#)
event manager scheduler suspend [EEM](#)
event manager session cli username [EEM](#)
event manager update user policy [EEM](#)
event mat [EEM](#)
event neighbor-discovery [EEM](#)
event nf [EEM](#)
event none [EEM](#)
event oir [EEM](#)

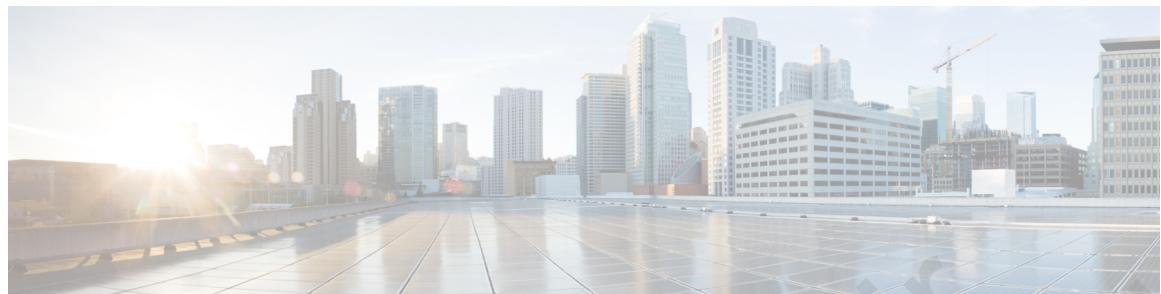
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debug smrp mcache through e
```

event owner [SNMP](#)
event process [EEM](#)
event resource [EEM](#)
event rf [EEM](#)
event routing [EEM](#)
event rpc [EEM](#)
event snmp [EEM](#)
event snmp-notification [EEM](#)
event snmp-object [EEM](#)
event syslog [EEM](#)
event timer [EEM](#)
event track [EEM](#)
event wdsysmon [EEM](#)
event-action [SEC](#)
event-log [IPV6, VR](#)
event-log (OSPFv3) [IPV6](#)
event-log (Privileged EXEC) [VR](#)
event-log dump ftp [VR](#)
event-log error-only [VR](#)
event-log max-buffer-size [VR](#)
exception access-group [SEC](#)
exception core-file [BSM](#)
exception crashinfo buffersize [BSM](#)
exception crashinfo dump [BSM](#)
exception crashinfo file [BSM](#)
exception crashinfo maximum files [BSM](#)
exception data-corruption [BSM](#)
exception delay-dump [BSM](#)
exception dump [BSM](#)
exception linecard [BSM](#)
exception memory [BSM](#)
exception memory ignore overflow [BSM](#)
exception protocol [BSM](#)
exception pxf [CBL](#)
exception region-size [BSM](#)
exception slot [IBM](#)

exception spurious-interrupt **BSM**
exclude **SSG**
exclude (SSG PTA-MD) **SSG**
exclude dnis-prefix **SSG**
exclude-address **MP**
exclusion-list **CE**
exclusive-domain **SEC**
exec **CF**
exec-banner **CF**
exec-character-bits **CF**
exec-timeout **CF**
execute (Flexible NetFlow) **FNF**
execute-on **CF**
exit (EXEC) **CF**
exit (LSP Attributes) **MP**
exit (global) **CF**
exit (satellite initial configuration) **IR**
exit-address-family **EIGRP, MP**
exit-af-interface **EIGRP**
exit-af-topology **EIGRP**
exit-bmp-server-mode (bmp) **BGP**
exit-global-af **MTR**
exit-if-topology **MTR**
exit-if-vnet **SBCD, EVN**
exit-peer-policy **BGP**
exit-peer-session **BGP**
exit-route-server-context **BGP, SBCD**
exit-service-family **SAF**
exit-sf-interface **SAF**
exit-sf-topology **SAF**
exit-topo **MTR**
exit-vrf-list **SBCD, EVN**
exp **MP, WAN**
exp (IP SLA) **SLA**
expect **SLB**
expect-factor **VR**

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■ debug smrp mcache through e
```

expire after OER
expire after (PfR) PFR
expires-header SBCD
explicit-prefix IPV6
exponential-weighting-constant QOS
export destination NF
export destination sctp (NetFlow aggregation cache) NF
export map MP, BGP
export map (VRF table to global table) BGP
export template NF
export version NF
export-protocol FNF, MM
exporter FNF, MM
exporter (PfR) PFR
expression SNMP
extended-port MP
external-client SAF
extsig mgcp VR



f through h

- [Finding IOS Command Information, page 187](#)
- [f through h, page 190](#)

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 6: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference

CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

f through h

F

fabric buffer-reserve [IR](#)
fabric clear-block [IR](#)
fabric error-recovery fabric-switchover (virtual switch) [IR](#)
fabric lcd-banner [IR](#)
fabric required [IR](#)
fabric switching-mode allow [IR](#), [IPV6](#)
fabric switching-mode force bus-mode [IR](#)
fabric timer [IR](#)
facility-alarm [IR](#)
facility-alarm (ubr10012) [CBL](#)
facility-alarm critical exceed-action shutdown [IR](#)
facility-alarm detect [IR](#)
failaction (firewall farm) [SLB](#)
failaction (server farm) [SLB](#)
faildetect (DNS probe) [SLB](#)
faildetect (custom UDP probe) [SLB](#)
faildetect (ping probe) [SLB](#)
faildetect inband (real server) [SLB](#)
faildetect numconns (real server) [SLB](#)
failover group-number [DIA](#)
failure-retry-delay (bmp) [BGP](#)
fair-queue (DWFQ) [QOS](#)
fair-queue (WFQ) [QOS](#)
fair-queue (class-default) [QOS](#)
fair-queue (policy-map class) [QOS](#)
fair-queue aggregate-limit [QOS](#)
fair-queue individual-limit [QOS](#)
fair-queue limit [QOS](#)
fair-queue qos-group [QOS](#)
fair-queue tos [QOS](#)
fair-queue weight [QOS](#)
falling (test threshold) [SNMP](#)

farm-weight **SLB**
fast-flood **IRS**
fast-register disable **SBCD**
fast-register-interval **SBCD**
fast-reroute keep-all-paths **OSPF**
fast-reroute load-sharing disable **IRS, IRI**
fast-reroute load-sharing disable (EIGRP) **EIGRP**
fast-reroute per-prefix **IRS, IRI**
fast-reroute per-prefix (EIGRP) **EIGRP**
fast-reroute per-prefix enable (OSPF) **OSPF**
fast-reroute per-prefix remote-lfa maximum-cost **OSPF**
fast-reroute per-prefix remote-lfa tunnel **OSPF**
fast-reroute remote-lfa **IRS**
fast-reroute tie-break **IRS, IRI**
fast-reroute tie-break (EIGRP) **EIGRP**
fast-reroute tie-break (OSPF) **OSPF**
fax interface-type **VR**
fax protocol (dial peer) **VR**
fax protocol (voice-service) **VR**
fax protocol t38 (dial peer) **VR**
fax protocol t38 (voice-service) **VR**
fax rate (dial peer) **VR**
fax rate (pots) **VR**
fax rate (voice-service) **VR**
fax receive called-subscriber **VR**
fax send center-header **VR**
fax send coverpage comment **VR**
fax send coverpage e-mail-controllable **VR**
fax send coverpage enable **VR**
fax send coverpage show-detail **VR**
fax send left-header **VR**
fax send max-speed **VR**
fax send right-header **VR**
fax send transmitting-subscriber **VR**
fax-relay (dial peer) **VR**
fax-relay (voice-service) **VR**

fddi burst-count [IR](#)
fddi c-min [IR](#)
fddi cmt-signal-bits [IR](#)
fddi duplicate-address-check [IR](#)
fddi encapsulate [IR](#)
fddi frames-per-token [IR](#)
fddi smt-frames [IR](#)
fddi t-out [IR](#)
fddi tb-min [IR](#)
fddi tl-min-time [IR](#)
fddi token-rotation-time [IR](#)
fddi valid-transmission-time [IR](#)
fdl [IR](#), [WAN](#)
fdl through frame-relay lapf n200 [WAN](#)
feedback [QOS](#)
fhrp version vrrp v3 [FHP](#)
file privilege [CF](#)
file prompt [CF](#)
file verify auto [CF](#)
file-acct flush [VR](#)
file-acct reset [VR](#)
filename (session border controller) [SBCD](#)
filter (ISG RADIUS proxy) [ISG](#)
filter tunnel [SEC](#)
filter voice [VR](#)
filter-for-history [SLA](#)
filter-hash [SEC](#)
filter-id [SEC](#)
filter-version [SEC](#)
fingerprint [SEC](#), [IPV6](#)
firewall [SEC](#)
firmware filename [DIA](#)
firmware location [DIA](#)
firmware upgrade [DIA](#)
first-cac-scope [SBCD](#)
first-cac-table [SBCD](#)

first-call-routing-table **SBCD**
first-inbound-na-table **SBCD**
first-outbound-na-table **SBCD**
first-reg-routing-table **SBCD**
fixed-link-layer-address **IMO**
fixed-link-local-address **IMO**
flapping-delay (bmp) **BGP**
flash-update-threshold **RIP**
flipped-interval (XML Billing) **SBCD**
flipped-size (XML Billing) **SBCD**
flow exporter **FNF**
flow hardware **FNF**
flow hardware mpls-vpn ip **NF**
flow monitor **FNF**
flow monitor type mace **WAN**
flow monitor type performance-monitor **MM**
flow platform **FNF**
flow record **FNF**
flow record type mace **WAN**
flow record type performance-monitor **MM**
flow-label (IP SLA) **SLA**
flow-label enable **MP**
flow-sampler **NF**
flow-sampler-map **NF**
flowcontrol **IR, LSW, DIA**
flowcontrol (line) **LSW**
flowcontrol receive **LSW**
flows **MM**
flush **VR**
flush-at-activation **TSV**
fmtp **VR**
fmtp (codec variant) **SBCD**
fmtp (session border controller) **SBCD**
font-weight:bold;" id=""> **IAD**
force-explicit-null **SLA**
force-local-chap **VPD**

force-signaling-peer [SBCD](#)
format [CF](#)
format (bulk statistics) [SNMP](#)
format global [CNS](#), [XMLPI](#)
forward accounting-on-off [SSG](#)
forward accounting-start-stop [SSG](#)
forward permit l2protocol all [MP](#)
forward-alarms [VR](#)
forward-base [MTR](#)
forward-digits [VR](#)
forwarding-agent [IAP](#)
fpm package-group [SEC](#)
fpm package-info [SEC](#)
fqdn (IKEv2 profile) [SEC](#)
fr-atm connect dlci [WAN](#)
fragment-threshold [WL](#)
frame [CBL](#)
frame (VO profile) [SLA](#)
frame consecutive [SLA](#)
frame interval [SLA](#)
frame offset [SLA](#)
frame size [SLA](#)
frame-relay [IR](#)
frame-relay accounting adjust [WAN](#)
frame-relay adaptive-shaping [WAN](#)
frame-relay address registration auto-address [WAN](#)
frame-relay address registration ip [WAN](#)
frame-relay address-reg enable [WAN](#)
frame-relay bc [WAN](#)
frame-relay be [WAN](#)
frame-relay broadcast-queue [WAN](#)
frame-relay cir [WAN](#)
frame-relay class [WAN](#)
frame-relay congestion threshold de [WAN](#)
frame-relay congestion threshold ecn [WAN](#)
frame-relay congestion-management [WAN](#)

frame-relay custom-queue-list [WAN](#)
frame-relay de-group [WAN](#)
frame-relay de-list [WAN](#)
frame-relay end-to-end keepalive error-threshold [WAN](#)
frame-relay end-to-end keepalive event-window [WAN](#)
frame-relay end-to-end keepalive mode [WAN](#)
frame-relay end-to-end keepalive success-events [WAN](#)
frame-relay end-to-end keepalive timer [WAN](#)
frame-relay fair-queue [WAN](#)
frame-relay fecn-adapt [WAN](#)
frame-relay fragment [WAN](#)
frame-relay fragment end-to-end [WAN](#)
frame-relay fragmentation voice-adaptive [WAN](#)
frame-relay holdq [WAN](#)
frame-relay idle-timer [WAN](#)
frame-relay ifmib-counter64 [WAN](#)
frame-relay interface-dlci [WAN](#), [IPV6](#)
frame-relay interface-dlci switched [WAN](#)
frame-relay interface-queue priority [QOS](#)
frame-relay intf-type [WAN](#), [IPV6](#)
frame-relay inverse-arp [WAN](#)
frame-relay ip rtp compression-connections [QOS](#)
frame-relay ip rtp header-compression [QOS](#)
frame-relay ip rtp priority [QOS](#)
frame-relay ip tcp compression-connections [QOS](#), [WAN](#)
frame-relay ip tcp header-compression [QOS](#), [WAN](#)
frame-relay lapf frmr [WAN](#)
frame-relay lapf k [WAN](#)
frame-relay lapf n200 [WAN](#)
frame-relay lapf n201 [WAN](#)
frame-relay lapf n201 through fr-atm connect dlci [WAN](#)
frame-relay lapf t200 [WAN](#)
frame-relay lapf t203 [WAN](#)
frame-relay lmi-n391dte [WAN](#)
frame-relay lmi-n392dce [WAN](#)
frame-relay lmi-n392dte [WAN](#)

frame-relay lmi-n393dce [WAN](#)
frame-relay lmi-n393dte [WAN](#)
frame-relay lmi-t392dce [WAN](#)
frame-relay lmi-type [WAN](#)
frame-relay local-dlc [WAN](#)
frame-relay map [WAN](#)
frame-relay map bridge [WAN](#)
frame-relay map bridge broadcast [IBM](#)
frame-relay map bstun [IBM](#)
frame-relay map clns [WAN](#)
frame-relay map ip compress [QOS](#)
frame-relay map ip nocompress [QOS](#)
frame-relay map ip rtp header-compression [QOS](#)
frame-relay map ip tcp header-compression [WAN](#)
frame-relay map ipv6 [IPV6](#)
frame-relay map llc2 [IBM](#)
frame-relay map rsrb [IBM](#)
frame-relay mincir [WAN](#)
frame-relay multicast-dlc [WAN](#)
frame-relay multilink ack [WAN, IPV6](#)
frame-relay multilink bandwidth-class [WAN](#)
frame-relay multilink bid [WAN, IPV6](#)
frame-relay multilink hello [WAN, IPV6](#)
frame-relay multilink lid [WAN, IPV6](#)
frame-relay multilink output-threshold [WAN](#)
frame-relay multilink retry [WAN](#)
frame-relay payload-compression [WAN](#)
frame-relay policing [WAN](#)
frame-relay priority-dlc-group [WAN](#)
frame-relay priority-group [WAN](#)
frame-relay pvc [WAN](#)
frame-relay qos-autosense [WAN](#)
frame-relay redundancy auto-sync lmi-sequence-numbers [HA](#)
frame-relay route [WAN](#)
frame-relay svc [WAN](#)
frame-relay switching [WAN, IPV6](#)

frame-relay tc [WAN](#)
frame-relay traffic-rate [WAN](#)
frame-relay traffic-shaping [WAN](#)
frame-relay traps-maximum dlci-status-change [WAN](#)
frame-relay vc-bundle [WAN](#)
frame-relay voice bandwidth [VR](#)
framer-type [ATM](#)
framing [IR](#)
framing (CEM) [IR](#)
framing (E3 controller) [IR](#)
framing (SONET) [IR](#)
framing (T1 E1 controller) [IR](#)
framing (T3 controller) [IR](#)
framing (T3-E3 interface) [IR](#)
fras backup dlsw [IBM](#)
fras ban [IBM](#)
fras ddr-backup [IBM](#)
fras map llc [IBM](#)
fras map sdlc [IBM](#)
fras-host ban [IBM](#)
fras-host bnn [IBM](#)
fras-host dlsw-local-ack [IBM](#)
freq-max-delay [VR](#)
freq-max-deviation [VR](#)
freq-max-power [VR](#)
freq-min-power [VR](#)
freq-pair [VR](#)
freq-power-twist [VR](#)
frequency (IP SLA service performance) [SLA](#)
frequency (IP SLA video) [SLA](#)
frequency (IP SLA) [SLA](#)
frequency (am-schedule) [SLA](#)
frequency (cp-dualtone) [VR](#)
frequency (event trigger) [SNMP](#)
frequency (session parameters) [MM](#)
fsck [CF](#)

ftp get **SLA**
full-duplex **IR**
full-help **CF**

G

g107 bpl **SBCD**
g107 ie **SBCD**
g107a-factor **SBCD**
g709 fec **IR**
g709 odu overhead tti **IR**
g709 odu report **IR**
g709 odu threshold **IR**
g709 otu report **IR**
g709 otu threshold **IR**
g729 annexb-all **VR**
g732 ber **VR**
gatekeeper **VR**
gateway **VR**
gbr traffic-class **MWG**
gcid **VR**
generate grekey **IMO**
generic-pool **IBM**
generic-stream branch **SBCD**
generic-stream callee **SBCD**
generic-stream caller **SBCD**
generic-stream media-type **SBCD**
ggsn csg-group **MWG**
ggsn quota-server **MWG**
glbp authentication **FHP, IPV6**
glbp client-cache maximum **FHP**
glbp forwarder preempt **FHP, IPV6**
glbp ip **FHP**
glbp ipv6 **FHP, IPV6**
glbp load-balancing **FHP, IPV6**
glbp name **FHP, IPV6**
glbp preempt **FHP, IPV6**
glbp priority **FHP, IPV6**

glbp sso [FHP](#)
glbp timers [FHP](#), [IPV6](#)
glbp timers redirect [FHP](#), [IPV6](#)
glbp weighting [FHP](#), [IPV6](#)
glbp weighting track [FHP](#), [IPV6](#)
global [SBCD](#)
global (application configuration) [VR](#)
global-address-family ipv4 [MTR](#)
gprs access-point-list [MWG](#)
gprs canonical-qos best-effort bandwidth-factor [MWG](#)
gprs canonical-qos gsn-resource-factor [MWG](#)
gprs canonical-qos map tos [MWG](#)
gprs canonical-qos premium mean-throughput-deviation [MWG](#)
gprs charging cdr-aggregation-limit [MWG](#)
gprs charging cdr-option [MWG](#)
gprs charging cg-path-requests [MWG](#)
gprs charging characteristics reject [MWG](#)
gprs charging container change-limit [MWG](#)
gprs charging container sgsn-change-limit [MWG](#)
gprs charging container time-trigger [MWG](#)
gprs charging container volume-threshold [MWG](#)
gprs charging disable [MWG](#)
gprs charging flow-control private-echo [MWG](#)
gprs charging header short [MWG](#)
gprs charging interface source loopback [MWG](#)
gprs charging map data tos [MWG](#)
gprs charging message transfer-request command-ie [MWG](#)
gprs charging message transfer-request possibly-duplicate [MWG](#)
gprs charging message transfer-response number-responded [MWG](#)
gprs charging packet-queue-size [MWG](#)
gprs charging path-protocol [MWG](#)
gprs charging port [MWG](#)
gprs charging profile [MWG](#)
gprs charging profile default [MWG](#)
gprs charging reconnect [MWG](#)
gprs charging release [MWG](#)

gprs charging roamers MWG
gprs charging send-buffer MWG
gprs charging server-switch-timer MWG
gprs charging service-mode MWG
gprs charging service-record include MWG
gprs charging switchover priority MWG
gprs charging tariff-time MWG
gprs charging transfer interval MWG
gprs compliance 3gpp ggsn r4.0 MWG
gprs dcca profile MWG
gprs default aaa-accounting MWG
gprs default aaa-group MWG
gprs default aggregate MWG
gprs default charging-gateway MWG
gprs default dhcp-server MWG
gprs default ip-address-pool MWG
gprs default map-converting-gsn MWG
gprs delay-qos map tos MWG
gprs dfp max-weight MWG
gprs gtp echo-timer dynamic enable MWG
gprs gtp echo-timer dynamic minimum MWG
gprs gtp echo-timer dynamic smooth-factor MWG
gprs gtp error-indication-throttle MWG
gprs gtp ip udp ignore checksum MWG
gprs gtp map signalling tos MWG
gprs gtp n3-buffer-size MWG
gprs gtp n3-requests MWG
gprs gtp path history MWG
gprs gtp path sgsn MWG
gprs gtp path-echo-interval MWG
gprs gtp pdp-context timeout idle MWG
gprs gtp pdp-context timeout session MWG
gprs gtp ppp vtemplate MWG
gprs gtp ppp-regeneration vtemplate MWG
gprs gtp response-message pco ipcp nack MWG
gprs gtp response-message wait-accounting MWG

gprs gtp t3-response MWG
gprs gtp update qos-fail delete MWG
gprs idle-pdp-context purge-timer MWG
gprs iscsi MWG
gprs maximum-pdp-context-allowed MWG
gprs mcc mnc MWG
gprs memory threshold MWG
gprs ms-address exclude-range MWG
gprs pcsef MWG
gprs plmn ip address MWG
gprs qos bandwidth-pool MWG
gprs qos cac-policy MWG
gprs qos default-response requested MWG
gprs qos map canonical-qos MWG
gprs qos map delay MWG
gprs qos map umts MWG
gprs radius attribute chap-challenge MWG
gprs radius attribute quota-server ocs-address MWG
gprs radius attribute session-timeout MWG
gprs radius msisdn first-byte MWG
gprs redundancy MWG
gprs redundancy charging sync-window cdr rec-seqnum MWG
gprs redundancy charging sync-window gtpp seqnum MWG
gprs service-aware MWG
gprs service-mode MWG
gprs service-mode test imsi MWG
gprs slb mode MWG
gprs slb notify MWG
gprs slb vserver MWG
gprs throughput interval MWG
gprs umts-qos dscp unmodified MWG
gprs umts-qos map diffserv-phb MWG
gprs umts-qos map traffic-class MWG
graceful-restart IPV6
graceful-restart helper IPV6
grant auto rollover SEC

grant auto trustpoint SEC
grant none SEC
grant ra-auto SEC
granularity FNF
gre-encap-key IMO
greater-than ISG
greater-than-or-equal ISG
groundstart auto-tip VR
group VR
group (IKE policy) SEC, IPV6
group (IKEv2 proposal) SEC
group (RADIUS) SEC
group (authentication) SEC
group (firewall) IAD, SEC
group (local RADIUS server) SEC
group (multicast-flows) IMC
group (service group) QOS
group (session border controller) SBCD
group auto-reset VR
group cumulative-ack VR
group out-of-sequence VR
group receive VR
group retransmit VR
group session-limit VPD
group set VR
group size SEC
group timer VR
group(firewall) SEC
group-lock SEC
group-object SEC
group-params VR
group-range DIA
gsid MM
gtp SEC, IR
gtp notification cac SLB
gtp pdp-context single pdp-session MWG

gtp pdp-context timeout idle **MWG**
gtp pdp-context timeout session **MWG**
gtp response-message wait-accounting **MWG**
gtp session (virtual server) **SLB**
gtp update qos-fail delete **MWG**
guest-mode (SSID configuration mode) **WL**
gvrp global **LSW**
gvrp mac-learning auto **LSW**
gvrp registration **LSW**
gvrp timer **LSW**
gvrp vlan create **LSW**
gw port (virtual server) **SLB**
gw-accounting **VR**
gw-type-prefix **VR**

H

h225 address **SBCD**
h225 address (session border controller) **SBCD**
h225 alt-ep hunt **VR**
h225 connect-passthru **VR**
h225 display-ie **VR**
h225 h245-address **VR**
h225 h245-address on-connect (H.323 voice-class) **VR**
h225 h245-address on-connect (H.323 voice-service) **VR**
h225 h245-address setup **VR**
h225 id-passthru **VR**
h225 plus-digit passthru **VR**
h225 signal overlap **VR**
h225 start-h245 **VR**
h225 timeout **SBCD**
h225 timeout call-proceeding **VR**
h225 timeout keepalive **VR**
h225 timeout setup **VR**
h225 timeout t302 **VR**
h225 timeout t304 **VR**
h225 timeout tcp call-idle (H.323 voice service) **VR**
h225 timeout tcp establish **VR**

h225 timeout ntf VR
h245 address-check VR
h245 passthru VR
h245 timeout VR
h245-address-pass SBCD
h245-tunnel disable SBCD
h248 allow-all-mg SBCD
h248-association-timeout SBCD
h248-event-storage SBCD
h248-inactivity-duration SBCD
h248-media-alert-event SBCD
h248-napt-package SBCD
h248-preserve-gates SBCD
h248-profile SBCD
h248-profile-version SBCD
h248-version SBCD
h248-version (session border controller) SBCD
h323 VR
h323 (session border controller) SBCD
h323 asr VR
h323 call start VR
h323 gatekeeper VR
h323 h323-id VR
h323 interface VR
h323 qos VR
h323 t120 VR
h323-annexg VR
h323-gateway voip bind srcaddr VR
h323-gateway voip h323-id VR
h323-gateway voip id VR
h323-gateway voip interface VR
h323-gateway voip tech-prefix VR
h323zone-id (voice source group) VR
h450 h450-3 timeout VR
ha-mode graceful-restart BGP
half-duplex IR

half-duplex controlled-carrier [IR](#)
half-duplex timer [IR](#)
hand-off [SSG](#)
hand-off radius [SLB](#)
handle-replaces [VR](#)
hangup-last-active-call [VR](#)
hardware statistics [IPV6](#), [SEC](#)
hardware-address [IAD](#)
hash (IKE policy) [SEC](#), [IPV6](#)
hash (ca-trustpoint) [SEC](#)
hash (cs-server) [SEC](#)
hccp authentication [CBL](#)
hccp authentication key-chain [CBL](#)
hccp bypass version [CBL](#)
hccp channel-switch [CBL](#)
hccp check version [CBL](#)
hccp ds-switch [CBL](#)
hccp lockout [CBL](#)
hccp protect [CBL](#)
hccp resync [CBL](#)
hccp revertive [CBL](#)
hccp reverttime [CBL](#)
hccp switch [CBL](#)
hccp timers [CBL](#)
hccp track [CBL](#)
hccp unlockout [CBL](#)
hccp working [CBL](#)
header [SLB](#)
header (editor) [SBCD](#)
header (session border controller) [SBCD](#)
header-editor [SBCD](#)
header-editor (method) [SBCD](#)
header-name [SBCD](#)
header-name p-asserted-id [SBCD](#)
header-name supported header-value timer insert [SBCD](#)
header-name via passthrough [SBCD](#)

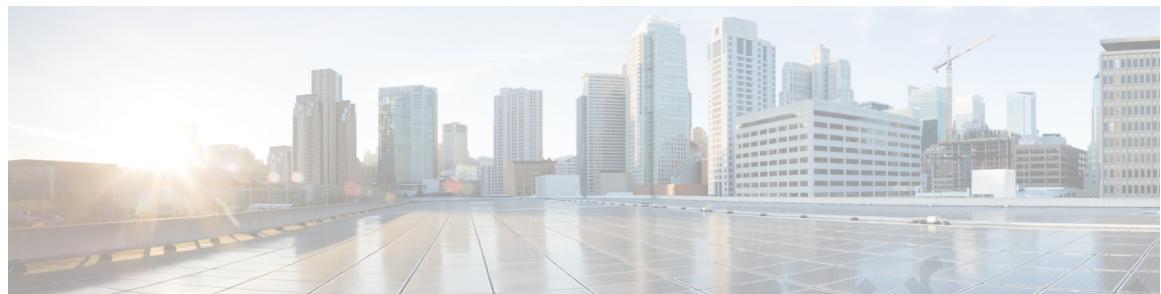
header-passing [VR](#)
header-prio header-name [SBCD](#)
header-prio header-name (editor) [SBCD](#)
header-profile [SBCD](#)
heading [SEC](#)
heart-beat terminate [SBCD](#)
heartbeat [IMO](#)
hello [WAN](#)
hello padding [IRS](#)
hello through lz entropy-check [WAN](#)
hello-interval [EIGRP, SAF](#)
help [CF, CBL](#)
hidden [WAN](#)
hide-url-bar [SEC](#)
hidekeys [CF](#)
history [CF, CBL](#)
history (interface) [IR](#)
history (monitor parameters) [MM](#)
history (session parameters) [MM](#)
history buckets-kept [SLA](#)
history distributions-of-statistics-kept [SLA](#)
history enhanced [SLA](#)
history filter [SLA](#)
history hours-of-statistics-kept [SLA](#)
history interval [SLA](#)
history lives-kept [SLA](#)
history session event-log save-exception-only [VR](#)
history session max-records [VR](#)
history session retain-timer [VR](#)
history size [CF](#)
history statistics-distribution-interval [SLA](#)
history-info [VR](#)
hold-character [CF](#)
hold-media-timeout [SBCD](#)
hold-queue [IR, CBL](#)
hold-resume [VR](#)

hold-time [EIGRP](#), [SAF](#)
holddown [OER](#)
holddown (PfR) [PFR](#)
holding-time [ATM](#)
holdtime [SEC](#), [IMO](#)
home interface [IMO](#)
home-address [IPV6](#)
home-agent [IMO](#)
home-agent (SSG-radius-proxy) [SSG](#)
home-network [IPV6](#)
hop-limit [IPV6](#), [SEC](#)
hopcount [VR](#)
hops-of-statistics-kept [SLA](#)
host [IAD](#)
host (SIP URI) [VR](#)
host (host-list) [IAD](#)
host (webvpn url rewrite) [SEC](#)
host group [IPV6](#)
host overlap [SSG](#)
host-address [OER](#)
host-address (PfR) [PFR](#)
host-registrar [VR](#)
hostname [CF](#), [IPV6](#)
hostname (IKEv2 keyring) [SEC](#)
hostname (L2TP) [WAN](#)
hostname (WebVPN) [SEC](#)
hostname dynamic [IRS](#)
hostname dynamic (OTV) [WAN](#)
hours-of-statistics-kept [SLA](#)
hours-of-statistics-kept (LSP discovery) [SLA](#)
hssi external-loop-request [IR](#)
hssi internal-clock [IR](#)
http (DDNS-update-method) [IAD](#)
http (IP SLA) [SLA](#)
http client cache memory [VR](#)
http client cache query [VR](#)

http client cache refresh VR
http client connection idle timeout VR
http client connection persistent VR
http client connection timeout VR
http client cookie VR
http client post-multipart VR
http client response timeout VR
http client secure-ciphersuite VR
http client secure-trustpoint VR
http proxy-server SEC
http-proxy HA
http-raw-request SLA
http-redirect SEC
hub IR
hunt-on-reject SBCD
hunt-scheme least-idle VR
hunt-scheme least-used VR
hunt-scheme longest-idle VR
hunt-scheme random VR
hunt-scheme round-robin VR
hunt-scheme sequential VR
hunting-mode SBCD
hunting-trigger SBCD
huntstop VR
hw-module bay reload CBL
hw-module boot IR
hw-module energywise level IR
hw-module fan-tray version IR
hw-module interface als restart IR
hw-module main-cpu qa error-recovery IR
hw-module oversubscription IR
hw-module power-supply power-cycle IR
hw-module pxf stall-monitoring IR
hw-module reset CF, IR
hw-module sec-cpu reset IR
hw-module shutdown CF, IR

hw-module shutdown (ubr10012) [CBL](#)
hw-module simulate link-up [IR](#)
hw-module slot [IR](#)
hw-module slot (7600) [IR](#)
hw-module slot (6500) [IR](#)
hw-module slot (7300) [IR](#)
hw-module slot (ASR 1000 Series) [IR](#), [LSW](#)
hw-module slot (ESP Scheduling) [QOS](#)
hw-module slot image [IR](#)
hw-module slot pos [CBL](#)
hw-module slot srp [CBL](#)
hw-module slot subslot only [SEC](#), [IR](#)
hw-module standby [IR](#)
hw-module subslot [IR](#)
hw-module subslot (4400) [IR](#)
hw-module subslot (Channelized SPA Scheduling) [QOS](#)
hw-module subslot (LAN WAN) [IR](#)
hw-module subslot ethernet vlan unlimited [IR](#)
hw-module subslot service-engine session [IR](#)
hw-module subslot session [IR](#)
hw-module subslot shutdown [IR](#)
hw-module subslot shutdown (4400) [IR](#)

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icmp idle-timeout through ipv6 nd autoconfig prefix

- Finding IOS Command Information, page 211
- icmp idle-timeout through ipv6 nd autoconfig prefix, page 214

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 7: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference

CF	Cisco IOS Configuration Fundamentals Command Reference
CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

icmp idle-timeout through ipv6 nd autoconfig prefix

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icmp idle-timeout SEC
icmp idle-timeout through ip http ezvpn SEC
icmp-echo SLA
icmp-jitter SLA
icpif VR
icpif through irq global-request VR
id VR
id (CFM) CE
id (expression) SNMP
id aa-group IR
id software group IR
id vsat IR
ida-client server url SEC
identifier SEC
identifier interface ISG
identifier ip src-addr ISG
identity (IKEv2 keyring) IPV6, SEC
identity (IKEv2 profile) SEC
identity address ipv4 SEC
identity local IPV6, SEC
identity number SEC
identity policy SEC
identity policy (policy-map) QOS
identity profile SEC
identity profile eapoudp SEC
idle (SSG-radius-proxy-timers) SSG
idle (firewall farm TCP protocol) SLB
idle (firewall farm datagram protocol) SLB
idle (virtual server) SLB
idle-pattern IR
idle-time IBM
idle-timeout ATM

idle-timeout (SSG) [SSG](#)
idle-timeout (WSMA) [WSMA](#)
idle-timeout (WebVPN) [SEC](#)
idle-voltage [VR](#)
ids-service-module monitoring [IR](#)
if upon network-service-found [ISG](#)
if-mgr delete [IR](#)
if-state nhrp [SEC](#)
ignore [VR](#)
ignore (ISG) [ISG](#)
ignore (interface) [IR](#), [VR](#)
ignore lsa mospf [OSPF](#)
ignore-dcd [IR](#)
ignore-error-duration [IR](#)
ignore-hw local-loopback [IR](#)
ignore-lsp-errors [ISO](#)
ilmi manage [ATM](#)
ima active-links-minimum [ATM](#)
ima autorestart [ATM](#)
ima clock-mode [ATM](#)
ima differential-delay-maximum [ATM](#)
ima frame-length [ATM](#)
ima restart [ATM](#)
ima test [ATM](#)
ima version [ATM](#)
ima-group [ATM](#)
image encoding [VR](#)
image resolution [VR](#)
imc access-port [IR](#)
imc config file [IR](#)
imc dns [IR](#)
imc ip address default-gateway [IR](#)
imc ip address dhcp [IR](#)
imc ip dhcp [IR](#)
imc remote-manager [IR](#)
imc vlan [IR](#)

impedance VR
import SEC
import all IAD
import dns-server IAD, IPV6
import domain-name IAD, IPV6
import information refresh IAD, IPV6
import ipv4 BGP
import map BGP, MP
import nis address IAD, IPV6
import nis domain-name IAD, IPV6
import nisp address IAD, IPV6
import nisp domain-name IAD, IPV6
import path limit BGP
import path selection BGP
import sip address IAD, IPV6
import sip domain-name IAD, IPV6
import sntp address IAD, IPV6
import topology MTR
import-map BGP, SBCD
ims media-service SBCD
ims pani SBCD
ims realm SBCD
ims rf SBCD
ims rx SBCD
ims rx preliminary-aar-forbid SBCD
inarp ATM
inarp (Frame Relay VC-bundle-member) WAN
inarp-vc ATM
inband-alerting VR
inbound SBCD
inbound secure SBCD
inbound ttl VR
include-local-lan SEC
inclusion-list CE
incoming SEC
incoming alerting VR

incoming called-number (call filter match list) **VR**
incoming called-number (dial peer) **VR**
incoming calling-number (call filter match list) **VR**
incoming dialpeer **VR**
incoming media local ipv4 **VR**
incoming media remote ipv4 **VR**
incoming port **VR**
incoming secondary-called-number **VR**
incoming signaling local ipv4 **VR**
incoming signaling remote ipv4 **VR**
incoming uri **VR**
index **MP**
index (voice class) **VR**
info-digits **VR**
information refresh **IAD, IPV6**
information-element ssidl **WL**
information-type **VR**
infrastructure client **WL**
infrastructure-ssid **WL**
ingress-class-map **QOS**
inherit peer-policy **BGP**
inherit peer-session **BGP**
inherit profile **SBCD**
init-tech-list **CBL**
init-tech-ovr **CBL**
initial-contact force **SEC**
initial-delay (bmp) **BGP**
initiate mode **SEC**
initiate-to **VPD**
initiator **ISG**
initiator unclassified vlan **CE**
inject guard-tone **VR**
inject pause **VR**
inject tone **VR**
inner-cos **SLA**
inner-vlan **SLA**

input IR, CE
input gain VR
input-queue RIP
insecure CF
inservice (DFP agent) SLB
inservice (WebVPN) SEC
inservice (firewall farm real server) SLB
inservice (firewall farm) SLB
inservice (server farm real server) SLB
inservice (server farm virtual server) SLB
inside bgp OER
inside bgp (PfR) PFR
inspect SEC, IPV6
inspect (config-profile) SEC
instance (Ethernet ring) CE
instance (MIB) SNMP
instance (VLAN) MP, LSW
instance (resource group) ERM
instance range SNMP
instance repetition SNMP
int att IMO
integrity SEC
intensity VR
inter-as-hybrid MP
inter-packet gap 6502-mode IR
interface IR, MWG
interface (OER) OER
interface (PfR) PFR
interface (RITE) SEC
interface (RLM server) VR
interface (VASI) SEC
interface (proxy mobile IPv6) IMO
interface analysis-module IR
interface atm ATM
interface atm ima ATM
interface auto-template MP

interface bri **DIA**
interface bvi **IBM**
interface cable **CBL**
interface cable-modem **CBL**
interface cbr **ATM**
interface channel **IBM**
interface content-engine **IR**
interface ctunnel **ISO**
interface dialer **DIA**
interface event-log dump ftp **VR**
interface event-log error only **VR**
interface event-log max-buffer-size **VR**
interface fastethernet **IR**
interface fr-atm **WAN**
interface gigabitethernet **IR, CBL**
interface group-async **IR**
interface integrated-cable **CBL**
interface integrated-service-engine **IR**
interface ism **IR**
interface max-server-records **VR**
interface mfr **WAN, IPV6**
interface modular-cable **CBL**
interface multilink **DIA**
interface multiservice **ISG**
interface overlay **WAN**
interface port-channel **IR, CBL**
interface pos **IR**
interface range **IR**
interface satellite **IR**
interface sbc **SBCD**
interface serial **DIA**
interface serial multipoint **WAN**
interface service-engine **IR**
interface sm **IR**
interface stats **VR**
interface tunnel-tp **MP**

interface usb **CBL**
interface vg-anylan **IR**
interface virtual-ethernet **MP**
interface virtual-ppp **DIA**
interface virtual-template **SEC, VPD, IPV6, DIA**
interface virtual-tokenring **IBM**
interface vlan **IBM**
interface vmi **IR**
interface wideband-cable **CBL**
interface wlan-controller **IR**
interface xtagatm **MP**
interface-id snmp-if-index **OSPF**
interim-interval **ISG**
internal (DDNS-update-method) **IAD**
international **CF**
international bit **IR**
interval **CBL**
interval (BFD) **IRI**
interval (DFP agent) **SLB**
interval (DNS probe) **SLB**
interval (HTTP probe) **SLB**
interval (LSP discovery) **SLA**
interval (MPLS-TP) **MP**
interval (TCP probe) **SLB**
interval (WSP probe) **SLB**
interval (custom UDP probe) **SLB**
interval (params) **SLA**
interval (ping probe) **SLB**
interval duration **MM**
interval maximum **IAD**
interval minimum **IAD**
interwork cost **SBCD**
interwork maximum **SBCD**
interworking **MP, WAN**
invert data **IR**
invert rxclock **IR**

invert txclock **IR**
invite-timeout **SBCD**
ip (iSCSI interface) **MWG**
ip (webvpn url rewrite) **SEC**
ip access-group **SEC, ISG**
ip access-list **SEC, SBCD**
ip access-list hardware permit fragments **SEC**
ip access-list log-update **SEC**
ip access-list logging hash-generation **SEC**
ip access-list logging interval **SEC**
ip access-list resequence **SEC**
ip accounting **IAP**
ip accounting mac-address **IAP**
ip accounting precedence **IAP**
ip accounting through ip sctp authenticate **IAP**
ip accounting-list **IAP**
ip accounting-threshold **IAP**
ip accounting-transits **IAP**
ip address **IAD, IPV6**
ip address (WebVPN) **SEC**
ip address (session border controller) **SBCD**
ip address authenticate trusted **VR**
ip address dhcp **IAD, SEC**
ip address docsis **CBL**
ip address negotiated **DIA**
ip address pool (DHCP) **IAD**
ip address-pool **DIA**
ip admission **SEC**
ip admission consent banner **SEC**
ip admission name **SEC**
ip admission name bypass regex **SEC**
ip admission name http-basic **SEC**
ip admission name method-list **SEC**
ip admission name ntlm **SEC**
ip admission name order **SEC**
ip admission proxy http **SEC**

ip admission virtual-ip SEC
ip alias TSV
ip arp entry learn IAD
ip arp gratuitous IAD
ip arp gratuitous through ip dhcp ping packets IAD
ip arp incomplete IAD
ip arp inspection filter vlan IAD
ip arp inspection limit (interface configuration) IAD
ip arp inspection log-buffer IAD
ip arp inspection trust IAD
ip arp inspection validate IAD
ip arp inspection vlan IAD
ip arp inspection vlan logging IAD
ip arp poll IAD
ip arp proxy disable IAD
ip arp queue IAD
ip as-path access-list BGP
ip audit SEC
ip audit attack SEC
ip audit info SEC
ip audit name SEC
ip audit notify SEC
ip audit po local SEC
ip audit po max-events SEC
ip audit po protected SEC
ip audit po remote SEC
ip audit signature SEC
ip audit smtp SEC
ip auth-proxy (global configuration) SEC
ip auth-proxy (interface configuration) SEC
ip auth-proxy auth-proxy-banner SEC
ip auth-proxy max-login-attempts SEC
ip auth-proxy name SEC
ip auth-proxy watch-list SEC
ip authentication key-chain eigrp EIGRP
ip authentication mode eigrp EIGRP

ip bandwidth-percent eigrp EIGRP
ip bgp fast-external-failover BGP
ip bgp-community new-format BGP
ip bootp server CF
ip broadcast-address IAP
ip cache-invalidate-delay ISW
ip cache-invalidate-delay through monitor event-trace cef ipv6 global ISW
ip casa IAP
ip cef ISW
ip cef accounting ISW
ip cef linecard ipc memory ISW
ip cef load-sharing algorithm ISW
ip cef optimize neighbor resolution ISW
ip cef table adjacency-prefix ISW
ip cef table consistency-check ISW
ip cef table event-log ISW
ip cef table resolution-timer ISW
ip cef traffic-statistics IAP, ISW
ip cgmp IMC
ip circuit VR
ip classless IAD
ip community-list BGP
ip dampening-change eigrp IMO
ip dampening-interval eigrp IMO
ip ddns update hostname IAD
ip ddns update method IAD
ip default-gateway IAD
ip default-network IRI
ip device tracking probe SEC
ip dfbit set WAN
ip dfp agent SLB
ip dhcp aaa default username IAD
ip dhcp bootp ignore IAD
ip dhcp class IAD
ip dhcp client IAD
ip dhcp client authentication key-chain IAD

ip dhcp client authentication mode IAD
ip dhcp client broadcast-flag (interface) IAD, SEC
ip dhcp client class-id IAD
ip dhcp client client-id IAD
ip dhcp client default-router distance IAD
ip dhcp client hostname IAD
ip dhcp client lease IAD
ip dhcp client mobile renew IAD, IMO
ip dhcp client request IAD
ip dhcp client route IAD, DIA
ip dhcp client update dns IAD
ip dhcp compatibility lease-query client IAD
ip dhcp compatibility suboption link-selection IAD
ip dhcp conflict logging IAD
ip dhcp conflict resolution IAD
ip dhcp database IAD
ip dhcp debug ascii-client-id IAD
ip dhcp excluded-address IAD
ip dhcp global-options IAD
ip dhcp limit lease IAD
ip dhcp limit lease log IAD
ip dhcp limit lease per interface IAD
ip dhcp limited-broadcast-address IAD
ip dhcp ping packets IAD
ip dhcp ping timeout IAD
ip dhcp ping timeout through ip dhcp-client forcerenew IAD
ip dhcp pool IAD
ip dhcp relay bootp ignore IAD
ip dhcp relay forward spanning-tree IAD
ip dhcp relay information check IAD
ip dhcp relay information check-reply IAD
ip dhcp relay information option IAD
ip dhcp relay information option server-id-override IAD
ip dhcp relay information option subscriber-id IAD
ip dhcp relay information option vpn-id IAD
ip dhcp relay information option-insert IAD

ip dhcp relay information policy IAD
ip dhcp relay information policy-action IAD
ip dhcp relay information trust-all IAD
ip dhcp relay information trusted IAD
ip dhcp relay prefer known-good-server IAD
ip dhcp route connected IAD
ip dhcp server use subscriber-id client-id IAD
ip dhcp smart-relay IAD
ip dhcp snooping IAD
ip dhcp snooping binding IAD
ip dhcp snooping database IAD
ip dhcp snooping detect spurious IAD
ip dhcp snooping detect spurious interval IAD
ip dhcp snooping detect spurious vlan IAD
ip dhcp snooping information option IAD
ip dhcp snooping limit rate IAD
ip dhcp snooping packets IAD
ip dhcp snooping verify mac-address IAD
ip dhcp snooping vlan IAD
ip dhcp subscriber-id interface-name IAD
ip dhcp support option55-override IAD
ip dhcp support tunnel unicast IAD, SEC
ip dhcp update dns IAD
ip dhcp use IAD
ip dhcp use subscriber-id client-id IAD
ip dhcp-client broadcast-flag IAD
ip dhcp-client default-router distance IAD
ip dhcp-client force-renew IAD, VR
ip dhcp-client network-discovery IAD, DIA
ip dhcp-client network-discovery through ip nat sip-sbc IAD
ip dhcp-client update dns IAD
ip dhcp-relay information option server-override IAD
ip dhcp-relay source-interface IAD
ip dhcp-server IAD, DIA
ip dhcp-server query lease IAD
ip directed-broadcast IAP, IPV6

ip dns name-list IAD
ip dns primary IAD
ip dns server IAD
ip dns server queue limit IAD
ip dns server view-group IAD
ip dns spoofing IAD
ip dns view IAD
ip dns view-group IAD
ip dns view-list IAD
ip domain list IAD
ip domain lookup IAD
ip domain multicast IMC
ip domain name IAD
ip domain retry IAD
ip domain round-robin IAD
ip domain timeout IAD
ip domain-lookup nsap ISO
ip dscp IR
ip dvmrp accept-filter IMC
ip dvmrp auto-summary IMC
ip dvmrp default-information IMC
ip dvmrp interoperability IMC
ip dvmrp metric IMC
ip dvmrp metric-offset IMC
ip dvmrp output-report-delay IMC
ip dvmrp reject-non-pruners IMC
ip dvmrp route-limit IMC
ip dvmrp routehog-notification IMC
ip dvmrp summary-address IMC
ip dvmrp unicast-routing IMC
ip explicit-path MP
ip extcommunity-list BGP
ip fast-convergence IRS
ip finger CF
ip flow NF
ip flow layer2-switched NF

ip flow monitor **FNF**
ip flow-aggregation cache **NF**
ip flow-cache entries **NF**
ip flow-cache mpls label-positions **MP, NF**
ip flow-cache timeout **NF**
ip flow-capture **NF**
ip flow-egress input-interface **NF**
ip flow-export destination **NF**
ip flow-export destination sctp **NF**
ip flow-export hardware version **NF**
ip flow-export interface-names **NF**
ip flow-export source **NF**
ip flow-export template **NF**
ip flow-export version **NF**
ip flow-export version (Supervisor Engine 2) **NF**
ip flow-export version (Supervisor Engine 720) **NF**
ip flow-export version (Supervisor Engine 2) **NF**
ip flow-export version (Supervisor Engine 720) **NF**
ip flow-top-talkers **NF**
ip forward-protocol **IAP**
ip forward-protocol spanning-tree **IAP**
ip forward-protocol turbo-flood **IAP**
ip ftp passive **CF**
ip ftp password **CF**
ip ftp source-interface **CF**
ip ftp username **CF**
ip gdp **FHP, IRI**
ip gratuitous-arp **IAD**
ip header-compression disable-feedback **QOS**
ip header-compression max-header **QOS**
ip header-compression max-period **QOS**
ip header-compression max-time **QOS**
ip header-compression old-iphc-comp **QOS**
ip header-compression old-iphc-decomp **QOS**
ip header-compression recoverable-loss **QOS**
ip header-compression special-vj **IAP**

```
ip hello-interval eigrp EIGRP
ip helper-address IAP
ip hold-time eigrp EIGRP
ip host IAD, SBCD
ip host-list IAD
ip hostname strict IAD
ip http access-class HTTPS
ip http accounting commands HTTPS
ip http active-session-modules HTTPS
ip http authentication HTTPS
ip http cable-monitor CBL
ip http client cache HTTPS
ip http client connection HTTPS
ip http client password HTTPS
ip http client proxy-server HTTPS
ip http client response HTTPS
ip http client secure-ciphersuite HTTPS
ip http client secure-trustpoint HTTPS
ip http client source-interface HTTPS
ip http client username HTTPS
ip http digest algorithm HTTPS, BBA
ip http ezvpn SEC, CBL
ip http help-path HTTPS
ip http max-connections HTTPS
ip http path HTTPS
ip http port HTTPS
ip http secure-active-session-modules HTTPS
ip http secure-ciphersuite HTTPS
ip http secure-client-auth HTTPS
ip http secure-port HTTPS
ip http secure-server HTTPS
ip http secure-trustpoint HTTPS
ip http server HTTPS, IPV6
ip http session-module-list HTTPS
ip http timeout-policy HTTPS
ip icmp rate-limit unreachable IAP
```

ip icmp redirect [IAP](#)
ip idle-group [DIA](#)
ip igmp access-group [IMC](#)
ip igmp access-group through ip igmp v3lite [IMC](#)
ip igmp explicit-tracking [IMC](#)
ip igmp helper-address [IMC](#)
ip igmp helper-address (UDL) [IMC](#)
ip igmp immediate-leave [IMC](#)
ip igmp immediate-leave group-list [IMC](#)
ip igmp join-group [IMC](#)
ip igmp last-member-query-count [IMC](#)
ip igmp last-member-query-interval [IMC](#)
ip igmp limit (global) [IMC](#)
ip igmp limit (interface) [IMC](#)
ip igmp mroute-proxy [IMC](#)
ip igmp proxy-service [IMC](#)
ip igmp querier-timeout [IMC](#)
ip igmp query-interval [IMC](#)
ip igmp query-max-response-time [IMC](#)
ip igmp snooping [IMC](#)
ip igmp snooping access-group [IMC](#)
ip igmp snooping check [IMC](#)
ip igmp snooping explicit-tracking [IMC](#)
ip igmp snooping explicit-tracking limit [IMC](#)
ip igmp snooping fast-leave [IMC](#)
ip igmp snooping flooding [IMC](#)
ip igmp snooping immediate-leave [IMC](#)
ip igmp snooping l2-entry-limit [IMC](#)
ip igmp snooping last-member-query-count [IMC](#)
ip igmp snooping last-member-query-interval [IMC](#)
ip igmp snooping limit [IMC](#)
ip igmp snooping limit track [IMC](#)
ip igmp snooping minimum-version [IMC](#)
ip igmp snooping mrouter [IMC](#)
ip igmp snooping querier [IMC](#)
ip igmp snooping rate [IMC](#)

■ icmp idle-timeout through ipv6 nd autoconfig prefix

ip igmp snooping report-suppression IMC
ip igmp snooping robustness-variable IMC
ip igmp snooping source-only-learning age-timer IMC
ip igmp snooping ssm-safe-reporting IMC
ip igmp snooping static IMC
ip igmp snooping tcn flood IMC
ip igmp snooping tcn query solicit IMC
ip igmp snooping tnc flood query count IMC
ip igmp snooping vlan IMC
ip igmp snooping vlan immediate-leave IMC
ip igmp snooping vlan mrouter IMC
ip igmp snooping vlan static IMC
ip igmp ssm-map IMC
ip igmp ssm-map enable IMC
ip igmp ssm-map query dns IMC
ip igmp ssm-map static IMC
ip igmp static-group IMC
ip igmp tcn query IMC
ip igmp unidirectional-link IMC
ip igmp v3lite IMC
ip igmp version IMC
ip information-reply IAP
ip inspect SEC
ip inspect alert-off SEC
ip inspect audit trail SEC
ip inspect audit-trail SEC
ip inspect dns-timeout SEC
ip inspect hashtable SEC
ip inspect log drop-pkt SEC
ip inspect max-incomplete high SEC
ip inspect max-incomplete low SEC
ip inspect name SEC
ip inspect one-minute high SEC
ip inspect one-minute low SEC
ip inspect tcp block-non-session SEC
ip inspect tcp finwait-time SEC

ip inspect tcp idle-time SEC
ip inspect tcp max-incomplete host SEC
ip inspect tcp reassembly SEC
ip inspect tcp synwait-time SEC
ip inspect tcp window-scale-enforcement loose SEC
ip inspect through ip security strip SEC
ip inspect udp idle-time SEC
ip interface SEC
ip ips SEC
ip ips auto-update SEC
ip ips config location SEC
ip ips deny-action ips-interface SEC
ip ips enable-clidelta SEC
ip ips event-action-rules SEC
ip ips fail closed SEC
ip ips inherit-obsolete-tunings SEC
ip ips memory regex chaining SEC
ip ips memory threshold SEC
ip ips name SEC
ip ips notify SEC
ip ips sdf location SEC
ip ips signature SEC
ip ips signature disable SEC
ip ips signature-category SEC
ip ips signature-definition SEC
ip irdp FHP
ip iscsi target-profile MWG
ip kerberos source-interface SEC
ip lisp source-locator LISP
ip load-sharing ISW
ip local interface WAN
ip local policy route-map IRI
ip local pool MWG, DIA
ip local-proxy-arp IAD
ip mask-reply IAP
ip mfib IMC

ip mfib cef IMC
ip mfib forwarding IMC
ip mfib through ip multicast-routing IMC
ip mobile arp IAD, IMO
ip mobile authentication ignore-spi IMO, MWP
ip mobile bindupdate IMO, MWP
ip mobile cdma ha-chap send attribute IMO
ip mobile cdma imsi dynamic MWP
ip mobile cdma ipsec MWP
ip mobile debug include username IMO
ip mobile foreign-agent IMO, MWP
ip mobile foreign-agent inject-mobile-networks IMO
ip mobile foreign-service IMO, MWP
ip mobile foreign-service revocation MWP
ip mobile home-agent IMO, MWH
ip mobile home-agent aaa user-password IMO
ip mobile home-agent accounting IMO, MWH
ip mobile home-agent dynamic-address IMO, MWH
ip mobile home-agent multi-path IMO
ip mobile home-agent nat traversal IMO
ip mobile home-agent redundancy IMO, MWH
ip mobile home-agent redundancy periodic-sync IMO, MWH
ip mobile home-agent reject-static-addr IMO, MWH
ip mobile home-agent resync-sa IMO, MWH
ip mobile home-agent revocation IMO, MWH
ip mobile home-agent template tunnel IMO, MWH
ip mobile host IMO, MWH
ip mobile mobile-networks IMO
ip mobile mobile-networks through multi-path (mobile router) IMO
ip mobile prefix-length IMO, MWP
ip mobile proxy-host IMO, MWP
ip mobile radius disconnect IMO, MWH
ip mobile realm IMO, MWH
ip mobile registration-lifetime IMO, MWP
ip mobile router IMO
ip mobile router-service IMO

ip mobile router-service collocated [IMO](#)
ip mobile router-service collocated registration nat traversal [IMO](#)
ip mobile router-service collocated registration retry [IMO](#)
ip mobile router-service description [IMO](#)
ip mobile router-service link-type [IMO](#)
ip mobile router-service roam [IMO](#)
ip mobile router-service tunnel mode [IMO](#)
ip mobile secure [IMO](#), [MWH](#), [MWP](#)
ip mobile secure aaa-download [IMO](#)
ip mobile secure foreign-agent [IMO](#)
ip mobile secure home-agent [IMO](#)
ip mobile secure host [IMO](#)
ip mobile secure mn-aaa [IMO](#)
ip mobile secure proxy-host [IMO](#)
ip mobile secure visitor [IMO](#)
ip mobile tunnel [IMO](#), [MWH](#), [MWP](#)
ip mobile virtual-network [IMO](#), [MWH](#)
ip mobile vpn-realm [IMO](#)
ip mpf [BBA](#)
ip mrm [IMC](#)
ip mrm accept-manager [IMC](#)
ip mrm manager [IMC](#)
ip mroute [IMC](#)
ip mroute-cache [IMC](#), [IPV6](#)
ip msdp border [IMC](#), [SEC](#)
ip msdp cache-rejected-sa [IMC](#)
ip msdp cache-sa-state [IMC](#)
ip msdp default-peer [IMC](#)
ip msdp description [IMC](#)
ip msdp filter-sa-request [IMC](#)
ip msdp keepalive [IMC](#)
ip msdp mesh-group [IMC](#)
ip msdp originator-id [IMC](#)
ip msdp password peer [IMC](#)
ip msdp peer [IMC](#)
ip msdp redistribute [IMC](#)

icmp idle-timeout through ipv6 nd autoconfig prefix

ip msdp rpf rfc3618 IMC
ip msdp sa-filter in IMC
ip msdp sa-filter out IMC
ip msdp sa-limit IMC
ip msdp sa-request IMC
ip msdp shutdown IMC
ip msdp timer IMC
ip msdp ttl-threshold IMC
ip mtu IAP, SEC
ip mtu adjust VPD
ip multicast boundary IMC
ip multicast cache-headers IMC
ip multicast default-rpf-distance IMC
ip multicast group-range IMC
ip multicast hardware-switching non-rpf aging IMC
ip multicast hardware-switching replication-mode IMC
ip multicast heartbeat IMC
ip multicast helper-map IMC
ip multicast limit IMC
ip multicast limit cost IMC
ip multicast mpls traffic-eng MP
ip multicast mrinfo-filter IMC
ip multicast multipath IMC
ip multicast netflow NF
ip multicast netflow output-counters NF
ip multicast netflow rpf-failure NF
ip multicast oif-per-mvrf-limit IMC
ip multicast rate-limit IMC
ip multicast redundancy routeflush maxtime IMC
ip multicast route-limit IMC
ip multicast rpf backoff IMC
ip multicast rpf interval IMC
ip multicast rpf mofrr IMC, SBCD
ip multicast rpf multitopology MTR
ip multicast rpf proxy vector IMC
ip multicast rpf select IMC

ip multicast rpf select topology IMC, SBCD
ip multicast rsvp IMC
ip multicast source-per-group-limit IMC
ip multicast topology IMC, SBCD
ip multicast total-oif-limit IMC
ip multicast ttl-threshold IMC
ip multicast use-functional IMC
ip multicast-routing IMC, SBCD
ip mux IMO
ip mux cache IMO
ip mux policy IMO
ip mux profile IMO
ip mux udppport IMO
ip name-server IAD, IPV6
ip nat IAD
ip nat create flow-entries IAD
ip nat enable IAD
ip nat inside destination IAD
ip nat inside source IAD
ip nat log translations flow-export IAD
ip nat log translations syslog IAD
ip nat outside source IAD
ip nat piggyback-support IAD
ip nat pool IAD
ip nat service IAD
ip nat service dns-reset-ttl IAD
ip nat service enable-sym-port IAD
ip nat service pptp IAD
ip nat settings mode IAD
ip nat settings pap IAD
ip nat settings support mapping outside IAD
ip nat sip-sbc IAD
ip nat source IAD
ip nat source through iterate-ip-addrs IAD
ip nat stateful id IAD
ip nat switchover replication http IAD

icmp idle-timeout through ipv6 nd autoconfig prefix

ip nat translation IAD
ip nat translation (timeout) IAD
ip nat translation max-entries IAD
ip nbar attribute-map QOS
ip nbar attribute-set QOS
ip nbar classification tunneled-traffic QOS
ip nbar custom QOS
ip nbar pdlm QOS
ip nbar port-map QOS
ip nbar protocol-discovery QOS
ip nbar protocol-pack QOS
ip nbar resources QOS
ip nbar resources protocol QOS
ip nbar resources system QOS
ip netmask-format IAD
ip next-hop-self eigrp EIGRP
ip nhrp authentication IAD
ip nhrp cache non-authoritative SEC
ip nhrp group IAD
ip nhrp holdtime IAD
ip nhrp interest IAD
ip nhrp map IAD
ip nhrp map group IAD
ip nhrp map multicast IAD
ip nhrp map multicast dynamic IAD
ip nhrp max-send IAD
ip nhrp network-id IAD
ip nhrp nhs IAD, SEC
ip nhrp record IAD
ip nhrp redirect IAD
ip nhrp registration IAD
ip nhrp registration no-unique IAD
ip nhrp responder IAD
ip nhrp server-only IAD
ip nhrp shortcut IAD
ip nhrp trigger-svc IAD

ip nhrp use IAD
ip options IAD, QOS
ip ospf area OSPF
ip ospf authentication OSPF
ip ospf authentication-key OSPF
ip ospf bfd OSPF
ip ospf cost OSPF
ip ospf cost (MTR) MTR
ip ospf database-filter all out OSPF
ip ospf dead-interval OSPF
ip ospf demand-circuit OSPF
ip ospf fast-reroute per-prefix OSPF
ip ospf flood-reduction OSPF
ip ospf hello-interval OSPF
ip ospf lls OSPF
ip ospf message-digest-key md5 OSPF
ip ospf mtu-ignore OSPF
ip ospf multi-area OSPF
ip ospf multi-area cost OSPF
ip ospf name-lookup OSPF
ip ospf network OSPF
ip ospf prefix-suppression OSPF
ip ospf priority OSPF
ip ospf resync-timeout OSPF
ip ospf retransmit-interval OSPF
ip ospf shutdown OSPF
ip ospf topology disable MTR
ip ospf transmit-delay OSPF
ip ospf ttl-security OSPF
ip ospf vnet area EVN
ip path-option MP
ip pgm host IMC
ip pgm host through ip pim version IMC
ip pgm router IMC
ip pim IMC
ip pim accept-register IMC

ip pim accept-rp IMC
ip pim allow-rp IMC
ip pim autorp listener IMC
ip pim bidir-enable IMC
ip pim bidir-neighbor-filter IMC
ip pim bidir-offer-interval IMC
ip pim bidir-offer-limit IMC
ip pim border IMC
ip pim bsr-border IMC
ip pim bsr-candidate IMC
ip pim bsr-candidate loopback IMC
ip pim dm-fallback IMC
ip pim dr-priority IMC
ip pim log-neighbor-changes IMC
ip pim maximum group-mappings IMC
ip pim minimum-vc-rate IMC
ip pim multipoint-signalling IMC
ip pim nbma-mode IMC
ip pim neighbor-filter IMC
ip pim passive IMC
ip pim query-interval IMC
ip pim redundancy IMC
ip pim register-rate-limit IMC
ip pim register-source IMC
ip pim rp-address IMC
ip pim rp-announce-filter IMC
ip pim rp-candidate IMC
ip pim send-rp-announce IMC
ip pim send-rp-discovery IMC
ip pim snooping (global configuration) IMC
ip pim snooping (interface configuration) IMC
ip pim snooping dr-flood IMC
ip pim snooping suppress sgr-prune IMC
ip pim sparse sg-expiry-timer IMC
ip pim spt-threshold IMC
ip pim ssm IMC

ip pim state-refresh disable [IMC](#)
ip pim state-refresh origination-interval [IMC](#)
ip pim v1-rp-reachability [IMC](#)
ip pim vc-count [IMC](#)
ip pim version [IMC](#)
ip pmtu [WAN](#), [VPD](#)
ip policy route-map [IRI](#)
ip policy-list [BGP](#)
ip port-map [SEC](#)
ip portbundle (global) [ISG](#)
ip portbundle (service policy-map) [ISG](#)
ip portbundle outside [ISG](#)
ip precedence [SBCD](#)
ip precedence (TN3270) [IBM](#)
ip precedence (VPDN) [VPD](#)
ip precedence (dial-peer) [VR](#)
ip prefix-list [BGP](#)
ip prefix-list description [BGP](#)
ip prefix-list sequence-number [BGP](#)
ip probe path [MWG](#)
ip protocol [WAN](#)
ip protocol (flow) [MM](#)
ip proxy-arp [IAD](#)
ip pxf [IR](#)
ip qos defending-priority [VR](#)
ip qos dscp [VR](#)
ip qos policy-locator [VR](#)
ip qos preemption-priority [VR](#)
ip radius source-interface [SEC](#)
ip rarp-server [CF](#)
ip rbSCP ack-split [IR](#)
ip remd domain-lookup [CF](#)
ip remd rcp-enable [CF](#)
ip remd remote-host [CF](#)
ip remd remote-username [CF](#)
ip remd rsh-enable [CF](#)

■ icmp idle-timeout through ipv6 nd autoconfig prefix

ip rcmd source-interface **CF**
ip redirects **IAP**
ip reflexive-list timeout **SEC**
ip rgmp **IMC**
ip rgmp through ipv6 multicast-routing **IMC**
ip rip advertise **RIP**
ip rip authentication key-chain **RIP**
ip rip authentication mode **RIP**
ip rip initial-delay **RIP**
ip rip receive version **RIP**
ip rip send version **RIP**
ip rip triggered **RIP**
ip rip v2-broadcast **RIP**
ip route **IAD, IRI, DIA**
ip route (large-scale dial-out) **DIA**
ip route (vasi) **SEC**
ip route priority high **IRS**
ip route profile **IRI**
ip route static adjust-time **IRI**
ip route static bfd **IRI**
ip route static install-routes-recurse-via-nexthop **IRI**
ip route static inter-vrf **MP**
ip route topology **MTR**
ip route vrf **IAD, MP**
ip route-cache **ISW, IPV6, ISG**
ip route-cache flow **NF**
ip route-cache policy **ISW**
ip router isis **IRS, IPV6**
ip routing **IAD, IRI**
ip routing protocol purge interface **IRI**
ip rsvp admission-control compression predict **QOS**
ip rsvp aggregation ip **QOS**
ip rsvp aggregation ip map **QOS**
ip rsvp aggregation ip reservation dscp **QOS**
ip rsvp aggregation ip role interior **QOS**
ip rsvp atm-peak-rate-limit **QOS**

ip rsvp authentication QOS
ip rsvp authentication challenge QOS
ip rsvp authentication key QOS
ip rsvp authentication key-chain QOS
ip rsvp authentication lifetime QOS
ip rsvp authentication neighbor QOS
ip rsvp authentication type QOS
ip rsvp authentication window-size QOS
ip rsvp bandwidth QOS
ip rsvp bandwidth ignore QOS
ip rsvp bandwidth percent QOS
ip rsvp burst policing QOS
ip rsvp data-packet classification none QOS
ip rsvp dsbm candidate QOS
ip rsvp dsbm non-resv-send-limit QOS
ip rsvp flow-assist QOS
ip rsvp layer2 overhead QOS
ip rsvp listener QOS
ip rsvp listener outbound QOS
ip rsvp msg-pacing MP, QOS
ip rsvp neighbor QOS
ip rsvp policy cops minimal QOS
ip rsvp policy cops report-all QOS
ip rsvp policy cops servers QOS
ip rsvp policy cops timeout QOS
ip rsvp policy default-reject QOS
ip rsvp policy identity QOS
ip rsvp policy local QOS
ip rsvp policy preempt QOS
ip rsvp policy vrf QOS
ip rsvp pq-profile QOS
ip rsvp precedence QOS
ip rsvp precedence through load protocol QOS
ip rsvp qos QOS
ip rsvp reservation QOS
ip rsvp reservation-host QOS

■ icmp idle-timeout through ipv6 nd autoconfig prefix

ip rsvp resource-provider QOS
ip rsvp sender QOS
ip rsvp sender-host QOS
ip rsvp signalling dscp QOS
ip rsvp signalling fast-local-repair notifications QOS
ip rsvp signalling fast-local-repair rate QOS
ip rsvp signalling fast-local-repair wait-time QOS
ip rsvp signalling hello (configuration) MP, QOS
ip rsvp signalling hello (interface) MP, QOS
ip rsvp signalling hello bfd (configuration) MP
ip rsvp signalling hello bfd (interface) MP
ip rsvp signalling hello dscp MP, QOS
ip rsvp signalling hello graceful-restart QOS
ip rsvp signalling hello graceful-restart dscp QOS
ip rsvp signalling hello graceful-restart mode QOS
ip rsvp signalling hello graceful-restart mode help-neighbor QOS
ip rsvp signalling hello graceful-restart neighbor QOS
ip rsvp signalling hello graceful-restart refresh interval QOS
ip rsvp signalling hello graceful-restart refresh misses QOS
ip rsvp signalling hello graceful-restart send QOS
ip rsvp signalling hello refresh interval MP, QOS
ip rsvp signalling hello refresh misses MP, QOS
ip rsvp signalling hello reroute dscp QOS
ip rsvp signalling hello reroute refresh interval QOS
ip rsvp signalling hello reroute refresh misses QOS
ip rsvp signalling hello statistics MP, QOS
ip rsvp signalling initial-retransmit-delay QOS
ip rsvp signalling patherr state-removal QOS
ip rsvp signalling rate-limit QOS
ip rsvp signalling refresh interval QOS
ip rsvp signalling refresh misses QOS
ip rsvp signalling refresh reduction QOS
ip rsvp signalling refresh reduction ack-delay QOS
ip rsvp snooping QOS
ip rsvp source QOS
ip rsvp svc-required QOS

ip rsvp tos **QOS**
ip rsvp transport **QOS**
ip rsvp transport sender-host **QOS**
ip rsvp tunnel overhead-percent **QOS**
ip rsvp udp neighbor **QOS**
ip rsvp udp-multicasts **QOS**
ip rtcp report interval **VR**
ip rtcp sub-rtcp **VR**
ip rtp compression-connections **QOS**
ip rtp compression-connections (mobile wireless) **MWR**
ip rtp header-compression **QOS**
ip rtp header-compression (mobile wireless) **MWR**
ip rtp priority **QOS**
ip rtp reserve **DIA**
ip sap cache-timeout **IMC**
ip sap listen **IMC**
ip scp server enable **SEC**
ip sctp asconf **IAP**
ip sctp authenticate **IAP**
ip sdee **SEC**
ip sdee events **SEC**
ip sdr cache-timeout **IMC**
ip sdr listen **IMC**
ip security add **SEC**
ip security aeso **SEC**
ip security dedicated **SEC**
ip security eso-info **SEC**
ip security eso-max **SEC**
ip security eso-min **SEC**
ip security extended-allowed **SEC**
ip security first **SEC**
ip security ignoreAuthorities **SEC**
ip security ignorecipso **SEC**
ip security implicit-labelling **SEC**
ip security multilevel **SEC**
ip security reserved-allowed **SEC**

ip security strip SEC
ip service reflect IMC, SBCD
ip sla SLA
ip sla auto discovery SLA
ip sla auto endpoint-list SLA
ip sla auto group SLA
ip sla auto schedule SLA
ip sla auto template SLA
ip sla enable reaction-alerts SLA
ip sla enable timestamp SLA
ip sla endpoint-list SLA
ip sla ethernet-monitor SLA
ip sla ethernet-monitor reaction-configuration SLA
ip sla ethernet-monitor schedule SLA
ip sla group schedule SLA
ip sla key-chain SLA
ip sla logging traps SLA
ip sla low-memory SLA
ip sla monitor SLA
ip sla monitor group schedule SLA
ip sla monitor key-chain SLA
ip sla monitor logging traps SLA
ip sla monitor low-memory SLA
ip sla monitor reaction-configuration SLA
ip sla monitor reaction-trigger SLA
ip sla monitor reset SLA
ip sla monitor responder SLA
ip sla monitor restart SLA
ip sla monitor schedule SLA
ip sla on-demand ethernet SLA
ip sla profile video SLA
ip sla reaction-configuration SLA
ip sla reaction-trigger SLA
ip sla reset SLA
ip sla responder SLA
ip sla responder auto-register SLA

ip sla responder tcp-connect ipaddress **SLA**
ip sla responder twamp **SLA**
ip sla responder udp-echo ipaddress **SLA**
ip sla restart **SLA**
ip sla schedule **SLA**
ip sla server twamp **SLA**
ip slb capp udp **SLB**
ip slb dfp **SLB**
ip slb entries **SLB**
ip slb firewallfarm **SLB**
ip slb map **SLB**
ip slb maxbuffers frag **SLB**
ip slb natpool **SLB**
ip slb probe custom udp **SLB**
ip slb probe dns **SLB**
ip slb probe http **SLB**
ip slb probe ping **SLB**
ip slb probe tcp **SLB**
ip slb probe wsp **SLB**
ip slb replicate slave rate **SLB**
ip slb route **SLB**
ip slb serverfarm **SLB**
ip slb static **SLB**
ip slb timers gtp gsn **SLB**
ip slb vserver **SLB**
ip source **ISG**
ip source binding **IAD**
ip source-address (telephony-service) **IPV6**
ip source-route **IAD**
ip source-track **SEC**
ip source-track address-limit **SEC**
ip source-track export-interval **SEC**
ip source-track syslog-interval **SEC**
ip source-track through ivrf **SEC**
ip split-horizon (RIP) **RIP**
ip split-horizon eigrp **EIGRP**

■ icmp idle-timeout through ipv6 nd autoconfig prefix

ip ssh SEC
ip ssh break-string SEC
ip ssh dh min size SEC
ip ssh dscp SEC
ip ssh maxstartups SEC
ip ssh port SEC
ip ssh precedence SEC
ip ssh pubkey-chain SEC
ip ssh rekey SEC
ip ssh rsa keypair-name SEC
ip ssh server authenticate user SEC
ip ssh source-interface SEC
ip ssh stricthostkeycheck SEC
ip ssh version SEC
ip sticky-arp (global configuration) IAD
ip sticky-arp (interface configuration) IAD
ip subnet-zero IAD
ip subscriber ISG
ip subscriber interface ISG
ip subscriber l2-roaming ISG
ip subscriber list ISG
ip summary-address eigrp EIGRP
ip summary-address rip RIP
ip tacacs source-interface SEC
ip tcp adjust-mss IAP, BBA
ip tcp adjust-mss through ipv6 tcp adjust-mss IAP
ip tcp async-mobility server DIA
ip tcp chunk-size IAP
ip tcp compression-connections IAP, QOS
ip tcp ecn IAP
ip tcp header-compression IAP, QOS
ip tcp intercept connection-timeout SEC
ip tcp intercept drop-mode SEC
ip tcp intercept finrst-timeout SEC
ip tcp intercept list SEC
ip tcp intercept max-incomplete SEC

ip tcp intercept max-incomplete high SEC
ip tcp intercept max-incomplete low SEC
ip tcp intercept mode SEC
ip tcp intercept one-minute SEC
ip tcp intercept one-minute high SEC
ip tcp intercept one-minute low SEC
ip tcp intercept watch-timeout SEC
ip tcp keepalive IAP
ip tcp mss IAP
ip tcp path-mtu-discovery IAP
ip tcp queuemax IAP
ip tcp selective-ack IAP
ip tcp synwait-time IAP
ip tcp timestamp IAP
ip tcp window-size IAP
ip telnet comport DIA
ip telnet hidden DIA
ip telnet quiet DIA
ip telnet source-interface CF
ip telnet timeout retransmit DIA
ip telnet tos DIA
ip tftp blocksize CF
ip tftp boot-interface CF
ip tftp min-timeout CF
ip tftp source-interface CF
ip topology-accounting MTR
ip tos IBM
ip tos (L2TP) WAN
ip tos (VPDN) VPD
ip traffic-export apply SEC
ip traffic-export profile SEC
ip trigger-authentication (global) SEC
ip trigger-authentication (interface) SEC
ip ttl WAN
ip udp checksum VR
ip udptn source-interface DIA

ip unnumbered IAD, IPV6
ip unreachable IAP
ip urd IMC
ip urlfilter alert SEC
ip urlfilter allowmode SEC
ip urlfilter audit-trail SEC
ip urlfilter cache SEC
ip urlfilter exclusive-domain SEC
ip urlfilter max-request SEC
ip urlfilter max-resp-pak SEC
ip urlfilter server vendor SEC
ip urlfilter source-interface SEC
ip urlfilter truncate SEC
ip urlfilter urlf-server-log SEC
ip verify drop-rate compute interval SEC
ip verify drop-rate compute window SEC
ip verify drop-rate notify hold-down SEC
ip verify source vlan dhcp-snooping IAD
ip verify unicast notification threshold ISW, SEC
ip verify unicast reverse-path ISW, SEC
ip verify unicast source reachable-via ISW, SEC, IR
ip verify unicast vrf ISW, BGP
ip virtual-reassembly SEC
ip virtual-reassembly-out SEC
ip vrf IAP, MP, SEC
ip vrf (tracking) IAP
ip vrf autoclassify ISG
ip vrf forwarding SEC, MWG
ip vrf forwarding (interface configuration) MP
ip vrf forwarding (server-group) SEC
ip vrf forwarding (service policy map) ISG
ip vrf receive MP
ip vrf select source MP
ip vrf sitemap MP
ip wccp IAP
ip wccp check acl outbound IAP

ip wccp check services all **IAP**
ip wccp enable **IAP**
ip wccp group-listen **IAP**
ip wccp outbound-acl-check **IAP, SBCD**
ip wccp redirect **IAP, SBCD**
ip wccp redirect exclude in **IAP**
ip wccp redirect-list **IAP**
ip wccp source-interface **IAP, SBCD**
ip wccp version **IAP, SBCD**
ip wccp web-cache accelerated **IAP, SEC, CF**
ip-access-group **MWG**
ip-address (SSG-radius-proxy-timers) **SSG**
ip-address (ca-trustpoint) **SEC**
ip-address (controller) **CBL**
ip-address (endpoint list) **SLA**
ip-address-pool **MWG**
ip-extension **SEC, IPV6**
ipc buffers **IR**
ipc header-cache **IR**
ipc holdq threshold **IR**
ipc master **IR**
ipc zone default **IR**
ipdr associate **CBL**
ipdr collector **CBL**
ipdr exporter ack-timeout **CBL**
ipdr exporter keepalive **CBL**
ipdr exporter max-unacked **CBL**
ipdr exporter start **CBL**
ipdr session **CBL**
ipdr session (global configuration) **CBL**
ipdr template **CBL**
ipdr type **CBL**
iphc-profile **QOS, IR**
ips signature update cisco **SEC**
ipsec maximum **SBCD**
ipv4 **SBCD**

icmp idle-timeout through ipv6 nd autoconfig prefix

ipv4 (SBE H.248) [SBCD](#)
ipv4 (blacklist) [SBCD](#)
ipv4 (ldap) [SEC](#)
ipv4 alt-vrf [LISP](#)
ipv4 etr [LISP](#)
ipv4 etr accept-map-request-mapping [LISP](#)
ipv4 etr map-cache-ttl [LISP](#)
ipv4 etr map-server [LISP](#)
ipv4 itr [LISP](#)
ipv4 itr map-resolver [LISP](#)
ipv4 map-cache-limit [LISP](#)
ipv4 map-cache-persistent [LISP](#)
ipv4 map-request-source [LISP](#)
ipv4 map-resolver [LISP](#)
ipv4 map-server [LISP](#)
ipv4 path-mtu-discovery [LISP](#)
ipv4 proxy-etr [LISP](#)
ipv4 proxy-itr [LISP](#)
ipv4 route-import map-cache [LISP](#)
ipv4 route-import maximum-prefix [LISP](#)
ipv4 solicit-map-request ignore [LISP](#)
ipv4 use-petr [LISP](#)
ipv4-address [IMO](#)
ipv4-prefix [IAD](#)
ipv6 (access point) [MWG](#)
ipv6 access-class [IPV6](#)
ipv6 access-list [IPV6](#)
ipv6 access-list log-update threshold [IPV6](#)
ipv6 address [IPV6](#)
ipv6 address (session border controller) [SBCD](#)
ipv6 address anycast [IPV6](#)
ipv6 address autoconfig [IAD, IPV6](#)
ipv6 address dhcp [IAD, IPV6](#)
ipv6 address dhcp client request [IAD, IPV6](#)
ipv6 address eui-64 [IPV6](#)
ipv6 address link-local [IPV6](#)

ipv6 alt-vrf LISP
ipv6 atm-vc IPV6
ipv6 authentication key-chain eigrp IPV6, EIGRP
ipv6 authentication mode eigrp IPV6, EIGRP
ipv6 bandwidth-percent eigrp IPV6, EIGRP
ipv6 base-vtemplate MWG
ipv6 cef ISW, IPV6
ipv6 cef accounting ISW, IPV6
ipv6 cef distributed ISW, IPV6
ipv6 cef load-sharing algorithm ISW, IPV6
ipv6 cef optimize neighbor resolution ISW, IPV6
ipv6 cga modifier rsakeypair IPV6, SEC
ipv6 cga rsakeypair IPV6, SEC
ipv6 crypto map IPV6, SEC
ipv6 destination-guard attach-policy IPV6
ipv6 destination-guard policy IPV6
ipv6 dhcp binding track ppp IAD, IPV6
ipv6 dhcp client information refresh minimum IAD, IPV6
ipv6 dhcp client pd IAD, IPV6
ipv6 dhcp database IAD, IPV6
ipv6 dhcp debug redundancy IAD, IPV6
ipv6 dhcp framed password IAD, IPV6
ipv6 dhcp guard attach-policy IAD, IPV6
ipv6 dhcp guard policy IAD, IPV6
ipv6 dhcp iana-route-add IAD
ipv6 dhcp iapd-route-add IAD
ipv6 dhcp ldra attach-policy (VLAN) IAD
ipv6 dhcp ping packets IAD, IPV6
ipv6 dhcp pool IAD, IPV6
ipv6 dhcp relay destination IAD, IPV6
ipv6 dhcp relay source-interface IPV6
ipv6 dhcp server IAD, IPV6
ipv6 dhcp server vrf enable IAD, IPV6
ipv6 dhcp-ldra IAD
ipv6 dhcp-ldra attach-policy IAD
ipv6 dhcp-relay bulk-lease IAD, IPV6

ipv6 dhcp-relay option vpn [IAD](#), [IPV6](#)
ipv6 dhcp-relay show bindings [IAD](#), [IPV6](#)
ipv6 dhcp-relay source-interface [IAD](#), [IPV6](#)
ipv6 dns primary [MWG](#)
ipv6 eigrp [IPV6](#), [EIGRP](#)
ipv6 enable [IPV6](#)
ipv6 etr [LISP](#)
ipv6 etr accept-map-request-mapping [LISP](#)
ipv6 etr map-cache-ttl [LISP](#)
ipv6 etr map-server [LISP](#)
ipv6 flow [IPV6](#)
ipv6 flow mask [IPV6](#)
ipv6 flow mask option-headers [IPV6](#)
ipv6 flow monitor [FNF](#)
ipv6 flow-aggregation cache [IPV6](#)
ipv6 flow-cache entries [IPV6](#)
ipv6 flow-cache timeout [IPV6](#)
ipv6 flow-export destination [IPV6](#)
ipv6 flow-export source [IPV6](#)
ipv6 flow-export template [IPV6](#)
ipv6 flow-export template options [IPV6](#)
ipv6 flow-export version 9 [IPV6](#)
ipv6 flowset [IPV6](#)
ipv6 general-prefix [IPV6](#)
ipv6 hello-interval eigrp [IPV6](#), [EIGRP](#)
ipv6 hold-time eigrp [IPV6](#), [EIGRP](#)
ipv6 hop-limit [IPV6](#)
ipv6 host [IPV6](#)
ipv6 icmp error-interval [IPV6](#)
ipv6 inspect [IPV6](#), [SEC](#)
ipv6 inspect alert-off [IPV6](#), [SEC](#)
ipv6 inspect audit trail [IPV6](#), [SEC](#)
ipv6 inspect max-incomplete high [IPV6](#), [SEC](#)
ipv6 inspect max-incomplete low [IPV6](#), [SEC](#)
ipv6 inspect name [IPV6](#), [SEC](#)
ipv6 inspect one-minute high [IPV6](#), [SEC](#)

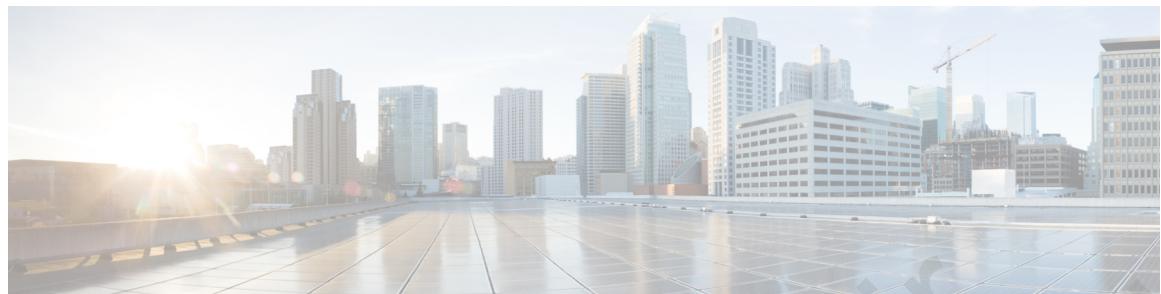
ipv6 inspect one-minute low IPV6, SEC
ipv6 inspect routing-header IPV6, SEC
ipv6 inspect tcp finwait-time IAD, IPV6
ipv6 inspect tcp idle-time IPV6, SEC
ipv6 inspect tcp max-incomplete host IPV6, SEC
ipv6 inspect tcp synwait-time IPV6, SEC
ipv6 inspect udp idle-time IPV6, SEC
ipv6 ipv6-access-group MWG
ipv6 ipv6-address-pool MWG
ipv6 itr LISP
ipv6 itr map-resolver LISP
ipv6 lisp source-locator LISP
ipv6 local policy route-map IPV6, IRI
ipv6 local pool IPV6
ipv6 map-cache-limit LISP
ipv6 map-cache-persistent LISP
ipv6 map-request-source LISP
ipv6 map-resolver LISP
ipv6 map-server LISP
ipv6 mfib IPV6, IMC
ipv6 mfib cef output IPV6, IMC
ipv6 mfib fast IPV6, IMC
ipv6 mfib forwarding IPV6, IMC
ipv6 mfib hardware-switching IPV6, IMC
ipv6 mfib-cef IPV6, IMC
ipv6 mfib-mode centralized-only IPV6, IMC
ipv6 mld access-group IPV6, IMC
ipv6 mld explicit-tracking IPV6, IMC
ipv6 mld host-proxy IPV6, IMC
ipv6 mld host-proxy interface IPV6, IMC
ipv6 mld join-group IPV6, IMC
ipv6 mld limit IPV6, IMC
ipv6 mld query-interval IPV6, IMC
ipv6 mld query-max-response-time IPV6, IMC
ipv6 mld query-timeout IPV6, IMC
ipv6 mld router IPV6, IMC

ipv6 mld snooping [IPV6](#), [IMC](#)
ipv6 mld snooping explicit-tracking [IPV6](#), [IMC](#)
ipv6 mld snooping last-member-query-interval [IPV6](#), [IMC](#)
ipv6 mld snooping limit [IPV6](#), [IMC](#)
ipv6 mld snooping mrouter [IPV6](#), [IMC](#)
ipv6 mld snooping querier [IPV6](#), [IMC](#)
ipv6 mld snooping report-suppression [IPV6](#), [IMC](#)
ipv6 mld ssm-map enable [IPV6](#), [IMC](#)
ipv6 mld ssm-map query dns [IPV6](#), [IMC](#)
ipv6 mld ssm-map static [IPV6](#), [IMC](#)
ipv6 mld state-limit [IPV6](#), [IMC](#)
ipv6 mld static-group [IPV6](#), [IMC](#)
ipv6 mobile home-agent (global configuration) [IPV6](#)
ipv6 mobile home-agent (interface configuration) [IPV6](#)
ipv6 mobile pmipv6-domain [IMO](#)
ipv6 mobile pmipv6-lma [IMO](#)
ipv6 mobile pmipv6-mag [IMO](#)
ipv6 mobile router [IPV6](#)
ipv6 mobile router-service roam [IPV6](#)
ipv6 mtu [IPV6](#)
ipv6 multicast aaa account receive [IPV6](#), [IMC](#)
ipv6 multicast boundary scope [IPV6](#), [IMC](#)
ipv6 multicast group-range [IPV6](#), [IMC](#)
ipv6 multicast limit [IPV6](#), [IMC](#)
ipv6 multicast limit cost [IPV6](#), [IMC](#)
ipv6 multicast limit rate [IPV6](#), [IMC](#)
ipv6 multicast multipath [IPV6](#), [IMC](#)
ipv6 multicast pim-passive-enable [IPV6](#), [IMC](#)
ipv6 multicast rpf [IPV6](#), [IMC](#)
ipv6 multicast rpf select [IMC](#)
ipv6 multicast-routing [IPV6](#), [IMC](#)
ipv6 mux [IMO](#)
ipv6 mux cache [IMO](#)
ipv6 mux policy [IMO](#)
ipv6 mux profile [IMO](#)
ipv6 mux udpprt [IMO](#)

ipv6 nat IPV6
ipv6 nat max-entries IPV6
ipv6 nat prefix IPV6
ipv6 nat prefix v4-mapped IPV6
ipv6 nat translation IPV6
ipv6 nat v4v6 pool IPV6
ipv6 nat v4v6 source IPV6
ipv6 nat v6v4 pool IPV6
ipv6 nat v6v4 source IPV6
ipv6 nd advertisement-interval IPV6
ipv6 nd autoconfig default-router IPV6
ipv6 nd autoconfig prefix IPV6

■ **icmp idle-timeout through ipv6 nd autoconfig prefix**

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ipv6 nd cache expire through I

- Finding IOS Command Information, page 257
- ipv6 nd cache expire through I, page 260

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 8: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference

CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

ipv6 nd cache expire through I

I

 ipv6 nd cache expire IPV6
 ipv6 nd cache interface-limit (global) IPV6
 ipv6 nd cache interface-limit (interface) IPV6
 ipv6 nd dad attempts IPV6
 ipv6 nd dad time IPV6
 ipv6 nd dad-proxy IPV6
 ipv6 nd host mode strict IPV6
 ipv6 nd inspection IPV6, SEC
 ipv6 nd inspection policy IPV6, SEC
 ipv6 nd managed-config-flag IAD, IPV6
 ipv6 nd na glean IPV6
 ipv6 nd ns-interval IPV6
 ipv6 nd nud retry IPV6
 ipv6 nd other-config-flag IAD, IPV6
 ipv6 nd prefix IPV6
 ipv6 nd prefix framed-ipv6-prefix IPV6, SEC
 ipv6 nd prefix-advertisement IPV6
 ipv6 nd ra dns server IPV6
 ipv6 nd ra interval IPV6
 ipv6 nd ra lifetime IPV6
 ipv6 nd ra suppress IPV6
 ipv6 nd ra-interval IPV6
 ipv6 nd ra-lifetime IPV6
 ipv6 nd raguard IPV6
 ipv6 nd raguard attach-policy IPV6, SEC
 ipv6 nd raguard policy IPV6, SEC
 ipv6 nd reachable-time IPV6
 ipv6 nd resolution data limit IPV6
 ipv6 nd route-owner IPV6
 ipv6 nd router-preference IPV6
 ipv6 nd secured certificate-db IPV6, SEC
 ipv6 nd secured full-secure IPV6, SEC

ipv6 nd secured full-secure (interface) **IPV6, SEC**
ipv6 nd secured key-length **IPV6, SEC**
ipv6 nd secured sec-level **IPV6, SEC**
ipv6 nd secured timestamp **IPV6, SEC**
ipv6 nd secured timestamp-db **IPV6, SEC**
ipv6 nd secured trustanchor **IPV6, SEC**
ipv6 nd secured trustpoint **IPV6, SEC**
ipv6 nd suppress attach-policy **IPV6**
ipv6 nd suppress policy **IPV6**
ipv6 nd suppress-ra **SEC, IPV6**
ipv6 neighbor **IPV6**
ipv6 neighbor binding **IPV6, SEC**
ipv6 neighbor binding down-lifetime **IPV6, SEC**
ipv6 neighbor binding interface **IPV6**
ipv6 neighbor binding logging **IPV6, SEC**
ipv6 neighbor binding max-entries **IPV6, SEC**
ipv6 neighbor binding stale-lifetime **IPV6, SEC**
ipv6 neighbor binding vlan **IPV6, SEC**
ipv6 neighbor tracking **IPV6, SEC**
ipv6 next-hop-self eigrp **IPV6, EIGRP**
ipv6 nhrp authentication **IPV6**
ipv6 nhrp holdtime **IPV6**
ipv6 nhrp interest **IPV6**
ipv6 nhrp map **IPV6**
ipv6 nhrp map multicast **IPV6**
ipv6 nhrp map multicast dynamic **IPV6**
ipv6 nhrp max-send **IPV6**
ipv6 nhrp network-id **IPV6**
ipv6 nhrp nhs **IPV6**
ipv6 nhrp record **IPV6**
ipv6 nhrp redirect **IPV6**
ipv6 nhrp registration **IPV6**
ipv6 nhrp responder **IPV6**
ipv6 nhrp server-only **IPV6**
ipv6 nhrp shortcut **IPV6**
ipv6 nhrp trigger-svc **IPV6**

ipv6 nhrp use IPV6
ipv6 ospf area IPV6
ipv6 ospf authentication IPV6
ipv6 ospf bfd IPV6
ipv6 ospf cost IPV6
ipv6 ospf database-filter all out IPV6
ipv6 ospf dead-interval IPV6
ipv6 ospf demand-circuit IPV6
ipv6 ospf encryption IPV6
ipv6 ospf flood-reduction IPV6
ipv6 ospf hello-interval IPV6
ipv6 ospf mtu-ignore IPV6
ipv6 ospf name-lookup IPV6
ipv6 ospf neighbor IPV6
ipv6 ospf network IPV6
ipv6 ospf priority IPV6
ipv6 ospf retransmit-interval IPV6
ipv6 ospf transmit-delay IPV6
ipv6 path-mtu-discovery LISP
ipv6 pim IPV6, IMC
ipv6 pim accept-register IPV6, IMC
ipv6 pim allow-rp IPV6, IMC
ipv6 pim bsr border IPV6, IMC
ipv6 pim bsr candidate bsr IPV6, IMC
ipv6 pim bsr candidate rp IPV6, IMC
ipv6 pim dr-priority IPV6, IMC
ipv6 pim hello-interval IPV6, IMC
ipv6 pim join-prune-interval IPV6, IMC
ipv6 pim maximum group-mappings IMC
ipv6 pim neighbor-filter list IPV6, IMC
ipv6 pim passive IPV6, IMC
ipv6 pim rp embedded IPV6, IMC
ipv6 pim rp-address IPV6, IMC
ipv6 pim spt-threshold infinity IPV6, IMC
ipv6 pim through senders IMC
ipv6 policy route-map IPV6, IRI

ipv6 port-map IPV6, SEC
ipv6 prefix ISG
ipv6 prefix-list IPV6
ipv6 prefix-list sequence-number IPV6
ipv6 proxy-etr LISP
ipv6 proxy-itr LISP
ipv6 redirect MWG
ipv6 redirects IPV6
ipv6 rip default-information IPV6
ipv6 rip enable IPV6
ipv6 rip metric-offset IPV6
ipv6 rip summary-address IPV6
ipv6 rip vrf-mode enable IPV6
ipv6 route IPV6
ipv6 route priority high IPV6
ipv6 route static bfd IPV6, IRI
ipv6 route static resolve default IPV6, IRI
ipv6 route vrf IAP
ipv6 route-import map-cache LISP
ipv6 route-import maximum-prefix LISP
ipv6 router eigrp IPV6, EIGRP
ipv6 router isis IPV6
ipv6 router nemo IPV6
ipv6 router ospf IPV6
ipv6 router rip IPV6
ipv6 routing-enforcement-header loose IPV6, SEC
ipv6 security verify source MWG
ipv6 snooping attach-policy IPV6
ipv6 snooping logging IPV6
ipv6 snooping logging packet drop IPV6, SEC
ipv6 snooping policy IPV6
ipv6 solicit-map-request ignore LISP
ipv6 source-guard attach-policy IPV6
ipv6 source-guard policy IPV6
ipv6 source-route IPV6
ipv6 spd mode IPV6

ipv6 spd queue max-threshold IPV6
ipv6 spd queue min-threshold IPV6
ipv6 split-horizon eigrp IPV6, EIGRP
ipv6 summary-address eigrp IPV6, EIGRP
ipv6 tacacs source-interface IPV6, SEC
ipv6 tcp adjust-mss IAP
ipv6 traffic interface-statistics IPV6
ipv6 traffic-filter IPV6
ipv6 unicast-routing IPV6
ipv6 unnumbered IPV6
ipv6 unreachable IPV6
ipv6 use-petr LISP
ipv6 verify unicast reverse-path ISW, IPV6
ipv6 verify unicast source reachable-via ISW, IPV6
ipv6 virtual-reassembly IPV6, SEC
ipv6 virtual-reassembly drop-fragments IPV6, SEC
ipv6 wccp IPV6
ipv6 wccp check acl outbound IPV6
ipv6 wccp group-listen IPV6
ipv6 wccp redirect IPV6
ipv6 wccp redirect exclude in IPV6
ipv6 wccp source-interface IPV6
ipv6 wccpcheck services all IPV6
ipv6-address (proxy mobile ipv6) IMO
ipv6-prefix IAD
ipx access-group IPX
ipx access-list IPX
ipx accounting IPX
ipx accounting-list IPX
ipx accounting-threshold IPX
ipx accounting-transits IPX
ipx advertise-default-route-only (RIP) IPX
ipx advertise-to-lost-route IPX
ipx backup-server-query-interval (EIGRP) IPX
ipx bandwidth-percent eigrp IPX
ipx broadcast-fastswitching IPX

ipx compression cipx **DIA**
ipx default-output-rip-delay **IPX**
ipx default-output-sap-delay **IPX**
ipx default-route **IPX**
ipx default-triggered-rip-delay **IPX**
ipx default-triggered-rip-holddown **IPX**
ipx default-triggered-sap-delay **IPX**
ipx default-triggered-sap-holddown **IPX**
ipx delay **IPX**
ipx down **IPX**
ipx eigrp-sap-split-horizon **IPX**
ipx encapsulation **IPX**
ipx flooding-unthrottled (NLSP) **IPX**
ipx gns-reply-disable **IPX**
ipx gns-response-delay **IPX**
ipx gns-round-robin **IPX**
ipx hello-interval eigrp **IPX**
ipx helper-address **IPX**
ipx helper-list **IPX**
ipx hold-down eigrp **IPX**
ipx hold-time eigrp **IPX**
ipx input-network-filter (RIP) **IPX**
ipx input-sap-filter **IPX**
ipx internal-network **IPX**
ipx ipxwan **IPX**
ipx ipxwan error **IPX**
ipx ipxwan static **IPX**
ipx link-delay **IPX**
ipx linkup-request (RIP) **IPX**
ipx maximum-hops (RIP) **IPX**
ipx maximum-paths **IPX**
ipx nasi-server enable **IPX, TSV**
ipx netbios input-access-filter **IPX**
ipx netbios output-access-filter **IPX**
ipx netbios-socket-input-checks **IPX**
ipx network **IPX**

ipx nhrp authentication **IPX**
ipx nhrp holdtime **IPX**
ipx nhrp interest **IPX**
ipx nhrp map **IPX**
ipx nhrp max-send **IPX**
ipx nhrp network-id **IPX**
ipx nhrp nhs **IPX**
ipx nhrp record **IPX**
ipx nhrp responder **IPX**
ipx nhrp use **IPX**
ipx nlsp csnp-interval **IPX**
ipx nlsp enable **IPX**
ipx nlsp hello-interval **IPX**
ipx nlsp hello-multiplier **IPX**
ipx nlsp lsp-interval **IPX**
ipx nlsp metric **IPX**
ipx nlsp multicast **IPX**
ipx nlsp priority **IPX**
ipx nlsp retransmit-interval **IPX**
ipx nlsp rip **IPX**
ipx nlsp sap **IPX**
ipx output-ggs-filter **IPX**
ipx output-gns-filter **IPX**
ipx output-network-filter (RIP) **IPX**
ipx output-rip-delay **IPX**
ipx output-sap-delay **IPX**
ipx output-sap-filter **IPX**
ipx pad-process-switched-packets **IPX**
ipx per-host-load-share **IPX**
ipx ping-default **IPX**
ipx potential-pseudonode (NLSP) **IPX**
ipx ppp-client **DIA**
ipx rip-max-packetsize **IPX**
ipx rip-multiplier **IPX**
ipx rip-queue-maximum **IPX**
ipx rip-response-delay **IPX**

ipx rip-update-queue-maximum IPX
ipx route IPX
ipx route-cache IPX
ipx route-cache inactivity-timeout IPX
ipx route-cache max-size IPX
ipx route-cache update-timeout IPX
ipx router IPX
ipx router-filter IPX
ipx router-sap-filter IPX
ipx routing IPX
ipx sap IPX
ipx sap follow-route-path IPX
ipx sap-helper IPX
ipx sap-incremental (EIGRP) IPX
ipx sap-incremental split-horizon IPX
ipx sap-max-packetsize IPX
ipx sap-multiplier IPX
ipx sap-queue-maximum IPX
ipx sap-update-queue-maximum IPX
ipx server-split-horizon-on-server-paths IPX
ipx split-horizon eigrp IPX
ipx spx-idle-time IPX
ipx spx-spoof IPX
ipx throughput IPX
ipx triggered-rip-delay IPX
ipx triggered-rip-holddown IPX
ipx triggered-sap-delay IPX
ipx triggered-sap-holddown IPX
ipx type-20-helpered IPX
ipx type-20-input-checks IPX
ipx type-20-output-checks IPX
ipx type-20-propagation IPX
ipx update interval IPX
ipx update sap-after-rip IPX
ipx watchdog IPX
ipx watchdog-spoof IPX

irq global-request VR
is-type IRS
isakmp authorization list SEC
isdn all-incoming-calls-v120 DIA
isdn answer1 isdn answer2
isdn autodetect DIA
isdn bcac service audit DIA
isdn bcac service audit interface DIA
isdn bcac service audit trigger DIA
isdn bcac service retry in-serv-on-fail DIA
isdn bcac service retry max DIA
isdn bcac service timer DIA
isdn bcac service update linkup DIA
isdn bcac service update provision DIA
isdn bchan-number-order DIA
isdn bind-l3 VR
isdn bind-l3 (Interface BRI) VR
isdn bind-l3 ccm-manager VR
isdn bind-l3 iua-backhaul VR
isdn bind-l3 through ixi transport http VR
isdn busy DIA
isdn call interface DIA
isdn caller DIA
isdn calling-number DIA
isdn calling-party-num DIA
isdn channel-id invert extended-bit DIA
isdn conference-code DIA
isdn contiguous-bchan VR
isdn disconnect interface DIA
isdn disconnect-cause DIA
isdn dpnss VR
isdn fast-rollover-delay DIA
isdn flip-chan-flag DIA
isdn gateway-max-interworking VR
isdn global-disconnect VR
isdn gtd VR

isdn guard-timer DIA
isdn ie oli VR
isdn incoming ie DIA
isdn incoming-voice DIA
isdn integrate calltype all VR
isdn layer1-emulate DIA
isdn layer2-flap DIA
isdn leased-line bri DIA
isdn logging DIA
isdn map DIA
isdn modem-busy-cause DIA
isdn negotiate-bchan DIA
isdn network-failure-cause VR
isdn not-end-to-end DIA
isdn nsf-service DIA
isdn number DIA
isdn outgoing display-ie VR
isdn outgoing ie DIA
isdn outgoing ie redirecting-number DIA
isdn outgoing-voice DIA
isdn overlap-receiving DIA
isdn overlap-receiving calltypes all DIA
isdn piafs-enabled DIA
isdn point-to-point-setup DIA
isdn protocol-emulate VR, DIA
isdn reject DIA
isdn rlm-group VR
isdn send-alerting DIA
isdn sending-complete DIA
isdn service DIA
isdn silent-boot DIA
isdn skipsend-idverify VR
isdn snmp busyout b-channel DIA
isdn spid1 isdn spid2
isdn spoofing VR, DIA
isdn static-tei DIA

isdn supp-service calldiversion VR
isdn supp-service mcid VR
isdn supp-service name calling VR
isdn supp-service tbct VR
isdn switch-type (BRI) IPV6, DIA
isdn switch-type (PRI) DIA
isdn t-activate VR
isdn t306 DIA
isdn t310 DIA
isdn tei-negotiation (global) DIA
isdn tei-negotiation (interface) VR, DIA
isdn test call interface DIA
isdn test disconnect interface DIA
isdn test l2 flap interface DIA
isdn timer DIA
isdn timer t309 DIA
isdn timer t321 DIA
isdn transfer-code DIA
isdn transparent DIA
isdn twait-disable DIA
isdn v110 only DIA
isdn v110 padding DIA
isdn voice-priority DIA
isdn x25 dchannel DIA
isdn x25 static-tei DIA
isis adjacency-filter ISO
isis advertise-prefix IRS
isis authentication key-chain IRS
isis authentication mode IRS
isis authentication send-only IRS
isis bfd IRS
isis circuit-type IRS
isis csnp-interval IRS
isis display delimiter IRS
isis hello padding IRS
isis hello-interval IRS

isis hello-multiplier IRS
isis ipv6 bfd IPV6, IRS
isis ipv6 metric IPV6
isis ipv6 tag IPV6, IRS
isis lsp-interval IRS
isis mesh-group IRS
isis metric IRS
isis network point-to-point IRS
isis password IRS
isis priority IRS
isis protocol shutdown IRS
isis retransmit-interval IRS
isis retransmit-throttle-interval IRS
isis tag IRS
isis topology disable MTR
iso-igrp adjacency-filter ISO
ispf IRS
issu abortversion HA
issu acceptversion HA
issu changeversion HA
issu checkversion HA
issu commitversion HA
issu linecard abortversion CBL
issu linecard acceptversion CBL
issu linecard changeversion CBL
issu linecard loadversion CBL
issu linecard prepareversion CBL
issu linecard process stop CBL
issu linecard reloadversion CBL
issu linecard runversion CBL
issu loadversion HA
issu runversion HA
issu set rollback-timer HA
issuer-name SEC
iterate-ip-addrs IAD
iua VR

ivr asr-server VR
ivr autoload mode VR
ivr autoload url VR
ivr contact-center VR
ivr language link VR
ivr prompt cutoff-threshold VR
ivr prompt memory VR
ivr prompt streamed VR
ivr record cpu flash VR
ivr record memory session VR
ivr record memory system VR
ivr tts-server VR
ivr tts-voice-profile VR
ivrf SEC
ixi application cme VR
ixi application mib VR
ixi transport http VR

J

jitter OER
jitter (PfR) PFR

K

kal-ap domain SLB
keepalive IR
keepalive (ISG) ISG
keepalive (LMI) WAN
keepalive (OER) OER
keepalive (PfR) PFR
keepalive (SAF) SAF
keepalive (TN3270) IBM
keepalive (WSMA) WSMA
keepalive (XMCP) SAF
keepalive (isakmp profile) SEC
keepalive retries VR
keepalive target IPV6, VR
keepalive timeout VR

keepalive trigger VR
keepalive-lifetime ATM
keepalive-time ATM
kerberos clients mandatory SEC
kerberos credentials forward SEC
kerberos instance map SEC
kerberos local-realm SEC
kerberos password SEC
kerberos preauth SEC
kerberos processes SEC
kerberos realm SEC
kerberos retry SEC
kerberos server SEC
kerberos srvtab entry SEC
kerberos srvtab remote SEC
kerberos timeout SEC
key IRI, IPV6, SAF
key (config-radius-server) SEC
key (ISG RADIUS proxy) ISG
key (SSG-radius-proxy-client) SSG
key (TACACS+) SEC, IPV6
key (isakmp-group) SEC
key (session border controller) SBCD
key chain IRI, IPV6, SAF
key config-key SEC
key config-key password-encryption SEC
key-hash SEC
key-set SEC
key-string (IKE) SEC
key-string (SSH) SEC
key-string (authentication) IRI, IPV6, SAF
keylen IBM
keymap TSV
keymap-type TSV
keyring SEC
keyring (IKEv2 profile) SEC

kron occurrence [CNS](#)

kron policy-list [CNS](#)

L

l2 pseudowire routing [MP](#)

l2 router-id [WAN](#)

l2 subscriber [CE](#)

l2 vfi autodiscovery [MP](#), [WAN](#)

l2 vfi manual [MP](#), [IR](#)

l2 vfi point-to-point [MP](#)

l2-filter bridge-group-acl [WL](#)

l2-params gateway [MM](#)

l2f ignore-mid-sequence [VPD](#)

l2f tunnel busy timeout [VPD](#)

l2f tunnel retransmit initial retries [VPD](#)

l2f tunnel retransmit retries [VPD](#)

l2f tunnel timeout setup [VPD](#)

l2protocol forward [LSW](#)

l2protocol-tunnel [IR](#)

l2protocol-tunnel cos [IR](#)

l2protocol-tunnel drop-threshold [IR](#)

l2protocol-tunnel global drop-threshold [IR](#)

l2protocol-tunnel point-to-point [IR](#)

l2protocol-tunnel shutdown-threshold [IR](#)

l2tp attribute clid mask-method [VPD](#)

l2tp congestion-control [VPD](#)

l2tp cookie local [WAN](#)

l2tp cookie remote [WAN](#)

l2tp drop out-of-order [VPD](#)

l2tp hello [WAN](#)

l2tp hidden [VPD](#)

l2tp id [WAN](#)

l2tp ip udp checksum [VPD](#)

l2tp rx-speed [VPD](#)

l2tp security crypto-profile [VPD](#)

l2tp security ip address-check [VPD](#)

l2tp sequencing [VPD](#)

l2tp sso enable **VPD**
l2tp tunnel authentication **VPD**
l2tp tunnel bearer capabilities **VPD**
l2tp tunnel busy timeout **VPD**
l2tp tunnel framing capabilities **VPD**
l2tp tunnel hello **VPD**
l2tp tunnel password **VPD**
l2tp tunnel receive-window **VPD**
l2tp tunnel resync **VPD**
l2tp tunnel retransmit initial retries **VPD, DIA**
l2tp tunnel retransmit initial timeout **VPD**
l2tp tunnel retransmit retries **VPD**
l2tp tunnel retransmit timeout **VPD**
l2tp tunnel timeout no-session **VPD**
l2tp tunnel timeout setup **VPD**
l2tp tunnel zlb delay **VPD**
l2tp tx-speed **VPD**
l2tp-class **WAN**
l2vpn **MP**
l2vpn pseudowire static-oam class **MP**
l2vpn pseudowire tlv template **MP**
l2vpn subscriber **MP**
l2vpn vfi context **MP**
l2vpn xconnect context **MP**
l3vpn encapsulation ip **IR**
label (pseudowire) **MP**
lacp active-port distribution automatic **IR, CE**
lacp direct-loadswap **CE**
lacp failover **CE**
lacp fast-switchover **IR, CE**
lacp max-bundle **IR, CE**
lacp min-bundle **CE**
lacp port-priority **IR, CE**
lacp rate **IR, CE**
lacp system-priority **IR, CE**
lan **IBM**

lan-name IBM
lane auto-config-atm-address ATM
lane bus-atm-address ATM
lane client ATM
lane client flush ATM
lane client mpoa client name ATM
lane client mpoa server name ATM
lane client qos QOS
lane client-atm-address ATM
lane config database ATM
lane config-atm-address ATM
lane database ATM
lane fixed-config-atm-address ATM
lane fssrp ATM
lane global-lecs-address ATM
lane le-arp ATM
lane qos database QOS
lane server-atm-address ATM
lane server-bus ATM
language SEC
lapb interface-outage WAN
lapb k WAN
lapb modulo WAN
lapb n1 WAN
lapb n2 WAN
lapb protocol WAN
lapb t1 WAN
lapb t2 WAN
lapb t4 WAN
lat TSV
lat access-list TSV
lat enabled TSV
lat group-list TSV
lat host-buffers TSV
lat host-delay DEC
lat ka-timer TSV

lat node **TSV**
lat out-group **TSV**
lat remote-modification **TSV**
lat retransmit-limit **TSV**
lat server-buffers **TSV**
lat service autocommand **DEC**
lat service enabled **TSV**
lat service ident **TSV**
lat service password **TSV**
lat service rating **TSV**
lat service rotary **TSV**
lat service-announcements **TSV**
lat service-group **TSV**
lat service-host **TSV**
lat service-responder **TSV**
lat service-timer **TSV**
lat vc-sessions **TSV**
lat vc-timer **TSV**
lbo **IR**
lcp renegotiation **VPD**
ldap attribute-map **SEC**
ldap search **SEC**
ldap server **SEC**
ldr-check **SBCD**
ldr-check (XML billing) **SBCD**
learn **OER**
learn (PfR) **PFR**
lease **IAD**
lease through renew dhcp **IAD**
length **CF**
length (ISG) **ISG**
length (RITE) **SEC**
length (SSG) **SSG**
less-than **ISG**
less-than-or-equal **ISG**
level **CE**

level (CFM-AIS-link) [CE](#)
lex burned-in-address [IR](#)
lex input-address-list [IR](#)
lex input-type-list [IR](#)
lex priority-group [IR](#)
lex retry-count [IR](#)
lex timeout [IR](#)
li-slot rp rate [IR](#)
li-view [SEC](#)
license (parameter-map) [SEC](#)
license accept end user agreement [CSA](#)
license accept end user agreement through request license new-udi [CSA](#)
license agent default [CSA](#)
license agent listener [CSA](#)
license agent max-sessions [CSA](#)
license agent notify [CSA](#)
license boot level [CSA](#)
license boot module [CSA](#)
license call-home install pak [CSA](#)
license call-home resend [CSA](#)
license call-home revoke [CSA](#)
license call-home url [CSA](#)
license clear [CSA](#)
license comment [CSA](#)
license expand nvram [CSA](#)
license feature [CSA](#)
license feature evaluation disable [CBL](#)
license feature evaluation enable [CBL](#)
license feature snasw [CSA](#)
license install [CSA](#)
license modify priority [CSA](#)
license purge [CSA](#)
license revoke [CSA](#)
license right-to-use activate [CSA](#)
license right-to-use deactivate [CSA](#)
license save [CSA](#)

license save credential [CSA](#)
life [SLA](#)
lifetime (IKE policy) [SEC](#), [IPV6](#)
lifetime (IKEv2 profile) [SEC](#)
lifetime (certificate server) [SEC](#)
lifetime (cs-server) [SEC](#)
lifetime crl [SEC](#)
lifetime enrollment-request [SEC](#)
lig [LISP](#)
limit address-count [IPV6](#), [SEC](#)
limit base-size [DIA](#)
limit duration [MWG](#)
limit overflow-size [DIA](#)
limit pad0 service-name [BBA](#)
limit retransmissions [OSPF](#)
limit sgsn-change [MWG](#)
limit volume [MWG](#)
line [TSV](#)
line-cli [CNS](#)
line-mode [IR](#)
line-power [DIA](#)
line-rate [IR](#)
line-term [IR](#)
line-termination [IR](#)
linecard-group y-cable [IR](#)
linecode [IR](#)
link (RLM) [VR](#)
link (TN3270) [IBM](#)
link debounce [IR](#)
link state group [IR](#)
link state track [IR](#)
link-group [OER](#)
link-group (PfR) [PFR](#)
link-test [IR](#)
lisp extended-subnet-mode [LISP](#)
lisp mobility [LISP](#)

lisp-rig LISP
list MP
list (LSP Attributes) MP, SEC
list (OER) OER
list (PfR) PFR
list (WebVPN) SEC
listen-point IBM
listen-port (SIP) VR
lives-of-history-kept SLA
llc2 ack-delay-time IBM
llc2 ack-max IBM
llc2 adm-timer-value IBM
llc2 dynwind IBM
llc2 idle-time IBM
llc2 local-window IBM
llc2 n1 IBM
llc2 n2 IBM
llc2 nw IBM
llc2 recv-window IBM
llc2 rnr-activated IBM
llc2 send-window IBM
llc2 t1-time IBM
llc2 tbusy-time IBM
llc2 tpf-time IBM
llc2 trej-time IBM
llc2 xid-neg-val-time IBM
llc2 xid-retry-time IBM
lldp CE
lldp (interface) CE
lma IMO
lmr duplex half VR
lmr e-lead VR
lmr ip-vad VR
lmr led-on VR
lmr m-lead VR
lnm alternate IBM

lnm crs [IBM](#)
lnm disabled [IBM](#)
lnm express-buffer [IBM](#)
lnm loss-threshold [IBM](#)
lnm password [IBM](#)
lnm pathtrace-disabled [IBM](#)
lnm rem [IBM](#)
lnm rps [IBM](#)
lnm snmp-only [IBM](#)
lnm softerr [IBM](#)
load classification [SEC](#)
load protocol [QOS](#)
load-balance [VR](#)
load-balance flow-label [MP](#)
load-balance (server-group) [SEC](#)
load-balance flow [MP](#)
load-balancing [IR](#)
load-interval [CF, IR](#)
load-order [SBCD](#)
loadsharing [VPD](#)
loc-reach-algorithm [LISP](#)
locaddr-priority [IBM](#)
locaddr-priority-list [IBM](#)
local [VR](#)
local (OER) [OER](#)
local (PfR) [PFR](#)
local interface [MP](#)
local ip address [IR](#)
local name [VPD](#)
local priority [SEC](#)
local udp port [IR](#)
local-address [SEC](#)
local-address ipv4 [SBCD](#)
local-address ipv4 (packet-cable) [SBCD](#)
local-id host [SBCD](#)
local-ip (IPC transport-SCTP local) [IAD](#)

local-jitter-ratio [SBCD](#)
local-lnm [IR](#)
local-port [IAD, SBCD](#)
local-port (WebVPN) [SEC](#)
local-port (session border controller) [SBCD](#)
local-profile [SSG](#)
local-remote-desc always [SBCD](#)
local-rib-criteria [OSPF](#)
local-routing-mag [IMO](#)
localhost [VR](#)
location [CF, CE](#)
location (interface) [CE](#)
location civic-location identifier [CE](#)
location civic-location-id [CE](#)
location custom-location identifier [CE](#)
location custom-location-id [CE](#)
location geo-location identifier [CE](#)
location geo-location-id [CE](#)
location prefer [CE](#)
location-id [SBCD](#)
location-id (session border controller) [SBCD](#)
locator-down [LISP](#)
locator-scope [LISP](#)
locator-table [LISP](#)
lock [CF](#)
lockable [CF](#)
lockdown (LSP Attributes) [MP, SEC](#)
log (parameter-map type) [SEC](#)
log (policy-map) [SEC](#)
log (type access-control) [SEC](#)
log config [CF](#)
log-adjacency-changes [IRS, OSPF, IPV6](#)
log-adjacency-changes (IPX) [IPX](#)
log-adjacency-changes (OSPFv3) [IPV6](#)
log-adjacency-changes (OTV) [WAN](#)
log-neighbor-changes (EIGRP) [EIGRP, IPX](#)

log-neighbor-changes (IPv6 EIGRP) [IPV6](#), [EIGRP](#)
log-neighbor-warnings [EIGRP](#), [IPX](#), [IPV6](#)
logging (DNS) [IAD](#)
logging (MPLS-TP) [MP](#)
logging (OER) [OER](#)
logging (PfR) [PFR](#)
logging (cfg-dns-view) [IAD](#)
logging (parameter-map) [SEC](#)
logging alarm [ESM](#)
logging buffered [ESM](#)
logging buffered filtered [ESM](#)
logging buffered xml [ESM](#)
logging buginf [CF](#)
logging cmts sea [CBL](#)
logging cns-events [CNS](#), [ESM](#)
logging console [ESM](#)
logging console filtered [ESM](#)
logging console guaranteed [ESM](#)
logging console xml [ESM](#)
logging count [ESM](#)
logging discriminator [ESM](#)
logging dmvpn [SEC](#)
logging enable [CF](#)
logging enabled [SEC](#)
logging esm config [CF](#)
logging event [IR](#)
logging event atm pvc state [ATM](#)
logging event bundle-status [CF](#)
logging event frame-relay x25 [WAN](#)
logging event link-status (global configuration) [CF](#), [IR](#)
logging event link-status (interface configuration) [CF](#), [IR](#), [IPV6](#)
logging event nfas-status [DIA](#)
logging event subif-link-status [CF](#), [IR](#)
logging event trunk-status [CF](#)
logging facility [ESM](#)
logging filter [ESM](#)

logging filter control protocol SBCD
logging history ESM
logging history size ESM
logging host ESM, IPV6
logging ip access-list cache (global configuration) SEC, CF
logging ip access-list cache (interface configuration) SEC, CF
logging level SBCD
logging linecard ESM
logging message-counter ESM
logging monitor ESM
logging monitor filtered ESM
logging monitor xml ESM
logging on ESM
logging origin-id ESM, IPV6
logging persistent ESM
logging persistent (config-archive-log-cfg) CF
logging persistent move ESM
logging persistent reload (config-archive-log-cfg) CF
logging pseudowire status MP
logging queue-limit ESM
logging rate-limit BBA, ESM
logging redundancy MP
logging reload CF
logging server-arp IAD
logging size CF
logging source-interface IR, ESM, IPV6
logging synchronous CF, ESM
logging system CF
logging trap ESM
logging userinfo ESM
logging-events IR
logging-events (T1-E1 controller) IR
logical-mn IMO
login (EXEC) TSV
login (line) TSV
login authentication SEC

login block-for SEC
login delay SEC
login quiet-mode access-class SEC
login-message SEC
login-photo SEC
login-string TSV
logo SEC
logout CF
logout-warning CF
lookup SLB
loop-detect VR
loopback ATM
loopback (ATM) ATM
loopback (CEM) IR
loopback (DSL controller) IR
loopback (E3 controller) IR
loopback (J1 controller) IR
loopback (PA-MC-8TE1+ port adapter) IR
loopback (T1 interface) IR
loopback (T3 controller) IR
loopback (T3-E3 interface) IR
loopback (controller el) DIA
loopback (controller) VR
loopback (interface) IR
loopback applique IR
loopback dte IR
loopback line IR
loopback local (controller) DIA
loopback local (interface) DIA
loopback remote (controller) DIA
loopback remote (interface) IR
loss OER
loss (PfR) PFR
loss-plan VR
IRQ e164 early-lookup VR
IRQ forward-queries VR

lrq lrj immediate-advance VR
lrq reject-resource-low VR
lrq reject-unknown-circuit VR
lrq reject-unknown-prefix VR
lrq timeout blast window VR
lrq timeout seq delay VR
lsap IBM
lsp-full suppress IRS
lsp-gen-interval (IPX) IRS, IPX
lsp-gen-interval (IS-IS) IRS
lsp-gen-interval (OTV) WAN
lsp-mtu (IPX) IPX
lsp-mtu (ISO CLNS) ISO
lsp-mtu (OTV) WAN
lsp-refresh-interval (IPX) IPX
lsp-refresh-interval (IS-IS) IRS
lsp-refresh-interval (OTV) WAN
lsp-selector SLA
lsp-selector-base SLA
lsr-path SLA
lte failovertimer DIA
lte gps mode standalone DIA
lte gps nmea DIA
lte sim authenticate DIA
lte sim max-retry DIA
lte sim primary DIA
lte sim profile DIA
lte sim profile 3gpp 3gpp2 DIA
lte sms archive DIA
lu deletion IBM
lu termination IBM
lz entropy-check WAN



m

- [Finding IOS Command Information, page 287](#)
- [m, page 290](#)

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 9: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference

CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

m**M**

mab [SEC](#)

mab through mime-type [SEC](#)

mac access-group [SEC](#), [LSW](#)

mac access-group in [CE](#)

mac access-group in through show ethernet cfm errors [CE](#)

mac access-list extended [LSW](#)

mac address-group through revision [LSW](#)

mac aging-time [CE](#)

mac limit action flooding disable [CE](#)

mac limit maximum addresses [CE](#)

mac limit maximum addresses (service instance) [CE](#)

mac packet-classify [IAD](#), [QOS](#)

mac packet-classify use vlan [IAD](#), [QOS](#)

mac security [CE](#)

mac static address [CE](#)

mac tunnel address destination default [CE](#)

mac tunnel address destination map [CE](#)

mac-address [IBM](#), [CBL](#)

mac-address (ATM) [ATM](#)

mac-address (RITE) [SEC](#)

mac-address (virtual switch) [IR](#)

mac-address-table aging-time [LSW](#)

mac-address-table dynamic [LSW](#)

mac-address-table learning [IR](#), [LSW](#)

mac-address-table limit [LSW](#)

mac-address-table notification change [LSW](#)

mac-address-table notification mac-move [LSW](#)

mac-address-table notification threshold [LSW](#)

mac-address-table secure [IR](#), [LSW](#)

mac-address-table static [LSW](#)

mac-address-table synchronize [LSW](#)

mac-address-table unicast-flood [LSW](#)

mace enable **WAN**
mace enable through rtcp-regenerate **WAN**
mace monitor waas **WAN**
macro (global configuration) **CF**
macro (interface configuration) **CF**
mag **IMO**
mail-server **HA**
mail-server through service image-version efsu **HA**
main-cpu **CBL**
main-fiber port **IR**
maintenance-mode **CBL**
major rising **ERM**
managed-config-flag **IPV6, SEC**
management server password **BBA**
management server password through sessions throttle **BBA**
management server url **BBA**
manager **IMC**
manager (DFP agent) **SLB**
map ip **QOS**
map ipv6 **QOS**
map mpls **QOS**
map q850-cause **VR**
map q850-cause through mgcp package-capability **VR**
map resp-code **VR**
map type **SEC**
map-cache **LISP**
map-class atm **ATM**
map-class dialer **DIA**
map-class frame-relay **WAN**
map-group **WAN**
map-list **WAN**
map-notify-group **LISP**
map-server **LISP**
map-server-peer **LISP**
mask **NF, IPV6**
mask (IPv4) **NF**

mask (policy-map) [SEC](#)
mask-urls [SEC](#)
master [OER](#)
master (IKEv2 cluster) [SEC](#)
master (PfR) [PFR](#)
match (IKEv2 policy) [SEC](#), [IPV6](#)
match (IKEv2 profile) [SEC](#), [IPV6](#)
match (NetFlow) [NF](#)
match (VLAN access-map) [LSW](#)
match (gtp) [SEC](#)
match (radius-filter) [ISG](#)
match (ruleset) [TSV](#)
match access-group [QOS](#), [SEC](#), [MM](#)
match access-group (ISG) [ISG](#)
match access-group name [IPV6](#)
match access-group through mls ip pbr [QOS](#)
match access-list [ISG](#)
match access-list (PMIPv6) [IMO](#)
match additional-paths advertise-set [BGP](#)
match address (GDOI local server) [SEC](#)
match address (IPSec) [SEC](#)
match any [QOS](#), [MM](#)
match application (class-map) [QOS](#), [MD](#)
match application name [FNF](#), [MM](#)
match application vendor [MM](#)
match application version [MM](#)
match as-path [BGP](#)
match atm oam [QOS](#)
match atm-clp [QOS](#)
match atm-vci [QOS](#)
match authen-status [ISG](#)
match authenticated-domain [ISG](#)
match authenticated-username [ISG](#)
match authentication trustpoint [SEC](#)
match body regex [SEC](#)
match certificate [SEC](#)

match certificate (ISAKMP) SEC
match certificate (ca-trustpoint) SEC
match certificate (ca-trustpool) SEC
match certificate override cdp SEC
match certificate override ocsp SEC
match certificate override sia SEC
match class session SEC
match class-map QOS, SEC
match clns address ISO
match clns next-hop ISO
match clns route-source ISO
match cmd SEC
match community BGP
match connection client MM
match connection id FNF
match connection server MM
match connection transaction-id FNF, MM
match cos MP, QOS, MM
match cos inner QOS
match cos through mpls ldp atm control-mode MP
match data-length SEC
match datalink destination-vlan-id MM
match datalink dot1q priority FNF
match datalink dot1q vlan FNF
match datalink ethertype FNF
match datalink mac FNF, MM
match datalink source-vlan-id MM
match datalink vlan FNF, MM
match destination-address mac QOS, MM
match discard-class QOS, MM
match dnis ISG
match dsdp QOS, IPV6, MM
match encrypted SEC
match extcommunity BGP, EIGRP
match field QOS, SEC
match file-transfer SEC

match flow **FNF, MM**
match flow pdp **QOS, MWG**
match fr-de **WAN, MM**
match fr-dlci **QOS, MM**
match group-object security **SEC**
match header count **SEC**
match header length gt **SEC**
match header regex **SEC**
match identity **IPV6, SEC**
match input vlan **QOS**
match input-interface **QOS, MM**
match interface (Flexible NetFlow) **FNF, MM**
match interface (Flexible NetFlow) through ttl (Flexible NetFlow) **FNF**
match interface (IP) **IRI**
match interface (ISO CLNS) **ISO**
match invalid-command **SEC**
match ip address **IRI**
match ip address (OER) **OER**
match ip address (PfR) **PFR**
match ip dscp **QOS, MM**
match ip next-hop **IRI**
match ip precedence **QOS, MM**
match ip redistribution-source **IRI**
match ip route-source **IRI**
match ip rtp **QOS, MM**
match ipv4 **FNF, MM**
match ipv4 destination **FNF, MM**
match ipv4 fragmentation **FNF, MM**
match ipv4 initiator **MM**
match ipv4 responder **MM**
match ipv4 section **FNF, MM**
match ipv4 source **FNF, MM**
match ipv4 total-length **FNF, MM**
match ipv4 ttl **FNF, MM**
match ipv6 **IPV6, FNF, MM**
match ipv6 access-list **IPV6, SEC**

match ipv6 address IPV6, IRI
match ipv6 destination IPV6, FNF, MM
match ipv6 extension map IPV6, FNF, MM
match ipv6 fragmentation IPV6, FNF, MM
match ipv6 hop-limit IPV6, FNF, MM
match ipv6 initiator MM
match ipv6 length IPV6, FNF, MM
match ipv6 next-hop IPV6
match ipv6 responder MM
match ipv6 route-source IPV6
match ipv6 section FNF, MM
match ipv6 source FNF, MM
match length IRI, IPV6
match local-preference BGP
match login clear-text SEC
match media ISG
match message SEC
match message-type IAD
match metadata MM
match metric (IP) IRI
match metric (ISO CLNS) ISO
match mime content-type regex SEC
match mime encoding SEC
match mlp-negotiated ISG
match mpls experimental QOS
match mpls experimental topmost MP, QOS, MM
match mpls label FNF
match mpls-label MP, IPV6
match nas-port ISG
match no-username ISG
match not QOS, SEC, MM
match oer learn OER
match packet length (class-map) QOS, MM
match pfr learn PFR
match policy performance-monitor MM
match policy-list BGP

match port-type **QOS**
match precedence **QOS, IPV6, MM**
match program-number **SEC**
match protocol **QOS, IPV6, MM**
match protocol (ISG) **ISG**
match protocol (L2TPv3) **WAN**
match protocol (NBAR) **QOS**
match protocol (zone) **SEC, IPV6**
match protocol attribute application-group **QOS**
match protocol attribute category **QOS**
match protocol attribute encrypted **QOS**
match protocol attribute sub-category **QOS**
match protocol attribute tunnel **QOS**
match protocol citrix **QOS**
match protocol fasttrack **QOS**
match protocol gnutella **QOS**
match protocol h323-annexe **SEC**
match protocol h323-nxg **SEC**
match protocol http **QOS**
match protocol pppoe-discovery **QOS**
match protocol rtp **QOS**
match protocol-violation **SEC**
match qos-group **QOS, MM**
match ra prefix-list **IPV6, SEC**
match recipient address regex **SEC**
match recipient count gt **SEC**
match recipient invalid count gt **SEC**
match reply ehlo **SEC**
match reply prefix-list **IAD**
match req-resp **SEC**
match req-resp body length **SEC**
match req-resp header content-type **SEC**
match req-resp header transfer-encoding **SEC**
match req-resp protocol-violation **SEC**
match request **SEC**
match request length **SEC**

match request method SEC
match request not regex SEC
match request port-misuse SEC
match request regex SEC
match response SEC
match response body java-applet SEC
match response status-line regex SEC
match route-type (IP) IRI
match route-type (ISO CLNS) ISO
match routing FNF, MM
match routing is-multicast FNF, MM
match routing multicast replication-factor FNF, MM
match rpkı BGP
match rule CBL
match search-file-name SEC
match security-group SEC
match sender address regex SEC
match server access-list IAD
match server-domain urlf-glob SEC
match server-response any SEC
match service SEC
match service-instance IAD
match service-name ISG
match service-type IAD
match services waas MM
match source-address mac QOS, MM
match source-ip-address ISG
match source-protocol BGP
match start QOS, SEC
match tag IRI
match tag (class-map) QOS
match tag list EIGRP, IRI
match tcp WAN
match text-chat SEC
match timer ISG
match traffic-class access-list OER

match traffic-class access-list (PfR) **PFR**
match traffic-class application **OER**
match traffic-class application (PfR) **PFR**
match traffic-class application nbar **OER**
match traffic-class application nbar (PfR) **PFR**
match traffic-class prefix-list **OER**
match traffic-class prefix-list (PfR) **PFR**
match transport **FNF**, **MM**
match transport destination-port **MM**
match transport icmp ipv4 **FNF**, **MM**
match transport icmp ipv6 **FNF**, **MM**
match transport initiator **MM**
match transport responder **MM**
match transport rtp ssrc **MM**
match transport source-port **MM**
match transport tcp **FNF**, **MM**
match transport udp **FNF**, **MM**
match tunnel-name **ISG**
match unauthenticated-domain **ISG**
match unauthenticated-username **ISG**
match url **SEC**
match url category **SEC**
match url reputation **SEC**
match url-keyword urlf-glob **SEC**
match user-group **SEC**
match vlan **WL**, **MM**
match vlan (QoS) **QOS**
match vlan inner **QOS**
match vrf **ISG**
matchdscp **IMO**
matchnot (radius-filter) **ISG**
max bandwidth **BBA**
max prefix **OER**
max prefix (PfR) **PFR**
max range receive **OER**
max range receive (PfR) **PFR**

max vc **BBA**
max-area-addresses **IRS**
max-associations (SSID configuration mode) **WL**
max-bandwidth **VR**
max-call-rate-per-scope **SBCD**
max-calls **VR**
max-clients **SAF**
max-conn (dial peer) **VR**
max-connection **VR**
max-connections **SBCD**
max-delay **SLA**
max-destination **SEC**
max-dropout **MM**
max-dropout (policy RTP) **MM**
max-forwards **VR**
max-header-length **SEC**
max-in-call-msg-rate **SBCD**
max-incomplete **SEC**
max-incomplete (parameter-map type) **SEC**
max-incomplete aggressive-aging **SEC**
max-llc2-rcvbuffs **IBM**
max-llc2-sessions **IBM**
max-logins **SEC**
max-lsa **OSPF**
max-lsp-lifetime (IPX) **IPX**
max-lsp-lifetime (OTV) **WAN**
max-message **WSMA**
max-metric router-lsa **OSPF, IPV6**
max-num-calls **SBCD**
max-out-call-msg-rate **SBCD**
max-range-utilization **OER**
max-range-utilization (PfR) **PFR**
max-recursive-depth **SBCD**
max-redirects **VR**
max-reg **SBCD**
max-reg-rate-per-scope **SBCD**

max-reorder **MM**
max-reorder (policy RTP) **MM**
max-request **SEC**
max-reserved-bandwidth **QOS, IR**
max-resp-pak **SEC**
max-responses **SBCD**
max-retry-attempts **SEC**
max-sessions host **SSG**
max-subscription **VR**
max-updates **SBCD**
max-uri-length **SEC**
max-users **SEC**
max-users (WebVPN) **SEC**
max-xmit-utilization **OER**
max-xmit-utilization (PfR) **PFR**
max1 lookup **VR**
max1 retries **VR**
max2 lookup **VR**
max2 retries **VR**
maxclients **SLB**
maxconns (firewall farm TCP protocol) **SLB**
maxconns (firewall farm datagram protocol) **SLB**
maxconns (server farm) **SLB**
maximum **CF**
maximum (local policy) **QOS**
maximum bandwidth ingress **QOS**
maximum bandwidth percent **QOS**
maximum buffer-size **VR**
maximum cdrflush-timer **VR**
maximum conference-participants **VR**
maximum delay-class **MWG**
maximum fileclose-timer **VR**
maximum header **QOS**
maximum meps **CE**
maximum pdp-context **MWG**
maximum peak-throughput **MWG**

maximum retry-count **VR**
maximum routes **MP, IPV6**
maximum routes (MTR) **MTR**
maximum sessions (DSP farm profile) **IPV6, VR**
maximum traffic-class **MWG**
maximum utilization receive **OER**
maximum utilization receive (PfR) **PFR**
maximum-lus **IBM**
maximum-paths **IRI**
maximum-paths (IPv6) **IPV6**
maximum-paths (OSPFv3) **IPV6**
maximum-paths eibgp **BGP**
maximum-paths ibgp **BGP, IPV6**
maximum-prefix **EIGRP**
maximum-service (EIGRP) **SAF**
maximum-sessions **SLA**
maxlength **IMO**
mbr traffic-class **MWG**
mbssid **WL**
mc-peer **PFR**
mcsa **IMO**
mdix auto **IR**
mdl **IR**
mdn **VR**
mdr download reserve memory image **HA**
mdt auto-discovery pim **IMC**
mdt data **IMC**
mdt data mpls mldp **IMC**
mdt default **IMC**
mdt log-reuse **IMC**
mdt preference **IMC**
measurement-retry **SLA**
measurement-type **SLA**
media **SBCD, VR**
media address preserve **SBCD**
media bandwidth-fields ignore **SBCD**

media bypass **SBCD**
media bypass type **SBCD**
media class **VR**
media limits **SBCD**
media police **SBCD**
media profile asp **VR**
media profile nr **VR**
media profile police **VR**
media profile recorder **VR**
media service **VR**
media-address **SBCD**
media-address ipv4 **SBCD**
media-address ipv6 **SBCD**
media-address pool **SBCD**
media-address pool ipv4 **SBCD**
media-address pool ipv6 **SBCD**
media-gateway **SBCD**
media-gateway policy type **SBCD**
media-inactivity-criteria **VR**
media-late-to-early-iw **SBCD**
media-line **SBCD**
media-policy **SBCD**
media-proxy services **MSP**
media-proxy services metadata **MSP**
media-proxy services rsvp **MSP**
media-recording **VR**
media-timeout **SBCD**
media-timeout (session border controller) **SBCD**
media-type **IR**
media-type auto-failover **IR**
mediacard **VR**
mediatrace **MM**
mediatrace enable provider **MM**
mediatrace enable tag **MM**
mediatrace flow-specifier **MM**
mediatrace initiator **MM**

mediatrace path-specifier **MM**
mediatrace poll **MM**
mediatrace profile custom **MM**
mediatrace profile perf-monitor **MM**
mediatrace profile snmp **MM**
mediatrace profile system **MM**
mediatrace responder **MM**
mediatrace schedule **MM**
mediatrace session-params **MM**
medium p2p **MP**
meetme-conference **VR**
member **DIA**
member (VRF list) **EVN**
member (bridge-domain) **MP**
member (dial peer cor list) **VR, DIA**
member (l2vpn vfi) **MP**
member (xconnect) **MP**
member subslot **IR, CBL**
meminfo **CBL**
memory cache error-recovery **CF**
memory cache error-recovery options **CF**
memory free low-watermark **CF**
memory io **ERM**
memory lite **CF**
memory processor **ERM**
memory reserve **CF**
memory reserve critical **CF**
memory sanity **CF**
memory scan **CF**
memory statistics history table **ERM**
memory-size iomem **CF**
menu menu-name single-space **CF**
menu <menu-name> single-space **CF**
menu (EXEC) **CF**
menu clear-screen **CF**
menu command **CF**

menu default **CF**
menu line-mode **CF**
menu options **CF**
menu prompt **CF**
menu status-line **CF**
menu text **CF**
menu title **CF**
mep archive-hold-time **CE**
mep crosscheck mpid evc **CE**
mep crosscheck mpid vlan **CE**
mep mpid **CE**
message retry count **SEC**
message retry interval **SEC**
message-authenticator ignore **ISG**
message-exchange max-failures **VR**
metadata application-params **QOS, MD**
metadata flow **QOS, MD**
metadata flow (troubleshooting) **QOS, MD**
metadata flow reverse transmit **MD**
metadata flow transmit **MD**
metadata source nbar **MD**
metadatocache **WAN**
method **CBL, VR**
method (editor) **SBCD**
method (session border controller) **SBCD**
method packetcable-em **SBCD**
method xml **SBCD**
method-editor **SBCD**
method-list **ISG**
method-profile **SBCD**
metric **IRS**
metric holddown **EIGRP**
metric maximum-hops **EIGRP**
metric rib-scale **EIGRP**
metric weights (EIGRP) **EIGRP, IPV6, SAF**
metric weights (ISO CLNS) **ISO**

metric-list (monitoring profile) **MM**
metric-list (system profile) **MM**
metric-style narrow **MP**
metric-style transition **MP**
metric-style wide **IRS, MP**
mgcp **VR**
mgcp behavior **VR**
mgcp behavior comedy-check-media-src **VR**
mgcp behavior comedy-role **VR**
mgcp behavior comedy-sdp-force **VR**
mgcp behavior g729-variants static-pt **VR**
mgcp bind **VR**
mgcp block-newcalls **VR**
mgcp call-agent **VR**
mgcp codec **VR**
mgcp codec gsmamr-nb **VR**
mgcp codec ilbc **VR**
mgcp crypto rfc-preferred **VR**
mgcp debug-header **VR**
mgcp default-package **VR**
mgcp disconnect-delay **VR**
mgcp dns stale threshold **VR**
mgcp dtmf-relay **VR**
mgcp endpoint offset **VR**
mgcp explicit hookstate **VR**
mgcp fax rate **VR**
mgcp fax t38 **VR**
mgcp fax-relay **VR**
mgcp ip qos dscp **VR**
mgcp ip-tos **VR**
mgcp lawful-intercept **VR**
mgcp max-waiting-delay **VR**
mgcp modem passthrough codec **VR**
mgcp modem passthrough mode **VR**
mgcp modem passthrough voip redundancy **VR**
mgcp modem passthru **VR**

mgcp modem relay voip gateway-xid VR
mgcp modem relay voip latency VR
mgcp modem relay voip mode VR
mgcp modem relay voip mode sse VR
mgcp modem relay voip sprt retries VR
mgcp modem relay voip sprt v14 VR
mgcp package-capability VR
mgcp persistent VR
mgcp persistent through mmoip aaa send-id secondary VR
mgcp piggyback message VR
mgcp playout VR
mgcp profile VR
mgcp quality-threshold VR
mgcp quarantine mode VR
mgcp quarantine persistent-event disable VR
mgcp request retries VR
mgcp request timeout VR
mgcp restart-delay VR
mgcp rtp payload-type VR
mgcp rtp unreachable timeout VR
mgcp rtcac VR
mgcp sched-time VR
mgcp sdp VR
mgcp sgcp disconnect notify VR
mgcp sgcp restart notify VR
mgcp src-cac VR
mgcp timer VR
mgcp tse payload VR
mgcp vad VR
mgcp validate call-agent source-ipaddr VR
mgcp validate domain-name VR
mgcp voice-quality-stats VR
microcode (12000) CF
microcode (7000/7500) CF
microcode (7200) CF
microcode (uBR10012) CBL

microcode reload (12000) **CF**
microcode reload (7000 7500) **CF**
microcode reload (7000/7500) **CF**
microcode reload (7200) **CF**
microcode reload (uBR10012) **CBL**
microcode reload controller **IR, VR**
microloop avoidance **IRS**
microloop avoidance rib-update-delay **IRS**
mid **ATM**
midcall-signaling **VR**
mime-type **SEC**
min-se (SIP) **VR**
min-sequential **MM**
min-sequential (policy RTP) **MM**
minor rising **ERM**
minor-alert-size **SBCD**
mip auto-create **CE**
mip auto-create (cfm-srv) **CE**
mitigation **SEC**
mitigation through outgoing **SEC**
mkdir **CF**
mkdir disk0: **CF**
mlacp interchassis group **CE**
mlacp lag-priority **CE**
mlacp node-id **CE**
mlacp system-mac **CE**
mlacp system-priority **CE**
mls acl team consistency enable **SEC**
mls acl team default-result **SEC**
mls acl team override dynamic dhcp-snooping **SEC**
mls acl team share-global **SEC**
mls acl vacl apply-self **SEC**
mls aclmerge algorithm **SEC**
mls aging fast **NF**
mls aging long **NF**
mls aging normal **NF**

mls aging slb normal **SLB**
mls aging slb process **SLB**
mls cef maximum-routes **ISW, IPV6**
mls cef tunnel fragment **ISW**
mls erm priority **ISW, IPV6**
mls exclude acl-deny **NF**
mls exclude protocol **IR**
mls flow **NF**
mls ip **ISW**
mls ip acl port expand **SEC**
mls ip cef accounting per-prefix **ISW**
mls ip cef load-sharing **ISW**
mls ip cef rate-limit **ISW**
mls ip cef rpf hw-enable-rpf-acl **ISW**
mls ip cef rpf interface-group **ISW**
mls ip cef rpf multipath **ISW**
mls ip delete-threshold **IR**
mls ip directed-broadcast **IR**
mls ip inspect **SEC**
mls ip install-threshold **IAP**
mls ip install-threshold through platform trace runtime process forwarding-manager module wccp **IAP**
mls ip multicast (global configuration) **IMC**
mls ip multicast (interface configuration) **IMC**
mls ip multicast bidir gm-scan-interval **IMC**
mls ip multicast connected **IMC**
mls ip multicast consistency-check **IMC**
mls ip multicast flow-stat-timer **IMC**
mls ip multicast non-rpf aging **IMC**
mls ip multicast replication-mode **IMC**
mls ip multicast sso **IMC, HA**
mls ip multicast stub **IMC**
mls ip multicast threshold **IMC**
mls ip nat netflow-frag-l4-zero **NF**
mls ip pbr **QOS**
mls ip reflexive ndr-entry tcam **IAP**
mls ip slb purge global **SLB**

mls ip slb search wildcard **SLB**
mls ipv6 acl compress address unicast **IPV6**
mls ipv6 acl source **IPV6**
mls ipv6 slb search wildcard rp **IPV6**
mls ipv6 vrf **IPV6, MP**
mls ipx **IR**
mls l2tpv3 reserve **WAN**
mls mpls **MP**
mls mpls (guaranteed bandwidth traffic engineering) **MP**
mls mpls (recirculation) **MP**
mls mpls qos input uniform-mode **MP**
mls nde flow **NF**
mls nde interface **NF**
mls nde sender **NF**
mls netflow **NF**
mls netflow interface **NF**
mls netflow maximum-flows **NF**
mls netflow sampling **NF**
mls netflow usage notify **NF**
mls qos (global configuration mode) **QOS**
mls qos (interface configuration mode) **QOS**
mls qos 10g-only **QOS**
mls qos aggregate-policer **QOS**
mls qos bridged **QOS**
mls qos channel-consistency **QOS**
mls qos cos **QOS**
mls qos cos-mutation **QOS**
mls qos dscp-mutation **QOS**
mls qos exp-mutation **QOS**
mls qos global configuration mode through mpls experimental **QOS**
mls qos loopback **QOS**
mls qos map **QOS**
mls qos map cos-dscp **QOS**
mls qos map cos-mutation **QOS**
mls qos map dscp-cos **QOS**
mls qos map dscp-exp **QOS**

mls qos map dscp-mutation **QOS**
mls qos map exp-dscp **QOS**
mls qos map exp-mutation **QOS**
mls qos map ip-prec-dscp **QOS**
mls qos map policed-dscp **QOS**
mls qos marking ignore port-trust **QOS**
mls qos marking statistics **QOS**
mls qos mpls trust experimental **QOS**
mls qos police redirected **QOS**
mls qos police serial **QOS**
mls qos protocol **QOS**
mls qos queue-mode mode-dscp **QOS**
mls qos queueing-only **QOS**
mls qos rewrite ip dscp **QOS**
mls qos statistics-export (global configuration) **QOS**
mls qos statistics-export (interface configuration) **QOS**
mls qos statistics-export aggregate-policer **QOS**
mls qos statistics-export class-map **QOS**
mls qos statistics-export delimiter **QOS**
mls qos statistics-export destination **QOS**
mls qos statistics-export interval **QOS**
mls qos supervisor 10g-only **QOS**
mls qos trust **QOS**
mls qos trust extend **QOS**
mls qos tunnel gre input uniform-mode **QOS**
mls qos vlan-based **QOS**
mls rate-limit all **SEC**
mls rate-limit layer2 **SEC**
mls rate-limit multicast ipv4 **SEC**
mls rate-limit multicast ipv6 **IPV6, SEC**
mls rate-limit unicast acl **SEC**
mls rate-limit unicast cef **SEC**
mls rate-limit unicast ip **SEC**
mls rate-limit unicast l3-features **SEC**
mls rate-limit unicast vacl-log **SEC**
mls rp ip **LSW**

mls rp ip (global) **LSW**
mls rp ip (interface) **LSW**
mls rp ip multicast **LSW**
mls rp ip multicast management-interface **LSW**
mls rp ipx (global) **LSW**
mls rp ipx (interface) **LSW**
mls rp locate ipx **LSW**
mls rp management-interface **LSW**
mls rp nde-address **LSW**
mls rp vlan-id **LSW**
mls rp vtp-domain **LSW**
mls sampling **NF**
mls switching **LSW**
mls switching unicast **LSW**
mls verify **IR**
mmoip aaa global-password **VR**
mmoip aaa method fax accounting **VR**
mmoip aaa method fax authentication **VR**
mmoip aaa receive-accounting enable **VR**
mmoip aaa receive-authentication enable **VR**
mmoip aaa receive-id primary **VR**
mmoip aaa receive-id secondary **VR**
mmoip aaa send-accounting enable **VR**
mmoip aaa send-authentication enable **VR**
mmoip aaa send-id primary **VR**
mmoip aaa send-id secondary **VR**
mn-profile-load-aaa **IMO**
mobile network (label) **IMO**
mobile-map (LMA) **IMO**
mobile-network (PMIPv6) **IMO**
mobile-network (mobile router) **IMO**
mobility **IR**
mode **CF, IR**
mode (ATM T1 E1 controller) **IR, VR**
mode (ATM/T1/E1 controller) through mwi-server **VR**
mode (Flexible NetFlow) **FNF**

mode (HSA redundancy) [IR](#)
mode (IPSec) [SEC](#)
mode (OER) [OER](#)
mode (RSC redundancy) [IR](#)
mode (T1 E1 controller) [IR](#), [VR](#)
mode (flow sampler configuration) [NF](#)
mode (nat64) [IAD](#)
mode (redundancy) [CBL](#), [HA](#)
mode (session border controller) [SBCD](#)
mode auto-tunnels [PFR](#)
mode bles [VR](#)
mode border-element [VR](#)
mode bypass [IMC](#), [IR](#), [IMO](#)
mode c-12 [IR](#)
mode ccs [VR](#)
mode dad-proxy [IPV6](#)
mode dot1q-in-dot1q access-gateway [LSW](#)
mode download [IR](#)
mode extended [SSG](#)
mode monitor [PFR](#)
mode ra [SEC](#)
mode route [PFR](#)
mode secure [SEC](#)
mode select-exit [PFR](#)
mode sub-cs [SEC](#)
mode two-way [IR](#)
mode verify bidirectional [PFR](#)
mode vt-15 [IR](#)
mode y-cable [MWR](#)
modem always-on [DIA](#)
modem answer-timeout [DIA](#)
modem at-mode [DIA](#)
modem at-mode-permit [DIA](#)
modem autoconfigure discovery [DIA](#)
modem autoconfigure type [DIA](#)
modem autotest [DIA](#)

modem bad [DIA](#)
modem buffer-size [DIA](#)
modem busyout [DIA](#)
modem busyout-threshold [DIA](#)
modem call-record [DIA](#)
modem callin [DIA](#)
modem callout [DIA](#)
modem country mica [DIA](#)
modem country microcom_hdms [DIA](#)
modem country smart_acf [DIA](#)
modem country v12 [DIA](#)
modem cts-alarm [DIA](#)
modem cts-required [DIA](#)
modem dialin [DIA](#)
modem dialout controller [DIA](#)
modem dtr-active [DIA](#)
modem dtr-delay [IR](#)
modem enable [DIA](#)
modem firmware slot [DIA](#)
modem hold-reset [DIA](#)
modem host [DIA](#)
modem inout [DIA](#)
modem link-info poll time [DIA](#)
modem log [DIA](#)
modem min-speed max-speed [DIA](#)
modem passthrough (dial peer) [VR](#)
modem passthrough (voice-service) [VR](#)
modem poll retry [DIA](#)
modem poll time [DIA](#)
modem printer [DIA](#)
modem recovery action [DIA](#)
modem recovery maintenance [DIA](#)
modem recovery threshold [DIA](#)
modem recovery-time [DIA](#)
modem relay (dial peer) [VR](#)
modem relay (voice-service) [VR](#)

modem relay gateway-xid **VR**
modem relay latency **VR**
modem relay sprt retries **VR**
modem relay sprt v14 **VR**
modem relay sse **VR**
modem ri-is-cd **DIA**
modem shutdown **DIA**
modem startup-test **DIA**
modem status-poll **DIA**
modem-pool **DIA**
modemcap edit **DIA**
modemcap entry **DIA**
modemui **DIA**
modemui-version **DIA**
modular-host subslot **CBL**
monitor call application event-log **VR**
monitor call leg event-log **VR**
monitor capture **EPC**
monitor capture (access list/class map) **EPC**
monitor capture (interface/control plane) **EPC**
monitor capture buffer **EPC**
monitor capture clear **EPC**
monitor capture export **EPC**
monitor capture limit **EPC**
monitor capture match **EPC**
monitor capture point **EPC**
monitor capture point associate **EPC**
monitor capture point disassociate **EPC**
monitor capture point start **EPC**
monitor capture point stop **EPC**
monitor capture start **EPC**
monitor capture stop **EPC**
monitor elog trigger position **ISW**
monitor event ipv6 static **IPV6**
monitor event-trace (EXEC) **ISW, MP, CF**
monitor event-trace (global) **ISW, MP, CF**

monitor event-trace cef (EXEC) **ISW**
monitor event-trace cef (global) **ISW**
monitor event-trace cef ipv4 (global) **ISW**
monitor event-trace cef ipv6 (global) **ISW, IPV6**
monitor event-trace cpu-report (EXEC) **BSM**
monitor event-trace cpu-report (global) **BSM**
monitor event-trace dmvpn **SEC**
monitor event-trace dump-traces **CF**
monitor event-trace gdoi **SEC**
monitor event-trace gdoi (global) **CF**
monitor event-trace gdoi (privileged EXEC) **SEC**
monitor event-trace ipv6 spd **IPV6, SEC**
monitor event-trace sbc (EXEC) **HA**
monitor event-trace sbc (global) **HA**
monitor event-trace sbc ha (EXEC) **SBCD**
monitor event-trace sbc ha (global) **SBCD**
monitor l2tun counters tunnel l2tp **WAN**
monitor loss counter **CE**
monitor metric ip-cbr **MM**
monitor metric rtp **MM**
monitor parameters **MM**
monitor pcm-tracer capture-destination **CF**
monitor pcm-tracer delayed-start **CF**
monitor pcm-tracer profile **CF**
monitor peer bfd **IRI, MP, WAN**
monitor permit-list **CF**
monitor pids **QOS**
monitor probe icmp-ping **VR**
monitor service instance **CE**
monitor session **LSW**
monitor session (VLAN) **LSW**
monitor session egress replication-mode **CF**
monitor session type **CF**
monitor traffic line **TSV**
monitor-interval **MM**
monitor-period **OER**

monitor-period (PfR) **PFR**
monitoring **IR**
monitoring-basics **CBL**
monitoring-duration **CBL**
mop device-code **CF**
mop enabled **IR, DEC**
mop retransmit-timer **CF**
mop retries **CF**
mop sysid **IR**
more **CF**
more url begin **CF**
more url exclude **CF**
more url include **CF**
more <url> begin **CF**
more <url> exclude **CF**
more <url> include **CF**
more flh:logfile **CF**
mos **OER**
mos (PfR) **PFR**
motd-banner **CF**
mpls atm control-vc **MP**
mpls atm cos **MP**
mpls atm disable-headend-vc **MP**
mpls atm multi-vc **MP**
mpls atm vp-tunnel **MP**
mpls atm vpi **MP**
mpls bgp forwarding **MP**
mpls control-word **MP**
mpls cos-map **MP**
mpls discovery vpn interval **SLA**
mpls discovery vpn next-hop **SLA**
mpls experimental **MP, QOS**
mpls export interval **MP**
mpls export vpng4 prefixes **MP**
mpls forwarding bgp **MP**
mpls ip (global configuration) **MP**

mpls ip (interface configuration) **MP**
mpls ip default-route **MP**
mpls ip encapsulate explicit-null **MP**
mpls ip propagate-ttl **MP**
mpls ip ttl-expiration pop **MP**
mpls ipv6 source-interface **MP, IPV6**
mpls l2transport route **MP**
mpls label **MP**
mpls label mode **MP**
mpls label mode (6VPE) **MP**
mpls label protocol (global configuration) **MP**
mpls label protocol (interface configuration) **MP**
mpls label range **MP**
mpls ldp address-message **MP**
mpls ldp advertise-labels **MP**
mpls ldp advertise-labels old-style **MP**
mpls ldp atm control-mode **MP**
mpls ldp atm vc-merge **MP**
mpls ldp atm vc-merge through mpls static binding ipv4 **MP**
mpls ldp autoconfig **MP**
mpls ldp backoff **MP**
mpls ldp discovery **MP**
mpls ldp discovery transport-address **MP**
mpls ldp explicit-null **MP**
mpls ldp graceful-restart **MP**
mpls ldp graceful-restart timers forwarding-holding **MP**
mpls ldp graceful-restart timers max-recovery **MP**
mpls ldp graceful-restart timers neighbor-liveness **MP**
mpls ldp holdtime **MP**
mpls ldp igrp autoconfig **MP**
mpls ldp igrp sync **MP**
mpls ldp igrp sync holddown **MP**
mpls ldp label **MP**
mpls ldp logging neighbor-changes **MP**
mpls ldp logging password configuration **MP**
mpls ldp logging password rollover **MP**

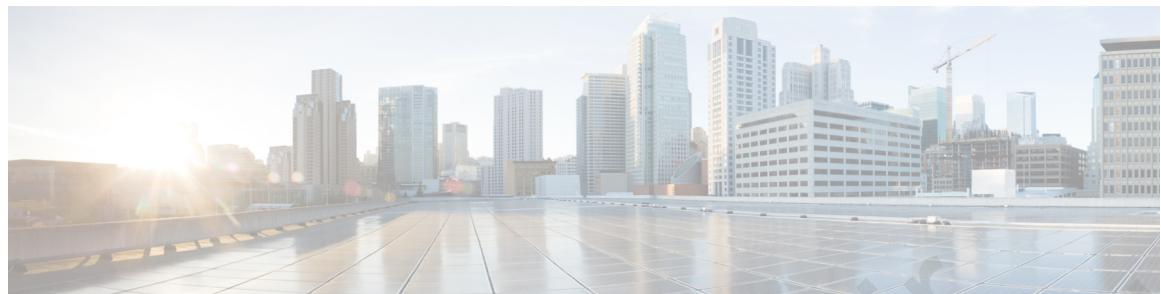
mpls ldp loop-detection **MP**
mpls ldp maxhops **MP**
mpls ldp neighbor implicit-withdraw **MP**
mpls ldp neighbor labels accept **MP**
mpls ldp neighbor password **MP**
mpls ldp neighbor targeted **MP**
mpls ldp nsr **MP**
mpls ldp password fallback **MP**
mpls ldp password option **MP**
mpls ldp password required **MP**
mpls ldp password rollover duration **MP**
mpls ldp path-vector maxlen **MP**
mpls ldp router-id **MP, IPV6**
mpls ldp session protection **MP**
mpls ldp sync **MP**
mpls ldp tcp pak-priority **MP**
mpls load-balance per-label **MP**
mpls lsp ping ipv4 **SLA**
mpls lsp ping pseudowire **SLA**
mpls lsp trace ipv4 **SLA**
mpls mldp **IMC**
mpls mldp fec **IMC**
mpls mldp filter **IMC**
mpls mldp forwarding recursive **IMC**
mpls mldp logging notifications **IMC**
mpls mldp path **IMC**
mpls mtu **MP**
mpls netflow egress **MP, NF**
mpls oam **MP**
mpls prefix-map **MP**
mpls request-labels for **MP**
mpls static binding ipv4 **MP**
mpls static binding ipv4 vrf **MP**
mpls static binding ipv4 vrf through mpls traffic-eng logging tunnel **MP**
mpls static crossconnect **MP**
mpls tp **MP**

mpls tp link **MP**
mpls tp lsp **MP**
mpls traffic-eng **MP**
mpls traffic-eng administrative-weight **MP**
mpls traffic-eng area **MP**
mpls traffic-eng atm cos global-pool **MP**
mpls traffic-eng atm cos sub-pool **MP**
mpls traffic-eng attribute-flags **MP**
mpls traffic-eng auto-bw timers **MP, IPV6**
mpls traffic-eng auto-tunnel backup **MP**
mpls traffic-eng auto-tunnel backup config **MP**
mpls traffic-eng auto-tunnel backup config affinity **MP**
mpls traffic-eng auto-tunnel backup nhop-only **MP**
mpls traffic-eng auto-tunnel backup srlg exclude **MP**
mpls traffic-eng auto-tunnel backup timers **MP**
mpls traffic-eng auto-tunnel backup tunnel-num **MP**
mpls traffic-eng auto-tunnel mesh **MP**
mpls traffic-eng auto-tunnel mesh tunnel-num **MP**
mpls traffic-eng auto-tunnel primary config **MP**
mpls traffic-eng auto-tunnel primary config mpls ip **MP**
mpls traffic-eng auto-tunnel primary onehop **MP**
mpls traffic-eng auto-tunnel primary timers **MP**
mpls traffic-eng auto-tunnel primary tunnel-num **MP**
mpls traffic-eng backup-path **MP**
mpls traffic-eng backup-path tunnel **MP**
mpls traffic-eng ds-te bc-model **MP**
mpls traffic-eng ds-te mode **MP**
mpls traffic-eng fast-reroute backup-prot-preemption **MP**
mpls traffic-eng fast-reroute promote **MP**
mpls traffic-eng fast-reroute timers **MP**
mpls traffic-eng flooding thresholds **MP**
mpls traffic-eng interface **MP**
mpls traffic-eng link timers bandwidth-hold **MP**
mpls traffic-eng link timers periodic-flooding **MP**
mpls traffic-eng link-management timers bandwidth-hold **MP**
mpls traffic-eng link-management timers periodic-flooding **MP**

mpls traffic-eng logging lsp **MP**
mpls traffic-eng logging tunnel **MP**
mpls traffic-eng lsp attributes **MP**
mpls traffic-eng lsp attributes through route-target **MP**
mpls traffic-eng mesh-group **MP**
mpls traffic-eng multicast-intact **MP**
mpls traffic-eng nsr **MP**
mpls traffic-eng passive-interface **MP**
mpls traffic-eng path-option list **MP**
mpls traffic-eng path-selection metric **MP**
mpls traffic-eng reoptimize **MP**
mpls traffic-eng reoptimize events **MP**
mpls traffic-eng reoptimize timers delay **MP**
mpls traffic-eng reoptimize timers frequency **MP**
mpls traffic-eng router-id **MP**
mpls traffic-eng scanner **MP**
mpls traffic-eng signalling advertise explicit-null **MP**
mpls traffic-eng signalling advertise implicit-null **MP**
mpls traffic-eng srlg **MP**
mpls traffic-eng topology holdown sigerr **MP**
mpls traffic-eng tunnels (global configuration) **MP**
mpls traffic-eng tunnels (interface configuration) **MP**
mpls ttl-dec **MP**
mpoa client config name **ATM**
mpoa client name **ATM**
mpoa server config name **ATM**
mpoa server name **ATM**
mpoa server name trigger ip-address **ATM**
mrcp client rtpsetup enable **VR**
mrcp client session history duration **VR**
mrcp client session history records **VR**
mrcp client session nooffailures **VR**
mrcp client statistics enable **VR**
mrcp client timeout connect **VR**
mrcp client timeout message **VR**
mrinfo **IMC**

mrm [IMC](#)
msid (SSG-radius-proxy-timers) [SSG](#)
msisdn suppression [MWG](#)
mstat [IMC](#)
mta receive aliases [VR](#)
mta receive disable-dsn [VR](#)
mta receive generate [VR](#)
mta receive generate-mdn [VR](#)
mta receive maximum-recipients [VR](#)
mta send filename [VR](#)
mta send mail-from [VR](#)
mta send origin-prefix [VR](#)
mta send postmaster [VR](#)
mta send return-receipt-to [VR](#)
mta send server [VR](#)
mta send subject [VR](#)
mta send success-fax-only [VR](#)
mta send with-subject [VR](#)
mtrace [IMC](#)
mtu [MP](#), [SEC](#), [IR](#)
mtu (IP multiplexing) [IMO](#)
multi-homed [IMO](#)
multi-path (mobile networks) [IMO](#)
multi-path (mobile router) [IMO](#)
multi-topology [IPv6](#)
multicast [IPX](#)
multihop-hostname [BBA](#), [VPD](#)
multilink [DIA](#)
multilink bundle-name [DIA](#)
multilink max-fragments [DIA](#)
multilink virtual-template [DIA](#)
multilink-group [DIA](#)
multipath [IMO](#)
multiqueue [ATM](#)
multiring [IBM](#)
music-threshold [VR](#)

mvpn single-forwarder-selection highest-ip-address **BGP**
mvr **LSW**
mvr group **LSW**
mvr immediate **LSW**
mvr max-groups **LSW**
mvr querytime **LSW**
mvr type **LSW**
mvr vlan **LSW**
mvrp global **LSW**
mvrp mac-learning **LSW**
mvrp registration **LSW**
mvrp timer **LSW**
mvrp vlan creation **LSW**
mwi **VR**
mwi (supplementary-service) **VR**
mwi-server **VR**



n through q

- [Finding IOS Command Information, page 323](#)
- [n through q, page 326](#)

Finding IOS Command Information

First Published: February 2008

Last Updated: January 2014

This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 10: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference

CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

n through q

N

n3-requests [MWG](#)
na-carrier-id-table [SBCD](#)
na-dst-address-table [SBCD](#)
na-dst-prefix-table [SBCD](#)
na-src-account-table [SBCD](#)
na-src-address-table [SBCD](#)
na-src-adjacency-table [SBCD](#)
na-src-name-anonymous-table [SBCD](#)
na-src-prefix-table [SBCD](#)
nai [IPV6](#)
nai (proxy mobile IPv6) [IPV6](#), [IMO](#)
nai (proxy mobile ipv6) through tunnel mode gre [IMO](#)
name [IAD](#), [SEC](#), [MWG](#), [IBM](#), [CBL](#)
name (MST) [MP](#), [LSW](#)
name (dial peer cor custom) [VR](#), [DIA](#)
name (view) [SEC](#)
name elan-id [ATM](#)
name local-seg-id [ATM](#)
name preempt [ATM](#)
name server-atm-address [ATM](#)
name-connection [CF](#)
named-key [SEC](#)
nas [SEC](#), [WL](#)
nas-port format d (bba) [BBA](#)
nas-port-id format c [BBA](#)
nasi authentication [SEC](#), [IPX](#)
nat [SLB](#)
nat (IKEv2 profile) [SEC](#)
nat (session border controller) [SBCD](#)
nat force-on [SBCD](#)
nat symmetric check-media-src [VR](#)
nat symmetric role [VR](#)

nat user-address SSG
nat64 enable IAD
nat64 logging IAD
nat64 logging translations IAD
nat64 map-t IAD
nat64 prefix IAD
nat64 prefix stateless IAD
nat64 prefix stateful IAD
nat64 route IAD
nat64 service ftp IAD
nat64 settings IAD
nat64 settings eif IAD
nat64 settings flow-entries disable IAD
nat64 settings mtu minimum IAD
nat64 switchover replicate http IAD
nat64 translation IAD
nat64 v4 IAD
nat64 v4v6 IAD
nat64 v6v4 IAD
national bit (controller) IR
national bit (interface) IR
national reserve IR
nbns primary MWG
nbns-list SEC
nbns-list (policy group) SEC
nbns-server SEC
ncia IBM
ncia client IBM
ncia rsrb IBM
ncia server IBM
negotiation IR
neighbor accept-route-legacy-rt BGP
neighbor bmp-activate BGP
neighbor translate-update BGP
neighbor (EIGRP) EIGRP, IPV6
neighbor (L2VPN Pseudowire Switching) WAN

neighbor (MPLS) **MP**
neighbor (OSPF) **OSPF**
neighbor (RIP) **RIP**
neighbor (VPLS transport mode) **MP**
neighbor (VPLS) **MP, IR, WAN**
neighbor (annex g) **VR**
neighbor (service-family) **SAF**
neighbor (tgrep) **VR**
neighbor activate **BGP, MP, IPV6**
neighbor additional-paths **BGP**
neighbor advertise additional-paths **BGP**
neighbor advertise best-external **BGP**
neighbor advertise diverse-path **BGP**
neighbor advertise-map **BGP**
neighbor advertisement-interval **BGP**
neighbor allow-policy **BGP**
neighbor allowas-in **MP**
neighbor announce rpk state **BGP**
neighbor as-override **MP**
neighbor capability orf prefix-list **BGP**
neighbor cluster-id **BGP**
neighbor database-filter all out OSPF
neighbor default-originate **BGP**
neighbor description **BGP, EIGRP**
neighbor disable-connected-check **BGP**
neighbor distribute-list **BGP**
neighbor dmzlink-bw **BGP**
neighbor ebgp-multipath **BGP, IPV6**
neighbor fall-over **BGP**
neighbor filter-list **BGP**
neighbor ha-mode graceful-restart **BGP**
neighbor ha-mode sso **BGP, HA**
neighbor inherit peer-policy **BGP**
neighbor inherit peer-session **BGP**
neighbor inter-as-hybrid **MP**
neighbor internal-vpn-client **BGP**

neighbor local-as **BGP**
neighbor maximum-prefix **BGP**
neighbor maximum-prefix (BGP) **BGP**
neighbor maximum-prefix (EIGRP) **EIGRP**
neighbor next-hop-self **BGP**
neighbor next-hop-unchanged **BGP, IPV6**
neighbor override-capability-neg **IPV6, MP**
neighbor password **BGP**
neighbor path-attribute discard **BGP**
neighbor path-attribute treat-as-withdraw **BGP**
neighbor peer-group (assigning members) **BGP, IPV6**
neighbor peer-group (creating) **BGP, IPV6**
neighbor prefix-length-size **BGP**
neighbor prefix-list **BGP**
neighbor remote-as **BGP, MP, IPV6**
neighbor remove-private-as **BGP**
neighbor route-map **BGP, IPV6**
neighbor route-reflector-client **BGP, IPV6**
neighbor route-server-client **BGP**
neighbor send-community **BGP, MP, IPV6**
neighbor send-label **IPV6, MP**
neighbor send-label explicit-null **MP**
neighbor shutdown **BGP**
neighbor slow-peer detection **BGP**
neighbor slow-peer split-update-group dynamic **BGP**
neighbor slow-peer split-update-group static **BGP**
neighbor soft-reconfiguration **BGP**
neighbor soo **BGP**
neighbor suppress-signaling-protocol **BGP, MP**
neighbor timers **BGP**
neighbor translate-topology **MTR**
neighbor translate-update **IPV6**
neighbor transport **BGP, MTR**
neighbor ttl-security **BGP**
neighbor unsuppress-map **BGP**
neighbor update-source **BGP, MP, IPV6**

neighbor version **BGP**
neighbor weight **BGP**
net **IRS**
netbios access-list (IPX) **IPX**
netbios access-list bytes **IBM**
netbios access-list host **IBM**
netbios enable-name-cache **IBM**
netbios input-access-filter bytes **IBM**
netbios input-access-filter host **IBM**
netbios name-cache **IBM**
netbios name-cache name-len **IBM**
netbios name-cache proxy-datatype **IBM**
netbios name-cache query-timeout **IBM**
netbios name-cache recognized-timeout **IBM**
netbios name-cache timeout **IBM**
netbios nbf **DIA**
netbios output-access-filter bytes **IBM**
netbios output-access-filter host **IBM**
netbios-name-server **IAD**
netbios-node-type **IAD**
netconf beep initiator **CNS**
netconf beep listener **CNS**
netconf format **CNS, XMLPI**
netconf lock-time **CNS**
netconf max-message **CNS**
netconf max-sessions **CNS**
netconf ssh **CNS**
netflow-sampler **NF**
netmask **SEC**
network **IMO, CBL, SBCD**
network (BGP and multiprotocol BGP) **BGP, IPV6**
network (DHCP) **IAD**
network (EIGRP) **EIGRP**
network (IPX Enhanced IGRP) **IPX**
network (IPv6) **IPV6, MP**
network (RIP) **RIP**

network (mobile networks) **IMO**
network (ssg-redirect) **SSG**
network area **OSPF**
network backdoor **BGP**
network-behind-mobile **MWG**
network-clock (BITS) **IR**
network-clock base-rate **VR**
network-clock clear lockout **IR**
network-clock hold-off global **IR**
network-clock quality-level **IR**
network-clock select **CF, VR**
network-clock set lockout **IR**
network-clock synchronization automatic **IR**
network-clock synchronization ssm option **IR**
network-clock-participate **VR**
network-clock-priority **DIA**
network-clock-select (ATM) **ATM**
network-clock-switch **VR**
network-id **ATM**
network-id (session border controller) **SBCD**
network-list **SSG**
next-address **MP**
next-hop-self **EIGRP**
next-server **IAD**
nhrp group **IAD**
nhrp map group **IAD**
nis address **IAD, IPV6**
nis domain-name **IAD, IPV6**
nisp address **IAD, IPV6**
nisp domain-name **IAD, IPV6**
nls **CBL**
nls ag-id auth-key **CBL**
nls resp-timeout **CBL**
no channelized **IR**
no crypto engine software ipsec **SEC**
no crypto xauth **SEC**

no ip inspect SEC
no ip ips sdf builtin SEC
no menu CF
no snmp-server SNMP
noisefloor VR
non-linear VR
non-revertive CE
non-standard (config-radius-server) SEC
non-tcp QOS
non-tcp contexts QOS
nonce SAF
notify CF
notify (MGCP profile) VR
notify redirect VR
notify redirect (dial peer) VR
notify syslog CF
notify telephone-event VR
nrzi-encoding IR
nsap VR
nsf IRI
nsf (EIGRP) EIGRP, HA
nsf (IS-IS) HA
nsf (OSPF) OSPF, HA
nsf (OTV) WAN
nsf cisco OSPF, HA
nsf cisco helper disable OSPF
nsf ietf OSPF, HA
nsf ietf helper disable OSPF
nsf ietf helper strict-lsa-checking OSPF
nsf interface wait HA
nsf interval HA
nsf t3 HA
nsr OSPF
ntp access-group BSM, IPV6
ntp allow mode private BSM
ntp authenticate BSM, IPV6

ntp authentication-key **BSM, IPV6**
ntp broadcast **BSM**
ntp broadcast client **BSM, IPV6**
ntp broadcastdelay **BSM, IPV6**
ntp clear drift **BSM, IPV6**
ntp clock-period **BSM**
ntp disable **BSM, IPV6**
ntp logging **BSM, IPV6**
ntp master **BSM, IPV6**
ntp max-associations **BSM, IPV6**
ntp maxdistance **BSM**
ntp multicast **BSM, IPV6**
ntp multicast client **BSM, IPV6**
ntp orphan **BSM**
ntp panic update **BSM**
ntp passive **BSM**
ntp peer **BSM, IPV6**
ntp refclock **BSM, IPV6**
ntp server **BSM, IPV6**
ntp source **BSM, IPV6**
ntp trusted-key **BSM, IPV6**
ntp update-calendar **BSM, IPV6**
null-called-number **VR**
num-exp **VR**
num-packets **SLA**
number **DIA**
numbering-type **VR**

0

oam ais-rdi **ATM**
oam protocol **CE**
oam queue **ATM**
oam retry **ATM, MP**
oam retry cc **ATM**
oam-ac emulation-enable **MP, WAN**
oam-ac segment endpoint **ATM**
oam-bundle **ATM, QOS**

oam-pvc ATM, MP
oam-pvc manage cc ATM
oam-pvc manage cc deny ATM
oam-range ATM
oam-svc ATM
object (expression) SNMP
object (tracking) IAP
object id SNMP
object id (event trigger) SNMP
object list SNMP
object-group (Catalyst 6500 series switches) SEC
object-group network SEC
object-group security SEC
object-group service SEC
object-list SNMP
occur-at (ips-auto-update) SEC
ocsp SEC
ocsp url SEC
odap client IAD
odap server IAD
oer OER
oer-map OER
offer call-hold VR
offload (backup) IBM
offload (primary) IBM
offload alias IBM
offset-list (EIGRP) EIGRP
offset-list (RIP) RIP
on SEC
one-minute SEC
open-ring CE
operating mode BBA
operation VR
operation-packet priority SLA
optimize WAN
optimize tfo WAN

optimize timestamp **SLA**
option **IAD, CBL**
option (Flexible NetFlow) **FNF, MM**
option (editor) **SBCD**
option (session border controller) **SBCD**
option ext **IAD**
option hex **IAD**
option-editor **SBCD**
option-profile **SBCD**
options **SBCD**
options (ruleset) **TSV**
options-ping **VR**
options-ping (dial-peer) **VR**
origin **IAD**
origin-host **SBCD**
origin-host (Rf interface) **SBCD**
origin-realm **SBCD**
origin-realm (Rf interface) **SBCD**
ospfv3 area **IPV6**
ospfv3 authentication **IPV6**
ospfv3 bfd **IPV6**
ospfv3 cost **IPV6**
ospfv3 database-filter **IPV6**
ospfv3 dead-interval **IPV6**
ospfv3 demand-circuit **IPV6**
ospfv3 encryption **IPV6**
ospfv3 flood-reduction **IPV6**
ospfv3 hello-interval **IPV6**
ospfv3 mtu-ignore **IPV6**
ospfv3 network **IPV6**
ospfv3 priority **IPV6**
ospfv3 retransmit-interval **IPV6**
ospfv3 transmit-delay **IPV6**
other-config-flag **IPV6, SEC**
other-xtr-probe **LISP**
otv active-source **WAN**

otv adjacency-server unicast-only [WAN](#)
otv control-group [WAN](#)
otv data-group [WAN](#)
otv filter-fhrp [WAN](#)
otv fragmentation [WAN](#)
otv isis authentication [WAN](#)
otv isis csnp-interval [WAN](#)
otv isis hello padding [WAN](#)
otv isis hello-interval [WAN](#)
otv isis hello-multiplier [WAN](#)
otv isis lsp-interval [WAN](#)
otv isis metric [WAN](#)
otv isis overlay [WAN](#)
otv isis priority [WAN](#)
otv isis retransmit-interval [WAN](#)
otv isis retransmit-throttle-interval [WAN](#)
otv isis site [WAN](#)
otv join-interface [WAN](#)
otv mac flood [WAN](#)
otv site bridge-domain [WAN](#)
otv site-identifier [WAN](#)
otv suppress arp-nd [WAN](#)
otv use-adjacency-server unicast-only [WAN](#)
otv vpn-name [WAN](#)
oui [CBL](#)
out-of-band telemetry [SEC](#)
outbound [SBCD](#)
outbound data-pid [IR](#)
outbound data-rate [IR](#)
outbound frequency [IR](#)
outbound id [IR](#)
outbound modulation-type [IR](#)
outbound retry-interval [VR](#)
outbound sync ip address [IR](#)
outbound viterbi-rate [IR](#)
outbound-flood-rate [SBCD](#)

outbound-proxy **IPV6, VR**
outdscp **IMO**
outer-cos **SLA**
outer-vlan **SLA**
outgoing **SEC**
outgoing called-number **VR**
outgoing calling-number **VR**
outgoing dialpeer **VR**
outgoing media local ipv4 **VR**
outgoing media remote ipv4 **VR**
outgoing port **VR**
outgoing signaling local ipv4 **VR**
outgoing signaling remote ipv4 **VR**
output **IR, CE**
output attenuation **VR**
output-delay **RIP**
output-features **FNF, MM**
output-rate **CBL**
overhead **VR**
overhead j0 **IR**
overhead j1 **IR**
overload-time-threshold **SBCD**
overload-time-threshold (session border controller) **SBCD**
override **CBL**
override default-router **IAD**
override utilization high **IAD**
override utilization low **IAD**
owner **SLA**

P

pac key **SEC**
pac key through port-misuse **SEC**
package **SBCD, VR**
package appcommon **VR**
package callsetup **VR**
package language **VR**
package persistent **VR**

package segment max-pdu-size **SBCD**
package session_xwork **VR**
package through pattern **VR**
packet drop during-authorization **WAN**
packet retries **WL**
packet-size **SLA**
packetcable **CBL**
packetcable authorize vanilla-docsis-mta **CBL**
packetcable element-id **CBL**
packetcable gate maxcount **CBL**
packetcable timer **CBL**
packetcable-em transport radius **SBCD**
pad **TSV**
padding **CF**
pagp learn-method **LSW**
pagp port-priority **LSW**
pagp rate **LSW**
page timer **LSW**
param **VR**
param access-method **VR**
param account-id-method **VR**
param accounting enable **VR**
param accounting-list **VR**
param authen-list **VR**
param authen-method **VR**
param authentication enable **VR**
param convert-discpi-after-connect **VR**
param dsm-script **VR**
param event-log **VR**
param fax-dtmf **VR**
param global-password **VR**
param language **VR**
param mail-script **VR**
param mode **VR**
param pin-len **VR**
param prompt **VR**

param redirect-number VR
param reroutemode VR
param retry-count VR
param security VR
param uid-len VR
param voice-dtmf VR
param warning-time VR
parameter SEC
parameter (editor) SBCD
parameter (session border controller) SBCD
parameter change notify interval BBA
parameter-editor SBCD
parameter-map type SEC
parameter-map type content-scan global SEC
parameter-map type inspect SEC, IPV6
parameter-map type inspect-global SEC
parameter-map type inspect-vrf SEC
parameter-map type inspect-zone SEC
parameter-map type mitigation SEC
parameter-map type ooo global SEC
parameter-map type protocol-info SEC
parameter-map type regex SEC
parameter-map type trend-global SEC
parameter-map type urlglob SEC
parameter-map type urlfilter SEC
parameter-map type urlfpolicy SEC
parameter-map type waas WAN
parameter-profile SBCD
parameters SLA
paramspace VR
paramspace appcommon event-log VR
paramspace appcommon security VR
paramspace callsetup mode VR
paramspace callsetup reroutemode VR
paramspace language VR
paramspace session_xwork convert-discpi-after-connect VR

parity [CF](#)
parser cache [CF](#)
parser command serializer [CF](#)
parser config cache interface [CF](#)
parser config partition [CF](#)
parser maximum [CF](#)
parser view [SEC](#)
parser view superview [SEC](#)
partial-fill [ATM](#)
partition [CF](#)
partition avoidance [IRS](#)
pass [SEC](#)
pass-body [SBCD](#)
passive [SEC](#)
passive-interface [IRI](#)
passive-interface (EIGRP) [EIGRP](#)
passive-interface (IPv6) [IPV6, MP](#)
passive-interface (OSPFv3) [IPV6](#)
passthrough [WAN](#)
passthru downstream ipv6 [ISG](#)
password [WAN](#)
password (DFP agent) [SLB](#)
password (ISG) [ISG](#)
password (L2TP) [WAN](#)
password (SAF) [SAF](#)
password (ca-trustpoint) [SEC, IPV6](#)
password (dot1x credentials) [SEC](#)
password (line configuration) [SEC](#)
password (satellite initial configuration) [IR](#)
password 5 [SEC](#)
password encryption aes [SEC](#)
password logging [SEC](#)
path [IBM](#)
path (archive configuration) [CF](#)
path-discover [SLA](#)
path-echo [SLA](#)

path-jitter **SLA**
path-specifier **MM**
paths-of-statistics-kept **SLA**
pattern **VR**
pattern (parameter-map) **SEC**
payload-compression **IR**
payload-encapsulation **WL**
payload-size **IR**
payload-type asymmetric **SBCD**
pcscf **MWG**
peak-time1 **CBL**
peer **SEC, CE**
peer (IKEv2 keyring) **SEC**
peer (session border controller) **SBCD**
peer address ipv4 **SEC**
peer default ip address **DIA**
peer default ipv6 address pool **IPV6**
peer ip address forced **DIA**
peer match aaa-pools **DIA**
peer pool backup **DIA**
peer pool static **DIA**
peer port **SLB**
peer reactivate **SEC**
peer secret **SLB**
peer-cert-verify enable **WAN**
peer-cipherlist **WAN**
peer-ssl-version **WAN**
penalty-period **CBL**
per-box aggressive-aging **SEC**
per-box max-incomplete **SEC**
per-box max-incomplete aggressive-aging **SEC**
per-box tcp syn-flood limit **SEC**
percentile **SLA**
period (CFM-AIS-link) **CE**
periodic **CF**
periodic (OER) **OER**

periodic (PfR) **PFR**
periodic-interval **OER**
periodic-interval (Pfr) **PFR**
periodic-rel-pxf enable **CBL**
periodic-report interval **VR**
periodic-report interval through pulse-digit-detection **VR**
permission (dial peer voice) **DIA**
permit **SEC**
permit (Catalyst 6500 series switches) **SEC**
permit (IP) **SEC**
permit (IPX extended) **IPX**
permit (IPX standard) **IPX**
permit (IPv6) **IPV6, SEC**
permit (MAC ACL) **SEC**
permit (NLSP) **IPX**
permit (SAP filtering) **IPX**
permit (reflexive) **SEC**
permit (webvpn acl) **SEC**
permit hostname (SIP) **VR**
permit link-local **IPV6**
pfr **PFR**
pfr-map **PFR**
pfs **SEC**
phone context **VR**
phone number **VR**
phone-number **HA**
physical-interface **IR, IMO**
physical-layer **IR**
pickup direct **VR**
pickup group **VR**
pickup local **VR**
ping **CF, IPV6**
ping (MTTR) **MTR**
ping (privileged) **CF**
ping atm interface atm **ATM**
ping docsis **CBL**

ping ethernet **CE**
ping ethernet evc **CE**
ping ethernet mpid vlan **CE**
ping ethernet vlan **CE**
ping ip **CF**
ping ipv6 **IPV6**
ping mpls **MP**
ping mpls mldp **MP**
ping mpls tp **MP**
ping sna **IBM**
ping srp **CF**
ping vrf **MP, CF, IPV6**
ping-bad-rsp-codes **SBCD**
ping-enable **SBCD**
ping-fail-count **SBCD**
ping-interval **SBCD**
ping-lifetime **SBCD**
ping-suppression **SBCD**
pki trustpoint **SEC**
pki-server **SEC**
platform bfd allow-svi **IRI**
platform bfd enable-offload **IRI**
platform console **IR**
platform cwan acl software-switched **IR**
platform enable controller **CSA**
platform hardware throughput level **IR**
platform ip features sequential **QOS, IR**
platform ipsec fips-mode **QOS**
platform ipsec llq **QOS**
platform ipv6 acl fragment hardware **IPV6**
platform ipv6 acl icmp optimize neighbor-discovery **IPV6**
platform ipv6 acl punt extension-header **IPV6**
platform mpls load-balance ingress-port **MP**
platform multicast oce flag suppress **IMC**
platform netflow rp sampling scale **NF**
platform performance-monitor rate-limit **MM**

platform port-channel local-significance LSW
platform punt-keepalive IR
platform punt-police queue QOS
platform qos marker-statistics QOS
platform qos match-statistics per-ace QOS
platform qos match-statistics per-filter QOS
platform redundancy bias HA
platform scp retry interval IR
platform shell CF
platform time-source IR
platform trace boottime process forwarding-manager module interfaces IR
platform trace runtime process forwarding-manager module mfr WAN
platform trace runtime process forwarding-manager module wccp IAP
platform trace runtime process forwarding-manager module mfr WAN
platform vfi dot1q-transparency QOS
platform vfi provision vlan LSW
playout-delay (dial peer) VR
playout-delay (voice-port) VR
playout-delay mode (dial-peer) VR
playout-delay mode (voice-port) VR
plim qos input QOS
plim qos input map QOS, CBL
plim qos input map cos (Classify CoS Values for VLAN) QOS
plim qos input map cos (classify CoS values for VLAN) QOS
pm fec threshold IR
pm optics report IR
pm optics threshold IR
pm otn report IR
pm otn threshold IR
poison-reverse (IPv6 RIP) IPV6
police QOS
police (EtherSwitch) QOS
police (ISG) ISG
police (percent) QOS
police (policy map) QOS
police (two rates) QOS

police (zone policy) SEC
police profile VR
police rate MWG
police rate (control-plane) QOS
police rate pdp QOS
policy SEC, CBL
policy (ERM) ERM
policy (resource group) ERM
policy (session border controller) SBCD
policy config-sync reload HA
policy dynamic identity SEC
policy group SEC
policy static sgt SEC
policy-list CNS, IOS_TCL
policy-map MP, QOS, ISG
policy-map copp-peruser QOS
policy-map type class-routing ipv4 unicast MTR
policy-map type control ISG
policy-map type control mitigation SEC
policy-map type control tms SEC
policy-map type inspect SEC, IPV6
policy-map type inspect urlfilter SEC
policy-map type mace WAN
policy-map type performance-monitor MM
policy-map type service ISG
policy-map type waas WAN
policy-name ISG
policy-peer ISG
policy-rules OER
policy-rules (PfR) PFR
poll-interval SNMP
pool IBM
pool (isakmp-group) SEC
pool ipv4 IMO
pool ipv6 IMO
pool-member VPD

pool-range [DIA](#)
port [SEC](#), [MWG](#), [ISG](#)
port (Annex G neighbor BE) [VR](#)
port (DFP agent) [SLB](#)
port (HTTP probe) [SLB](#)
port (IKEv2 cluster) [SEC](#)
port (IPv6 RIP) [IPV6](#)
port (MGCP profile) [VR](#)
port (OER) [OER](#)
port (PfR) [PFR](#)
port (SBE H.248) [SBCD](#)
port (TACACS+) [IPV6](#), [SEC](#)
port (TCP probe) [SLB](#)
port (custom UDP probe) [SLB](#)
port (dial peer) [IPV6](#), [VR](#)
port (global) [DIA](#)
port (iSCSI interface) [MWG](#)
port (interface) [IR](#)
port (session border controller) [SBCD](#)
port (ssg-redirect) [SSG](#)
port (supplementary-service) [VR](#)
port (twamp) [SLA](#)
port access-map [IR](#)
port media [VR](#)
port modem autotest [DIA](#)
port signal [VR](#)
port-channel hash-distribution [IR](#)
port-channel load-balance [IR](#), [CE](#)
port-channel load-balance (interface) [IR](#), [CE](#)
port-channel load-balance mpls [IR](#), [CE](#)
port-channel load-balance weighted rebalance [IR](#), [CE](#)
port-channel load-balancing vlan-manual [IR](#)
port-channel load-defer [IR](#), [LSW](#)
port-channel min-links [IR](#)
port-channel per-module load-balance [IR](#)
port-channel port load-defer [IR](#), [LSW](#)

port-channel standalone-disable **IR**
port-forward **SEC**
port-forward (policy group) **SEC**
port-list **SSG**
port-misuse **SEC**
port-parameters **IAD**
port-range **SBCD**
port-range (ipv4) **SBCD**
port-range (ipv6) **SBCD**
port0 **CE**
port0 service instance **CE**
port1 **CE**
port1 service instance **CE**
pos ais-shut **IR**
pos delay triggers **IR**
pos flag **IR**
pos flag s1-byte rx-communicate **ATM, IR**
pos flag s1-byte tx **ATM, IR**
pos framing **IR**
pos report **IR**
pos scramble-atm **IR**
pos threshold **IR**
pots call-waiting **VR**
pots country **VR**
pots dialing-method **VR**
pots disconnect-supervision **VR**
pots disconnect-time **VR**
pots distinctive-ring-guard-time **VR**
pots encoding **VR**
pots forwarding-method **VR**
pots line-type **VR**
pots prefix filter **VR**
pots prefix number **VR**
pots ringing-freq **VR**
pots silence-time **VR**
pots tone-source **VR**

power client **WL**
power enable **CF, IR**
power inline **IR**
power local **WL**
power redundancy-mode **CF, IR**
ppp **DIA**
ppp acem **DIA**
ppp accounting **SEC, IPV6**
ppp accounting through quit **SEC**
ppp acfc local **DIA**
ppp acfc remote **DIA**
ppp authentication **SEC, MWP, IPV6**
ppp authentication ms-chap-v2 **SEC**
ppp authorization **SEC**
ppp bap call **DIA**
ppp bap callback **DIA**
ppp bap drop **DIA**
ppp bap link types **DIA**
ppp bap max **DIA**
ppp bap monitor load **DIA**
ppp bap number **DIA**
ppp bap timeout **DIA**
ppp bcp tagged-frame **IBM**
ppp bridge appletalk **DIA**
ppp bridge ip **DIA**
ppp bridge ipx **DIA**
ppp callback (DDR) **DIA**
ppp callback (PPP client) **DIA**
ppp caller name **DIA**
ppp chap hostname **SEC**
ppp chap password **SEC**
ppp chap refuse **SEC**
ppp chap wait **SEC**
ppp direction **DIA**
ppp dnis **DIA**
ppp eap identity **SEC**

ppp eap local SEC
ppp eap password SEC
ppp eap refuse SEC
ppp eap wait SEC
ppp encrypt mppe DIA
ppp hold-queue DIA
ppp ip address-save aaa-acct-vsa BBA
ppp ipcp BBA, IPV6, DIA
ppp ipcp default route DIA
ppp ipcp predictive DIA
ppp iphc max-header DIA
ppp iphc max-period DIA
ppp iphc max-time DIA
ppp ipv6cp address unique IPV6, BBA
ppp lcp delay DIA
ppp lcp echo mru verify BBA
ppp lcp fast-start DIA
ppp lcp predictive DIA
ppp link SEC, IR
ppp link reorders DIA
ppp loopback no-backoff IR
ppp loopback ignore DIA
ppp max-bad-auth DIA
ppp max-configure DIA
ppp max-failure DIA
ppp max-terminate DIA
ppp microcode DIA
ppp mru match DIA
ppp ms-chap refuse DIA
ppp ms-chap-v2 refuse DIA
ppp mtu adaptive DIA
ppp multilink IPV6, BBA, DIA
ppp multilink endpoint DIA
ppp multilink fragment delay DIA
ppp multilink fragment disable BBA, DIA
ppp multilink fragment maximum DIA

ppp multilink fragment size [DIA](#)
ppp multilink fragmentation [DIA](#)
ppp multilink group [BBA](#), [DIA](#)
ppp multilink idle-link [DIA](#)
ppp multilink interleave [DIA](#)
ppp multilink links maximum [DIA](#)
ppp multilink links minimum [DIA](#)
ppp multilink load-threshold [DIA](#)
ppp multilink mrru [IR](#), [DIA](#)
ppp multilink multiclass [DIA](#)
ppp multilink multiclass local [DIA](#)
ppp multilink multiclass remote [DIA](#)
ppp multilink ncp sequenced [DIA](#)
ppp multilink slippage [DIA](#)
ppp mux [MWR](#)
ppp mux delay [MWR](#)
ppp mux frame [MWR](#)
ppp mux pid [MWR](#)
ppp mux subframe count [MWR](#)
ppp mux subframe length [MWR](#)
ppp ncp override local [IPV6](#), [BBA](#)
ppp pap refuse [SEC](#)
ppp pap sent-username [SEC](#)
ppp pap wait [DIA](#)
ppp pfc local [DIA](#)
ppp pfc remote [DIA](#)
ppp quality [DIA](#)
ppp reliable-link [DIA](#)
ppp timeout aaa [DIA](#)
ppp timeout authentication [DIA](#)
ppp timeout idle [DIA](#)
ppp timeout idle (template) [DIA](#)
ppp timeout multilink link add [DIA](#)
ppp timeout multilink link remove [DIA](#)
ppp timeout multilink lost-fragment [DIA](#)
ppp timeout ncp [BBA](#), [IPV6](#), [DIA](#)

ppp timeout retry [DIA](#)
ppp unique address accept-access [BBA](#), [IPV6](#)
ppp-regeneration [MWG](#)
pppoe enable [BBA](#)
pppoe limit max-sessions [BBA](#)
pppoe limit per-mac [BBA](#)
pppoe limit per-vc [BBA](#)
pppoe limit per-vlan [BBA](#)
pppoe max-sessions [BBA](#)
pppoe server circuit-id delay [BBA](#)
pppoe server remote-id delay [BBA](#)
pppoe service [BBA](#)
pppoe-client control-packets vlan cos [BBA](#)
pppoe-client dial-pool-number [BBA](#)
pppoe-sessions threshold [BBA](#)
pptp flow-control receive-window [VPD](#)
pptp flow-control static-rtt [VPD](#)
pptp tunnel echo [VPD](#)
prc-interval [IRS](#)
prc-interval (IPX) [IPX](#)
prc-interval (IPv6) [IPV6](#)
prc-interval (OTV) [WAN](#)
pre-dial delay [VR](#)
pre-shared-key [SEC](#), [IPV6](#)
pre-shared-key (IKEv2 keyring) [SEC](#)
preamble-short [WL](#)
precedence [QOS](#)
precedence (Frame Relay VC-bundle-member) [WAN](#)
precedence (WRED group) [QOS](#)
precedence (session border controller) [SBCD](#)
precision [SLA](#)
predictor [SLB](#)
predictor hash address (firewall farm) [SLB](#)
preempt [IAD](#), [SEC](#)
preempt-priority [QOS](#)
preemption enable [VR](#)

preemption guard timer **VR**
preemption level **VR**
preemption tone timer **VR**
preference (DHCPv6 Guard) **IAD**
preference (dial-peer) **VR**
preferred-nnserver **IBM**
preferred-path **MP**
preferred-transport **SBCD**
prefix **CBL, VR**
prefix (Annex G) **VR**
prefix (session border controller) **SBCD**
prefix (stcapp-fac) **VR**
prefix (stcapp-fsd) **VR**
prefix object **SNMP**
prefix-delegation **IAD, IPV6**
prefix-delegation aaa **IAD, IPV6**
prefix-delegation pool **IAD, IPV6**
prefix-glean **IPV6**
prefix-length-size **BGP**
prefix-suppression **OSPF**
prefixes **OER**
prefixes (PfR) **PFR**
preloaded-route **VR**
prepaid config **ISG**
presence **VR**
presence call-list **VR**
presence enable **VR**
pri-group **IR**
pri-group (pri-slt) **VR**
pri-group nec-fusion **VR**
pri-group timeslots **VR, DIA**
primary **SEC**
primary (gateway accounting file) **VR**
printer **CF**
priority **QOS**
priority (10000 series) **QOS**

priority (LSP Attributes) [MP](#)
priority (OSPF) [MTR](#)
priority (SIP400) [QOS](#)
priority (firewall) [IAD](#), [SEC](#)
priority (session border controller) [SBCD](#)
priority level [QOS](#)
priority(firewall) [SEC](#)
priority-group [QOS](#)
priority-list default [QOS](#)
priority-list interface [QOS](#)
priority-list protocol [QOS](#)
priority-list protocol bstun [IBM](#)
priority-list protocol ip tcp [IBM](#)
priority-list protocol stun address [IBM](#)
priority-list queue-limit [QOS](#)
priority-queue cos-map [QOS](#)
priority-queue queue-limit [QOS](#)
priority1 [IR](#), [CE](#)
priority2 [IR](#), [CE](#)
privacy [CBL](#), [VR](#)
privacy (session border controller) [SBCD](#)
privacy (supplementary-service) [VR](#)
privacy restrict outbound [SBCD](#)
privacy-policy [VR](#)
private [CF](#)
private-hosts [SEC](#)
private-hosts layer3 [SEC](#)
private-hosts mac-list [SEC](#)
private-hosts mode [SEC](#)
private-hosts promiscuous [SEC](#)
private-hosts vlan-list [SEC](#)
private-vlan [LSW](#)
private-vlan association [LSW](#)
private-vlan mapping [LSW](#)
private-vlan synchronize [LSW](#)
privilege [SEC](#), [CF](#)

privilege level SEC
proactive enable IR
proactive rvrt-threshold IR
proactive rvrt-window IR
proactive trig-threshold IR
probe (PfR) PFR
probe (firewall farm real server) SLB
probe (server farm) SLB
probe-interval SLA
probe-packet priority SLA
probing interval VR
probing max-failures VR
process cpu statistics limit entry-percentage CF
process cpu threshold type CF
process-max-time CF
process-min-time percent OSPF, IPV6
profile CE, IBM
profile (GDOI local server) SEC
profile (call home) HA
profile (diagnostic signature) HA
profile (profile map configuration) SEC
profile (session border controller) SBCD
profile flow MSP
profile flow port-map MSP
profile incoming DIA
profile packet SLA
profile perf-monitor MM
profile system MM
profile traffic SLA
profile-description CBL
progress_ind VR
prompt CF
prompt config CF
propagate sgt SEC
propagate sgt (config-if-cts-dot1x) SEC
proposal SEC

protect ATM
protect (Frame Relay VC-bundle-member) WAN
protect-tunnel CBL
protection (LSP Attributes) MP
protection (zone) SEC
protection local-prefixes MP
protocol IAD, SEC
protocol (ATM) ATM
protocol (IPv6) IPV6
protocol (L2TP) WAN
protocol (OER) OER
protocol (VPDN) VPD
protocol datagram SLB
protocol gre IR
protocol ipv6 (ATM) IPV6
protocol mode IPV6, VR
protocol pppoe (ATM VC) BBA
protocol pppovlan dot1q BBA
protocol rlm port VR
protocol shutdown IRS
protocol tcp SLB
provider VR
provision code BBA
proxy SEC
proxy (ISG RADIUS proxy) ISG
proxy (RADIUS proxy) ISG
proxy h323 VR
psc refresh interval MP
pseudowire MP, WAN
pseudowire (Layer 2) CE
pseudowire routing MP
pseudowire type MP
pseudowire-class MP, WAN
pseudowire-static-oam class MP
pseudowire-tlv template MP
ptp clock IR, CE

pu (DLUR) **IBM**
pu (TN3270) **IBM**
pu (listen-point) **IBM**
pu dlur (listen-point) **IBM**
publickey **SEC**
pulse-digit-detection **VR**
pulse-time **IR**
purge connection **SLB**
purge radius framed-ip acct on-off (virtual server) **SLB**
purge radius framed-ip acct stop (virtual server) **SLB**
purge sticky **SLB**
pvc **ATM**
pvc (Frame Relay VC-bundle) **WAN**
pvc-bundle **ATM, QOS**
pvc-in-range **BBA**
pwd **CF**

Q

q850-cause **VR**
qllc accept-all-calls **IBM**
qllc dlsw **IBM**
qllc largest-packet **IBM**
qllc npsi-poll **IBM**
qllc partner **IBM**
qllc sap **IBM**
qllc srb **IBM**
qllc xid **IBM**
qos fax **SBCD**
qos police order parent-first **QOS**
qos pre-classify **QOS**
qos shape-timer **QOS**
qos sig **SBCD**
qos video **SBCD**
qos voice **SBCD**
qos-group (ATM VC bundle member) **ATM**
qos-group (PVS Bundle Member) **SEC**
qos-profile enforced **CBL**

qos-profile registered **CBL**
qsig decode **VR**
query certificate **SEC**
query ip dhcp **SSG**
query url **SEC**
query-interval **VR**
queue-depth **QOS**
queue-depth (OSPFv3) **IPV6**
queue-limit **QOS**
queue-limit atm clp **QOS**
queue-list default **QOS**
queue-list interface **QOS**
queue-list lowest-custom **QOS**
queue-list protocol **QOS**
queue-list protocol bstun **IBM**
queue-list protocol ip tcp **IBM**
queue-list queue byte-count **QOS**
queue-list queue limit **QOS**
quit **SEC**

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- [Finding IOS Command Information, page 359](#)
- [r, page 362](#)

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 11: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference

CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

R

radius acct local-ack key **SLB**
radius attribute acct-session-id charging-id **MWG**
radius attribute nas-id **MWG**
radius attribute nas-port-type **SEC**
radius attribute nas-port-type through rd **SEC**
radius attribute suppress imsi **MWG**
radius attribute suppress qos **MWG**
radius attribute suppress sgsn-address **MWG**
radius attribute user-name msisdn **MWG**
radius filter **ISG**
radius inject acct key **SLB**
radius inject auth **SLB**
radius inject auth timer **SLB**
radius inject auth vsa **SLB**
radius ip-input-bypass **SEC**
radius local-server pac-generate expiry **SEC**
radius server **SEC**
radius-server accounting system host-config **SEC**
radius-server attribute 11 default direction **SEC**
radius-server attribute 188 format non-standard **SEC**
radius-server attribute 25 **SEC**
radius-server attribute 30 original-called-number **SEC**
radius-server attribute 31 **SEC, ISG**
radius-server attribute 31 mac format **SEC**
radius-server attribute 31 remote-id **VPD**
radius-server attribute 32 include-in-access-req **SEC, MWH**
radius-server attribute 4 **SEC**
radius-server attribute 44 extend-with-addr **SEC**
radius-server attribute 44 include-in-access-req **SEC**
radius-server attribute 44 sync-with-client **SEC**
radius-server attribute 55 include-in-acct-req **SEC**
radius-server attribute 6 **SEC, VR**

radius-server attribute 60 include-in-access-req SEC
radius-server attribute 61 extended SEC
radius-server attribute 66 include-in-access-req SEC
radius-server attribute 67 include-in-access-req SEC
radius-server attribute 69 clear SEC
radius-server attribute 77 SEC
radius-server attribute 8 include-in-access-req SEC
radius-server attribute 87 circuit-id VPD
radius-server attribute data-rate send 0 SEC
radius-server attribute list SEC, IPV6
radius-server attribute nas-port extended SEC
radius-server attribute nas-port format SEC
radius-server attribute nas-port-id include ISG
radius-server authorization SEC
radius-server backoff exponential SEC
radius-server challenge-noecho SEC
radius-server configure-nas SEC
radius-server dead-criteria SEC
radius-server deadtime SEC
radius-server directed-request SEC
radius-server domain-stripping SEC, VPD
radius-server extended-portnames SEC
radius-server host SEC, MWH, IPV6
radius-server host non-standard SEC
radius-server key SEC, IPV6
radius-server load-balance SEC
radius-server local SEC, WL
radius-server optional-passwords SEC
radius-server retransmit SEC, IPV6
radius-server retry method reorder SEC
radius-server source-ports extended SEC
radius-server throttle SEC
radius-server timeout SEC
radius-server transaction max-tries SEC
radius-server unique-ident SEC
radius-server vsa disallow unknown SEC

radius-server vsa send SEC, BBA, IPV6
rai target VR
random-contact VR
random-detect QOS
random-detect (per VC) QOS
random-detect aggregate QOS
random-detect atm-clp-based QOS
random-detect clp QOS
random-detect cos-based QOS
random-detect discard-class QOS
random-detect discard-class-based QOS
random-detect dscp QOS
random-detect dscp (aggregate) QOS
random-detect ecn QOS
random-detect exponential-weighting-constant QOS
random-detect flow QOS
random-detect flow average-depth-factor QOS
random-detect flow count QOS
random-detect prec-based QOS
random-detect precedence QOS
random-detect precedence (aggregate) QOS
random-detect-group QOS
random-request-uri validate VR
range DIA
range (session border controller) SBCD
range pvc BBA
ras retry VR
ras retry (session border controller) SBCD
ras retry lrq VR
ras rrq SBCD
ras rrq dynamic prefixes VR
ras rrq ttl VR
ras timeout VR
ras timeout (session border controller) SBCD
ras timeout decisec VR
ras timeout lrq VR

rat **IMO**
rate **SLB**
rate layer3 **MM**
rate-limit **QOS**
rate-limit (call home) **HA**
rate-limit (firewall) **SEC**
rbe nasip **IAD, BBA**
rbs-zero **VR**
rcapi number **DIA**
rcapi server **DIA**
rcp-id **CBL**
rcv-queue bandwidth **QOS**
rcv-queue cos-map **QOS**
rcv-queue queue-limit **QOS**
rcv-queue random-detect **QOS**
rcv-queue threshold **QOS**
rd **MP, SEC, IPV6**
rd (VPLS) **MP, WAN**
re-authenticate do-not-apply **ISG**
react (policy) **MM**
react (tplt-icmp-ech) **SLA**
react (tplt-icmp-jtr) **SLA**
react (tplt-tcp-conn) **SLA**
react (tplt-udp-ech) **SLA**
react (tplt-udp-jtr) **SLA**
read-ahead **WAN**
real (firewall farm) **SLB**
real (server farm) **SLB**
real (static NAT) **SLB**
real-address **MWG**
realm **SBCD**
realm (H.248 BAC) **SBCD**
realm (Rf billing) **SBCD**
realm (diameter) **SBCD**
reason **SBCD**
reason-header override **VR**

reassign **SLB**
reauthentication time **SEC, WL**
reauthentication time through rsa-pubkey **SEC**
receive-channel **CBL**
receive-module **CBL**
receive-window **WAN**
receivers **IMC**
reconnect **SEC, WSMA**
record **FNF**
record (Performance Monitor) **MM**
record-route (LSP Attributes) **MP**
recorder profile **VR**
recoverable-loss **QOS**
redial **VR**
redirect (identity policy) **SEC**
redirect access-list **SSG**
redirect all ip **MWG**
redirect captive advertising default group **SSG**
redirect captive initial default group **SSG**
redirect contact order **VR**
redirect gateway **SEC**
redirect identifier **VPD**
redirect interface **QOS**
redirect intermobile ip **MWG**
redirect ip2ip (dial peer) **VR**
redirect ip2ip (voice service) **VR**
redirect log translations **ISG**
redirect permanent http to **SSG**
redirect prepaid-user to **SSG**
redirect server-group **ISG**
redirect session-limit **ISG**
redirect smtp group **SSG**
redirect to **SSG**
redirect to (ISG) **ISG**
redirect unauthenticated-user to **SSG**
redirect unauthorized-service service to **SSG**

redirect unauthorized-service to **SSG**
redirect-limit **SBCD**
redirect-mode **SBCD**
redirection (SIP) **VR**
redistribute (BGP to ISO IS-IS) **BGP**
redistribute (IP) **BGP, IRI**
redistribute (IPX) **IPX**
redistribute (IPv6) **IPV6**
redistribute (ISO IS-IS to BGP) **BGP**
redistribute (ISO CLNS) **ISO**
redistribute (OSPFv3) **IPV6**
redistribute dvmrp **BGP**
redistribute eigrp **EIGRP**
redistribute isis **IRS**
redistribute isis (IPv6) **IPV6, IRS**
redistribute maximum-prefix **OSPF**
redistribute maximum-prefix (EIGRP) **EIGRP**
redistribute vrf **EVN**
redundancy **IAD, IR, MWR, HA, DIA**
redundancy (GDOI) **SEC**
redundancy (cs-server) **SEC**
redundancy (firewall) **SEC**
redundancy asymmetric-routing enable **IAD, SEC**
redundancy config-sync **HA**
redundancy delay (xconnect) **MP**
redundancy force-failover main-cpu **CBL**
redundancy force-switchover **IR, HA**
redundancy force-switchover main-cpu **CBL**
redundancy group **IAD, SEC, IMO**
redundancy group (interface) **IAD, SEC**
redundancy handover **IR**
redundancy inter-device **SEC**
redundancy predictive **MP**
redundancy reload **CBL**
redundancy reload peer **HA**
redundancy rii **SEC**

redundancy stateful **SEC**, **IR**
redundancy switch-activity **CBL**
redundant peer **SBCD**
refer-ood enable **VR**
referto-passing **VR**
refresh max-period **QOS**
refresh max-time **QOS**
refresh rtp **QOS**
refresh-buffer **SBCD**
refuse-message **CF**
reg-min-expiry **SBCD**
regenerate **SEC**
regexp (profile map configuration) **SEC**
regexp optimize **CF**
register (mobile networks) **IMO**
register (mobile router) **IPV6**, **IMO**
register e164 **VR**
register-rate **SBCD**
registered qos-profile **CBL**
registered-caller ring **VR**
registrar **IPV6**, **VR**
registrar server **VR**
registration aggregate **SBCD**
registration contact username **SBCD**
registration interface **SEC**
registration monitor **SBCD**
registration outgoing timer **SBCD**
registration passthrough **VR**
registration periodic crl trustpoint **SEC**
registration required **SBCD**
registration retries **VR**
registration retry count **SEC**
registration retry interval **SEC**
registration retry-interval (TIDP) **SEC**
registration rewrite-register **SBCD**
registration target address **SBCD**

registration target port **SBCD**
registration timeout **VR**
registration unencrypted-convert **SBCD**
reject-threshold **SBCD**
rekey address ipv4 **SEC**
rekey algorithm **SEC**
rekey authentication **SEC**
rekey lifetime **SEC**
rekey retransmit **SEC**
rekey sig-hash algorithm **SEC**
rekey transport unicast **SEC**
rel1xx **VR**
relay agent information **IAD**
relay destination **IAD**
relay pppoe bba-group **BBA**
relay source **IAD**
relay target **IAD**
relay-information hex **IAD**
release dhcp **IAD**
reliability (NetFlow SCTP) **NF**
reload **CF**
reload components **DIA**
remark **SEC**
remark (IPv6) **IPV6, SEC**
remote command **IAD, CF, IR**
remote login **IAD, CF, IR**
remote-address ipv4 **SBCD**
remote-ip (IPC transport-SCTP remote) **IAD**
remote-neighbors **SAF**
remote-neighbors source **SAF**
remote-neighbors source (EIGRP) **EIGRP**
remote-party-id **VR**
remote-port **IAD, SBCD**
remote-port (session border controller) **SBCD**
remote-span **IAD, CF, IR**
remote-url **VR**

remove vsa **SSG**
rename **CF**
rename (policy) **MM**
rename profile **HA**
renew deny unknown **IAD**
renew dhcp **IAD**
rep admin vlan **LSW**
rep block port **LSW**
rep lsl-age-timer **LSW**
rep lsl-ageout timer **LSW**
rep lsl-retries **LSW**
rep preempt delay **LSW**
rep preempt segment **LSW**
rep segment **LSW**
rep stcn **LSW**
repeat **CBL**
replay counter window-size **SEC**
replay time window-size **SEC**
replay-protection **IMO**
replicate casa (firewall farm) **SLB**
replicate casa (virtual server) **SLB**
replicate interval (firewall farm) **SLB**
replicate interval (virtual server) **SLB**
replicate slave (firewall farm) **SLB**
replicate slave (virtual server) **SLB**
reply-dscp-bits **SLA**
reply-mode **SLA**
req-qos **VR**
req-timeout **SBCD**
request **VR**
request (HTTP probe) **SLB**
request (XML transport) **VR**
request (custom UDP probe) **SLB**
request license new-udi **CSA**
request outstanding **BBA**
request peer-header **VR**

request platform software package describe file **CF**
request platform software package expand file **CF**
request platform software package install commit **CF**
request platform software package install file **CF**
request platform software package install rollback **CF**
request platform software package install snapshot **CF**
request platform software package verify rp file **HA**
request platform software process release **CF**
request platform software shell session output format **CF**
request platform software snapshot **CF**
request platform software system shell **CF**
request platform software vty attach **CF**
request-data-size **SLA**
request-data-size (Ethernet) **SLA**
request-dialin **VPD**
request-dialout **VPD**
request-line **SBCD**
request-line request-uri rewrite **SBCD**
request-method **SEC**
request-queue (GTP) **SEC**
request-timeout **SEC**
reserve dsp **SLA**
reserved-only **IAD**
reserved-only through show ip irdp **IAD**
reset **CBL, VR**
reset (alarm-interface) **IR**
reset (policy-map) **SEC**
reset (zone-based policy) **SEC**
reset timer expires **VR**
resolution **SLA**
resolve **OER**
resolve (PfR) **PFR**
resource **DIA**
resource (voice) **VR**
resource policy **ERM**
resource threshold **VR**

resource-pool **DIA**
resource-pool (mediacard) **VR**
resource-pool aaa accounting ppp **DIA**
resource-pool aaa protocol **DIA**
resource-pool call treatment **DIA**
resource-pool call treatment discriminator **DIA**
resource-pool group resource **DIA**
resource-pool profile customer **DIA**
resource-pool profile discriminator **DIA**
resource-pool profile service **DIA**
resource-pool profile vpdn **VPD, DIA**
resource-priority **SBCD**
resource-priority-set **SBCD**
responder-only **SEC**
response **SLB**
response (XML application) **VR**
response (voice) **VR**
response peer-header **VR**
response size (XML transport) **VR**
response-code-mapping **SBCD**
response-data-size **SLA**
response-time group **IBM**
response-timeout **VR**
response-timeout (session parameters) **MM**
restrict authenticated **IAD**
restrict name-group **IAD**
restrict source access-group **IAD**
restricted **CBL**
resume (setting X.3 PAD parameters) **TSV**
resume (switching sessions) **TSV**
retain **SNMP**
retired (IPS) **SEC**
retransmit **WAN**
retransmit (config-radius-server) **SEC**
retries (auto-config application) **VR**
retry **IR**

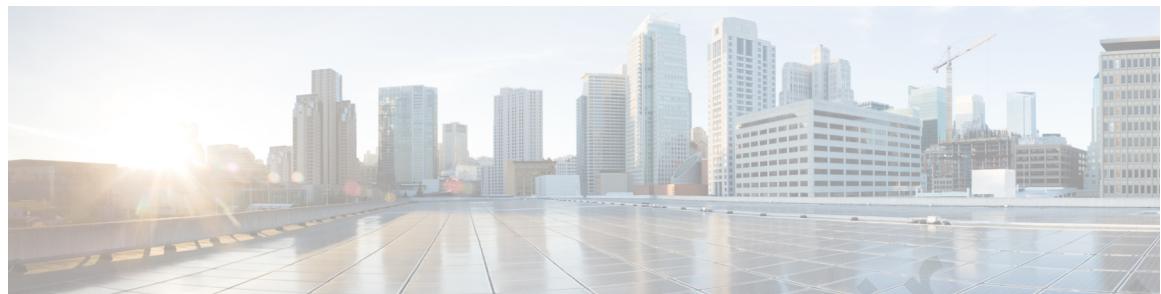
retry (SVC) [ATM](#)
retry (bulk statistics) [SNMP](#)
retry (real server) [SLB](#)
retry bye [VR](#)
retry cancel [VR](#)
retry comet [VR](#)
retry interval [VR](#)
retry invite [VR](#)
retry keepalive [DIA](#)
retry keepalive (SIP) [VR](#)
retry notify [VR](#)
retry prack [VR](#)
retry refer [VR](#)
retry register [IPV6](#), [VR](#)
retry re1xx [VR](#)
retry response [VR](#)
retry subscribe [VR](#)
retry window [VR](#)
retry-count [SBCD](#)
retry-delay [VR](#)
retry-interval [SBCD](#)
retry-interval (registration) [SBCD](#)
retry-limit [VR](#)
retry-limit (radius) [SBCD](#)
retry-limit (routing table) [SBCD](#)
reverse-route [SEC](#)
reverse-tunnel [IMO](#)
revertive [CBL](#)
revision [MP](#), [CF](#), [LSW](#)
revocation-check [SEC](#), [IPV6](#)
revocation-check (ca-trustpool) [SEC](#)
rewrite egress tag [CE](#)
rewrite ingress tag [WAN](#), [CE](#)
rf [SBCD](#)
rf-channel cable downstream channel-id [CBL](#)
rf-channel depi-tunnel [CBL](#)

rf-channel description **CBL**
rf-channel frequency **CBL**
rf-channel ip-address mac-address udp-port **CBL**
rf-channel network-delay **CBL**
rf-channel rf-power **CBL**
rf-channel rf-shutdown **CBL**
rf-channel stacking **CBL**
rf-switch auxport enable **CBL**
rif **BR, IBM**
rif timeout **BR, IBM**
rif validate-age **BR, IBM**
rif validate-enable **BR, IBM**
rif validate-enable-age **BR, IBM**
rif validate-enable-route-cache **BR, IBM**
ring **VR**
ring cadence **VR**
ring frequency **VR**
ring number **VR**
ring-speed **IR**
ringing-timeout **VR**
rising (test threshold) **SNMP**
rj45-auto-detect-polarity **IR**
rloc-prefix **LISP**
rlogin **TSV**
rlogin trusted-localuser-source **TSV**
rlogin trusted-remoteuser-source local **TSV**
rmdir **CF**
rmon **RMON**
rmon alarm **RMON**
rmon capture-userdata **RMON**
rmon collection history **RMON**
rmon collection host **RMON**
rmon collection matrix **RMON**
rmon collection rmon1 **RMON**
rmon event **RMON**
rmon hc-alarms **RMON**

rmon queuesize **RMON**
roaming interface **IMO**
roaming (dial peer) **VR**
roaming (settlement) **VR**
role **IMO**
role 3gma **IMO**
rommon-pref **CF**
root **SEC**
rotary **DIA**
rotary-group **DIA**
route accept **SEC**
route set **SEC**
route set remote **SEC**
route-aggregation (NLSP) **IPX**
route-change reaction-time **MM**
route-converge-interval **CF**
route-map **IRI, IPV6**
route-map (ISO CLNS) **ISO**
route-replicate **MTR**
route-replicate (VRF address family) **EVN**
route-server-context **BGP**
route-tag list **EIGRP, IRI**
route-tag notation **EIGRP, IRI**
route-target **MP, IPV6**
route-target (VPLS) **MP, WAN**
router bgp **BGP, MP, IPV6**
router eigrp **EIGRP**
router eigrp (MTR) **MTR**
router isis **IRS**
router iso-igrp **ISO**
router lisp **LISP**
router mobile **IMO, MWH**
router odr **ODR**
router ospf **OSPF**
router ospfv3 **IPV6**
router rip **RIP**

router-guard ip multicast efps **IMC**
router-guard ip multicast switchports **IMC**
router-id **OSPF, MP**
router-id (IPv6) **IPV6**
router-id (OSPFv3) **IPV6**
router-preference maximum **IPV6, SEC**
routing dynamic **IRI**
routing-context **EVN**
rpl **CE**
rrq dynamic-prefixes-accept **VR**
rsa keypair-name **TSV**
rsa-pubkey **SEC**
rsakeypair **SEC, IPV6**
rsh **CF**
rsrb remote-peer lsap-output-list **IBM**
rsrb remote-peer netbios-output-list **IBM**
rsvp **VR**
rsvp (PfR) **PFR**
rsvp post-dial-delay **PFR**
rsvp signaling-retries **PFR**
rtcp keepalive **VR**
rtcp-mux **SBCD**
rtcp-regenerate **WAN, SBCD**
rtg-carrier-id-table **SBCD**
rtg-category-table **SBCD**
rtg-dst-address-table **SBCD**
rtg-dst-domain-table **SBCD**
rtg-dst-trunk-group-id-table **SBCD**
rtg-least-cost-table **SBCD**
rtg-round-robin-table **SBCD**
rtg-src-account-table **SBCD**
rtg-src-address-table **SBCD**
rtg-src-adjacency-table **SBCD**
rtg-src-domain-table **SBCD**
rtg-src-trunk-group-id-table **SBCD**
rtg-time-table **SBCD**

rtp QOS
rtp (VO profile) SLA
rtp payload-type VR
rtp send-recv VR
rtp-ssrc multiplex VR
rtr SLA
rtr group schedule SLA
rtr key-chain SLA
rtr logging traps SLA
rtr low-memory SLA
rtr mpls-lsp-monitor SLA
rtr mpls-lsp-monitor reaction-configuration SLA
rtr mpls-lsp-monitor schedule SLA
rtr reaction-configuration SLA
rtr reaction-trigger SLA
rtr reset SLA
rtr responder SLA
rtr restart SLA
rtr schedule SLA
rtr-locator-set LISP
rts WL
rtsp client rtpsetup enable VR
rtsp client session history duration VR
rtsp client session history records VR
rtsp client timeout connect VR
rtsp client timeout message VR
rule (ENUM configuration) VR
rule (voice translation-rule) VR
rx-speed BBA
rxspeed TSV



sa ipsec through show dxi pvc interface

- Finding IOS Command Information, page 379
- sa ipsec through show dxi pvc interface, page 382

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 12: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference

CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
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MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

sa ipsec through show dxi pvc interface

sa ipsec through show dxi pvc interface

S

sa ipsec SEC

sa ipsec through sessions maximum SEC

sa receive-only SEC

sample (event trigger) SNMP

sample (event trigger) through snmp mib event sample SNMP

sample (expression) SNMP

sampler FNF

samples-of-history-kept SLA

sampling-interval MM

sap mode-list (config-if-cts-dot1x) SEC

sap-priority IBM

sap-priority-list IBM

save-password SEC

sbc SBCD

sbcdbe SBCD

sbc dump-alarms SBCD

sbc dump-diagnostics SBCD

sbc interface-id SBCD

sbc periodic-dump-alarms SBCD

sbc redundancy-group tcp (session border controller) SBCD

sc-cold-boot-delay SBCD

scan-interval SLA

scan-period SLA

sccp VR

sccp blf-speed-dial retry-interval VR

sccp ccm IPV6, VR

sccp ccm group IPV6, VR

sccp codec mask VR

sccp ip precedence VR

sccp local VR

sccp plar VR

sccp switchback timeout guard VR

sccp through service-type call-check VR
scenario-cause VR
schedule SLA
scheduler allocate CF
scheduler heapcheck enable CF
scheduler heapcheck poll CF
scheduler heapcheck process CF
scheduler interrupt mask profile CF
scheduler interrupt mask size CF
scheduler interrupt mask time CF
scheduler interval CF
scheduler isr-watchdog CF
scheduler max-sched-time CF
scheduler process-watchdog CF
scheduler timercheck process CF
scheduler timercheck system context CF
schema SNMP
scheme SEC
sck-pool-size SBCD
scope BGP, MTR
scramble IR
scramble through service-module t1 lbo IR
scrambling cell-payload ATM
scrambling cell-payload through show lane ATM
scrambling-payload ATM
script SBCD
script activation DIA
script arap-callback DIA
script callback DIA
script connection DIA
script dialer DIA
script reset DIA
script startup DIA
script-set lua SBCD
scripting tcl encdir IOS_TCL
scripting tcl init IOS_TCL

sa ipsec through show dxi pvc interface

scripting tcl low-memory **IOS_TCL**
scripting tcl secure-mode **IOS_TCL**
scripting tcl trustpoint name **IOS_TCL**
scripting tcl trustpoint untrusted **IOS_TCL**
sctp **IAP**
sctp through show ip sctp statistics **IAP**
sdlc address **IBM**
sdlc dlsw **IBM**
sdlc dte-timeout **IBM**
sdlc frmr-disable **IBM**
sdlc holdq **IBM**
sdlc k **IBM**
sdlc line-speed **IBM**
sdlc n1 **IBM**
sdlc n2 **IBM**
sdlc partner **IBM**
sdlc poll-limit-value **IBM**
sdlc poll-pause-timer **IBM**
sdlc poll-wait-timeout **IBM**
sdlc qllc-prtnr **IBM**
sdlc role **IBM**
sdlc saps **IBM**
sdlc sdlc-largest-frame **IBM**
sdlc simultaneous **IBM**
sdlc slow-poll **IBM**
sdlc snrm-timer **IBM**
sdlc t1 **IBM**
sdlc test serial **IBM**
sdlc virtual-multidrop **IBM**
sdlc vmac **IBM**
sdlc xid **IBM**
sdlc xid-pause-timer **IBM**
sdllc partner **IBM**
sdllc ring-largest-frame **IBM**
sdllc sap **IBM**
sdllc sdlc-largest-frame **IBM**

sdlc traddr IBM
sdlc xid IBM
sdp repeat answer SBCD
sdspfarm tag VR
sdspfarm transcode sessions VR
sdspfarm units VR
search-filter SEC
search-type nested SEC
sec-level minimum IPV6, SEC
sec-profile IBM
secondary VR
secondary aux CBL
secondary-color SEC
secondary-frequency SLA
secondary-text-color SEC
secret SEC
secret-key SEC
secure boot-config SEC
secure boot-image SEC
secure cipher SEC
secure-media SBCD
secure-server TSV
security MWG, VR
security (Diameter peer) SEC
security (TN3270) IBM
security (session border controller) SBCD
security acl VR
security authentication failure rate SEC
security ipsec SEC
security izct VR
security mode VR
security passwords min-length SEC
security verify MWG
security-group SEC
select SSG
select-topology MTR

sa ipsec through show dxi pvc interface

selection-method **ATM**
self-identity **SEC, IPV6**
send **CF**
send qdm message **QOS**
send qdm message through show atm bundle svc statistics **QOS**
send-lifetime **IRI, IPV6, SAF**
send-nat-address **IPV6**
sender **HA**
sender-id **CE**
sender-id (CFM-srv) **CE**
senders **IMC**
sequence-interval **WAN**
sequence-interval through show platform software otv fp **WAN**
sequence-numbers **VR**
sequencing **MP, WAN**
sequencing through show ip traffic-engineering configuration **MP**
serial restart-delay **IR**
serial-number (ca-trustpoint) **SEC, IPV6**
serial-number (cs-server) **SEC**
serial-number (pubkey) **SEC**
server **SEC, ISG**
server (RADIUS) **SEC**
server (RLM) **VR**
server (SSG) **SSG**
server (TACACS+) **SEC**
server (application firewall policy) **SEC**
server (auto-config application) **VR**
server (ldap) **SEC**
server (p-cscf) **MWG**
server (parameter-map) **SEC**
server (presence) **VR**
server (psd)2 **MWG**
server (session border controller) **SBCD**
server (transport map) **TSV**
server absent reject **VR**
server address ipv4 **SEC**

server flow-control VR
server ip SEC, ISG
server ip address IR
server ipv4 SBCD
server local SEC
server name (IPv6 TACACS+) IPV6, SEC
server registration-port VR
server routing VR
server scansafe SEC
server trigger arq VR
server trigger brq VR
server trigger drq VR
server trigger irr VR
server trigger lcf VR
server trigger lrj VR
server trigger lrq VR
server trigger rai VR
server trigger rrq VR
server trigger urq VR
server vendor SEC
server-group SSG
server-key SEC, ISG
server-port SSG
server-private (RADIUS) SEC
server-private (TACACS+) SEC
server-private (RADIUS) IPV6, SEC
server-private (TACACS+) IPV6, SEC
server-retry disable SBCD
server_(Diameter) SEC
servercert IBM
serverfarm SLB
service VR
service (CFM-srv) CE
service (ISG) ISG
service (proxy mobile IPv6) IMO
service action SEC

sa ipsec through show dxi pvc interface

service alignment **DIA**
service call-home **HA**
service cdma pdsn **MWP**
service compress-config **CF**
service config **CF**
service counters max age **CF**
service decimal-tty **CF**
service declassify **IR**
service deny **BBA**
service deny (ISG) **ISG**
service dhcp **IAD**
service divert-rate-limit **CBL**
service divert-rate-limit ip **CBL**
service divert-rate-limit ip trusted-site **CBL**
service divert-rate-limit ipv6 **CBL**
service divert-rate-limit non-ip **CBL**
service divert-rate-limit trusted-site **CBL**
service divert-rate-limit trusted-site-ipv6 **CBL**
service dsapp **VR**
service evc **CE**
service exec-callback **TSV**
service exec-wait **CF**
service finger **CF**
service hide-telnet-address **CF**
service icc **CE**
service image-version compatibility **HA**
service image-version efsu **HA**
service instance **CBL**
service instance dynamic **CE**
service instance ethernet **CE**
service instance ethernet (mac-tunnel) **CE**
service instance trunk **LSW**
service linenumber **CF**
service local **BBA**
service local (ISG) **ISG**
service nagle **CF**

service name match **BBA**
service netflow timeout **BBA**
service old-slip-prompts **TSV**
service pad **WAN, IPV6**
service pad from-xot **WAN**
service pad to-xot **WAN**
service password-encryption **SEC, IPV6**
service password-recovery **SEC**
service performance **SLA**
service profile **BBA**
service prompt config **CF**
service pt-vty-logging **TSV**
service relay **BBA**
service relay (ISG) **ISG**
service sbc sbe radius accounting **SBCD**
service sequence-numbers **CF**
service single-slot-reload-enable **IR**
service slave-log **CF**
service tcp-keepalives-in **CF**
service tcp-keepalives-out **CF**
service tcp-small-servers **CF**
service telnet-zeroidle **CF**
service timestamps **CF, IPV6**
service translation **WAN**
service udp-small-servers **CF**
service udp-small-servers max-servers no-limit **CBL**
service vlan **CE**
service vpdn group **BBA, VPD**
service vpdn group (ISG) **ISG**
service-aware **MWG**
service-class **CBL**
service-class (cmts-tag) **CBL**
service-class (enforce-rule) **CBL**
service-engine default-gateway **IR**
service-engine hostname **IR**
service-engine ip address **IR**

sa ipsec through show dxi pvc interface

service-engine nameserver **IR**
service-engine wma-passcode **IR**
service-engine wma-token **IR**
service-engine wma-url **IR**
service-family **SAF**
service-family external-client listen **SAF**
service-flow primary upstream **VR**
service-group **QOS**
service-list mdns-sd **IAD**
service-mode **MWG**
service-module **IR**
service-module 56k clock rate **IR**
service-module 56k clock source **IR**
service-module 56k data-coding **IR**
service-module 56k network-type **IR**
service-module 56k remote-loopback **IR**
service-module 56k switched-carrier **IR**
service-module analysis-module reload **IR**
service-module analysis-module reset **IR**
service-module analysis-module session **IR**
service-module analysis-module shutdown **IR**
service-module analysis-module status **IR**
service-module apa traffic-management **CF**
service-module backup interface **IR**
service-module backup mode **IR**
service-module content-engine reload **IR**
service-module content-engine reset **IR**
service-module content-engine session **IR**
service-module content-engine shutdown **IR**
service-module content-engine status **IR**
service-module external ip address **IR**
service-module heartbeat-reset disable **IR**
service-module ids bootmode **SEC**
service-module ids heartbeat-reset **SEC**
service-module ids-sensor **IR**
service-module integrated-service-engine default-boot **IR**

service-module integrated-service-engine reload **IR**
service-module integrated-service-engine reset **IR**
service-module integrated-service-engine session **IR**
service-module integrated-service-engine shutdown **IR**
service-module integrated-service-engine statistics **IR**
service-module integrated-service-engine status **IR**
service-module ip address **IR**
service-module ip default-gateway **IR**
service-module ip redundancy **FHP, IR**
service-module ip redundancy through show vrss summary **FHP**
service-module ip rip relay **RIP**
service-module ism default-boot **IR**
service-module ism heartbeat-reset **IR**
service-module ism install **IR**
service-module ism install abort **IR**
service-module ism reload **IR**
service-module ism reset **IR**
service-module ism session **IR**
service-module ism shutdown **IR**
service-module ism statistics **IR**
service-module ism status **IR**
service-module ism uninstall **IR**
service-module mgf ip address **IR**
service-module mgf ip default-gateway **IR**
service-module mgf ipv6 address **IR**
service-module routing redistribute **IR**
service-module satellite backup **IR**
service-module satellite configuration **IR**
service-module satellite cw-mode **IR**
service-module satellite status **IR**
service-module service-engine **IR**
service-module sm default-boot **IR**
service-module sm heartbeat-reset **IR**
service-module sm install **IR**
service-module sm install abort **IR**
service-module sm reload **IR**

sa ipsec through show dxi pvc interface

service-module sm reset **IR**
service-module sm session **IR**
service-module sm shutdown **IR**
service-module sm statistics **IR**
service-module sm status **IR**
service-module sm uninstall **IR**
service-module t1 cablelength short **IR**
service-module t1 clock source **IR**
service-module t1 data-coding **IR**
service-module t1 fdl **IR**
service-module t1 framing **IR**
service-module t1 lbo **IR**
service-module t1 linecode **IR**
service-module t1 linecode through show controllers satellite **IR**
service-module t1 remote-alarm-enable **IR**
service-module t1 remote-loopback **IR**
service-module t1 timeslots **IR**
service-module wlan-ap bootimage **CF, IR**
service-module wlan-ap reload **CF, IR**
service-module wlan-ap reset **CF, IR**
service-module wlan-ap session **CF, IR**
service-module wlan-ap statistics **CF, IR**
service-module wlan-ap status **CF, IR**
service-monitor **ISG**
service-policy **IAD, QOS, MWG, ISG**
service-policy (class-map) **QOS**
service-policy (control-plane) **QOS**
service-policy (policy-map class) **QOS**
service-policy (policy-map) **SEC**
service-policy (service group) **QOS**
service-policy (zones) **SEC**
service-policy inspect **SEC**
service-policy type class-routing **MTR**
service-policy type control **ISG**
service-policy type control policy **CE**
service-policy type inspect **SEC, IPV6**

service-policy type performance-monitor **MM**
service-policy type qos **QOS**
service-policy type service **ISG**
service-policy-query **IAD**
service-relationship **VR**
service-routing mdns-sd **IAD**
service-routing xmcp listen **SAF**
service-type call-check **VR**
service-type-id **CBL**
service-type-id (cmts-tag) **CBL**
services host-service peering **WAN**
session **VR**
session packet **SEC**
session group **VR**
session idle-time **MWG**
session protocol (Voice over Frame Relay) **VR**
session protocol (dial peer) **IPV6, VR**
session protocol aal2 **VR**
session protocol multicast **VR**
session refresh **VR**
session retry limit **BBA**
session slot **CF, IR**
session start **VR**
session target (MMoIP dial peer) **VR**
session target (POTS dial peer) **VR**
session target (VoATM dial peer) **VR**
session target (VoFR dial peer) **VR**
session target (VoIP dial peer) **IPV6, VR**
session through sgcp tse payload **VR**
session transport **VR**
session transport (H.323 voice-service) **VR**
session transport (SIP) **VR**
session-failover **MWG**
session-identifier **SSG**
session-identifier (ISG) **ISG**
session-limit **TSV**

sa ipsec through show dxi pvc interface

session-limit (VPDN) **VPD**
session-params **MM**
session-range **CBL**
session-refresh renegotiation **SBCD**
session-set **VR**
session-timeout **TSV**
session-timeout (LSP discovery) **SLA**
sessionmgr **IMO**
sessions auto cleanup **SSG**
sessions max limit **BBA**
sessions maximum **SEC, IPV6**
sessions per-mac iwf limit **BBA**
sessions per-mac limit **BBA**
sessions per-vc limit **BBA**
sessions per-vlan limit **BBA**
sessions per-vlan throttle **BBA**
sessions pre-auth limit ignore **BBA**
sessions rate **SEC**
sessions threshold **BBA**
sessions throttle **BBA**
set **CBL, VR**
set (EEM) **EEM**
set (ruleset) **TSV**
set active-probe **OER**
set active-probe (PfR) **PFR**
set aggressive-mode client-endpoint **SEC, IPV6**
set aggressive-mode client-endpoint through show content-scan **SEC**
set aggressive-mode password **SEC**
set as-path **BGP**
set atm-clp **QOS**
set automatic-tag **IRI**
set backoff **OER**
set backoff (PfR) **PFR**
set clock **CBL**
set comm-list delete **BGP**
set community **BGP**

set cos MP, QOS
set cos cos-inner (policy-map configuration) QOS
set cos-inner QOS
set cos-inner cos QOS
set dampening BGP
set default interface IRI, IPV6
set delay OER
set delay (PfR) PFR
set discard-class QOS
set dscp QOS, IPV6
set extcomm-list delete BGP, MP
set extcommunity IPV6, BGP
set extcommunity cost BGP
set extcommunity rt BGP
set extcommunity soo BGP
set extcommunity vpn-distinguisher BGP
set fr-de QOS
set fr-fecn-becn WAN
set group SEC
set holddown OER
set holddown (PfR) PFR
set http client cache stale VR
set identifier (control policy-map class) VPD
set identity SEC
set interface IRI, IPV6
set interface (OER) OER
set interface (PfR) PFR
set ip access-group SEC
set ip default next-hop IRI
set ip default next-hop verify-availability IRI
set ip df IR
set ip dscp QOS
set ip dscp (bmp) BGP
set ip dscp (policy-map configuration) QOS
set ip dscp tunnel QOS
set ip global IRI

sa ipsec through show dxi pvc interface

set ip next-hop IRI, IPV6
set ip next-hop (BGP) BGP
set ip next-hop dynamic dhcp IAD, DIA
set ip next-hop self (BGP) BGP
set ip next-hop verify-availability IRI
set ip precedence (policy-map configuration) QOS
set ip precedence (policy-map) QOS
set ip precedence (route-map) QOS
set ip precedence tunnel QOS
set ip tos (route-map) QOS
set ip vrf IRI
set ipv6 default next-hop IPV6, IRI, MP
set ipv6 next-hop (BGP) IPV6, BGP
set ipv6 next-hop (PBR) IPV6, IRI, MP
set ipv6 precedence IPV6, IRI
set isakmp-profile SEC
set jitter OER
set jitter (PfR) PFR
set level (IP) IRI
set level (ISO CLNS) ISO
set link-group OER
set link-group (PfR) PFR
set link-type IMO
set local-preference IRI
set loss OER
set loss (PfR) PFR
set memory debug incremental starting-time DB, CF
set metric (BGP-OSPF-RIP) BGP, IRI
set metric (EIGRP) EIGRP
set metric (ISO CLNS) ISO
set metric-type IRI
set metric-type (ISO CLNS) ISO
set metric-type internal BGP
set mode OER
set mode (PfR) PFR
set mos OER

set mos (PfR) **PFR**
set mpls experimental **MP**
set mpls experimental topmost **MP**
set mpls experimental imposition **MP**
set mpls-label **MP, IPV6**
set nat demux **SEC**
set next-hop **IRI**
set next-hop (OER) **OER**
set next-hop (PfR) **PFR**
set origin (BGP) **BGP**
set ospf router-id **MP**
set peer (IPsec) **SEC**
set periodic **OER**
set periodic (PfR) **PFR**
set pfs **SEC, IPV6**
set platform software trace forwarding-manager alg **IAD, SEC**
set platform hardware qfp active feature ipsec event-monitor **IR**
set port flowcontrol **LSW**
set port flowcontrol through show udld **LSW**
set precedence **QOS, IPV6**
set probe **OER**
set probe (PfR) **PFR**
set pstn-cause **VR**
set qos-group **QOS**
set resolve **OER**
set resolve (PfR) **PFR**
set reverse-route **SEC**
set security-association dummy **SEC**
set security-association idle-time **SEC**
set security-association level per-host **SEC**
set security-association lifetime **SEC, IPV6**
set security-association replay disable **SEC**
set security-association replay window-size **SEC**
set security-policy limit **SEC**
set session-key **SEC**
set sip-status **VR**

sa ipsec through show dxi pvc interface

set tag (IP) **EIGRP**, **IRI**
set tag (ISO CLNS) **ISO**
set traceroute reporting **OER**
set traceroute reporting (PfR) **PFR**
set traffic-index **BGP**
set transform-set **SEC**, **IPV6**
set trap-enable **PFR**
set unreachable **OER**
set unreachable (PfR) **PFR**
set variable (control policy-map class) **VPD**
set vlan **LSW**
set vlan inner **QOS**
set vlan mapping **LSW**
set vrf **MP**, **IPV6**
set weight **BGP**
set-attached-bit **IRS**
set-overload-bit **IRS**
set-timer **ISG**
settle-call **VR**
settlement **VR**
settlement roam-pattern **VR**
setup **CF**
sf-interface **SAF**
sg-service-group **ISG**
sg-service-type **ISG**
sg-service-type external policy **ISG**
sgbp aaa authentication **SEC**
sgbp dial-bids **DIA**
sgbp group **DIA**
sgbp member **DIA**
sgbp ppp-forward **DIA**
sgbp protocol **DIA**
sgbp seed-bid **DIA**
sgbp source-ip **DIA**
sgcp **VR**
sgcp call-agent **VR**

sgcp graceful-shutdown VR
sgcp max-waiting-delay VR
sgcp modem passthru VR
sgcp quarantine-buffer disable VR
sgcp request retries VR
sgcp request timeout VR
sgcp restart VR
sgcp retransmit timer VR
sgcp timer VR
sgcp tse payload VR
sgi beep listener ISG
shape QOS
shape (percent) QOS
shape (policy-map class) QOS
shape adaptive QOS
shape fecn-adapt QOS
shape fr-voice-adapt WAN
shape max-buffers QOS
shdsl annex IR
shdsl rate IR
shelf-id IR, DIA
shell environment load IOS_SHL
shell environment save IOS_SHL
shell init IOS_SHL
shell processing IOS_SHL
shortcut-frame-count ATM
shortcut-frame-time ATM
show CF, LSW
show command append CF
show command begin CF
show command exclude CF
show command include CF
show command redirect CF
show command section CF
show command tee CF
show <command> append CF

sa ipsec through show dxi pvc interface

show <command> begin **CF**
show <command> exclude **CF**
show <command> include **CF**
show <command> redirect **CF**
show <command> section **CF**
show <command> tee **CF**
show (Flash file system) **CF**
show (ca-trustpool) **SEC**
show (cs-server) **SEC**
show (satellite initial configuration) **IR**
show aaa attributes **SEC**
show aaa cache filterserver **SEC**
show aaa cache group **SEC**
show aaa common-criteria policy **SEC**
show aaa dead-criteria **SEC**
show aaa local user lockout **SEC**
show aaa memory **SEC**
show aaa method-lists **SEC**
show aaa servers **SEC**
show aaa servers sg **MWG**
show aaa service-profiles **SEC**
show aaa subscriber profile **SEC**
show aaa user **SEC**
show aal2 profile **VR**
show aal2 profile through show call filter match-list **VR**
show aal2 xgcpspi **ATM**
show access-expression **BR, IBM**
show access-group mode interface **SEC**
show access-list template **BBA, IPV6**
show access-list template through vpn service **BBA**
show access-lists **SEC, IPV6**
show access-lists compiled **SEC**
show access-lists rate-limit **QOS**
show accounting **SEC**
show acircuit checkpoint **MP, WAN**
show adjacency **ISW, IPV6**

show adjacency through show ip cef with source **ISW**
show alarm-interface **IR**
show alg sip **IAD**
show aliases **CF**
show alignment **CF**
show alps ascu **IBM**
show alps circuits **IBM**
show alps peers **IBM**
show als **IR**
show appfw **SEC**
show appletalk access-lists **ATK**
show appletalk adjacent-routes **ATK**
show appletalk arp **ATK**
show appletalk aarp events **ATK**
show appletalk aarp topology **ATK**
show appletalk cache **ATK**
show appletalk domain **ATK**
show appletalk eigrp interfaces **ATK**
show appletalk eigrp neighbors **ATK**
show appletalk eigrp topology **ATK**
show appletalk globals **ATK**
show appletalk interface **ATK**
show appletalk macip-clients **ATK**
show appletalk macip-servers **ATK**
show appletalk macip-traffic **ATK**
show appletalk name-cache **ATK**
show appletalk nbp **ATK**
show appletalk neighbors **ATK**
show appletalk remap **ATK**
show appletalk route **ATK**
show appletalk sockets **ATK**
show appletalk static **ATK**
show appletalk traffic **ATK**
show appletalk zone **ATK**
show application-buckets **CBL**
show aps **IR**

sa ipsec through show dxi pvc interface

show arap **TSV**
show archive **CF**
show archive config differences **CF**
show archive config incremental-diffs **CF**
show archive config rollback timer **CF**
show archive log config **CF**
show arp **IAD**
show arp application **IAD**
show arp ha **IAD**
show arp summary **IAD**
show as5400 **CF**
show ase **SEC**
show asic-version **IR**
show async bootp **CF**
show async status **DIA**
show atm arp-server **ATM**
show atm bundle **QOS**
show atm bundle stat **QOS**
show atm bundle svc **QOS**
show atm bundle svc stat **QOS**
show atm cell-packing **ATM, MP**
show atm class-links **ATM**
show atm ilmi-configuration **ATM**
show atm ilmi-status **ATM**
show atm interface atm **ATM**
show atm map **ATM, IPV6**
show atm pvc **ATM**
show atm pvc dbs **ATM**
show atm signalling statistics **ATM**
show atm svc **ATM**
show atm svc ppp **BBA**
show atm traffic **ATM**
show atm vc **ATM, MP**
show atm video-voice address **VR**
show atm vp **ATM**
show audit **SEC**

show authentication interface SEC
show authentication registrations SEC
show authentication sessions SEC
show auto discovery qos QOS
show auto discovery qos through show ip rsvp hello client lsp detail QOS
show auto qos QOS
show auto secure config SEC
show auto-config VR
show auto-ip-ring IAD
show autonomic control-plane AN
show autonomic device AN
show autonomic interfaces AN
show autonomic neighbor AN
show autonomic registrar AN
show autonomic service AN
show autoupgrade configuration unknown CF
show backhaul-session-manager group VR
show backhaul-session-manager session VR
show backhaul-session-manager set VR
show backup DIA
show bcm560x CF
show bfd drops IRI
show bfd neighbors IPV6, IRI
show bfd summary IPV6
show bgp all community BGP
show bgp all neighbors BGP
show bgp ipv6 IPV6, BGP
show bgp ipv6 community IPV6
show bgp ipv6 community-list IPV6
show bgp ipv6 dampened-paths IPV6
show bgp ipv6 filter-list IPV6
show bgp ipv6 flap-statistics IPV6
show bgp ipv6 inconsistent-as IPV6
show bgp ipv6 labels IPV6
show bgp ipv6 neighbors IPV6
show bgp ipv6 paths IPV6

sa ipsec through show dxi pvc interface

show bgp ipv6 peer-group **IPV6**
show bgp ipv6 prefix-list **IPV6**
show bgp ipv6 quote-regexp **IPV6**
show bgp ipv6 regexp **IPV6**
show bgp ipv6 route-map **IPV6**
show bgp ipv6 summary **IPV6**
show bgp l2vpn evpn **BGP**
show bgp l2vpn vpls **BGP**
show bgp mvpn **BGP**
show bgp nsap **BGP**
show bgp nsap community **BGP**
show bgp nsap community-list **BGP**
show bgp nsap dampened-paths **BGP**
show bgp nsap dampening **BGP**
show bgp nsap filter-list **BGP**
show bgp nsap flap-statistics **BGP**
show bgp nsap inconsistent-as **BGP**
show bgp nsap neighbors **BGP**
show bgp nsap paths **BGP**
show bgp nsap quote-regexp **BGP**
show bgp nsap regexp **BGP**
show bgp nsap summary **BGP**
show bgp vpng6 multicast **BGP**
show bgp vpng6 unicast **IPV6, BGP**
show bootflash: **CF**
show bootvar **CF**
show bridge **BR, IBM**
show bridge cable-modem **CBL**
show bridge circuit-group **BR, IBM**
show bridge group **BR, IBM**
show bridge multicast **BR, IBM**
show bridge vlan **BR, IBM**
show bridge-domain **MP, CE**
show bsc **IBM**
show bstun **IBM**
show buffers **CF**

show buffers leak **BSM**
show buffers summary **CF**
show buffers tune **BSM**
show buffers usage **BSM**
show busyout **DIA**
show c2600 **CF**
show c7200 **CF**
show c7300 **IR**
show c7300 errorlog **IR**
show c7300 pxf accounting **IR**
show c7300 pxf interfaces **IR**
show c7300 slot **IR**
show cable acfe controller **CBL**
show cable acfe interface **CBL**
show cable acfe summary **CBL**
show cable active-reman **CBL**
show cable admission-control **CBL**
show cable arp-filter **CBL**
show cable bgsync **CBL**
show cable bundle **IR, CBL**
show cable bundle multicast **CBL**
show cable burst-profile **CBL**
show cable calls **CBL**
show cable cgd-associations **CBL**
show cable clock **CBL**
show cable clock dti counters **CBL**
show cable clock dti status **CBL**
show cable device access-group **CBL**
show cable dsg **CBL**
show cable dsg cfr **CBL**
show cable dsg host **CBL**
show cable dsg static-group bundle **CBL**
show cable dsg tg **CBL**
show cable dsg tunnel **CBL**
show cable dynamic-qos trace **CBL**
show cable fiber-node **CBL**

sa ipsec through show dxi pvc interface

show cable filter **CBL**
show cable flap-list **CBL**
show cable flap-list wb-rf **CBL**
show cable hop **CBL**
show cable host access-group **CBL**
show cable ib-ipc **CBL**
show cable ipc-stats **CBL**
show cable l2-vpn dot1q-vc-map **CBL**
show cable l2-vpn vc-map **CBL**
show cable l2-vpn xconnect **CBL**
show cable leasequery-filter **CBL**
show cable licenses all **CBL**
show cable load-balance **CBL**
show cable load-balance docsis-group **CBL**
show cable logging **CBL**
show cable mac-domain cable forwarding **CBL**
show cable mac-domain cgd-associations **CBL**
show cable mac-domain downstream-service-group **CBL**
show cable mac-domain rcc **CBL**
show cable mac-domain upstream-service-group **CBL**
show cable metering-status **CBL**
show cable modem **CBL**
show cable modem access-group **CBL**
show cable modem auth-profile **CBL**
show cable modem calls **CBL**
show cable modem classifiers **CBL**
show cable modem cnr **CBL**
show cable modem connectivity **CBL**
show cable modem counters **CBL**
show cable modem cpe **CBL**
show cable modem docsis device-class **CBL**
show cable modem docsis version **CBL**
show cable modem domain-name **CBL**
show cable modem errors **CBL**
show cable modem extended-power **CBL**
show cable modem flap **CBL**

show cable modem ipv6 CBL
show cable modem mac CBL
show cable modem maintenance CBL
show cable modem offline CBL
show cable modem partial-mode CBL
show cable modem partial-service CBL
show cable modem phy CBL
show cable modem primary-channel CBL
show cable modem primary-channel summary total CBL
show cable modem privacy CBL
show cable modem qos CBL
show cable modem registered CBL
show cable modem remote-query CBL
show cable modem resiliency CBL
show cable modem rf-adapt CBL
show cable modem rogue CBL
show cable modem service-flow CBL
show cable modem service-type-id CBL
show cable modem summary CBL
show cable modem summary wb-rf CBL
show cable modem tcs summary CBL
show cable modem type CBL
show cable modem unregistered CBL
show cable modem vendor CBL
show cable modem voice CBL
show cable modem wideband CBL
show cable modem wideband phy CBL
show cable modem wideband primary-channel CBL
show cable modem wideband rcs-status CBL
show cable modulation-profile CBL
show cable multicast authorization CBL
show cable multicast db CBL
show cable multicast debug CBL
show cable multicast dsid CBL
show cable multicast qos CBL
show cable multicast ses-cache CBL

sa ipsec through show dxi pvc interface

show cable multicast statistics failure **CBL**
show cable noise **CBL**
show cable privacy **CBL**
show cable qos enforce-rule **CBL**
show cable qos permission **CBL**
show cable qos profile **CBL**
show cable rate-adapt **CBL**
show cable rate-limit-ccf **CBL**
show cable redundancy **CBL**
show cable resiliency **CBL**
show cable rf-adapt **CBL**
show cable rf-status **CBL**
show cable rsvp flow-db **CBL**
show cable service-class **CBL**
show cable service-voice downstream-type **CBL**
show cable signal-quality **CBL**
show cable spectrum-analysis **CBL**
show cable spectrum-group **CBL**
show cable subscriber-usage **CBL**
show cable tech-support **CBL**
show cable throttle-modem **CBL**
show cable upstream service-flow summary **CBL**
show cable urn **CBL**
show cable us-sg **CBL**
show cable-diagnostics tdr **IR**
show calendar **BSM**
show call accounting-template voice **VR**
show call active fax **IPV6, VR**
show call active media **VR**
show call active video **VR**
show call active voice **IPV6, VR**
show call admission statistics **SEC, BBA**
show call application app-level **VR**
show call application gateway-level **VR**
show call application interface **VR**
show call application services registry **VR**

show call application session-level VR
show call application sessions VR
show call application voice VR
show call calltracker active DIA
show call calltracker handle DIA
show call calltracker history DIA
show call calltracker summary DIA
show call fallback cache VR
show call fallback config VR
show call fallback stats VR
show call filter components VR
show call filter match-list VR
show call history fax IPV6, VR
show call history fax through show debug condition VR
show call history media VR
show call history video VR
show call history video record VR
show call history voice IPV6, VR
show call language voice VR
show call leg VR
show call media forking VR
show call progress tone DIA
show call prompt-mem-usage VR
show call resource voice stats VR
show call resource voice threshold VR
show call rsvp-sync conf VR
show call rsvp-sync stats VR
show call spike status VR
show call threshold VR
show call treatment VR
show call-home HA
show call-home diagnostic-signature HA
show call-home through vrrp sso HA
show call-router routes VR
show call-router status VR
show caller DIA

sa ipsec through show dxi pvc interface

show callmon VR
show catalyst6000 CF, IR
show cca DIA
show ccm clients BBA
show ccm group WAN
show ccm queues BBA
show ccm sessions WAN, BBA
show ccm-manager VR
show cdapi VR
show cdma pdsn MWP
show cdma pdsn accounting MWP
show cdma pdsn accounting detail MWP
show cdma pdsn accounting session MWP
show cdma pdsn accounting session detail MWP
show cdma pdsn accounting session flow MWP
show cdma pdsn accounting session flow user MWP
show cdma pdsn ahdlc MWP
show cdma pdsn cluster controller MWP
show cdma pdsn cluster controller configuration MWP
show cdma pdsn cluster controller member MWP
show cdma pdsn cluster controller session MWP
show cdma pdsn cluster controller statistics MWP
show cdma pdsn cluster member MWP
show cdma pdsn flow MWP
show cdma pdsn flow service MWP
show cdma pdsn pcf MWP
show cdma pdsn redundancy MWP
show cdma pdsn redundancy statistics MWP
show cdma pdsn resource MWP
show cdma pdsn selection MWP
show cdma pdsn session MWP
show cdma pdsn statistics MWP
show cdma pdsn statistics prepaid MWP
show cdp CDP
show cdp entry CDP, IPV6
show cdp interface CDP

show cdp neighbors CDP, IPV6
show cdp tlv CDP
show cdp traffic CDP
show cef ISW, IPV6
show cef drop ISW
show cef events ISW
show cef features global ISW
show cef interface ISW, IPV6
show cef interface policy-statistics ISW
show cef linecard ISW, IPV6
show cef memory ISW
show cef not-cef-switched ISW
show cef nsf HA
show cef state ISW, HA
show cef subtree context client ISW
show cef table ISW, IPV6
show cef table download priority ISW
show cef timers ISW
show cef vrf ISW
show cellular gps DIA
show cellular sms DIA
show cem IR
show cem circuit IR
show ces ATM
show ces circuit ATM
show ces clock-select VR
show ces interface cbr ATM
show ces status ATM
show cfmpal CE
show chassis IR
show checkpoint BBA, CBL
show class cem IR
show class-map QOS
show class-map type control ISG
show class-map type inspect SEC
show class-map type nat QOS

sa ipsec through show dxi pvc interface

show class-map type port-filter QOS
show class-map type traffic ISG
show class-map type urlfilter SEC
show clns ISO
show clns cache ISO
show clns es-neighbors ISO
show clns filter-expr ISO
show clns filter-set ISO
show clns interface IRS, ISO
show clns is-neighbors IRS, ISO
show clns neighbor areas ISO
show clns neighbors ISO, IPV6
show clns protocol ISO
show clns route ISO
show clns traffic IRS, ISO
show clock BSM, IPV6
show cls CF
show cmts ipc-cable client base CBL
show cns config connections CNS
show cns config outstanding CNS
show cns config stats CNS
show cns config status CNS
show cns event connections CNS
show cns event gateway CNS
show cns event stats CNS
show cns event status CNS
show cns event subject CNS
show cns image connections CNS
show cns image inventory CNS
show cns image status CNS
show compress IR
show config id CF
show configuration id CF
show configuration lock CF
show connect VR
show connect (FR-ATM) WAN

show connection MP, WAN
show content-scan SEC
show context CF
show control-plane cef-exception counters QOS
show control-plane cef-exception features QOS
show control-plane counters QOS
show control-plane features QOS
show control-plane host counters QOS
show control-plane host features QOS
show control-plane host open-ports QOS
show control-plane transit counters QOS
show control-plane transit features QOS
show controller dsl IR
show controller dwdm IR
show controller gigabitethernet CBL
show controller integrated-cable CBL
show controller vdsl IR
show controllers (GRP image) CF
show controllers (line card image) CF
show controllers analysis-module IR
show controllers atm ATM
show controllers bri DIA
show controllers cable CBL
show controllers cable jib CBL
show controllers cable upstream spectrum CBL
show controllers cable-modem CBL
show controllers cable-modem bpkm CBL
show controllers cable-modem classifiers CBL
show controllers cable-modem cmcert CBL
show controllers cable-modem crypto des CBL
show controllers cable-modem filters CBL
show controllers cable-modem lookup-table CBL
show controllers cable-modem mac CBL
show controllers cable-modem manuf-cert CBL
show controllers cable-modem phs CBL
show controllers cable-modem phy CBL

sa ipsec through show dxi pvc interface

show controllers cable-modem qos **CBL**
show controllers cable-modem service-flows **CBL**
show controllers cable-modem tuner **CBL**
show controllers cbus **IR**
show controllers channel **IBM**
show controllers clock-reference **CBL**
show controllers content-engine **IR**
show controllers dsx3 **IR**
show controllers e1 **IR**
show controllers e1 call-counters **DIA**
show controllers e1 cas-data **DIA**
show controllers e3 **IR**
show controllers ethernet **IR**
show controllers fastethernet **IR, LSW**
show controllers fddi **IR**
show controllers gigabitethernet **IR**
show controllers integrated-service-engine **IR**
show controllers ism **IR**
show controllers j1 **IR**
show controllers jacket **CBL**
show controllers lex **IR**
show controllers logging **CF**
show controllers mci **IR**
show controllers modular-cable **CBL**
show controllers pcbus **IR**
show controllers pos **IR**
show controllers rs366 **VR**
show controllers satellite **IR**
show controllers serial **IR**
show controllers serial bert **IR**
show controllers serial through show hw-module slot proc cpu **IR**
show controllers shdsl **BBA**
show controllers sm **IR**
show controllers sonet **IR**
show controllers t1 **IR**
show controllers t1 bert **IR**

show controllers t1 call-counters **DIA**
show controllers t1 cas-data **DIA**
show controllers t1 clock **DIA**
show controllers t1 firmware-status **DIA**
show controllers t1 timeslots **DIA**
show controllers t3 **IR**
show controllers t3 bert **IR**
show controllers tech-support **CF**
show controllers timeslots **VR**
show controllers token **IR**
show controllers token (IBM) **BR, IBM**
show controllers usb **CBL**
show controllers vg-anylan **IR**
show controllers voice **VR**
show controllers vsi control-interface **MP**
show controllers vsi descriptor **MP**
show controllers vsi session **MP**
show controllers vsi status **MP**
show controllers vsi traffic **MP**
show controllers wanphy **IR**
show controllers wlan-controller **IR**
show controllers xtagatm **MP**
show cops servers **QOS**
show cot dsp **DIA**
show cot request **DIA**
show cot summary **DIA**
show counters interface **IR**
show coverage history **CF**
show cpd **CBL**
show cr10k-rp cable **CBL**
show cr10k-rp controller **CBL**
show cr10k-rp queue **CBL**
show cr10k-rp slots **CBL**
show crm **VR**
show crypto ace redundancy **SEC**
show crypto ace redundancy through show cts sxp **SEC**

sa ipsec through show dxi pvc interface

show crypto ca certificates SEC, CBL
show crypto ca crls SEC
show crypto ca roots SEC
show crypto ca timers SEC
show crypto ca trustpoints SEC, CBL
show crypto call admission statistics SEC
show crypto ctcp SEC
show crypto datapath SEC
show crypto debug-condition DB, SEC
show crypto dynamic-map SEC
show crypto eli SEC
show crypto eng qos QOS, SEC
show crypto engine SEC, IPV6
show crypto engine accelerator logs SEC
show crypto engine accelerator ring SEC
show crypto engine accelerator sa-database SEC
show crypto engine accelerator statistic SEC
show crypto entropy status QOS
show crypto gdoi SEC
show crypto ha SEC
show crypto identity SEC
show crypto ikev2 stats SEC
show crypto ikev2 cluster SEC
show crypto ikev2 diagnose error SEC
show crypto ikev2 policy SEC, IPV6
show crypto ikev2 profile SEC, IPV6
show crypto ikev2 proposal SEC
show crypto ikev2 sa SEC, IPV6
show crypto ikev2 session SEC, IPV6
show crypto ikev2 stats SEC
show crypto ipsec client ezvpn SEC
show crypto ipsec default transform-set SEC
show crypto ipsec policy IPV6
show crypto ipsec sa SEC, IPV6
show crypto ipsec security-association idle-time SEC
show crypto ipsec security-association lifetime SEC

show crypto ipsec transform-set SEC
show crypto ipsec transform-set default SEC
show crypto isakmp default policy SEC
show crypto isakmp diagnose error SEC
show crypto isakmp key SEC, IPV6
show crypto isakmp peers SEC, IPV6
show crypto isakmp policy SEC, IPV6
show crypto isakmp profile SEC, IPV6
show crypto isakmp sa SEC
show crypto key mypubkey rsa SEC
show crypto key pubkey-chain rsa SEC
show crypto map (IPsec) SEC, IPV6
show crypto mib ipsec flowmib endpoint SEC
show crypto mib ipsec flowmib failure SEC
show crypto mib ipsec flowmib global SEC
show crypto mib ipsec flowmib history SEC
show crypto mib ipsec flowmib history failure size SEC
show crypto mib ipsec flowmib history tunnel size SEC
show crypto mib ipsec flowmib spi SEC
show crypto mib ipsec flowmib tunnel SEC
show crypto mib ipsec flowmib version SEC
show crypto mib isakmp flowmib failure SEC
show crypto mib isakmp flowmib global SEC
show crypto mib isakmp flowmib history SEC
show crypto mib isakmp flowmib peer SEC
show crypto mib isakmp flowmib tunnel SEC
show crypto pki benchmarks SEC
show crypto pki certificates SEC
show crypto pki certificates storage SEC
show crypto pki counters SEC
show crypto pki crls SEC
show crypto pki server SEC
show crypto pki server certificates SEC
show crypto pki server crt SEC
show crypto pki server requests SEC
show crypto pki timers SEC

sa ipsec through show dxi pvc interface

show crypto pki token SEC
show crypto pki trustpoints SEC
show crypto pki trustpool SEC
show crypto route SEC
show crypto ruleset SEC
show crypto session SEC, IPV6
show crypto session group SEC
show crypto session summary SEC
show crypto socket SEC, IPV6
show crypto tech-support SEC
show crypto vlan SEC
show csm VR
show csm call VR
show cts credentials SEC
show cts interface SEC
show cts server-list SEC
show cts sxp SEC
show cube status VR
show cwan LSW
show cwan qinq LSW
show cwan qinq bridge-domain LSW
show cwan qinq interface LSW
show cwan qinq load-balance LSW
show cwan qinq port-channel LSW
show cwmp map BBA
show cwmp methods BBA
show cwmp parameter BBA
show cwmp persistent BBA
show cwmp session BBA
show cwtlc qinq LSW
show dampening interface IRI
show data-corruption CF
show data-store MWG
show data-store statistics MWG
show database data ISG
show debug CBL

show debug condition VR
show debugging DB, IAP, CF, SBCD
show debugging condition DB
show declassify CF
show decnet DEC
show decnet accounting DEC
show decnet interface DEC
show decnet map DEC
show decnet neighbors DEC
show decnet route DEC
show decnet static DEC
show decnet traffic DEC
show depi CBL
show depi session CBL
show depi tunnel CBL
show derived-config CF
show device-sensor cache SEC
show dhcp CBL, DIA
show diag IR
show diagnostic bootup CBL
show diagnostic bootup level IR
show diagnostic cns CF, IR
show diagnostic content CBL
show diagnostic content module IR
show diagnostic description module IR
show diagnostic events IR
show diagnostic health IR
show diagnostic ondemand settings IR
show diagnostic ood-status CBL
show diagnostic result CBL
show diagnostic result module IR
show diagnostic result slot IR
show diagnostic sanity CF, IR
show diagnostic schedule CBL
show diagnostic schedule module IR
show diagnostic simulation failure IR

sa ipsec through show dxi pvc interface

show diagnostic status **IR**
show dial-peer **VR**
show dial-peer through show gatekeeper zone prefix **VR**
show dial-peer video **VR**
show dial-peer voice **IPV6, VR**
show dial-shelf **DIA**
show dial-shelf split **DIA**
show dialer **DIA**
show dialer dnis **DIA**
show dialer interface bri **DIA**
show dialer maps **DIA**
show dialer sessions **DIA**
show dialplan dialpeer **VR**
show dialplan in-carrier **VR**
show dialplan in-trunk-group-label **VR**
show dialplan incall **VR**
show dialplan incall uri **VR**
show dialplan number **VR**
show dialplan uri **VR**
show diameter peer **SEC, MWG**
show diameter peer through show object-group **SEC**
show disk **CF**
show disk0: **CF**
show disk1: **CF**
show dlsw capabilities **IBM**
show dlsw circuits **IBM**
show dlsw circuits history **IBM**
show dlsw fastcache **IBM**
show dlsw local-circuit **IBM**
show dlsw peers **IBM**
show dlsw reachability **IBM**
show dlsw statistics **IBM**
show dlsw transparent cache **IBM**
show dlsw transparent map **IBM**
show dlsw transparent neighbor **IBM**
show dmvpn **SEC, IPV6**

show dn-numbers VR
show dnsix SEC
show dot11 aaa authentication mac-authen filter-cache WL
show dot11 associations WL
show dot11 carrier busy WL
show dot11 statistics client-traffic WL
show dot11 statistics interface WL
show dot11 vlan-name WL
show dot1q-tunnel LSW
show dot1x SEC
show drip BR, IBM
show dsc clock IR, DIA
show ds1 IR, DIA
show dsip IR, DIA
show dsip clients IR, DIA
show dsip nodes IR, DIA
show dsip ports IR, DIA
show dsip queue IR, DIA
show dsip tracing IR, DIA
show dsip transport IR, DIA
show dsip version IR, DIA
show dsl interface atm BBA
show dsp-group VR
show dspfarm VR
show dspfarm profile VR
show dspl IBM
show dss log SEC
show dtp interface IR
show dwld_mgr ISG
show dxi map ATM
show dxi pvc ATM
show dxi pvc interface ATM

sa ipsec through show dxi pvc interface

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show eap registrations through show mvr source ports

- Finding IOS Command Information, page 423
- show eap registrations through show mvr source ports, page 426

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 13: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference

CF	Cisco IOS Configuration Fundamentals Command Reference
CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

show eap registrations through show mvr source ports

show eap registrations through show mvr source ports

S

show eap registrations SEC
show eap sessions SEC
show echo-cancel VR
show eigrp address-family accounting EIGRP, IPV6
show eigrp address-family events EIGRP, IPV6
show eigrp address-family interfaces EIGRP, IPV6
show eigrp address-family neighbors EIGRP, IPV6
show eigrp address-family timers EIGRP, IPV6
show eigrp address-family topology EIGRP, IPV6
show eigrp address-family traffic EIGRP, IPV6
show eigrp plugins EIGRP, SAF
show eigrp protocols EIGRP, SAF
show eigrp service-family SAF
show eigrp service-family external-client SAF
show eigrp service-family ipv4 topology SAF
show eigrp service-family ipv6 topology SAF
show eigrp tech-support EIGRP, SAF
show entry TSV
show environment CF
show environment alarm CF
show environment connector CF
show environment cooling CF
show environment status CF
show environment temperature CF
show eobc IR
show eou SEC
show epm session SEC
show erm statistics IPV6
show errdisable detect CF, IR
show errdisable flap-values LSW
show errdisable recovery CF, IR
show esmc IR

show etherchannel IR
show etherchannel load-balancing IR
show ethernet cfm domain CE
show ethernet cfm errors CE
show ethernet cfm maintenance-points local CE
show ethernet cfm maintenance-points local through weight CE
show ethernet cfm maintenance-points remote CE
show ethernet cfm maintenance-points remote crosscheck CE
show ethernet cfm maintenance-points remote detail CE
show ethernet cfm mpdb CE
show ethernet cfm pm CE
show ethernet cfm smep CE
show ethernet cfm statistics CE
show ethernet cfm traceroute-cache CE
show ethernet event microwave statistics CE
show ethernet event microwave status CE
show ethernet lmi CE
show ethernet loopback CE
show ethernet mac-tunnel engine slot CE
show ethernet oam debug link-monitor CE
show ethernet oam discovery CE
show ethernet oam runtime CE
show ethernet oam statistics CE
show ethernet oam status CE
show ethernet oam summary CE
show ethernet ring g8032 brief CE
show ethernet ring g8032 configuration CE
show ethernet ring g8032 port status CE
show ethernet ring g8032 profile CE
show ethernet ring g8032 statistics CE
show ethernet ring g8032 status CE
show ethernet ring g8032 summary CE
show ethernet ring g8032 trace CE
show ethernet service dynamic CE
show ethernet service evc WAN, CE
show ethernet service instance WAN, CE

■ show eap registrations through show mvr source ports

show ethernet service interface WAN, CE
show ethernet service mac-tunnel CE
show event manager detector EEM
show event manager directory user EEM
show event manager environment EEM
show event manager history events EEM
show event manager history traps EEM
show event manager metric processes EEM
show event manager policy active EEM
show event manager policy available EEM
show event manager policy pending EEM
show event manager policy registered EEM
show event manager scheduler EEM
show event manager session cli username EEM
show event manager statistics EEM
show event manager version EEM
show event-manager consumers VR
show extended channel backup IBM
show extended channel cmgr IBM
show extended channel cmpc IBM
show extended channel connection-map llc2 IBM
show extended channel csna IBM
show extended channel icmp-stack IBM
show extended channel ip-stack IBM
show extended channel lan IBM
show extended channel llc2 IBM
show extended channel max-llc2-sessions IBM
show extended channel packing names IBM
show extended channel packing stats IBM
show extended channel statistics IBM
show extended channel subchannel IBM
show extended channel tcp-connections IBM
show extended channel tcp-stack IBM
show extended channel tg IBM
show extended channel tn3270-server IBM
show extended channel tn3270-server client-ip-address IBM

show extended channel tn3270-server client-name IBM
show extended channel tn3270-server dlur IBM
show extended channel tn3270-server dlurlink IBM
show extended channel tn3270-server nailed-domain IBM
show extended channel tn3270-server nailed-ip IBM
show extended channel tn3270-server nailed-name IBM
show extended channel tn3270-server pu IBM
show extended channel tn3270-server pu lu IBM
show extended channel tn3270-server response-time application IBM
show extended channel tn3270-server response-time global IBM
show extended channel tn3270-server response-time link IBM
show extended channel tn3270-server response-time listen-point IBM
show extended channel tn3270-server response-time subnet IBM
show extended channel tn3270-server security IBM
show extended channel udp-listeners IBM
show extended channel udp-stack IBM
show fabric IR
show facility-alarm status CBL
show fastblk CF
show file descriptors CF
show file information CF
show file systems CF
show firewall vlan-group SEC
show flh-log CF
show flow exporter FNF
show flow interface FNF
show flow monitor FNF
show flow monitor cache aggregate FNF
show flow monitor cache filter FNF
show flow monitor cache sort FNF
show flow monitor type mace WAN
show flow record FNF
show flow record type WAN, MM
show flow-sampler NF
show fm features IR
show fm inband-counters IR

■ show eap registrations through show mvr source ports

show fm inspect **CF**
show fm interface **CF**
show fm ipv6 pbr all **IPV6, IRI**
show fm ipv6 pbr interface **IPV6, IRI**
show fm ipv6 traffic-filter **IPV6**
show fm nat netflow data **NF**
show fm netflow **NF**
show fm private-hosts **SEC**
show fm raguard **IPV6, SEC**
show fm reflexive **CF**
show fm slb counters **SLB**
show fm summary **CF**
show format **XMLPI**
show fpm package-group **SEC**
show fpm package-info **SEC**
show frame-clocks **CBL**
show frame-relay end-to-end keepalive **WAN**
show frame-relay fragment **WAN**
show frame-relay ip rtp header-compression **QOS**
show frame-relay ip tcp header-compression **QOS, WAN**
show frame-relay iphc **WAN**
show frame-relay lapf **WAN**
show frame-relay lmi **WAN, IPV6**
show frame-relay map **WAN, IPV6**
show frame-relay multilink **WAN, IPV6**
show frame-relay pvc **WAN, IPV6**
show frame-relay qos-autosense **WAN**
show frame-relay route **WAN**
show frame-relay svc maplist **WAN**
show frame-relay traffic **WAN**
show frame-relay vc-bundle **WAN**
show frame-relay vofr **VR**
show fras **IBM**
show fras map **IBM**
show fras-host **IBM**
show funi **CF**

show gatekeeper calls VR
show gatekeeper circuits VR
show gatekeeper cluster VR
show gatekeeper endpoint circuits VR
show gatekeeper endpoints VR
show gatekeeper gw-type-prefix VR
show gatekeeper performance statistics VR
show gatekeeper servers VR
show gatekeeper status VR
show gatekeeper status cluster VR
show gatekeeper zone cluster VR
show gatekeeper zone prefix VR
show gatekeeper zone status VR
show gateway VR
show gateway through show modem relay statistics VR
show ggsn csig MWG
show ggsn quota-server MWG
show glbp FHP, IPV6
show gprs MWG
show gprs access-point MWG
show gprs access-point statistics MWG
show gprs access-point throughput statistics MWG
show gprs bandwidth-pool status MWG
show gprs charging parameters MWG
show gprs charging statistics MWG
show gprs charging status MWG
show gprs gtp ms MWG
show gprs gtp parameters MWG
show gprs gtp path MWG
show gprs gtp path statistics history MWG
show gprs gtp path statistics remote-address MWG
show gprs gtp path throughput MWG
show gprs gtp pdp-context MWG
show gprs gtp statistics MWG
show gprs gtp status MWG
show gprs memory threshold statistics MWG

■ show eap registrations through show mvr source ports

show gprs ms-address exclude-range MWG
show gprs pescf MWG
show gprs plmn MWG
show gprs plmn ip address MWG
show gprs qos status MWG
show gprs redundancy MWG
show gprs service-aware statistics MWG
show gprs service-mode MWG
show gprs slb detail MWG
show gprs slb mode MWG
show gprs slb statistics MWG
show gprs slb vservers MWG
show gprs umts-qos map traffic-class MWG
show gprs umts-qos police pdp-context tid MWG
show gprs umts-qos profile pdp tid MWG
show gsr CF
show gsr through show monitor event trace CF
show gt64010 (7200) CF
show gtp IR
show gvRP interface LSW
show gvRP summary LSW
show h323 calls preserved VR
show h323 gateway VR
show h323 gateway prefixes VR
show hardware CF
show hcCP CBL
show hcCP channel-switch CBL
show hcCP group CBL
show hcCP interface CBL
show hcCP linecard CBL
show health-monitor CF
show history CF
show history all CF
show hosts IAD, CF
show html CF
show http client cache VR

show http client cookie **VR**
show http client history **VR**
show http client secure status **VR**
show http client statistics **VR**
show hub **IR**
show hw-module all fpd **IR**
show hw-module bay **CBL**
show hw-module bay oir **CBL**
show hw-module bay transceiver **CBL**
show hw-module slot (6500) **IR**
show hw-module slot align **IR**
show hw-module slot fpd **IR**
show hw-module slot logging **IR**
show hw-module slot proc cpu **IR**
show hw-module slot tech-support **IR**
show hw-module slot tech-support through show interfaces vg-anylan **IR**
show hw-module subslot **IR**
show hw-module subslot fpd **IR**
show hw-module subslot oir **IR**
show hw-module subslot service-engine status **IR**
show hw-module subslot transceiver **IR**
show hw-programmable **IR**
show icc **IR**
show idb **CF**
show identity policy **CF**
show identity profile **CF**
show idmgr **SEC, ISG**
show idprom **CF**
show ima interface atm **ATM**
show interface bundle **CBL**
show interface cable **CBL**
show interface cable admission-control reservation **CBL**
show interface cable cable-monitor **CBL**
show interface cable downstream **CBL**
show interface cable dsg downstream **CBL**
show interface cable dsg downstream tg **CBL**

■ show eap registrations through show mvr source ports

show interface cable dynamic-service statistics **CBL**
show interface cable intercept **CBL**
show interface cable mac-scheduler **CBL**
show interface cable modem **CBL**
show interface cable monitor **CBL**
show interface cable multicast-sessions **CBL**
show interface cable packetcable statistics **CBL**
show interface cable privacy **CBL**
show interface cable qos paramset **CBL**
show interface cable service-flow **CBL**
show interface cable sid **CBL**
show interface cable signal-quality **CBL**
show interface cable upstream **CBL**
show interface cable upstream debug **CBL**
show interface cbr **ATM**
show interface dampening **IRI**
show interface dspfarm **VR**
show interface gigabitethernet **CBL**
show interface history **IR**
show interface integrated-cable **CBL**
show interface integrated-cable queue **CBL**
show interface mac **IAP**
show interface modular-cable **CBL**
show interface modular-cable accounting **CBL**
show interface modular-cable description **CBL**
show interface modular-cable dlm **CBL**
show interface modular-cable downstream **CBL**
show interface modular-cable intercept **CBL**
show interface modular-cable multicast-sessions **CBL**
show interface modular-cable stats **CBL**
show interface modular-cable summary **CBL**
show interface modular-cable switching **CBL**
show interface monitor **ISG**
show interface multicast-gcr **CBL**
show interface port-channel **CBL**
show interface precedence **IAP**

show interface pseudowire MP
show interface rf-status CBL
show interface sbc SBCD
show interface sdcc IR
show interface stats ISW
show interface tunnel configuration MP
show interface virtual-access SEC
show interface virtual-ethernet MP
show interface wideband-cable CBL
show interface wideband-cable multicast-sessions CBL
show interface wideband-cable queue CBL
show interface xtagatm MP
show interfaces IR
show interfaces accounting IR, IPV6
show interfaces analysis-module IR
show interfaces atm ATM
show interfaces bdi IR
show interfaces bri DIA
show interfaces cable-modem CBL, VR
show interfaces capabilities IR
show interfaces cem IR
show interfaces channel IBM
show interfaces content-engine IR
show interfaces counters nonzero IR
show interfaces crb BR, IBM
show interfaces ctunnel IR
show interfaces debounce IR
show interfaces description IR
show interfaces ethernet IR
show interfaces fair-queue QOS
show interfaces fastethernet IR
show interfaces fddi IR
show interfaces flowcontrol IR
show interfaces gigabitethernet IR
show interfaces hssi IR
show interfaces integrated-service-engine IR

■ show eap registrations through show mvr source ports

show interfaces irb BR, IBM
show interfaces ism IR
show interfaces lex IR
show interfaces loopback IR
show interfaces port-channel IR
show interfaces port-channel etherchannel IR
show interfaces pos IR
show interfaces private-vlan mapping IR
show interfaces random-detect QOS
show interfaces rate-limit QOS
show interfaces satellite IR
show interfaces serial IR
show interfaces serial bchannel DIA
show interfaces sm IR
show interfaces status IR
show interfaces summary IR
show interfaces switching ISW
show interfaces switchport IR
show interfaces switchport backup IR
show interfaces tokenring IR
show interfaces tokenring (IBM) BR, IBM
show interfaces transceiver IR
show interfaces trunk IR
show interfaces tunnel IR
show interfaces ucse IR
show interfaces unidirectional IR
show interfaces vg-anylan IR
show interfaces virtual-access VPD, DIA
show interfaces vlan mapping IR
show interfaces vlan mapping through show scp IR
show interfaces wlan-controller IR
show inventory CF
show ip access-lists SEC
show ip accounting IAP
show ip admission SEC
show ip aliases IAD

show ip arp IAD
show ip arp inspection IAD
show ip arp inspection log IAD
show ip arp poll IAD
show ip arp vrf CBL
show ip as-path-access-list BGP
show ip audit configuration SEC
show ip audit interface SEC
show ip audit statistics SEC
show ip auth-proxy SEC
show ip auth-proxy watch-list SEC
show ip bgp BGP, HA
show ip bgp bmp BGP
show ip bgp all dampening BGP
show ip bgp cidr-only BGP
show ip bgp cluster-ids BGP
show ip bgp community BGP
show ip bgp community-list BGP
show ip bgp dampened-paths BGP
show ip bgp dampening dampened-paths BGP
show ip bgp dampening flap-statistics BGP
show ip bgp dampening parameters BGP
show ip bgp extcommunity-list BGP
show ip bgp filter-list BGP
show ip bgp flap-statistics BGP
show ip bgp inconsistent-as BGP
show ip bgp injected-paths BGP
show ip bgp ipv4 BGP
show ip bgp ipv4 multicast BGP
show ip bgp ipv4 multicast summary BGP
show ip bgp ipv6 multicast BGP
show ip bgp ipv6 unicast BGP
show ip bgp l2vpn BGP, MP
show ip bgp labels MP, SEC
show ip bgp neighbors BGP, MP, HA
show ip bgp path-attribute discard BGP

■ show eap registrations through show mvr source ports

show ip bgp path-attribute unknown **BGP**
show ip bgp paths **BGP**
show ip bgp peer-group **BGP**
show ip bgp quote-regexp **BGP**
show ip bgp regexp **BGP**
show ip bgp replication **BGP**
show ip bgp rib-failure **BGP**
show ip bgp rpkı servers **BGP**
show ip bgp rpkı table **BGP**
show ip bgp rtfilter **BGP**
show ip bgp summary **BGP**
show ip bgp template peer-policy **BGP**
show ip bgp template peer-session **BGP**
show ip bgp topology **MTR**
show ip bgp unicast route-server **BGP**
show ip bgp update-group **BGP**
show ip bgp vpnv4 **BGP, MP, HA**
show ip bgp vpnv4 all dampening **BGP**
show ip bgp vpnv4 all sso summary **BGP, HA**
show ip bgp vpnv6 unicast all dampening **BGP**
show ip cache **ISW**
show ip cache flow **NF**
show ip cache flow aggregation **NF**
show ip cache policy **IRI**
show ip cache verbose flow **NF**
show ip cache verbose flow aggregation **NF**
show ip casa affinities **IAP**
show ip casa oper **IAP**
show ip casa stats **IAP**
show ip casa wildcard **IAP**
show ip cef **ISW**
show ip cef exact-route **ISW**
show ip cef adjacency **ISW**
show ip cef epoch **ISW**
show ip cef events **ISW**
show ip cef exact-route **ISW**

show ip cef inconsistency **ISW**
show ip cef non-recursive **ISW**
show ip cef platform **ISW, IRI**
show ip cef summary **ISW**
show ip cef switching statistics **ISW**
show ip cef traffic prefix-length **ISW**
show ip cef tree **ISW**
show ip cef unresolved **ISW**
show ip cef vlan **ISW**
show ip cef vrf **ISW**
show ip cef with epoch **ISW**
show ip cef with source **ISW**
show ip community-list **BGP**
show ip ddns update **IAD**
show ip ddns update method **IAD**
show ip device tracking **SEC**
show ip dfp **SLB**
show ip dhcp binding **IAD**
show ip dhcp conflict **IAD**
show ip dhcp database **IAD**
show ip dhcp import **IAD**
show ip dhcp limit lease **IAD**
show ip dhcp pool **IAD**
show ip dhcp relay information trusted-sources **IAD**
show ip dhcp server statistics **IAD**
show ip dhcp snooping **IAD**
show ip dhcp snooping binding **IAD**
show ip dhcp snooping database **IAD**
show ip dhcp vrf **IAD**
show ip dns name-list **IAD**
show ip dns primary **IAD**
show ip dns statistics **IAD**
show ip dns view **IAD**
show ip dns view-list **IAD**
show ip dvmrp route **IMC**
show ip dvmrp route through show ip sdr **IMC**

■ show eap registrations through show mvr source ports

show ip eigrp accounting **EIGRP**
show ip eigrp events **EIGRP**
show ip eigrp interfaces **EIGRP**
show ip eigrp neighbors **EIGRP**
show ip eigrp topology **EIGRP, MTR**
show ip eigrp traffic **EIGRP**
show ip eigrp vrf accounting **EIGRP**
show ip eigrp vrf interfaces **EIGRP**
show ip eigrp vrf neighbors **EIGRP**
show ip eigrp vrf topology **EIGRP**
show ip eigrp vrf traffic **EIGRP**
show ip explicit-paths **MP**
show ip extcommunity-list **BGP**
show ip flow export **NF**
show ip flow top **NF**
show ip flow top-talkers **NF**
show ip helper-address **IAP**
show ip host-list **IAD**
show ip http client **HTTPS**
show ip http client connection **HTTPS**
show ip http client cookie **HTTPS, BBA**
show ip http client history **HTTPS**
show ip http client secure status **HTTPS**
show ip http client session-module **HTTPS**
show ip http help-path **HTTPS**
show ip http server **HTTPS**
show ip http server secure status **HTTPS**
show ip icmp rate-limit **IAP**
show ip igmp groups **IMC**
show ip igmp interface **IMC**
show ip igmp membership **IMC**
show ip igmp snooping **IMC**
show ip igmp snooping explicit-tracking **IMC**
show ip igmp snooping filter **IMC**
show ip igmp snooping mrouter **IMC**
show ip igmp snooping rate-limit **IMC**

show ip igmp snooping statistics **IMC**
show ip igmp ssm-mapping **IMC**
show ip igmp static-group class-map **IMC**
show ip igmp udllr **IMC**
show ip inspect **SEC**
show ip inspect ha **SEC**
show ip interface **IAD, SEC, IR**
show ip interface (MTR) **MTR**
show ip interface brief **CBL**
show ip interface unnumbered **IAD**
show ip interface virtual-access **DIA**
show ip ips **SEC**
show ip ips auto-update **SEC**
show ip ips category **SEC**
show ip ips event-action-rules **SEC**
show ip ips sig-clidelta **SEC**
show ip ips signature-category **SEC**
show ip irdp **IAD**
show ip iscsi name **MWG**
show ip iscsi session **MWG**
show ip iscsi stats **MWG**
show ip iscsi target **MWG**
show ip lisp **LISP**
show ip lisp database **LISP**
show ip lisp forwarding **LISP**
show ip lisp instance-id **LISP**
show ip lisp locator-table **LISP**
show ip lisp map-cache **LISP**
show ip lisp route-import **LISP**
show ip lisp statistics **LISP**
show ip local policy **IRI**
show ip local pool **DIA**
show ip masks **IAD**
show ip mcache **IMC**
show ip mds forwarding **ISW**
show ip mds forwarding through show monitor event-trace merged-list **ISW**

■ show eap registrations through show mvr source ports

show ip mds interface ISW
show ip mds stats ISW
show ip mds summary ISW
show ip mfib IMC
show ip mfib active IMC
show ip mfib count IMC
show ip mfib interface IMC
show ip mfib route IMC
show ip mfib status IMC
show ip mfib summary IMC
show ip mobile aaa requests host IMO
show ip mobile binding IMO, MWH
show ip mobile cdma ipsec MWP
show ip mobile cdma ipsec profile MWP
show ip mobile globals IMO, MWH
show ip mobile host IMO, MWH
show ip mobile interface IMO
show ip mobile mobile-networks IMO
show ip mobile proxy IMO, MWP
show ip mobile router IMO
show ip mobile router agent IMO
show ip mobile router interface IMO
show ip mobile router registration IMO
show ip mobile router traffic IMO
show ip mobile secure IMO, MWH, MWP
show ip mobile traffic IMO, MWH, MWP
show ip mobile tunnel IMO, MWH
show ip mobile violation IMO, MWH, MWP
show ip mobile visitor IMO, MWP
show ip mobile vpn-realm IMO
show ip mpacket IMC
show ip mr proxy IMC
show ip mrib client IMC
show ip mrib route IMC
show ip mrib route summary IMC
show ip mrm interface IMC

show ip mrm manager IMC
show ip mrm status-report IMC
show ip mroute IMC
show ip msdp count IMC
show ip msdp peer IMC
show ip msdp rpf-peer IMC
show ip msdp sa-cache IMC
show ip msdp summary IMC
show ip multicast IMC
show ip multicast interface IMC
show ip multicast mpls vif MP
show ip multicast redundancy state IMC
show ip multicast redundancy statistics IMC
show ip multicast rpf tracked IMC
show ip multicast topology IMC
show ip nat limits all-host IAD
show ip nat limits all-vrf IAD
show ip nat nvi statistics IAD
show ip nat nvi translations IAD
show ip nat redundancy IAD
show ip nat statistics IAD
show ip nat translations IAD
show ip nat translations redundancy IAD
show ip nat translations rsvp QOS
show ip nbar attribute QOS
show ip nbar link-age QOS
show ip nbar pdlm QOS
show ip nbar port-map QOS
show ip nbar protocol activated QOS
show ip nbar protocol-attribute QOS
show ip nbar protocol-discovery QOS
show ip nbar protocol-id QOS
show ip nbar protocol-pack QOS
show ip nbar resources flow QOS
show ip nbar statistics QOS
show ip nbar trace QOS

■ show eap registrations through show mvr source ports

show ip nbar unclassified-port-stats **QOS**
show ip nbar version **QOS**
show ip nhrp **IAD**
show ip nhrp group-map **IAD**
show ip nhrp multicast **IAD**
show ip nhrp nhs **IAD, SEC**
show ip nhrp summary **IAD**
show ip nhrp traffic **IAD**
show ip ospf **OSPF**
show ip ospf border-routers **OSPF**
show ip ospf database **OSPF**
show ip ospf database opaque-area **MP**
show ip ospf events **OSPF**
show ip ospf fast-reroute **OSPF**
show ip ospf flood-list **OSPF**
show ip ospf interface **OSPF, MTR**
show ip ospf max-metric **OSPF**
show ip ospf mpls ldp interface **MP**
show ip ospf mpls traffic-eng **MP**
show ip ospf multi-area **OSPF**
show ip ospf neighbor **OSPF**
show ip ospf nsf **OSPF, HA**
show ip ospf nsr **OSPF**
show ip ospf request-list **OSPF**
show ip ospf retransmission-list **OSPF**
show ip ospf rib **OSPF**
show ip ospf sham-links **OSPF**
show ip ospf statistics **OSPF**
show ip ospf summary-address **OSPF**
show ip ospf timers rate-limit **OSPF**
show ip ospf topology-info **MTR**
show ip ospf traffic **OSPF**
show ip ospf virtual-links **OSPF**
show ip pgm host defaults **IMC**
show ip pgm host sessions **IMC**
show ip pgm host traffic **IMC**

show ip pgm router IMC
show ip pim boundary IMC
show ip pim bsr-router IMC
show ip pim interface IMC
show ip pim mdt bgp IMC
show ip pim mdt history IMC
show ip pim mdt receive IMC
show ip pim mdt send IMC
show ip pim neighbor IMC
show ip pim rp IMC
show ip pim rp mapping IMC
show ip pim rp-hash IMC
show ip pim rp-hash (BSR) IMC
show ip pim snooping IMC
show ip pim tunnel IMC
show ip pim vc IMC
show ip policy IRI
show ip policy-list BGP
show ip port-map SEC
show ip portbundle ip ISG
show ip portbundle status ISG
show ip prefix-list BGP
show ip protocols IRI
show ip protocols topology MTR
show ip protocols vrf MP
show ip redirects IAP
show ip rip database RIP
show ip rip neighbors RIP
show ip route BGP, IRI, MP
show ip route dhcp IAD
show ip route loops IRI
show ip route multicast MTR
show ip route profile IRI
show ip route summary IRI
show ip route supernets-only IRI
show ip route tag EIGRP, IRI

■ show eap registrations through show mvr source ports

show ip route topology MTR
show ip route track-table IRI
show ip route vrf BGP, IRI, MP, MWH
show ip rpf IMC
show ip rpf events IMC
show ip rpf select IMC
show ip rsvp QOS
show ip rsvp aggregation ip QOS
show ip rsvp aggregation ip endpoints QOS
show ip rsvp atm-peak-rate-limit QOS
show ip rsvp authentication QOS
show ip rsvp counters QOS
show ip rsvp counters state teardown QOS
show ip rsvp fast bw-protect MP, QOS
show ip rsvp fast detail MP, QOS
show ip rsvp fast-reroute QOS
show ip rsvp fast-reroute bw-protect QOS
show ip rsvp fast-reroute detail QOS
show ip rsvp hello MP, QOS
show ip rsvp hello bfd nbr MP
show ip rsvp hello bfd nbr detail MP
show ip rsvp hello bfd nbr summary MP
show ip rsvp hello client lsp detail QOS
show ip rsvp hello client lsp summary QOS
show ip rsvp hello client lsp summary through show lane qos database QOS
show ip rsvp hello client nbr detail QOS
show ip rsvp hello client neighbor detail QOS
show ip rsvp hello client neighbor summary QOS
show ip rsvp hello graceful-restart QOS
show ip rsvp hello instance detail MP, QOS
show ip rsvp hello instance summary MP, QOS
show ip rsvp hello statistics MP, QOS
show ip rsvp high-availability counters QOS, HA
show ip rsvp high-availability database MP, QOS
show ip rsvp high-availability summary QOS
show ip rsvp host MP, QOS

show ip rsvp host vrf **QOS**
show ip rsvp ingress **QOS**
show ip rsvp installed **QOS**
show ip rsvp interface **QOS**
show ip rsvp interface detail **MP, QOS, HA**
show ip rsvp listeners **QOS**
show ip rsvp neighbor **QOS**
show ip rsvp p2mp counters **QOS**
show ip rsvp policy **QOS**
show ip rsvp policy cops **QOS**
show ip rsvp policy identity **QOS**
show ip rsvp policy local **QOS**
show ip rsvp policy vrf **QOS**
show ip rsvp precedence **QOS**
show ip rsvp request **QOS**
show ip rsvp reservation **QOS**
show ip rsvp sbm **QOS**
show ip rsvp sender **QOS**
show ip rsvp signalling **QOS**
show ip rsvp signalling blockade **QOS**
show ip rsvp signalling fast-local-repair **QOS**
show ip rsvp signalling rate-limit **QOS**
show ip rsvp signalling refresh **QOS**
show ip rsvp snooping **QOS**
show ip rsvp tos **QOS**
show ip rsvp transport **QOS**
show ip rsvp transport sender **QOS**
show ip rtp header-compression **QOS**
show ip rtp header-compression (mobile wireless) **MWR**
show ip sap **IMC**
show ip sctp association list **IAP**
show ip sctp association parameters **IAP**
show ip sctp association statistics **IAP**
show ip sctp errors **IAP**
show ip sctp instances **IAP**
show ip sctp statistics **IAP**

■ show eap registrations through show mvr source ports

show ip sdee SEC
show ip sdr IMC
show ip sla application SLA
show ip sla authentication SLA
show ip sla auto discovery SLA
show ip sla auto endpoint-list SLA
show ip sla auto group SLA
show ip sla auto schedule SLA
show ip sla auto summary-statistics SLA
show ip sla auto template SLA
show ip sla configuration SLA
show ip sla endpoint-list SLA
show ip sla enhanced-history collection-statistics SLA
show ip sla enhanced-history distribution-statistics SLA
show ip sla ethernet-monitor configuration SLA
show ip sla event-publisher SLA
show ip sla group schedule SLA
show ip sla history SLA
show ip sla history interval SLA
show ip sla monitor application SLA
show ip sla monitor authentication SLA
show ip sla monitor collection-statistics SLA
show ip sla monitor configuration SLA
show ip sla monitor distributions-statistics SLA
show ip sla monitor enhanced-history collection-statistics SLA
show ip sla monitor enhanced-history distribution-statistics SLA
show ip sla monitor group schedule SLA
show ip sla monitor history SLA
show ip sla monitor mpls-lsp-monitor collection-statistics SLA
show ip sla monitor mpls-lsp-monitor configuration SLA
show ip sla monitor mpls-lsp-monitor lpd operational-state SLA
show ip sla monitor mpls-lsp-monitor neighbors SLA
show ip sla monitor mpls-lsp-monitor scan-queue SLA
show ip sla monitor mpls-lsp-monitor summary SLA
show ip sla monitor reaction-configuration SLA
show ip sla monitor reaction-trigger SLA

show ip sla monitor responder **SLA**
show ip sla monitor statistics **SLA**
show ip sla monitor statistics aggregated **SLA**
show ip sla monitor totals-statistics **SLA**
show ip sla mpls-lsp-monitor collection-statistics **SLA**
show ip sla mpls-lsp-monitor configuration **SLA**
show ip sla mpls-lsp-monitor lpd operational-state **SLA**
show ip sla mpls-lsp-monitor neighbors **SLA**
show ip sla mpls-lsp-monitor scan-queue **SLA**
show ip sla mpls-lsp-monitor summary **SLA**
show ip sla profile video **SLA**
show ip sla reaction-configuration **SLA**
show ip sla reaction-trigger **SLA**
show ip sla responder **SLA**
show ip sla statistics **SLA**
show ip sla statistics aggregated **SLA**
show ip sla summary **SLA**
show ip sla twamp connection **SLA**
show ip sla twamp session **SLA**
show ip sla twamp standards **SLA**
show ip slb connslb
show ip slb dfp **SLB**
show ip slb firewallfarm **SLB**
show ip slb fragments **SLB**
show ip slb gtp **SLB**
show ip slb map **SLB**
show ip slb natpool **SLB**
show ip slb probe **SLB**
show ip slb reals **SLB**
show ip slb replicate **SLB**
show ip slb serverfarms **SLB**
show ip slb sessions **SLB**
show ip slb static **SLB**
show ip slb stats **SLB**
show ip slb sticky **SLB**
show ip slb vServers **SLB**

■ show eap registrations through show mvr source ports

show ip slb wildcard SLB
show ip snat IAD
show ip sockets IAP, IPV6
show ip sockets through show sockets IAP
show ip source binding IAD
show ip source-track SEC
show ip source-track export flows SEC
show ip ssh SEC
show ip static route IRI, MTR
show ip static route bfd IRI, MTR
show ip static route summary MTR
show ip subscriber ISG
show ip tcp header-compression IAP, QOS
show ip through show rtr SLA
show ip traffic IAP, ISW
show ip traffic (MTR) MTR
show ip traffic-engineering MP
show ip traffic-engineering configuration MP
show ip traffic-engineering routes MP
show ip traffic-engineering routes through show mpls memory MP
show ip traffic-export SEC
show ip trigger-authentication SEC
show ip trm config SEC
show ip trm subscription status SEC
show ip urlfilter SEC
show ip urlfilter cache SEC
show ip urlfilter config SEC
show ip verify source IAD
show ip virtual-reassembly SEC
show ip vrf MP, QOS
show ip wccp IAP
show ip wccp global counters IAP
show ip wccp web-caches IAP
show ipc IR
show ipc hog-info IR
show ipc sctp MWP

show ipdr collector [CBL](#)
show ipdr exporter [CBL](#)
show ipdr session [CBL](#)
show ipdr session collector [CBL](#)
show ipdr session template [CBL](#)
show iphc-profile [QOS](#)
show ipv6 access-list [IPV6](#), [SEC](#)
show ipv6 cef [IPV6](#)
show ipv6 cef adjacency [IPV6](#)
show ipv6 cef events [IPV6](#)
show ipv6 cef exact-route [IPV6](#)
show ipv6 cef neighbor discovery throttling [IPV6](#)
show ipv6 cef non-recursive [IPV6](#)
show ipv6 cef platform [IPV6](#)
show ipv6 cef summary [IPV6](#)
show ipv6 cef switching statistics [IPV6](#)
show ipv6 cef traffic prefix-length [IPV6](#)
show ipv6 cef tree [IPV6](#)
show ipv6 cef unresolved [IPV6](#)
show ipv6 cef vrf [IPV6](#), [MP](#)
show ipv6 cef with epoch [ISW](#), [IPV6](#)
show ipv6 cef with source [ISW](#), [IPV6](#)
show ipv6 cga address-db [IPV6](#), [SEC](#)
show ipv6 cga modifier-db [IPV6](#), [SEC](#)
show ipv6 destination-guard policy [IPV6](#)
show ipv6 dhcp [IAD](#), [IPV6](#)
show ipv6 dhcp binding [IAD](#), [IPV6](#)
show ipv6 dhcp conflict [IAD](#), [IPV6](#)
show ipv6 dhcp database [IAD](#), [IPV6](#)
show ipv6 dhcp guard policy [IAD](#), [IPV6](#)
show ipv6 dhcp interface [IAD](#), [IPV6](#)
show ipv6 dhcp pool [IAD](#), [IPV6](#)
show ipv6 dhcp relay binding [IAD](#), [IPV6](#)
show ipv6 dhcp route [IAD](#)
show ipv6 dhcp-ldra [IAD](#)
show ipv6 eigrp events [IPV6](#), [EIGRP](#)

■ show eap registrations through show mvr source ports

show ipv6 eigrp interfaces **IPV6, EIGRP**
show ipv6 eigrp neighbors **IPV6, EIGRP**
show ipv6 eigrp topology **IPV6, EIGRP**
show ipv6 eigrp traffic **IPV6, EIGRP**
show ipv6 flow cache aggregation **IPV6**
show ipv6 flow export **IPV6**
show ipv6 general-prefix **IPV6**
show ipv6 inspect **IPV6, SEC**
show ipv6 interface **IPV6**
show ipv6 lisp **LISP**
show ipv6 lisp database **LISP**
show ipv6 lisp forwarding **LISP**
show ipv6 lisp instance-id **LISP**
show ipv6 lisp locator-table **LISP**
show ipv6 lisp map-cache **LISP**
show ipv6 lisp route-import **LISP**
show ipv6 lisp statistics **LISP**
show ipv6 local pool **IPV6**
show ipv6 mfib **IPV6, IMC**
show ipv6 mfib active **IPV6, IMC**
show ipv6 mfib count **IPV6, IMC**
show ipv6 mfib global **IPV6, IMC**
show ipv6 mfib instance **IPV6, IMC**
show ipv6 mfib interface **IPV6, IMC**
show ipv6 mfib route **IPV6, IMC**
show ipv6 mfib status **IPV6, IMC**
show ipv6 mfib summary **IPV6, IMC**
show ipv6 mld groups **IPV6, IMC**
show ipv6 mld groups summary **IPV6, IMC**
show ipv6 mld host-proxy **IPV6, IMC**
show ipv6 mld interface **IPV6, IMC**
show ipv6 mld snooping **IPV6, IMC**
show ipv6 mld ssm-map **IPV6, IMC**
show ipv6 mld traffic **IPV6, IMC**
show ipv6 mobile binding **IPV6**
show ipv6 mobile globals **IPV6**

show ipv6 mobile home-agents IPV6
show ipv6 mobile host groups IPV6
show ipv6 mobile pmipv6 lma binding IMO
show ipv6 mobile pmipv6 lma globals IMO
show ipv6 mobile pmipv6 lma stats IMO
show ipv6 mobile pmipv6 lma tunnel IMO
show ipv6 mobile pmipv6 mag binding IMO
show ipv6 mobile pmipv6 mag globals IMO
show ipv6 mobile pmipv6 mag stats IMO
show ipv6 mobile router IPV6
show ipv6 mobile traffic IPV6
show ipv6 mobile tunnels IPV6
show ipv6 mrrib client IPV6, IMC
show ipv6 mrrib route IPV6, IMC
show ipv6 mroute IPV6, IMC
show ipv6 mroute active IPV6, IMC
show ipv6 mtu IPV6
show ipv6 nat statistics IAD, IPV6
show ipv6 nat translations IAD, IPV6
show ipv6 nd destination IPV6
show ipv6 nd on-link prefix IPV6
show ipv6 nd ra session ISG
show ipv6 nd raguard counters IPV6, SEC
show ipv6 nd raguard policy IPV6, SEC
show ipv6 nd secured certificates IPV6, SEC
show ipv6 nd secured counters interface IPV6, SEC
show ipv6 nd secured nonce-db IPV6, SEC
show ipv6 nd secured solicit-db IPV6, SEC
show ipv6 nd secured timestamp-db IPV6, SEC
show ipv6 neighbor binding IPV6
show ipv6 neighbors IPV6
show ipv6 nhrp IPV6
show ipv6 nhrp multicast IPV6
show ipv6 nhrp nhs IPV6
show ipv6 nhrp summary IPV6
show ipv6 nhrp traffic IPV6

■ show eap registrations through show mvr source ports

show ipv6 ospf IPV6, OSPF, IMO
show ipv6 ospf border-routers IPV6
show ipv6 ospf database IPV6
show ipv6 ospf event IPV6
show ipv6 ospf flood-list IPV6
show ipv6 ospf graceful-restart IPV6
show ipv6 ospf interface IPV6, IR, IMO
show ipv6 ospf neighbor IPV6
show ipv6 ospf request-list IPV6
show ipv6 ospf retransmission-list IPV6
show ipv6 ospf statistics IPV6
show ipv6 ospf summary-prefix IPV6
show ipv6 ospf timers rate-limit IPV6
show ipv6 ospf traffic IPV6, OSPF
show ipv6 ospf virtual-links IPV6
show ipv6 pim bsr IPV6, IMC
show ipv6 pim df IPV6, IMC
show ipv6 pim df winner IPV6, IMC
show ipv6 pim group-map IPV6, IMC
show ipv6 pim interface IPV6, IMC
show ipv6 pim join-prune statistic IPV6, IMC
show ipv6 pim limit IPV6, IMC
show ipv6 pim neighbor IPV6, IMC
show ipv6 pim range-list IPV6, IMC
show ipv6 pim topology IPV6, IMC
show ipv6 pim traffic IPV6, IMC
show ipv6 pim tunnel IPV6, IMC
show ipv6 policy IPV6, IRI
show ipv6 port-map IPV6, SEC
show ipv6 prefix-list IPV6, SEC
show ipv6 protocols IPV6
show ipv6 rip IPV6
show ipv6 route IPV6, IRI
show ipv6 route shortcut IPV6, IRI
show ipv6 route summary IPV6, IRI
show ipv6 route tag EIGRP, IRI

show ipv6 route vrf IPV6, IRI, MP
show ipv6 routers IPV6
show ipv6 rpf IPV6, IMC
show ipv6 snooping capture-policy IPV6, SEC
show ipv6 snooping counters IPV6, SEC
show ipv6 snooping features IPV6, SEC
show ipv6 snooping policies IPV6, SEC
show ipv6 source-guard policy IPV6
show ipv6 spd IPV6, SEC
show ipv6 static IPV6
show ipv6 through udp-port IMC
show ipv6 traffic IPV6
show ipv6 tunnel IPV6
show ipv6 virtual-reassembly IPV6, SEC
show ipv6 virtual-reassembly features IPV6, SEC
show ipv6 wccp IPV6
show ipv6 wccp global counters IPV6
show ipx access-list IPX
show ipx accounting IPX
show ipx cache IPX
show ipx compression DIA
show ipx eigrp interfaces IPX
show ipx eigrp neighbors IPX
show ipx eigrp topology IPX
show ipx eigrp traffic IPX
show ipx interface IPX
show ipx nasi connections IPX
show ipx nhrp IPX
show ipx nhrp traffic IPX
show ipx nlsp database IPX
show ipx nlsp neighbors IPX
show ipx nlsp spf-log IPX
show ipx route IPX
show ipx servers IPX
show ipx spx-protocol DIA
show ipx spx-spoof IPX

■ show eap registrations through show mvr source ports

show ipx traffic IPX
show isdn DIA
show isdn nfas group DIA
show isis database IRS, IPV6
show isis database verbose IRS, MP
show isis fast-reroute IRS, IRI
show isis hostname IRS
show isis ip rib IRS
show isis ipv6 rib IPV6
show isis lsp-log IRS
show isis mpls ldp MP
show isis mpls traffic-eng adjacency-log MP
show isis mpls traffic-eng advertisements MP
show isis mpls traffic-eng downstream-tree MP
show isis mpls traffic-eng tunnel MP
show isis neighbors IRS, MTR
show isis nsf IRS, HA
show isis rib IRS
show isis rib redistribution IRS
show isis route ISO
show isis spf-log IRS, IPV6
show isis topology IRS, IPV6
show issu HA
show issu clients MP, HA
show issu comp-matrix HA
show issu entities MP, HA
show issu message types MP, HA
show issu negotiated MP, HA
show issu outage HA
show issu patch HA
show issu platform img-dnld HA
show issu rollback timer HA
show issu sessions MP, HA
show issu state HA
show iua as VR
show iua asp VR

show kerberos creds SEC
show key chain IRI, IPV6
show keymap TSV
show kron schedule CNS
show l2cac WAN
show l2fib WAN
show l2protocol-tunnel IR
show l2tp class VPD
show l2tp counters VPD
show l2tp memory VPD
show l2tp redundancy VPD
show l2tp session VPD, IPV6
show l2tp tunnel VPD, IPV6
show l2tun WAN
show l2tun counters tunnel l2tp WAN
show l2tun session WAN, IPV6
show l2tun tunnel WAN
show l2vpn atom binding MP
show l2vpn atom checkpoint MP
show l2vpn atom hw-capability MP
show l2vpn atom memory MP
show l2vpn atom pwid MP
show l2vpn atom static-oam MP
show l2vpn atom summary MP
show l2vpn atom vc MP
show l2vpn pwmib MP
show l2vpn rib MP
show l2vpn service MP
show l2vpn signaling rib MP
show l2vpn vfi MP
show l3-mgr IR
show l3vpn encapsulation ip IR
show l4f WAN
show lacp IR, CE
show lane ATM
show lane bus ATM

■ show eap registrations through show mvr source ports

show lane bus through vc-class atm [ATM](#)
show lane client [ATM](#)
show lane config [ATM](#)
show lane database [ATM](#)
show lane default-atm-addresses [ATM](#)
show lane le-arp [ATM](#)
show lane neighbor [ATM](#)
show lane qos database [QOS](#)
show lane server [ATM](#)
show lat advertised [TSV](#)
show lat groups [TSV](#)
show lat nodes [TSV](#)
show lat services [TSV](#)
show lat sessions [TSV](#)
show lat traffic [TSV](#)
show ldap attributes [SEC](#)
show ldap server [SEC](#)
show license [CSA](#)
show license call-home [CSA](#)
show license right-to-use [CSA](#)
show license statistics [CSA](#)
show license through snmp-server host [CSA](#)
show line [TSV](#)
show line async-queue [DIA](#)
show line autodetect [TSV](#)
show line x121-address [WAN](#)
show link state group [IR](#)
show lisp [LISP](#)
show lisp ddt [LISP](#)
show lisp locator-table [LISP](#)
show lisp site [LISP](#)
show llc2 [IBM](#)
show lldp [CE](#)
show lnm bridge [BR, IBM](#)
show lnm config [BR, IBM](#)
show lnm interface [BR, IBM](#)

show lnm ring BR, IBM
show lnm station BR, IBM
show local-ack IBM
show location CF
show logging CF
show logging count CF
show logging history CF
show logging ip access-list IAD, SEC
show logging persistent ESM
show logging system CF
show logging xml CF
show login SEC
show mab SEC
show mac access-group interface SEC
show mac-address-table SEC, LSW
show mac-address-table aging-time LSW
show mac-address-table dynamic IR, LSW
show mac-address-table learning LSW
show mac-address-table static LSW
show mace metrics WAN
show management event SNMP
show management expression SNMP
show management-interface SEC
show mcsa statistics IMO
show mdm EMM
show mdns cache IAD, WAN
show mdns requests IAD, WAN
show mdns statistics IAD, WAN
show mdr download image HA
show media resource status VR
show mediocard VR
show mediatrace flow-specifier MM
show mediatrace initiator MM
show mediatrace path-specifier MM
show mediatrace profile perf-monitor MM
show mediatrace profile system MM

■ show eap registrations through show mvr source ports

show mediatrace responder app-health **MM**
show mediatrace responder sessions **MM**
show mediatrace session **MM**
show mediatrace session-params **MM**
show memory **CF**
show memory allocating-process **CF**
show memory dead **CF**
show memory debug incremental **DB, CF**
show memory debug leaks **DB, CF**
show memory debug references **DB, CF**
show memory debug unused **DB, CF**
show memory detailed **CF**
show memory ecc **CF**
show memory events **CF**
show memory failures alloc **CF**
show memory fast **CF**
show memory fragment **CF**
show memory lite-chunks **CF**
show memory multibus **CF**
show memory pci **CF**
show memory processor **CF**
show memory scan **CF**
show memory statistics history **CF**
show memory traceback **CF**
show memory transient **CF**
show metadata **MD**
show metadata application table **QOS, MD**
show metadata flow **QOS, MD**
show mgcp **VR**
show mgcp connection **VR**
show mgcp endpoint **VR**
show mgcp nas **VR**
show mgcp profile **VR**
show mgcp srtp **VR**
show mgcp statistics **VR**
show microcode **CF**

show mlrib common log [WAN](#)
show mlrib layer2 log [WAN](#)
show mls acl inconsistency [SEC](#)
show mls asic [IR](#)
show mls cef [ISW](#)
show mls cef adjacency [ISW](#)
show mls cef exact-route [ISW](#)
show mls cef exception [ISW](#)
show mls cef hardware [ISW](#)
show mls cef inconsistency [ISW](#)
show mls cef ip [ISW](#)
show mls cef ip multicast [ISW](#)
show mls cef ipv6 [ISW, IPV6](#)
show mls cef ipx [ISW](#)
show mls cef logging [ISW](#)
show mls cef lookup [ISW](#)
show mls cef mac [ISW](#)
show mls cef maximum-routes [ISW](#)
show mls cef mpls [ISW](#)
show mls cef mpls exact-route [MP](#)
show mls cef rpf [ISW](#)
show mls cef statistics [ISW](#)
show mls cef summary [ISW](#)
show mls cef vrf [ISW](#)
show mls df-table [LSW](#)
show mls ip [IR](#)
show mls ip cef rpf-table [ISW](#)
show mls ip multicast [IMC](#)
show mls ip multicast bidir [IMC](#)
show mls ip multicast rp-mapping [IMC](#)
show mls ip multicast sso [IMC](#)
show mls ip non-static [ISW, NF](#)
show mls ip routes [ISW, NF](#)
show mls ip static [ISW, NF](#)
show mls ip statistics [ISW](#)
show mls ipx [IR](#)

■ show eap registrations through show mvr source ports

show mls masks **LSW**
show mls nde **NF**
show mls netflow **NF**
show mls netflow ip **NF**
show mls netflow ip dynamic **NF**
show mls netflow ip routes **NF**
show mls netflow ip sw-installed **NF**
show mls netflow ipv6 **NF, IPV6**
show mls netflow ipx **NF**
show mls qos **QOS**
show mls qos aggregate policer **QOS**
show mls qos free-agram **QOS**
show mls qos interface **QOS**
show mls qos maps **QOS**
show mls qos mpls **QOS**
show mls qos protocol **QOS**
show mls qos queuing interface **QOS**
show mls qos statistics-export info **QOS**
show mls qos through wrr-queue threshold **QOS**
show mls rate-limit **SEC**
show mls rp **LSW**
show mls rp interface **LSW**
show mls rp ip multicast **LSW**
show mls rp ipx **LSW**
show mls rp vtp-domain **LSW**
show mls sampling **NF**
show mls statistics **CF**
show mls table-contention **ISW**
show mmpls igmp explicit-tracking **LSW**
show mmpls msc **LSW**
show mobility **IR**
show modem **DIA**
show modem at-mode **DIA**
show modem bundled-firmware **DIA**
show modem call-stats **DIA**
show modem calltracker **DIA**

show modem configuration **DIA**
show modem configuration (pvdm2) **DIA**
show modem connect-speeds **DIA**
show modem cookie **DIA**
show modem csm **DIA**
show modem log **DIA**
show modem log (pvdm2) **DIA**
show modem mapping **DIA**
show modem mica **DIA**
show modem operational-status **DIA**
show modem operational-status (pvdm2) **DIA**
show modem relay statistics **VR**
show modem summary **DIA**
show modem test **DIA**
show modem version **DIA**
show modem version (pvdm2) **DIA**
show modem-pool **DIA**
show modemcap **DIA**
show module **CF, IR**
show monitor capture **EPC**
show monitor event-trace **ISW, IRI, CF**
show monitor event-trace adjacency **ISW**
show monitor event-trace cef **ISW**
show monitor event-trace cef events **ISW**
show monitor event-trace cef interface **ISW**
show monitor event-trace cef ipv4 **ISW**
show monitor event-trace cef ipv6 **ISW, IPV6**
show monitor event-trace continuous **ISW**
show monitor event-trace cpu-report **ISW**
show monitor event-trace dmvpn **SEC**
show monitor event-trace gdoi **SEC, CF**
show monitor event-trace hw-api **ISW**
show monitor event-trace merged-list **ISW**
show monitor event-trace sbc **HA**
show monitor event-trace sbc ha **SBCD**
show monitor event-trace vpn-mapper **IPV6**

■ show eap registrations through show mvr source ports

show monitor permit list through show process memory **CF**
show monitor permit-list **CF**
show monitor session **CF**
show mpf cpu **BBA**
show mpf interface **BBA**
show mpf ip exact-route **BBA**
show mpf punt **BBA**
show mpls atm-ldp bindings **MP**
show mpls atm-ldp bindwait **MP**
show mpls atm-ldp capability **MP**
show mpls atm-ldp summary **MP**
show mpls cos-map **MP**
show mpls discovery vpn **SLA**
show mpls flow mappings **MP**
show mpls forwarding vrf **MP**
show mpls forwarding-table **MP, IPV6**
show mpls forwarding-table exact-route **MP**
show mpls infra lfd block-database **MP**
show mpls interfaces **MP**
show mpls ip binding **MP**
show mpls ip iprm counters **MP, HA**
show mpls ip iprm ldm **MP, HA**
show mpls ip iprm statistics **MP**
show mpls l2 vc detail **MP**
show mpls l2transport binding **MP**
show mpls l2transport checkpoint **MP, WAN**
show mpls l2transport hw-capability **MP**
show mpls l2transport static-oam **MP**
show mpls l2transport summary **MP**
show mpls l2transport vc **MP**
show mpls label range **MP**
show mpls ldp backoff **MP**
show mpls ldp bindings **MP**
show mpls ldp capabilities **MP**
show mpls ldp checkpoint **MP**
show mpls ldp discovery **MP**

show mpls ldp graceful-restart MP
show mpls ldp igr sync MP
show mpls ldp neighbor MP
show mpls ldp neighbor password MP
show mpls ldp nsr MP
show mpls ldp parameters MP
show mpls memory MP
show mpls mldp bindings IMC
show mpls mldp count IMC
show mpls mldp database IMC
show mpls mldp filter IMC
show mpls mldp ha count IMC
show mpls mldp ha database IMC
show mpls mldp ha neighbors IMC
show mpls mldp ha root IMC
show mpls mldp interface IMC
show mpls mldp label release IMC
show mpls mldp neighbors IMC
show mpls mldp root IMC
show mpls oam echo statistics MP
show mpls oam echo statistics through switching tlv MP
show mpls platform MP
show mpls prefix-map MP
show mpls static binding MP
show mpls static crossconnect MP
show mpls tp link-management admission-control failures MP
show mpls traffic tunnel backup MP
show mpls traffic-eng auto-tunnel backup MP
show mpls traffic-eng auto-tunnel mesh MP
show mpls traffic-eng auto-tunnel primary MP
show mpls traffic-eng autoroute MP
show mpls traffic-eng destination list MP
show mpls traffic-eng exp MP
show mpls traffic-eng fast-reroute database MP
show mpls traffic-eng fast-reroute log reroutes MP
show mpls traffic-eng forwarding path-set MP

show eap registrations through show mvr source ports

show mpls traffic-eng forwarding statistics **MP**
show mpls traffic-eng forwarding-adjacency **MP**
show mpls traffic-eng link-management admission-control **MP**
show mpls traffic-eng link-management advertisements **MP**
show mpls traffic-eng link-management bandwidth-allocation **MP**
show mpls traffic-eng link-management igp-neighbors **MP**
show mpls traffic-eng link-management interfaces **MP**
show mpls traffic-eng link-management summary **MP**
show mpls traffic-eng lsp attributes **MP**
show mpls traffic-eng nsr **MP**
show mpls traffic-eng process-restart iprouting **MP**
show mpls traffic-eng topology **MP**
show mpls traffic-eng topology path **MP**
show mpls traffic-eng tunnels **MP**
show mpls traffic-eng tunnels statistics **MP**
show mpls traffic-eng tunnels summary **MP**
show mpls ttfib **MP**
show mpoa client **ATM**
show mpoa client cache **ATM**
show mpoa client statistics **ATM**
show mpoa default-atm-addresses **ATM**
show mpoa server **ATM**
show mpoa server cache **ATM**
show mpoa server statistics **ATM**
show mrcp client session active **VR**
show mrcp client session active through show sip dhcp **VR**
show mrcp client session history **VR**
show mrcp client statistics hostname **VR**
show msfc **CF, IR**
show mtm table **MTR**
show mux **IMO**
show mux cache **IMO**
show mux interface **IMO**
show mux profile **IMO**
show mvr **LSW**
show mvr groups **LSW**

show mvr interface LSW
show mvr members LSW
show mvr receiver ports LSW
show mvr source ports LSW

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■ show eap registrations through show mvr source ports

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show mvrp interface through snmp-server enable traps ospf rate-limit

- Finding IOS Command Information, page 469
- show mvrp interface through snmp-server enable traps ospf rate-limit, page 472

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 14: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference

CF	Cisco IOS Configuration Fundamentals Command Reference
CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

show mvrp interface through snmp-server enable traps ospf rate-limit

S

- show mvrp interface LSW
- show mvrp module LSW
- show mvrp summary LSW
- show mwi relay clients VR
- show nat64 IAD
- show nat64 adjacency IAD
- show nat64 aliases IAD
- show nat64 ha status IAD
- show nat64 limits IAD
- show nat64 map-t IAD
- show nat64 mappings dynamic IAD
- show nat64 pools IAD
- show nat64 prefix stateless IAD
- show nat64 prefix stateful IAD
- show nat64 prefix stateless IAD
- show nat64 routes IAD
- show nat64 services IAD
- show nat64 statistics IAD
- show nat64 timeouts IAD
- show nat64 translations IAD
- show nat64 translations entry-type IAD
- show nat64 translations redundancy IAD
- show nat64 translations time IAD
- show nat64 translations total IAD
- show nat64 translations v4 IAD
- show nat64 translations v6 IAD
- show nat64 translations verbose IAD
- show nbfcache DIA
- show nbfsessions DIA
- show ncia circuits IBM
- show ncia client IBM

show ncia server IBM
show netbios-cache BR, IBM
show netconf CNS
show network-clocks ATM, IR
show nextport VR
show nextport vpd VR
show nhrp debug-condition IAD
show nhrp group-map IAD
show nls CBL
show nls ag-id CBL
show nls flow CBL
show nmfp CE
show node TSV
show ntp associations BSM, IPV6
show ntp info BSM
show ntp packets BSM
show ntp status BSM, IPV6
show num-exp VR
show object-group SEC
show odm-format XMLPI
show oer api client OER
show oer api provider OER
show oer border OER
show oer border active-probes OER
show oer border defined application OER
show oer border passive applications OER
show oer border passive cache OER
show oer border passive learn OER
show oer border passive prefixes OER
show oer border routes OER
show oer master OER
show oer master active-probes OER
show oer master appl OER
show oer master border OER
show oer master cost-minimization OER
show oer master defined application OER

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

show oer master learn list **OER**
show oer master link-group **OER**
show oer master nbar application **OER**
show oer master policy **OER**
show oer master prefix **OER**
show oer master traffic-class **OER**
show oer master traffic-class application nbar **OER**
show oer proxy **OER**
show ospfv3 border-routers **IPV6**
show ospfv3 database **IPV6**
show ospfv3 events **IPV6**
show ospfv3 flood-list **IPV6**
show ospfv3 graceful-restart **IPV6**
show ospfv3 interface **IPV6**
show ospfv3 max-metric **IPV6**
show ospfv3 neighbor **IPV6**
show ospfv3 request-list **IPV6**
show ospfv3 retransmission-list **IPV6**
show ospfv3 sham-links **OSPF**
show ospfv3 statistic **IPV6**
show ospfv3 summary-prefix **IPV6**
show ospfv3 timers rate-limit **IPV6**
show ospfv3 traffic **IPV6**
show ospfv3 virtual-links **IPV6**
show otv **WAN**
show otv adjacency **WAN**
show otv adjacency-server replication-list **WAN**
show otv arp-nd-cache **WAN**
show otv data-group **WAN**
show otv isis database **WAN**
show otv isis hostname **WAN**
show otv isis lsp-log **WAN**
show otv isis neighbors **WAN**
show otv isis nsf **WAN**
show otv isis protocol **WAN**
show otv isis rib **WAN**

show otv isis spf-log WAN
show otv isis vlan-database WAN
show otv log WAN
show otv mroute WAN
show otv route WAN
show otv site WAN
show otv statistics WAN
show otv summary WAN
show otv vlan WAN
show packetcable cms CBL
show packetcable event CBL
show packetcable gate CBL
show packetcable gate counter commit CBL
show packetcable gate ipv6 CBL
show packetcable gate multimedia CBL
show packetcable global CBL
show pagp CF, IR
show parameter-map type inspect SEC
show parameter-map type consent SEC
show parameter-map type consent through show users SEC
show parameter-map type inspect SEC
show parameter-map type inspect-global SEC
show parameter-map type inspect-vrf SEC
show parameter-map type inspect-zone SEC
show parameter-map type ooo global SEC
show parameter-map type protocol-info SEC
show parameter-map type regex SEC
show parameter-map type trend-global SEC
show parameter-map type urlf-glob SEC
show parameter-map type urlfilter SEC
show parameter-map type urlfpolicy SEC
show parameter-map type waas WAN
show parser dump CF
show parser macro CF
show parser statistics CF
show parser view SEC

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

show pas caim **IR**
show pas eswitch address **IR**
show pas i82543 interface **IR**
show pas isa controller **IR**
show pas isa interface **IR**
show pas vam controller **IR**
show pas vam interface **IR**
show pas y88e8k interface **IR**
show pci **CF**
show pci aim **IR**
show pci hardware **CF**
show perf-meas **CF**
show performance monitor aggregated **MM**
show performance monitor cache **MM**
show performance monitor clients **MM**
show performance monitor clock rate **MM**
show performance monitor history **MM**
show performance monitor status **MM**
show pfr api provider **PFR**
show pfr border **PFR**
show pfr border active-probes **PFR**
show pfr border defined application **PFR**
show pfr border passive applications **PFR**
show pfr border passive cache learned **PFR**
show pfr border passive learn **PFR**
show pfr border passive prefixes **PFR**
show pfr border routes **PFR**
show pfr border rsvp **PFR**
show pfr master **PFR**
show pfr master active-probes **PFR**
show pfr master appl **PFR**
show pfr master bandwidth-resolution **PFR**
show pfr master border **PFR**
show pfr master cost-minimization **PFR**
show pfr master defined application **PFR**
show pfr master exits **PFR**

show pfr master export statistics **PFR**
show pfr master learn list **PFR**
show pfr master link-group **PFR**
show pfr master nbar application **PFR**
show pfr master policy **PFR**
show pfr master prefix **PFR**
show pfr master statistics **PFR**
show pfr master target-discovery **PFR**
show pfr master traffic-class **PFR**
show pfr master traffic-class application nbar **PFR**
show pfr master traffic-class performance **PFR**
show pfr proxy **PFR**
show piafs status **VR**
show plat hardware qfp active feature ess state pppoe **DIA**
show platform **CF, IR**
show platform hardware qfp active feature ipsec **SEC**
show platform hardware qfp feature alg statistics sip **IAD, SEC**
show platform hardware qfp feature firewall **SEC**
show platform hardware qfp feature firewall datapath scb **SEC**
show platform software firewall **SEC**
show platform 6rd tunnel-endpt **IPV6**
show platform acl software-switched **IR**
show platform atom disp-tbl backup **IR**
show platform atom disp-tbl local-vc-label **IR**
show platform atom imp-tbl backup **IR**
show platform atom imp-tbl remote-vc-label **IR**
show platform atom tbl-summary **IR**
show platform bridge **CF**
show platform cfm **CF**
show platform diag **CF, IR**
show platform discover-devices **IR**
show platform dwdm alarm history **IR**
show platform flow **FNF**
show platform hardware acl entry global-qos **QOS**
show platform hardware acl entry interface **MM**
show platform hardware capacity **CF, IR**

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

show platform hardware capacity rewrite-engine **IR**
show platform hardware interface **IR**
show platform hardware network-clocks **IR**
show platform hardware pp active infrastructure pi npd rx policer **QOS**
show platform hardware qfp feature alg **SEC**
show platform hardware qfp act feature ipsec datapath memory **SEC**
show platform hardware qfp active feature cef-mpls prefix ip **IRI, IR**
show platform hardware qfp active feature cef-mpls prefix ipv6 **IRI**
show platform hardware qfp active feature cef-mpls prefix mpls **IRI, IR**
show platform hardware qfp active feature cef-mpls urpf **IR**
show platform hardware qfp active feature multicast **IR**
show platform hardware qfp active feature pbr **PFR**
show platform hardware qfp active feature qos config global **QOS**
show platform hardware qfp active feature sbc sfx **SBCD**
show platform hardware qfp active feature wccp **IAP**
show platform hardware qfp active interface if-name statistics **IR**
show platform hardware qfp feature **IAD, SEC**
show platform hardware qfp feature otv client interface **WAN**
show platform hardware qfp feature td **SEC**
show platform hardware qfp interface **IR**
show platform hardware qfp statistics drop **IR**
show platform hardware slot **IR**
show platform hardware subslot **IR**
show platform hardware subslot (4400) **IR**
show platform hardware throughput level **IR**
show platform hardware transceiver **IR**
show platform isg **CF**
show platform isg memory **IR**
show platform isg session **ISG**
show platform isg session-count **ISG**
show platform lowq **QOS**
show platform mgf **IR**
show platform oam **CF**
show platform process slot **CF, IR**
show platform qos policy-map **QOS**
show platform redundancy **CF**

show platform redundancy bias **HA**
show platform slot r0 pcie status **IR**
show platform software ccm **MM**
show platform software configuration access policy **TSV**
show platform software ethernet f0 efp **MP**
show platform software ethernet f1 efp **MP**
show platform software feature-manager performance-monitor **MM**
show platform software feature-manager tcam **MM**
show platform software filesystem **CF**
show platform software frame-relay **WAN**
show platform software infrastructure lsmpi **WL**
show platform software infrastructure punt statistics **QOS**
show platform software infrastructure punt-keepalive **IR**
show platform software interface summary **IR**
show platform software ipsec f0 encryption-processor registers **SEC**
show platform software ipsec fp active flow **SEC**
show platform software ipsec fp active spd-map **SEC**
show platform software ipsec policy statistics **SEC**
show platform software ipv6-multicast **IPV6**
show platform software l2fib fp **WAN**
show platform software l2fib rp **WAN**
show platform software memory **CF, IR**
show platform software mfr **WAN**
show platform software mount **CF, IR**
show platform software mpls **MP**
show platform software multicast ip bidir **IMC**
show platform software multicast ip capability **IMC**
show platform software multicast ip complete **IMC**
show platform software multicast ip connected **IMC**
show platform software multicast ip interface **IMC**
show platform software multicast ip partial **IMC**
show platform software multicast ip source **IMC**
show platform software multicast ip statistics **IMC**
show platform software multicast ip summary **IMC**
show platform software multicast ip vrf **IMC**
show platform software otv fp **WAN**

■ show mvrp interface through snmp-server enable traps ospf rate-limit

show platform software pbr **PFR**
show platform software process list **CF, IR**
show platform software process memory **IR**
show platform software route-map **PFR**
show platform software snapshot status **CF**
show platform software status control-processor **IR, LSW**
show platform software tech-support **CF, IR**
show platform software trace message **IAD**
show platform software urpf qfp active configuration **SEC**
show platform software vnic-if interface-mapping **IR**
show platform software vpn **IPV6, MP**
show platform software wccp **IAP**
show platform subscriber-group **CF**
show platform supervisor **CF**
show platform time-source **IR**
show plim fpga **IR**
show policy-firewall config **SEC**
show policy-firewall mib **SEC**
show policy-firewall session **SEC**
show policy-firewall stats **SEC**
show policy-firewall stats vrf **SEC**
show policy-firewall stats vrf global **SEC**
show policy-firewall stats zone **SEC**
show policy-firewall summary-log **SEC**
show policy-manager events **QOS**
show policy-manager policy **QOS**
show policy-map **QOS**
show policy-map apn **MWG**
show policy-map class **QOS**
show policy-map control-plane **QOS**
show policy-map interface **MP, QOS, IR**
show policy-map interface brief **QOS**
show policy-map interface service group **QOS**
show policy-map interface service instance **QOS**
show policy-map mgre **QOS**
show policy-map multipoint **QOS**

show policy-map session **QOS**
show policy-map target service-group **QOS**
show policy-map type access-control **QOS**
show policy-map type class-routing ipv4 unicast **MTR**
show policy-map type control **ISG**
show policy-map type inspect **SEC**
show policy-map type inspect urlfilter **SEC**
show policy-map type inspect zone-pair **SEC**
show policy-map type inspect zone-pair urlfilter **SEC**
show policy-map type mace **WAN**
show policy-map type nat **QOS**
show policy-map type performance-monitor **MM**
show policy-map type port-filter **QOS**
show policy-map type service **ISG**
show policy-map type waas **WAN**
show port config **DIA**
show port digital log **DIA**
show port flowcontrol **LSW**
show port log **DIA**
show port modem calltracker **DIA**
show port modem log **DIA**
show port modem test **DIA**
show port operational-status **DIA**
show port-security **SEC**
show pots csm **VR**
show pots status **VR**
show pots volume **VR**
show power **CF, IR**
show power inline **IR**
show ppp atm trace **BBA**
show ppp bap **DIA**
show ppp interface **BBA**
show ppp mppe **VPD**
show ppp multilink **DIA**
show ppp mux **MWR**
show ppp queues **SEC**

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

show ppp subscriber statistics **BBA**
show pppatm redundancy **BBA**
show pppatm session **BBA**
show pppatm statistics **BBA**
show pppatm summary **BBA**
show pppoe debug conditions **BBA**
show pppoe derived **BBA**
show pppoe redundancy **BBA**
show pppoe relay context all **BBA**
show pppoe session **SEC, BBA**
show pppoe statistics **BBA**
show pppoe summary **BBA**
show pppoe throttled mac **BBA**
show presence global **VR**
show presence subscription **VR**
show private-hosts access-lists **SEC**
show private-hosts configuration **SEC**
show private-hosts interface configuration **SEC**
show private-hosts mac-list **SEC**
show privilege **SEC**
show processes **CF**
show processes cpu **CF**
show processes cpu monitor **ISG**
show processes detailed **CF**
show processes interrupt mask buffer **CF**
show processes interrupt mask detail **CF**
show processes memory **CF**
show profile device **MSP**
show profile flow **MSP**
show protocol phdf **QOS**
show protocols **CF**
show protocols through showmon **CF**
show proxy h323 calls **VR**
show proxy h323 detail-call **VR**
show proxy h323 status **VR**
show ptp clock dataset **IR, CE**

show ptp clock dataset parent IR, CE
show ptp clock dataset time-properties IR, CE
show ptp clock running IR, CE
show ptp port dataset foreign-master IR, CE
show ptp port dataset port IR, CE
show pw-udp vc MP
show pxf accounting ISW
show pxf accounting through test cef table consistency ISW
show pxf cable CBL
show pxf cable controller CBL
show pxf cable feature CBL
show pxf cable interface CBL
show pxf cable multicast CBL
show pxf cpu CBL
show pxf cpu access-lists ISW, IR
show pxf cpu atom ISW
show pxf cpu bba ISW
show pxf cpu buffers ISW
show pxf cpu cef ISW
show pxf cpu context ISW
show pxf cpu drl-trusted-sites CBL
show pxf cpu feedback ISW
show pxf cpu iedge ISW, IR, ISG
show pxf cpu ipv6 ISW
show pxf cpu isg ISG
show pxf cpu mpls ISW
show pxf cpu mroute ISW
show pxf cpu pbr action ISW
show pxf cpu police ISW
show pxf cpu policy-data ISW
show pxf cpu qos ISW, IR
show pxf cpu queue ISW, CBL
show pxf cpu queue wb-spa CBL
show pxf cpu reasm_index ISW
show pxf cpu statistics ISW, BR, CBL
show pxf cpu statistics drl ipv4 CBL

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

show pxf cpu statistics drl ipv6 **CBL**
show pxf cpu statistics drl us-cable **CBL**
show pxf cpu subblock **BR**
show pxf cpu subblocks **ISW**
show pxf cpu tbridge **BR**
show pxf cpu vcci **ISW**
show pxf crash **ISW**
show pxf dma **ISW, IR, CBL**
show pxf feature cef **ISW**
show pxf feature cef vrf **ISW**
show pxf feature nat **ISW**
show pxf interface **ISW**
show pxf max-logical-interfaces **IR**
show pxf microcode **ISW, CBL**
show pxf netflow **ISW**
show pxf stall-monitoring **ISW**
show pxf statistics **ISW**
show pxf xcm **ISW, CBL**
show qbm client **QOS**
show qbm pool **QOS**
show qdm status **QOS**
show qlc IBM
show qm-sp port-data **IR**
show queue **QOS**
show queueing **QOS**
show queueing interface **QOS**
show queuing virtual-access **DIA**
show radius local-server statistics **SEC, WL**
show radius server-group **SEC**
show radius statistics **SEC**
show radius table attributes **SEC**
show radius-proxy client **ISG**
show radius-proxy session **ISG**
show random-detect-group **QOS**
show raw **VR**
show rawmsg **VR**

show rbscp IR
show rapi status DIA
show record-storage-module stats MWG
show record-storage-module target-info MWG
show redirect group ISG
show redirect translations ISG
show redundancy IR, HA
show redundancy (HSA redundancy) IR
show redundancy (ubr10012) CBL
show redundancy application asymmetric-routing SEC
show redundancy application control-interface group IAD, SEC
show redundancy application data-interface IAD, SEC
show redundancy application faults group IAD, SEC
show redundancy application group IAD, SEC
show redundancy application if-mgr IAD, SEC
show redundancy application protocol IAD, SEC
show redundancy application transport IAD, SEC
show redundancy config-sync CBL, HA
show redundancy config-sync ignored failures mcl HA
show redundancy interlink IR
show redundancy linecard-group SEC
show redundancy platform CBL
show region CF
show registry CF
show reload CF
show rep topology LSW
show resource all ERM
show resource database ERM
show resource owner ERM
show resource relationship ERM
show resource user ERM
show resource-pool call DIA
show resource-pool customer DIA
show resource-pool discriminator DIA
show resource-pool queue CF
show resource-pool resource DIA

■ show mvrp interface through snmp-server enable traps ospf rate-limit

show resource-pool vpdn VPD, DIA
show rgf groups WAN
show rgf history WAN
show rgf statistics WAN
show rhosts CF
show rif BR, IBM
show rlm group statistics VR
show rlm group status VR
show rlm group timer VR
show rmon RMON
show rmon alarms RMON
show rmon capture RMON
show rmon events RMON
show rmon filter RMON
show rmon hc-alarms RMON
show rmon history RMON
show rmon hosts RMON
show rmon matrix RMON
show rmon statistics RMON
show rmon topn RMON
show rom-monitor CF
show rom-monitor slot CF
show route-map IRI, IPV6
show route-map ipc ISW
show route-tag list EIGRP, IRI
show router-guard IMC
show rpc IR
show rpms-proc counters VR
show rtppsi VR
show rtr application SLA
show rtr authentication SLA
show rtr collection-statistics SLA
show rtr configuration SLA
show rtr distributions-statistics SLA
show rtr enhanced-history collection-statistics SLA
show rtr enhanced-history distribution-statistics SLA

show rtr group schedule **SLA**
show rtr history **SLA**
show rtr mpls-lsp-monitor configuration **SLA**
show rtr mpls-lsp-monitor neighbors **SLA**
show rtr mpls-lsp-monitor scan-queue **SLA**
show rtr operational-state **SLA**
show rtr reaction-configuration **SLA**
show rtr reaction-trigger **SLA**
show rtr responder **SLA**
show rtr totals-statistics **SLA**
show rtsp client session **VR**
show rudpv0 failures **VR**
show rudpv0 statistics **VR**
show rudpv1 **VR**
show running identity policy **CF**
show running identity profile **CF**
show running interface auto-template **MP**
show running-config **SEC, CF**
show running-config control-plane **CF**
show running-config interface cable **CBL**
show running-config map-class **CF**
show running-config partition **CF**
show running-config service-group **QOS**
show running-config vnet **EVN**
show running-config vrf **IAD, MP, SEC**
show sampler **FNF**
show sasl **SEC**
show sbc **SBCD**
show sbc dbe addresses **SBCD**
show sbc dbe addresses (session border controller) **SBCD**
show sbc dbe controllers **SBCD**
show sbc dbe controllers (session border controller) **SBCD**
show sbc dbe flow-stats **SBCD**
show sbc dbe flow-stats (session border controller) **SBCD**
show sbc dbe forwarder-stats **SBCD**
show sbc dbe forwarder-stats (session border controller) **SBCD**

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

show sbcdbe h248-profile **SBCD**
show sbcdbe history **SBCD**
show sbcdbe media-flow-stats **SBCD**
show sbcdbe media-flow-stats (session border controller) **SBCD**
show sbcdbe media-stats (session border controller) **SBCD**
show sbcdbe signaling-flow-stats **SBCD**
show sbcdbe signaling-flow-stats (session border controller) **SBCD**
show sbch248 bac **SBCD**
show sbcrg **SBCD**
show sbcrscremon **SBCD**
show sbcsbe aaa **SBCD**
show sbcsbe addresses **SBCD**
show sbcsbe adjacencies **SBCD**
show sbcsbe adjacencies authentication-realms **SBCD**
show sbcsbe admin-domain **SBCD**
show sbcsbe all-authentication-realms **SBCD**
show sbcsbe all-peers **SBCD**
show sbcsbe billing **SBCD**
show sbcsbe blacklist **SBCD**
show sbcsbe blacklist configured-limits **SBCD**
show sbcsbe blacklist critical **SBCD**
show sbcsbe blacklist critical configured-limits **SBCD**
show sbcsbe blacklist critical current-blacklisting **SBCD**
show sbcsbe blacklist current-blacklisting **SBCD**
show sbcsbe cac-policy-set **SBCD**
show sbcsbe call branches **SBCD**
show sbcsbe call-policy-set **SBCD**
show sbcsbe call-policy-set (enum) **SBCD**
show sbcsbe call-policy-set default **SBCD**
show sbcsbe call-policy-set table entries **SBCD**
show sbcsbe call-policy-set table entry **SBCD**
show sbcsbe call-policy-set tables **SBCD**
show sbcsbe call-policy-sets **SBCD**
show sbcsbe call-rate-stats **SBCD**
show sbcsbe call-stats **SBCD**
show sbcsbe calls **SBCD**

show sbc sbe codec-list **SBCD**
show sbc sbe codecs **SBCD**
show sbc sbe diameter **SBCD**
show sbc sbe diameter peers **SBCD**
show sbc sbe diameter stats **SBCD**
show sbc sbe editors **SBCD**
show sbc sbe enum **SBCD**
show sbc sbe enum entry **SBCD**
show sbc sbe h323 timers **SBCD**
show sbc sbe hold-media-timeout **SBCD**
show sbc sbe hunting-trigger **SBCD**
show sbc sbe media-gateway-associations **SBCD**
show sbc sbe media-gateway-policy **SBCD**
show sbc sbe media-gateways **SBCD**
show sbc sbe media-policy **SBCD**
show sbc sbe policy-failure-stats **SBCD**
show sbc sbe policy-failure-stats dst-account **SBCD**
show sbc sbe policy-failure-stats dst-adjacency **SBCD**
show sbc sbe policy-failure-stats src-account **SBCD**
show sbc sbe policy-failure-stats src-adjacency **SBCD**
show sbc sbe qos-profiles **SBCD**
show sbc sbe radius-client-accounting accounting **SBCD**
show sbc sbe radius-client-accounting authentication **SBCD**
show sbc sbe radius-client-stats **SBCD**
show sbc sbe radius-server-stats **SBCD**
show sbc sbe redirect-limit **SBCD**
show sbc sbe resource-priority-sets **SBCD**
show sbc sbe script-set **SBCD**
show sbc sbe sdp-h245-mapping **SBCD**
show sbc sbe sdp-match-table **SBCD**
show sbc sbe sdp-policy-table **SBCD**
show sbc sbe sip body-editor **SBCD**
show sbc sbe sip body-profile **SBCD**
show sbc sbe sip delegate-profiles **SBCD**
show sbc sbe sip error-profile **SBCD**
show sbc sbe sip essential-headers **SBCD**

■ show mvrp interface through snmp-server enable traps ospf rate-limit

show sbc sbe sip essential-methods **SBCD**
show sbc sbe sip essential-options **SBCD**
show sbc sbe sip fast-register-stats **SBCD**
show sbc sbe sip header-editor **SBCD**
show sbc sbe sip header-profile **SBCD**
show sbc sbe sip header-profiles **SBCD**
show sbc sbe sip ip-fqdn-mapping **SBCD**
show sbc sbe sip method-editor **SBCD**
show sbc sbe sip method-profile **SBCD**
show sbc sbe sip method-profiles **SBCD**
show sbc sbe sip method-stats **SBCD**
show sbc sbe sip option-editor **SBCD**
show sbc sbe sip option-profile **SBCD**
show sbc sbe sip option-profiles **SBCD**
show sbc sbe sip parameter-editor **SBCD**
show sbc sbe sip sdp-match-table **SBCD**
show sbc sbe sip sdp-media-profile **SBCD**
show sbc sbe sip sdp-policy-table **SBCD**
show sbc sbe sip statistics **SBCD**
show sbc sbe sip subscribers **SBCD**
show sbc sbe sip timers **SBCD**
show sbc sbe stream-list **SBCD**
show sbc sbe subscriber-stats **SBCD**
show sbc sbe transcoding-stats **SBCD**
show sbc services **SBCD**
show sccp **IPV6, VR**
show sccp ccm group **VR**
show sccp connections details **VR**
show sccp connections internal **VR**
show sccp connections rsvp **VR**
show sccp connections summary **VR**
show sccp server statistics **VR**
show scp **CF, IR**
show sctp association **IAP**
show sctp association list **IAP**
show sctp association parameters **IAP**

show sctp association statistics [IAP](#)
show sctp errors [IAP](#)
show sctp instance [IAP](#)
show sctp instances [IAP](#)
show sctp statistics [IAP](#)
show sdlc local-ack [IBM](#)
show sdspfarm [VR](#)
show secure bootset [SEC](#)
show service [TSV](#)
show service-group [QOS](#)
show service-group interface [QOS](#)
show service-group state [QOS](#)
show service-group stats [QOS](#)
show service-group traffic-stats [QOS](#)
show service-module serial [IR](#)
show service-module serial through standby port [IR](#)
show service-routing capabilities-manager [SAF](#)
show service-routing capabilities-manager internal [SAF](#)
show service-routing plugins capman [SAF](#)
show service-routing xmcp clients [SAF](#)
show service-routing xmcp server [SAF](#)
show sessions [DIA](#)
show settlement [VR](#)
show sgbp [DIA](#)
show sgbp queries [DIA](#)
show sgcp connection [VR](#)
show sgcp endpoint [VR](#)
show sgcp statistics [VR](#)
show sgi [ISG](#)
show shared-line [VR](#)
show shell environment [IOS_SHL](#)
show shell functions [IOS_SHL](#)
show sip dhcp [VR](#)
show sip service [VR](#)
show sip service through show trunk hdlc [VR](#)
show sip-disk [IR](#)

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

show sip-ua calls **IPV6, VR**
show sip-ua connections **IPV6, VR**
show sip-ua map **VR**
show sip-ua min-se **VR**
show sip-ua mwi **VR**
show sip-ua register status **VR**
show sip-ua retry **VR**
show sip-ua service **VR**
show sip-ua statistics **VR**
show sip-ua status **IPV6, VR**
show sip-ua status refer-ood **VR**
show sip-ua timers **VR**
show slot **CF**
show slot0: **CF, IR**
show slot1: **CF**
show smds addresses **WAN**
show smds addresses through waas export **WAN**
show smds map **WAN**
show smds traffic **WAN**
show smf **IR**
show smm **SEC**
show smrp forward **ATK**
show smrp globals **ATK**
show smrp group **ATK**
show smrp mcache **ATK**
show smrp neighbor **ATK**
show smrp port **ATK**
show smrp route **ATK**
show smrp traffic **ATK**
show sna **IBM**
show snapshot **DIA**
show snasw class-of-service **IBM**
show snasw connection-network **IBM**
show snasw directory **IBM**
show snasw dlctrace **IBM**
show snasw dlus **IBM**

show snasw ipstrace IBM
show snasw link IBM
show snasw lu IBM
show snasw mode IBM
show snasw node IBM
show snasw pdlog IBM
show snasw port IBM
show snasw pu IBM
show snasw rtp IBM
show snasw session IBM
show snasw statistics IBM
show snasw summary-ipstrace IBM
show snasw topology IBM
show snmp SNMP
show snmp chassis SNMP
show snmp community SNMP
show snmp contact SNMP
show snmp context mapping MTR
show snmp group SNMP
show snmp host SNMP
show snmp location SNMP
show snmp mib SNMP
show snmp mib bulkstat transfer SNMP
show snmp mib context SNMP
show snmp mib ifmib ifindex SNMP
show snmp mib ifmib traps SNMP
show snmp mib nhrp status SEC
show snmp mib notification-log SNMP
show snmp pending SNMP
show snmp sessions SNMP
show snmp stats oid SNMP
show snmp sysobjectid SNMP
show snmp user SNMP
show snmp view SNMP
show sntp BSM
show sockets IAP

■ show mvrp interface through snmp-server enable traps ospf rate-limit

show software package CF
show software authenticity file CF
show software authenticity keys CF
show software authenticity running CF
show software installer rollback-timer CF
show source-bridge BR, IBM
show span BR, IBM
show spanning-tree BR, IBM, LSW
show spanning-tree mst MP, LSW
show spantree BR, LSW
show spe DIA
show spe digital DIA
show spe digital active DIA
show spe digital csr DIA
show spe digital disconnect-reason DIA
show spe digital summary DIA
show spe log DIA
show spe modem DIA
show spe modem active DIA
show spe modem csr DIA
show spe modem disconnect-reason DIA
show spe modem high speed DIA
show spe modem high standard DIA
show spe modem low speed DIA
show spe modem low standard DIA
show spe modem summary DIA
show spe recovery DIA
show spe version DIA
show spe voice VR
show srp WAN
show srp IR
show ss7 mtp1 channel-id VR
show ss7 mtp1 links VR
show ss7 mtp2 ccb VR
show ss7 mtp2 state VR
show ss7 mtp2 stats VR

show ss7 mtp2 timer VR
show ss7 mtp2 variant VR
show ss7 sm session VR
show ss7 sm set VR
show ss7 sm stats VR
show sscop ATM
show sse summary IPX
show ssg auto-domain exclude-profile SSG
show ssg binding SSG
show ssg connection SSG
show ssg dial-out exclude-list SSG
show ssg direction SSG
show ssg host SSG
show ssg interface SSG
show ssg multidomain ppp exclude-list SSG
show ssg next-hop SSG
show ssg open-garden SSG
show ssg pass-through-filter SSG
show ssg pending-command SSG
show ssg port-map ip SSG
show ssg port-map status SSG
show ssg prepaid default-quota SSG
show ssg radius-proxy SSG
show ssg service SSG
show ssg summary SSG
show ssg tcp-redirect group SSG
show ssg user transparent SSG
show ssg user transparent authorizing SSG
show ssg user transparent passthrough SSG
show ssg user transparent suspect SSG
show ssg user transparent unidentified SSG
show ssg vc-service-map SSG
show ssh SEC
show ssl-proxy module state SEC, LSW
show ssm ISG
show ssm group MP

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

show sss circuits **BBA**
show sss session **BBA**
show stacks **CF**
show standby **FHP, IPV6**
show standby arp gratuitous **FHP**
show standby capability **FHP**
show standby delay **FHP**
show standby internal **FHP**
show standby neighbors **FHP**
show standby redirect **FHP**
show startup-config **CF**
show stcapp buffer-history **VR**
show stcapp device **IPV6, VR**
show stcapp feature codes **VR**
show stcapp statistics **VR**
show storm-control **IR**
show stun **IBM**
show subscriber default-session **ISG**
show subscriber policy dpm statistics **ISG**
show subscriber policy peer **ISG**
show subscriber policy ppm-shim-db **QOS**
show subscriber service **ISG**
show subscriber session **ISG**
show subscriber statistics **ISG**
show subscriber trace history **ISG**
show subscriber trace statistics **ISG**
show subscriber-policy **BR, IBM**
show subscription **VR**
show subscription local **VR**
show subsys **CF**
show subsys license **CSA**
show sup-bootflash **CF, IR**
show svc **ATM**
show syscon sdp **IR**
show sysctrl **CF**
show system jumbomtu **CF, IR**

show table-map QOS
show tacacs SEC
show tarp ISO
show tarp blacklisted-adjacencies ISO
show tarp host ISO
show tarp interface ISO
show tarp ldb ISO
show tarp map ISO
show tarp static-adjacencies ISO
show tarp tid-cache ISO
show tarp traffic ISO
show tbct VR
show tcam counts IR
show team interface IR
show tcam-mgr subslot IR
show tcp IAP
show tcp brief IAP
show tcp ha connections BGP, HA
show tcp ha statistics HA
show tcp intercept connections SEC
show tcp intercept statistics SEC
show tcp statistics IAP
show tcp through start-forwarding agent IAP
show tdm backplane IR
show tdm connections IR
show tdm data IR
show tdm detail IR
show tdm information IR
show tdm mapping VR
show tdm pool IR
show tech-support IAP, CF, MWG, SEC, CBL
show tech-support alg SEC
show tech-support ipsec SEC
show tech-support modem DIA
show tech-support mpls MP
show tech-support nbar platform QOS

■ show mvrp interface through snmp-server enable traps ospf rate-limit

show tech-support rsvp QOS
show tech-support spe DIA
show tech-support subscriber ISG
show template CF
show terminal TSV
show tgrep neighbors VR
show tgrm DIA
show through show fm summary CF
show time-range BSM
show time-range ipc IAP
show tn3270 ascii-hexval TSV
show tn3270 character-map TSV
show top counters interface report IR
show topology MTR
show trace multilink IPV6
show track IAP, IPV6
show track resolution IAP
show track route IAP
show traffic-shape QOS
show traffic-shape queue QOS
show traffic-shape statistics QOS
show translate TSV
show translate ruleset TSV
show translation-rule VR
show transport-map TSV
show trunk group VR, DIA
show trunk hdlc VR
show ttycap TSV
show tunnel 6rd IPV6
show tunnel 6rd destination IPV6
show tunnel 6rd prefix IPV6
show tunnel endpoints SEC
show tunnel interface IR
show tunnel keys-database tunnel IR
show ucse imc download progress IR
show ucse imc files IR

show ucse server boot **IR**
show ucse server erase device status **IR**
show ucse server raid level **IR**
show udld **LSW**
show udp **IAP**
show upgrade file **IR**
show upgrade fpd file **IR**
show upgrade fpd package default **IR**
show upgrade fpd progress **IR**
show upgrade fpd table **IR**
show upgrade fpga progress **IR**
show upgrade hw-programmable file **IR**
show upgrade hw-programmable progress **IR**
show upgrade package default **IR**
show upgrade progress **IR**
show upgrade table **IR**
show usb controllers **SEC, CF**
show usb device **SEC, CF**
show usb driver **SEC, CF**
show usb port **SEC, CF**
show usb tree **SEC, CF**
show usb-devices summary **SEC**
show usbtoken **SEC, CF**
show user-group **SEC**
show users **SEC, TSV**
show vasi pair **SEC**
show vc-group **WAN**
show vdev **VR**
show vdev through show voice statistics memory-usage **VR**
show version **CF**
show vfc **VR**
show vfc cap-list **VR**
show vfc default-file **VR**
show vfc directory **VR**
show vfc version **VR**
show vfi **MP, WAN**

■ show mvrp interface through snmp-server enable traps ospf rate-limit

show video call summary VR
show vlan LSW
show vlan access-log config LSW
show vlan access-log flow LSW
show vlan access-log statistics LSW
show vlan access-map LSW
show vlan all-ports LSW
show vlan counters LSW
show vlan dot1q tag native LSW
show vlan filter LSW
show vlan free LSW
show vlan free summary LSW
show vlan free summary LSW
show vlan group SEC
show vlan group through switchport port-security violation SEC
show vlan internal free summary LSW
show vlan internal usage LSW
show vlan mapping LSW
show vlan port provisioning LSW
show vlan private-vlan LSW
show vlan remote-span LSW
show vlan through spanning-tree vlan LSW
show vlan virtual-port LSW
show vlan-range LSW
show vlan-switch LSW
show vlans LSW
show vlans dot1q LSW
show vlans tokenring LSW
show vmi neighbors IR, IMO
show vnet EVN
show vnet counters EVN
show vnet tag EVN
show voice accounting method VR
show voice accounting response pending VR
show voice busyout VR
show voice cable-status VR

show voice call VR
show voice call rate VR
show voice cause-code VR
show voice class called-number VR
show voice class called-number-pool VR
show voice class e164-pattern-map VR
show voice class resource-group VR
show voice class uri VR
show voice connectivity summary VR
show voice data VR
show voice dnis-map VR
show voice dsmp stream VR
show voice dsp VR
show voice dsp channel VR
show voice dsp crash-dump VR
show voice dsp summary VR
show voice eddri prefix VR
show voice enum-match-table VR
show voice hpi capture VR
show voice iec description VR
show voice lmr VR
show voice pcm capture VR
show voice permanent-call VR
show voice port CBL, VR
show voice source-group VR
show voice statistics csr interval accounting VR
show voice statistics csr interval aggregation VR
show voice statistics csr since-reset accounting VR
show voice statistics csr since-reset aggregation-level VR
show voice statistics csr since-reset all VR
show voice statistics iec VR
show voice statistics interval-tag VR
show voice statistics memory-usage VR
show voice trace VR
show voice trace through shutdown (voice-port) VR
show voice translation-profile VR

■ show mvrp interface through snmp-server enable traps ospf rate-limit

show voice translation-rule VR
show voice trunk-conditioning signaling VR
show voice trunk-conditioning supervisory VR
show voice vtsp VR
show voip debug version VR
show voip fpi call-rate VR
show voip fpi calls VR
show voip fpi stats VR
show voip htsp VR
show voip recmsp session VR
show voip rtp connections IPV6, VR
show voip rtp forking VR
show voip trunk group VR
show vpdn VPD
show vpdn dead-cache VPD
show vpdn domain VPD
show vpdn group VPD
show vpdn group-select VPD
show vpdn group-select keys VPD
show vpdn history failure VPD
show vpdn multilink VPD
show vpdn redirect VPD
show vpdn redundancy VPD
show vpdn session BBA, VPD, IPV6
show vpdn tunnel VPD, IPV6
show vrf MP, QOS, IPV6
show vrf counters EVN
show vrf list EVN
show vrm active_calls VR
show vrm vdevices VR
show vrrp FHP
show vrrp interface FHP
show vrss FHP
show vrss clients FHP
show vrss group FHP
show vrss plugin database FHP

show vrss summary FHP
show vsp VR
show vtemplate SEC, VPD, DIA
show vtemplate redundancy VPD
show vtp LSW
show waas accelerator WAN
show waas alarms WAN
show waas auto-discovery WAN
show waas cache http-express metadatocache WAN
show waas connection WAN
show waas statistics accelerator WAN
show waas statistics aom WAN
show waas statistics application WAN
show waas statistics auto-discovery WAN
show waas statistics class WAN
show waas statistics dre WAN
show waas statistics errors WAN
show waas statistics global WAN
show waas statistics lz WAN
show waas statistics pass-through WAN
show waas statistics peer WAN
show waas status WAN
show waas token WAN
show warm-reboot CF
show wccp IAP
show wccp global counters IAP
show webvpn context SEC
show webvpn gateway SEC
show webvpn install SEC
show webvpn license SEC
show webvpn nbns SEC
show webvpn policy SEC
show webvpn session SEC
show webvpn sessions SEC
show webvpn statistics SEC
show webvpn stats SEC

■ show mvrp interface through snmp-server enable traps ospf rate-limit

show wedged-interfaces IR
show whoami CF
show wiretap CF
show wlccp wds SEC
show wrr-queue QOS
show wsapi VR
show wsma agent WSMA
show wsma id WSMA
show wsma profile WSMA
show x25 context WAN
show x25 cug WAN
show x25 hunt-group WAN
show x25 interface WAN
show x25 map WAN
show x25 pad TSV
show x25 profile WAN
show x25 remote-red WAN
show x25 route WAN
show x25 services WAN
show x25 vc WAN
show x25 xot WAN
show x28 hunt-group WAN
show x29 access-lists WAN
show xconnect MP, WAN
show xcsp port VR
show xcsp slot VR
show xdr ISW
show xsd-format XMLPI
show xsm status SEC
show xsm xrd-list SEC
show xtagatm cos-bandwidth-allocation MP
show xtagatm cross-connect MP
show xtagatm vc MP
show zone security SEC
show zone-pair security SEC
show_spd CBL

showmon CF
shut VR
shutdown (Annex G neighbor) VR
shutdown (Annex G) VR
shutdown (CMCC) IBM
shutdown (DSP Farm profile) VR
shutdown (FR-ATM) WAN
shutdown (IP multiplexing) IMO
shutdown (MTR) MTR
shutdown (OER) OER
shutdown (PVC range) BBA
shutdown (PVC-in-range) BBA
shutdown (PfR) PFR
shutdown (RLM) VR
shutdown (TN3270) IBM
shutdown (address-family) EIGRP
shutdown (auto-config application) VR
shutdown (bridge-domain) CE
shutdown (certificate server) SEC
shutdown (controller) IR
shutdown (cs-server) SEC
shutdown (dial-peer) VR
shutdown (dwdm) IR
shutdown (firewall) SEC
shutdown (gatekeeper) VR
shutdown (gateway) IPV6, VR
shutdown (hub) IR
shutdown (interface) IR
shutdown (mediacard) VR
shutdown (mpls) MP
shutdown (port) DIA
shutdown (router OSPF) OSPF
shutdown (service-family) SAF
shutdown (settlement) VR
shutdown (spe) DIA
shutdown (voice-port) VR

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

shutdown vlan LSW
signal VR
signal did VR
signal keepalive VR
signal pattern VR
signal sequence oos VR
signal through srv version VR
signal timing idle suppress-voice VR
signal timing oos VR
signal timing oos restart VR
signal timing oos slave-standby VR
signal timing oos suppress-all VR
signal timing oos suppress-voice VR
signal timing oos timeout VR
signal-type VR
signaling IR
signaling forward VR
signaling forward (dial peer) VR
signaling protocol MP
signaling-address SBCD
signaling-class cas DIA
signaling-peer SBCD
signaling-peer-port SBCD
signaling-peer-priority SBCD
signaling-peer-switch SBCD
signaling-port SBCD
signature SEC
signature (IP SLA) SLA
silent-fax VR
single-connection SEC, IPV6
singlepacket IMO
sip VR
sip address IAD, IPV6
sip adjacency SBCD
sip body-editor SBCD
sip body-profile SBCD

sip default body-profile SBCD
sip dns SBCD
sip domain-name IAD, IPV6
sip editor-type SBCD
sip encryption key SBCD
sip error-profile SBCD
sip header-editor SBCD
sip header-profile SBCD
sip home network identifier SBCD
sip hunting-trigger SBCD
sip inherit profile SBCD
sip ip-fqdn-mapping SBCD
sip max-connections SBCD
sip method-editor SBCD
sip method-profile SBCD
sip option-editor SBCD
sip option-profile SBCD
sip parameter-editor SBCD
sip parameter-profile SBCD
sip sdp origin-user-name SBCD
sip sdp-match-table SBCD
sip sdp-media-profile SBCD
sip sdp-policy-table SBCD
sip timer SBCD
sip visited network identifier SBCD
sip-contact SBCD
sip-header VR
sip-server IPV6, VR
sip-ua VR
sipi SBCD
site LISP
site-id HA
skeptical interval RIP
skeptical interval (OTV) WAN
skip (ruleset) TSV
slave (IKEv2 cluster) SEC

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

slave auto-sync config **CF**
slave auto-sync config through terminal-type **CF**
slave default-slot **CF**
slave image **CF**
slave reload **CF**
slave sync config **CF**
slave terminal **CF**
slip **TSV**
slot (ERM policy) **ERM**
slow-peer detection **BGP**
slow-peer split-update-group dynamic **BGP**
slow-peer split-update-group static **BGP**
smart-tunnel list **SEC**
smartcard-removal-disconnect **SEC**
smds address **WAN**
smds dxi **WAN**
smds enable-arp **WAN**
smds glean **WAN**
smds multicast **WAN**
smds multicast arp **WAN**
smds multicast bridge **WAN**
smds multicast ip **WAN**
smds static-map **WAN**
smrp mroute-cache protocol appletalk **ATK**
smrp protocol appletalk **ATK**
smrp routing **ATK**
smt-queue-threshold **IR**
sna enable-host (QLLC) **IBM**
sna enable-host (SDLC) **IBM**
sna enable-host (Token Ring **Ethernet**
sna host (Frame Relay) **IBM**
sna host (QLLC) **IBM**
sna host (SDLC) **IBM**
sna host (Token Ring **Ethernet**
sna rsrb **IBM**
sna rsrb enable-host **IBM**

sna rsrb start IBM
sna start IBM
sna vdlc IBM
sna vdlc enable-host IBM
sna vdlc start IBM
snapshot client DIA
snapshot server DIA
snasw cpname IBM
snasw dlcfilter IBM
snasw dlctrace IBM
snasw dlus IBM
snasw dump IBM
snasw event IBM
snasw ip-precedence IBM
snasw ipsfilter IBM
snasw ipstrace IBM
snasw link IBM
snasw location IBM
snasw lu62-security IBM
snasw mode IBM
snasw msgdump IBM
snasw pathswitch IBM
snasw pdlog IBM
snasw port IBM
snasw rtp pathswitch-timers IBM
snasw start IBM
snasw start cp-cp IBM
snasw start link IBM
snasw start port IBM
snasw stop IBM
snasw stop cp-cp IBM
snasw stop link IBM
snasw stop port IBM
snasw stop session IBM
snmp context MTR, EVN
snmp context (VRF) SNMP

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

snmp enable peer-trap dscp-profile VR
snmp enable peer-trap poor-qov VR
snmp get SNMP
snmp get-bulk SNMP
snmp get-next SNMP
snmp ifindex clear IR
snmp ifindex persist IR
snmp ifmib ifalias long SNMP
snmp ifmib ifindex persist IR
snmp inform SNMP
snmp manager CBL
snmp mib bulkstat object-list SNMP
snmp mib bulkstat schema SNMP
snmp mib bulkstat transfer SNMP
snmp mib cef throttling-interval ISW
snmp mib community-map SNMP
snmp mib event object list SNMP
snmp mib event owner SNMP
snmp mib event sample SNMP
snmp mib event trigger owner SNMP
snmp mib event trigger owner through snmp-server enable informs SNMP
snmp mib expression delta SNMP
snmp mib expression owner SNMP
snmp mib flash cache SNMP
snmp mib flowmon alarmhistorysize SNMP
snmp mib mpls vpn MP
snmp mib notification-log default SNMP
snmp mib notification-log default disable SNMP
snmp mib notification-log globalageout SNMP
snmp mib notification-log globalsize SNMP
snmp mib persist SNMP
snmp mib target list SNMP
snmp set SNMP
snmp trap if-monitor SNMP
snmp trap illegal-address IR
snmp trap ip verify drop-rate SEC

snmp trap link-status **SNMP, IPV6**
snmp trap mac-notification change **LSW**
snmp-server cache **SNMP**
snmp-server chassis-id **SNMP**
snmp-server community **MP, SNMP, IPV6**
snmp-server contact **SNMP**
snmp-server context **SNMP**
snmp-server drop vrf-traffic **SNMP**
snmp-server enable informs **SNMP**
snmp-server enable traps **SNMP, CSA, HA**
snmp-server enable traps (MPLS) **MP, SNMP**
snmp-server enable traps aaa_server **SNMP**
snmp-server enable traps atm pvc **ATM, SNMP**
snmp-server enable traps atm pvc extension **ATM, SNMP**
snmp-server enable traps atm pvc extension mibversion **ATM, SNMP**
snmp-server enable traps atm subif **ATM, SNMP**
snmp-server enable traps bfd **SNMP**
snmp-server enable traps bgp **SNMP**
snmp-server enable traps bulkstat **SNMP**
snmp-server enable traps c6kxbar **SNMP**
snmp-server enable traps cable **CBL**
snmp-server enable traps calltracker **SNMP**
snmp-server enable traps cdma **MWP**
snmp-server enable traps cef **ISW**
snmp-server enable traps cnpd **SNMP**
snmp-server enable traps cpu **SNMP**
snmp-server enable traps dhcp **IAD, SNMP**
snmp-server enable traps dhcp-snooping bindings **SNMP**
snmp-server enable traps director **SNMP**
snmp-server enable traps dlsw **SNMP**
snmp-server enable traps docsis-cm **CBL**
snmp-server enable traps docsis-cmts **CBL**
snmp-server enable traps docsis-resil **CBL**
snmp-server enable traps eigrp **SNMP**
snmp-server enable traps envmon **SNMP**
snmp-server enable traps errdisable **SNMP**

```
■ show mvrp interface through snmp-server enable traps ospf rate-limit
```

snmp-server enable traps ether-oam **CE**
snmp-server enable traps ethernet cfm alarm **CE**
snmp-server enable traps ethernet cfm cc **CE**
snmp-server enable traps ethernet cfm crosscheck **CE**
snmp-server enable traps ethernet evc **CE**
snmp-server enable traps firewall **SNMP**
snmp-server enable traps flash **SNMP**
snmp-server enable traps flowmon **SNMP**
snmp-server enable traps frame-relay **SNMP**
snmp-server enable traps frame-relay multilink bundle-mismatch **SNMP**
snmp-server enable traps frame-relay subif **SNMP**
snmp-server enable traps gdoi **SEC**
snmp-server enable traps if-monitor **SNMP**
snmp-server enable traps ip local pool **SNMP**
snmp-server enable traps ipmobile **IMO, MWH, MWP**
snmp-server enable traps ipsec **SEC**
snmp-server enable traps isakmp **SEC**
snmp-server enable traps isdn **SNMP**
snmp-server enable traps isis **IRS**
snmp-server enable traps l2tun pseudowire status **SNMP**
snmp-server enable traps l2tun session **SNMP**
snmp-server enable traps memory **SNMP**
snmp-server enable traps mpls ldp **MP**
snmp-server enable traps mpls p2mp-traffic-eng **MP**
snmp-server enable traps mpls rfc ldp **MP**
snmp-server enable traps mpls rfc vpn **MP**
snmp-server enable traps mpls traffic-eng **MP**
snmp-server enable traps mpls vpn **MP**
snmp-server enable traps mvpn **IMC**
snmp-server enable traps netsync **IR**
snmp-server enable traps nhrp **SEC**
snmp-server enable traps ospf **OSPF**
snmp-server enable traps ospf cisco-specific errors **OSPF**
snmp-server enable traps ospf cisco-specific errors config-error **OSPF, SNMP**
snmp-server enable traps ospf cisco-specific errors shamlink **OSPF, SNMP**
snmp-server enable traps ospf cisco-specific lsa **OSPF**

snmp-server enable traps ospf cisco-specific retransmit [OSPF, SNMP](#)
snmp-server enable traps ospf cisco-specific state-change [OSPF, SNMP](#)
snmp-server enable traps ospf cisco-specific state-change through snmp-server enable traps voice poor-qov
[SNMP](#)
snmp-server enable traps ospf errors [OSPF](#)
snmp-server enable traps ospf lsa [OSPF](#)
snmp-server enable traps ospf rate-limit [OSPF](#)

■ show mvrp interface through snmp-server enable traps ospf rate-limit

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snmp-server enable traps ospf retransmit through u

- Finding IOS Command Information, page 515
- snmp-server enable traps ospf retransmit through u, page 518

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 15: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference

CF	Cisco IOS Configuration Fundamentals Command Reference
CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

■ snmp-server enable traps ospf retransmit through u

snmp-server enable traps ospf retransmit through u

s

snmp-server enable traps ospf retransmit OSPF
snmp-server enable traps ospf state-change OSPF
snmp-server enable traps pfr PFR
snmp-server enable traps pim IMC, SNMP
snmp-server enable traps power-ethernet group SNMP
snmp-server enable traps pppoe SNMP
snmp-server enable traps pppoe per-interface SNMP
snmp-server enable traps pppoe per-mac SNMP
snmp-server enable traps pppoe per-vc SNMP
snmp-server enable traps pppoe per-vlan SNMP
snmp-server enable traps pppoe system SNMP
snmp-server enable traps pppoe vc SNMP
snmp-server enable traps repeater SNMP
snmp-server enable traps resource-policy SNMP
snmp-server enable traps rtr SNMP
snmp-server enable traps sbc SBCD
snmp-server enable traps slb SLB
snmp-server enable traps snmp SNMP
snmp-server enable traps srp SNMP
snmp-server enable traps storm-control SNMP
snmp-server enable traps syslog SNMP
snmp-server enable traps through snmp-server enable traps ospf cisco-specific retransmit SNMP
snmp-server enable traps transceiver all SNMP
snmp-server enable traps trustsec SNMP
snmp-server enable traps trustsec-interface SNMP
snmp-server enable traps trustsec-policy SNMP
snmp-server enable traps trustsec-server SNMP
snmp-server enable traps trustsec-sxp SNMP
snmp-server enable traps voice SNMP
snmp-server enable traps voice (DSCP profile) VR
snmp-server enable traps voice poor-qos SNMP
snmp-server enable traps vpdn dead-cache VPD

snmp-server enable traps vswitch dual-active **SNMP**
snmp-server enable traps waas **WAN**
snmp-server file-transfer access-group **SNMP**
snmp-server group **MP, SNMP, IPV6**
snmp-server host **ISW, MP, SNMP, CSA, IPV6**
snmp-server host traps docsis-resil **CBL**
snmp-server host traps evc **CE**
snmp-server ifindex persist **IR**
snmp-server inform **SNMP**
snmp-server ip dscp **SNMP**
snmp-server ip precedence **SNMP**
snmp-server location **SNMP**
snmp-server manager **SNMP**
snmp-server manager session-timeout **SNMP**
snmp-server packetsize **SNMP**
snmp-server queue-length **SNMP**
snmp-server queue-limit **SNMP**
snmp-server snmp traps ospfv3 errors **OSPF**
snmp-server snmp traps ospfv3 rate-limit **OSPF**
snmp-server snmp traps ospfv3 state-change **OSPF**
snmp-server source-interface **SNMP**
snmp-server system-shutdown **SNMP**
snmp-server tftp-server-list **SNMP**
snmp-server trap authentication unknown-context **SNMP**
snmp-server trap authentication vrf **SNMP**
snmp-server trap link **SNMP**
snmp-server trap link switchover **SNMP**
snmp-server trap retry **SNMP**
snmp-server trap timeout **SNMP**
snmp-server trap-authentication **SNMP**
snmp-server trap-source **SNMP**
snmp-server trap-timeout **SNMP**
snmp-server user **SNMP, IPV6**
snmp-server usm cisco **SNMP**
snmp-server view **SNMP**
snr margin **IR**

■ snmp-server enable traps ospf retransmit through u

sntp address IPV6
sntp broadcast client BSM
sntp logging BSM
sntp server BSM
sntp source-interface BSM
soft-offhook VR
softswitch-shield SBCD
software clean CF
software commit CF
software expand CF
software install file CF
software install source switch CF
software install source switch CF
software provision CF
software repackaging CF
software rollback CF
software source list CF
software uninstall CF
soo BGP
sort-by NF
source SEC, ISG
source (Flexible NetFlow) FNF, MM
source (IP multiplexing) IMO
source (parameter-map) SEC
source carrier-id VR
source interface SEC, MWG, LSW
source interface (Diameter peer) SEC
source interface (ca-trustpool) SEC
source ip SSG
source ip (path) MM
source template DIA
source template (eoam) CE
source template type pseudowire MP
source trunk-group-label VR
source vpdn-template VPD
source-address IR

source-address (uc-wsapi) [VR](#)
source-bridge [IBM](#)
source-bridge connection-timeout [IBM](#)
source-bridge cos-enable [IBM](#)
source-bridge enable-80d5 [IBM](#)
source-bridge explorer-fastswitch [IBM](#)
source-bridge explorer-maxrate [IBM](#)
source-bridge explorerq-depth [IBM](#)
source-bridge fst-peername [IBM](#)
source-bridge input-address-list [IBM](#)
source-bridge input-lsap-list [IBM](#)
source-bridge input-type-list [IBM](#)
source-bridge keepalive [IBM](#)
source-bridge largest-frame [IBM](#)
source-bridge max-hops [IBM](#)
source-bridge max-in-hops [IBM](#)
source-bridge max-out-hops [IBM](#)
source-bridge output-address-list [IBM](#)
source-bridge output-lsap-list [IBM](#)
source-bridge output-type-list [IBM](#)
source-bridge passthrough [IBM](#)
source-bridge proxy-explorer [IBM](#)
source-bridge proxy-netbios-only [IBM](#)
source-bridge qllc-local-ack [IBM](#)
source-bridge remote-peer frame-relay [IBM](#)
source-bridge remote-peer fst [IBM](#)
source-bridge remote-peer interface [IBM](#)
source-bridge remote-peer tcp [IBM](#)
source-bridge ring-group [IBM](#)
source-bridge route-cache [IBM](#)
source-bridge route-cache cbus [IBM](#)
source-bridge route-cache sse [IBM](#)
source-bridge sap-80d5 [IBM](#)
source-bridge sdlc-local-ack [IBM](#)
source-bridge spanning (automatic) [IBM](#)
source-bridge spanning (manual) [IBM](#)

■ snmp-server enable traps ospf retransmit through u

source-bridge tcp-queue-max IBM
source-bridge transparent IBM
source-bridge transparent fastswitch IBM
source-bridge trcrf-vlan BR
source-interface HA
source-interface (URL parameter-map) SEC
source-ip VPD
source-ip (flow) MM
source-ip (tplt) SLA
source-ip-address HA
source-port SLA
spanning-tree backbonefast LSW
spanning-tree bpdufilter LSW
spanning-tree bpduguard LSW
spanning-tree bridge assurance LSW
spanning-tree cost LSW
spanning-tree etherchannel guard misconfig LSW
spanning-tree extend system-id LSW
spanning-tree guard LSW
spanning-tree link-type LSW
spanning-tree loopguard default LSW
spanning-tree mode MP, LSW
spanning-tree mst LSW
spanning-tree mst configuration MP, LSW
spanning-tree mst forward-time LSW
spanning-tree mst hello-time LSW
spanning-tree mst max-age LSW
spanning-tree mst max-hops LSW
spanning-tree mst pre-standard LSW
spanning-tree mst priority LSW
spanning-tree mst root LSW
spanning-tree mst simulate pvst (interface) LSW
spanning-tree mst simulate pvst global LSW
spanning-tree pathcost method LSW
spanning-tree port-priority LSW
spanning-tree portfast (interface mode) BR

spanning-tree portfast (interface) **LSW**
spanning-tree portfast bpdufilter default **LSW**
spanning-tree portfast bpduguard default **LSW**
spanning-tree portfast default **LSW**
spanning-tree transmit hold-count **LSW**
spanning-tree uplinkfast **LSW**
spanning-tree vlan **LSW**
spd extended-headroom **IPV6**
spd headroom **IPV6**
spe **DIA**
spe call-record modem **DIA**
spe country **DIA**
spe download maintenance **DIA**
spe log-size **DIA**
spe recovery **DIA**
spec-file install add-entry **XMLPI**
spec-file install built-in **XMLPI**
spec-file install file **XMLPI**
spec-file install remove-entry **XMLPI**
spec-file install restore **XMLPI**
special-character-bits **CF**
special-vj **IAP**
speed **IR, WL**
speed dial **VR**
spf-interval **IRS, IPX**
spf-interval (IPv6) **IPV6**
spf-interval (OTV) **WAN**
split-dns **SEC**
split-horizon (EIGRP) **EIGRP, SAF**
split-horizon (IPv6 RIP) **IPV6**
squeeze **CF**
squench **IR**
squench through system jumbomtu **IR**
src-address **SBCD**
src-address (editor) **SBCD**
srfg **IRS**

■ snmp-server enable traps ospf retransmit through u

srp buffer-size IR
srp deficit-round-robin IR
srp loopback IR
srp priority-map IR
srp random-detect IR
srp shutdown IR
srp tx-traffic-rate IR
srtp (dial peer) VR
srtp (voice) VR
srtp branch SBCD
srtp callee SBCD
srtp caller SBCD
srtp interworking SBCD
srtp media interworking SBCD
srtp negotiate VR
srtp response downgrade SBCD
srtp retry rtp SBCD
srtp support allow SBCD
srtp-fallback SBCD
srv version VR
ss7 mtp2-variant VR
ss7 mtp2-variant bellcore VR
ss7 mtp2-variant itu VR
ss7 mtp2-variant itu-white VR
ss7 mtp2-variant ntt VR
ss7 mtp2-variant through switchover method VR
ss7 mtp2-variant ttc VR
ss7 session VR
ss7 session cumack_t VR
ss7 session kp_t VR
ss7 session m_cumack VR
ss7 session m_outseq VR
ss7 session m_rcvnum VR
ss7 session m_retrans VR
ss7 session retrans_t VR
ss7 set VR

ss7 set failover-timer VR
sscop cc-timer ATM
sscop keepalive-timer ATM
sscop max-cc ATM
sscop poll-timer ATM
sscop receive-window ATM
sscop send-window ATM
ssg aaa group prepaid SSG
ssg accounting SSG
ssg attribute 44 suffix host ip SSG
ssg auto-domain SSG
ssg auto-logoff arp SSG
ssg auto-logoff icmp SSG
ssg bind direction SSG
ssg bind service SSG
ssg default-network SSG
ssg dfp ip SSG
ssg dfp weight SSG
ssg dial-out SSG
ssg direction SSG
ssg enable SSG
ssg intercept dhcp SSG
ssg local-forwarding SSG
ssg login transparent SSG
ssg maximum host SSG
ssg maximum service SSG
ssg maxservice SSG
ssg multidomain ppp SSG
ssg next-hop download SSG
ssg open-garden SSG
ssg pass-through SSG
ssg port-map SSG
ssg port-map destination access-list SSG
ssg port-map destination range SSG
ssg port-map enable SSG
ssg port-map length SSG

■ snmp-server enable traps ospf retransmit through u

ssg port-map source ip **SSG**
ssg prepaid reauthorization drop-packet **SSG**
ssg prepaid threshold **SSG**
ssg profile-cache **SSG**
ssg qos police **SSG**
ssg query mac dhcp **SSG**
ssg radius-helper **SSG**
ssg radius-proxy **SSG**
ssg service-cache **SSG**
ssg service-cache refresh **SSG**
ssg service-password **SSG**
ssg service-search-order **SSG**
ssg tcp-redirect **SSG**
ssg vc-service-map **SSG**
ssg wlan reconnect **SSG**
ssh **SEC, IPV6**
ssid **WL**
ssid (local RADIUS server group) **SEC**
ssl encryption **SEC**
ssl trupoint **SEC**
ssl-proxy module allowed-vlan **SEC**
sso enable **VPD**
sso-server **SEC**
ssrc maximum **MM**
stack **CBL**
stack-mib portname **CF, IR**
standalone **MWR**
standard **SBCD**
standby arp gratuitous **FHP**
standby arp gratuitous through track vrrp **FHP**
standby authentication **FHP**
standby bfd **FHP**
standby bfd all-interfaces **FHP**
standby delay minimum reload **FHP**
standby follow **FHP**
standby initialization delay **HA**

standby ip **FHP**
standby ipv6 **FHP, IPV6**
standby mac-address **FHP**
standby mac-refresh **FHP**
standby name **FHP**
standby port **IR**
standby preempt **FHP, IPV6**
standby priority **FHP, IPV6**
standby redirect **FHP**
standby redirects (global) **FHP**
standby send arp **FHP**
standby sso **FHP**
standby timers **FHP**
standby track **FHP**
standby track decrement priority **MWH**
standby use-bia **FHP**
standby use-interface **MWR**
standby version **FHP, IPV6**
standby-group **SEC**
start **SBCD**
start-character **DIA**
start-chat **DIA**
start-forwarding-agent **IAP**
start-time **SLA**
startup (test boolean) **SNMP**
startup (test boolean) through write mib-data **SNMP**
startup (test existence) **SNMP**
startup (test threshold) **SNMP**
state-machine **CF**
state-tracks-signal **IBM**
station-id name **VR**
station-id number **VR**
station-role **WL**
statistics **SBCD**
statistics packet **FNF**
statistics-distribution-interval **SLA**

■ snmp-server enable traps ospf retransmit through u

statistics-setting **SBCD**
stats **VR**
stats-reporting-period (bmp) **BGP**
status **SEC**
status (pseudowire class) **MP**
status admin-down disconnect **WAN**
status control-plane route-watch **MP**
status decoupled **CE**
status peer topology dual-homed **CE**
status protocol notification static **MP**
status redundancy **MP**
stcapp **VR**
stcapp call-control mode **VR**
stcapp ccm-group **VR**
stcapp feature access-code **VR**
stcapp feature callback **VR**
stcapp feature speed-dial **VR**
stcapp register capability **VR**
stcapp security mode **VR**
stcapp security trustpoint **VR**
stcapp supplementary-services **VR**
stcapp timer **VR**
stealth **WSMA**
sticky (firewall farm TCP protocol) **SLB**
sticky (firewall farm datagram protocol) **SLB**
sticky (virtual server) **SLB**
stop-character **DIA**
stopbits **CF**
storage **SEC**
store-rule **SBCD**
storm-control **IR, LSW**
storm-control level **CF, IR**
stream-list **SBCD**
street-address **HA**
strict-http **SEC**
sts-1 **IR**

stub EIGRP, IPV6
stun VR
stun flowdata agent-id VR
stun flowdata catlife VR
stun flowdata keepalive VR
stun flowdata shared-secret VR
stun group IBM
stun keepalive-count IBM
stun peer-name IBM
stun protocol-group IBM
stun quick-response IBM
stun remote-peer-keepalive IBM
stun route address interface dlcI IBM
stun route address interface serial IBM
stun route address tcp IBM
stun route all interface serial IBM
stun route all tcp IBM
stun schema offset length format IBM
stun sdlc-role primary IBM
stun sdlc-role secondary IBM
stun usage firewall-traversal flowdata VR
subaddress VR
subcell-mux VR
subject-alt-name SEC
subject-name SEC, IPV6
subnet prefix-length IAD
subnet-acl (IKEv2 profile) SEC
subnet-acl (IKEv2) SEC
subscribe-to-alert-group HA
subscribe-to-alert-group all HA
subscribe-to-alert-group configuration HA
subscribe-to-alert-group diagnostic HA
subscribe-to-alert-group environment HA
subscribe-to-alert-group inventory HA
subscribe-to-alert-group syslog HA
subscriber SBCD

■ snmp-server enable traps ospf retransmit through u

subscriber access BBA
subscriber access pppoe unique-key circuit-id SEC
subscriber accounting accuracy QOS, ISG
subscriber accounting ssg ISG
subscriber authorization enable BBA
subscriber feature prepaid ISG
subscriber policy recording ISG
subscriber profile BBA
subscriber redundancy BBA, ISG, HA
subscriber service SEC
subscriber trace event ISG
subscriber trace history ISG
subscriber-policy IBM
subscription asnl session history VR
subscription maximum VR
subscription-required MWG
subslot IR
substitute (control policy-map class) VPD
substitute (ruleset) TSV
summary-address (EIGRP) EIGRP
summary-address (IS-IS) IRS
summary-address (OSPF) OSPF
summary-metric EIGRP
summary-prefix (IPv6 IS-IS) IPV6
summary-prefix (OSPFv3) IPV6
supervisory answer dualtone VR
supervisory custom-cptone VR
supervisory disconnect VR
supervisory disconnect anyone VR
supervisory disconnect dualtone VR
supervisory disconnect dualtone voice-class VR
supervisory disconnect lcfo VR
supervisory dualtone-detect-params VR
supervisory sit us VR
supplementary-service h225-notify cid-update (dal peer) VR
supplementary-service h225-notify cid-update (voice-service) VR

supplementary-service h450.12 (dial peer) **VR**
supplementary-service h450.12 (voice-service) **VR**
supplementary-service h450.2 (dial peer) **VR**
supplementary-service h450.2 (voice-service) **VR**
supplementary-service h450.3 (dial peer) **VR**
supplementary-service h450.3 (voice-service) **VR**
supplementary-service h450.7 **VR**
supplementary-service media-renegotiate **VR**
supplementary-service qsig call-forward **VR**
supplementary-service sip **VR**
supported language **VR**
suppress **VR**
suppress-server-encoding enable **WAN**
suspend-resume (SIP) **VR**
svc **ATM**
svc address-pool **SEC**
svc default-domain **SEC**
svc dns-server **SEC**
svc dpd-interval **SEC**
svc dtls **SEC**
svc homepage **SEC**
svc keep-client-installed **SEC**
svc keepalive **SEC**
svc module **SEC**
svc msie-proxy **SEC**
svc msie-proxy server **SEC**
svc mtu **SEC**
svc rekey **SEC**
svc split **SEC**
svc split dns **SEC**
svc wins-server **SEC**
svc-bundle **QOS**
sw-module heap fp **BBA**
switchback interval **VR**
switchback method **VR**
switching tlv **MP**

■ snmp-server enable traps ospf retransmit through u

switching-point **MP**
switchover method **VR**
switchover pxf restart **ISW, CBL**
switchover timeout **CBL**
switchport **IR, IPV6**
switchport access vlan **IR, IPV6**
switchport autostate exclude **IR**
switchport backup **IR**
switchport block unicast **IR**
switchport capture **IR**
switchport capture allowed vlan **IR**
switchport dot1q ethertype **IR**
switchport mode **IR, IPV6**
switchport port-security **SEC, IR**
switchport port-security aging **SEC, IR**
switchport port-security mac-address **SEC, IR**
switchport port-security maximum **SEC, IR**
switchport port-security violation **SEC, IR**
switchport private-vlan host-association **IR**
switchport private-vlan mapping **IR**
switchport protected **IR**
switchport trunk **IR**
switchport vlan mapping **IR**
switchport vlan mapping enable **IR**
switchport voice vlan **IR**
sync **CBL**
sync interval **IR, CE**
sync-restart-delay **CF, IR**
synchronization **BGP**
synchronization (IPv6) **IPV6**
synguard (virtual server) **SLB**
syscon address **IR**
syscon shelf-id **IR**
syscon source-interface **IR**
syslog-throttling **HA**
sysreset **CBL**

systat **CF**
system (ERM policy) **ERM**
system flowcontrol bus **CF, IR**
system jumbo mtu **CF, IR**

T

t1 **IR**
t1 bert **IR**
t1 clock source **IR**
t1 external **IR**
t1 fdl ansi **IR**
t1 framing **IR**
t1 linecode **IR**
t1 logging-events **IR**
t1 span **IR**
t1 span syslog **IR**
t1 test **IR**
t1 through tug-2 e1 unframed **IR**
t1 timeslot **IR**
t1 yellow **IR**
t3-response **MWG**
table-map **BGP**
table-map (value mapping) **QOS**
table-type **SBCD**
tacacs server **SEC, IPV6**
tacacs-server administration **SEC**
tacacs-server administration through title-color **SEC**
tacacs-server directed-request **SEC**
tacacs-server dns-alias-lookup **SEC**
tacacs-server domain-stripping **SEC, VPD**
tacacs-server host **SEC**
tacacs-server key **SEC**
tacacs-server packet **SEC**
tacacs-server timeout **SEC**
tag **CBL**
tag (IP SLA) **SLA**
tag cts sgt **SEC**

■ snmp-server enable traps ospf retransmit through u

tag ppp-max-payload BBA
tag-control-protocol vsi MP
target carrier-id VR
target carrier-id through timeout tsmax VR
target trunk-group-label VR
target-discovery PFR
target-value SEC
tariff-time MWG
tarp allow-caching ISO
tarp arp-request-timer ISO
tarp blacklist-adjacency ISO
tarp cache-timer ISO
tarp enable ISO
tarp global-propagate ISO
tarp ldb-timer ISO
tarp lifetime ISO
tarp map ISO
tarp nselector-type ISO
tarp originate ISO
tarp post-t2-response-timer ISO
tarp propagate ISO
tarp protocol-type ISO
tarp query ISO
tarp resolve ISO
tarp route-static ISO
tarp run ISO
tarp sequence-number ISO
tarp t1-response-timer ISO
tarp t2-response-timer ISO
tarp tid ISO
tarp urc ISO
tbct clear call VR
tbct max call-duration VR
tbct max calls VR
tcam priority IR
tclquit IOS_TCL

tclsafe IOS_TCL
tclsh IOS_TCL
tcp QOS
tcp (blacklist) SBCD
tcp contexts QOS
tcp finwait-time SEC
tcp half-close reset SEC
tcp half-open reset SEC
tcp idle reset SEC
tcp idle-time SEC
tcp max-incomplete SEC
tcp reassembly SEC
tcp reassembly memory limit SEC
tcp syn-flood limit SEC
tcp syn-flood rate per-destination SEC
tcp synwait-time SEC
tcp timer giveup SBCD
tcp window-scale-enforcement loose SEC
tcp-connect SLA
tcp-connect-timeout SBCD
tcp-idle-timeout SBCD
tcp-port IBM
tcs-extra-codecs SBCD
tdm clock priority CF, DIA
tdm-group VR
tech-prefix VR
tech-prefix (session border controller) SBCD
tel-config to-hdr VR
telephony-service VR
telephony-service ccm-compatible (H.323 voice-class) VR
telephony-service ccm-compatible (H.323 voice-service) VR
telnet SEC, TSV, IPV6
telnet break-on-ip TSV
telnet refuse-negotiations TSV
telnet speed TSV
telnet sync-on-break TSV

■ snmp-server enable traps ospf retransmit through u

telnet transparent TSV
template DIA
template (am-group) SLA
template (cns) CNS
template (eoam) CE
template (identity policy) SEC
template (identity profile) SEC
template config SEC
template data timeout FNF, MM
template file SEC
template http admin-introduction SEC
template http completion SEC
template http error SEC
template http introduction SEC
template http start SEC
template http welcome SEC
template location SEC
template peer-policy BGP
template peer-session BGP
template tunnel (mobile networks) IMO
template tunnel (mobile router) IMO
template username SEC
template variable p SEC
term ip netmask-format IAD
terminal data-character-bits CF
terminal databits CF
terminal dispatch-character CF
terminal dispatch-timeout CF
terminal download CF
terminal editing CF
terminal escape-character CF
terminal exec-character-bits CF
terminal flowcontrol CF
terminal full-help CF
terminal history CF
terminal history size CF

terminal hold-character **CF**
terminal international **CF**
terminal keymap-type **CF**
terminal lat out-group **TSV**
terminal lat remote-modification **TSV**
terminal length **CF**
terminal monitor **CF**
terminal notify **CF**
terminal padding **CF**
terminal parity **CF**
terminal rxspeed **CF**
terminal shell **IOS_SHL**
terminal special-character-bits **CF**
terminal speed **CF**
terminal start-character **CF**
terminal stop-character **CF**
terminal stopbits **CF**
terminal telnet break-on-ip **CF**
terminal telnet refuse-negotiations **CF**
terminal telnet speed **CF**
terminal telnet sync-on-break **CF**
terminal telnet transparent **CF**
terminal terminal-type **CF**
terminal transport preferred **TSV**
terminal txspeed **CF**
terminal width **CF**
terminal-queue entry-retry-interval **CF**
terminal-type **CF**
terminate-from **VPD**
terminating-pe tie-breaker **MP**
termination **IR**
termination-id rootidname **SBCD**
test (event trigger) **SNMP**
test (ruleset) **TSV**
test aaa group **SEC**
test aim eeprom **IR**

■ snmp-server enable traps ospf retransmit through u

test appletalk ATK
test cable dcc (Supporting Dynamic Channel Change) CBL
test cable voice CBL
test cable-diagnostics CF, IR
test cable-diagnostics through xmodem CF
test cef table consistency ISW
test content-scan SEC
test crypto self-test SEC
test flash CF
test interface fastethernet IR
test interfaces CF
test memory CF
test memory destroy CF
test modem back-to-back DIA
test packetcable gate create CBL
test packetcable gc client-accept CBL
test packetcable gc gate-alloc CBL
test packetcable gc gate-delete CBL
test packetcable gc gate-info CBL
test packetcable gc gate-set multimedia CBL
test packetcable gc initiate CBL
test platform debugger rommon IR
test platform police get CF, IR
test platform police ipv6 disable IR
test platform police set CF, IR
test port modem back-to-back DIA
test satellite satellite mfg link IR
test satellite satellite reset IR
test sbc message sip filename script-set editors SBCD
test sbc profile-to-editor sip SBCD
test script-set SBCD
test service-module IR
test sgi xml ISG
test snmp trap auth-framework sec-violation SNMP
test snmp trap bridge SNMP
test snmp trap c6kxbar SNMP

test snmp trap call-home **SNMP**
test snmp trap config-copy **SNMP**
test snmp trap dhcp bindings **SNMP**
test snmp trap dhcp-snooping bindings **SNMP**
test snmp trap dot1x **SNMP**
test snmp trap entity-diag **SNMP**
test snmp trap errdisable ifevent **SNMP**
test snmp trap flex-links status **SNMP**
test snmp trap fru-ctrl **SNMP**
test snmp trap l2-control vlan **SNMP**
test snmp trap l2tc **SNMP**
test snmp trap mac-notification **SNMP**
test snmp trap module-auto-shutdown **SNMP**
test snmp trap port-security **SNMP**
test snmp trap power-ethernet port-on-off **SNMP**
test snmp trap snmp **SNMP**
test snmp trap stack **SNMP**
test snmp trap storm-control **SNMP**
test snmp trap stpx **SNMP**
test snmp trap syslog **SNMP**
test snmp trap trustsec **SNMP**
test snmp trap trustsec-interface **SNMP**
test snmp trap trustsec-policy **SNMP**
test snmp trap trustsec-server **SNMP**
test snmp trap trustsec-sxp **SNMP**
test snmp trap udld **SNMP**
test snmp trap vswitch dual-active **SNMP**
test snmp trap vswitch vsl **SNMP**
test snmp trap vtp **SNMP**
test snmp trap vtp pruning-change **SNMP**
test translate **TSV**
test trunk **IR**
test urlf cache snapshot **SEC**
test virtual-template subinterface **BBA**
text relay modulation **VR**
text relay protocol **VR**

■ snmp-server enable traps ospf retransmit through u

text relay rtp VR
text-color SEC
tfo auto-discovery blacklist WAN
tfo optimize WAN
tftp-server CF
tftp-server system CF
tg (CMPC) IBM
tg (CMPC+) IBM
tg delay IBM
tgid-context SBCD
tgid-routing SBCD
tgrep address-family VR
tgrep advertise (dial peer) VR
tgrep advertise (trunk group) VR
tgrep local-itad VR
thaug mapping IR
threshold value (policy-react and policy-inline-react) MM
threat-detection basic-threat SEC
threat-detection rate SEC
threshold CBL
threshold (IP SLA video) SLA
threshold (IP SLA) SLA
threshold (ISG) ISG
threshold de WAN
threshold ecn WAN
threshold metric IAP
threshold metric through track timer IAP
threshold noise VR
threshold percentage IAP
threshold weight IAP
throttle SEC
throttle (router configuration) RIP
throughput OER
throughput (PfR) PFR
time-offset SBCD
time-out TSV

time-period **BSM, CF**
time-range **BSM**
timeout **SBCD**
timeout (GTP) **SEC**
timeout (IP SLA video) **SLA**
timeout (IP SLA) **SLA**
timeout (LSP discovery) **SLA**
timeout (TACACS+) **SEC, IPV6**
timeout (application firewall application-configuration) **SEC**
timeout (auto-config application) **VR**
timeout (config-radius-server) **SEC**
timeout (custom UDP probe) **SLB**
timeout (monitor parameters) **MM**
timeout (parameter-map) **SEC**
timeout (policy group) **SEC**
timeout (twamp) **SLA**
timeout absolute **DIA**
timeout absolute (ISG) **ISG**
timeout file download **SEC**
timeout idle **ISG**
timeout leg3 **VR**
timeout login response **SEC**
timeout ptt **VR**
timeout retransmit **SEC**
timeout setup **WAN**
timeout tcrit **VR**
timeout tdinit **VR**
timeout tdmax **VR**
timeout tdmin **VR**
timeout thist **VR**
timeout tone busy **VR**
timeout tone cot1 **VR**
timeout tone cot2 **VR**
timeout tone dial **VR**
timeout tone dial stutter **VR**
timeout tone mwi **VR**

■ snmp-server enable traps ospf retransmit through u

timeout tone network VR
timeout tone reorder VR
timeout tone ringback VR
timeout tone ringback connection VR
timeout tone ringing VR
timeout tone ringing distinctive VR
timeout tpar VR
timeout tsmax VR
timeouts (SSG-radius-proxy) SSG
timeouts call-disconnect VR
timeouts call-disconnect through timing clear-wait VR
timeouts initial VR
timeouts interdigit (voice port) VR
timeouts power-denial VR
timeouts ringing VR
timeouts teardown lmr VR
timeouts wait-release VR
timer MWG, DIA
timer (Diameter peer) SEC
timer (Ethernet ring) CE
timer (ISG RADIUS proxy) ISG
timer accessrequest sequential delay VR
timer cluster-element VR
timer inactivity SLA
timer irr period VR
timer lrq seq delay VR
timer lrq seq delay centisec VR
timer lrq window VR
timer lrq window decisecond VR
timer media-inactive VR
timer reauthentication (config-if-cts-dot1x) SEC
timer receive-rtcp VR
timer receive-rtp VR
timer server retry VR
timer server timeout VR
timers VR

timers (IPv6 RIP) **IPV6**
timers active-time **EIGRP, IPV6**
timers basic (ISO CLNS) **ISO**
timers basic (ODR) **ODR**
timers basic (RIP) **RIP**
timers bgp **BGP**
timers buffer-invite **VR**
timers comet **VR**
timers connect **VR**
timers connection aging **VR**
timers delay **SEC**
timers disconnect **VR**
timers dns **VR**
timers expires **VR**
timers graceful-restart purge-time **EIGRP, SAF**
timers hello-time **IAD, SEC**
timers hold **VR**
timers keepalive **VR**
timers lsa arrival **IPV6, OSPF**
timers notify **VR**
timers nsf converge **EIGRP, HA**
timers nsf route-hold **EIGRP, HA**
timers nsf signal **EIGRP, HA**
timers pacing flood **OSPF**
timers pacing flood (OSPFv3) **IPV6**
timers pacing lsa-group **OSPF**
timers pacing lsa-group (OSPFv3) **IPV6**
timers pacing retransmission **OSPF**
timers pacing retransmission (OSPFv3) **IPV6**
timers prack **VR**
timers refer **VR**
timers register **IPV6, VR**
timers re1xx **VR**
timers spf (IPv6) **IPV6**
timers throttle lsa **IPV6**
timers throttle lsa all **OSPF**

■ snmp-server enable traps ospf retransmit through u

timers throttle spf IPV6, OSPF
timers trying VR
timeslot IR
timestamp CBL
timezone-offset SBCD
timing clear-wait VR
timing delay-duration VR
timing delay-duration through type (voice) VR
timing delay-start VR
timing delay-voice tdm VR
timing delay-with-integrity VR
timing dial-pulse min-delay VR
timing dialout-delay VR
timing digit VR
timing guard-out VR
timing hangover VR
timing hookflash-input VR
timing hookflash-output VR
timing ignore m-lead VR
timing interdigit VR
timing opx-ringwait VR
timing percentbreak VR
timing pulse VR
timing pulse-interdigit VR
timing sup-disconnect VR
timing wait-wink VR
timing wink-duration VR
timing wink-wait VR
timing-mark IBM
title SEC
title-color SEC
tls VR
tls mutual authentication SBCD
tlv MP, CBL
tlv template MP
tmax baseroot SBCD

tmax-timer **SBCD**
tn3270 **TSV**
tn3270 8bit display **TSV**
tn3270 8bit transparent-mode **TSV**
tn3270 character-map **TSV**
tn3270 datastream **TSV**
tn3270 null-processing **TSV**
tn3270 optimize-cursor-move **TSV**
tn3270 reset-required **TSV**
tn3270 status-message **TSV**
tn3270 typeahead **TSV**
tn3270-server **IBM**
tod **IR, CE**
toggle-between-two-calls **VR**
token-root-name **VR**
tone busytone **VR**
tone dialtone **VR**
tone incoming **VR**
tone incoming system **VR**
top **NF**
topology **SAF**
topology (BGP) **MTR**
topology (EIGRP) **EIGRP, MTR**
topology (IS-IS) **MTR**
topology (OSPF) **MTR**
topology (global) **MTR**
topology (interface) **MTR**
topology-accounting **MTR**
tos **CBL**
tos (IP SLA) **SLA**
tos (multicast qos) **CBL**
total resource maximum **SBCD**
trace (privileged) **CF**
trace (user) **CF**
trace filter endpoint address ipv4 (session border controller) **SBCD**
trace-route **MM**

■ snmp-server enable traps ospf retransmit through u

traceroute CF, IPV6, MTR
traceroute ethernet CE
traceroute ethernet evc CE
traceroute ethernet vlan CE
traceroute mac CF
traceroute mpls MP
traceroute mpls multipath MP
traceroute probe-delay OER
traceroute probe-delay (PfR) PFR
track IAP
track (VRRP) FHP
track (firewall) SEC
track abcd IAP
track application IAP
track id application home-agent MWH
track interface IAP, IPV6
track ip route IAP
track ip sla IAP, SLA
track list IAP
track resolution IAP
track rtr IAP, SLA
track stub-object IAP, EEM
track timer IAP
track(firewall) SEC
tracking IPV6, SEC
traffic-class MWG, WL
traffic-class (IP SLA) SLA
traffic-class access-list OER
traffic-class access-list (PfR) PFR
traffic-class aggregate OER
traffic-class aggregate (PfR) PFR
traffic-class application OER
traffic-class application (PfR) PFR
traffic-class application nbar OER
traffic-class application nbar (PfR) PFR
traffic-class filter OER

traffic-class filter (PfR) [PFR](#)
traffic-class keys [OER](#)
traffic-class keys (PfR) [PFR](#)
traffic-class prefix-list [OER](#)
traffic-class prefix-list (PfR) [PFR](#)
traffic-engineering filter [MP](#)
traffic-engineering route [MP](#)
traffic-export [SEC](#)
traffic-export through zone security [SEC](#)
traffic-shape adaptive [QOS](#)
traffic-shape fecn-adapt [QOS](#)
traffic-shape group [QOS](#)
traffic-shape rate [QOS](#)
traffic-share balanced [EIGRP](#)
traffic-share min [IRI](#)
transaction-pending [SBCD](#)
transceiver type all [IR](#)
transcode cost [SBCD](#)
transcode maximum [SBCD](#)
transcode-deny [SBCD](#)
transcoder [SBCD](#)
transcoding [SBCD](#)
transcoding-stats enable [SBCD](#)
transfer [VR](#)
transfer-encoding type [SEC](#)
translate [VR](#)
translate (session border controller) [SBCD](#)
translate (translation profiles) [VR](#)
translate lat [TSV](#)
translate lat (virtual access interfaces) [TSV](#)
translate ruleset [TSV](#)
translate tcp [TSV](#)
translate tcp (virtual access interfaces) [TSV](#)
translate use telnet [TSV](#)
translate x25 [TSV](#)
translate x25 (virtual access interfaces) [TSV](#)

■ snmp-server enable traps ospf retransmit through u

translate-outgoing VR
translation-profile (dial peer) IPV6, VR
translation-profile (source group) VR
translation-profile (trunk group) VR
translation-profile (voice port) VR
translation-profile (voice service POTS) VR
translation-rule VR
transmit-buffers backing-store IR
transmit-clock-internal IR
transmit-interface IR
transmit-priority ATM
transmitter-delay IR
transport MWG, VR
transport (Flexible NetFlow) FNF, MM
transport (SBE H.248) SBCD
transport (WSMA initiator) WSMA
transport (WSMA listener) WSMA
transport (WSMA) WSMA
transport (session border controller) SBCD
transport event CNS
transport input TSV
transport interface TSV
transport ipv4 IR
transport ipv4 (PTP) IR, CE
transport output TSV
transport port SEC
transport port (ldap) SEC
transport preferred TSV
transport switch VR
transport type console TSV
transport type persistent TSV
transport vpls mesh MP
transport-map type console TSV
transport-map type persistent TSV
transport-mode IR
transrate audio cost SBCD

transrate audio maximum **SBCD**
transrating **SBCD**
trap-enable **PFR**
tree-init **SLA**
trigger **MWG**
trigger (EEM) **EEM**
trigger-log-percentage **PFR**
trigger-period **SBCD**
trigger-size **SBCD**
trm register **SEC**
trunk activate port-threshold **DIA**
trunk group (global) **VR, DIA**
trunk trusted **SBCD**
trunk-group (CAS custom) **VR**
trunk-group (interface) **VR**
trunk-group (timeslots) **DIA**
trunk-group (voice port) **VR**
trunk-group-label (dial peer) **VR**
trunk-group-label (voice source group) **VR**
trunkgroup (dial peer) **VR**
trust **QOS, ISG**
trusted **IPV6**
trusted-port (DHCPv6 Guard) **IAD**
trusted-port (IPv6 ND Inspection Policy) **IPV6**
trusted-port (IPv6 NDP Inspection Policy) **IPV6, SEC**
trusted-port (IPv6 RA Guard Policy) **IPV6, SEC**
trustpoint (DSP farm profile) **VR**
trustpoint (tti-petitioner) **SEC**
trustpoint signing **SEC**
ts16 **IR**
ttb **IR**
ttl **VR**
ttl (Flexible NetFlow) **FNF, MM**
ttl (IP SLA) **SLA**
ttl (IP multiplexing) **IMO**
ttl-security all-interfaces **OSPF**

■ snmp-server enable traps ospf retransmit through u

ttycap **TSV**
tug-2 e1 **IR**
tug-2 e1 bert pattern **IR**
tug-2 e1 channel-group timeslots **IR**
tug-2 e1 clock source **IR**
tug-2 e1 framing **IR**
tug-2 e1 loopback **IR**
tug-2 e1 national bits **IR**
tug-2 e1 shutdown **IR**
tug-2 e1 unframed **IR**
tunnel **DIA**
tunnel 6rd br **IPV6**
tunnel 6rd ipv4 **IPV6**
tunnel 6rd prefix **IPV6**
tunnel bandwidth **IR**
tunnel bandwidth through yellow **IR**
tunnel checksum **IR**
tunnel destination **IR, IPV6**
tunnel destination access-list **MP**
tunnel destination list mpls traffic-eng **MP**
tunnel destination mesh-group **MP**
tunnel flow egress-records **MP**
tunnel key **IR**
tunnel mode **SEC, IR, IPV6**
tunnel mode gre **IMO**
tunnel mode ipv6ip **IPV6**
tunnel mode mpls traffic-eng **MP**
tunnel mode mpls traffic-eng point-to-multipoint **MP**
tunnel mpls traffic-eng affinity **MP**
tunnel mpls traffic-eng auto-bw **MP**
tunnel mpls traffic-eng autoroute announce **MP**
tunnel mpls traffic-eng autoroute destination **MP**
tunnel mpls traffic-eng autoroute metric **MP**
tunnel mpls traffic-eng backup-bw **MP**
tunnel mpls traffic-eng bandwidth **MP**
tunnel mpls traffic-eng exp **MP**

tunnel mpls traffic-eng exp-bundle master MP
tunnel mpls traffic-eng exp-bundle member MP
tunnel mpls traffic-eng fast-reroute MP
tunnel mpls traffic-eng forwarding-adjacency MP
tunnel mpls traffic-eng interface down delay MP
tunnel mpls traffic-eng load-share MP
tunnel mpls traffic-eng name MP
tunnel mpls traffic-eng path-option MP
tunnel mpls traffic-eng path-option protect MP
tunnel mpls traffic-eng path-selection metric MP
tunnel mpls traffic-eng priority MP
tunnel mpls traffic-eng record-route MP
tunnel mtu IMO
tunnel nat IMO
tunnel path-mtu-discovery IR
tunnel protection SEC
tunnel rbscp ack_split IR
tunnel rbscp delay IR
tunnel rbscp input_drop IR
tunnel rbscp long_drop IR
tunnel rbscp report IR
tunnel rbscp window_stuff IR
tunnel route-via IR
tunnel sequence-datagrams IR
tunnel source IR, IPV6
tunnel tos IR
tunnel tsp-hop MP
tunnel ttl IR
tunnel udlr address-resolution IMC
tunnel udlr receive-only IMC
tunnel udlr send-only IMC
tunnel vrf MP, IR
tunnel-limit (GTP) SEC
tx-limit ATM
tx-queue-limit IR
tx-ring-limit QOS

■ snmp-server enable traps ospf retransmit through u

tx-timeout MWG
txspeed TSV
type (media policy) SBCD
type (script) SBCD
type (settlement) VR
type (test existence) SNMP
type (voice) VR
type copy MP
type dhcp SLA
type dlsw peer-ipaddr SLA
type dns target-addr SLA
type echo (MPLS) SLA
type echo domain SLA
type ftp operation get url SLA
type http operation SLA
type jitter dest-ipaddr SLA
type jitter dest-ipaddr (codec) SLA
type jitter domain SLA
type mpls lsp ping ipv4 SLA
type mpls lsp trace ipv4 SLA
type voip delay gatekeeper registration SLA
type voip delay post-dial SLA

U

ubr ATM
ubr+ ATM
ubr+ cos ATM
uc wsapi VR
ucse cmos-reset IR
ucse heartbeat-reset IR
ucse imc config IR
ucse imc file delete IR
ucse imc file download IR
ucse password-reset IR
ucse server boot IR
ucse server boot order IR
ucse server erase device hdd IR

ucse server raid level **IR**
ucse server reload boot **IR**
ucse server reset boot **IR**
ucse server start boot **IR**
ucse session **IR**
ucse shutdown **IR**
ucse statistics **IR**
ucse status **IR**
ucse stop **IR**
ucse subslot server password-reset **IR**
ucse subslot imc password-reset **IR**
ucse subslot server **IR**
ucse subslot shutdown **IR**
ucse subslot statistics **IR**
ucse subslot status **IR**
udld **LSW**
udld port **LSW**
udld recovery **LSW**
udld reset **LSW**
udld through vtp v2-mode **LSW**
udp (blacklist) **SBCD**
udp half-open **SEC**
udp idle-time **SEC**
udp port **MP**
udp-echo **SLA**
udp-first-retransmit-interval **SBCD**
udp-jitter **SLA**
udp-jitter (codec) **SLA**
udp-max-retransmit-interval **SBCD**
udp-port **IMC**
udp-response-linger-period **SBCD**
udp-retransmit-interval **SBCD**
unalias **CBL**
unbind-action **IBM**
unbundle vfc **VR**
undelete **CF**

■ snmp-server enable traps ospf retransmit through u

unexpected-source-alerting **SBCD**
unexpected-source-alerting (session border controller) **SBCD**
uni count **CE**
unidirectional **IR**
unmatched-action **SEC**
unprofile **CF**
unreachable **OER**
unreachable (PfR) **PFR**
unset **CBL**
update arp **IAD**
update dns **IAD**
update-source (bmp) **BGP**
upgrade automatic abortversion **CF**
upgrade automatic getversion **CF**
upgrade automatic runversion **CF**
upgrade filesystem monlib **CF**
upgrade fpd auto **IR**
upgrade fpd path **IR**
upgrade fpga **IR**
upgrade fpga all **IR**
upgrade fpga auto-upgrade **CBL**
upgrade fpga file **CBL**
upgrade hw-module slot **IR**
upgrade hw-module slot fpd file **IR**
upgrade hw-module subslot **IR**
upgrade hw-module subslot fpd file **IR**
upgrade hw-programmable **IR**
upgrade rom-monitor **CF**
upgrade rom-monitor default **IR**
upgrade rom-monitor preference **CF**
upgrade satellite satellite **IR**
upstream **CBL**
upstream (config-lb-group) **CBL**
upstream cable connector **CBL**
upstream freq-range **CBL**
uri username parameters parse **SBCD**

url VR
url (SIP) VR
url (WSP probe) SLB
url (bulk statistics) SNMP
url (dial peer) VR
url (ips-auto-update) SEC
url rewrite SEC
url-list SEC
url-profile SEC
url-text SEC
urlfilter SEC
usage SEC
usage-indication VR
use-any-local-port SBCD
use-proxy VR
use-time-offset SBCD
use-topology MTR
user SEC, WL
user (ERM) ERM
user passthrough maximum SSG
user suspect maximum SSG
user suspect timeout SSG
user unidentified timeout SSG
user unidentified traffic permit SSG
user-group SEC
user-group (parameter-map) SEC
user-group logging SEC
user-id VR
user-profile location SEC
username SEC
username (IOS SLB) SLB
username (SAF) SAF
username (dot1x credentials) SEC
username (ips-autoupdate) SEC
username mac SSG
username secret SEC

```
■ snmp-server enable traps ospf retransmit through u
```

utilization mark high IAD

utilization mark low IAD



v through z

- [Finding IOS Command Information, page 557](#)
- [v through z, page 560](#)

Finding IOS Command Information

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This document contains a list of the commands supported in many different software releases and on many different platforms. Some of the commands may not be supported in your Cisco IOS software release. To search for a command, use the alphabet key at the top part of this document and then scroll down until you find the command of interest, or use the Find function in your web browser. To access the documentation for a particular command, click the link to the command reference designator to the right of the command name. This list is intended to be used online only.

Alternatively, you may search for commands using the Command Lookup Tool (<https://tools.cisco.com/Support/CLILookup>), where you will be prompted to provide your Cisco.com username and password.

Table 16: Command Reference Designators

ANCP	Cisco IOS Access Node Control Protocol Command Reference
ATK	Cisco IOS AppleTalk Command Reference
AN	Cisco IOS Autonomic Networking Command Reference
ATM	Cisco IOS Asynchronous Transfer Mode Command Reference
BBA	Cisco IOS Broadband Access Aggregation and DSL Command Reference
BGP	Cisco IOS IP Routing: BGP Command Reference
BR	Cisco IOS Bridging Command Reference
CE	Cisco IOS Carrier Ethernet Command Reference
CF	Cisco IOS Configuration Fundamentals Command Reference

CSA	Cisco IOS Software Activation Command Reference
DB	Cisco IOS Debug Command Reference
DEC	Cisco IOS DECnet Command Reference
DIA	Cisco IOS Dial Technologies Command Reference
EIGRP	Cisco IOS IP Routing: EIGRP Command Reference
EM	Cisco IOS Embedded Menu Manager Command Reference
FHP	Cisco IOS First Hop Redundancy Protocols Command Reference
FNF	Cisco IOS Flexible NetFlow Command Reference
HA	Cisco IOS High Availability Command Reference
IAD	Cisco IOS IP Addressing Services Command Reference
IAP	Cisco IOS IP Application Services Command Reference
IBM	Cisco IOS IBM Networking Command Reference
IMC	Cisco IOS IP Multicast Command Reference
IMO	Cisco IOS IP Mobility Command Reference
IPV6	Cisco IOS IPv6 Command Reference
IPX	Cisco IOS Novell IPX Command Reference
IR	Cisco IOS Interface and Hardware Component Command Reference
IRI	Cisco IOS IP Routing: Protocol-Independent Command Reference
IRS	Cisco IOS IP Routing: ISIS Command Reference
ISG	Cisco IOS Intelligent Services Gateway Command Reference
ISO	Cisco IOS ISO CLNS Command Reference
ISW	Cisco IOS IP Switching Command Reference
LISP	Cisco IOS IP Routing: LISP Command Reference
LSW	Cisco IOS LAN Switching Command Reference
MM	Cisco IOS Media Monitoring Command Reference
MP	Cisco IOS Multiprotocol Label Switching Command Reference
MSP	Cisco IOS Media Services Proxy Command Reference
MTR	Cisco IOS Multi-Topology Routing Command Reference
MWG	Cisco IOS Mobile Wireless Gateway GPRS Support Node Command Reference
MWH	Cisco IOS Mobile Wireless Home Agent Command Reference
MWP	Cisco IOS Mobile Wireless Radio Access Networking Command Reference
MWR	Cisco IOS Mobile Wireless Radio Access Networking Command Reference

NF	Cisco IOS NetFlow Command Reference
NM	Cisco IOS Network Management Command Reference
ODR	Cisco IOS IP Routing: ODR Command Reference
OER	Cisco IOS Optimized Edge Routing Command Reference
OSPF	Cisco IOS IP Routing: OSPF Command Reference
PFR	Cisco IOS Performance Routing Command Reference
QOS	Cisco IOS Quality of Service Solutions Command Reference
RIP	Cisco IOS IP Routing: RIP Command Reference
SAF	Cisco IOS Service Advertisement Framework Command Reference
SBCD	Cisco Unified Border Element (SP Edition) Command Reference: Distributed Model
SBCU	Cisco Unified Border Element (SP Edition) Command Reference: Unified Model
SEC	Cisco IOS Security Command Reference
SLA	Cisco IOS IP SLAs Command Reference
SLB	Cisco IOS Server Load Balancing Command Reference
SM	Cisco IOS Software Modularity Command Reference
SSG	Cisco IOS Service Selection Gateway Command Reference
TSV	Cisco IOS Terminal Services Command Reference
VPD	Cisco IOS VPDN Command Reference
VR	Cisco IOS Voice Command Reference
VS	Cisco IOS Virtual Switch Command Reference
WAN	Cisco IOS Wide-Area Networking Command Reference
WL	Cisco IOS Wireless LAN Command Reference

v through z

v

vacant-message [CF](#)
vad (SPA-DSP) [VR](#)
vad (dial peer) [VR](#)
vad (dial peer) through voice-class sip encap clear-channel [VR](#)
validate source-mac [IPV6](#), [SEC](#)
validate-update-source [RIP](#)
value (test boolean) [SNMP](#)
value type [SNMP](#)
variable [SEC](#)
variance (EIGRP) [EIGRP](#), [IPV6](#)
variant [SBCD](#)
variant (codec variant profile) [SBCD](#)
vbd-playout-delay [VR](#)
vbr-nrt [ATM](#), [QOS](#)
vbr-rt [ATM](#), [VR](#)
vc type [MP](#)
vc-class atm [ATM](#)
vc-group [WAN](#)
vc-hold-queue [QOS](#)
vcci [VR](#)
vccv [IRI](#)
vccv bfd status signaling [IRI](#)
vccv bfd template [IRI](#)
vdbe [SBCD](#)
vdbe (session border controller) [SBCD](#)
ve [BGP](#), [MP](#)
vendor-tag circuit-id service [BBA](#)
vendor-tag circuit-id strip [BBA](#)
vendor-tag remote-id service [BBA](#)
vendor-tag strip [BBA](#)
verify [CF](#)
verify-data (IP SLA) [SLA](#)

version [RIP](#)
video (IP SLA) [SLA](#)
video codec (dial peer) [VR](#)
video codec (voice class) [VR](#)
video screening [VR](#)
video-content [SLA](#)
view [SEC](#)
view (DNS) [IAD](#)
violation [VR](#)
violation (media profile) [VR](#)
virtual [SLB](#), [MWH](#)
virtual-address [MWG](#)
virtual-profile aaa [DIA](#)
virtual-profile if-needed [DIA](#)
virtual-profile virtual-template [BBA](#), [IPV6](#), [DIA](#)
virtual-template [VPD](#)
virtual-template (BBA group) [BBA](#)
virtual-template (IKEv2 profile) [SEC](#)
virtual-template (webvpn context) [SEC](#)
virtual-template pre-clone [BBA](#)
virtual-template snmp [BBA](#)
vlan (SSID configuration mode) [WL](#)
vlan (VLAN) [LSW](#)
vlan (global) [LSW](#)
vlan (local RADIUS server group) [SEC](#)
vlan access-log [LSW](#)
vlan access-map [LSW](#)
vlan accounting [LSW](#)
vlan database [LSW](#)
vlan dot1q tag native [LSW](#)
vlan filter [LSW](#)
vlan group [SEC](#)
vlan ifdescr detail [LSW](#)
vlan internal allocation policy [LSW](#)
vlan mapping dot1q [LSW](#)
vlan port provisioning [LSW](#)

vlan-id dot1q **BBA**
vlan-range dot1q **BBA**
vmwi **VR**
vnet **EIGRP, EVN**
vnet tag **EVN**
vnet trunk **EVN**
vofr **VR**
voice **VR**
voice call capacity mir **VR**
voice call capacity reporting **VR**
voice call capacity stw **VR**
voice call capacity timer interval **VR**
voice call convert-discpi-to-prog **VR**
voice call csr data-points **VR**
voice call csr recording interval **VR**
voice call csr reporting interval **VR**
voice call debug **DB, VR**
voice call disc-pi-off **VR**
voice call rate monitor **VR**
voice call send-alert **VR**
voice call trap deviation **VR**
voice call trigger hwm **VR**
voice call trigger lwm **VR**
voice call trigger percent-change **VR**
voice cause-code **VR**
voice class aaa **VR**
voice class busyout **VR**
voice class called number **VR**
voice class cause-code **VR**
voice class codec **VR**
voice class custom-cptone **VR**
voice class dscp-profile **VR**
voice class dualtone **VR**
voice class dualtone-detect-params **VR**
voice class e164-pattern-map **VR**
voice class e164-pattern-map load **VR**

voice class h323 VR
voice class media VR
voice class permanent VR
voice class resource-group VR
voice class sip-copylist VR
voice class sip-profiles VR
voice class tone-signal VR
voice class uri VR
voice class uri sip preference VR
voice confirmation-tone VR
voice dnis-map VR
voice dnis-map load VR
voice dsp crash-dump VR
voice echo-canceller extended VR
voice enum-match-table VR
voice hpi capture VR
voice hunt VR
voice iec syslog VR
voice local-bypass VR
voice mlpp VR
voice pcm capture VR
voice rtp send-recv VR
voice service IPV6, VR
voice source-group VR
voice statistics accounting method VR
voice statistics display-format separator VR
voice statistics field-params VR
voice statistics max-storage-duration VR
voice statistics push VR
voice statistics time-range VR
voice statistics type csr VR
voice statistics type iec VR
voice translation-profile VR
voice translation-rule VR
voice vad-time VR
voice vrf VR

voice-card VR
voice-class aaa (dial peer) VR
voice-class called-number (dial peer) VR
voice-class called-number-pool VR
voice-class codec (dial peer) VR
voice-class h323 (dial peer) VR
voice-class permanent (dial-peer) VR
voice-class permanent (voice-port) VR
voice-class sip anat IPV6, VR
voice-class sip asserted-id VR
voice-class sip associate registered-number VR
voice-class sip asymmetric payload VR
voice-class sip authenticate redirecting-number VR
voice-class sip bind VR
voice-class sip block VR
voice-class sip call-route VR
voice-class sip calltype-video VR
voice-class sip copy-list VR
voice-class sip e911 VR
voice-class sip encapsulate clear-channel VR
voice-class sip error-code-override VR
voice-class sip error-code-override through vxml version 2.0 VR
voice-class sip g729 annexb-all VR
voice-class sip history-info VR
voice-class sip localhost VR
voice-class sip map resp-code VR
voice-class sip options-keepalive VR
voice-class sip outbound-proxy IPV6, VR
voice-class sip preloaded-route VR
voice-class sip privacy VR
voice-class sip privacy-policy VR
voice-class sip random-contact VR
voice-class sip random-request-uri validate VR
voice-class sip referto-passing VR
voice-class sip registration passthrough VR
voice-class sip rel1xx VR

voice-class sip reset timer expires **VR**
voice-class sip resource priority dscp-profile **VR**
voice-class sip resource priority mode (dial-peer) **VR**
voice-class sip resource priority namespace (dial-peer) **VR**
voice-class sip rsvp-fail-policy **VR**
voice-class sip send 180 sdp **VR**
voice-class sip srtp negotiate **VR**
voice-class sip tel-config to-hdr **VR**
voice-class sip transport switch **VR**
voice-class sip url **VR**
voice-class source interface **IPV6, VR**
voice-class stun-usage **VR**
voice-class tone-signal **VR**
voice-port **CBL, VR**
voice-port (MGCP profile) **VR**
voice-port busyout **VR**
voice-service dsp-reservation **VR**
voicecap configure **VR**
voicecap entry **VR**
voicemail (stcapp-fsd) **VR**
voiceport **VR**
voip delay gatekeeper-registration **SLA**
voip delay post-dial **SLA**
voip rtp **SLA**
voip trunk group **VR**
voip-incoming translation-profile **VR**
voip-incoming translation-rule **VR**
volume **VR**
vpdn aaa attribute **SEC, VPD**
vpdn aaa override-server **VPD**
vpdn aaa untagged **VPD**
vpdn authen-before-forward **VPD**
vpdn authorize directed-request **VPD**
vpdn authorize domain **BBA, VPD**
vpdn domain-delimiter **VPD**
vpdn enable **VPD**

vpdn group **VPD**
vpdn history failure **VPD**
vpdn history failure cause normal **VPD**
vpdn incoming **VPD**
vpdn ip udp ignore checksum **VPD**
vpdn l2tp attribute **VPD**
vpdn l2tp attribute clid mask-method **VPD**
vpdn logging **VPD**
vpdn logging cause normal **VPD**
vpdn multihop **VPD**
vpdn outgoing **VPD**
vpdn pmtu **VPD**
vpdn profile **VPD**
vpdn redirect **VPD**
vpdn redirect attempts **VPD**
vpdn redirect identifier **VPD**
vpdn redirect source **VPD**
vpdn search-order **VPD**
vpdn session accounting **VPD**
vpdn session-limit **VPD**
vpdn softshut **VPD**
vpdn source-ip **VPD**
vpdn tunnel accounting network **VPD**
vpdn tunnel authorization network **VPD**
vpdn tunnel authorization password **VPD**
vpdn tunnel authorization virtual-template **VPD**
vpdn-group **VPD**
vpdn-template **VPD**
vpls-id **MP, WAN**
vpn **MP, VPD, IPV6**
vpn (session border controller) **SBCD**
vpn id **MP**
vpn id (mpls) **MP**
vpn service **BBA**
vrf **MWG, SBCD**
vrf (DHCP pool) **IAD**

vrf (DHCPv6 pool) [IAD, IPV6](#)
vrf (IP SLA) [SLA](#)
vrf (ca-trustpoint) [SEC](#)
vrf (ca-trustpool) [SEC](#)
vrf (call home) [HA](#)
vrf (isakmp profile) [SEC](#)
vrf (multicast qos) [CBL](#)
vrf (router configuration) [IRS](#)
vrf (session border controller) [SBCD](#)
vrf definition [MP, IPV6, EVN](#)
vrf forwarding [MP, IPV6, EVN](#)
vrf list [EVN](#)
vrf selection source [MP](#)
vrf upgrade-cli [MP](#)
vrf-name [SEC](#)
vrfid (proxy mobile IPv6) [IMO](#)
vrfname [SEC](#)
vrn [IBM](#)
vrrp authentication [FHP](#)
vrrp authentication through vrrs mac-address [FHP](#)
vrrp delay [FHP](#)
vrrp description [FHP](#)
vrrp ip [FHP](#)
vrrp name [FHP](#)
vrrp preempt [FHP](#)
vrrp priority [FHP](#)
vrrp shutdown [FHP](#)
vrrp sso [FHP, HA](#)
vrrp timers advertise [FHP](#)
vrrp timers learn [FHP](#)
vrrp track [FHP](#)
vrrs [FHP](#)
vrrs follow [FHP](#)
vrrs interface-state [FHP](#)
vrrs mac-address [FHP](#)
vtg [IR](#)

vtp **CF**
vtp (global) **LSW**
vtp (interface) **LSW**
vtp client **LSW**
vtp domain **LSW**
vtp password **LSW**
vtp server **LSW**
vtp transparent **LSW**
vtp v2-mode **LSW**
vty-async **DIA**
vty-async dynamic-routing **DIA**
vty-async header-compression **DIA**
vty-async ipx ppp-client loopback **DIA**
vty-async keepalive **DIA**
vty-async mtu **DIA**
vty-async ppp authentication **DIA**
vty-async ppp use-tacacs **DIA**
vty-async virtual-template **DIA**
vxml allow-star-digit **VR**
vxml audioerror **VR**
vxml tree memory **VR**
vxml version 2.0 **VR**

W

waas cm-register url **WAN**
waas config **WAN**
waas enable **WAN**
waas export **WAN**
waas-ssl-trustpoint **WAN**
wanphy flag j1 transmit **IR**
wanphy report-alarm **IR**
wanphy threshold **IR**
warm-reboot **CF**
warrant match-order **SBCD**
warrant match-order (h323) **SBCD**
watcher all **VR**
web-agent-url **SEC**

webvpn **SEC**
webvpn cef **SEC**
webvpn context **SEC**
webvpn create template **SEC**
webvpn enable **SEC**
webvpn gateway **SEC**
webvpn import svc profile **SEC**
webvpn install **SEC**
webvpn sslvpn-vif nat **SEC**
webvpn-homepage **SEC**
weekend duration **CBL**
weekend off **CBL**
weekend peak-time1 **CBL**
weight (firewall farm real server) **SLB**
weight (real server) **SLB**
weight (session border controller) **SBCD**
weight (srvs instance) **CE**
where **CF, TSV**
which-route **ISO**
whitelist **SEC, AN**
whitelist (editor) **SBCD**
width **CF**
wildcard (expression) **SNMP**
wins **SEC**
wlccp authentication-server client **SEC**
wlccp authentication-server infrastructure **SEC**
wlccp wds priority interface **SEC**
world-mode **WL**
wpa-psk **WL**
write core **CF**
write erase **CF**
write memory **CF**
write mib-data **SNMP, CF**
write network **CF**
write terminal **CF**
wrr-queue bandwidth **QOS**

wrr-queue cos-map **QOS**
wrr-queue dscp-map **QOS**
wrr-queue queue-limit **QOS**
wrr-queue random-detect **QOS**
wrr-queue threshold **QOS**
wsma agent **WSMA**
wsma dhcp **WSMA**
wsma id **WSMA**
wsma profile initiator **WSMA**
wsma profile listener **WSMA**
wsse **WSMA**

X

x25 accept-reverse **WAN**
x25 address **WAN**
x25 address (line) **WAN**
x25 alias **WAN**
x25 aodi **DIA**
x25 bfe-decision **WAN**
x25 bfe-emergency **WAN**
x25 call-record **WAN**
x25 default **WAN**
x25 facility **WAN**
x25 fail-over **WAN**
x25 hic **WAN**
x25 hoc **WAN**
x25 hold-queue **WAN**
x25 hold-vc-timer **WAN**
x25 host **WAN**
x25 htc **WAN**
x25 hunt-group **WAN**
x25 idle **WAN**
x25 ip-precedence **WAN**
x25 ips **WAN**
x25 lic **WAN**
x25 linkrestart **WAN**
x25 loc **WAN**

x25 ltc **WAN**
x25 map **WAN**
x25 map bridge **WAN**
x25 map cmns **WAN**
x25 map compressedtcp **WAN**
x25 map pad **WAN**
x25 map ppp **DIA**
x25 map qllc **IBM**
x25 map rbp local **WAN**
x25 map rbp remote **WAN**
x25 modulo **WAN**
x25 nvc **WAN**
x25 ops **WAN**
x25 pad-access **WAN**
x25 profile **WAN**
x25 pvc (XOT) **WAN**
x25 pvc (encapsulation) **WAN**
x25 pvc (switched PVC to SVC) **WAN**
x25 pvc (switched) **WAN**
x25 pvc qllc **IBM**
x25 pvc rbp local **WAN**
x25 pvc rbp local through xot access-group **WAN**
x25 pvc rbp remote **WAN**
x25 pvc translate ruleset **TSV**
x25 relay-vc-number **WAN**
x25 remote-red **WAN**
x25 retry **WAN**
x25 roa **WAN**
x25 rotary **WAN**
x25 route **WAN**
x25 routing **WAN**
x25 security call-conf address out **WAN**
x25 security clann **WAN**
x25 security crcdn **WAN**
x25 subaddress **TSV**
x25 subscribe cug-service **WAN**

x25 subscribe flow-control [WAN](#)
x25 subscribe local-cug [WAN](#)
x25 subscribe packetsize [WAN](#)
x25 subscribe throughput [WAN](#)
x25 subscribe windowsize [WAN](#)
x25 suppress-called-address [WAN](#)
x25 suppress-calling-address [WAN](#)
x25 t10 [WAN](#)
x25 t11 [WAN](#)
x25 t12 [WAN](#)
x25 t13 [WAN](#)
x25 t20 [WAN](#)
x25 t21 [WAN](#)
x25 t22 [WAN](#)
x25 t23 [WAN](#)
x25 threshold [WAN](#)
x25 use-source-address [WAN](#)
x25 version [WAN](#)
x25 win [WAN](#)
x25 wout [WAN](#)
x28 [TSV](#)
x28 no-outgoing [TSV](#)
x28 no-padding [WAN](#)
x29 access-list [WAN](#)
x29 inviteclear-time [WAN](#)
x29 profile [WAN](#)
x3 [TSV](#)
xauth userid mode [SEC](#)
xconnect MP, [WAN](#)
xconnect (CEM) [IR](#)
xconnect backup force-switchover [WAN](#)
xconnect encapsulation mpls [WAN](#)
xconnect logging pseudowire status [MP](#)
xconnect logging redundancy [WAN](#)
xml (billing) [SBCD](#)
xmodem [CF](#)

xot access-group **WAN**
xsm **SEC**
xsm dvdm **SEC**
xsm edm **SEC**
xsm history edm **SEC**
xsm history vdm **SEC**
xsm privilege configuration level **SEC**
xsm privilege monitor level **SEC**
xsm vdm **SEC**
xsvc **VR**
xtr instance-id **LISP**

Y

yellow **IR**

Z

zone access **VR**
zone bw **VR**
zone circuit-id **VR**
zone cluster local **VR**
zone cluster remote **VR**
zone local **VR**
zone pair security **SEC, IPV6**
zone prefix **VR**
zone qos **VR**
zone remote **VR**
zone security **SEC, IPV6**
zone subnet **VR**
zone-member security **SEC**

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