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## Cisco IOS Master Command List, All Releases

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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.

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## Command Reference Designators

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

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

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

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**1**100rel inbound **SBCU**100rel outbound **SBCU**

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**A**aaa accounting **IPV6, MWG, MWH, 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 **ISG, SEC**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 **IPV6, SEC**aaa accounting send stop-record authentication **SEC**aaa accounting session-duration ntp-adjusted **SEC**aaa accounting suppress null-username **SEC**aaa accounting update **SEC**aaa accounting vrrs **FHP**aaa accounting-list **SEC**aaa attribute **SEC**aaa attribute list **SEC**aaa authentication (IKEv2 profile) **SEC**aaa authentication (WebVPN) **SEC**aaa authentication arap **ATM, SEC**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 **IPV6, SEC**aaa authentication sgbp **SEC**aaa authentication suppress null-username **SEC**aaa authentication username-prompt **SEC**aaa authorization **IPV6, SEC**aaa authorization (IKEv2 profile) **SEC**aaa authorization cache filterserver **SEC**aaa authorization config-commands **SEC**aaa authorization configuration default **DIA, IPV6**aaa authorization console **SEC**aaa authorization ipmobile **IMO, MWH**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 configuration **SEC**aaa connect-info **ANCP**aaa dnis map accounting network **SEC**aaa dnis map authentication group **SEC**aaa dnis map authorization network group **SEC**

aaa group server diameter MWG, SEC  
 aaa group server ldap SEC  
 aaa group server radius IPV6, SEC  
 aaa group server tacacs+ IPV6, SEC  
 aaa intercept SEC  
 aaa local authentication attempts max-fail SEC  
 aaa max-sessions 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 IPV6, SEC  
 aaa password SEC  
 aaa pod server MWH, SEC  
 aaa preauth SEC  
 aaa processes SEC  
 aaa route download DIA, SEC  
 aaa server radius dynamic-author ISG, SEC  
 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-group MWG  
 aal2-profile custom VR  
 abr ATM  
 absolute BSM  
 absolute-timeout TSV  
 ac name BBA  
 acc-qos VR  
 accelerator WAN  
 accept-dialin VPD  
 accept-dialout VPD  
 accept-lifetime IPV6, IRI, SAF  
 access (firewall farm) SEC, SLB  
 access (server farm) SEC, SLB  
 access (virtual server) SEC, SLB  
 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 IPV6, SEC  
 access-list BR, IBM, MWH, MWP  
 access-list (DECnet extended) DEC  
 access-list (DECnet standard) DEC  
 access-list (IP SLA) SLA  
 access-list (IP extended) SEC  
 access-list (IP standard) SEC  
 access-list (NLSP) SEC  
 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-secure **SBCU**  
 access-template **SEC**  
 access-type **MWG**  
 access-violation deactivate-pdp-context **MWG**  
 account **QOS**  
 account (session border controller) **SBCU**  
 accounting **SEC**  
 accounting (DHCP for IPv6) **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) **SBCU**  
 action (NA-) **SBCU**  
 action (RTG-) **SBCU**  
 action (SDP) **SBCU**  
 action (SIP) **SBCU**  
 action (body editor) **SBCU**  
 action (body) **SBCU**  
 action (event) **SNMP**  
 action (header-editor) **SBCU**  
 action (method profile) **SBCU**  
 action (method-editor) **SBCU**  
 action (parameter editor) **SBCU**  
 action (parameter) **SBCU**  
 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 **SBCU**  
 action else **EEM**  
 action elseif **EEM**  
 action end **EEM**  
 action exit **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 syslog **EEM**  
 action track read **EEM**  
 action track set **EEM**  
 action while **EEM**  
 action-type **SEC**  
 activate **SBCU, SEC**  
 activate (billing) **SBCU**  
 activate (enum) **SBCU**  
 activate (radius) **SBCU**  
 activate (session border controller) **SBCU**  
 activate-rule at-byte-count **CBL**  
 activation-character **CF**  
 activation-key **VR**  
 active (call home) **HA**  
 active-cac-policy-set **SBCU**  
 active-call-policy-set **SBCU**  
 active-probe **OER**  
 active-probe (PfR) **PFR**  
 active-probe address source **OER**  
 active-probe address source (PfR) **PFR**  
 active-script-set **SBCU**  
 adapter **IBM**  
 add (WebVPN) **SEC**  
 add (bulkstat object) **SNMP**  
 address **SEC**  
 address (DNS probe) **SLB**  
 address (HTTP probe) **SLB**  
 address (IKEv2 keyring) **IPV6, SEC**  
 address (Mobile IPv6) **IPV6**  
 address (Proxy Mobile IPv6) **IMO**  
 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) **SBCU**  
 address client-id **IAD**  
 address hardware-address **IAD**  
 address ipv4 **MWG, SEC**  
 address ipv4 (GDOI) **SEC**  
 address ipv4 (config-radius-server) **SEC**  
 address ipv4 (session border controller) **SBCU**  
 address ipv6 (TACACS+) **IPV6, SEC**  
 address prefix **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**  
 address-family nsap **BGP**  
 address-family rtfilter unicast **BGP**  
 address-family vpng4 **BGP**  
 address-family vpng6 **IPV6**  
 address-hiding **VR**  
 address-pool **SSG**  
 addressed-key **SEC**  
 adjacency **SBCU**  
 adjacency timeout **SBCU**  
 adjacency-check **IPV6**  
 admin-domain **SBCU**  
 admin-domain (adjacency) **SBCU**  
 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 downlink next-hop **MWG**  
 advertise-passive-only **IRS**  
 advertise-passive-only (IPv6) **IPV6**  
 af-interface **EIGRP**  
 affinity **MP**  
 affinity (LSP Attributes) **MP**  
 agent **SLB**  
 ageout **SLA**  
 aggregate **MWG**  
 aggregate interval **SLA**  
 aggregate-address **BGP, IPV6**  
 aggregation-type **OER**  
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 air-queue aggregate-limit **QOS**  
 ais **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-severity **SEC**  
 algorithm **SEC**  
 alias **CBL, CF**  
 alias (session border controller) **SBCU**  
 alias static **VR**  
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 all-interfaces **MTR**  
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 allocate lu **IBM**  
 allow diff-med-sig-vpn **SBCU**  
 allow private info **SBCU**  
 allow subscribe **VR**  
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 allow-list **SAF**  
 allow-mode **SEC**  
 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**  
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 als restart pulse **IR**  
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 anat **IPV6, VR**  
 ancp adjacency timer **ANCP**  
 ancp atm shaper **ANCP**  
 ancp enable **ANCP**  
 ancp enable test-configuration **ANCP**  
 ancp neighbor **ANCP**  
 ancp vdsl ethernet shaper **ANCP**  
 ani mapping **VR**  
 annex modulation **CBL**  
 announce config **CNS**  
 announce interval **CE, IR**  
 announce timeout **CE, IR**  
 anonymous user **MWG**  
 answer-address **VR**  
 antenna **WL**  
 api client **OER**  
 api provider **OER**  
 api provider (PfR) **PFR**  
 apn **SLB**  
 apn (proxy mobile IPv6) **IMO**  
 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**  
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 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**

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 appletalk eigrp-timers [ATK](#)  
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 appletalk free-trade-zone [ATK](#)  
 appletalk getzonelist-filter [ATK](#)  
 appletalk glean-packets [ATK](#)  
 appletalk ignore-verify-errors [ATK](#)  
 appletalk iptalk [ATK](#)  
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 appletalk macip dynamic [ATK](#)  
 appletalk macip server [ATK](#)  
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 appletalk name-lookup-interval [ATK](#)  
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 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](#)  
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 apply (satellite initial configuration) [IR](#)  
 aps authenticate [IR](#)  
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 aps force [IR](#)  
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 arap authentication [SEC](#)  
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 arap dedicated [TSV](#)  
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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 stub [OSPF](#)  
 area virtual-link [IPV6](#), [OSPF](#)  
 area virtual-link authentication [IPV6](#)  
 area virtual-link encryption [IPV6](#)  
 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 address-broadcast-mask [IBM](#)  
 asp broadcast-addr [IBM](#)  
 asp dcd always [IBM](#)  
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 associate slot [IR](#)  
 association [IR](#)  
 asymmetric payload [VR](#)  
 asymmetric-routing [IAD](#), [SEC](#)  
 async default routing [DIA](#)  
 async dynamic address [DIA](#)  
 async dynamic routing [DIA](#)  
 async mode dedicated [DIA](#)  
 async mode interactive [DIA](#)  
 async-bootp [CF](#)  
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 atm [ATM](#)  
 atm aal aal3 4 [ATM](#)  
 atm aal aal3/4 [ATM](#)  
 atm abr rate-factor [ATM](#)  
 atm address-registration [ATM](#)  
 atm arp-server [ATM](#)  
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 atm classic-ip-extensions [ATM](#)  
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 atm compression [ATM](#)  
 atm ds3-scramble [ATM](#)  
 atm e164 auto-conversion [ATM](#)  
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 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 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 (phone proxy) **SBCU**  
 attach (session border controller) **SBCU**  
 attach-controllers **SBCU**  
 attach-controllers (session border controller) **SBCU**  
 attribute **SSG**  
 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**  
 au-3 **IR**  
 au-4 tug-3 **IR**  
 audio **VR**  
 audio-prompt load **VR**  
 audit filesize **SEC**  
 audit interval **SEC**  
 audit-trail **SEC**  
 audit-trail (zone) **SEC**  
 aug mapping **IR**  
 auth-option **IMO**  
 auth-type **SEC**  
 auth-type (ISG) **ISG, SEC**  
 authen-before-forward **VPD**  
 authenticate (control policy-map class) **ISG, VPD**  
 authenticate (service policy-map) **ISG**  
 authenticate redirecting-number **VR**  
 authentication **IAD, SEC**  
 authentication (BFD) **IRI**  
 authentication (IKE policy) **IPV6, SEC**

authentication (IKEv2 profile) **SEC**  
 authentication (L2TP) **WAN**  
 authentication (Mobile IPv6) **IPV6**  
 authentication (SIP UA) **VR**  
 authentication (dial peer) **VR**  
 authentication (session border controller) **SBCU**  
 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) **SBCU**  
 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-retries **TSV**  
 authoization list (global) **SEC**  
 authorization **MWG, SEC**  
 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 **IPV6, SEC**  
 auto-polarity **IR**  
 auto-retrieve **MWG**  
 auto-rollover **SEC**  
 auto-route-target **WAN**  
 auto-summary (BGP) **BGP**  
 auto-summary (EIGRP) **EIGRP**  
 auto-summary (RIP) **RIP**  
 auto-sync **CBL, CF**  
 auto-update client **SEC**  
 autobaud **CF**  
 autocommand **TSV**  
 autodetect encapsulation **DIA**  
 autohangup **DIA**  
 autonomous-system (EIGRP) **EIGRP**  
 autoselect **DIA**  
 autoupgrade disk-cleanups **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 **DIA, IR**  
 backup delay (L2VPN local switching) **MP, WAN**  
 backup excluded **WSMA**  
 backup group **SEC**  
 backup hold **WSMA**  
 backup interface **DIA, IR**  
 backup interface atm **IR**  
 backup interface cem **IR**  
 backup interface dialer **DIA**  
 backup load **DIA, IR**  
 backup peer **MP, WAN**  
 backup-gateway **SEC**  
 bandwidth **MWG, VR**  
 bandwidth (LSP Attributes) **MP**  
 bandwidth (dial peer) **VR**  
 bandwidth (interface) **IPV6, IR, SNMP**  
 bandwidth (policy-map class) **QOS**  
 bandwidth (session border controller) **SBCU**  
 bandwidth check-destination **VR**  
 bandwidth qos-reference **QOS**  
 bandwidth remaining ratio **QOS**  
 bandwidth remote **VR**  
 bandwidth-fields mandatory **SBCU**  
 bandwidth-percent **EIGRP, SAF**  
 bandwidth-police tman **SBCU**  
 bandwidth-pool **MWG**  
 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**  
 batch **IR**  
 batch-size **SBCU**  
 batch-time **SBCU**  
 battery-reversal **VR**

bba-group pppoe	<b>BBA</b>	bgp client-to-client reflection	<b>BGP</b>
bce delete-wait-time	<b>IMO</b>	bgp cluster-id	<b>BGP</b>
bce lifetime	<b>IMO</b>	bgp confederation identifier	<b>BGP</b>
bce maximum	<b>IMO</b>	bgp confederation peers	<b>BGP</b>
beacon	<b>WL</b>	bgp consistency-checker	<b>BGP, SBCU</b>
beacon (multicast routing monitor)	<b>IMC</b>	bgp dampening	<b>BGP</b>
bearer-capability clear-channel	<b>VR</b>	bgp default ipv4-unicast	<b>BGP</b>
bert abort controller	<b>IR</b>	bgp default ipv6-nexthop	<b>IPV6</b>
bert controller	<b>IR</b>	bgp default local-preference	<b>BGP</b>
bert errors	<b>IR</b>	bgp default route-target filter	<b>MP</b>
bert pattern	<b>IR</b>	bgp deterministic-med	<b>BGP</b>
bert pattern (T1 E1)	<b>IR</b>	bgp dmzlink-bw	<b>BGP</b>
bert pattern (T1/E1)	<b>IR</b>	bgp enforce-first-as	<b>BGP</b>
bert pattern (T3 E3)	<b>IR</b>	bgp enhanced-error	<b>BGP</b>
bert pattern (T3/E3)	<b>IR</b>	bgp fast-external-failover	<b>BGP</b>
bert profile	<b>IR</b>	bgp graceful-restart	<b>BGP, IPV6</b>
bfd	<b>IPV6, IRI</b>	bgp inject-map	<b>BGP</b>
bfd (EIGRP)	<b>EIGRP</b>	bgp listen	<b>BGP</b>
bfd all-interfaces	<b>IPV6, IRI, RIP</b>	bgp log-neighbor-changes	<b>BGP, IPV6</b>
bfd all-interfaces (OSPFv3)	<b>IPV6</b>	bgp maxas-limit	<b>BGP</b>
bfd echo	<b>IRI</b>	bgp next-hop	<b>MP</b>
bfd interface	<b>IRI</b>	bgp nexthop	<b>BGP</b>
bfd map	<b>IRI</b>	bgp nopeerup-delay	<b>BGP</b>
bfd slow-timers	<b>IRI</b>	bgp recursion host	<b>BGP, IPV6</b>
bfd-template	<b>IRI</b>	bgp redistribute-internal	<b>BGP</b>
bfe	<b>WAN</b>	bgp refresh max-eor-time	<b>BGP, SBCU</b>
bgp additional-paths install	<b>BGP, IPV6</b>	bgp refresh stalepath-time	<b>BGP, SBCU</b>
bgp additional-paths select	<b>BGP, SBCU</b>	bgp regexp deterministic	<b>BGP</b>
bgp advertise-best-external	<b>BGP, IPV6</b>	bgp router-id	<b>BGP, IPV6</b>
bgp aggregate-timer	<b>BGP</b>	bgp rpki server	<b>BGP</b>
bgp always-compare-med	<b>BGP</b>	bgp rr-group	<b>BGP</b>
bgp asnotation dot	<b>BGP</b>	bgp scan-time	<b>BGP, MP</b>
bgp bestpath as-path ignore	<b>BGP</b>	bgp slow-peer detection	<b>BGP</b>
bgp bestpath compare-routerid	<b>BGP</b>	bgp slow-peer split-update-group dynamic	<b>BGP</b>
bgp bestpath cost-community ignore	<b>BGP</b>	bgp soft-reconfig-backup	<b>BGP</b>
bgp bestpath igrp-metric ignore	<b>BGP, SBCU</b>	bgp sso route-refresh-enable	<b>BGP</b>
bgp bestpath med confed	<b>BGP</b>	bgp suppress-inactive	<b>BGP</b>
bgp bestpath med missing-as-worst	<b>BGP</b>	bgp tid	<b>MTR</b>
bgp bestpath prefix-validate	<b>BGP</b>	bgp transport	<b>BGP</b>

bgp update-delay **BGP**  
 bgp update-group split as-override **BGP**  
 bgp upgrade-cli **BGP**  
 bgp-policy **BGP**  
 bidirectional **SEC**  
 billing **SBCU**  
 billing (CAC) **SBCU**  
 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 **SBCU**  
 blacklist (editor) **SBCU**  
 blacklist (sip-opt) **SBCU**  
 block **VR**  
 block count **SEC, WL**  
 block-caller **VR**  
 block-foreign-ms **MWG**  
 body **SBCU**  
 body (editor) **SBCU**  
 body-editor **SBCU**  
 body-editor (method) **SBCU**  
 body-profile **SBCU**  
 body-profile (sip adj) **SBCU**  
 boot **CBL, CF**  
 boot bootldr **CF**  
 boot bootstrap **CF**  
 boot config **CF**  
 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 **SBCU**  
 branch codec **SBCU**  
 branch codec-list **SBCU**  
 branch hold-setting **SBCU**  
 branch inband-dtmf-mode **SBCU**  
 branch inbound-policy **SBCU**  
 branch media bypass **SBCU**  
 branch media-caps **SBCU**  
 branch media-description disabled **SBCU**  
 branch media-type **SBCU**  
 branch outbound-policy **SBCU**  
 branch port-range-tag **SBCU**  
 branch privacy edit-privacy-request **SBCU**  
 branch privacy privacy-service **SBCU**  
 branch ptime **SBCU**  
 branch secure-media **SBCU**  
 branch sig-qos-profile **SBCU**  
 branch tel-event payload type **SBCU**  
 branch video-qos-profile **SBCU**  
 branch voice-qos-profile **SBCU**  
 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, LSW, WAN**  
 bridge-domain (global) **CE**  
 bridge-domain (service instance) **CE, WAN**  
 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 (bulkstat) **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](#)