



CHAPTER

Catalyst 4500 Series IOS Commands

New Commands

auto security
auto security-port
show auto security

Revised Commands

A Commands

aaa accounting dot1x default start-stop group radius
aaa accounting system default start-stop group radiusclear mac-address-table
access-group mode
access-list hardware capture mode
access-list hardware entries
access-list hardware region
action
apply
anyp client server
anyp mode client
apply
arp access-list
attach module
authentication control-direction
authentication critical recovery delay
authentication event
authentication fallback

authentication host-mode
authentication open
authentication order
authentication periodic
authentication port-control
authentication priority
authentication timer
authentication violation
auto qos classify
auto qos classify police
auto qos srnd4
auto qos trust
auto qos video
auto qos voip
auto qos voip cisco-softphone
auto security
auto security-port
auto-sync
average-packet-size (netflow-lite monitor submode)

C Commands

call-home (global configuration)
call-home request
call-home send
call-home send alert-group
call-home test
channel-group
channel-protocol
cisp enable
class-map
clear counters
clear errdisable interface
clear hw-module slot password
clear interface gigabitethernet
clear interface vlan
clear ip access-template
clear ip arp inspection log

clear ip arp inspection statistics
clear ip dhcp snooping binding
clear ip dhcp snooping database
clear ip dhcp snooping database statistics
clear ip igmp group
clear ip mfib counters
clear ip mfib fastdrop
clear ip wccp
clear lacp counters
clear netflow-lite exporter statistics
clear netflow-lite monitor statistics interface
clear nmsp statistics
clear mac-address-table dynamic
clear pagp
clear port-security
clear pppoe intermediate-agent statistics
clear qos
clear switch virtual dual-active fast-hello
clear vlan counters
clear vmps statistics
control-plane
cos (netflow-lite exporter submode)
counter

D Commands

debug adjacency
debug backup
debug condition interface
debug condition standby
debug condition vlan
debug device-sensor
debug dot1x
debug etherchnl
debug interface
debug ip dhcp snooping event
debug ip dhcp snooping packet
debug ip verify source packet

debug ipc
debug lacp
debug monitor
debug nmsp
debug nvram
debug pagp
debug platform packet protocol lacp
debug platform packet protocol pagp
debug pm
debug port-security
debug pppoe intermediate-agent
debug redundancy
debug spanning-tree
debug spanning-tree backbonefast
debug spanning-tree switch
debug spanning-tree uplinkfast
debug sw-vlan
debug sw-vlan ifs
debug sw-vlan notification
debug sw-vlan vtp
debug udd
debug vqpc
define interface-range
deny
destination (netflow-lite exporter submenu)
device-sensor filter-list
device-sensor filter-list dhcp
device-sensor filter-spec
device-sensor notify
diagnostic fpga soft-error recover
diagnostic monitor action
diagnostic start
dot1x auth-fail max-attempts
dot1x auth-fail vlan
dot1x credentials (global configuration)
dot1x critical
dot1x critical eapol
dot1x critical recovery delay

dot1x critical vlan
dot1x control-direction
dot1x guest-vlan
dot1x guest-vlan supplicant
dot1x host-mode
dot1x initialize
dot1x mac-auth-bypass
dot1x max-reauth-req
dot1x max-req
dot1x port-control
dot1x re-authenticate
dot1x re-authentication
dot1x system-auth-control
dot1x timeout
dscp (netflow-lite exporter submode)
dual-active detection (virtual switch)
duplex
dual-active recovery ip address
duplex

E Commands

erase
errdisable detect cause
errdisable recovery
export-protocol (netflow-lite exporter submode)
exporter (netflow-lite monitor submode)

F Commands

flowcontrol

H Commands

hardware statistics
hw-module beacon
hw-module module start
hw-module module stop
hw-module port-group
hw-module power

```
hw-module system max-port-num-mode 1/2
hw-module system max-port-num-mode 1/2 switch 1/2/all
```

```
hw-module system max-queue-limit
hw-module uplink mode
hw-module uplink select
```

I Commands

```
instance
interface
interface (virtual switch)
interface port-channel
interface range
interface vlan
ip admission proxy http refresh-all
ip arp inspection filter vlan
ip arp inspection limit (interface)
ip arp inspection log-buffer
ip arp inspection trust
ip arp inspection validate
ip arp inspection vlan
ip arp inspection vlan logging
ip cef load-sharing algorithm
ip dhcp snooping
ip dhcp snooping binding
ip dhcp snooping database
ip dhcp snooping information option
ip dhcp snooping information option allow-untrusted
ip dhcp snooping limit rate
ip dhcp snooping trust
ip dhcp snooping vlan
ip device tracking maximum
ip igmp filter
ip igmp max-groups
ip igmp profile
ip igmp query-interval
```

ip igmp snooping
ip igmp snooping report-suppression
ip igmp snooping vlan
ip igmp snooping vlan explicit-tracking
ip igmp snooping vlan immediate-leave
ip igmp snooping vlan mrouter
ip igmp snooping vlan static
ip local-proxy-arp
ip mfib fastdrop
ip route-cache flow
ip source binding
ip sticky-arp
ip verify header vlan all
ip verify source
ip verify unicast source reachable-via
ip wccp
ip wccp check services all
ip wccp group-listen
ip wccp redirect
ip wccp redirect exclude in
ipv6 mld snooping
ipv6 mld snooping last-listener-query-count
ipv6 mld snooping last-listener-query-interval
ipv6 mld snooping listener-message-suppression
ipv6 mld snooping robustness-variable
ipv6 mld snooping tcn
ipv6 mld snooping vlan
issu abortversion
issu acceptversion
issu commitversion
redundancy config-sync mismatched-commands
issu loadversion
issu runversion
issu set rollback-timer

L Commands

l2protocol-tunnel

l2protocol-tunnel cos
 l2protocol-tunnel drop-threshold
 l2protocol-tunnel shutdown-threshold
 lacp port-priority
 lacp system-priority
 license right-to-use activate
 license right-to-use deactivate
 lldp tlv-select power-management
 logging event trunk-status global (global configuration)
 logging event link-status global (global configuration)
 logging event trunk-status global (global configuration)
 logging event link-status global (global configuration)
 logging event link-status (interface configuration)
 logging event trunk-status (interface configuration)

M Commands

mac access-list extended
 mac-address (virtual switch)
 mac-address-table aging-time
 mac-address-table dynamic group protocols
 mac-address-table learning vlan
 mac-address-table notification
 mac-address-table static
 macro apply cisco-desktop
 macro apply cisco-phone
 macro apply cisco-router
 macro apply cisco-switch
 macro auto device
 macro auto execute (built-in function)
 macro auto execute (remotely-defined trigger)
 macro auto execute (user-defined function)
 macro auto global processing
 macro auto mac-address-group
 macro auto monitor
 macro auto processing
 macro auto sticky
 macro global apply cisco-global

macro global apply system-cpp
macro global description
main-cpu
match
match flow ip
mdix auto
media-type
mode
monitor capture { access-list | class-map }
monitor capture [clear | export]
monitor capture [interface | vlan | control-plane]
monitor capture file location buffer-size
monitor capture limit
monitor capture mycap match
monitor capture start
monitor session
mtu
mvr (global configuration)
mvr (interface configuration)

N Commands

name
netflow-lite exporter
netflow-lite monitor
netflow-lite sampler
nmsp
nmsp attachment suppress

O Commands

options timeout (netflow-lite exporter submode)

P Commands

packet-offset (netflow-lite sampler submode)
packet-rate (netflow-lite sampler submode)
packet-section size (netflow-lite sampler submode)
pagp learn-method
pagp port-priority

passive-interface
permit
policy-map
port-channel load-balance
port-channel standalone-disable
port-security mac-address
port-security mac-address sticky
port-security maximum
power dc input
power efficient-ethernet auto
power inline
power inline consumption
power inline four-pair forced
power inline logging global
power inline police
power redundancy combined max inputs
power redundancy-mode
pppoe intermediate-agent (global)
pppoe intermediate-agent (interface)
pppoe intermediate-agent (interface vlan-range)
pppoe intermediate-agent format-type (global)
pppoe intermediate-agent limit rate
pppoe intermediate-agent trust
pppoe intermediate-agent vendor-tag strip
priority
private-vlan
private-vlan mapping
private-vlan synchronize
profile
profile flow

Q Commands

qos account layer-all encapsulation
qos account layer2 encapsulation
qos trust
queue-limit

R Commands

redundancy
redundancy force-switchover
redundancy reload
remote login module
remote-span
renew ip dhcp snooping database
reset
revision

S Commands

sampler (netflow-lite monitor submode)
service-policy (interface configuration)
service-policy (policy-map class)
service-policy input (control-plane)
session module
set
set cos
set dscp
set precedence
set qos-group
shape (interface configuration)
shell trigger
snmp ifindex clear
snmp ifindex persist
snmp-server enable traps
snmp-server ifindex persist
snmp-server ifindex persist compress
snmp trap mac-notification change
source (netflow-lite exporter submode)
spanning-tree backbonefast
spanning-tree bpdudfilter
spanning-tree bpduguard
spanning-tree cost
spanning-tree etherchannel guard misconfig
spanning-tree extend system-id
spanning-tree guard

spanning-tree link-type
spanning-tree loopguard default
spanning-tree mode
spanning-tree mst
spanning-tree mst configuration
spanning-tree mst forward-time
spanning-tree mst hello-time
spanning-tree mst max-age
spanning-tree mst max-hops
spanning-tree mst root
spanning-tree pathcost method
spanning-tree portfast (interface configuration mode)
spanning-tree portfast bpdudfilter default
spanning-tree portfast bpduguard default
spanning-tree portfast default
spanning-tree port-priority
spanning-tree uplinkfast
spanning-tree vlan
speed
storm-control
storm-control
storm-control broadcast include multicast
switch (virtual switch)
switch convert mode (virtual switch)
switch virtual domain (virtual switch)
switch virtual link (virtual switch)
switchport
switchport access vlan
switchport autostate exclude
switchport block
switchport mode
switchport port-security
switchport private-vlan association trunk
switchport private-vlan host-association
switchport private-vlan mapping
switchport private-vlan trunk allowed vlan
switchport private-vlan trunk native vlan tag
switchport trunk

switchport vlan mapping
system mtu

Show Commands

show access-group mode interface
show adjacency
show ancp multicast
show arp access-list
show authentication
show auto install status
show auto qos
show auto security
show bootflash:
show bootvar
show cable-diagnostics tdr
show call-home
show cdp neighbors
show class-map
show device-sensor cache
show diagnostic content
show diagnostic result module
show diagnostic result module test
show diagnostic result module test 2
show diagnostic result module test 3
show dot1x
show environment
show errdisable detect
show errdisable recovery
show etherchannel
show flowcontrol
show hw-module port-group
show hw-module system max-port-num-mode
show hw-module uplink
show idprom
show interfaces
show interfaces (virtual switch)
show interfaces counters

show interfaces counters (virtual switch)
show interfaces description
show interfaces link
show interfaces mtu
show interfaces private-vlan mapping
show interfaces status
show interfaces switchport
show interfaces transceiver
show interfaces trunk
show ip arp inspection
show ip arp inspection log
show ip cef vlan
show ip dhcp snooping
show ip dhcp snooping binding
show ip dhcp snooping database
show ip igmp interface
show ip igmp profile
show ip igmp snooping
show ip igmp snooping membership
show ip igmp snooping mrouter
show ip igmp snooping vlan
show ip interface
show ip mfib
show ip mfib fastdrop
show ip mroute
show ip source binding
show ip verify source
show ip wccp
show ipc
show ipv6 mld snooping
show ipv6 mld snooping mrouter
show ipv6 mld snooping querier
show ipv6 snooping counters
show issu capability
show issu clients
show issu comp-matrix
show issu endpoints
show issu entities

```
show issu fsm
show issu message
show issu negotiated
show issu rollback-timer
show issu sessions
show issu state
show l2protocol-tunnel
show lacp
show license
show mab
show mac access-group interface
show mac-address-table address
show mac-address-table aging-time
show mac-address-table count
show mac-address-table dynamic
show mac-address-table interface
show mac address-table learning
show mac-address-table multicast
show mac-address-table notification
show mac-address-table protocol
show mac-address-table static
show mac-address-table vlan
show macro auto mac-address-group
show macro auto device
show macro auto interface
show macro auto monitor clients
show macro auto monitor device
show macro auto monitor type
show module
show monitor
show monitor capture
show monitor capture file
show mvr
show mvr interface
show mvr members
show netflow-lite exporter
show netflow-lite monitor
show netflow-lite sampler
```

show nmsp
show pagp
show pagp dual-active (virtual switch)
show policy-map
show policy-map control-plane
show policy-map interface
show policy-map interface vlan
show port-security
show power
show power inline police
show qos
show pppoe intermediate-agent interface
show qos
show qos aggregate policer
show qos dbl
show qos interface
show qos maps
show redundancy
show redundancy config-sync
show running-config
show slavebootflash:
show slaveslot0:
show slot0:
show spanning-tree
show spanning-tree mst
show storm-control
show switch virtual (virtual switch)
show system mtu
show tech-support
show uddl
show vlan
show vlan access-map
show vlan counters
show vlan dot1q tag native
show vlan group
show vlan internal usage
show vlan mapping
show vlan mtu

show vlan private-vlan
show vlan remote-span
show vmps
show vslp (virtual switch)
show vtp

T Commands

template data timeout (netflow-lite exporter submode)
test cable-diagnostics tdr
traceroute mac
traceroute mac ip
transport udp (netflow-lite exporter submode)
trust
ttl (netflow-lite exporter submode)
tx-queue

U Commands

udld (global configuration mode)
udld (interface configuration mode)
udld reset
unidirectional
username

V Commands

verify
vlan (VLAN Database mode)
vlan access-map
vlan configuration
vlan database
vlan dot1q tag native
vlan filter
vlan group
vlan internal allocation policy
vmps reconfirm (global configuration)
vmps reconfirm (privileged EXEC)
vmps retry
vmps server

vrf (netflow-lite exporter submode)
vslp interval (virtual switch)
vtp (global configuration mode)
vtp client
vtp domain
vtp password
vtp pruning
vtp server
vtp transparent
vtp v2-mode