



CHAPTER

Catalyst 4500 Series IOS Commands

New Commands

clear switch virtual dual-active
dual-active fast-hello (virtual switch)
hw-module system max-port-num-mode 1/2
hw-module system max-port-num-mode 1/2 switch 1/2/all
mvr (global configuration)
mvr (interface configuration)
show hw-module system max-port-num-mode
show mvr
show mvr interface
show mvr members

Revised Commands

clear errdisable interface
dual-active detection (virtual switch)
errdisable detect cause
errdisable recovery
show errdisable detect
show errdisable recovery
show switch virtual (virtual switch)

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-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
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 udld
debug vqpc
define interface-range
deny

destination (netflow-lite exporter submode)
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
- p 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 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

uddl (global configuration mode)
uddl (interface configuration mode)
uddl 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