



# Catalyst 4500 Series IOS Commands

## New Commands

`access-list hardware region`

`control-plane`

`dot1x critical`

`dot1x critical eapol`

`dot1x critical recovery delay`

`dot1x critical vlan`

`dot1x control-direction`

`dot1x mac-auth-bypass`

`mac-address-table notification`

`macro global apply cisco-global`

`macro global apply system-cpp`

`macro global description`

`passive-interface`

`service-policy input (control-plane)`

`show mac-address-table notification`

`show policy-map control-plane`

`snmp trap mac-notification change`

## Revised Commands

`clear mac-address-table`

`clear port-security`

`show dot1x`

`show interfaces`

`snmp-server enable traps`

`switchport mode`

`switchport port-security`

[switchport private-vlan mapping](#)

## 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 entries](#)

[access-list hardware region](#)

[action](#)

[apply](#)

[arp access-list](#)

[attach module](#)

[auto qos voip](#)

[auto-sync](#)

## C Commands

[channel-group](#)

[channel-protocol](#)

[class-map](#)

[clear counters](#)

[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 database](#)

[clear ip dhcp snooping database statistics](#)

[clear ip igmp group](#)

[clear ip mfib counters](#)

[clear ip mfib fastdrop](#)

[clear lacp counters](#)

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

[clear pagp](#)

[clear port-security](#)

[clear qos](#)

[clear vlan counters](#)

clear vmps statistics  
control-plane

## D Commands

debug adjacency  
debug backup  
debug condition interface  
debug condition standby  
debug condition vlan  
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 nvram  
debug pagp  
debug platform packet protocol lacp  
debug platform packet protocol pagp  
debug pm  
debug port-security  
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

diagnostic start  
**diagnostic monitor action**  
**dot1x auth-fail max-attempts**  
**dot1x auth-fail vlan**  
**dot1x critical**  
**dot1x critical eapol**  
**dot1x critical recovery delay**  
**dot1x critical vlan**  
**dot1x control-direction**  
**dot1x guest-vlan**  
dot1x guest-vlan supplicant  
**dot1x initialize**  
**dot1x mac-auth-bypass**  
**dot1x max-reauth-req**  
**dot1x max-req**  
**dot1x multiple-hosts**  
**dot1x port-control**  
**dot1x re-authenticate**  
**dot1x re-authentication**  
**dot1x system-auth-control**  
**dot1x timeout**  
duplex

## E Commands

erase  
**errdisable detect**  
**errdisable recovery**

## F Commands

**flowcontrol**

## H Commands

**hw-module power**  
**hw-module uplink select**

## I Commands

instance

interface

interface port-channel

interface range

interface vlan

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 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 vlan dhcp-snooping**

## L Commands

**l2protocol-tunnel**  
**l2protocol-tunnel cos**  
**l2protocol-tunnel drop-threshold**  
**l2protocol-tunnel shutdown-threshold**  
**lACP port-priority**  
**lACP system-priority**  
**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-table aging-time**  
**mac-address-table dynamic group protocols**  
**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 global apply cisco-global**  
**macro global apply system-cpp**  
**macro global description**  
**main-cpu**  
**match**  
**match flow ip**  
**media-type**  
**mode**  
**monitor session**  
**mtu**

## N Commands

`name`

## P Commands

`pagp learn-method`

`pagp port-priority`

`passive-interface`

`permit`

`policy-map`

`port-channel load-balance`

`port-security mac-address`

`port-security mac-address sticky`

`port-security maximum`

`power dc input`

`power inline`

`power inline consumption`

`power redundancy-mode`

`power supplies required`

`private-vlan`

`private-vlan mapping`

`private-vlan synchronize`

## Q Commands

`qos (global configuration mode)`

`qos (interface configuration mode)`

`qos account layer2 encapsulation`

`qos aggregate-policer`

`qos cos`

`qos dbl`

`qos dscp`

`qos map cos`

`qos map dscp`

`qos map dscp policed`

`qos rewrite ip dscp`

`qos trust`

`qos vlan-based`

## R Commands

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

## S Commands

service-policy  
service-policy input (control-plane)  
session module  
shape  
snmp ifindex clear  
snmp ifindex persist  
snmp-server enable traps  
snmp-server ifindex persist  
snmp-server ifindex persist compress  
snmp trap mac-notification change  
spanning-tree backbonefast  
spanning-tree bpdupfilter  
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 bpdupfilter default`  
`spanning-tree portfast bpduguard default`  
`spanning-tree portfast default`  
`spanning-tree port-priority`  
`spanning-tree uplinkfast`  
`spanning-tree vlan`  
`speed`  
`storm-control`  
`switchport`  
`switchport access vlan`  
`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`  
`system mtu`

## Show Commands

`show access-group mode interface`  
`show adjacency`  
`show arp access-list`  
`show auto install status`  
`show auto qos`  
`show bootflash:`  
`show bootvar`  
`show cable-diagnostics tdr`  
`show cdp neighbors`  
`show class-map`  
`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 uplink**  
**show idprom**  
**show interfaces**  
**show interfaces capabilities**  
**show interfaces counters**  
**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 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 ipc**  
**show lacp**  
**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 multicast**  
**show mac-address-table notification**  
**show mac-address-table protocol**  
**show mac-address-table static**  
**show mac-address-table vlan**  
**show module**  
**show monitor**  
**show pagp**  
**show policy-map**  
**show policy-map control-plane**  
**show policy-map interface**  
**show policy-map interface vlan**  
**show port-security**  
**show power**  
**show qos**  
**show qos aggregate policer**  
**show qos dbl**  
**show qos interface**  
**show qos maps**  
**show redundancy**  
**show running-config**  
**show slavebootflash:**  
**show slaveslot0:**  
**show slot0:**  
**show spanning-tree**  
**show spanning-tree mst**  
**show storm-control**  
**show system mtu**  
**show tech-support**

`show uddl`  
`show vlan`  
`show vlan access-map`  
`show vlan counters`  
`show vlan dot1q tag native`  
`show vlan internal usage`  
`show vlan mtu`  
`show vlan private-vlan`  
`show vlan remote-span`  
`show vmps`  
`show vtp`

## T Commands

`test cable-diagnostics tdr`  
`traceroute mac`  
`traceroute mac ip`  
`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 database`  
`vlan dot1q tag native`  
`vlan filter`  
`vlan internal allocation policy`  
`vmps reconfirm (global configuration)`  
`vmps reconfirm (privileged EXEC)`  
`vmps retry`  
`vmps server`

**vtp (global configuration mode)**

**vtp client**

**vtp domain**

**vtp password**

**vtp pruning**

**vtp server**

**vtp transparent**

**vtp v2-mode**

