



## CHAPTER

# Catalyst 4500 Series IOS Commands

## New Commands

**dot1X guest-vlan supplicant**  
**ip dhcp snooping information option allow-untrusted**  
**port-security mac-address**  
**port-security mac-address sticky**  
**port-security maximum**  
**show policy-map interface vlan**

## Revised Commands

**dot1x guest-vlan**  
**dot1x timeout**  
**service-policy**  
**show dot1x**  
**show ip dhcp snooping**  
**show port-security**

## A Commands

**aaa accounting dot1x default start-stop group radius**  
**aaa accounting system default start-stop group radius**  
**access-group mode**  
**access-list hardware entries**  
**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](#)

## 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 psecure
debug redundancy
debug smf updates
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
diagnostic monitor action
dot1x guest-vlan
dot1X guest-vlan supplicant
dot1x initialize
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

[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

## M Commands

mac access-list extended  
mac-address-table aging-time  
mac-address-table dynamic group protocols  
mac-address-table static  
macro apply cisco-desktop  
macro apply cisco-phone  
macro apply cisco-router  
macro apply cisco-switch  
main-cpu  
match  
match flow ip  
media-type  
mode

[monitor session](#)

[mtu](#)

## N Commands

[name](#)

## P Commands

[pagp learn-method](#)

[pagp port-priority](#)

[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**  
**session module**  
**shape**  
**snmp ifindex clear**  
**snmp ifindex persist**  
**snmp-server enable traps**  
**snmp-server ifindex persist**  
**snmp-server ifindex persist compress**  
**spanning-tree backbonefast**  
**spanning-tree bpdufilter**  
**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 bpdufilter 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 class-map**  
**show diagnostic content**  
**show diagnostic result module**  
**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 protocol
show mac-address-table static
show mac-address-table vlan
show module
show monitor
show pagp
show policy-map
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 udld
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

traceroute mac  
traceroute mac ip  
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 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
```