

L2 Managed Switch CLI Reference Guide

OS1326/1326P

Syntax for CLI commands

ACL:

- **create_acl_profile** profile_name <name 32> type [mac | ip | ip_ext | ipv6 | advanced]

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create acl profile profile_name acl_1 type mac
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- **delete acl_profile** [profile_name <name 32> | all]
- **config acl_profile** profile_name <name 32> type [**mac** {source_mac <macaddr> {mask <macmask>}} {destination_mac <macaddr> {mask <macmask>}} {vid <value 1-4094> {cos <value 0-7>}} {ethernet_type <hex 0x0000-0xFFFF>} {ingress_port <value 1-28> | all} {action [type1 {redirect <value 1-28>} {priority <value 0-7>} {dscp <value 1-8>} {sniffer} | type2 {redirect <value 1-28>} {priority <value 0-7>} {bandwidth <value 1-32>} {ptp} {sflow} | drop}] | **ip** {source_ip <ipaddr> {mask <ipmask>}} {src_port_range [low <value 0-65535>] [high <value 0-65535>]} {dst_port_range [low <value 0-65535>] [high <value 0-65535>]} {ingress_port <value 1-28> | all} {action [type1 {redirect <value 1-28>} {priority <value 0-7>} {dscp <value 1-8>} {sniffer} | type2 {redirect <value 1-28>} {priority <value 0-7>} {bandwidth <value 1-32>} {ptp} {sflow} | drop}] | **ip_ext** {source_ip <ipaddr> {mask <ipmask>}} {destination_ip <ipaddr> {mask <ipmask>}} {[src_port_range [low <value 0-65535>] [high <value 0-65535>] | src_port <value 0-65535>]} {[dst_port_range [low <value 0-65535>] [high <value 0-65535>] | dst_port <value 0-65535>]} {vid <value 1-4094> {cos <value 0-7>}} {**flag** [all | **urg** | **ack** | **psh** | **rst** | **syn** | **fin**]}] {dscp <value 0-63>} {ip_protocol <hex 0x00-0xFF>} {ingress_port <value 1-28> | all} {action [type1 {redirect <value 1-28>} {priority <value 0-7>} {dscp <value 1-8>} {sniffer} | type2 {redirect <value 1-28>} {priority <value 0-7>} {bandwidth <value 1-32>} {ptp} {sflow} | drop}] | **ipv6** {source_ipv6 <ipv6addr> {mask <ipv6mask>}} {destination_ipv6 <ipv6addr> {mask <ipv6mask>}} {ingress_port <value 1-28> | all} {action [type1 {redirect <value 1-28>} {priority <value 0-7>} {dscp <value 1-8>} {sniffer} | type2 {redirect <value 1-28>} {priority <value 0-7>} {bandwidth <value 1-32>} {ptp} {sflow} | drop}] | **advanced** {source_mac <macaddr> {mask <macmask>}} {destination_mac <macaddr> {mask <macmask>}} {source_ip <ipaddr> {mask <ipmask>}} {destination_ip <ipaddr> {mask <ipmask>}} {[src_port_range [low <value 0-65535>] [high <value 0-65535>] | src_port <value 0-65535>]} {[dst_port_range [low <value 0-65535>] [high <value 0-65535>] | dst_port <value 0-65535>]} {vid <value 1-4094> {cos <value 0-7>}} {ethernet_type <hex 0x0000-0xFFFF>} {**flag** [all | **urg** | **ack** | **psh** | **rst** | **syn** | **fin**]}] {dscp <value 0-63>} {ip_protocol <hex 0x00-0xFF>} {ingress_port <value 1-28> | all} {action [type1 {redirect <value 1-28>} {priority <value 0-7>} {dscp <value 1-8>} {sniffer} | type2 {redirect <value 1-28>} {priority <value 0-7>} {bandwidth <value 1-32>} {ptp} {sflow} | type3 {redirect <value 1-28>} {priority <value 0-7>} {insert_ctag <value 1-32>} | type4 {insert_ctag

<value 1-32> } {insert_stag <value 1-32>} {sniffer} | type5 {redirect <value 1-28>} {priority <value 0-7>} {dscp <value 1-8>} {sniffer} {ptp} {sflow} {insert_ctag <value 1-32>} {insert_stag <value 1-32>} {mib_counter <value 1-2>} {bandwidth <value 1-32>}} | drop]]

config acl profile profile_name acl_1 type mac ingress_port 6 destination_mac FF:FF:FF:FF:FF:FF destination_mask FF:FF:FF:FF:FF:FF action drop

- **show acl_profile** [profile_name <name 32> | all]

Bandwidth Control :

- show bandwidth_ctrl {port PORTS} {mode MODE}
- config bandwidth_ctrl [port PORTS] (dir ingress [rate RATE] | dir egress {rate RATE} {period PERIOD})

Broadcast Storm :

- show storm_ctrl {storm STORM1}
- enable storm_ctrl [storm STORM1] [ports PORTS]

enable storm_ctrl storm arp ports all

- disable storm_ctrl [storm STORM1] [ports PORTS]
- config storm_ctrl [storm STORM2] [{threshold THRESHOLD} {period PERIOD}]

DHCP Relay Agent:

- show dhcprelay {state} { hops } { option82 [state | policy | remoteid] } {server}
- enable dhcprelay
- disable dhcprelay
- restart dhcprelay
- config dhcprelay hops [1-16]
- config dhcprelay option82 {state [enable|disable] } { policy [drop/relpace/keep/Append(ipv6 only)] }
- config dhcprelay server [1-5] type [ipv4 | ipv6] state [enable ip [ip-addr] | disable]

IMP Table :

- show imp_table ({ports PORTS} | filter_ports | filter_rule | pass_nullip)
- enable imp_table [pass_nullip | filter_ports PORTS]

- disable imp_table [pass_nullip | filter_ports PORTS]
- config imp_table [filter_rule RULE]

config imp_table filter_rule ip-match

- create imp_table version (4 [ip IPV4] | 6 [ip IPV6])

create imp_table ip 192.168.1.5

- config imp_table version (4 [ip IPV4] {port [PORT|notcheck]} {mac [MAC|notcheck]} {action (filter|priority PRI)}) | (6 [ip IPV6] {port [PORT|notcheck]} {mac [MAC|notcheck]})

config imp_table ip 192.168.1.5 mac 00:11:22:33:44:55 port 6 action filter

- delete imp_table version (4 [ip IPV4] | 6 [ip IPV6])

IPv4 :

- show ip address
- config ip address [address]
- config ip submask [submask]
- show ip gateway
- config ip gateway [address]

IPv6 :

- show ipv6 address
- config ipv6 address [address/prefixLEN]

config ipv6 address fe80::c0a8:202/64

- show ipv6 gateway
- show ipv6 dns
- config ipv6 dns [ipv6 address]

LACP :

- config link_aggregation algorithm [port | sa | da | sa_da | dip | sip | tcpudp_dp | tcpudp_sp]
- config link_aggregation entry <value 1-6> [{state [enable |disable]} {type [lacp | static]}]

{group_id <value 1-65535>} {mode [active | passive]} {ports <portlist>}}

config link_aggregation entry 1 ports 1,3,5,7 type lacp mode active op_key 120 state enable timeout short

- config link_aggregation combine_entry [1_2 | 3_4 | 5_6]
- show link_aggregation {group <value 1-6> | algorithm}

MAC Table:

- show mac_table {{ports PORTS} {state STATE1} | bind_en | aging_time | bind_ports}
- clear mac_table [ports PORTS]
- enable mac_table [bind_ports PORTS]
- disable mac_table [bind_ports PORTS]
- config mac_table [bind_en ENABLED | aging_time AGTIME | bind_ports PORTS]
- create mac_table [mac MAC] [msti MSTI] [port PORT] {owner OWNER}
- config mac_table [mac MAC] [msti MSTI] {port PORT} {priority PRI} {drop ENABLED} {snif1 ENABLED} {snif2 ENABLED} {sflow ENABLED} {state STATE2}

config mac_table mac 00:11:22:33:44:55 msti 6 port 6 state valid

- delete mac_table [mac MAC] [msti MSTI] {owner OWNER}

MIB Counter :

- enable mib_counter
- clear mib_counter {ports PORTS}
- show mib_counter ports PORTS { type TYPE}

show mib_counter ports 1,3,5 type rx_mcst

Mirror:

- show mirror
- config mirror {sniffed-port [sniffed-ports]} {sniffing-port [sniffing-ports]} {method (ingress | egress | ingress+egress)} {enable}

config mirror source-ports 1,3,5 destination-ports 7 method ingress

- enable mirror
- disable mirror

Multicast(IGMP/MLD):

- enable igmp_snooping
- disable igmp_snooping
- config igmp_snooping [{version <value 1-3>} {router_ports <portlist>} {gmi <value 10-65535 >} {router_aging <value 10-65535>}]
- create igmp_snooping static_group <ipaddr>
- delete igmp_snooping static_group <ipaddr>
- config igmp_snooping static_group <ipaddr> [add|delete <portlist>]
- show igmp_snooping {router_ports} | {groups} |[{ports <portlist>} {ip <ipaddr>}]
- clear igmp_snooping [{ip <ipaddr>} | {all}]
- enable mld_snooping
- disable mld_snooping
- config mld_snooping [{version <value 1-3>} {router_ports <portlist>} {gmi <value 10-65535 >} {router_aging <value 10-65535>}]
- create mld_snooping static_group <ipv6addr>
- delete mld_snooping static_group <ipv6addr>
- config igmp_snooping static_group <ipv6addr> [add|delete <portlist>]
- show mld_snooping {router_ports} | {groups} |[{ports <portlist>} {ip <ipv6addr>}]
- clear mld_snooping [{ip <ipv6addr>} | {all}]
- restart [mcp|igmp|mld]

Physical Port status:

- show port current [<port-list> | all]
- config ports [<port-list> | all] {name [name]} {speed [10_full | 10_half | 100_full | 100_half | 1000_full | [auto { capability [10_full | 10_half | 100_full | 100_half | 1000_full] }]] } {auto_negotiation [restart_an]} {flow_control [enable | disable]} {learning [enable | disable]} {state [enable | disable]}

QoS:

- show qosaging ports [port-list | all]
- show qosaging timesettings
- config qosaging ports [port-list] {queue0 [enable|disable]} {queue1 [enable|disable]} {queue2 [enable|disable]} {queue3 [enable|disable]} {queue4 [enable|disable]} {queue5 [enable|disable]} {queue6 [enable|disable]} {queue7 [enable|disable]}

Ex:

config qosaging ports 1,2,3 queue0 enable queue1 enable queue2 disable

- config qosaging {time [value]} {fastaging [enable|disable]}
- show cos ports [port-list | all]
- show cos 8021pedition
- show cos dscp entry [dscp-list | all]
- show cos dscp nomatchaction
- show cos protocolport entry [1-20 | all]
- show cos protocolport userdefine [1-5 | all]
- config cos ports [port-list] {acl [enable|disable]} {igmp [enable|disable]} {ipaddress [enable|disable]} {macaddress [enable|disable]} {vid [enable|disable]} {protocolport [enable|disable]} {dscp [enable|disable]} {8021p [enable|disable]} {physicalport [0-7]}

config cos ports 1,3,5 vid enable

- config cos 8021pedition [2005 | 2005_exchange | early]
- config cos dscp entry [1-8] value [0-63] queue [0-7]
- config cos dscp nomatchaction [0|1]
- config cos protocolport entry [1-20] queue [0-7]
- config cos protocolport userdefine [[1|2] port [port-num] | [3-5] from [port-num] to [port-num]]
- show qosmode groupmemeber [[1-max_groupnum] | all]
- show qosmode groupsettings [[1-max_groupnum] | all]
- config qosmode group [1-max_groupnum] member [port-list | all]

config qosmode group 2 member 1,3,5,7

- config qosmode groupsettings [1-max_groupnum] {mode [0-5]} {method [0-4]} {queue [0-7]} [{weight [0-255]} {maxbandwidth [0-255]}] } {unit [0-3]}

config qosmode groupsettings 2 mode 3 method WRR queue 6 weight 200

- show qosremap mode [tx|rx] ports [port-list | all]
- config qosremap mode [tx|rx] ports [port-list] {queue0 [0-7]} {queue1 [0-7]} {queue2 [0-7]}

{queue3 [0-7]} {queue4 [0-7]} {queue5 [0-7]} {queue6 [0-7]} {queue7 [0-7]}

SNMP:

- show snmp
- show snmp traps
- show snmp linkchange-traps [port-list]
- show snmp community {community-string}
- show snmp host {host-addr}
- show snmp group {group-name}
- show snmp user {user-name}
- show snmp view {oid-tree}

- enable snmp
- enable snmp [traps | linkchange-traps]
- disable snmp
- disable snmp [traps | linkchange-traps]

- create snmp user [user-name] group [group-name] {auth [md5-key]} {priv [des-key]}

reate snmp user user_2 group group_2 auth 12345678 priv 87654321

- create snmp community [community-name] group [group-name]

create snmp community comm_1 group group_1

- create snmp group [group-name] version [v1 | v2c | v3 [noauth_nopriv | auth_nopriv | auth_priv]]
 {read-view [view-name]} {write-view [view-name]} {notify-view [view-name]}

create snmp group group_1 version v2c read-view snmp_1 write-view snmp_1

create snmp group group_2 version v3 auth_priv read-view snmp_1 write-view snmp_1

- create snmp view [view-name] oid [oid-tree] type [included | excluded]

create snmp view snmp_1 oid 1.3.6.1.2.1.1 type included

- create snmp host [host-addr] version [v1 | v2c | v3 [noauth_nopriv | auth_nopriv | auth_priv]] auth
 [user(v3) or community(v1 | v2c)]

create snmp host 192.168.1.5 version v2c auth comm_1

- delete snmp user [user-name]
- delete snmp community [string]
- delete snmp group [group-name]
- delete snmp view [view-name] {oid-tree}
- delete snmp host [host-addr]

- config snmp linkchange-traps [<ports-list>] state [enable | disable]
- config snmp system-contact [contract-string]
- config snmp system-location [location-string]

SNMP RMON:

- show snmp rmon
- show snmp rmon alarm {number}
- show snmp rmon event {number}

- create snmp rmon alarm [number] variable [MIB-OID]

create snmp rmon alarm 1 variable 1.3.6.1.2.1.2.2.1.11.1

- create snmp rmon event [number]

- delete snmp rmon alarm [number]
- delete snmp rmon event [number]

- config snmp rmon alarm [number] {interval [time-interval] } {type [absolute | delta]}
 {rising-threshold [value]} {rising-event [event-number]} {falling-threshold
 [value]} {falling-event [event-number]} {owner [owner-name]}

config snmp rmon alarm 1 interval 2 type delta falling-threshold 100 falling-event 1

- config snmp rmon event [number] {type [none | log | snmptrap | logandtraps]}
 {community [community-string]} {description [description-string]} {owner
 [owner-name]}

config snmp rmon event 1 type snmptrap

- enable snmp rmon
- disable snmp rmon

Syslog :

- restart logappd
- enable logappd
- disable logappd
- show logappd {state | server}
- config logappd name [name-string] state [{enable {facility [local0~local7]}} | {disable}]
- config logappd server [1-4] { ip [server-ip] } { port [server-port] } {local0 [0-8]} {local1 [0-8]} {local2 [0-8]} {local3 [0-8]} {local4 [0-8]} {local5 [0-8]} {local6 [0-8]} {local7 [0-8]}
- clear logappd server [1-4]

STP:

- enable stp
- disable stp
- config stp [{version [stp | rstp | mstp]} {maxage <value 6-40>} {maxhops <value 6-40>} {hellotime <value 1-2>} {forwarddelay <value 4-30>}]
- show stp
- create stp instance_id <value 1-15>

create stp mstid 5

- config stp instance_id <value 1-15> {[add_vlan | remove_vlan] <vidlist>}

config stp mstid 5 add_vlan 100,1000,3000

- delete stp instance_id <value 1-15>
- config stp mst_config_id [{name <string>} {revision_level <value 0-65535>}]
- show stp mst_config_id
- config stp mst_ports <portlist> [instance_id <value 0-15>] [{internalCost [auto | <value 1-200000000>]} {priority <value 0-240>}]

config stp mst_ports 1,3,5 mstid 5 rpc 100000 priority 32

- config stp ports <portlist> [{externalCost [auto | <value 1-200000000>]} {state [enable | disable]}]
- show stp ports {<portlist>}
- config stp priority <value 0-61440> [instance_id <value 0-15>]
- show stp instance {<value 0-15>}

System:

- show system
- show system mac
- show system uptime
- show system devicename
- show system comment
- show system location
- show system contact
- clear system devicename
- clear system comment
- clear system location
- clear system contact
- config system devicename [string]
- config system comment [string]
- config system location [string]
- config system contact [string]

VLAN:

- show vlan all
- show vlan port [port-list | all]

show vlan ports 1,3,5

- show vlan group [group-name]
- show vlan group [all]
- show double-vlan ports [port-list | all]
- show double-vlan index [index-list | all]
- show vlan protocol all
- show vlan protocol [entry]

- enable vlan type [tag | group]
- enable vlan priority
- enable vlan egress-frame {multicast} {unicast} {arp}

- disable vlan type [tag | group]
- disable vlan priority
- disable vlan egress-frame

- create vlan name [name] [vid]

create vlan name tagVLAN_1 vid 1000

- create vlan group [group-name]
- config vlan name [name] {[add {tag [port-list]} {untag [port-list]} {mem [port-list]} {forbidden [port-list]} | delete [port-list]]} {priority [0-7]} {gvrp [enable|disable]}

config vlan name tagVLAN_1 add mem 1,3,5,7 tag 1,3 untag 7

- config vlan ports [port-list] {vid [vid]} {tagging [add | rmv | both | none]} {force [enable | disable]} {uplink [enable | disable]} {exclusive [enable | disable]} {egress [enable | disable]} {ingress-check [enable | disable]} {gvrp [enable | disable]} {ingress-frame [all | tag frame | priority tag and non-tag | priority tag and tag]}

config vlan ports 1,3,5,7 pvid 77 tagging none

- config vlan group [group-name] mem [mem-list]
- config vlan protocol [entry] {mode [enable/disable]} {vid [vid]} {type [type]} {method [0-2]}
- config vlan tagging [port | vid]
- config double-vlan ports [port-list] {index [index]} {tagging [add | rmv | both | none]} {rxdet [enable | disable]} {keep [enable | disable]}

config double-vlan ports 1,3,5 index 1 tagging add

- config double-vlan index [index] data [data]
- config double-vlan type [type]

config vlan tagging vid

- delete vlan name [name]
- delete vlan group [group-name]

- clear vlan protocol [entry]