

# Smart 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]

*create acl profile profile\_name acl\_1 type mac*

- **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> } { bandwidth <value 1-32> } { ptp } { sflow } | type4 { insert\_ctag <value 1-32> } | type3 { redirect <value 1-28> } { priority <value 0-7> } { bandwidth <value 1-32> } { ptp } { sflow } | 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/replace/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*



## 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 varibale 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]