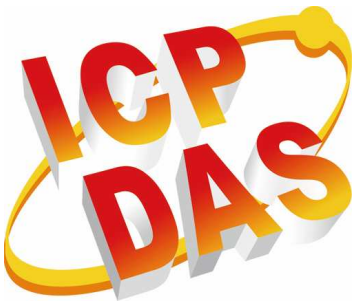

MSM-6226G
GbE Managed ETHERNET SWITCH
Console Manual

MSM-6226G L2 GIGABIT ETHERNET SWITCH

26 Port L2 Plus Managed Switch

PURPOSE This guide gives specific information on how to operate and use the management functions of the switch.

AUDIENCE The guide is intended for use by network administrators who are responsible for operating and maintaining network equipment; consequently, it assumes a basic working knowledge of general switch functions, the Internet Protocol (IP), and Simple Network Management Protocol (SNMP).

CONVENTIONS The following conventions are used throughout this guide to show information:

NOTE: Emphasizes important information or calls your attention to related features or instructions.

CAUTION: Alerts you to a potential hazard that could cause loss of data, or damage the system or equipment.

WARNING: Alerts you to a potential hazard that could cause personal injury.

RELATED PUBLICATIONS The following publication details the hardware features of the switch, including the physical and performance-related characteristics, and how to install the switch:

The *Installation Guide*

Also, as part of the switch's software, there is an online web-based help that describes all management related features.

Revision History

V1.0	**07/29/2013**

Table 1: 802.1X Commands

agetime	Configure the time in seconds between check for activity on successfully authenticated MAC addresses
auto-logout	Configure time of inactivity before automatic logout.
clear	Clear 802.1X statistics
eapol-timeout	Configure the time between EAPOL retransmissions
exit	Exit from current mode
guest-vlan	Configure the Guest VLAN mode
help	Show available commands
history	Show a list of previously run commands
hold-time	Configure the time in seconds before a MAC-address that failed authentication gets a new authentication chance
logout	Disconnect
mode	Configure the 802.1X mode
port-guest-vlan	Configure the Guest VLAN mode of switch ports
port-radius-qos	Configure the RADIUS-assigned QoS mode of switch
port-radius-vlan	Configure the RADIUS-assigned VLAN mode of switch
port-state	Configure the 802.1X port state
quit	Disconnect
radius-qos	Configure the RADIUS-assigned QoS mode
radius-vlan	Configure the RADIUS-assigned VLAN mode
reauth-period	Configure the period

between reauthentications	
reauthentication	Configure the 802.1X
reauthentication mode	
restart	Restart 802.1X
authentication process	
restore	Restore running
configuration	
save	Save running
configuration	
show	Show 802.1X information

Agetime

Configure the time in seconds between check for activity on successfully authenticated MAC addresses

SYNTAX

agetime *<10-1000000>*

Parameter

Time in seconds between checks for activity on a MAC address that succeeded authentication

EXAMPLE

clear

Clear 802.1X statistics

SYNTAX

Clear *<port-list>*

Parameter

Port list available value is from 1 to 10B format:1,3-5

EXAMPLE

eapol-timeout

Configure the time between EAPOL retransmissions

SYNTAX

eapol-timeout *<1-65535>*

Parameter

<1-65535> Time in seconds between EAPOL retransmissions

EXAMPLE

hold-time

Configure the time in seconds before a MAC-address that lied authentication gets a new authentication chance

SYNTAX

hold-time <10-1000000>

Paramete

<10-1000000> Hold time before MAC addresses that failed authentication expire

EXAMPLE

mode

Configure the 802.1X mode

SYNTAX

mode <*disable*> <*ensable*>

Parameter

Disable Globally disable 802.1X operation mode

enable Globally enable 802.1X operation mode

EXAMPLE

port-guest-vlan

Configure the Guest VLAN mode of switch ports

SYNTAX

port-guest-vlan <port-list> <*disable*> <*ensable*>

Parameter

Port list, available value is from 1 to 10B format:1,3-5.

Disable Disable Guest VLAN

Enable Enable Guest VLAN

EXAMPLE

port-radius-qos

A constant that defines a nonzero number of seconds between periodic reauthentication of the supplicant

SYNTAX

port-radius-qos <port-list> <*disable*> <*ensable*>

Parameter

Port list, available value is from 1 to 10B format:1,3-5

Disable Disable RADIUS-assigned QoS
Enable Enable RADIUS-assigned QoS

EXAMPLE

port-radius-vlan

Configure the RADIUS-assigned VLAN mode of switch ports

SYNTAX

port-radius-vlan <port-list>

Parameter

Port list, available value is from 1 to 10B format:1,3-5

EXAMPLE

port-state

Configure the 802.1X port state

SYNTAX

port-state <port-list> <force-auth> <force-unauth>
<mac-based> <multi> <port-based> <single>

Parameter

Port list, available value is from 1 to 10B format:1,3-5

force-auth Port access is allowed

force-unauth Port access is not allowed

mac-based Switch authenticates on behalf of the client

multi Multiple Host 802.1X Authentication

port-based Port-based 802.1X Authentication

single Single Host 802.1X Authentication

EXAMPLE

radius-qos

Configure the RADIUS-assigned QoS moder

SYNTAX

radius-qos <*disable*> <*ensable*>

Parameter

Disable Disable RADIUS-assigned QoS

enable Enable RADIUS-assigned QoS

EXAMPLE

radius-vlan

Configure the RADIUS-assigned vlan mode

SYNTAX

radius-vlan <*disable*> <*ensable*>

Parameter

disable Disable RADIUS-assigned vlan

enable Enable RADIUS-assigned vlan

EXAMPLE

Table : AAA Commands

acc-radius	Configure RADIUS accounting Server
accounting	Configure Accounting mode
authorization	Configure Authorization mode
deadtime	Configure server dead time
fallback-author	Configure Authorization mode
radius	Configure RADIUS authentication server
show	Show AAA information
tacacs+	Configure TACACS+ authentication server
timeout	Configure server response timeout

acc-radius

To configure the RADIUS accounting server parameter.

Syntax

acc-radius *<index> <enable/disable> <ip-hostname> <0-65535> <Line>*

Parameter

<index> The RADIUS accounting Server index. The available value is from 1 to 5

<**disable/enable**> To enable or disable the RADIUS accounting service.

<**ip-hostname**> The RADIUS accounting server IP address or hostname.

<**0-65535**> The RADIUS accounting server UDP port. If the port is set to 0 (zero), then the default port (1813) is used.

<**LINE**> Secret shared with external accounting server. The Available value is up to 29 characters long.

EXAMPLE

accounting To enable or disable the RADIUS accounting operation mode.

Syntax

accounting <*enable/disable*>

Parameter

<**disable>** Globally disable Accounting operation mode.

<enable> Globally enable Accounting operation mode.

EXAMPLE

NOTE: If you didn't connect the RADIUS Server already then the switch will show "Server disconnect".

authorization To configure (enable/disable) RADIUS Authorization mode

Syntax

authorization <*enable/disable*>

Parameter

<**disable>** Globally disable Authorization operation mode.

<enable> Globally enable Authorization operation mode.

EXAMPLE

deadtime To configure the RADIUS server deadtime.

Syntax

deadtime <*0-3600*>

Parameter

<**0-3600**> Time that a server is considered dead if it doesn't answer a request.

The available value is from 0 to 3600 second

Default Setting

None

EXAMPLE

NOTE: If you didn’t connect the RADIUS Server already then the switch will show “Server disconnect”.

fallback-author To configure the fallback function of RADIUS authorization with enable/disable if remote authorization fails.

Syntax

fallback-author *<disable/ enable>*

Parameter

<**disable**> Disable fallback function.

<**enable**> Enable fallback function if remote authorization fails.

EXAMPLE

NOTE: If you didn't connect the RADIUS Server already then the switch will show "Server disconnect".

radius To configure the RADIUS Server detail parameter

Syntax

radius *<index> <enable/disable> <ip-hostname> <0-65535> <Line>*

Parameter

<index> The RADIUS accounting Server index. The available value is from 1 to 5

<**disable/enable**> To enable or disable the RADIUS accounting service.

<**ip-hostname**> The RADIUS accounting server IP address or hostname.

<**0-65535**> The RADIUS accounting server UDP port. If the port is set to 0 (zero), then the default port (1813) is used.

<**LINE**> Secret shared with external accounting server. The Available value is up to 29 characters long.

EXAMPLE

NOTE: If you didn't connect the RADIUS Server already then the switch will show "Server disconnect".

show To display the RADIUS AAA information

Syntax

Show *<config>*

Show <*statistics***>** *<1-5>*

Parameter

<config> To show AAA configuration

<**statistics**> To show RADIUS statistics

<**1-5**> The RADIUS Server Index

EXAMPLE

tacacs+ To configure the TACACS+ authentication server detail parameter.

Syntax

tacacs+ *<index> <enable/disable> <ip-hostname> <0-65535> <Line>*

Parameter

<index> The TACACS+ authentication Server index. The available value is from 1 to 5

<**disable/enable**> To enable or disable the TACACS+ authentication service.

<**ip-hostname**> The TACACS+ authentication server IP address or hostname.

<**0-65535**> The TACACS+ authentication server UDP port. If the port is set to 0 (zero), then the default port (1813) is used.

<**LINE**> Secret shared with external accounting server. The Available value is up to 29 characters long.

EXAMPLE

NOTE: If you didn't connect the TACACS+ Server already then the switch will show "Server disconnect".

timeout To configure server response timeout

Syntax

timeout *<3-3600>*

Parameter

<**3-3600**> The Timeout, which can be set to a number between 3 and 3600 seconds, is the maximum time to wait for a reply from a server.

EXAMPLE

Table : Access Commands

add	Add or modify access management entry
clear	Clear access management statistics
delete	Delete access management entry
mode	Configure the access management mode
show	Show access management information

add

Add or modify access management entry

SYNTAX

add *<1-16> <ipv4/ipv6> <ip-address> <ip-address> <all> <snmp> <telnet> <web>*

Parameter

1-16 Entry index
ipv4 IPv4 format address
ipv6 IPv6 format address
<ip-address> Start IP address
<ip-address> End IP address
all All interface
snmp SNMP interface
telnet TELNET/SSH interface
web HTTP/HTTPS interface

EXAMPLE

clear

Clear access management statistics

SYNTAX

Clear < *statistics*>

Parameter

Clear access management statistics

EXAMPLE

delete

Delete access management entry.

SYNTAX

Delete <*1-16*>

Parameter

1-16 Entry index

EXAMPLE

mode

Configure the 802.1X mode

SYNTAX

mode <*disable*> <*ensable*>

Parameter

disable Disable access management mode operation
enable Enable access management mode operation

EXAMPLE

show

Show 802.1X information

SYNTAX

show < config> < statistics>

Parameter

config Show access management configuration
statistics Show access management statistics

EXAMPLE

Table : Account Commands

add	Add or modify user account
delete	Delete user account
show	Show user account information

add

Add or modify user account

SYNTAX

add guest *<1-15> <word>*

Parameter

<1-15> User privilege level
<WORD> Up to 32 characters to identify the user name

EXAMPLE

delete

To create a new operator user. When you create a new operator user, you must type in password and confirm password.

SYNTAX

delete <WORD>

Parameter

Up to 32 characters to identify the user name

EXAMPLE

show Show user account information

SYNTAX

Show *<name>*

EXAMPLE

Table : ACL Commands

ace	Add or modify Access Control Entry
action	Configure ACL port default action
clear	Clear all ACL counters
delete	To delete the ACE (Access Control Entry) configuration on the switch.
logging	Configure ACL port default logging operation.
mirror	Configure ACL port default mirror operation
move	Move ACE
policy	Configure ACL port policy
rate-limiter	To set acl rate limter.
show	Show ACL information
shutdown	Configure ACL port default shut down operation

ace

Add or modify Access Control Entry.

SYNTAX

ace *<index>*

Parameter

<1-256> If the ACE ID is specified and an entry with this ACE ID already exists, the ACE will be modified. Otherwise, a new ACE will be added.

<0-256> If the next ACE ID is non zero, the ACE will be placed before this ACE in the

list. If the next ACE ID is zero, the ACE will be placed last in the list.

policy Policy ACE keyword, the rule applies to all ports configured with the specified policy

port Port ACE keyword, the rule applies to the specified port only

switch Switch ACE keyword, the rule applies to all ports

<port-list> Port list, available value is from 1 to 10B format:1,3-5
any Any frame can match this ACE
arp Only ARP frames can match this ACE.Notice the ARP frames won't match the ACE with ethernet type
etype Only Ethernet Type frames can match this ACE
icmp Only ICMP frames can match this ACE. Notice the ICM frames won't match the ACE with ethernet type
ipv4 Only IPv4 frames can match this ACE. Notice the IPv4 frames won't match the ACE with ethernet type
tcp Only TCP frames can match this ACE. Notice the TCP frames won't match the ACE with ethernet type
udp Only UDP frames can match this ACE. Notice the UDP frames won't match the ACE with ethernet type

EXAMPLE

action Configure ACL port default action

SYNTAX

action <port-list> <deny> <permit>.

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-5pe
deny Deny forwarding
permit Permit forwarding

EXAMPLE

delete

This command delete the ACE (Access Control Entry) configuration on the switch.

SYNTAX

delete <1-256>

Parameter

<1-256> ACE ID must be exist

EXAMPLE

list

This command display ACL list.

SYNTAX

list <port-list> disable/enable

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-5

disable Frames received on the port are not logged
enable Frames received on the port are stored in the system log

EXAMPLE

mirror

Configure ACL port default mirror operation.

SYNTAX

list <port-list> disable/enable

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-5

disable Frames received on the port are not logged
enable Frames received on the port are stored in the system log

EXAMPLE

move

This command move ACE configuration between two index.

SYNTAX

Move <1-256> <0-256>

Parameter

<1-256> ACE ID must be exist
<0-256> If the next ACE ID is non zero, the ACE will be Placed before this ACE in the

list. If the next ACE ID is zero,the ACE will be placed last in the list.

EXAMPLE

policy

This command set acl port policy on switch.

SYNTAX

policy <port-list> *<1-8>*

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-5
<1-8> Policy number

EXAMPLE

port-rate

This command set acl port policy on switch.

SYNTAX

port-rate <port-list> *<1-8>*

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-5
disable Disable rate limit
<1-16> Rate limiter ID

EXAMPLE

ratelimiter

This command access control rule with rate limiter on switch.

SYNTAX

ratelimiter *<1-16>* <kbps> <0-10000>

Parameter

<1-16> *Rate limiter ID*
kbps Kbits per second
pps Packets per second
<0-10000> Rate in 100Kbps

EXAMPLE

show

This command show all access control entry setting on switch.

SYNTAX

show

Parameter

acl-config Show ACL configuration
acl-status Show ACL status
port Show ACL port configuration
rate-limiter Show ACL rate limiter

EXAMPLE

Table : Aggregation Commands

delete	Delete command
group	Configure the link aggregation group
mode	Configure the link aggregation traffic distribution mod
show information	Show aggregation group

delete

To Delete command

SYNTAX

delete

Parameter

group Delete link aggregation group

EXAMPLE

Group

Configure the link aggregation group.

SYNTAX

set return-path *<1-5>*<port-list>

Parameter

<1-5> Aggregation group id

<port-list> Port list, available value is from 1 to 10B format:1,3-

EXAMPLE

mode

To set sender description.

SYNTAX

set sender < ip > <disable>

Parameter

dmac Destination MAC address
ip Source and destination IP address
port Source and destination UDP/TCP port
smac Source MAC address
disable Disable field in traffic distribution
enable Enable field in traffic distribution
sender Sender description.

EXAMPLE

show

To set return path description.

SYNTAX

show

EXAMPLE

Table : Arp-inspection Commands

add	Add ARP inspection static entry
delete	Delete ARP inspection static entry
mode	Configure ARP inspection mode
port-mode	Configure ARP inspection port mode
show	Show ARP inspection information

add

Add ARP inspection static entry

SYNTAX

add <port-list> <1-4094> <ip-address> <mac-address>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3
<ip-address> IP address allowed for doing ARP request
<mac-address> MAC address, format 0a-1b-2c-3d-4e-5f

EXAMPLE

delete

Delete ARP inspection static entry

SYNTAX

delete<port-list> <1-4094> <ip-address> <mac-address>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3
<ip-address> IP address allowed for doing ARP request
<mac-address> MAC address, format 0a-1b-2c-3d-4e-5f

EXAMPLE

mode

Configure ARP inspection mode

SYNTAX

Delete < disable> < enable>

Parameter

disable Globally disable ARP inspection mode
enable Globally enable ARP inspection mode.

EXAMPLE

port-mode

Configure ARP inspection port mode

SYNTAX

Delete <port-list> < disable> < enable>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable Globally disable ARP inspection mode
enable Globally enable ARP inspection mode.

EXAMPLE

Show

Configure ARP inspection port mode

SYNTAX

Show < config> < status>

Parameter

config Show ARP inspection configuration
status Show ARP inspection static and dynamic entry

EXAMPLE

Table : Auth Commands

fallback fallback	Configure local authentication
method	Configure authentication method
show	Show Authentication configuration

fallback

Configure local authentication fallback

SYNTAX

add < *console*> < ssh > < telnet > < web > /< *disable* >< *disable* >

Parameter

console Settings for console
ssh Settings for ssh
telnet Settings for telnet
web Settings for web
disable Disable local authentication if remote authentication fails
enable Enable local authentication if remote authentication fails

EXAMPLE

method

Delete ARP inspection static entry

SYNTAX

delete< *console*> < ssh > < telnet > < web > /

Parameter

< local> < none> < radius> < tacacs+>
console Settings for console
ssh Settings for ssh
telnet Settings for telnet
web Settings for web
local Use local authentication
none Authentication disabled
radius Use remote RADIUS authentication
tacacs+ Use remote TACACS+ authentication
<port-list> Port list, available value is from 1 to 10B format:1,3
<ip-address> IP address allowed for doing ARP request
<mac-address> MAC address, format 0a-1b-2c-3d-4e-5f

EXAMPLE

Show

Show Authentication configuration

SYNTAX

Show

EXAMPLE

Table : Config-file Commands

export	Export configuration file to tftp server
import	Import configuration file to flash

export

To run the export function.

SYNTAX

export < ip-address> <WORD>

Parameter

ip-address The TFTP server ip address
<WORD> Configuration file name

EXAMPLE

import

To run the import start function.

SYNTAX

import < *ip-address*> <*WORD*>

Parameter

ip-address The TFTP server ip address.
<WORD> Configuration file name

EXAMPLE

Table : DHCP-Relay Commands

clear	Clear DHCP relay statistics
mode	onfigure DHCP relay mode
relay-option	Configure DHCP relay
agent information option	
server	Configure DHCP relay server
show	Show DHCP relay information

clear

Clear DHCP relay statistics

SYNTAX

clear < statistics >

Parameter

statistics Clear DHCP relay statistics

EXAMPLE

mode

Delete dhcp snooping entry

SYNTAX

mode <*enable*> /<*disable*>

Parameter

disable Disable DHCP relay mode
enable Enable DHCP snooping mode.When enable DHCP relay mode operation, the agent forward and to transfer DHCP messages between the clients and the server when they are not on the same subnet domain. And the DHCP broadcast message won't flood for security considered

EXAMPLE

relay-option

Configure DHCP relay agent information option

SYNTAX

relay-option<*enable*> <*disable*>

Parameter

disable Disable DHCP relay mode
enable Enable DHCP snooping mode.When enable DHCP relay mode operation, the agent forward and to transfer DHCP messages between the clients and the server when they are not on the same subnet domain. And the DHCP broadcast message won't flood for security considered

EXAMPLE

server

Configure DHCP relay server

SYNTAX

server <ip-address>

Parameter

<ip-address> DHCP server IP address

EXAMPLE

show

Show DHCP relay information

SYNTAX

set entry < *config*> < *statistics*>

Parameter

config Show DHCP relay configuration
statistics Show DHCP relay statistics
set entry <*vid*> *vid* range from 1 to 4094

EXAMPLE

Table : dhcp_snooping Commands

clear	Clear DHCP snooping statistics
mode	Configure DHCP snooping mode
port-mode	Configure DHCP snooping port mode
show	Show DHCP snooping information

clear

Clear DHCP snooping statistics

SYNTAX

Clear *<statistics><port-list>*

Parameter

statistics Clear DHCP snooping statistics
<port-list> Port list, available value is from 1 to 10B format:1,3-

EXAMPLE

mode

Delete dhcp snooping entry

SYNTAX

Mode *<disable><enable>*

Parameter

disable Disable DHCP snooping mode
enable Enable DHCP snooping mode.When enable DHCP snooping mode operation, the request DHCP messages will be forwarded to trusted ports and only allowed reply packets from trusted ports.

EXAMPLE

port-mode

configure DHCP snooping port mode

SYNTAX

Mode <port-list> < trusted >

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-
trusted Configures the port as trusted sources of the DHCP message
untrusted Configures the port as untrusted sources of the DHCP message

EXAMPLE

show

Show DHCP snooping information

SYNTAX

show < config> < statistics>

Parameter

config Show DHCP snooping configuration
statistics Show DHCP snooping statistics

EXAMPLE

Table : Diagnosic Commands

ping	Uses the ICMP protocol's mandatory ECHO_REQUEST datagram to elicit an ICMP ECHO_RESPONSE from a host or gateway
ping6	Uses the ICMP protocol's mandatory ECHO_REQUEST datagram to elicit an ICMP ECHO_RESPONSE from a host or gateway
veriphy	Run cable diagnostics

ping

Uses the ICMP protocol's mandatory ECHO_REQUEST datagram to elicit an ICMP ECHO_RESPONSE from a host or gateway

SYNTAX

clear <ip-hostname> <60-1400>

Parameter

<ip-hostname> Hostname or IP address
<60-1400> Size of ICMP echo packet

EXAMPLE

ping

Uses the ICMP protocol's mandatory ECHO_REQUEST datagramto elicit an ICMP ECHO_RESPONSE from a host or gateway

SYNTAX

Ping6<ip-hostname> <60-1400>

Parameter

<ip-hostname> Hostname or IP address
<60-1400> Size of ICMP echo packet

EXAMPLE

veriphy

Run cable diagnostics

SYNTAX

veriphy <port-list>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

EXAMPLE

Table : EEE Commands

mode	Configure EEE mode
show	Show EEE information
urgent-queue	Configure EEE urgent queue

mode

To configure the port Energy Efficient Ethernet mode

Syntax

mode *<port-list> <disable/ enable>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable Energy Efficient Ethernet.

<**enable**> Enable Energy Efficient Ethernet.

Default Setting

None

EXAMPLE

show

To show the port EEE mode configuration status

Syntax

show

Parameter

None

EXAMPLE

urgent-queue To configure the port EEE urgent-queue

Syntax

urgent-queue <*port-list*> <*queue-list*> <*disable/ enable*>

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**queue-list**> Queue list, format : 1,3-5

<**disable**> Queue will postpone the transmission until 3000 bytes are ready to be transmitted.

<**enable**> Queues set will activate transition of frames as soon as any data is available

EXAMPLE

Table : event Commands

group	Configure trap event
severity leve	
show	Show trap event
configuration	

group

Configure trap event severity level

SYNTAX

Group <group-name><*port-list*>

Parameter

<group-name> Trap event group name

<0-7> Severity level

<0> Emergency: system is unusable

<1> Alert: action must be taken immediately

<2> Critical: critical conditions

<3> Error: error conditions

<4> Warning: warning conditions

<5> Notice: normal but significant condition

<6> Informational: informational messages

<7> Debug: debug-level messages-

EXAMPLE

Show

Show trap event configuration

SYNTAX

Show

EXAMPLE

Table :Firmware Commands

upgrade	Upgrade system firmware

upgrade

Upgrade system firmware

SYNTAX

firmware< *<ipv6-address>*>< *ip-hostname*> <WORD>

Parameter

<ipv6-address> TFTP server ipv6 address IPv6 address is in 128-bit records represented as eight fields of up to four hexadecimal digits with a colon separates each field (:).For example, 'fe80::215:c5ff:fe03:4dc7'. The symbol '::' is a special syntax that can be used as a shorthand way of representing multiple 16-bit groups of contiguous zeros; but it can only appear once. It also used a following legally IPv4 address. For example,'::192.1.2.34'

<ip-hostname> TFTP server ip address or hostname

<WORD> Firmware image file name

EXAMPLE

Table : GARP Commands

applicant	Enable/Disable applicant administrative control
join-time	Set the GARP join timer configuration
leave-all	Set the GARP leave all timer configuration
leave-time	Set the GARP leave timer configuration
show	Show the GARP configuration

applicant

To enable/disable applicant administrative control

Syntax

applicant *<port-list> <non-participant/ normal-participant>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**non-participant**> Set applicant administrative control to non-participant

<**normal-participant**> Disable applicant administrative control to normal-participant.

EXAMPLE

join-time

To set the GARP join timer configuration

Syntax

join-time *<port-list> <time-value>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**time-value**> join time value, available value is from 200 to 400 seconds.

EXAMPLE

NOTE: If you didn't set the GARP environment already then the switch will show "Set jointimer failed".

leave-all

To set the GARP leave all timer configuration

Syntax

leave-all *<port-list> <timer-value>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**timer-value**> leave all time value, available value is from 10000 to 100000 seconds.

EXAMPLE

NOTE: If you didn't set the GARP environment already then the switch will show "Set leavealltimer failed".

leave-time

To set the GARP leave timer configuration

Syntax

leave-time *<port-list> <timer-value>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**timer-value**> leave time value, available value is from 600 to 1000 seconds

EXAMPLE

NOTE: If you didn't set the GARP environment already then the switch will show "Set leavetimer failed".

show To show the GARP configuration

Syntax

show <*statistic*> <*port-list*>

Parameter

<**statistic**> Show the basic GARP port statistics

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

NOTE: If you didn't set the GARP environment already then the switch will show "empty field value".

Table : GVRP Commands

clear	Clear the basic GVRP port statistics
control	Enable/ Disable GVRP globally
mode	Enable/ Disable GVRP on port
rrole	Enable/ Disable GVRP restricted role on port
show	Show the GVRP configuration

clear

To clear the basic GVRP port statistics

Syntax

clear <*port-list***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

NOTE: If you set the GVRP on port then you could show the port GVRP statistics information or clear all record on port.

control

To enable or disable GVRP globally.

Syntax

control <*disable/ enable***>**

Parameter

<**disable**> To disable GVRP function globally.

<**enable**> To enable GVRP function globally.

EXAMPLE

mode To enable or disable GVRP function on port.

Syntax

mode <*port-list***>** *<disable/ enable>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> To disable GVRP function on port.

<**enable**> To enable GVRP function on port

EXAMPLE

rrole To enable or disable the GVRP restricted role on port

Syntax

rrole <*port-list***>** *<disable/ enable>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> To disable GVRP restricted role on port.

<**enable**> To enable GVRP restricted role on port

EXAMPLE

show To show the GVRP function information

Syntax

show <*config***>**

show *<statistics>*

Parameter

<**config**> To show the GVRP configuration.

<**statistics**> To show the basic GVRP port statistics.

EXAMPLE

Table : Https Commands

mode	Configure the HTTPS mode
redirect	Configure the HTTPS redirect mode
show	Show HTTPS configuration

mode

Configure the HTTPS mode

SYNTAX

mode<*disable*><*enable*>

Parameter

disable Disable HTTPS mode operation
enable Enable HTTPS mode operation

EXAMPLE

redirect

Configure the HTTPS redirect mode

SYNTAX

Redirect <*disable*><*enable*>

Parameter

disable Disable HTTPS redirect mode operation
enable Enable HTTPS redirect mode operation

EXAMPLE

show Show HTTPS configuration

SYNTAX

Show

EXAMPLE

Table : igmp Commands

fast-leave	Set per-port Fast Leave
filtering	The IP Multicast Group
that will be filtered	
flooding	Set IGMP Flooding Mode
leave-proxy	Set IGMP Leave Proxy Mode
lmqi Query Interval	Set per-VLAN Last Member
proxy	Set IGMP Proxy Mode
qi	Set per-VLAN Query Interval
qri Interval	Set per-VLAN Query Response
querier	Set per-VLAN IGMP Querier
router	Set Router Port
rv Variable	Set per-VLAN Robustness
show information	Show IGMP Snooping
snooping	Set IGMP Snooping Mode
state Snooping Mode	Enable/Disable per-VLAN IGMP
throttling	Set per-port Throttling
uri Interval	Set per-VLAN Unsolicited Report

fast-leave

Set per-port Fast Leave

SYNTAX

fast-leave *<port-list>/< disable >< enable>*

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-
disable Disable Fast Leave
enable Enable Fast Leave

EXAMPLE

leave-proxy

Set IGMP Leave Proxy Mode

SYNTAX

Mode <*disable*><*enable*>

Parameter

disable Disable IGMP Leave Proxy
enable Enable IGMP Leave Proxy

EXAMPLE

lmqi

Set per-VLAN Last Member Query Interval

SYNTAX

Mode <port-list> trusted

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-
trusted Configures the port as trusted sources of the DHCP message
untrusted Configures the port as untrusted sources of the DHCP message

EXAMPLE

proxy

Set IGMP Proxy Mode

SYNTAX

Mode <*disable*><*enable*>

Parameter

disable Disable IGMP Proxy
enable Enable IGMP Proxy

EXAMPLE

qi

Set per-VLAN Query Interval

SYNTAX

Qi <vlan-list> <1-255>

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5
<1-255> Range:1~255 sec, Default:125 sec

EXAMPLE

qri

Set per-VLAN Query Response Interval.

SYNTAX

Qri <vlan-list> <0-31744>

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5
<0-31744> Range:0~31744 tenths of sec, Default:100 tenths of sec

EXAMPLE

querier

Set per-VLAN IGMP Querier

SYNTAX

Qri <vlan-list> <*disable*><*enable*>

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5
disable Disable per-VLAN IGMP Querier
enable Enable per-VLAN IGMP Querier

EXAMPLE

router

Set Router Port

SYNTAX

Router <*port-list*><*disable*><*enable*>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-
disable Disable Router Port
enable Enable Router Port

EXAMPLE

rv

Set per-VLAN Robustness Variable

SYNTAX

Rv <vlan-list> <1-255>

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5
<1-255> Range:1~255, Default:2

EXAMPLE

show

Show IGMP Snooping information

SYNTAX

show < config> < statistics>

Parameter

config Show IGMP Snooping Configuration
groups Entries in the IGMP Group Table
ssm Entries in the IGMPv3 Information Table
status Show IGMP Snooping status
version Show IGMP Working Querier/Host Version currently

EXAMPLE

snooping

Set IGMP Snooping Mode

SYNTAX

Snooping <*disable*><*enable*>

Parameter

disable Disable the Global IGMP Snooping
enable Enable the Global IGMP Snooping

EXAMPLE

state

Enable/Disable per-VLAN IGMP Snooping Mode

SYNTAX

Snooping <vlan-list><*disable*><*enable*>

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5

disable Disable per-VLAN IGMP Snooping
enable Enable per-VLAN IGMP Snooping

EXAMPLE

throttling

Set per-port Throttling

SYNTAX

Snooping <port-list> *<0-10>*

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-
<0-10> Set Port Group Limit numberm, Range:0~10, 0:unlimited

EXAMPLE

uri

Set per-VLAN Unsolicited Report Interval

SYNTAX

Snooping *<vlan-list><0-31744>*

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5
<0-31744> Range:0~31744 sec, Default:1 sec

EXAMPLE

Table : ip Commands

dhcp	Enable/Disable DHCP client
mgmt-vlan	Set the management VLAN ID
name-server	Set DNS IP address
setup	Set the IP address
show	Show ip information

dhcp

Enable/Disable DHCP client

SYNTAX

Dhcp <*disable*><*enable*>

Parameter

disable Disable DHCP client

enable Enable DHCP client

EXAMPLE

mgmt-vlan

Set the management VLAN ID

SYNTAX

mgmt-vlan <1-4094>

Parameter

<1-4094> Management VLAN ID, available value is from 1 to 4094s.

EXAMPLE

name-server

Set DNS IP address

SYNTAX

name-server <ip-address>

Parameter

<ip-address> DNS IP address

EXAMPLE

Setup

Set the IP address

SYNTAX

Setup <ip-address><ip-mask><ip-address>

Parameter

<ip-address> IP address

<ip-mask> IP subnet mask

<ip-address> Gateway IP address

EXAMPLE

show

Show ip information

SYNTAX

Show

EXAMPLE

Table : IP-Source-Guard Commands

Add	Add or modify IP source guard static entry
delete	Delete IP source guard static entry
limit	IP source guard port limitation for dynamic entries
mode	Configure IP source guard mode
port-mode	Configure IP source guard port mode
show	Show IP source guard configuration

add

To add or modify IP source guard static entry

Syntax

add <*port-list***> <***VLAN ID***> <***ip-address***> <***mac-address***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5..

<**VLAN ID**> VLAN ID, available value is from 1 to 4094

<**ip-address**> IP address allowed for doing IP source guard

<**mac-address**> MAC address, format 0a-1b-2c-3d-4e-5f

EXAMPLE

delete To delete IP source guard static entry

Syntax

delete <*port-list***>** *<VLAN ID> <ip-address> <mac-address>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5..

<**VLAN ID**> VLAN ID, available value is from 1 to 4094

<**ip-address**> IP address allowed for doing IP source guard

<**mac-address**> MAC address, format 0a-1b-2c-3d-4e-5f

EXAMPLE

limit To set the IP source guard port limitation for dynamic entries

Syntax

limit <*port-list***>** *<0-2/ unlimited>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5..

<**0-2**> Specify the maximum number of dynamic clients that can be learned on given port. If the port mode is enabled and the value of max dynamic client is equal to 0, it means only allow the IP packets forwarding that are matched in static entries on the specific port

<**unlimited**> Unlimited dynamic clients

EXAMPLE

mode To configure IP source guard mode globally.

Syntax

mode <*disable/ enable***>**

Parameter

<**disable**> Globally disable IP source guard mode.

<**enable**> Globally enable IP source guard mode.

NOTE: All configured ACEs will be lost when the mode is enabled.

EXAMPLE

port-mode To configure IP source guard port mode.

Syntax

port-mode <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable IP source guard port mode.

<**enable**> Enable IP source guard port mode.

EXAMPLE

show

To show IP source guard information

Syntax

show <*binding-table***> <***port-list***>**
show <*config***>**

Parameter

<**binding-table**> Show IP-MAC binding table.
<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.
<**config**> Show IP source guard configuration.

EXAMPLE

Table : IPV6 Commands

autoconfig mode	Configure IPv6 autoconfig
setup	Set the IPv6 address
show	Show IPv6 information

autoconfig

Configure IPv6 autoconfig mode

SYNTAX

Autoconfig <*disable*><*enable*>

Parameter

disable Disable autoconfig mode
enable Enable autoconfig mode

EXAMPLE

Setup

Set the IPv6 address

SYNTAX

Setup <ipv6-address>

Parameter

<ipv6-address> Gateway IPv6 address IPv6 address is in 128-bit records represented as eight fields of up to four hexadecimal digits with a colon separates each field (:). For example, 'fe80::215:c5ff:fe03:4dc7'. The symbol '::'is a special syntax that can be used as a shorthand way of representing multiple 16-bit groups of contiguous zeros; but it can only appear once. It also used a
following legally IPv4 address. For example, '::192.1.2.34'
<1-128> IPv6 prefix

EXAMPLE

show Show ipv6 information

SYNTAX

Show

EXAMPLE

Table : LACP Commands

clear	Clear command
key	Configure the LACP key
mode	Configure the LACP
mode	
role	Configure the LACP role
show	Show LACP information

clear

Clear command

SYNTAX

clear < *statistics*>

Parameter

statistics Clear LACP statistics

EXAMPLE

Key

Configure the LACP key

SYNTAX

Setup <port-list><1-65535>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-
<1-65535> LACP key auto The Auto setting will set the key as appropriate
by the physical link speed, 10Mb = 1, 100Mb = 2, 1Gb = 3

EXAMPLE

mode Configure the LACP mode

SYNTAX

mode <*disable*><*enable*>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-
disable Disable LACP protocol
enable Enable LACP protocol

EXAMPLE

role Configure the LACP mode

SYNTAX

role <*disable*><*enable*>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-
active Initiate LACP negotiation, and transmit LACP packets each second
passive Listen for LACP packets

EXAMPLE

Show

Show LACP information

SYNTAX

Show

Parameter

config Show LACP configuration
statistics Show LACP statistics
status Show LACP status

EXAMPLE

Table : Limit-control Commands

action	Configure the action involved with exceeding the limit
aging	Configure the aging mode and period
limit	Configure the max. number of MAC addresses that can be learned on the port
mode	Configure the global limit control mode
port-mode	Configure the port mode
reopen	Reopen one or more ports whose limit is exceeded and shut down
show	Show limit control configuration

action

Configure the action involved with exceeding the limit

SYNTAX

Action <port-list> both

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

Both Send a SNMP trap and shutdown the port

none Do nothing

shutdown Shutdown the port

trap Send a SNMP trap

EXAMPLE

aging

Configure the aging mode and period

SYNTAX

aging<*disable*><*enable*>

Parameter

disable Disable aging

enable Enable aging

EXAMPLE

limit

Configure the max. number of MAC addresses that can be learned on the port

SYNTAX

limit<port-list><1-1024>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

<1-1024> Max. number of MAC addresses on selected port

EXAMPLE

mode

Configure the global limit control mode

SYNTAX

Mode <*disable*><*enable*>

Parameter

disable Globally disable port security

enable Globally enable port security

EXAMPLE

port-mode

Configure the port mode

SYNTAX

port-mode <port-list><*disable*><*enable*>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable Disable port security on selected port

enable Enable port security on selected port

EXAMPLE

reopen

Reopen one or more ports whose limit is exceeded and shut down

SYNTAX

reopen<port-list>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

EXAMPLE

show Show limit control configuration

SYNTAX

Show

EXAMPLE

Table : LLDP Commands

cdp-aware	Configure CDP (Cisco Discovery Protocol) aware mode
clear	Clear LLDP statistics
delay	Configure LLDP Tx delay
hold	Configure LLDP Tx hold value
interval	Configure LLDP transmission interval
mode	Configure the LLDP mode
option-tlv	Configure LLDP Optional TLVs
reinit	Configure LLDP reinit delay
show	Show LLDP information

cdp-aware

Configure CDP (Cisco Discovery Protocol) aware mode

SYNTAX

cdp-aware *<disable><enable>*

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable Disable CDP awareness

enable Enable CDP awareness (CDP discovery information is added to the LLDP neighbor table)

EXAMPLE

clear

Clear LLDP statistics

SYNTAX

clear

EXAMPLE

delay

Configure LLDP Tx delay

SYNTAX

limit<1-8192>

Parameter

<1-8192> LLDP transmission delay

EXAMPLE

Interval

Configure LLDP transmission interval

SYNTAX

Interval <5-32768>

Parameter

<5-32768> LLDP transmission interval

EXAMPLE

mode

Configure the LLDP mode

SYNTAX

Mode<port-list> <*disable*><*enable*>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable The switch will not send out LLDP information, and will drop LLDP information received from neighbours

enable The switch will send out LLDP information, and will analyze LLDP information received from neighbours

rx-only The switch will not send out LLDP information, but LLDP information from neighbour units is analyzed tx-only The switch will drop LLDP information received from neighbours, but will send out LLDP information

EXAMPLE

option-tlv

Configure LLDP Optional TLVs

SYNTAX

option-tlv <port-list>< mgmt-addr >< disable >

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

mgmt-addr Management IP address

port-desc Port description

sys-capa System capability
sys-desc System description
sys-name System name
disable Disable TLV
enable Enable TLV

EXAMPLE

reinit Configure LLDP reinit delay

SYNTAX

reinit <1-10>

Parameter

<1-10> LLDP reinit delay

EXAMPLE

show Show LLDP information

SYNTAX

Show

Parameter

config Show LLDP configuration
info Show LLDP neighbor device information
statistics Show LLDP statistics

EXAMPLE

Table : LLDPMED Commands

civic	Configure LLDP-MED civic address location
additional-code	Additional code
additional-info	Additional location info
apartment	Unit (Apartment, suite)
block	Neighbourhood, block
building	Building (structure)
city	City, township, shi (Japan)
comm.-name	Postal community name
country-code	The two-letter ISO 3166 country code
county	County, parish, gun (Japan), district
district	City division, borough, city district, ward, chou(Japan
floor	Floor
house-no	House number
house-no-suffix	House number suffix
landmark	Landmark or vanity address
leading-street-direction	Leading street direction
name	Name (residence and office occupant)
p.o.box	Post office box (P.O. BOX)
place-type	Place type
room-number	Room number
state	National subdivisions (state, canton, region, province, prefecture)
street	Street
street-suffix	Street suffix
trailing-street-suffix	Trailing street suffix
zip_code	Postal/zip code
coordinate	Configure LLDP-MED coordinate location
altitude	Altitude
datum	Map datum

latitude	Latitude
longitude	Longitude
delete	Delete the selected policy
ecs	Configure LLDP-MED Emergency Call Service
fast	Configure LLDP-MED fast start repeat count
policy	Configure LLDP-MED policy
show	Show LLDP-MED information

civic To configure LLDP-MED civic address location

Syntax

civic additional-code <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic additional-info <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic apartment <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic block <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic building<*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic city<*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic comm.-name<*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic contry-code <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry and it is the two-letter

ISO 3166 country code.

EXAMPLE

Syntax

civic country <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic district <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic floor <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic house-no <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic house-no-suffix <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic landmark <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic leading-street-direction <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic name <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic p.o.box <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic place-type <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic room-number <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic state <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic street <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic street-suffix <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic trailing-street-suffix <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

Syntax

civic zip-code <*LINE***>**

Parameter

<**LINE**> The value for the Civic Address Location entry.

EXAMPLE

coordinate To configure LLDP-MED coordinate location

Syntax

coordinate altitude <*coordinate-value***> <***floor/ meter***>**

Parameter

<**coordinate-value**> Meters or floors with max. 4 digits.

<**floor**> Representing altitude in a form more relevant in buildings which have different floor-to-floor dimension

<**meter**> Representing meters of Altitude defined by the vertical datum specified

EXAMPLE

Syntax

coordinate datum <*nad83-mllw/ nad83-navd88/ wgs84***>**

Parameter

<**nad83-mllw**> North American Datum 1983, CRS Code 4269, Prime Meridian. Name: Greenwich; The associated vertical datum is Mean Lower Low Water (MLLW).

This datum pair is to be used when referencing location on water/sea/ocean

<**nad83-navd88**> North American Datum 1983, CRS Code 4269, Prime Meridian.

Name: Greenwich; The associated vertical datum is the North American Vertical Datum of 1988 (NAVD88).

This datum pair is to be used when referencing location on land, not near tidal water (which would use Datum = NAD83/MLLW)

<**wgs84**> (Geographical 3D) - World Geodesic System 1984, CRS Cod 4327, Prime Meridian.

Name: Greenwich

EXAMPLE

Syntax

coordinate latitude <*coordinate-value***> <***north/ south***>**

Parameter

<**coordinate-value**> 0 to 90 degrees with max. 4 digits.

<**north**> North of the equator

<**south**> South of the equator

EXAMPLE

Syntax

coordinate longitude <*coordinate-value***> <***east/ west***>**

Parameter

<**coordinate-value**> 0 to 180 degrees with max. 4 digits.

<**east**> East of the prime meridian.

<**west**> West of the prime meridian.

EXAMPLE

delete To delete the selected policy

Syntax

delete <*policy ID***>**

Parameter

<**policy ID**> Policy ID, available value is from 0 to 31.

EXAMPLE

ecs To configure LLDP-MED Emergency Call Service

Syntax

ecs <*number***>**

Parameter

<**number**> The numerical digit string for the Emergency Call Service.

EXAMPLE

fast To configure LLDP-MED fast start repeat count

Syntax

fast <*1-10***>**

Parameter

<**1-10**> The number of times the fast start LLDPDU are being sent during the activation of the fast start mechanism defined by LLDP-MED.

EXAMPLE

policy To configure LLDP-MED policy

Syntax

policy <*tagged/ untagged> <VLAN ID> < Layer2 priority> <DSCP value> <guest-voice/ guest-voice-signaling/ softphone-voice/ streaming-video/ video-conferencing/ video-signaling/ voice/ voice-signaling>*

Parameter

<**tagged**> The device is using tagged frames.

<**untagged**> The device is using untagged frames

<**VLAN ID**> VLAN ID, available value is from 1 to 4094.

<**L2 priority**> Layer 2 priority to be used for the specified application type, available value is from 0 to 7.

<**DSCP value**> DSCP value to be used to provide Diffserv node behavior for the specified application type as defined in IETF RFC 2474, available value is from 0 to 63.

<**guest-voice**> Guest Voice to support a separate limited feature-set voice service for guest users and visitors with their own IP Telephony handsets and other similar appliances supporting interactive voice services.

<**guest-voice-signaling**> Guest Voice Signaling (conditional) for use in network topologies that require a different policy for the guest voice signaling than for the guest voice media.

<**softphone-voice**> Softphone Voice for use by softphone applications on typical data centric devices, such as PCs or laptops. This class of endpoints frequently does not support multiple VLANs, if at all,and are typically configured to use an untagged VLAN or a single tagged data specific VLAN.

<**streaming-video**> Streaming Video for use by broadcast or multicast based video content distribution and other similar applications supporting streaming video services that require specific network policy treatment. Video applications relying on TCP with buffering would not be an intended use of this application type.

<**video-conferencing**> Video Signaling (conditional) for use in network topologies that require a separate policy for the video signaling than for the video media.

<**video-signaling>** Video Signaling (conditional) for use in network topologies that require a separate policy for the video signaling than for the video media.

<**voice**> Voice for use by dedicated IP Telephony handsets and other similar appliances supporting interactive voice services. These devices are typically deployed on a separate VLAN for ease of deployment and enhanced security by

isolation from data applications.

<**voice-signaling>** Voice Signaling (conditional) for use in network topologies that require a different policy for the voice signaling than for the voice media

EXAMPLE

port-policy To configure LLDP-MED port policy

Syntax

port-policy <*port-list*> <*policy ID*> <*disable/ enable*>

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**policy ID**> Policy ID, available value is from 0 to 31.

<**disable**> Disable the policy to a given port.

<**enable**> Enable the policy to a given port.

EXAMPLE

show To show LLDP-MED information

Syntax

show <*config*>

Parameter

<**config**> Show LLDP-MED configuration

EXAMPLE

Syntax

show <*info***>** <*port-list*>

Parameter

<**info**> Show LLDP-MED neighbor device information .

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

Syntax

show <*policy***>**

Parameter

<**policy**> Show LLDP-MED policy configuration .

EXAMPLE

Syntax

show <*port-policy***>**

Parameter

<**port-policy**> Show LLDP-MED port policy configuration .

EXAMPLE

Table :MAC Commands

age-time	Configure aging time of MAC address
delete	Delete commands
flush	Flush out dynamic learned MAC address
learning	Configure learning mode of switch ports
show	Show MAC address table information
static-mac	Configure static MAC address

age-time

Configure aging time of MAC address

SYNTAX

age-time <10-1000000>

Parameter

<10-1000000> Available value is from 10 to 1000000

EXAMPLE

delete

Delete commands

SYNTAX

delete static-mac <mac-address><1-4094>

Parameter

static-mac Delete static MAC address

<mac-address> MAC address, format 0a-1b-2c-3d-4e-5f

<1-4094> VLAN ID, available value is from 1 to 4094

EXAMPLE

flush

Flush out dynamic learned MAC address

SYNTAX

flush

EXAMPLE

learning

Configure learning mode of switch ports

SYNTAX

learning<port-list>< auto>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

auto Learning is done automatically as soon as a frame with unknown SMAC is receiveddisable Disable learning

secure Only static MAC entries are learned, all other frames

EXAMPLE

show Configure LLDP-MED fast start repeat count

SYNTAX

Show

Parameter

configuration Show MAC address table configuration

mac-table Show MAC address table

static-mac Show static MAC address

EXAMPLE

Table: Mirror Commands

analyzer-port	Configure analyzer port
analyzer-port	Configure port mod
show	Show port mirroring
information	

analyzer-port

Configure LLDP-MED civic address location

SYNTAX

analyzer-port < disable >

Parameter

disable Disable port mirroring

<port> Analyzer port, available value is from 1 to 10

EXAMPLE

port-mode

Configure LLDP-MED coordinate location

SYNTAX

port-mode <port-list> <disable>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable Disable mirroring

enable Enable Rx and Tx mirroring

rx-only Enable Rx mirroring

tx-only Enable Tx mirroring

EXAMPLE

show Show port mirroring information

SYNTAX

Show

EXAMPLE

Table :MLD Commands

fast-leave	Set per-port Fast Leave
filtering	The IP Multicast Group that will be filtered
flooding	Set MLD Flooding Mode
leave-proxy	Set MLD Leave Proxy Mode
lmqi	Set the per-VLAN Last Member Query Interval
proxy	Set MLD Proxy Mode
qi	Set the per-VLAN Query Interval
qri	Set the per-VLAN Query Response Interval
querier	Enable/Disable the per-VLAN MLD Querier
router	Set Router Port
rv	Set the per-VLAN Robustness Variable
show	Show MLD Information
snooping	Set MLD Snooping Mode
state	Enable/Disable the per-VLAN MLD Snooping
throttling	Set per-port Throttling
uri	Set the per-VLAN Unsolicited Report Interval

fast-leave

Set per-port Fast Leave

SYNTAX

fast-leave

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable Disable Fast Leave

enable Enable Fast Leave

EXAMPLE

filtering

The IP Multicast Group that will be filtered

SYNTAX

filtering

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

<ip-address> IPv6 address is in 128-bit records represented as eight fields of up to four hexadecimal digits with a colon separates each field (:). For example, 'fe80::215:c5ff:fe03:4dc7'. The symbol '::' is a special syntax that can be used as a shorthand way of representing multiple 16-bit groups of contiguous zeros; but it can only appear once. It also used a following legally IPv4 address. For example,'::192.1.2.34'

EXAMPLE

flooding

Set MLD Flooding Mode

SYNTAX

Flooding

Parameter

disable Disable unregistered IPMCv6 traffic flooding

enable Enable unregistered IPMCv6 traffic floodingq

EXAMPLE

leave-proxy

Set MLD Leave Proxy Mode

SYNTAX

leave-proxy<*disable*>

Parameter

disable Disable MLD Leave Proxy

enable Enable MLD Leave Proxy

EXAMPLE

lmqi

Set the per-VLAN Last Member Query Interval

SYNTAX

Lmqi <vlan-list><0-31744>

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5

<0-31744> Range:0~31744 tenths of sec, Default:100 tenths of sec

EXAMPLE

proxy

Set MLD Proxy Mode

SYNTAX

policy *<disable><enable>*

Parameter

disable Disable MLD Proxy

enable Enable MLD Proxy

EXAMPLE

qi Set the per-VLAN Query Interval

SYNTAX

qi <vlan-list><1-255><1-255>

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5

<1-255> Range:1~255 sec, Default:125 sec

<1-255> Range:1~255 sec, Default:125 sec

EXAMPLE

qri Set the per-VLAN Query Response Interval

SYNTAX

qri *<vlan-list><0-31744>*

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5

<0-31744> Range:0~31744 tenths of sec, Default:100 tenths of sec

EXAMPLE

querier Enable/Disable the per-VLAN MLD Querier

SYNTAX

querier<*vlan-list*>< disable >

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5

disable Disable the per-VLAN MLD Querier

enable Enable the per-VLAN MLD Querier

EXAMPLE

router Set Router Port

SYNTAX

router<port-list>< disable >

Parameter

Port list available value is from 1 to 10B format:1,3-5

disable Disable Router Port

enable Enable Router Port

EXAMPLE

rv set the per-VLAN Robustness Variable

SYNTAX

rv<vlan-list><2-255>

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5

<2-255> Range:2~255, Default:2

EXAMPLE

show Show MLD Information

SYNTAX

Show

Parameter

config Show MLD Configuration

groups Entries in the MLD Group Table

ssm Entries in the MLDv2 Information Table

status Show MLD Status

version Show MLD Working Querier/Host Version currently

EXAMPLE

snooping

Set MLD Snooping Mode

SYNTAX

snooping< disable >

Parameter

disable Disable the Global MLD Snooping

enable Enable the Global MLD Snooping

EXAMPLE

state

Enable/Disable the per-VLAN MLD Snooping

SYNTAX

state*<vlan-list><0-31744>*

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5

disable Disable the per-VLAN MLD Snooping

enable Enable the per-VLAN MLD Snooping

EXAMPLE

throttling

Set per-port Throttling

SYNTAX

Throttling *<port-list><0-10>*

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

<0-10> Set Port Group Limit number, Range:0~10, 0:unlimited

EXAMPLE

uri

t the per-VLAN Unsolicited Report Interval

SYNTAX

uri*<vlan-list><0-31744>*

Parameter

<vlan-list> VLAN list, available value is from 1 to 4094 format: 1,3-5

<0-31744> Range:0~31744 sec, Default:1 sec

EXAMPLE

Table : MRP Commands

applicant	Enable/Disable applicant administrative control
join-time	Set the MRP join timer configuration
leave-all	Set the MRP leave all timer configuration
leave-time	Set the MRP leave timer configuration
periodic	Enable/Diable periodic tx timer
show	Show the MRP information

applicant

To enable/disable applicant administrative control

Syntax

applicant *<port-list> <disable/ enable>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable applicant administrative control.

<**enable**> Enable applicant administrative control.

EXAMPLE

join-time

To set the MRP join timer configuration

Syntax

join-time *<port-list> <time-value>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**time-value**> join time value, available value is from 200 to 400 seconds.

EXAMPLE

NOTE: If you didn't set the MRP environment already then the switch will show "Set join timer failed".

leave-all

To set the MRP leave all timer configuration

Syntax

leave-all <*port-list*> <*timer-value*>

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**timer-value**> leave all time value, available value is from 10000 to 100000 seconds.

EXAMPLE

NOTE: If you didn't set the MRP environment already then the switch will show "Set leave all timer failed".

leave-time

To set the MRP leave timer configuration

Syntax

leave-time <*port-list*> <*timer-value*>

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**timer-value**> leave time value, available value is from 600 to 1000 seconds

EXAMPLE

NOTE: If you didn't set the MRP environment already then the switch will show "Set leavetimer failed".

periodic To enable or disable periodic tx timer

Syntax

periodic <*port-list*> <*disable/ enable*>

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable periodic tx timer.

<**enable**> Enable periodic tx timer

EXAMPLE

show To show the MRP configuration

Syntax

show <*config*>

Parameter

<**config**> Show MRP configuration.

EXAMPLE

Syntax

show <*statistic*> <*port-list*>

Parameter

<**statistic**> Show the basic MRP port statistics

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

Table : MSTP Commands

CName	Set MSTP Configuration name
FwdDelay	Set FwdDelay
MaxAge	Set Maxage
MaxHops	Set MaxHops
Statistics	Clear STP port statistics
TxhoId	Set TxHold
Version	Set force-version
bpduFilter	Set edge port BPDU Filtering
bpduGuard	Set edge port BPDU Guard
migrate-check	Set the STP mCheck (Migration Check) variable for ports
msti-vlan	Map Vlan ID(s) to an MSTI
p-AutoEdge	Set the STP autoEdge port parameter
p-bpduGuard	Set the bpduGuard port parameter
p-cost	Set the STP port instance path cost
p-edge	Set the STP adminEdge port parameter
p-mode	Set the STP enabling for a port
p-p2p	Set the STP point to point port parameter
p-priority	Set the STP port instance priority
priority	Set the bridge instance priority
r-role	Set the MSTP restrictedRole port parameter
r-tcn	Set the MSTP restrictedTcn port parameter
recovery	Set edge port error recovery timeout
show	Show Region config, MSTI vlan mapping, instance parameter and port parameters

CName

To set MSTP configuration name

Syntax

CName *<word>*

Parameter

<**word**> A text string up to 32 characters long.

EXAMPLE

FwdDelay

To set the FewDelay parameter

Syntax

FwDelay *<4-30>*

Parameter

<**4-30**> MSTP forward delay (4-30, and max_age <= (forward_delay- 1)*2)).

EXAMPLE

MaxAge

To set the STP Maximum age time.

Syntax

MaxAge *<6-40>*

Parameter

<**6-40**> STP maximum age time (6-40, and max_age <= (forward_dely-1)*2).

EXAMPLE

MaxHops

To set STP BPDU MaxHops parameter.

Syntax

MaxHops *<6-40>*

Parameter

<**6-40**> STP BPDU MaxHops (6-40)).

EXAMPLE

statistics

To clear the selected port statistics

Syntax

statistics *<clear>*

Parameter

<**clear**> Clear the selected port statistics.

EXAMPLE

Txhold

To set the STP Transmit Hold Count.

Syntax

Txhold *<1-10>*

Parameter

<**1-10**> STP Transmit Hold Count (1-10).

EXAMPLE

version

To set the force-version with STP/RSTP/MSTP

Syntax

version *<mstp/ rstp/ stp>*

Parameter

<**mstp**> Multiple Spanning Tree Protocol.

<**rstp**> Rapid Spanning Tree Protocol.

<**stp**> Spanning Tree Protocol

EXAMPLE

bpduFilter

To set edge port BPDU filtering

Syntax

bpduFilter *<disable/ enable>*

Parameter

<**disable**> disable BPDU Filtering for Edge ports.

<**enable**> enable BPDU Filtering for Edge ports.

EXAMPLE

bpduGuard

To set edge port BPDU Guard.

Syntax

bpduGuard *<disable/ enable>*

Parameter

<**disable**> disable BPDU Guard for Edge ports.

<**enable**> enable BPDU Guard for Edge ports.

EXAMPLE

migrate-check

To set the STP mCheck (Migration Check) variable for ports

Syntax

migrate-check <*port-list***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

msti-vlan

To map Vlan ID(s) to an MSTI

Syntax

msti-valn <*add/ delete***> <***instance no.***>** *<VLAN ID>*

Parameter

<**add**> To add a VLAN to a MSTI.

<**delete**> To clear MSTP MSTI VLAN mapping configuration

<**instance no.**> STP bridge instance no (0-7, CIST=0, MSTI1=1, ...), available value is from 0 to 7.

<**VLAN ID**> The VLAN ID, available value is from 1 to 4096.

EXAMPLE

p-AutoEdge

To set the STP autoEdge port parameter

Syntax

p-AutoEdge <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable MSTP autoEdges.

<**enable**> Enable MSTP autoEdge.

EXAMPLE

p-bpduGuard

To set the bpduGuard port parameter

Syntax

p-bpduGuard <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable port BPDU Guard.

<**enable**> Enable port BPDU Guard.

EXAMPLE

p-cost

To set the STP port instance path cost

Syntax

p-cost <*0-7***> <***port-list***> <***0-200000000***>**

Parameter

<**0-7**> STP bridge instance no (0-7, CIST=0, MSTI1=1, ...)

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**0-200000000**> STP port path cost (1-200000000) or the value zero means auto status.

EXAMPLE

p-edge

To set the STP adminEdge port parameter

Syntax

p-edge <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Configure MSTP adminEdge to Non-edge.

<**enable**> Configure MSTP adminEdge to Edge.

EXAMPLE

p-mode

To set the STP enabling for a port

Syntax

p-mode <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable MSTP protocol.

<**enable**> Enable MSTP protocol..

EXAMPLE

p-p2p

To set the STP point to point port parameter

Syntax

p-p2p <*port-list***> <***auto/ disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**auto**> Automatic MSTP point to point detection

<**disable**> Disable MSTP point to point.

<**enable**> Enable MSTP point to point..

EXAMPLE

p-priority

To set the STP port instance priority

Syntax

p-priority <*0-7***> <***port-list***>** *<0-240>*

Parameter

<**0-7**> STP bridge instance no (0-7, CIST=0, MSTI1=1, ...).

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**0-240**> STP bridge priority (0/16/32/48/.../224/240)

EXAMPLE

priority

To set the bridge instance priority

Syntax

priority <*0-7***>** *<0-240>*

Parameter

<**0-7**> STP bridge instance no (0-7, CIST=0, MSTI1=1, ...).

<**0-240**> STP bridge priority (0/16/32/48/.../224/240)

EXAMPLE

r-role

To set the MSTP restricted Role port parameter

Syntax

r-role <*port-list***>** *<disable/ enable>*

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5..

<**disable**> Disable MSTP restricted role.

<**enable**> Enable MSTP restricted role..

EXAMPLE

r-tcn To set the MSTP restrictedTcn port parameter

Syntax

r-tcn <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5..

<**disable**> Disable MSTP restricted TCN.

<**enable**> Enable MSTP restricted TCN..

EXAMPLE

recovery To set edge port error recovery timeout

Syntax

recovery <*time range***>**

Parameter

<**time range**> Time before error-disabled ports are re-enable, available value is from 30 to 86400 seconds, 0 is disabled.

EXAMPLE

show To show Region configuration, MSTI VLAN mapping, instance parameter and port parameters.

Syntax

show <*CName***>**

Parameter

<**CName**> To show the MSTP configuration name.

EXAMPLE

Syntax

show <*Statistics***>**

Parameter

<**Statistics**> To show the STP port statistics.

EXAMPLE

Syntax

show <*Status***> <*0-7*>**

Parameter

<**Status**> To show the STP Bridge status.

<**0-7**> STP bridge instance no (0-7, CIST=0, MSTI1=1 ...).

EXAMPLE

Syntax

show <*Instance***>**

Parameter

<**Instance**> To show the instance status.

EXAMPLE

Syntax

show <*msti-vlan***>**

Parameter

<**msti-vlan**> To show the MSTP MSTI VLAN mapping configuration.

EXAMPLE

Syntax

show <*p-config***> <***0-7***>**

Parameter

<**p-config**> To show the STP port instance configuration.

<**0-7**> STP bridge instance no (0-7, CIST=0, MSTI1=1 ...).

EXAMPLE

Syntax

show <*pconf***>**

Parameter

<**pconf**> To show the STP Port configuration.

EXAMPLE

Syntax

show <*priority***>**

Parameter

<**priority**> To show the bridge instance priority.

EXAMPLE

Table : MVR Commands

immediate-leave	Configure MVR port state about immediate leave
mode	Configure MVR mode
port-mode	Configure MVR port mode
port-type	Configure MVR port type
show	Show command

immediate-leave

To configure MVR port state about immediate leave.

Syntax

immediate-leave <*port-list***> <***disable/enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable immediate leave on the specific port.

<**enable**> Enable immediate leave on the specific port..

EXAMPLE

mode

To configure the MVR mode globally.

Syntax

mode *<disable/enable> <VLAN ID>*

Parameter

<**disable**> Disable the MVR function globally.

<**enable**> Enable multicast traffic forwarding on the Multicast VLAN function

globally.

<**VLAN ID**> Multicast VLAN ID, available is from 1 to 4094

EXAMPLE

port-mode

To configure the MVR port mode

Syntax

port-mode <*port-list***>** <*disable/enable*>

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable the MVR on the specific port.

<**enable**> Enable the MVR on the specific port.

EXAMPLE

port-type

To configure the MVR port type

Syntax

port-type <*port-list***>** <*receiver/source*>

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**receiver**> Define the port as receiver port.

<**source**> Define the port as source port.

EXAMPLE

show

To show the Multicast VLAN Registration status or configuration.

Syntax

show <*config***>**

Parameter

<**config**> To display the MVR configuration.

EXAMPLE

Syntax

show <*group***>**

Parameter

<**group**> To display the MVR group information.

EXAMPLE

NOTE: If you didn't set the MVR environment already then the switch won't show any information.

Syntax

show <*statistics***>**

Parameter

<**statistics**> To display the MVR statistics information.

EXAMPLE

Table : MVRP Commands

clear	Clear the basic MVRP port statistics
control	Enable/Disable MVRP globally
mode	Enable/Disable MVRP on port
rrole	Enable/Disable MVRP restricted role on port
show	Show mvrp information

clear

To clear the basic MVRP port statistics

Syntax

clear <*port-list***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

control

To enable or disable the MVRP function globally.

Syntax

control <*disable/ enable***>**

Parameter

<**disable**> Disable the MVRP globally.

<**enable**> Enable the MVRP globally.

EXAMPLE

mode

To enable or disable MVRP function on port

Syntax

mode <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable the MVRP on port.

<**enable**> Enable the MVRP on port.

EXAMPLE

rrole

To enable or disable the MVRP restricted role on port.

Syntax

mode <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable the MVRP restricted role on port.

<**enable**> Enable the MVRP restricted role on port.

EXAMPLE

show

To show the MVRP information and configuration.

Syntax

mode <*config***>**

Parameter

<**config**> To display the MVRP configuration.

EXAMPLE

Syntax

show <*statistics***> <***port-list***>**

Parameter

<**statistics**> To display Show the basic MVRP port statistics..

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

Table :Port Commands

clear	Clear port counter
description	Interface specific description
excessive-collision	Configure excessive collision operation
flow-control	Configure flow operation
max-frame	Configure maximum receive frame size
port-state	Configure port state operation
power-saving	Configure power saving operation
show	Show port information
speed-duplex	Configure speed duplex operation

clear

Clear port counter

SYNTAX

Clear

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

EXAMPLE

description

Interface specific description

SYNTAX

Description <port-list><LINE>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

<LINE> Up to 47 characters describing this interface

EXAMPLE

excessive-collision Configure excessive collision operation

SYNTAX

excessive-collision <port-list> Discard

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

Discard Discard the packet when excessive collision

restart Retransmit the packet, regardless of the number of collisions

EXAMPLE

flow-control Configure flow operation

SYNTAX

flow-control < *number*>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable Disable flow control operation

enable Enable flow control operation

EXAMPLE

max-frame

Configure maximum receive frame size

SYNTAX

max-frame <port-list><1518-9600>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

<1518-9600> Maximum receive frame size in bytes

EXAMPLE

port-state

Configure port state operation

SYNTAX

port-state <port-list> <*disable*><*enable*>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable Disable port state operation

enable Enable port state operation

EXAMPLE

power-saving

Configure power saving operation

SYNTAX

power-saving <port-list><actiphy>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

actiphy Enable ActiPHY power control

disable Disable power saving

dynamic Enable dynamic power control

enable Enable power saving

EXAMPLE

show Show port information

SYNTAX

Show

Parameter

configuration Show port configuration

detail-counter Show detailed traffic statistics for specific switch port

sfp Show sfp information

simple-counter Show general traffic statistics for all switch ports

status Show port status

EXAMPLE

speed-duplex

Configure speed duplex operation

SYNTAX

speed-duplex <port-list><10-full>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-
10-full Force speed duplex to 10-full operation
10-half Force speed duplex to 10-half operation
100-full Force speed duplex to 100-full operation
100-half Force speed duplex to 100-half operation
1000-full Force speed duplex to 1000-full operation
auto Enable auto speed duplex configuration

EXAMPLE

Table : Port-Security Commands

show	Show port security status

show

Show port security status

SYNTAX

civic

Parameter

port Show MAC addresses learned by port security
switch Show port security switch status

EXAMPLE

Table : Privilege Commands

group	Configure a privilege level
group	
show	Show privilege
configuration	

group

Configure a privilege level group

SYNTAX

Group<group-name>

Parameter

<group-name> privilege group name

EXAMPLE

Show

Show privilege configuration

SYNTAX

show

EXAMPLE

Table : PVLAN Commands

delete	Delete private VLAN group
port-isolate	Configure port isolation
private-vlan group	Configure private VLAN
show information	Show private VLAN

delete

Delete private VLAN group

SYNTAX

Delete＜**private-vlan**＞＜**1-10**＞

Parameter

private-vlan private VLAN KEYWORD
<1-10> Private VLAN ID, available value is from 1 to 10

EXAMPLE

port-isolate

Configure port isolation

SYNTAX

port-isolate<port-list>< disable >

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable Disable port isolation

enable Enable port isolation

EXAMPLE

private-vlan Configure private VLAN group

SYNTAX

private-vlan <1-10><port-list>

Parameter

<1-10> Private VLAN ID, available value is from 1 to 10

<port-list> Port list, available value is from 1 to 10B format:1,3-

EXAMPLE

show Show private VLAN information

SYNTAX

Show

Parameter

port-isolate Show port isolation information

private-vlan Show private VLAN membership information

EXAMPLE

Table :Qos Commands

dscp-classification	Configure DSCP ingress classification
dscp-map	Configure DSCP mapping table. This table is used to map QoS class and DP level based on DSCP value. DSCP value used to map QoS class and DPL is either translated DSCP value or incoming frame DSCP value
dscp-rmap	Configure DSCP egress remap table. This table is used if the port egress remarking mode is 'remap' and the purpose is to map the DSCP and DP level to a new DSCP value
dscp-translation	configure global ingress DSCP translation table. If port DSCP translation is enabled, translation table is used to translate incoming frame's DSCP value and translated value is used to map QoS class and DP level
dscp-trust	Configure trusted DSCP value which is used for QoS classification. The DSCP value to be checked for trust is either translated value if DSCP translation is enabled for the ingress port

or incoming frame DSCP value if translation is disabled for the port. Trusted DSCP value is only used for QoS classification	
port-classify	QoS ingress port classification
port-dscp	QoS port DSCP configuration
port-scheduler	QoS egress port schedulers
port-shaper	Port shaper
qce	Add or modify QoS control entry
queue-shaper	Queue shaper
show	Show QoS information
storm	Configure storm rate control
tag-remarking	QoS egress port tag remarking

DSCP-Classification Configure DSCP ingress classification

SYNTAX

DSCP-Classification <class-list><dpl-list> <0-63>

Parameter

<class-list> QoS class list, available value is from 0 to 7

<dpl-list> Drop precedence level list, available value is from 0 to 1

<0-63> Mapped DSCP

EXAMPLE

dscp-map

Configure DSCP mapping table. This table is used to map QoS class and DP level based on DSCP value. DSCP value

used to map QoS class and DPL is either translated DSCP value or incoming frame DSCP value

SYNTAX

dscp-map <dscp-list><0-7><0-1>

Parameter

<dscp-list> DSCP list, format : 1,3,5-7

<0-7> QoS class

<0-1> Drop Precedence Level

EXAMPLE

dscp-remap

Configure DSCP egress remap table. This table is used if the port egress remarking mode is 'remap' and the purpose is to map the DSCP and DP level to a new DSCP value

SYNTAX

dscp-remap <dscp-list><dpl-list><0-63>

Parameter

<dscp-list> DSCP list, format : 1,3,5-7

<dpl-list> Drop precedence level list, available value is from 0 to 1

<0-63> Egress remapped DSCP

EXAMPLE

dscp-translation

Configure global ingress DSCP translation table. If port DSCP translation is enabled, translation table is used to translate incoming frame's DSCP value and translated value is used to map QoS class and DP level

SYNTAX

dscp-translation <dscp-list><0-63>

Parameter

<dscp-list> DSCP list, format : 1,3,5-7

<0-63> Translated DSCP

EXAMPLE

dscp-trust

Configure trusted DSCP value which is used for QoS classification. The DSCP value to be checked for trust is either translated value if DSCP translation is enabled for the ingress port or incoming frame DSCP value if translation is disabled for the port. Trusted DSCP value is only used for QoS classification

SYNTAX

dscp-trust <dscp-list>< disable >

Parameter

<dscp-list> DSCP list, format : 1,3,5-7

disable Set DSCP as untrusted DSCP
enable Set DSCP as trusted DSCP

EXAMPLE

port-classify

QoS ingress port classification

SYNTAX

port-classify <port-list> <0-7>

Parameter

<port-list> Port list, available value is from 1 to 10B format:1,3-

<0-7> QoS class for frames not classified in any other way.
There is a one to one mapping between QoS class, queue and priority. A QoS class of 0 (zero) has the lowest priority

EXAMPLE

port-dscp

QoS port DSCP configuration

SYNTAX

port-dscp < classification><port-list> <all>

Parameter

classification Configure DSCP classification based on QoS class and DP level. This enables per port to map new DSCP value based on QoS class and DP level

egress-remark Configure the port DSCP remarking mode

translation Configure DSCP ingress translation mode. If translation is enabled for a port, incoming frame DSCP value is translated and translated value is used for QoS classification

<port-list> Port list, available value is from 1 to 10B format:1,3-

all Classify all DSCP

disable Disable DSCP ingress classification

selected Classify only selected DSCP for which classification is enabled as specified in DSCP Translation window for the specific DSCP

zero Classify DSCP if DSCP = 0

EXAMPLE

port-scheduler QoS egress port schedulers

SYNTAX

port-scheduler < mode ><port-list>< strict>

Parameter

mode Configure the port scheduler mode

weight Configure the port scheduler weight

<port-list> Port list, available value is from 1 to 10B format:1,3-

strict Strict priority scheduler mode

weighted Weighted scheduler mode

EXAMPLE

port-shaper

port-shaper

SYNTAX

port-shaper <mode><port-list> <disable >

Parameter

mode Configure the port shaper mode

rate Configure the port shaper rate

<port-list> Port list, available value is from 1 to 10B format:1,3-

disable Disable port shaper

enable Enable port shaper

EXAMPLE

qce

Add or modify QoS control entry

SYNTAX

Qce <1-256><0-256> <port-list> any

Parameter

<1-256> If the QCE ID parameter <qce_id> is specified and an entry with this QCE ID already exists, the QCE will be modified. Otherwise, a new QCE will be added

<0-256> If the next QCE ID is non zero, the QCE will be placed before this QCE in the list. If the next QCE ID is zero

<port-list> Port member for QCE

any Only Ethernet Type frames can match this QCE

etype Only Ethernet Type frames can match this QCE

ipv4 Only IPv4 frames can match this QCE

ipv6 Only IPv6 frames can match this QCE

llc Only LLC frames can match this QCE

snap Only SNAP frames can match this QCE

auto-logout Configure time of inactivity before automatic logout

class Action of QoS class for this QCE

classified-dscp Action of DSCP for this QCE

dei Specify whether frames can hit the action according to DEI

dmac Configure destination MAC address for this QCE

dp Action of drop precedence level for this QCE

dport Configure destination UDP/TCP port range for this ACE

dscp Configure DSCP for this QCE

end Finish QCE setting and return to QoS mode

exit Exit from current mode

fragment Specify the fragment offset settings for this QCE

help Show available commands

history Show a list of previously run commands

ip-protocol Configure IP protocol for this QCE

logout Disconnect

pcp Specify whether frames can hit the action according to PCP

quit Disconnect

restore Restore running configuration

save Save running configuration

show Show QCE

sip Configure source IP address for this QCE

smac Configure source MAC address for this QCE

sport Configure Source UDP/TCP port range for this QCE

tag Specify whether frames can hit the action according to the 802.1Q tagged

vid Specify the VLAN ID filter for this QCE

EXAMPLE

queue-shaper Queue shaper

SYNTAX

queue-shaper < excess ><port-list><queue-list> disable

Parameter

excess Configure the port queue excess bandwidth mode

mode Configure the port queue shaper mode

rate Configure the port queue shaper rate

<port-list> Port list, available value is from 1 to 10B format:1,3-

<queue-list> Queue list, available value is from 0 to 7

disable Disable use of excess bandwidth

enable Enable use of excess bandwidth

EXAMPLE

show

Show QoS information

SYNTAX

Show

Parameter

class-map Show QoS class and DP level to DSCP mapping

dscp-map Show DSCP to QoS class and DP level mapping

dscp-translation Show DSCP ingress and egress translation

port-classify Show QoS ingress port classification

port-dscp Show port DSCP configuration

port-map Show port classification (PCP, DEI) to (QoS class, DP level) mapping table

port-shaper Show port shaper configuration

qce Show QCL control list

qcl-status Show QCL status

queue-shaper Show port queue shaper configuration

remarking-map Show port tag remarking mapping table

scheduler-mode Show port scheduler mode configuration

scheduler-weight Show port scheduler weight configuration

storm Show storm control configuration

tag-remarking Show port tag remarking configuration

EXAMPLE

storm

Configure storm rate control

SYNTAX

storm <broadcast> <*disable*><*enable*>

Parameter

broadcast broadcast storm control
multicast multicast storm control
unicast unicast storm control

disable Disable broadcast storm control
enable Enable broadcast storm control

EXAMPLE

tag-remarking

QoS egress port tag remarking

SYNTAX

tag-remarking *<disable><enable>*

dei Configure the default DEI. This value is used when port tag remarking mode is set to 'default'
map Configure the port tag remarking map. This map is used when port tag remarking mode is set to 'mapped', and the purpose is to translate the classified QoS class (0-7) and DP level (0-1) to PCP and DEI
mode Configure the port tag remarking mode
pcp Configure the default PCP. This value is used when port tag remarking mode is set to 'default'

<0-1> Drop Eligible Indicator

<0-1> Drop Eligible Indicator

EXAMPLE

Table : SMTP Commands

delete	Delete command
level	Configure Severity level
mail-address	Configure email-address description
return-path	Configure email return-path description
sender	Configure email sender description
server	Configure email server description
show	Show email configuration
username	Configure email user name

level

To configure Severity level and parameter.

Syntax

level *<Severity level>*

Parameter

<**Severity level**> To configure the Severity level, the available value is from 0 to 7.

<**0**> Emergency: system is unusable.

<**1**> Alert: action must be taken immediately.

<**2**> Critical: critical conditions.

<**3**> Error: error conditions.

<**4**> Warning: warning conditions.

<**5**> Notice: normal but significant condition.

<**6**> Informational: informational messages.

<**7**> Debug: debug-level messages.

EXAMPLE

mail-address

To configure the email address alias for identified the email property.

Syntax

mail-address <*Email address index*> **<***mail-address description***>**

Parameter

<**Email address index**> Email address index, the available value is from 1 to 6.

<**mail-address description**> Up to 47 characters describing mail address.

EXAMPLE

return-path

To configure the email return-path description.

Syntax

return-path <*return-path*>

Parameter

<**return-path**> Up to 47 characters describing return path.

EXAMPLE

sender

To configure the email sender identified the alarm mail sender.

Syntax

sender <*sender description*>

Parameter

< **sender description** > Up to 47 characters describing sender.

EXAMPLE

server

To configure the email server description.

Syntax

server <*server description*>

Parameter

< **server description** > Up to 47 characters describing email server.

EXAMPLE

show To show the email server configuration and information.

Syntax

show

Parameter

none.

EXAMPLE

username To configure email user name.

Syntax

username <*username account*> **<***password***>**

Parameter

< **username account** > Up to 47 characters describing user name.

< **password**> Up to 47 characters describing password

EXAMPLE

Table : SNMP Commands

access	Configure SNMP access
community	Configure SNMP community
delete	Delete command
engine-id	Set SNMP Engine ID
group	Configure SNMP groups
mode	Enable/Disable SNMP mode
show	Show SNMP command
trap	Configure SNMP trap
user	Configure SNMP users
view	Configure SNMP views

access

To configure the SNMP access, the command adds an SNMPv3 access entry.

Syntax

access <*group name*> **<***security model***>** **<***security level***>** **<***read_view name***>** **<***write_view name***>**

Parameter

< **group name** > The name of the SNMP group. (Range: 1-32 characters, ASCII characters 33-126 only).

< **security model**> The user security model (Range 0 to 3). Security Model: 1(v1), 2(v2c), 3(usm), 0(any).

< **security level**> The security level assigned to the group (Range 1 to 3), 1(NoAuthNoPriv), 2(AuthNoPriv), 3(AuthP iv). If security model is not usm, the security_level value must be 1(NoAuthNoPriv).

<**1-NoAuthNoPriv**> => There is no authentication or encryption used in SNMP communications.
<**2- AuthNoPriv** > => SNMP communications use authentication, but the data is not encrypted.
<**3- AuthPriv** > => SNMP communications use both authentication and encryption.

< **read_view name**> The scope for a specified instance can read, None is

reserved for Empty. (Range: 1-32 characters, ASCII characters 33-126 only).

< **write_view name**> he scope for a specified instance can write, None is reserved for Empty. (Range: 1-32 characters, ASCII characters 33-126 only)

EXAMPLE

community To configure SNMP community, the command adds the SNMP community mapping to security name entry.

Syntax

community <*community*> **<***user name***> <***ip-address***> <***ip-mask***>**

Parameter

< **community** > Specifies the community strings which allow access to the SNMP agent. (Range: 1-32 characters, ASCII characters 33-126 only).

< **user name** > Specifies the username strings, the community will be mapping to user_name, which allow access to the SNMP agent. (Range: 1-32 characters, ASCII characters 33-126 only).

< **ip-address** > Specifies the source address of an SNMP client.

< **ip-mask** > Specifies the address mask for the SNMP client.

EXAMPLE

delete To delete the SNMP command.

Syntax

delete <*access / community/ group/ trap/ user/ view***> <***table index***>**

Parameter

< **access**> Delete snmpv3 access entry.

< **community** > Delete community entry.

< **group** > Delete snmpv3 groups entry.

< **trap** > Delete trap entry.

< **user** > Delete snmpv3 users entry

< **view** > Delete snmpv3 views entry

< **table index**> The SNMP entry table index, the available value is from 1 to 4.

EXAMPLE

engine-id To configure the SNMP Engine ID, the command sets the SNMPv3 local engine ID.

Syntax

engine-id *<HEX>*

Parameter

< **HEX** > The SNMPv3 engine ID, the format may not be all zeros or all 'ff' H, and is restricted to 5 - 32 octet string.

EXAMPLE

NOTE:

- An SNMPv3 engine is an independent SNMP agent that resides on the switch. This engine protects against message replay, delay, and redirection. The engine ID is also used in combination with user passwords to generate the security keys for authenticating and encrypting SNMPv3 packets.
- A local engine ID is automatically generated that is unique to the switch. This is referred to as the default engine ID. If the local engine ID is deleted or changed, all local SNMP users will be cleared. You will need to reconfigure all existing users.

group To configure SNMP group, the command adds an SNMPv3 group entry.

Syntax

group *<user name> <security model> <group name>*

Parameter

< **user name** > The name of user connecting to the SNMP agent. (Range: 1-32 characters, ASCII characters 33-126 only).

< **security model** > The user security model. (1|2|3), 1 is (v1), 2 is (v2c), 3 is (usm).

<**group name** > The name of the SNMP group. (Range: 1-32 characters, ASCII characters 33-126 only).

EXAMPLE

NOTE:

- An SNMPv3 group sets the access policy for its assigned users, restricting them to specific read and write views as defined by the access entry. You can use the pre-defined default groups, or create a new group and the views authorized for that group.
- Note that the views assigned to a group must be specified with the view entry.
  - v1 : Up to 2 group names can be configured.
  - V2 : Up to 2 group names can be configured.
  - usm : Up to 10 group names can be configured.

mode To enable or disable the SNMP mode.

Syntax

mode *<disable/enable>*

Parameter

< **disable** > Disable SNMP mode.

< **enable** > Enable SNMP mode.

EXAMPLE

show To show the SNMP configuration or detail information.

Syntax

show *<access /community /group/ mode/ trap/ user/ view>*

Parameter

<**access**> Show snmpv3 access entry.

<**community**> Show snmpv3 community entry.

<**group**> Show snmpv3 groups entry.

<**mode**> Show snmp configuration.

<**trap**> Show snmp trap entry.

<**user**> Show snmpv3 users entry.

<**view**> Show snmpv3 views entry.

EXAMPLE

trap To configure the SNMP trap parameter, the command adds an SNMP trap entry.

Syntax

trap *<trap index> <version> <trap host IP address> <trap port> <severity level> <security name> <security_level> <Authentication protocol> <Authentication password>*

Parameter

<**trap index**> Index to SNMP trap table. (Range: 1-6).

<**version**> SNMP trap protocol version. (v2/ v3), v2 is v2c and v3 is v3.

<**trap host IP address**> To set IP –Address of the management station to receive notification messages.

<**trap port**> To set the trap port, the available value is from 1 to 65535.

<**severity level**> To configure the Severity level, the available value is from 0 to 7.

<**0**> Emergency: system is unusable.

<**1**> Alert: action must be taken immediately.

<**2**> Critical: critical conditions.

<**3**> Error: error conditions.

<**4**> Warning: warning conditions.

<**5**> Notice: normal but significant condition.

<**6**> Informational: informational messages.

<**7**> Debug: debug-level messages.

<**security name**> Specifies the community access string to use when sending SNMP trap packets. (Range: Range: 1-32 characters, ASCII characters 33-126 only).

<**security level**> The security level assigned to the user(1|2|3)

1=> NoauthNoPriv.

2=> AuthNoPriv.

3=> AuthPriv.

< **Authentication protocol** > The method used for user authentication(1|2)

1=> MD5.

2=> SHA.

< **Authentication password** > Authentication Password is restricted to 8 - 40.

EXAMPLE

user To configure SNMP users, the command adds an SNMPv3 user entry.

Syntax

user *<user name> <security level> <Authentication Protocol> <Authentication Password>*

Parameter

<**username**> The name of user connecting to the SNMP agent, (Range: 1-32 characters, ASCII characters 33-126 only).

<**security level**> The security level assigned to the user, (NoauthNoPriv | AuthNoPriv | AuthPriv)

< **Authentication protocol** > The method used for user authentication. (MD5 |SHA)

< **Authentication password** > Authentication Password is restricted to 8 - 40

EXAMPLE

view To configure SNMP views, the command adds an SNMPv3 view entry.

Syntax

view *<view name> <view type> <oid subtree>*

Parameter

<**view name**> The name of the SNMP view. (Range: 1-32 characters, ASCII characters 33-126 only).

<**view type**> Indicates if the object identifier of a branch within the MIB tree is included or excluded from the SNMP view name (1|2).

1=> included.

2=> excluded

< **oid subtree**> Object identifiers of branches within the MIB tree

EXAMPLE

- **NOTE:** The view oid-subtree first character must be a period (.). Wild cards can be used to mask a specific portion of the OID string using an asterisk. (Length: 1-128)

Table : SSH Commands

mode	Configure the SSH mode
show	Show SSH configuration

mode

To configure the SSH mode.

Syntax

mode <*disable/ enable*>

Parameter

<**disable**> Disable SSH mode operation.

<**enable**> Enable SSH mode operation.

EXAMPLE

show

To show the SSH configuration.

Syntax

show

Parameter

none.

EXAMPLE

Table : SYSLOG Commands

clear	Clear syslog entry
level	Configure syslog level
mode	Configure syslog mode
server	Configure syslog server IP address
show	Show SSH configuration

clear

To clear the syslog entry.

Syntax

clear

Parameter

none.

EXAMPLE

level

To configure the syslog level.

Syntax

level <*syslog severity level*>

Parameter

<**syslog severity level**> To configure the Syslog severity level, the available value is from 0 to 7.

<**0**> Emergency: system is unusable.

<**1**> Alert: action must be taken immediately.

<**2**> Critical: critical conditions.

<**3**> Error: error conditions.

<**4**> Warning: warning conditions.

<**5**> Notice: normal but significant condition.

<**6**> Informational: informational messages.

<**7**> Debug: debug-level messages.

EXAMPLE

mode To configure syslog mode with enable or disable.

Syntax

mode <*disable/ enable*>

Parameter

<**disable**> Disable syslog mode.

<**enable**> Enable syslog mode.

EXAMPLE

server To configure the syslog server IP address.

Syntax

server <*ip-hostname*>

Parameter

<**ip-hostname**> Syslog server IP address or host name.

EXAMPLE

show To show syslog information.

Syntax

show *<config/ detail-log/ log>*

Parameter

<**config**> Show syslog configuration.

<**detail-log**> Show detailed syslog information.

<**log**> Show syslog entry

EXAMPLE

Table : SYSTEM Commands

contact	Configure system contact
description	Configure system description
location	Configure system location
name	Configure device name
show	Show system information

contact

To configure the system contact information.

Syntax

contact *<system contact information>*

Parameter

<**system contact information**> Up to 255 characters describing system contact information.

EXAMPLE

description

To configure system description that descripts the device property.

Syntax

description *<system description>*

Parameter

<**system description** > Up to 255 characters describing system information.

EXAMPLE

location

To configure the system location.

Syntax

location *<system location>*

Parameter

<**system location**> Up to 256 characters describing system location.

EXAMPLE

name To configure device name or alias.

Syntax

name <*system name*>

Parameter

<**system name**> Up to 255 characters describing device name.

EXAMPLE

show To show the system detail information.

Syntax

show

Parameter

none.

EXAMPLE

Table : THERMAL Commands

port-priority	Configure the port priority
priority-temp	Configure the temperature at which the ports shall be shut down
show	Show thermal protection information

port-priority

To configure the port priority.

Syntax

port-priority <*port-list***> <***port priority***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**port priority**> To set the port priority, available value is from 0 to 3..

EXAMPLE

priority-temp

To configure the temperature at which the ports shall be shut down.

Syntax

priority-temp <*port priority***> <***temperature***>**

Parameter

<**port priority**> To set the port priority, available value is from 0 to 3.

<**temperature**> The temperature at which the ports with the corresponding priority will be turned off, the available value is from 0 to 255.

EXAMPLE

show

To show the thermal protection information.

Syntax

show

Parameter

none.

EXAMPLE

Table : TIME Commands

daylight	Indicates the Daylight Savings operation
delete	Delete NTP server entry
manual	Configure system time manually
ntp	Configure system time by NTP
show	Show time information
time-zone	Configure system time zone

daylight

To indicates the Daylight Savings operation.

Syntax

daylight *<disable/enable>* **<***Time Set Offset***>** **<***By-dates/Recurring***>** *<Day that DST stars> <time that DST starts> <Day that DST ends> <time that DST ends>*

Parameter

<**disable**> Disable Daylight Savings operation.

<**enable**> Enable Daylight Savings operation.

<**By-dates**> Manually enter day and time that DST starts and ends.

<**Recurring**> DST occurs on the same date every year.

<**Day that DST starts**> DST starts date, format is YYYY:MM:DD.

<**Time that DST starts**> DST starts time, format is HH:MM.

<**Day that DST ends**> DST ends date, format is YYYY:MM:DD.

<**Time that DST ends**> DST ends time, format is HH:MM.

EXAMPLE

delete To delete NTP server entry.

Syntax

delete *<NTP server index>*

Parameter

<**NTP server index**> NTP server index, available value is from 1 to 5.

EXAMPLE

manual To configure system time manually.

Syntax

manual *<date of system>* ***<****time of system****>***

Parameter

<**date of system**> Date of system, format is YYYY:MM:DD, example: 2011:06:25.

<**time of system**> Time of system, format is HH:MM:SS, example: 23:10:55.

EXAMPLE

ntp To configure system time by NTP.

Syntax

ntp <*mode*> **<***disable/ enable***>**

Parameter

<**mode**> Indicates the NTP mode operation.

<**disable**> Disable NTP mode operation.

<**enable**> Enable NTP mode operation.

EXAMPLE

Syntax

ntp <*server*> **<***server index***>** **<***ipv6-address/ ip-hostname***>**

Parameter

<**server**> Indicates the NTP mode operation.

<**server index**> NTP server index, the available value is from 1 to 5.

<**ipv6-address**> NTP server ipv6 address, IPv6 address is in 128-bit records represented as eight fields of up to four hexadecimal digits with a colon separates each field (:)For example, 'fe80::215:c5ff:fe03:4dc7'. The symbol '::' is a special syntax that can be used as a shorthand way of representing multiple 16-bit groups of contiguous zeros; but it can only appear once. It also used a following legally IPv4 address. For example, '::192.1.2.34'.

<**ip-hostname**> NTP server ip address or hostname.

EXAMPLE

show To show time information.

Syntax

show *<daylight/ ntp>*

Parameter

<**daylight**> Show the daylight time information.

<**ntp**> Show the NTP information.

EXAMPLE

Table : VCL Commands

delete	Delete command
mac-vlan	Configure MAC-based VLAN membership
protocol-vlan	Configure protocol-based VLAN
show	Show VCL status command

delete

To delete the configured command or VCL rule entry.

Syntax

delete < *mac-vlan***> <***mac-address***>**

Parameter

<**mac-vlan**> Delete MAC-based VLAN entry.

<**mac-address**> MAC address, format 0a-1b-2c-3d-4e-5f

EXAMPLE

NOTE: The delete command was used for what you want to delete the command or entry you had set on the switch.

Syntax

delete < *protocol-vlan***> <***ethernet* **> <***ether type***>**

Parameter

<**protocol-vlan**> Delete protocol-based VLAN ethertype protocol to group mapping.

<**ethernet**> Delete protocol-based VLAN Ethernet-II protocol to group mapping.

<**ether type**> Ether type, available value is from 0x0600 to 0xffff.

EXAMPLE

Syntax

delete < *protocol-vlan***> <***llc***> <***DSAP value*> <*SSAP value*>

Parameter

<**protocol-vlan**> Delete protocol-based VLAN.

<**llc**> Delete protocol-based VLAN LLC protocol to group mapping.

<**DSAP value**> DSAP value, available value is from 0x00 to 0xff.

<**SSAP value**> SSAP value, available value is from 0x00 to 0xff.

EXAMPLE

Syntax

delete < *protocol-vlan***> <***snap***> <***oui-address*> <*protocol ID*>

Parameter

<**protocol-vlan**> Delete protocol-based VLAN.

<**snap**> Delete protocol-based VLAN SNAP protocol to group mapping.

<**oui-address**> OUI address, format : 00-40-c7.

<**protocol ID**> Protocol ID is the Ethernet type field value for the protocol running on top of SNAP.

EXAMPLE

mac-vlan To configure MAC-based VLAN membership.

Syntax

mac-vlan < mac-address**> <***vlan ID***> <***port-list*>

Parameter

<**mac-address**> MAC address, format 0a-1b-2c-3d-4e-5f.

<**vlan ID**> VLAN ID, available value is from 1 to 4094.

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

protocol-vlan To configure protocol-based VLAN.

Syntax

protocol-vlan < *protocol* > **<***ethernet***> <***ether type*> <*protocol-based vlan name*>

Parameter

<**protocol**> Protocol-based VLAN ethertype protocol to group mapping.

<**ethernet** > Protocol-based VLAN Ethernet-II protocol to group mapping.

<**ether type**> Ether type, available value is from 0x0600 to 0xffff.

<**protocol-based vlan name**> Up to 16 characters to describe protocol-based VLAN group name.

EXAMPLE

Syntax

protocol-vlan <*protocol* > **<***llc***> <***DSAP value*> <*SSAP value*> <*protocol-based vlan name*>

Parameter

<**protocol**> Protocol-based VLAN ethertype protocol to group mapping.

<**llc**> Protocol-based VLAN LLC protocol to group mapping.

<**DSAP value**> DSAP value, available value is from 0x00 to 0xff.

<**SSAP value**> SSAP value, available value is from 0x00 to 0xff.

<**protocol-based vlan name**> Up to 16 characters to describe protocol-based VLAN group name.

EXAMPLE

Syntax

protocol-vlan <*protocol* > **<***snap***> <***oui-address*> <*protocol ID*> <*protocol-based vlan name*>

Parameter

<**protocol**> Protocol-based VLAN ethertype protocol to group mapping.

<**snap**> Protocol-based VLAN SNAP protocol to group mapping.

<**oui-address**> OUI address, format : 00-40-c7.

<**protocol ID**> Protocol ID is the Ethernet type field value for the protocol running on top of SNAP.

<**protocol-based vlan name**> Up to 16 characters to describe protocol-based VLAN group name.

EXAMPLE

Syntax

protocol-vlan <*vlan***>** *<protocol-based vlan name>***<***vlan ID***> <***port-list***>**

Parameter

<**vlan**> Protocol-based VLAN group to VLAN mapping.

<**protocol-based vlan name**> Up to 16 characters to describe protocol-based VLAN group name.

<**vlan ID**> VLAN ID, available value is from 1 to 4094.

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

show To show the VCL status command.

Syntax

show *<mac-vlan>*

Parameter

<**mac-vlan**> Show MAC-based VLAN entry.

EXAMPLE

Syntax

show <*protocol- vlan*>

Parameter

<**protocol- vlan** > Show protocol-based VLAN configuration.

EXAMPLE

Table : VLAN Commands

delete	Delete VLAN group
egress-rule	Configure egress-rule of switch ports
frame-type	Configure frame type of switch ports
ingress-filtering	Configure ingress filtering of switch ports
port-type	Configure port type of switch ports
pvid	Configure port VLAN ID
show	Show VLAN information
tag-group	Configure tag-based VLAN group
tpid	Configure the TPID used for Custom S-ports. This is a global setting for all the Custom S-ports

delete

To delete VLAN group and remove the VLAN member

Syntax

delete <*tag-group***> <***VLAN ID***>**

Parameter

<**tag-group**> Delete tag-based VLAN group.

<**VLAN-ID**> VLAN ID, available value is from 1 to 4094

EXAMPLE

egress-rule

To configure egress-rule of switch ports

Syntax

egress-rule <*port-list***> <***access/ hybric/ trunk***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**access**> Untag all frames.

<**hybric**> Tag all frames except VLAN ID same as PVID.

<**trunk**> Tag all frames.

EXAMPLE

frame-type

To configure frame type of switch ports

Syntax

frame-type <*port-list***> <***all/ tagged/ untagged***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**all**> Accept all frames.

<**tagged**> Accept tagged frames only.

<**untagged**> Accept untagged frames only.

EXAMPLE

ingress-filtering

To configure ingress filtering of switch ports

Syntax

ingress-filtering <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disable ingress filtering.

<**enable**> Enable ingress filtering. If ingress port is not a member of the classified VLAN of the frame, the frame is discarded.

EXAMPLE

port-type

To configure port type of switch ports

Syntax

port-type <*port-list***> <***c-port/ s-custom-port/ s-port/ unaware***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**c-port**> To set the port as the customer port type.

<**s-custom-port**> To set the port as the customer service port type.

<**s-port**> To set the port as the service port type.

<**unaware**> To set the port as the VLAN unaware port type.

EXAMPLE

pvid To configure the Port VLAN ID

Syntax

pvid <*port-list***> <***VLAN ID***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**VLAN ID**> VLAN ID, available value is from 1 to 4094.

EXAMPLE

show To show the VLAN configuration and information.

Syntax

show <*port-config***>**

Parameter

<**port-config**> Show VLAN port configuration.

EXAMPLE

Syntax

show <*port-status***> <***combined/ gvrp/ mstp/ mvr/ mvrp/ nas/ static/ voice***>**

Parameter

<**port-status**> Show VLAN port status

<**combined**> VLAN port status for combined VLAN Users.

<**gvrp**> VLAN port status for GVRP.

<**mstp**> VLAN port status for MSTP.

<**mvr**> VLAN port status for MVR.

<**mvrp**> VLAN port status for MVRP.

<**nas**> VLAN port status for NAS.

<**static**> Static VLAN port status.

<**voice**> VLAN port status for Voice VLAN.

EXAMPLE

tag-group To configure tag-based VLAN group.

Syntax

tag-group <*VLAN ID***> <***VLAN Name***> <***port-list***>**

Parameter

<**VLAN ID**> VLAN ID, available value is from 1 to 4094.

<**VLAN Name**> Up to 32 characters describing VLAN name.

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

EXAMPLE

tpid To configure the TPID used for Custom S-ports. This is a global setting for all the Custom S-ports.

Syntax

tpid < *TPID value***>**

Parameter

< **TPID value**> TPID value, available value is from 0x600 to 0xffff.

EXAMPLE

Table : VOICE-VLAN Commands

config	Configure Voice VLAN
delete	Delete command
discovery	Configure Voice VLAN discovery protocol
oui	Create Voice VLAN OUI entry. Modify OUI table will restart auto detect OUI process
port-mode	Configure Voice VLAN port mode
security	Configure Voice VLAN port security mode
show	Show Voice VLAN information

config

To configure the Voice VLAN parameter.

Syntax

config <*disable/ enable***> <***VLAN ID***> <***Secure aging time***> <***Voice VLAN traffic class***>**

Parameter

<**disable**> Disable Voice VLAN mode operation.

<**enable**> Enable Voice VLAN mode operation.

<**VLAN ID**> VLAN ID, available value is from 1 to 4094

<**Secure aging time**> Voice VLAN secure aging time, available value is from 10 to 1000000.

<**Voice VLAN traffic class**> Voice VLAN traffic class, all traffic on the Voice VLAN will apply this class, available value is from 0(Low) to 7(High).

EXAMPLE

delete To delete the Voice VLAN OUI entry. Modify OUI table will restart auto detect OUI process.

Syntax

delete <*oui***> <***oui-address***>**

Parameter

<**oui**> Delete Voice VLAN OUI entry. Modify OUI table will restart auto detect OUI process.

<**oui-address**> OUI address, format : 0a-1b-2c.

EXAMPLE

NOTE: If you didn't set Voice VLAN OUI already then the switch will show "ERROR! Voice VLAN table entry not exist". Due to the reason then you need to create the Voice VLAN OUI entry first.

discovery To configure the Voice VLAN discovery protocol.

Syntax

discovery <*port-list***> <***both/ lldp/ oui***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**both**> Both OUI and LLDP.

<**lldp**> Detect telephony device by LLDP

<**oui** > Detect telephony device by OUI address.

EXAMPLE

NOTE: If your IP Phone without support LLDP protocol then please set the discovery protocol with both.

oui To create Voice VLAN OUI entry. Modify OUI table will restart auto detect OUI process.

Syntax

oui <*oui-address***> <***LINE***>**

Parameter

<**oui-address**> OUI address, format : 0a-1b-2c.

<**LINE**> Up to 32 characters describing OUI address.

EXAMPLE

port-mode To configure Voice VLAN port mode.

Syntax

port-mode <*port-list***> <***auto/ disable/ force***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**auto**> Enable auto detect mode. It detects whether there is VoIP phone attached on the specific port and configure the Voice VLAN members automatically.

<**disable**> Disjoin from Voice VLAN.

<**force**> Forced join to Voice VLAN

EXAMPLE

NOTE: If you didn't enable the LLDP or LLDP-MED protocol on your switch then please set the port-mode with force mode.

security To configure Voice VLAN port security mode.

Syntax

security <*port-list***> <***disable/ enable***>**

Parameter

<**port-list**> Port list, available value is from 1 to 14 format: 1,3-5.

<**disable**> Disjoin from Voice VLAN.

<**enable**> Enable Voice VLAN security mode. When the function is enabled, all non-telephone MAC address in Voice VLAN will be blocked 10 seconds.

EXAMPLE

show To show the Voice VLAN configuration and information.

Syntax

show <*config***>**

Parameter

<**config**> Show Voice VLAN configuratio

EXAMPLE

Syntax

show <*oui***>**

Parameter

<**oui**> Show OUI address.

EXAMPLE