ISW-12 802.3bt 4GbP 4 Combo 4 SFP+ (12-port Switch)

CLI Command Guide

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1. Scope

1 Scope

1.1 Scope

This user guide describes the commands and parameters of the Command Line Interface (CLI) as implemented in the current version of industrial managed switch series software. These commands are used to set-up, administer and maintain the system.

1.2 Audience

The guide is intended for Operating personnel (sometimes called craft persons).

1.3 Pre-required Knowledge

The reader must be familiar with the:

- Basic operations of industrial managed switch series (see User Guide).
- Security and activity monitoring constraints that limit how a command is implemented.

1.4 Access to Hardware Interface

Access to the hardware interface is by a terminal (or computer with terminal emulation software). Requirements for the terminal are:

- RS-232 ASCII port
- Selectable transmission baud rate
- Full alphanumeric capability
- Selectable odd/even or no parity check

1.5 Related Documents

You may want to refer to the following related documents:

- Quick Installation Guide
- User Guide
- Web Configuration Tool Guide

2. Operator Interface

2 Operator Interface

2.1 Introduction

Access to the Switch is protected by a logon security system. You can log on to the switch with the user name and password. After three failed logon attempts, the system refuses further attempts.

After you log on, the system monitors the interface for periods of inactivity. If the interface is inactive for too long, you are automatically logged off.

The CLI initial fixed user name is (admin) while the password is none(). You should change the password as soon as possible, because the initial password is known to anyone who reads this manual. You can also add additional user names. Use the “account add” command to enter a new user identification, password and authorization level.

2.2 Connect Interface

Interface	**Parameter**
Console	Baud rate: 115200bps, Data bit: 8, Parity: None, Stop bit: 1
Telnet	Port 23
SSH	Port 22 (In Windows, you can run terminal emulator such as PuTTY)

2.3 Screen Description

1. Connecting to the Ethernet port(RJ45 Ethernet port)
2. Key-in the command under Telnet: ***telnet 192.0.2.1***
3. Login with default account and password.
   Username: admin
   Password: (none)

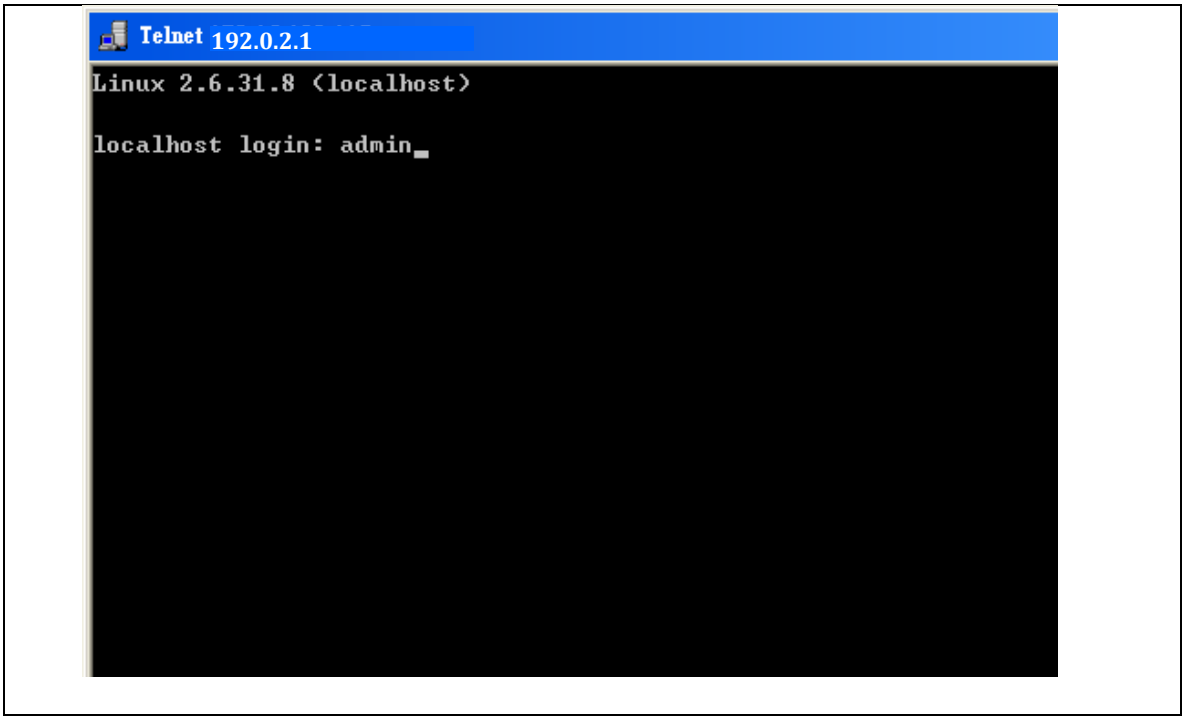

Figure 2-1 Screen Description

2.4 Execution Modes

The CLI contains several execution modes. Users will see different set of commands under different execution modes. Table 2-1 lists all the execution modes and their purposes. When users enter a certain execution mode, the corresponding mode prompt will be displayed automatically on the screen. The mode prompts of all the execution modes are also listed in Table 2-1.

Table 2-1 List of Execution Modes

Mode	Parent Mode	Description
Privileged Exec (Enable Mode)		Privileged mode; allows configuration and other modifications to the system. Command: `enable` Prompt: `#`
Config (Configure Mode)	Priv.Exec	Global configuration mode Command: `configure terminal` Prompt: `(config)#`
VLAN	Config	Sub-mode for configuring VLAN Command: `vlan <vlist>` Prompt: `(config-if-vlan)#`
VLAN Interface Config	Config	Sub-mode for configuring VLAN interface Command: `interface vlan` Prompt: `(config-vlan)#`
Interface Config	Config	Sub-mode for configuring Ethernet Interface Command: `interface type port_num` Prompt: `(config-if)#`
Interface LLAG Config	Config	Sub-mode for configuring LLAG Interface Command: `interface llag <llag_id>`

		Prompt: `(config-llag)#`
Line	Config	Sub-mode for configuring Ternimal Lines Command: `line { console | vty } line_num` Prompt: `(config-line)#`
SNMP Server Host Config	Config	Sub-mode for configuring SNMP server host entries Command: `snmp-server host <host_name>` Prompt: `(config-snmps-host)#`
CFM MD	Config	Sub-mode for configuring CFM domain Command: `cfm domain <md_name>` Prompt: `(config-cfm-dmn)#`
CFM MA	CFM MD	Sub-mode for configuring CFM Maintenance Association Command: `service <kword1-15>` Prompt: `(config-cfm-dmn-svc)#`
CFM MEP	CFM MA	Sub-mode for configuring CFM Maintenance Association EndPoint Command: `mep <1-8191>` Prompt: `(config-cfm-dmn-svc-mep)#`
IPMC Profile	Config	Sub-mode for configuring IPMC Profile Command: `ipmc profile <profile_name>` Prompt: `(config-ipmc-profile)#`
DHCP Pool	Config	Sub-mode for configuring DHCP Pool Command: `ip dhcp pool <pool_name>` Prompt: `(config-dhcp-pool)#`
ERPS	Config	Sub-mode for configuring ERPS Command: `erps <inst>` Prompt: `(config-erps)#`
Spanning Tree Aggregation	Config	Sub-mode for configuring Spanning Tree Aggregation Command: `spanning-tree aggregation` Prompt: `(config-stp-aggr)#`
QoS Map Egress	Config	Sub-mode for configuring Qos Map Egress Command: `qos map egress <map_id>` Prompt: `(config-qos-map-egress)#`
QoS Map Inress	Config	Sub-mode for configuring Qos Map Inress Command: `qos map ingress <map_id>` Prompt: `(config-qos-map-ingress)#`
RingV2	Config	Sub-mode for configuring Ringv2 Command: `ringv2 protect groupNo.` Prompt: `(config-ringv2-groupNo.)#`
Profile Alarm	Config	Sub-mode for configuring Profile Alarm Command: `profile alarm` Prompt: `(alm-profile-config)#`

2.5 Getting help

The user can get help by entering a question mark '?' at each position in the command. The displayed result depends on the execution mode and previous input.

2.6 Terminal Key Function

Following is the list of all the terminal keys and their function.

Table 2-2 List of Terminal Keys

ENTER	Run a CLI config script
CTRL-M	
TAB	Tab completion. If tab is pressed after a non-whitespace character, complete the word before the Tab. If tab is pressed after a whitespace character, complete the next word.
CTRL-I	
?	Display available commands If ? is pressed after a non-whitespace character, show possible choices for this word. If ? is pressed after a whitespace character, show possible choices for the next word.
<Up Arrow>	Up history
CTRL-P	
<Down Arrow>	Down history
CTRL-N	
Home	Move the cursor to the beginning of the input line
CTRL-A	
End	Move the cursor to the end of the input line
CTRL-E	
<Left Arrow>	Move the cursor backward
CTRL-B	
<Right Arrow>	Move the cursor forward
CTRL-F	
BACKSPACE	Erase the character before the cursor
CTRL-H	

2.7 Notation Conventions

The notation conventions for the parameter syntax of each CLI command are as follows:

- Parameters enclosed in [ ] are optional.
- Parameter values are separated by a vertical bar “|” only when one of the specified values can be used.
- Parameter values are enclosed in { } when you must use one of the values specified.

3. Commands Descriptions

3 Commands Descriptions

3.1 Enable Mode Commands

All the “show - -” commands in this section can also be executed under any other command mode except Initialize Mode.

3.1.1 alarm suppress (For 90W PoE Model)

Description	alarm suppress	
Syntax	alarm suppress <alarm_name>	
Parameter		
	Name	**Description**
	<alarm_name>	<alarm_name> : <127 characters

3.1.2 clear access management statistics

Description	Use the clear access management statistics privileged EXEC command to clear the statistics maintained by access management.
Syntax	clear access management statistics
Parameter	None

3.1.3 clear access-list ace statistics

Description	Use the clear access-list ace statistics privileged EXEC command to clear the statistics maintained by access-list, including access-list interface statistics and ACE's statistics.
Syntax	clear access-list ace statistics
Parameter	None

3.1.4 clear cfm meps (For 90W PoE Model)

Description	Clear MEP statistics.	
Syntax	clear cfm meps [domain <kword1-15>] [service <kword1-15>] [mep-id <1-8191>] statistics	
Parameter		
	Name	**Description**
	domain	Select domain to clear counters
	service	Select a service to clear counters
	<kword1-15>	Domain name to clear counters Service name to clear counters
	mep-id	Select a MEP to clear counters
	<1-8191>	Particular MEP-ID to clear counters

3.1.5 clear dot1x statistics

Description	Clears the dot1x statistics counters	
Syntax	clear dot1x statistics [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports

3.1.6 clear erps

Description	Clear the counters of one or more ERPS instances	
Syntax	clear erps [<1~64>] statistics	
Parameter		
	Name	**Description**
	<1~64>	ERPS ID

3.1.7 clear fa

Description	Clear Fabric Attach statistics	
Syntax	clear fa statistics [summary | (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	summary	Clear Fabric Attach summary statistics
	<port_type>	Select port type.
	<v_port_type_ list>	Port list in 1/1 – max number of the ports

3.1.8 clear ip acd (For 90W PoE Model)

Description	Clear IPv4 ACD statistics
Syntax	clear ip acd
Parameter	None

3.1.9 clear ip arp

Description	Clear ARP cache data
Syntax	clear ip arp
Parameter	None

3.1.10 clear ip dhcp detailed statistics

Description	Clear IP DHCP detailed statistics	
Syntax	clear ip dhcp detailed statistics { server | client | snooping | relay | helper | all } [interface (<port_type> [<in_port_list>])]	
Parameter		
	Name	**Description**
	server	DHCP server
	client	DHCP client
	snooping	DHCP snooping
	relay	DHCP relay
	helper	DHCP normal L2 or L3 forward
	all	Clear all DHCP related statistics
	<port_type>	Select port type.
	<in_port_list>	Port list in 1/1 – max number of the ports

3.1.11 clear ip dhcp relay statistics

Description	Use the clear ip dhcp relay statistics privileged EXEC command to clear the statistics maintained by IP DHCP realy.
Syntax	clear ip dhcp relay statistics
Parameter	None

3.1.12 clear ip dhcp server binding

Description	Clears the leases from the lease binding database.	
Syntax	clear ip dhcp server binding <ipv4_ucast>	
Parameter		
	Name	**Description**

	<ipv4_ucast>	<ipv4_ucast> : IPv4 unicast address

3.1.13 clear ip dhcp server binding type

Description	Clear specify type of bindings.	
Syntax	clear ip dhcp server binding type { automatic | manual | expired }	
Parameter		
	Name	**Description**
	automatic	Clear (expire) automatic bindings
	manual	Clear (remove) expired bindings
	expired	Clear (expire) manual bindings

3.1.14 clear ip dhcp server statistics

Description	Reset all DHCP server counters.
Syntax	clear ip dhcp server statistics
Parameter	None

3.1.15 clear ip dhcp snooping statistics

Description	Clear IP DHCP snooping traffic statistics	
Syntax	clear ip dhcp snooping statistics [interface (<port_type> [<in_port_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<in_port_list>	Port list in 1/1 – max number of the ports

3.1.16 clear ip igmp snooping

Description	Clear the IGMP snooping vlan < vlan_list> statistics.	
Syntax	clear ip igmp snooping [vlan <vlan_list>] statistics	
Parameter		
	Name	**Description**
	<vlan_list>	<vlan_list> : <1~4095>

3.1.17 clear ip statistics

Description	Clear IP statistics
Syntax	clear ip statistics
Parameter	None

3.1.18 clear ipv6

Description	Clears IPv6 data	
Syntax	clear ipv6 mld snooping [vlan <v_vlan_list>] statistics clear ipv6 neighbors clear ipv6 statistics	
Parameter		
	Name	**Description**
	snooping	Snooping MLD
	<v_vlan_list>	VLAN identifier (VID)
	neighbors	IPv6 neighbors
	statistics	Traffic statistics

3.1.19 clear known-host-keys (For 90W PoE Model)

Description	Clear the cache of known hosts SSH keys
Syntax	clear known-host-keys
Parameter	None

3.1.20 clear lacp statistics

Description	Clear all LACP statistics
Syntax	clear lacp statistics
Parameter	None

3.1.21 clear lldp statistics

Description	Clears the LLDP statistics.	
Syntax	clear lldp statistics { [interface (<port_type> [<plist>])] | global }	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<plist>	Port list in 1/1- max number of ports
	global	Clear global counters

3.1.22 clear logging

Description	Use the clear logging privileged EXEC command to clear the logging message.	
Syntax	clear logging [informational] [notice] [warning] [error]	
Parameter		
	Name	**Description**
	informational	Severity 6: Informational messages
	notice	Severity 5: Normal but significant condition
	warning	Severity 4: Warning conditions
	error	Severity 3: Error conditions

3.1.23 clear mac address-table

Description	Flush mac address-table
Syntax	clear mac address-table
Parameter	None

3.1.24 clear mep (For 30W PoE Model)

Description	Clear Maintenance Entity Point information	
Syntax	clear mep <inst> { lm | dm | tst | bfd }	
Parameter		
	Name	**Description**
	<inst>	The MEP instance.
	lm	Clear LM measuring information.
	dm	Clear DM measuring information.
	tst	Clear TST measuring information.
	bfd	Clear G.8113.2 BFD CC/CV statistics counters.

3.1.25 clear mvr

Description	Clear the mvr statistics.	
Syntax	clear mvr [vlan <vlan_list> | name <word16>] statistics	
Parameter		
	Name	**Description**
	<vlan_list>	MVR multicast VLAN list
	<word16>	MVR multicast VLAN name

3.1.26 clear poe ping counters (For 90W PoE Model)

Description	Clear poe ping result counters
Syntax	clear poe ping counters

Parameter	None

3.1.27 clear port-security dynamic (For 90W PoE Model)

Description	Clear port security information	
Syntax	clear port-security dynamic [{ address <mac> [vlan <vlan_on_mac>] } | { interface (<port_type> [<plist>]) [vlan <vlan_on_interface>] } | vlan <vlan>]	
Parameter		
	Name	Description
	<mac>	MAC address to clear
	<vlan_on_mac>	VLAN on which to clear MAC address
	<port_type>	Select port type.
	<plist>	Port list in 1/1 – max number of the ports
	<vlan_on_interface>	VLANs on interface to clear all MAC addresses for
	<vlan>	VLAN on which to delete all MAC addresses

3.1.28 clear sflow statistics

Description	Clear sflow statistics.	
Syntax	clear sflow statistics { receiver | samplers [interface (<port_type> [<v_port_type_list>])] }	
Parameter		
	Name	Description
	receiver	Show statistics for receiver
	samplers	Show statistics for samplers
	interface	Show statistics for a specific interface or interfaces
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports

3.1.29 clear spanning-tree

Description	Clear Spanning Tree Protocol statistics for all interfaces or a specified interface or restart the protocol migration.	
Syntax	clear spanning-tree { { statistics [interface (<port_type> [<v_port_type_list>])] } | { detected-protocols [interface (<port_type> [<v_port_type_list_1>])] } }	
Parameter		
	Name	Description
	detected-protocols	Set the STP migration check
	statistics	STP statistics
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports
	<v_port_type_list_1>	Port list in 1/1 – max number of the ports

3.1.30 clear statistics

Description	Clears the statistics for the interface or all interface.	
Syntax	clear statistics { [{ interface (<port_type> [<port_list>]) }]	
Parameter		
	Name	Description
	<port_type>	Select port type.

	<port_list>	Port list in 1/1 – max number of the ports

3.1.31 clear system led status (For 90W PoE Model)

Description	Clear system LED status information	
Syntax	clear system led status { fatal | software || all }	
Parameter		
	Name	**Description**
	fatal	Clear fatal error status of the system LED
	software	Clear generic software error status of the system LED
	all	Clear all error status of the system LED and back to normal indication

3.1.32 configure terminal

Description	Enter configuration mode.
Syntax	configure
Parameter	None

3.1.33 copy

Description	Used to overwrite the current startup configuration file with the contents of the current running configuration file and vice versa. Import example: copy sftp://usr:pwd@server_ip/filename running-config Export example: copy running-config sftp://usr:pwd@server_ip/filename	
Syntax	copy usb <has_src_file> { config-startup | config-running } (For 90W PoE Model) copy { config-startup | config-running } usb <has_dest_file> (For 90W PoE Model) copy { startup-config | running-config | <source_path> } { startup-config | running-config | <destination_path> } [syntax-check]	
Parameter		
	Name	**Description**
	<has_src_file>	path/file_name
	config-startup	Startup configuration
	config-running	Currently running configuration
	startup-config	Startup configuration
	running-config	Currently running configuration
	<url_file>	File in FLASH or on TFTP/FTP/SFTP server. Sytax: <flash:filename | tftp://server/path-and-filename | ftp://user:passwd@server:port/path-and-filename>. Where FTP port can be ignored if default port 21 is used. A valid file name is a text string drawn from alphabet (A-Z, a-z), digits (0-9), dot (.), hyphen (-), under score(_). The maximum length is 63 and hyphen must not be first character. The file name content that only contains '.' is not allowed
	syntax-check	Perform syntax check on source configuration

3.1.34 delete

Description	Delete url file.
Syntax	delete <url_file>
Parameter	

	Name	Description
	<url_file>	File in FLASH or on remote server. Syntax: <flash:filename> |<protocol>://[<username>[:<password>]@]<host>[:<port>][/<path>]>. A valid file name is a text string drawn from alphabet (A-Za-z), digits (0-9), dot (.), hyphen (-), under score(_). The maximum length is 63 and hyphen must not be first character. The file name content that only contains '.' is not allowed

3.1.35 dir

Description	Shows files in a directory, default directory is usually Flash.
Syntax	dir
Parameter	None

3.1.36 disable

Description	Enter init mode.
Syntax	disable
Parameter	None

3.1.37 dot1x initialize

Description	Force re-authentication immediately	
Syntax	dot1x initialize [interface (<port_type> [<plist>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<plist>	Port list in 1/1 – max number of the ports

3.1.38 enable

Description	Turn on privileged commands	
Syntax	enable [<new_priv>]	
Parameter		
	Name	**Description**
	<new_priv>	<0-15> Choose privileged level

3.1.39 erps (For 30W PoE Model)

Description	Ethernet Ring Protection Switching	
Syntax	erps <group> command { force | manual | clear } { port0 | port1 }	
Parameter		
	Name	**Description**
	force	Causes a forced switchover
	manual	Causes a switchover if the signal is good and no forced switch is in effect
	clear	Clear command
	port0	ERPS Port 0 interface
	port1	ERPS Port 1 interface

3.1.40 erps clear (For 90W PoE Model)

Description	Clear a switchover (FS or MS) request and a WTB/WTR condition and force reversion even if not revertive
Syntax	erps <inst> clear
Parameter	

	Name	Description
	<inst>	ERPS instance number

3.1.41 erps switch (For 90W PoE Model)

Description	Request a switchover from port0 to port1 or vice versa. Use 'erps <inst> clear' to clear the request.	
Syntax	erps <inst> switch {force | manual } {port0-to-port1 | port1-to-port0}	
Parameter		
	Name	Description
	<inst>	<1-64> ERPS instance number
	switch	Request a switchover from port0 to port1 or vice versa. Use 'erps <inst> clear' to clear the request.
	force	Causes a forced switchover
	manual	Causes a switchover if the signal is good and no forced switch is in effect
	port0-to-port1	Blocks port0 and unblocks port1
	port1-to-port0	Blocks port1 and unblocks port0

3.1.42 exit

Description	Exit from current mode
Syntax	exit
Parameter	None

3.1.43 firmware swap

Description	Use firmware swap to swap the active and alternative firmware images.
Syntax	firmware swap
Parameter	None

3.1.44 firmware upgrade

Description	Use firmware upgrade to load new firmware image to the switch.	
Syntax	firmware upgrade <url_file> firmware upgrade usb <has_file> (For 90W PoE Model)	
Parameter		
	Name	Description
	<url_file>	Uniform Resource Locator. It is a specific character string that constitutes a reference to a resource. Syntax: <protocol>://[<username>[:<password>]@]<host>[:<port>][/<path>]/<file_name>. If the following special characters: space !"#$%&'()*+,/:;<=>?@[\]^`{|}~ need to be contained in the input URL string, they should be percent-encoded. A valid file name is a text string drawn from alphabet (A-Z, a-z), digits (0-9), dot (.), hyphen (-), under score (_). The maximum length is 63 and hyphen must not be first character. The file name content that only contains '.' is not allowed For example : firmware upgrade sftp://usr:pwd@server_ip/filename
	<has_file>	Path/file_name

3.1.45 help

Mode	Enable Mode

Description	Description of the interactive help system
Syntax	help
Parameter	None

3.1.46 ip dhcp retry interface

Description	Restart the dhcp client	
Syntax	ip dhcp retry interface vlan <vlan_id>	
Parameter		
	Name	**Description**
	<vlan_id>	<vlan_id>: 1-4095

3.1.47 ipv6 dhcp-client restart (For 30W PoE Model)

Description	Restart DHCPv6 client service.	
Syntax	ipv6 dhcp-client restart [interface vlan <vlan_list>]	
Parameter		
	Name	**Description**
	interface	Select an interface to configure
	<vlan_list>	<vlan_list> : IPv6 interface VLAN list

3.1.48 logout

Description	Exit from current mode
Syntax	logout
Parameter	None

3.1.49 more

Description	Display url file.	
Syntax	more <url_file> [save-host-key] [ftp-active]	
Parameter		
	Name	**Description**
	<path>	File in FLASH or on TFTP/FTP server. Sytax: <flash:filename | tftp://server/path-and-filename | ftp://user:passwd@server:port/path-and-filename>. Where FTP port can be ignored if default port 21 is used. A valid file name is a text string drawn from alphabet (A-Z, a-z), digits (0-9), dot (.), hyphen (-), under score(_). The maximum length is 63 and hyphen must not be first character. The file name content that only contains '.' is not allowed
	[save-host-key]	Always save SSH host keys in local cache
	[ftp-active]	Use active mode for FTP transfers (default is passive mode)

3.1.50 no alarm suppress (For 90W PoE Model)

Description	No alarm suppress	
Syntax	no alarm suppress <alarm_name>	
Parameter		
	Name	**Description**
	<alarm_name>	<alarm_name> : <127 characters

3.1.51 no debug (For 90W PoE Model)

Description	No debugging functions

Syntax	no debug gdbserver no debug interrupt monitor [source <intr_name>] no debug trace hunt	
Parameter		
	Name	**Description**
	gdbserver	GDB server
	monitor	Print a line on the console every time the corresponding source interrupt fires
	<intr_name>	Valid words are 'AMS' 'CLK_ADJ' 'CLK_TSTAMP' 'EGR_ENGINE_ERR' 'EGR_FIFO_OVERFLOW' 'EGR_RW_FCS_ERR' 'EGR_TIMESTAMP_CAPTURED' 'EXT_1_SYNC' 'EXT_SYNC' 'FLNK' 'INGR_ENGINE_ERR' 'INGR_RW_FCS_ERR' 'INGR_RW_PREAM_ERR' 'KR' 'LOS' 'MOD_DET' 'PTP_PIN_0' 'PTP_PIN_1' 'PTP_PIN_2' 'PTP_PIN_3' 'PUSH_BUTTON' 'SYNC' 'VOE'
	trace hunt	Trace hunt

3.1.52 no debug (For 30W PoE Model)

Description	No debug function	
Syntax	no debug interrupt-monitor source <source> no debug ipv6 nd no debug trace hunt	
Parameter		
	Name	**Description**
	<source>	The possible values are enum vtss_interrupt_source_t values found in file board/interrupt_api.h
	nd	IPv6 Neighbor Discovery debugging
	trace hunt	Trace hunt

3.1.53 no port-security (For 30W PoE Model)

Description	No port security shutdown function	
Syntax	no port-security shutdown [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports

3.1.54 no terminal editing

Description	Disable command line editing
Syntax	no terminal editing
Parameter	None

3.1.55 no terminal length

Description	Remove number of lines on a screen
Syntax	no terminal length
Parameter	None

3.1.56 no terminal width

Description	Remove width of the display terminal
Syntax	no terminal width

Parameter	None

3.1.57 no terminal exec-timeout

Description	Remove the EXEC timeout
Syntax	no terminal exec-timeout
Parameter	None

3.1.58 no terminal history size

Description	Remove history buffer size
Syntax	no terminal history size
Parameter	None

3.1.59 ping ip (For 90W PoE Model)

Description	Sends a sequence of ICMP echo request packets to the specified host.	
Syntax	ping [ip] { <domain_name> | <ipv4_addr> } [ttl <1-255>] [repeat <1-60>] [{ saddr <ipv4_addr> | sif { <port_type_id> | vlan <vlan_id> } }] [size <2-1452>] [data <0-255>] [{ verbose | quiet }]	
Parameter		
	Name	**Description**
	[ip]	ICMPv4 Echo Request
	<ipv4_addr>	Destination IPv4 address Send from interface with source address
	<domain_name>	Destination hostname or FQDN
	data	Specify payload data byte value
	quiet	Set quiet output
	repeat	Specify repeat count
	saddr	Send from interface with source address
	sif	Send from specified interface
	size	Specify datagram size
	ttl	Set IPv4 Time-To-Live (TTL)
	verbose	Set verbose output
	<1-255>	Set IPv4 Time-To-Live (TTL). IPv4 TTL: 1-255; Default is 64
	<1-60>	Specify repeat count. Packets: 1-60; Default is 5
	<port_type_id>	Send from specified interface
	<vlan_id>	VLAN ID
	<2-1452>	Specify datagram size. <2-1452> Size (bytes): 2-1452; Default is 56 (excluding MAC, IP and ICMP headers)
	<0-255>	Specify payload data byte value. <0-255> Payload data: 0-255; Default is 0

3.1.60 ping ip (For 30W PoE Model)

Description	Sends a sequence of ICMP echo request packets to the specified host.	
Syntax	ping ip { <v_ip_addr> | <v_ip_name> } [repeat <count>] [size <size>] [interval <seconds>]	
Parameter		
	Name	**Description**
	<ipv4_addr>	ICMP destination IPv4 address
	<v_ip_name>	ICMP destination IP domain name
	<count>	Specify repeat count. Packets: 1-60; Default is 5
	<size>	Specify datagram size. <2-1452> Size (bytes): 2-1452; Default is 56 (excluding MAC, IP and ICMP headers)

	<seconds>	<0-30> 0-30; Default is 0

3.1.61 ping ipv6 (For 90W PoE Model)

Description	ICMPv6 Echo Request	
Syntax	ping ipv6 { <domain_name> | <ip_addr> } [repeat <count>] [saddr <src_addr>] [sif { <port_type> <src_if> | vlan <vlan_id> }] [size <size>] [data <data_value>] [{ verbose | quiet }]	
Parameter		
	Name	**Description**
	<domain_name>	Destination hostname or FQDN
	<ip_addr>	Destination IPv6 address
	<count>	<1-60> Packets: 1-60; Default is 5
	<src_addr>	Source Address of interface
	<port_type>	Select port type.
	<src_if>	Port list in 1/1 – max number of the ports
	<vlan_id>	Source VLAN interface
	<size>	<2-1452> Size (bytes): 2-1452; Default is 56 (excluding MAC, IP and ICMP headers)
	<data_value>	<0-255> Payload data: 0-255; Default is 0
	verbose	Set verbose output
	quiet	Set quiet output

3.1.62 ping ipv6 (For 30W PoE Model)

Description	Send ICMP echo messages	
Syntax	ping ipv6 { <v_ipv6_addr> | <v_ipv6_name> } [repeat <count>] [size <size>] [interval <seconds>] [interface vlan <v_vlan_id>]	
Parameter		
	Name	**Description**
	<v_ipv6_addr>	ICMPv6 destination IPv6 address
	<v_ipv6_name>	ICMPv6 destination IP domain name
	<count>	Specify repeat count. Packets: 1-60; Default is 5
	<size>	Specify datagram size. <2-1452> Size (bytes): 2-1452; Default is 56 (excluding MAC, IP and ICMP headers)
	<seconds>	<0-30> 0-30; Default is 0
	<v_vlan_id>	VLAN identifier(s): VID

3.1.63 platform debug

Description	Platform debug configuration	
Syntax	platform debug { allow | deny }	
Parameter		
	Name	**Description**
	allow	Allow debug commands
	deny	Deny debug commands

3.1.64 poe firmware upgrade (For 30W PoE Model)

Description	Upgrade PoE CHIP firmware
Syntax	poe firmware upgrade
Parameter	None

3.1.65 reload

Description	Reload system, either cold (reboot) or restore defaults without reboot.	
Syntax	reload { cold | defaults [keep-ip] [force] }	
Parameter		
	Name	**Description**
	cold	Reload cold.
	defaults	Reload defaults without rebooting.
	keep-ip	Attempt to keep VLAN1 IP setup.
	force (For 90W PoE Model)	Force reload of defaults on remote session.

3.1.66 send

Description	Send a message to other tty lines	
Syntax	send { * | <session_list> | console 0 | vty <vty_list> } <message>	
Parameter		
	Name	**Description**
	*	All tty lines
	<session_list>	<0~16> Send a message to multiple lines
	console	Primary terminal line
	0	Send a message to a specific line
	vty	Virtual terminal
	<vty_list>	<0~15> Send a message to multiple lines
	<message>	Message to be sent to lines, in 128 characters

3.1.67 show aaa

Description	Show AAA
Syntax	show aaa
Parameter	None

3.1.68 show access management

Description	Access management configuration	
Syntax	show access management [statistics | <access_id_list>]	
Parameter		
	Name	**Description**
	statistics	Statistics data
	access_id_list	ID of access management entry

3.1.69 show access-list

Description	Access list	
Syntax	show access-list [interface [(<port_type> [<v_port_type_list>])]] [rate-limiter [<rate_limiter_list>]] [ace statistics [<ace_list>]] show access-list ace-status [static] [link-oam] [loop-protect] [dhcp] [ptp] [arp-inspection] [mep] [ipmc] [ip-source-guard] [conflicts]	
Parameter		
	Name	**Description**
	interface	Select an interface to configure
	ace-status	The local ACEs status
	port_type	GigabitEthernet,1 Gigabit Ethernet Port
	v_port_type_list	PORT_LIST, Port list in 1/1-14
	rate-limiter	Rate limiter
	rate_limiter_list	<RateLimiterList : 1~16> Rate limiter ID

	ace	Access list entry
	statistics	Traffic statistics
	ace_list	<AceId : 1~256> ACE ID
	static	The ACEs that are configured by users manually
	loop-protect	The ACEs that are configured by Loop Protect module
	ipmc	The ACEs that are configured by IPMC module
	ip-source-guard	The ACEs that are configured by IP Source Guard module
	dhcp	The ACEs that are configured by DHCP module
	conflicts	The ACEs that did not get applied to the hardware due to hardware limitations
	arp-inspection	The ACEs that are configured by ARP Inspection module
	mep	The ACEs that are configured by MEP module
	ptp	The ACEs that are configured by PTP module

3.1.70 show aggregation

Description	Aggregation	
Syntax	show aggregation [mode]	
Parameter		
	Name	**Description**
	mode	Traffic distribution mode

3.1.71 show alarm sources (For 90W PoE Model)

Description	Show alarm sources	
Syntax	show alarm sources [<filter>]	
Parameter		
	Name	**Description**
	<filter>	<filter> : <127 characters

3.1.72 show alarm status (For 90W PoE Model)

Description	Show alarm status	
Syntax	show alarm status [<alarm_name>]	
Parameter		
	Name	**Description**
	<alarm_name>	<alarm_name> : <127 characters

3.1.73 show alarm

Description	Alarm information	
Syntax	show alarm { history | current }	
Parameter		
	Name	**Description**
	current	Show alarm current infomation
	history	Show alarm history infomation

3.1.74 show cfm domains (For 90W PoE Model)

Description	Show CFM Domains.	
Syntax	show cfm domains [domain <kword1-15>] [details]	
Parameter		
	Name	**Description**
	domain	Show CFM Domains
	<kword1-	Show particular domain, only

	15>	
	detail	Show details of the domain(s)

3.1.75 show cfm errors (For 90W PoE Model)

Description	Show errors.
Syntax	show cfm errors
Parameter	None

3.1.76 show cfm meps (For 90W PoE Model)

Description	Show MEPs.	
Syntax	show cfm meps [domain <kword1-15>] [service <kword1-15>] [mep-id <1-8191>] [details]	
Parameter		
	Name	**Description**
	domain	Select domain to show info
	service	Select a service to show info
	<kword1-15>	Domain name to show info, 1-15 characters. Service name to show info, 1-15 characters.
	mep-id	Select a MEP to show info
	<1-8191>	Particular MEP-ID to show info,1-8191.
	details	Show detailed information

3.1.77 show cfm services (For 90W PoE Model)

Description	Show CFM Services.	
Syntax	show cfm services [domain <kword1-15>] [service <kword1-15>] [details]	
Parameter		
	Name	**Description**
	domain	Show services within a particular domain, only
	service	Show a particular service, only
	<kword1-15>	Show services within a particular domain, only Show a particular service, only
	details	Show details of the services(s)

3.1.78 show clock

Description	Display clock information.
Syntax	show clock
Parameter	None

3.1.79 show clock detail

Description	Display clock detailed information.
Syntax	show clock detail
Parameter	None

3.1.80 show ddmi

Description	Display DDMI configuration
Syntax	show ddmi
Parameter	None

3.1.81 show dot1x statistics

Description	Shows statistics for either EAPoL or RADIUS.
Syntax	show dot1x statistics { eapol | radius | all } [interface (<port_type> [<v_port_type_list>])]
Parameter	

	Name	Description
	all	Show all dot1x statistics
	eapol	Show EAPoL statistics
	radius	Show Back-end Server statistics
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports

3.1.82 show dot1x status

Description	Shows dot1x status, such as admin state, port state and last source.	
Syntax	show dot1x status [interface (<port_type> [<v_port_type_list>])] [brief]	
Parameter		
	Name	Description
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports
	[brief]	Show status in a brief format (deprecated)

3.1.83 show erps

Description	Show the state or counters of one or more ERPS instances	
Syntax	show erps [<1~64>] [statistics] [details]	
Parameter		
	Name	Description
	<1~64>	ERPS ID
	statistics	Show statistics information
	details	Show detailed information

3.1.84 show fa

Description	Display FA agent information.	
Syntax	show fa agent show fa assignment [<v_isid>] show fa elements [{ auth-status { auth-fail | auth-pass | not-auth } } | { client-type <v_clienttype> } | { element-type { client | proxy | server } } | { (<port_type> [<v_port_type_list>]) }] show fa interface [disabled-auth | disabled-port | enabled-auth | enabled-port | (<port_type> [<v_port_type_list>])] show fa port-enable [disabled-auth | disabled-port | enabled-auth | enabled-port | (<port_type> [<v_port_type_list>])] show fa statistics [summary | (<port_type> [<v_port_type_list>])] show fa vlan	
Parameter		
	Name	Description
	agent	**Display FA agent information**
	<v_isid>	<1-16777214> I-SID to display.
	auth-fail	Auth-fail
	auth-pass	Auth-pass
	not-auth	Not-auth
	<v_clienttype>	<6-17> Client-type
	client	Client
	proxy	Proxy
	server	Server
	<port_type>	Select port type.

	<v_port_type_ list>	Port list in 1/1 – max number of the ports
	disabled-auth	Display only disabled authorized ports
	disabled-port	Display only disabled ports
	enabled-auth	Display only enabled authorized ports
	enabled-port	Display only enabled ports
	summary	Display Fabric Attach summary statistics
	vlan (For 30W PoE Model)	Display FA vlan information

3.1.85 show green-ethernet

Description	Display Green Ethernet (Power reduction) information.	
Syntax	show green-ethernet [interface (<port_type> [<port_list>])] show green-ethernet eee [interface (<port_type> [<port_list>])] show green-ethernet energy-detect [interface (<port_type> [<port_list>])] show green-ethernet short-reach [interface (<port_type> [<port_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port_list>	Port list in 1/1 – max number of the ports
	eee	Shows green Ethernet EEE status for a specific port or ports.
	energy-detect	Shows green Ethernet energy-detect status for a specific port or ports.
	short-reach	Shows green Ethernet short-reach status for a specific port or ports.

3.1.86 show history

Description	Display the session command history
Syntax	show history
Parameter	None

3.1.87 show i-sid

Description	Display FA I-SID
Syntax	show i-sid
Parameter	None

3.1.88 show interface switchport

Description	Use the show interface command to display the administrative and operational status of all interfaces or a specified interface.	
Syntax	show interface (<port_type> [<in_port_list>]) switchport [access | trunk | hybrid]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<in_port_list>	Port list in 1/1 – max number of the ports
	access	Show access ports status
	hybrid	Show hybrid ports status
	trunk	Show trunk ports status

3.1.89 show interface capabilities

Description	To display the interface capabilities for interfaces.

Syntax	show interface (<port_type> [<port_list>]) capabilities	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port_list>	Port list in 1/1 – max number of the ports

3.1.90 show interface description (For 90W PoE Model)

Description	Show description of interface	
Syntax	show interface (<port_type> [<port_list>]) description	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port_list>	Port list in 1/1 – max number of the ports

3.1.91 show interface statistics

Description	Display interface statistics information	
Syntax	show interface (<port_type> [<port_list>]) statistics [{ packets | bytes | errors | discards | filtered | dot3br | { priority [<priority_list>] } }] [{ up | down }]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port_list>	Port list in 1/1 – max number of the ports
	packets	Show packet statistics
	bytes	Show byte statistics
	errors	Show error statistics
	discards	Show discard statistics
	filtered	Show filtered statistics
	dot3br	Show 802.3br statistics
	priority	Show priority statistics
	<priority_list>	<0~7> Priority of the queue (or queues) to show statistics
	up	Show ports which are up
	down	Show ports which are down

3.1.92 show interface status

Description	Display status for the interface.	
Syntax	show interface (<port_type> [<port_list>]) status [details [clause-73]]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port_list>	Port list in 1/1 – max number of the ports
	details	Show details
	[clause-73] (For 90W PoE Model)	Clause 73

3.1.93 show interface transceiver

Description	Show SFP transceiver properties	
Syntax	show interface (<port_type> [<port_list>]) transceiver	
Parameter		
	Name	**Description**
	<port_type>	Select port type.

	<port_list>	Port list in 1/1 – max number of the ports

3.1.94 show interface veriphy

Description	Display cable diagnostics.	
Syntax	show interface (<port_type> [<port_list>]) veriphy	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port_list>	Port list in 1/1 – max number of the ports

3.1.95 show interface vlan

Description	Display VLAN status	
Syntax	show interface vlan [<vlan_list>]	
Parameter		
	Name	**Description**
	<vlan_list>	<vlan_list>: 1-4095

3.1.96 show ip acd (For 90W PoE Model)

Description	Display IPv4 ACD information
Syntax	show ip acd
Parameter	None

3.1.97 show ip arp

Description	Print ARP table
Syntax	show ip arp
Parameter	None

3.1.98 show ip arp inspection

Description	Display the ARP Inspection Configuration.	
Syntax	show ip arp inspection [interface (<port_type> [<in_port_type_list>]) | vlan <in_vlan_list>]	
Parameter		
	Name	**Description**
	interface	ARP inspection entry interface configuration
	vlan	VLAN configuration
	<port_type>	Select port type.
	<in_port_type_list>	Port list in 1/1 – max number of the ports
	<in_vlan_list>	Select a VLAN id to configure.

3.1.99 show ip arp inspection entry

Description	Display the ARP Inspection entry.	
Syntax	show ip arp inspection entry [dhcp-snooping | static] [interface (<port_type> [<in_port_type_list>])]	
Parameter		
	Name	**Description**
	entry	ARP inspection entries
	dhcp-snooping	Learn from DHCP snooping
	static	Setting from static entries
	interface	ARP inspection entry interface configuration
	vlan	VLAN configuration
	<port_type>	Select port type.

	<in_port_type _list>	Port list in 1/1 – max number of the ports

3.1.100 show ip dhcp detailed statistics

Description	Displays DHCP detailed statistics information.	
Syntax	show ip dhcp detailed statistics { server | client | snooping | relay | normal-forward | combined } [interface (<port_type> [<in_port_list>])]	
Parameter		
	Name	**Description**
	server	DHCP server
	client	DHCP client
	snooping	DHCP snooping
	relay	DHCP relay
	normal-forward	DHCP normal L2 or L3 forward
	combined	Show all DHCP related statistics
	<port_type>	Select port type.
	<in_port_list>	Port list in 1/1 – max number of the ports

3.1.101 show ip dhcp excluded-address

Description	Displays DHCP pools excluded IP database.
Syntax	show ip dhcp excluded-address
Parameter	None

3.1.102 show ip dhcp pool

Description	Displays DHCP pools information.	
Syntax	show ip dhcp pool [<word32>]	
Parameter		
	Name	**Description**
	<word32>	Pool name in 32 characters

3.1.103 show ip dhcp relay

Description	Use the show ip dhcp relay user EXEC command without keywords to display the DHCP relay configuration, or use the statistics keyword to display statistics.	
Syntax	show ip dhcp relay [statistics]	
Parameter		
	Name	**Description**
	[statistics]	Show statistics

3.1.104 show ip dhcp server

Description	Display the DHCP Server Mode Configuration.
Syntax	show ip dhcp server
Parameter	None

3.1.105 show ip dhcp server binding <ipv4_ucast>

Description	Displays the DHCP binding address parameters.	
Syntax	show ip dhcp server binding <ipv4_ucast>	
Parameter		
	Name	**Description**
	<ipv4_ucast>	<ipv4_ucast> : IPv4 unicast address

3.1.106 show ip dhcp server binding

Description	Display the DHCP Server binding configuration.	
Syntax	show ip dhcp server binding [state {allocated | committed | expired}] [type {automatic | manual | expired}]	
Parameter		
	Name	**Description**
	state	State of binding
	allocated	Allocated state
	committed	Committed state
	expired	Expired state Expired binding that is aged out
	type	Type of binding
	automatic	Automatic binding
	manual	Manual binding for a specific host

3.1.107 show ip dhcp server declined-ip

Description	Display the DHCP Decline information.
Syntax	show ip dhcp server declined-ip
Parameter	None

3.1.108 show ip dhcp server declined-ip <ipv4_addr>

Description	Display specify IP address DHCP Decline information.	
Syntax	show ip dhcp server declined-ip <ipv4_addr>	
Parameter		
	Name	**Description**
	<ipv4_addr>	<ipv4_addr> : IPv4 address

3.1.109 show ip dhcp server statistics

Description	Display the DHCP Server statistics.
Syntax	show ip dhcp server statistics
Parameter	None

3.1.110 show ip dhcp snooping

Description	Use the show ip dhcp snooping user EXEC command to display the DHCP snooping configuration.	
Syntax	show ip dhcp snooping [interface (<port_type> [<in_port_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<in_port_list>	Port list in 1/1 – max number of the ports

3.1.111 show ip dhcp snooping table

Description	Use the show ip dhcp snooping table user EXEC command to display the IP assigned information that is obtained from DHCP server except for local VLAN interface IP addresses.
Syntax	show ip dhcp snooping table
Parameter	None

3.1.112 show ip domain

Description	Show ip domain name
Syntax	show ip domain
Parameter	None

3.1.113 show ip http

Description	Use the show ip http privileged EXEC command to display the secure HTTP web server status.
Syntax	show ip http
Parameter	None

3.1.114 show ip igmp snooping

Description	Display the IGMP snooping configuration of a device.	
Syntax	show ip igmp snooping [vlan <v_vlan_list>] [group-database [interface (<port_type> [<v_port_type_list>])] [sfm-information]] [detail]	
Parameter	**Name**	**Description**
	<v_vlan_list>	VLAN identifier (VID)
	<port_type>	Select port type.
	<v_port_type_ list>	Port list in 1/1- max number of ports
	[sfm-information]	Inclear cluding source filter multicast information from IGMP
	detail	Show detailed information

3.1.115 show ip igmp snooping mrouter

Description	Displays the information about the dynamically learned and manually configured multicast router interfaces.	
Syntax	show ip igmp snooping mrouter [detail]	
Parameter	**Name**	**Description**
	detail	Detail running information/statistics of IGMP snooping

3.1.116 show ip interface

Description	IP interface status	
Syntax	show ip interface [brief]	
Parameter		
Parameter	**Name**	**Description**
	[brief]	Brief IP interface status

3.1.117 show ip name-server

Description	Display the active domain name server information
Syntax	show ip name-server
Parameter	None

3.1.118 show ip neighbor (For 90W PoE Model)

Description	Print ARP/neighbor table
Syntax	show ip neighbor
Parameter	None

3.1.119 show ip route

Description	Routing table status
Syntax	show ip route
Parameter	None

3.1.120 show ip source binding

Description	Show ipv4 verify source binding with dhcp-snooping or static configuration
Syntax	show ip source binding [dhcp-snooping | static] [interface (<port_type> [<in_port_type_list>])]

Parameter		
	Name	**Description**
	dhcp-snooping	Learn from DHCP snooping
	static	Letting from static entries
	<port_type>	Select port type.
	<in_port_type_list>	Port list in 1/1- max number of ports

3.1.121 show ip ssh

Description	Show Secure Shell information	
Syntax	show ip ssh show ip ssh ciphers show ip ssh hmacs show ip ssh keyexs show ip ssh key-exchange-algorithms show ip ssh public-key	
Parameter		
	Name	**Description**
	ciphers	Chipers
	hmacs	Hashing Message Authentication Code (HMAC)
	keyexs (For 90W PoE Model)	Key exchange algorithms
	key-exchange-algorithms (For 30W PoE Model)	Key exchange algorithms
	public-key	Display SSH public key

3.1.122 show ip statistics (For 90W PoE Model)

Description	Displays IP routing related statistics.
Syntax	show ip statistics [system]
Parameter	None

3.1.123 show ip statistics (For 30W PoE Model)

Description	Show Traffic statistics	
Syntax	show ip statistics [system] [interface vlan <v_vlan_list>] [icmp] [icmp-msg <type>]	
Parameter		
	Name	**Description**
	[system]	IPv4 system traffic
	<v_vlan_list>	VLAN identifier(s): VID
	[icmp]	IPv4 ICMP traffic
	[icmp-msg]	IPv4 ICMP traffic for designated message type
	<type>	<0~255> ICMP message type ranges from 0 to 255

3.1.124 show ip telnet

Description	Displays Telnet information
Syntax	show ip telnet
Parameter	None

3.1.125 show ip verify source

Description	Show ipv4 verify source interface configuration	
Syntax	show ip verify source [interface (<port_type> [<in_port_type_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<in_port_type_list>	Port list in 1/1- max number of ports

3.1.126 show ipmc

Description	IPMC information	
Syntax	show ipmc profile [<profile_name>] [detail] show ipmc range [<entry_name>]	
Parameter		
	Name	**Description**
	profile	IPMC profile configuration
	range	A range of IPv4 multicast addresses for the profile
	profile_name	<ProfileName : word16> Profile name in 16 char's
	detail	Detail information of a profile
	entry_name	<EntryName : word16> Range entry name in 16 char's

3.1.127 show ipv6 dhcp-client (For 30W PoE Model)

Description	Shows DHCPv6 client lease information.	
Syntax	show ipv6 dhcp-client [interface vlan <vlan_list>]	
Parameter		
	Name	**Description**
	interface	Select an interface to configure
	<vlan_list>	<vlan_list> : IPv6 interface VLAN list

3.1.128 show ipv6

Description	Show IPv6 information	
Syntax	show ipv6 interface [brief] show ipv6 mld snooping [vlan <v_vlan_list>] [group-database [interface (<port_type> [<v_port_type_list>])] [sfm-information]] [detail] show ipv6 mld snooping mrouter [detail] show ipv6 neighbor show ipv6 route show ipv6 source binding [dhcpv6-snooping | static] [interface (<port_type> [<port_list>])] (For 90W PoE Model) show ipv6 statistics [system] [interface vlan <vlan_list>] show ipv6 verify source [interface (<port_type> [<port_list>])] (For 90W PoE Model)	
Parameter		
	Name	**Description**
	[brief]	Brief summary of IPv6 status and configuration
	<v_vlan_list>	VLAN identifier (VID)
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1- max number of ports
	[sfm-information]	Including source filter multicast information from MLD

	[detail]	Detail running information/statistics of MLD snooping
	neighbor	IPv6 neighbors
	route	IPv6 routes
	dhcpv6-snooping	See dynamic entries learned from DHCPv6 shielding
	static	See static entries
	<port_list>	Port list in 1/1- max number of ports
	[system]	IPv6 system traffic
	<vlan_list>	VLAN identifier (VID)

3.1.129 show lacp

Description	LACP information	
Syntax	show lacp { internal | statistics | system-id | neighbor } [details]	
Parameter		
	Name	**Description**
	internal	Internal LACP configuration
	neighbour	Neighbour LACP status
	statistics	Internal LACP statistics
	system-id	LACP system id
	[details] (For 90W PoE Model)	LACP state

3.1.130 show licenses (For 90W PoE Model)

Description	Show license information	
Syntax	show licenses [details]	
Parameter		
	Name	**Description**
	[details]	Also display details, that is, the raw licenses

3.1.131 show line

Description	Alive line information	
Syntax	show line [alive]	
Parameter		
	Name	**Description**
	alive	Display information about alive lines

3.1.132 show lldp eee

Description	Display LLDP local and neighbor EEE information.	
Syntax	show lldp eee [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1- max number of ports

3.1.133 show lldp med media-vlan-policy

Description	Show media vlan policy(ies)	
Syntax	show lldp med media-vlan-policy [<v_0_to_31>]	
Parameter		
	Name	**Description**
	<v_0_to_31>	Media VLAN policy <0~31>

3.1.134 show lldp med remote-device

Description	Show LLDP-MED neighbor device information.	
Syntax	show lldp med remote-device [interface (<port_type> [<port_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<v_port_type_ list>	Port list in 1/1- max number of ports

3.1.135 show lldp neighbors

Description	Shows the LLDP neighbors information.	
Syntax	show lldp neighbors [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<v_port_type_ list>	Port list in 1/1- max number of ports

3.1.136 show lldp preempt (For 90W PoE Model)

Description	Shows the LLDP local and neighbors preempt information.	
Syntax	show lldp preempt [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<v_port_type_ list>	Port list in 1/1- max number of ports

3.1.137 show lldp statistics

Description	Shows the LLDP statistics information.	
Syntax	show lldp statistics [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<v_port_type_ list>	Port list in 1/1- max number of ports

3.1.138 show logging (For 90W PoE Model)

Description	Logging information	
Syntax	show logging <log_id> show logging [info] [warning] [error]	
Parameter		
	Name	**Description**
	log_id	<logging_id: 1-4294967295> Logging ID
	error	Error
	info	Infomation
	warning	Warning

3.1.139 show logging (For 30W PoE Model)

Description	Logging information	
Syntax	show logging <log_id> [switch <switch_list>] show logging [informational] [notice] [warning] [error]	
Parameter		
	Name	**Description**

	log_id	<logging_id: 1-4294967295> Logging ID
	<switch_list>	Switch ID list in 1
	error	Severity 3: Error conditions
	informational	Severity 6: Informational messages
	notice	Severity 5: Normal but significant condition
	warning	Severity 4: Warning conditions

3.1.140 show loop-protec

Description	Loop protect information	
Syntax	show loop-protect [interface (<port_type> [<plist>])]	
Parameter		
	Name	**Description**
	port_type	Select port type.
	plist	Port list in 1/1- max number of ports

3.1.141 show mac address-table

Description	Show the Mac address table	
Syntax	show mac address-table [conf | static | aging-time | { { learning | count } [interface (<port_type> [<v_port_type_list>]) | vlan <v_vlan_id_2>] } | { address <v_mac_addr> [vlan <v_vlan_id>] } | vlan <v_vlan_id_1> | interface (<port_type> [<v_port_type_list_1>])]	
Parameter		
	Name	**Description**
	conf	User added static mac addresses
	static	All static mac addresses
	aging-time	Aging time
	learning	Learn/disable/secure state
	count	Total number of mac addresses
	address	MAC address lookup
	vlan	Addresses in this VLAN
	<v_vlan_id_2>	1-4095
	<v_vlan_id_1>	1-4095
	<v_vlan_id>	1-4095
	<v_mac_addr>	MAC address
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1- max number of ports
	<v_port_type_list_1>	Port list in 1/1- max number of ports

3.1.142 show mep (For 30W PoE Model)

Description	Show MEP information	
Syntax	show mep [<inst>] [peer | cc | lm | dm | lt | lb | tst | aps | client | ais | lck | pm | syslog | tlv | bfd | rt | lst | lm-avail] [lm-hli] [detail]	
Parameter		
	Name	**Description**
	<inst>	The range of MEP instances
	peer	Show peer mep state
	cc	Show CC state
	lm	Show LM state
	dm	Show DM state
	lt	show LT state

	lb	Show LB state
	tst	Show TST state
	aps	Show APS state
	client	Show Client state
	ais	Show AIS state
	lck	Show LCK state
	pm	Show PM state
	syslog	Show Syslog state
	tlv	show TLV state
	bfd	show BFD state
	rt	show RT state
	lst	show LST state
	lm-avail	show Availability state
	lm-hli	show LM HLI state
	[detail]	Show detailed state including configuration information.

3.1.143 show monitor

Description	Show monitored different system events	
Syntax	show monitor [session {<uint> | all | remote}]	
Parameter		
	Name	**Description**
	<uint>	Session ID <1~5>
	all	Show all MIRROR sessions
	remote	Show only Remote MIRROR sessions

3.1.144 show mrp status (For 90W PoE Model)

Description	Use the show MRP status command to view MRP statistics for each interface.	
Syntax	show mrp status [interface (<port_type> [<plist>])] [all | mvrp]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<plist>	Port list in 1/1- max number of ports
	all	Show MRP statistics for all MRP Applications
	mvrp	Show MRP statistics for the MVRP Application

3.1.145 show mvr

Description	Display the MVR information.	
Syntax	show mvr [vlan <v_vlan_list> | name <mvr_name>] [group-database [interface (<port_type> [<v_port_type_list>])] [sfm-information]] [detail]	
Parameter		
	Name	**Description**
	vlan	Search by VLAN
	group-database	Multicast group database from MVR
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports
	name	Search by MVR name
	<v_vlan_list>	MVR multicast VLAN list
	<mvr_name>	<word16> MVR multicast VLAN name
	sfm-	Including source filter multicast information from MVR

	information	
	detail	Detail information/statistics of MVR group database

3.1.146 show ntp status

Description	Show SNTP information.
Syntax	show ntp status
Parameter	None

3.1.147 show platform

Description	Display platform configuration information.	
Syntax	show platform debug show platform phy [interface (<port_type> [<v_port_type_list>])] show platform phy failover show platform phy id [interface (<port_type> [<v_port_type_list>])] show platform phy instance	
Parameter		
	Name	**Description**
	debug	Debug command setting
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports
	Failover (For 90W PoE Model)	Failover status
	id	ID
	instance	PHY Instance Information

3.1.148 show poe (For 90W PoE Model)

Description	Show PoE status and information for each port	
Syntax	show poe [interface (<port_type> [<v_port_type_list>])] show poe auto-restart	
Parameter		
	Name	**Description**
	port_type	Select port type.
	v_port_type_list	Port list in 1/1 – max number of the ports
	auto-restart	Display PoE (Power Over Ethernet) status/config for auto restart

3.1.149 show poe (For 30W PoE Model)

Description	Show PoE status and information for each port	
Syntax	show poe firmware show poe [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	firmware	Display PoE firmware information for the switch
	poe	Power over Ethernet
	port_type	Select port type.
	v_port_type_list	Port list in 1/1 – max number of the ports

3.1.150 show port-security (For 90W PoE Model)

Description	Port security
Syntax	show port-security [interface (<port_type> [<plist>])] show port-security address [interface (<port_type> [<plist>])]
Parameter	

	Name	Description
	address	Show MAC Addresses learned by Port Security
	<port_type>	Select port type.
	<plist>	Port list in 1/1 – max number of the ports

3.1.151 show port-security (For 30W PoE Model)

Description	Show port security information	
Syntax	show port-security port [interface (<port_type> [<v_port_type_list>])] show port-security switch [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	Description
	port	Show MAC Addresses learned by Port Security
	switch	Show Port Security status
	port_type	Select port type.
	v_port_type_list	Port list in 1/1 – max number of the ports

3.1.152 show privilege

Description	Display command privilege
Syntax	show privilege
Parameter	None

3.1.153 show process

Description	Show process information	
Syntax	show process list [detail] show process load	
Parameter		
	Name	Description
	list	List
	[detail]	Optionally show thread call stack
	load	Load

3.1.154 show profile alarm

Description	Profile alarm
Syntax	show profile alarm
Parameter	None

3.1.155 show pse (For 90W PoE Model)

Description	Show Power Over Ethernet information	
Syntax	show pse [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	Description
	<port_type>	Select port type.
	<plist>	Port list in 1/1 – max number of the ports

3.1.156 show pvlan

Description	Use the show pvlan command to view the PVLAN configuration.	
Syntax	show pvlan [<range_list>]	
Parameter		
	Name	Description
	<range_list>	<1~3> PVLAN ID to show configuration

3.1.157 show pvlan isolation

Description	Use the show pvlan isolation command to view the PVLAN isolation configuration.	
Syntax	show pvlan isolation [interface (<port_type> [<plist>])]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<plist>	Port list in 1/1 – max number of the ports

3.1.158 show qos

Description	Show qos information.	
Syntax	show qos [{ interface [(<port_type> [<port>])] } | wred | { maps [dscp-cos] [dscp-ingress-translation] [dscp-classify] [cos-dscp] [dscp-egress-translation] [{ ingress [<ing_id>] }] [{ egress [<egr_id>] }] } | storm | { qce [<qce>] }]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port>	Port list in 1/1 – max number of the port
	wred	Weighted Random Early Discard
	maps	QoS Maps/Tables
	dscp-cos	Map for DSCP to COS
	dscp-ingress-translation	Map for DSCP ingress translation
	dscp-classify	Map for DSCP classify enable
	cos-dscp	Map for COS to DSCP
	dscp-egress-translation	Map for DSCP egress translation
	ingress (For 90W PoE Model)	Map for ingress configuration
	<ing_id> (For 90W PoE Model)	<0-255> Map ID
	egress (For 90W PoE Model)	Map for egress configuration
	<egr_id> (For 90W PoE Model)	<0-511> Map ID
	storm	Storm policer
	qce	QoS Control Entry
	<qce>	<1-256> QCE ID

3.1.159 show radius-server

Description	Use the show radius-server command to view the current RADIUS configuration and statistics.	
Syntax	show radius-server [statistics]	
Parameter		
	Name	**Description**
	[statistics]	RADIUS statistics

3.1.160 show ringv2

Description	Show user status ringv2
Syntax	show ringv2
Parameter	None

3.1.161 show rmon alarm

Description	Display the RMON alarm table Alarm entry list	
Syntax	show rmon alarm [<1~65535>]	
Parameter		
	Name	**Description**
	<1~65535>	Alarm entry list

3.1.162 show rmon event

Description	Display the RMON event table Event entry list	
Syntax	show rmon event [<1~65535>]	
Parameter		
	Name	**Description**
	<1~65535>	Event entry list

3.1.163 show rmon history

Description	Display the RMON history table History entry list	
Syntax	show rmon history [<1~65535>]	
Parameter		
	Name	**Description**
	<1~65535>	History entry list

3.1.164 show rmon statistics

Description	Display the RMON statistics table Statistics entry list	
Syntax	show rmon statistics [<1~65535>]	
Parameter		
	Name	**Description**
	<1~65535>	Statistics entry list

3.1.165 show running-config

Description	Show the configuration information currently.	
Syntax	show running-config [all-defaults]	
Parameter		
	Name	**Description**
	all-defaults	Include most/all default values

3.1.166 show running-config feature

Description	Show configuration for specific feature.	
Syntax	show running-config feature <feature_name> [all-defaults] show running-config feature fa [all-defaults]	
Parameter		
	Name	**Description**
	feature_name	Valid words are 'GVRP' 'MRP' 'MVRP' 'access' 'access-list' 'aggregation' 'alarm' 'alm_profile' 'arp-inspection' 'auth' 'cfm' 'clock' 'cpuport' 'ddmi' 'dhcp' 'dhcp-snooping' 'dhcp_server' 'dns' 'dot1x' 'erps' 'http' 'icli' 'ip-igmp-snooping' 'ip-igmp-snooping-port' 'ip-igmp-snooping-vlan' 'ipmc-profile' 'ipmc-profile-range' 'ipv4' 'json_rpc_notification' 'lacp' 'lldp' 'logging' 'loop-protect'

		'mac' 'mstp' 'mvr' 'mvr-port' 'ntp' 'poe' 'port' 'port-security' 'pvlan' 'qos' 'rmon' 'router_global_conf' 'snmp' 'source-guard' 'ssh' 'tsn' 'user' 'vlan' 'voice-vlan' 'vtss-rmirror' 'web-privilege-group-level'
	fa	Fabric Attach feature
	all-defaults	Include most/all default values

3.1.167 show running-config interface

Description	Show all configured interface commands	
Syntax	show running-config interface (<port_type> [<list>]) [all-defaults]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<list>	Port list in 1/1- max number of ports
	all-defaults	Include most/all default values

3.1.168 show running-config interface vlan

Description	Show the configuration of the specified VLAN interfaces.	
Syntax	show running-config interface vlan <vlan_list> [all-defaults]	
Parameter		
	Name	**Description**
	<vlan_list>	List of VLAN numbers
	all-defaults	Include most/all default values

3.1.169 show running-config line

Description	Show the list of console/vty line settings.	
Syntax	show running-config line { console | vty } <range_list> [all-defaults]	
Parameter		
	Name	**Description**
	console	Console
	vty	VTY
	<range_list>	List of console/VTYs
	all-defaults	Include most/all default values

3.1.170 show running-config vlan

Description	Displays information about all VLANs or a specified VLAN.	
Syntax	show running-config vlan {[<vlan_list>]} [all-defaults]	
Parameter		
	Name	**Description**
	<vlan_list>	List of VLAN numbers
	all-defaults	Include most/all default values

3.1.171 show sflow

Description	Use show sflow to display the current sFlow configuration.
Syntax	show sflow
Parameter	None

3.1.172 show sflow statistics

Description	Use sflow statistics to show statistics for either receiver or sample interface.
Syntax	show sflow statistics { receiver | samplers [interface (<port_type> [<v_port_type_list>])] }
Parameter	

	Name	Description
	receiver	Show statistics for receiver
	samplers	Show statistics for samplers
	interface	Show statistics for a specific interface or interfaces
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports

3.1.173 show snmp (For 90W PoE Model)

Description	Display SNMP configurations
Syntax	show snmp
Parameter	None

3.1.174 show snmp access (For 90W PoE Model)

Description	Display SNMP access configuration.	
Syntax	show snmp access [<word32> [{ v1 | v2c | v3 | any } [{ auth | noauth | priv }]]]	
Parameter		
	Name	**Description**
	<word32>	<word32> Group name. <=32 characters
	any	any security model
	v1	v1 security model
	v2c	v2c security model
	v3	v3 security model
	auth	authNoPriv Security Level
	noauth	noAuthNoPriv Security Level
	priv	authPriv Security Level

3.1.175 show snmp community (For 90W PoE Model)

Description	Display SNMP specify community configurations.	
Syntax	show snmp community [<word32>]	
Parameter		
	Name	**Description**
	<word32>	<word32> Specify community name. <=32 characters

3.1.176 show snmp host (For 90W PoE Model)

Description	Displays the SNMP trap receiver configuration.	
Syntax	show snmp host [<word32>]	
Parameter		
	Name	**Description**
	<word32>	Name of the host configuration. <=32 characters

3.1.177 show snmp mib context (For 90W PoE Model)

Description	Use the show snmp mib context user EXEC command to display the supported MIBs in the switch.
Syntax	show snmp mib context
Parameter	None

3.1.178 show snmp mib ifmib ifIndex (For 90W PoE Model)

Description	Use the show snmp mib ifmib ifIndex user EXEC command to display the SNMP ifIndex(defined in IF-MIB) mapping information in the switch.
Syntax	show snmp mib ifmib ifIndex [port] [aggregation] [vlan]

Parameter	None	
	Name	**Description**
	port	Show port information
	aggregation	Show aggregation information
	vlan	Show VLAN information

3.1.179 show snmp security-to-group (For 90W PoE Model)

Description	Display SNMP security-to-group configuration.	
Syntax	show snmp security-to-group [{ v1 | v2c | v3 } [<word32>]]	
Parameter		
	Name	**Description**
	v1	v1 security model
	v2c	v2c security model
	v3	v3 security model
	<word32>	<word32> Security user name. <=32 characters

3.1.180 show snmp trap (For 90W PoE Model)

Description	Show recipient details configured for SNMP trap notifications.	
Syntax	show snmp trap [<cword>]	
Parameter		
	Name	**Description**
	<cword>	<cword> : Valid words are 'alarmTrapStatus' 'authenticationFailure' 'coldStart' 'entConfigChange' 'fallingAlarm' 'frerTrap' 'ipTrapGlobalsMain' 'ipTrapInterfacesLink' 'linkDown' 'linkUp' 'lldpRemTablesChange' 'newRoot' 'psecTrapGlobalsMain' 'psecTrapInterfaces' 'risingAlarm' 'topologyChange' 'warmStart'

3.1.181 show snmp user (For 90W PoE Model)

Description	Display SNMP security user configurations.	
Syntax	show snmp user [<word32> [<word10-64>]]	
Parameter		
	Name	**Description**
	<word32>	<word32> Security user name. <=32 characters
	<word10-64>	<word10-64> Security Engine ID. 10-64 characters

3.1.182 show snmp view (For 90W PoE Model)

Description	Displays a list of configured SNMP views.	
Syntax	show snmp view [<word32> [<word255>]]	
Parameter		
	Name	**Description**
	<word32>	<word32> MIB view name. <=32 characters
	<word255>	<word64> MIB view OID. <=255characters

3.1.183 show snmp (For 30W PoE Model)

Description	SNMP information
Syntax	show snmp show snmp access [<group_name> { v1 | v2c | v3 | any } { auth | noauth | priv }] show snmp community v3 [<community>] show snmp host [<conf_name>] [system] [switch] [interface] [aaa] show snmp mib context show snmp mib ifmib ifIndex

	show snmp security-to-group [{ v1 | v2c | v3 } <security_name>] show snmp user [<username> <engineID>] show snmp view [<view_name> <oid_subtree>]	
Parameter		
	Name	**Description**
	access	access configuration
	group_name	<GroupName : word32> group name
	any	any security model
	v1	v1 security model
	v2c	v2c security model
	v3	v3 security model
	auth	authNoPriv Security Level
	noauth	noAuthNoPriv Security Level
	priv	authPriv Security Level
	community	Community
	community	<word32> Specify community name
	host	Set SNMP host's configurations
	conf_name	<ConfName : word32> Name of the host configuration
	aaa	AAA event group
	interface	Interface event group
	switch	Switch event group
	system	System event group
	mib	MIB(Management Information Base)
	context	MIB context
	ifmib	IF-MIB
	ifIndex	The IfIndex that is defined in IF-MIB
	security-to-group	security-to-group configuration
	security_name	<SecurityName : word32> security group name
	user	User
	username	<Username : word32> Security user name
	engineID	<word10-64> Security Engine ID
	view	MIB view configuration
	view_name	<ViewName : word32> MIB view name
	oid_subtree	<OidSubtree : word255> MIB view OID

3.1.184 show spanning-tree

Description	Display the Spanning Tree Status	
Syntax	show spanning-tree [summary | active | { interface (<port_type> [<v_port_type_list>]) } | { detailed [interface (<port_type> [<v_port_type_list_1>])] } | { mst [configuration | { <instance> [interface (<port_type> [<v_port_type_list_2>])] }] }]	
Parameter		
	Name	**Description**
	summary	STP summary
	active	STP active interfaces
	detailed	STP statistics
	interface	Choose port
	mst	Multiple STP
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1- max number of the ports
	<v_port_type_list_1>	Port list in 1/1- max number of the ports

	<v_port_type_list_2>	Port list in 1/1- max number of the ports
	<instance>	<instance>: 0-7

3.1.185 show svl (For 90W PoE Model)

Description	Show the current Shared VLAN Learning configuration. Without arguments, this command only shows non-default configuration	
Syntax	show svl { [fid [<fid_list>]] | [vlan [<vlan_list>]] }	
Parameter		
	Name	**Description**
	fid	Show a given FID
	vlan	Show a given VLAN ID
	<fid_list>	1-4095. List of FIDs to show
	<vlan_list>	1-4095. List of VIDs to show

3.1.186 show switchport forbidden

Description	Lookup VLAN Forbidden port entry.	
Syntax	show switchport forbidden [{ vlan <vlan_list> } | { name <name> }]	
Parameter		
	Name	**Description**
	name	Forbidden VLANs by VLAN name
	vlan	Forbidden VLAN by VLAN ID
	<vlan_list>	VLAN ID, 1-4095
	<name>	<vword32> VLAN name

3.1.187 show system

Description	Show system status	
Syntax	show system cpu status show system led status show system temperature	
Parameter		
	Name	**Description**
	cpu	CPU status
	led	LED status
	temperature (For 30W PoE Model)	Show system temperature

3.1.188 show tacacs-server

Description	Use the show tacacs-server command to view the current TACACS+ configuration.
Syntax	show tacacs-server
Parameter	None

3.1.189 show tech-support

Description	Tech support information
Syntax	show tech-support
Parameter	None

3.1.190 show terminal

Description	Display terminal configuration parameters
Syntax	show terminal
Parameter	None

3.1.191 show user-privilege

Description	Show users privilege configuration
Syntax	show user-privilege
Parameter	None

3.1.192 show users

Description	Display information about terminal lines	
Syntax	show users [myself]	
Parameter		
	Name	**Description**
	myself	Display information about mine

3.1.193 show version

Description	System hardware and software status	
Syntax	show version [brief]	
Parameter		
	Name	**Description**
	[brief]	Show brief information

3.1.194 show vlan

Description	Use the show vlan command to view the VLAN configuration.	
Syntax	show vlan [id <vlan_list> | name <vword32>] [detail | all]	
Parameter		
	Name	**Description**
	id	VLAN status by VLAN id
	name	VLAN status by VLAN name
	detail	Show VLAN detail information
	all	Show all VLANs (if left out only access VLANs are shown)
	<vlan_list>	VLAN ID
	<vword32>	VLAN name

3.1.195 show vlan brief

Description	VLAN summary information	
Syntax	show vlan [id <vlan_list> | name <name> | brief]	
Parameter		
	Name	**Description**
	id	VLAN status by VLAN id
	vlan_list	<vlan_list> VLAN IDs 1-4095
	name	VLAN status by VLAN name
	name	<vword32> A VLAN name
	brief	VLAN summary information

3.1.196 show vlan i-sid

Description	Display vlan information.	
Syntax	show vlan i-sid [<v_vid>]	
Parameter		
	Name	**Description**
	<v_vid>	<1-4094> VLAN ID to display.

3.1.197 show vlan ip-subnet

Description	Show VCL IP Subnet entries
Syntax	show vlan ip-subnet [<ipv4_subnet>]

Parameter		
	Name	**Description**
	<ipv4_subnet>	Specify a specific IP Subnet

3.1.198 show vlan name (For 30W PoE Model)

Description	Show bridge port member set/status per VLAN name (32 words).	
Syntax	show vlan name <vword32>	
Parameter		
	Name	**Description**
	< vword32>	**Valid values**: 32 words **Type**: Mandatory.

3.1.199 show vlan mac

Description	Show VLAN MAC entries	
Syntax	show vlan mac [address <mac_ucast>]	
Parameter		
	Name	**Description**
	<mac_ucast>	MAC address

3.1.200 show vlan protocol

Description	Show vlan protocol to group mapping.	
Syntax	show vlan protocol [eth2 {<0x600-0xffff>|arp|ip|ipx|at}] [snap {<0x0-0xffffff>|rfc-1042|snap-8021h} <0x0-0xffff>] [llc <0x0-0xff> <0x0-0xff>]	
Parameter		
	Name	**Description**
	eth2	Ethernet-based VLAN commands
	<0x600-0xffff>	Ether Type (Range: 0x600 - 0xFFFF)
	arp	Ether Type is ARP
	ip	Ether Type is IP
	ipx	Ether Type is IPX
	at	Ether Type is AppleTalk
	snap	SNAP-based VLAN group
	<0x0-0xffffff>	SNAP OUI (Range 0x000000 - 0XFFFFFF)
	rfc-1042	SNAP OUI is rfc-1042
	snap-8021h	SNAP OUI is 8021h
	<0x0-0xffff>	PID (Range: 0x0 - 0xFFFF)
	llc	LLC-based VLAN group
	<0x0-0xff>	DSAP/SSAP (Range: 0x00 - 0xFF)

3.1.201 show vlan status

Description	Use the show VLAN status command to view the VLANs configured for each interface.	
Syntax	show vlan status [interface (<port_type> [<plist>])] [admin | all | combined | conflicts | erps | gvrp | mstp | mvr | nas | rmirror | vcl | voice-vlan]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<plist>	Port list in 1/1 – max number of the ports
	admin	Show the VLANs configured by administrator
	all	Show VLANs configured VLANs for all VLAN users
	combined	Show the combined set of configured VLANs.
	conflicts	Show VLAN configurations that have conflicts

	erps	Show the VLANs configured by ERPS
	gvrp	Show the VLANs configured by GVRP
	mstp	Show the VLANs configured by MSTP
	mvr	Show the VLANs configured by MVR
	nas	Show the VLANs configured by NAS
	rmirror	Show the VLANs configured by Remote mirroring
	vcl	Show the VLANs configured by VCL
	voice-vlan	Show the VLANs configured by Voice VLAN

3.1.202 show voice vlan

Description	Use the show voice vlan privilege EXEC command without keywords to display the voice vlan configuration, or particularly switchport configuration for the interface, or use the oui keyword to display oui table.	
Syntax	show voice vlan [oui [<oui>] | interface (<port_type> [<port_list>])]	
Parameter		
	Name	**Description**
	<oui>	OUI value
	<port_type>	Select port type.
	<port_list>	Port list in 1/1 – max number of the ports

3.1.203 show web privilege group

Description	Display the Web privilege group.	
Syntax	show web privilege group [<group_name>] level	
Parameter		
	Name	**Description**
	<group_name>	Valid words are 'Aggregation' 'Alarm' 'CFM' 'DDMI' 'DHCP' 'DHCPv6_Client' 'Debug' 'Diagnostics' 'ERPS' 'Firmware' 'IP' 'IPMC_Snooping' 'LACP' 'LLDP' 'Loop_Protect' 'MAC_Table' 'MRP' 'MVR' 'Miscellaneous' 'NTP' 'POE' 'Ports' 'Private_VLANs' 'QoS' 'RMirror' 'Security(access)' 'Security(network)' 'Spanning_Tree' 'System' 'VCL' 'VLANs' 'Voice_VLAN' 'XXRP' 'alm_profile' 'sFlow' 'tyndbg' 'uFDMA_AIL' 'uFDMA_CIL'
	level	Web privilege group level

3.1.204 terminal editing

Description	Enable command line editing
Syntax	terminal editing
Parameter	None

3.1.205 terminal exec-timeout

Description	Set up the EXEC timeout	
Syntax	terminal exec-timeout <min> [<sec>]	
Parameter		
	Name	**Description**
	<min>	<0-1440> Timeout in minute
	<sec>	<0-3600> Timeout in second

3.1.206 terminal help

Description	Description of the interactive help system
Syntax	terminal help
Parameter	None

3.1.207 terminal history size

Description	Set history buffer size	
Syntax	terminal history size <history_size>	
Parameter		
	Name	**Description**
	<history_size>	<0-32> Number of history commands, 0 means disable

3.1.208 terminal length

Description	Set up the number of lines on screen	
Syntax	terminal length <lines>	
Parameter		
	Name	**Description**
	<lines>	<0,3-512> Number of lines on screen (0 for no pausing)

3.1.209 terminal width

Description	Set width of the display terminal	
Syntax	terminal width <width>	
Parameter		
	Name	**Description**
	<width>	Width range: <0,40-512>

3.1.210 traceroute ip (For 90W PoE Model)

Description	Records the Internet route between computer and a specified destination computer.	
Syntax	traceroute ip { <domain_name> | <ip_addr> } [dscp <dscp>] [timeout <timeout>] [{ saddr <src_addr> | sif { <port_type> <src_if> | vlan <vlan_id> } }] [probes <probes>] [firstttl <firstttl>] [maxttl <maxttl>] [icmp] [numeric]	
Parameter		
	Name	**Description**
	<domain_name>	Destination hostname or FQDN
	<ip_addr>	Destination IPv4 address
	dscp	Specify DSCP value (default 0)
	<dscp>	Specify DSCP value. <0-63> DSCP value (decimal value, default 0)
	timeout	Specify time to wait for a response in seconds (default 3)
	<timeout>	Specify time to wait for a response in seconds. <1-86400> Time to wait for a response in seconds (default 3)
	saddr	Send from interface with source address
	<src_addr>	Source Address of interface
	sif	Send from specified interface
	<port_type>	Select port type.
	<src_if>	Port list in 1/1 – max number of the ports
	<vlan_id>	VLAN ID
	probes	Specify number of probes per hop (default 3)
	<probes>	Specify number of probes per hop. <1-60> Number of probes per hop (default 3)
	firstttl	Specify first number of hops (starting TTL) (default 1)

	<firstttl>	Specify first number of hops (starting TTL). <1-30> First number of hops (default 1)
	maxttl	Specify max number of hops (max TTL) (default 30)
	<maxttl>	Specify max number of hops (max TTL). <1-255> Max number of hops (default 30)
	icmp	Use ICMP instead of UDP
	numeric	Print numeric addresses

3.1.211 traceroute ipv6 (For 90W PoE Model)

Description	Traceroute (IPv6)	
Syntax	traceroute ipv6 { <domain_name> | <ip_addr> } [dscp <dscp>] [timeout <timeout>] [saddr <src_addr>] [sif { <port_type> <src_if> | vlan <vlan_id> }] [probes <probes>] [maxttl <maxttl>] [numeric]	
Parameter		
	Name	**Description**
	<domain_name>	Destination hostname or FQDN
	<ip_addr>	Destination IPv6 address Source Address of interface
	dscp	Specify DSCP value (default 0)
	<dscp>	<0-255>. DSCP value (decimal value, default 0)
	timeout	Specify time to wait for a response in seconds (default 3)
	<timeout>	Specify time to wait for a response in seconds. <1-86400> Time to wait for a response in seconds (default 3)
	saddr	Send from interface with source address
	<src_addr>	Source Address of interface
	sif	Send from specified interface
	<port_type>	Select port type. Manage, or port
	<src_if>	Port list in 1/1 – max number of the ports
	vlan	Send from VLAN interface with source address
	<vlan_id>	Source VLAN interface
	probes	Specify number of probes per hop (default 3)
	<probes>	<1-60> Number of probes per hop (default 3)
	maxttl	Specify max number of hops (max TTL) (default 30)
	<maxttl>	<1-255> Max number of hops (default 30)
	numeric	Print numeric addresses

3.1.212 veriphy

Description	Run cable diagnostics.	
Syntax	veriphy [{ interface (<port_type> [<port_list>]) }]	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port_list>	Port list in 1/1- max number of ports

3.2 Configure Mode Commands

Commands that can be executed under Configure Mode

3.2.1 aaa accounting

Description	Use the aaa accounting command to configure the accounting methods.	
Syntax	aaa accounting { console | telnet | ssh } tacacs { [commands <priv_lvl>] [exec] }*1	
Parameter		
	Name	**Description**
	<priv_lvl>	0-15

3.2.2 aaa authentication login

Description	Authentication	
Syntax	aaa authentication login { console | telnet | ssh | http } { { local | radius | tacacs } [{ local | radius | tacacs } [{ local | radius | tacacs }]] }	
Parameter		
	Name	**Description**
	console	Configure Console
	http	Configure HTTP
	ssh	Configure SSH
	telnet	Configure Telnet
	local	Use local database for authentication
	raduis	Use RADIUS for authentication
	tacacs	Use TACACS+ for authentication

3.2.3 aaa authorization

Description	Use the aaa authorization command to configure the authorization methods.	
Syntax	aaa authorization { console | telnet | ssh } tacacs commands <priv_lvl> [config-commands]	
Parameter		
	Name	**Description**
	<priv_lvl>	0-15

3.2.4 access

Description	Management configuration	
Syntax	access management access management <access_id> <access_vid> <start_addr> [to <end_addr>] { [web] [snmp] [telnet] | all }	
Parameter		
	Name	**Description**
	<access_id>	ID of access management entry
	<access_vid>	The VLAN ID for the access management entry
	<start_addr>	Start IP Address
	<end_addr>	End IP Address
	all	All services
	[web]	Web service
	[snmp]	SNMP service
	[telnet]	TELNET/SSH service

3.2.5 access-list action

Description	Access list action
Syntax	acces-list ace [update] <ace_id> [action { permit | deny | filter { switchport

	<filter_switch_port_list> | interface (<port_type> [<fliter_port_list>]) } }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	permit	Permit
	deny	Deny
	Filter	Filter
	<filter_switch_port_list>	Filter switch port list
	<port_type>	The type of port
	<fliter_port_list>	Filter port list

3.2.6 access-list dmac-type

Description	The type of destination MAC address	
Syntax	acces-list ace [update] <ace_id> [dmac-type { unicast | multicast | broadcast | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	unicast	Unicast destination MAC address
	multicast	Multicast destination MAC address
	braodcast	Broadcast destination MAC address
	any	Don't-care the type of destination MAC address

3.2.7 access-list frame-type arp arp-flag

Description	ARP flag	
Syntax	acces-list ace [update] <ace_id> frame-type arp [arp-flag [arp-request { <arp_flag_request> | any }] [arp-smac { <arp_flag_smac> | any }] [arp-tmac { <arp_flag_tmac> | any }] [arp-len { <arp_flag_len> | any }] [arp-ip { <arp_flag_ip> | any }] [arp-ether { <arp_flag_ether> | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<arp_flag_request: 0-1>	The value of ARP Request/Reply opcode field
	<arp_flag_smac: 0-1>	The value of ARP sender hardware address (SHA) field
	<arp_flag_tmac: 0-1>	The value of ARP target hardware address (THA) field
	<arp_flag_len: 0-1>	The value of ARP/RARP hardware address length (HLN) and protocol address length (PLN) field
	<arp_flag_ip: 0-1>	The value of ARP/RARP hardware address space (HRD) field
	<arp_flag_ether: 0-1>	The value of ARP/RARP protocol address space (PRO) field
	any	Don't-care the value of ARP Request/Reply opcode field, don't-care the value of ARP sender hardware address (SHA) field, don't-care the value of ARP target hardware address (THA) field, don't-care the value of ARP/RARP hardware address length (HLN) and protocol address length (PLN) field, don't-care the value of ARP/RARP hardware address space (HRD) field, or don't-care the value

		of ARP/RARP protocol address space (PRO) field

3.2.8 access-list frame-type arp arp-opcode

Description	Frame type is ARP.	
Syntax	acces-list ace [update] <ace_id> frame-type arp [arp-opcode { arp | rarp | other | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	Arp	ARP opcode
	Rarp	RARP opcode
	other	None ARP/RARP opcode
	any	Don't-care the value of ARP/RARP opcode field

3.2.9 access-list frame-type arp sip

Description	Frame type is ARP.	
Syntax	acces-list ace [update] <ace_id> frame-type arp [sip { <arp_sip> | any }] [dip { <arp_dip> | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<arp_sip>	The value of source IP address field. Notice the invalid IP address configuration is acceptable too, for example, 0.0.0.0. Normally, an ACE with invalid IP address will explicitly adding deny action
	<arp_dip>	The value of destination IP address field.
	any	Don't-care the value of source IP address field, or don't-care the value of destination IP address field

3.2.10 access-list frame-type arp smac

Description	Frame type is ARP.	
Syntax	acces-list ace [update] <ace_id> frame-type arp [smac { <arp_smac> | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<arp_smac>	The value of source MAC address field
	any	Don't-care the value of source MAC address field

3.2.11 access-list frame-type etype

Description	Frame type is Ethernet type.	
Syntax	acces-list ace [update] <ace_id> frame-type { any | etype [etype-value { <etype_value> | any }] [smac { <etype_smac> | any }] [dmac { <etype_dmac> | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<etype_value>	The value of etype Field. 0x600-0x7ff,0x801-

		0x805,0x807-0x86dc,0x86de-0xffff
	<etype_smac>	The value of source MAC address field
	<etype_dmac>	The value of destination MAC address field
	any	Don't-care the type of destination MAC address, or don't-care the value of source MAC address field

3.2.12 access-list frame-type ipv4

Description	Frame type of IPv4	
Syntax	acces-list ace [update] <ace_id> frame-type ipv4 [sip { <sipv4> | any }] [dip { <dipv4> | any }] [ip-protocol { <ipv4_protocol> | any }] [ip-flag [ip-ttl { <ip_flag_ttl> | any }] [ip-options { <ip_flag_options> | any }] [ip-fragment { <ip_flag_fragment> | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<sipv4>	The value of source IP address field. Notice the invalid IP address configuration is acceptable too, for example, 0.0.0.0. Normally, an ACE with invalid IP address will explicitly adding deny action
	<dipv4>	The value of destination IP address field. Notice the invalid IP address configuration is acceptable too, for example, 0.0.0.0. Normally, an ACE with invalid IP address will explicitly adding deny action
	<ipv4_protocol>	The value of IPv4 protocol field, 0,2-5,7-16,18-255
	<ip_flag_ttl>	The value of IPv4 TTL field
	<ip_flag_options: 0-1>	The value of IPv4 options field
	<ip_flag_fragment: 0-1>	The value of IPv4 fragment field
	any	Don't-care the value of source IP address field, don't-care the value of destination IP address field, don't-care the value of IPv4 protocol field, don't-care the value of IPv4 TTL field, don't-care the value of IPv4 options field

3.2.13 access-list frame-type ipv4-icmp

Description	Frame type of IPv4 ICMP	
Syntax	acces-list ace [update] <ace_id> frame-type ipv4-icmp [sip { <sipv4_icmp> | any }] [dip { <dipv4_icmp> | any }] [icmp-type { <icmpv4_type> | any }] [icmp-code { <icmpv4_code> | any }] [ip-flag [ip-ttl { <ip_flag_icmp_ttl> | any }] [ip-options { <ip_flag_icmp_options> | any }] [ip-fragment { <ip_flag_icmp_fragment> | any }]]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<sipv4_icmp>	The value of source IP address field. Notice the invalid IP address configuration is acceptable too, for example, 0.0.0.0. Normally, an ACE with invalid IP address will explicitly adding deny action
	<dipv4_icmp>	The value of destination IP address field. Notice the invalid IP address configuration is acceptable too, for example, 0.0.0.0.

		Normally, an ACE with invalid IP address will explicitly adding deny action
	<icmpv4_type: 0-255>	The value of ICMP type field
	<icmpv4_code: 0-255>	The value of ICMP code field
	<ip_flag_icmp_ttl: 0-1>	The value of IPv4 TTL field
	<ip_flag_icmp_options: 0-1>	The value of IPv4 options field
	<ip_flag_icmp_fragment: 0-1>	The value of IPv4 fragment field
	any	Don't-care the value of source IP address field, don't-care the value of destination IP address field, don't-care the value of ICMP type field, don't-care the value of ICMP code field, don't-care the value of IPv4 TTL field, don't-care the value of IPv4 options field, or don't-care the value of IPv4 fragment field

3.2.14 access-list frame-type ipv4-udp

Description	Frame type of IPv4 UDP	
Syntax	acces-list ace [update] <ace_id> frame-type ipv4-udp [sip { <sipv4_udp> | any }] [dip { <dipv4_udp> | any }] [sport { <sportv4_udp_start> [to <sportv4_udp_end>] | any }] [dport { <dportv4_udp_start> [to <dportv4_udp_end>] | any }] [ip-flag [ip-ttl { <ip_flag_udp_ttl> | any }] [ip-options { <ip_flag_udp_options> | any }] [ip-fragment { <ip_flag_udp_fragment> | any }]]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<sipv4_udp>	The value of source IP address field. Notice the invalid IP address configuration is acceptable too, for example, 0.0.0.0. Normally, an ACE with invalid IP address will explicitly adding deny action
	<dipv4_udp>	The value of destination IP address field. Notice the invalid IP address configuration is acceptable too, for example, 0.0.0.0. Normally, an ACE with invalid IP address will explicitly adding deny action
	<sportv4_udp_start>	The value of UDP start source port field, 0-65535
	<sportv4_udp_end>	The value of UDP end source port field, 0-65535
	<dportv4_udp_start>	The value of UDP start destination port field
	<dportv4_udp_end>	The value of UDP end destination port field
	<ip_flag_udp_ttl: 0-1>	The value of IPv4 TTL field
	<ip_flag_udp_options: 0-1>	The value of IPv4 options field
	<ip_flag_udp_fragment: 0-1>	The value of IPv4 fragment field
	any	Don't-care the value of source IP address field, don't-care the value of destination IP address field, don’t care the value of UDP source port field, or don't-care the value of UDP destination port field, don't-care the

		value of IPv4 TTL field, don't-care the value of IPv4 options field, don't-care the value of IPv4 fragment field

3.2.15 access-list frame-type ipv4-tcp

Description	Frame type of IPv4 TCP	
Syntax	acces-list ace [update] <ace_id> frame-type ipv4-tcp [sip { <sipv4_tcp> | any }] [dip { <dipv4_tcp> | any }] [sport { <sportv4_tcp_start> [to <sportv4_tcp_end>] | any }] [dport { <dportv4_tcp_start> [to <dportv4_tcp_end>] | any }] [ip-flag [ip-ttl { <ip_flag_tcp_ttl> | any }] [ip-options { <ip_flag_tcp_options> | any }] [ip-fragment { <ip_flag_tcp_fragment> | any }]] [tcp-flag [tcp-fin { <tcpv4_flag_fin> | any }] [tcp-syn { <tcpv4_flag_syn> | any }] [tcp-rst { <tcpv4_flag_rst> | any }] [tcp-psh { <tcpv4_flag_psh> | any }] [tcp-ack { <tcpv4_flag_ack> | any }] [tcp-urg { <tcpv4_flag_urg> | any }]]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<sipv4_tcp>	The value of source IP address field. Notice the invalid IP address configuration is acceptable too, for example, 0.0.0.0. Normally, an ACE with invalid IP address will explicitly adding deny action
	<dipv4_tcp>	The value of destination IP address field. Notice the invalid IP address configuration is acceptable too, for example, 0.0.0.0. Normally, an ACE with invalid IP address will explicitly adding deny action
	<sportv4_tcp_start>	The value of TCP start source port field, 0-65535
	<sportv4_tcp_end>	The value of TCP end source port field, 0-65535
	<dportv4_tcp_start>	The value of TCP start destination port field
	<dportv4_tcp_end>	The value of TCP end destination port field
	<ip_flag_tcp_ttl: 0-1>	The value of IPv4 TTL field
	<ip_flag_tcp_options: 0-1>	The value of IPv4 options field
	<ip_flag_tcp_fragment: 0-1>	The value of IPv4 fragment field
	<tcpv4_flag_fin: 0-1>	The value of TCP FIN field
	<tcpv4_flag_syn: 0-1>	The value of TCP SYN field
	<tcpv4_flag_rst: 0-1>	The value of TCP RST field
	<tcpv4_flag_psh: 0-1>	The value of TCP PSH field
	<tcpv4_flag_ack: 0-1>	The value of TCP ACK field
	<tcpv4_flag_urg: 0-1>	The value of TCP URG field
	any	Don't-care the value of source IP address field, don't-care the value of destination IP address field, don’t care the value of TCP source port field, or don't-care the value of TCP destination port field, don't-care the value of IPv4 TTL field, don't-care the value of IPv4 options field, don't-care the value of IPv4 fragment field, or don't-care the value of TCP FIN, TCP SYN, TCP RST, TCP PSH, TCP

		ACK, or TCP URG field

3.2.16 access-list ingress

Description	insert the current ACE before the next ACE ID	
Syntax	acces-list ace [update] <ace_id> [ingress { switch <ingress_switch_id> | switchport { <ingress_switch_port_id> | <ingress_switch_port_list> } | interface { <port_type> <ingress_port_id> | (<port_type> [<ingress_port_list>]) } | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<ingress_switch_id>	Ingress switch ID
	<ingress_switch_port_id>	Ingress switch port ID
	<ingress_switch_port_list>	Ingress switch port list
	<port_type>	The type of port
	<ingress_port_id>	Ingress port ID
	<ingress_port_list>	Ingress port list
	any	Don't-care the ingress interface

3.2.17 access-list logging

Description	Logging frame information. Note: The logging feature only works when the packet length is less than 1518 (without VLAN tags) and the System Log memory size and logging rate is limited.	
Syntax	acces-list ace [update] <ace_id> [logging [disable]]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	disable	Disable logging

3.2.18 access-list mirror

Description	Mirror frame to destination mirror port	
Syntax	acces-list ace [update] <ace_id> [mirror [disable]]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	disable	Disable mirror

3.2.19 access-list next

Description	insert the current ACE before the next ACE ID	
Syntax	acces-list ace [update] <ace_id> [next { <ace_id_next> | last }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<ace_id_next: 1-255>	The next ID
	last	Place the current ACE to the end of access list

3.2.20 access-list policy

Description	Policy
Syntax	acces-list ace [update] <ace_id> [policy <policy> [policy-bitmask

	<policy_bitmask>]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<policy: 1-255>	Policy ID
	<policy_bitmask: 1-255>	The value of policy bitmask

3.2.21 access-list rate-limiter

Description	Rate limiter	
Syntax	acces-list ace [update] <ace_id> [rate-limiter { <rate_limiter_id> | disable }] acces-list rate-limiter [<rate_limiter_list>] { pps <pps_rate> | 100kbps <kpbs100_rate> }	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<rate_limiter_id>	Rate limiter ID, 0-16
	<rate_limiter_list>	Rate limiter ID, 0-16
	<pps_rate>	Rate value, 0-3276700
	<kpbs100_rate>	Rate value, 0-10000
	disable	Disable rate-limiter

3.2.22 access-list redirect

Description	Rate limiter	
Syntax	acces-list ace [update] <ace_id> [redirect { switchport { <redirect_switch_port_id> | <redirect_switch_port_list> } | interface { <port_type> <redirect_port_id> | (<port_type> [<redirect_port_list>]) } | disable }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<redirect_switch_port_id>	Redirect switch port ID
	<redirect_switch_port_list>	Redirect switch port list
	<port_type>	The type of port
	<redirect_port_id>	Redirect port IS
	<redirect_port_list>	Redirect port list
	disable	Disable redirect

3.2.23 access-list shutdown

Description	Shutdown incoming port. The shutdown feature only works when the packet length is less than 1518 (without VLAN tags).	
Syntax	acces-list ace [update] <ace_id> [shutdown [disable]]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	disable	Disable shutdown

3.2.24 access-list tag

Description	Tag	
Syntax	acces-list ace [update] <ace_id> [tag { tagged | untagged | any }]	
Parameter	**Name**	**Description**

	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	tagged	Tagged
	Untagged	Untagged
	any	Don't-care tagged or untagged

3.2.25 access-list tag-priority

Description	Tag priority	
Syntax	acces-list ace [update] <ace_id> [tag-priority { <tag_priority> | 0-1 | 2-3 | 4-5 | 6-7 | 0-3 | 4-7 | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<tag_priority: 0-7>	The value of tag priority
	0-1	The range of tag priority
	2-3	The range of tag priority
	4-5	The range of tag priority
	6-7	The range of tag priority
	0-3	The range of tag priority
	4-7	The range of tag priority
	any	Don't-care the value of tag priority field

3.2.26 access-list vid

Description	VID field	
Syntax	acces-list ace [update] <ace_id> [vid { <vid> | any }]	
Parameter	**Name**	**Description**
	update	Update an existing ACE
	<ace_id: 1-512>	ACE ID
	<vid>	The value of VID field, 1-4095
	any	Don't-care the value of VID field

3.2.27 aggregation mode

Description	Traffic distribution mode	
Syntax	aggregation mode { [smac] [dmac] [ip] [port] }*1	
Parameter	**Name**	**Description**
	dmac	Destination MAC affects the distribution
	ip	IP address affects the distribution
	port	IP port affects the distribution
	smac	Source MAC affects the distribution

3.2.28 alarm (For 90W PoE Model)

Description	Create alarm	
Syntax	alarm <alarm_name> <alarm_expression>	
Parameter		
	Name	**Description**
	<alarm_name>	Alarm name. <127 characters
	<alarm_expression>	Alarm expression. <255 characters

3.2.29 alarm history clear

Description	Clear alarm history	
Syntax	alarm history clear	
Parameter	**Name**	**Description**

3.2.30 banner

Description	Configuring security warnings and informational messages.	
Syntax	banner [motd | login | exec] <banner>	
Parameter		
	Name	**Description**
	<banner>	c banner-text c, where 'c' is a delimiting character
	exec	Set EXEC process creation banner
	login	Set login banner
	motd	Set Message of the Day banner

3.2.31 cfm domain (For 90W PoE Model)

Description	Create or modify a maintenance domain	
Syntax	cfm domain <md_name>	
Parameter		
	Name	**Description**
	<md_name>	<kword1-15> Domain name.

3.2.32 cfm port-status-tlv (For 90W PoE Model)

Description	Port Status TLV format to be used in PDUs.	
Syntax	cfm port-status-tlv {disable | enable}	
Parameter		
	Name	**Description**
	disable	Do not include Port Status TLV in PDUs (default)
	enable	Include Port Status TLV in PDUs

3.2.33 cfm interface-status-tlv (For 90W PoE Model)

Description	Interface Status TLV format to be used in PDUs.	
Syntax	cfm interface-status-tlv {disable | enable}	
Parameter		
	Name	**Description**
	disable	Exclude Interface Status TLV from PDUs (default)
	enable	Include Interface Status TLV in PDUs

3.2.34 cfm organization-specific-tlv (For 90W PoE Model)

Description	Organization Specific TLV format to be used in PDUs.	
Syntax	cfm organization-specific-tlv { disable | enable oui <oui> subtype <subtype> value <value> }	
Parameter		
	Name	**Description**
	disable	Exclude Organization-Specific TLV from PDUs (default)
	enable	Include Organization-Specific TLV in PDUs
	<oui>	The OUI on form XX-XX-XX
	<subtype>	<0-255> Subtype value
	<value>	<string63> Value is a string of up to 63 characters enclosed in double-quotes

3.2.35 cfm sender-id-tlv (For 90W PoE Model)

Description	Sender ID TLV format to be used in PDUs.	
Syntax	cfm sender-id-tlv {disable | chassis | management | chassis-management}	
Parameter		
	Name	**Description**

	disable	Exclude Sender ID TLV from PDUs (default)
	chassis	Enable Sender ID TLV and send Chassis ID (MAC Address)
	management	Enable Sender ID TLV and send Management address(IPv4 Address)
	chassis-management	Enable Sender ID TLV and send both Chassis ID (MAC Address) and Management Address (IPv4 Address)

3.2.36 clock datetime

Description	Configure system datetime	
Syntax	clock datetime <input_year> <input_month> <input_date> <input_hour> <input_minute> <input_second>	
Parameter		
	Name	**Description**
	<input_year>	<2000-2037> year
	<input_month>	<1-12> month
	<input_date>	<1-31> date
	<input_hour>	<0-23> hour
	<input_minute>	<0-59> minute
	<input_second>	<0-59> second

3.2.37 clock summer-time recurring

Description	Configure recurring summer (daylight savings) time.	
Syntax	clock summer-time <word16> recurring [<start_week_var> <start_day_var> <start_month_var> <start_hour_var> <end_week_var> <end_day_var> <end_month_var> <end_hour_var> [<offset_var>]]	
Parameter		
	Name	**Description**
	<word16>	Name of time zone in summer (the string '' is a special syntax that is reserved for null input)
	recurring	Configure recurring summer time
	<start_week_var>	<1-5> Week number to start
	<start_day_var>	<1-7> Weekday to start
	<start_month_var>	<1-12> Month to start
	<start_hour_var>	<hhmm> Time to start (hh:mm)
	<end_week_var>	<1-5> Week number to end
	<end_day_var>	<1-7> Weekday to end
	<end_month_var>	<1-12> Month to end
	<end_hour_var>	<hhmm> Time to end (hh:mm)
	<offset_var>	<1-1439> Offset to add in minutes

3.2.38 clock summer-time date

Description	Configure absolute summer (daylight savings) time.	
Syntax	clock summer-time <word16> date [<start_month_var> <start_date_var> <start_year_var> <start_hour_var> <end_month_var> <end_date_var> <end_year_var> <end_hour_var> [<offset_var>]]	
Parameter		
	Name	**Description**
	<word16>	Name of time zone in summer (the string '' is a special syntax that is reserved for null input)
	<start_month_var>	<1-12> Month to start
	<start_day_var>	<1-31> Date to start
	<start_year_var>	<2000-2097> Year to start
	<start_hour_var>	<hhmm> Time to start (hh:mm)

	<end_month_var>	<1-12> Month to end
	<end_day_var>	<1-31> Weekday to end
	<end_year_var>	<2000-2097> Year to end
	<end_hour_var>	<hhmm> Time to end (hh:mm)
	<offset_var>	<1-1439> Offset to add in minutes

3.2.39 clock timezone

Description	Configure time zone.	
Syntax	clock timezone <word_var> <hour_var> [<minute_var> [<subtype_var>]]	
Parameter		
	Name	**Description**
	<word_var>	Name of time zone (the string '' is a special syntax that is reserved for null input)
	<hour_var>	<-23-23> Hours offset from UTC
	<minute_var>	<0-59> Minutes offset from UTC
	<subtype_var>	<0-9> Sub type of time zone

3.2.40 ddmi

Description	Enable DDMI function
Syntax	ddmi
Parameter	None

3.2.41 default

Description	Set a command to its defaults	
Syntax	default access-list rate-limiter [<rate_limiter_list>] default fa assignment-timeout default fa authentication-key [(<port_type> [<v_port_type_list>])] default fa client default fa discovery-timeout default fa message-authentication [(<port_type> [<v_port_type_list>])] default fa port-enable default i-sid	
Parameter		
	Name	**Description**
	RateLimiterId : 1-16	Rate limiter ID
	assignment-timeout	Set FA assignment-timeout to default
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports
	client	Default FA Client feature
	discovery-timeout	Set FA discovery-timeout to default
	port-enable	Default FA by Port
	i-sid	I-sid

3.2.42 do

Description	Entering EXEC-level commands without needing to exit the current configuration. mode.	
Syntax	do <line>	
Parameter		
	Name	**Description**
	<line>	<line> Exec Command

3.2.43 dot1x authentication timer

Description	dot1x authentication timer	
Syntax	dot1x authentication timer { inactivity <v_10_to_100000> } | { re-authenticate <v_1_to_3600>}	
Parameter		
	Name	**Description**
	inactivity	Time in seconds between check for activity on successfully authenticated MAC addresses
	re-authenticate	The period between re-authentication attempts in seconds

3.2.44 dot1x feature

Description	Globally enables/disables a dot1x feature functionality	
Syntax	dot1x feature { [guest-vlan] [radius-qos] [radius-vlan] }	
Parameter		
	Name	**Description**
	guest-vlan	Globally enables/disables state of guest-vlan
	radius-qos	Globally enables/disables state of RADIUS-assigned QoS.
	radius-vlan	Globally enables/disables state of RADIUS-assigned VLAN.

3.2.45 dot1x guest-vlan

Description	Enables/disables Guest VLAN globally or on one or more ports	
Syntax	dot1x guest-vlan supplicant dot1x guest-vlan<1-4095>	
Parameter		
	Name	**Description**
	<1-4095>	Guest VLAN ID used when entering the Guest VLAN.
	supplicant	The switch remembers if an EAPOL frame has been received on the port for the life-time of the port. Once the switch considers whether to enter the Guest VLAN, it will first check if this option is enabled or disabled. If disabled (unchecked, default), the switch will only enter the Guest VLAN if an EAPOL frame has not been received on the port for the life-time of the port. If enabled (checked), the switch will consider entering the Guest VLAN even if an EAPOL frame has been received on the port for the life-time of the port

3.2.46 dot1x max-reauth-req <value>

Description	The number of times a Request Identity EAPOL frame is sent without response before considering entering the Guest VLAN	
Syntax	dot1x max-reauth-req <value>	
Parameter		
	Name	**Description**
	<value>	<1-255> Number of times

3.2.47 dot1x re-authentication

Description	Set Re-authentication state
Syntax	dot1x re-authentication

Parameter	None

3.2.48 dot1x system-auth-controln

Description	Set the global NAS state
Syntax	dot1x system-auth-control
Parameter	None

3.2.49 dot1x timeout

Description	Timeout control	
Syntax	dot1x timeout quiet-period <v_10_to_1000000> dot1x timeout sense-period <v_10_to_255> dot1x timeout tx-period <v_1_to_65535>	
Parameter		
	Name	**Description**
	quiet-period	Time in seconds before a MAC-address that failed authentication gets a new authentication chance
	sense-period	Time in seconds for port control sense mode, when port link up but not received any EAPOL packet in period time, will change authentication from 802.1X to MAC-based.
	tx-period	The time between EAPOL retransmissions
	<v_10_to_1000000>	Seconds
	<v_10_to_255>	Seconds
	<v_1_to_65535>	Seconds

3.2.50 enable password

Description	Setting the enable password.	
Syntax	enable password [level <priv>] <password>	
Parameter		
	Name	**Description**
	<priv>	1-15
	<password>	<32 characters

3.2.51 enable secret

Description	Provide an additional layer of security over the enable password.	
Syntax	enable secret { 0 | 5 } [level <priv>] <password>	
Parameter		
	Name	**Description**
	0	Specifies an UNENCRYPTED password will follow
	5	Specifies an ENCRYPTED secret will follow
	<priv>	1-15
	<password>	<32 characters

3.2.52 erps (For 90W PoE Model)

Description	Create or modify ERPS instance	
Syntax	erps <inst>	
Parameter		
	Name	**Description**
	<inst>	ERPS instance number. 1-64

3.2.53 erps (For 30W PoE Model)

Description	Set up ERPS function	
Syntax	erps <group> guard <guard_time_ms> erps <group> holdoff <holdoff_time_ms> erps <group> major port0 interface <port_type> <port0> port1 interface <port_type> <port1> [interconnect] erps <group> mep port0 sf <p0_sf> aps <p0_aps> port1 sf <p1_sf> aps <p1_aps> erps <group> revertive <wtr_time_minutes> erps <group> rpl { owner | neighbor } { port0 | port1 } erps <group> sub port0 interface <port_type> <port0> { { port1 interface <port_type> <port1> } | { interconnect <major_ring_id> } } [virtual-channel] erps <group> topology-change propagate erps <group> version { 1 | 2 } erps <group> vlan { none | [add | remove] <vlans> }	
Parameter		
	Name	**Description**
	<group>	1-64 ERPS group number
	<guard_time_ms>	10-2000 Guard time in ms
	<holdoff_time_ms>	0-10000 Holdoff time in ms
	<port_type>	Select port type.
	<port0>	Port list in 1/1 – max number of the ports
	<port1>	Port list in 1/1 – max number of the ports
	[interconnect]	Major ring is interconnected
	<p0_sf>	1-100 Index of Port 0 SignalFail MEP
	<p0_aps>	1-100 Index of Port 0 APS MEP
	<p1_sf>	1-100 Index of Port 1 SignalFail MEP
	<p1_aps>	1-100 Index of Port 1 APS MEP
	<wtr_time_minutes>	1-12 Wait-to-restore time in minutes
	owner	Owner role
	neighbor	Neighbor role
	port0	ERPS Port 0 interface
	port1	ERPS Port 1 interface
	<major_ring_id>	1-64 Major ring group number
	[virtual-channel]	Enable virtual channel for sub-ring
	propagate	Topology Change propagate
	1	ERPS version 1
	2	ERPS version 2
	none	Do not include any VLANs
	add	Add to set of included VLANs
	remove	Remove from set of included VLANs
	<vlans>	List of VLANs

3.2.54 end

Description	Exit to EXEC mode.
Syntax	end
Parameter	None

3.2.55 exit

Description	Exit from current mode.
Syntax	exit
Parameter	None

3.2.56 fa

Description	Set up FA configuration	
Syntax	fa assignment-timeout <v_timeout> fa authentication-key [(<port_type> [<v_port_type_list>])] <v_key> fa client fa debuglevel <v_level> fa discovery-timeout <v_timeout> fa extended-logging fa message-authentication [(<port_type> [<v_port_type_list>])] [keymode { strict | standard }] fa port-enable [(<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	assignment-timeout	Set FA assignment-timeout
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports
	<v_key>	<line32> Authentication Key
	client	Enable FA Client
	<v_level>	<1-5> Level
	<v_timeout>	<45-480> Timeout
	extended-logging	Enable extended-logging
	strict	Strict mode
	standard	Standard mode

3.2.57 green-ethernet

Description	Green Ethernet (Power reduction)
Syntax	green-ethernet eee optimize-for-power
Parameter	None

3.2.58 gvrp

Description	Enable GVRP feature
Syntax	gvrp
Parameter	None

3.2.59 gvrp max-vlans

Description	Set gvrp max-vlans.	
Syntax	gvrp max-vlans <maxvlans>	
Parameter		
	Name	**Description**
	max-vlans	Number of simultaneously VLANs that GVRP can control
	<maxvlans>	<maxvlans>: <1-4095>

3.2.60 gvrp time

Description	Configure GARP protocol timer parameters	
Syntax	gvrp time { [join-time <1-20>] [leave-time <60-300>] [leave-all-time <1000-5000>] }*1	
Parameter		
	Name	**Description**
	<1-20>	Join time in units of centiseconds. Range is 1-20. Default is 20
	<60-300>	Leave time in units of centiseconds. Range is 60-300. Default is 60

	<1000-5000>	Leave all time in units of centiseconds. Range is 1000-5000. Default is 1000

3.2.61 help

Description	Description of the interactive help system.
Syntax	help
Parameter	None

3.2.62 hostname

Description	Set system's network name	
Syntax	hostname <hostname>	
Parameter		
	Name	**Description**
	<hostname>	This system's network name. The allowed string length is 0 to 63

3.2.63 i-sid

Description	Set up I-SID configuration	
Syntax	i-sid <v_isid> vlan <v_vlanid>	
Parameter		
	Name	**Description**
	<v_isid>	<1-16777214> I-SID
	<v_vlanid>	<1-4095> VLAN ID

3.2.64 interface

Description	Enter the port interface.	
Syntax	interface (<port_type> [<plist>])	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<plist>	Port list in 1/1 – max number of the ports

3.2.65 interface llag (For 90W PoE Model)

Description	Configure an llag interface.	
Syntax	interface llag <llag_id>	
Parameter		
	Name	**Description**
	<llag_id>	<1-6> ID of LLAG interface

3.2.66 interface vlan

Description	Enter the VLAN interfaces.	
Syntax	interface vlan <vlan_list>	
Parameter		
	Name	**Description**
	<vlan_list>	1-4095

3.2.67 ip arp inspection

Description	Use the ip arp inspection global configuration command to globally enable ARP inspection. Use the no form of this command to globally disable ARP inspection.
Syntax	ip arp inspection
Parameter	None

3.2.68 ip arp inspection entry interface

Description	Configure Static ARP Inspection Table.	
Syntax	ip arp inspection entry interface <port_type> <in_port_type_id> <vlan_var> <mac_var> <ipv4_var>	
Parameter		
	Name	**Description**
	interface	ARP inspection entry interface configuration
	<port_type>	Select port type.
	<in_port_type_id>	Port list in 1/1 – max number of the ports
	<vlan_var>	Select a VLAN id to configure. 1-4095
	<mac_var>	Select a MAC address to configure
	<ipv4_var>	Select an IP Address to configure

3.2.69 ip arp inspection translate

Description	Translate dynamic entries into static ARP inspection table for specific interface.	
Syntax	ip arp inspection translate [interface <port_type> <in_port_type_id> <vlan_var> <mac_var> <ipv4_var>]	
Parameter		
	Name	**Description**
	interface	ARP inspection entry interface configuration
	<port_type>	Select port type.
	<in_port_type_id>	Port list in 1/1 – max number of the ports
	<vlan_var>	Select a VLAN id to configure. 1-4095
	<mac_var>	Select a MAC address to configure
	<ipv4_var>	Select an IP Address to configure

3.2.70 ip arp inspection vlan

Mode	Configure Mode	
Description	Use the ip arp inspection global configuration command to globally enable ARP inspection. Use the no form of this command to globally disable ARP inspection.	
Syntax	ip arp inspection vlan <vlan_list>	
Parameter		
	Name	**Description**
	<vlan_list>	<vlan_list> : <1~4095>

3.2.71 ip arp inspection vlan logging

Mode	Configure Mode	
Description	Sets ARP inspection VLAN logging mode configuration.	
Syntax	ip arp inspection vlan <vlan_list> logging { deny | permit | all }	
Parameter		
	Name	**Description**
	vlan	ARP inspection VLAN setting
	<vlan_list>	ARP inspection VLAN list. <1~4095>
	logging	ARP inspection VLAN logging mode configuration
	deny	Log denied entries
	permit	Log permitted entries
	all	Log all entries

3.2.72 ip dhcp excluded-address

Description	Prevent DHCP from assigning certain addresses.
Syntax	ip dhcp excluded-address <low_ip> [<high_ip>]

Parameter		
	Name	**Description**
	<low_ip>	Low IP address.
	<high_ip>	High IP address

3.2.73 ip dhcp pool

Description	Creates a name for the DHCP server address pool and enters DHCP pool configuration mode	
Syntax	ip dhcp pool <pool_name>	
Parameter		
	Name	**Description**
	<pool_name>	<word32> Pool name in 32 characters

3.2.74 ip dhcp relay

Description	Use the ip dhcp relay global configuration command to enable the DHCP relay server. Use the no form of this command to disable the DHCP relay server.
Syntax	ip dhcp relay
Parameter	None

3.2.75 ip dhcp relay information option

Description	Use the ip dhcp relay information option global configuration command to enable the DHCP relay information option. Use the no form of this command to disable the DHCP relay information option. The option 82 circuit ID format as ""[vlan_id][module_id][port_no]"". The first four characters represent the VLAN ID, the fifth and sixthcharacters are the module ID(in standalone device it always equal 0, in stackable device it means switch ID), and the last two characters are the port number. For example, ""00030108"" means the DHCP message receive form VLAN ID 3, switch ID 1, port No 8. And the option 82 remote ID value is equal the switch MAC address.
Syntax	ip dhcp relay information option
Parameter	None

3.2.76 ip dhcp relay information policy

Description	Use the ip dhcp relay information policy global configuration command to configure the DHCP relay information policy. When DHCP relay information mode operation is enabled, if the agent receives a DHCP message that already contains relay agent information it will enforce the policy. The 'Replace' policy is invalid when relay information mode is disabled.	
Syntax	ip dhcp relay information policy { drop | keep | replace }	
Parameter		
	Name	**Description**
	drop	Drop the package when receive a DHCP message that already contains relay information.
	keep	Keep the original relay information when receive a DHCP message that already contains it.
	replace	Replace the original relay information when receive a DHCP message that already contains it.

3.2.77 ip dhcp server

Description	Enable DHCP server.
Syntax	ip dhcp server
Parameter	None

3.2.78 ip dhcp snooping

Description	Use the ip dhcp snooping global configuration command to globally enable DHCP snooping. Use the no form of this command to globally disable DHCP snooping.
Syntax	ip dhcp snooping
Parameter	None

3.2.79 ip dns proxy

Description	Enable DNS proxy service
Syntax	ip dns proxy
Parameter	None

3.2.80 ip domain name

Description	Set ip domain name	
Syntax	ip domain name { <v_domain_name> | dhcp [ipv4] [interface vlan <v_vlan_id_dhcp>] }	
Parameter		
	Name	**Description**
	<v_domain_name>	Input a name directly. < 253 characters
	dhcp ipv4	DNS setting is derived from DHCPv4
	<v_vlan_id_dhcp>	VLAN ID. 1-4095

3.2.81 ip helper-address

Description	Use the ip helper-address global configuration command to configure the host address of DHCP relay server.	
Syntax	ip helper-address <ipv4_ucast>	
Parameter		
	Name	**Description**
	<ipv4_ucast>	IP address of the DHCP relay server

3.2.82 ip http secure-certificate

Description	Set up HTTPS certificate	
Syntax	ip http secure-certificate { upload <url_file> [pass-phrase <pass_phrase>] | delete | generate }	
Parameter		
	Name	**Description**
	<url_file>	Uniform Resource Locator. It is a specific character string that constitutes a reference to a resource. Syntax: <protocol>://[<username>[:<password>]@]<host>[:<port>][/<path>]/<file_name> If the following special characters: space !"#$%&'()*+,/:;<=>?@[\]^`{|}~ need to be contained in the input URL string, they should be percent-encoded. A valid file name is a text string drawn from alphabet (A-Z, a-z), digits (0-9), dot (.), hyphen (-), under score (_). The maximum length is 63 and hyphen must not be first character. The file name content that only contains '.' is not

		allowed
	<pass_phrase>	<word64> <64 characters. Privacy key pass phrase string
	delete	Delete the current certificate
	generate	Generate a new self-signed RSA certificate

3.2.83 ip http secure-redirect

Description	Use the http secure-redirect global configuration command to enable the secure HTTP web redirection. When the secure HTTP web server is enabled, the feature automatic redirect the none secure HTTP web connection to the secure HTTP web connection. Use the no form of this command to disable the secure HTTP web redirection.
Syntax	ip http secure-redirect
Parameter	None

3.2.84 ip http secure-server

Description	Use the ip http secure-server global configuration command to enable the secure HTTP web server. Use the no form of this command to disable the secure HTTP web server.
Syntax	ip http secure-server
Parameter	None

3.2.85 ip igmp host-proxy

Description	Enable IGMP proxy , leave-proxy.	
Syntax	ip igmp host-proxy [leave-proxy]	
Parameter		
	Name	**Description**
	host-proxy	IGMP proxy configuration
	leave-proxy	IGMP proxy for leave configuration

3.2.86 ip igmp snooping

Description	Enables IGMP snooping on the bridge domain.
Syntax	ip igmp snooping
Parameter	None

3.2.87 ip igmp snooping vlan

Description	Enable IGMP Snooping for specific VLAN.	
Syntax	ip igmp snooping vlan <vlan_list>	
Parameter		
	Name	**Description**
	<vlan_list>	<vlan_list> : <1~4095>

3.2.88 ip igmp ssm-range

Description	Set SSM Range of IGMP.	
Syntax	ip igmp ssm-range <v_ipv4_mcast> <ipv4_prefix_length>	
Parameter		
	Name	**Description**
	<v_ipv4_mcast>	Valid IPv4 multicast address
	<ipv4_prefix_length>	Prefix length ranges from 4 to 32

3.2.89 ip igmp unknown-flooding

Description	Flood unregistered IPv4 multicast traffic.
Syntax	ip igmp unknown-flooding
Parameter	None

3.2.90 ip name-server

Description	Set the DNS server for resolving domain names	
Syntax	ip name-server [<order>] { <v_ipv4_ucast> | { <v_ipv6_ucast> [interface vlan <v_vlan_id_static>] } | dhcp [ipv4] [interface vlan <v_vlan_id_dhcp>] }	
Parameter		
	Name	**Description**
	<order>	<order>: 0-2. Preference of DNS server. Default selection is 0
	<v_ipv4_ucast>	A valid IPv4 unicast address
	<v_ipv6_ucast>	A valid IPv6 unicast address
	<v_vlan_id_static>	VLAN ID. 1-4095
	dhcp	Dynamic Host Configuration Protocol
	ipv4	DNS setting is derived from DHCPv4
	<v_vlan_id_dhcp>	VLAN ID. 1-4095

3.2.91 ip route <v_ipv4_addr> <v_ipv4_netmask>

Description	Add new IP route	
Syntax	ip route <v_ipv4_addr> <v_ipv4_netmask> <v_ipv4_gw> [distance <v_distance>]	
Parameter		
	Name	**Description**
	<v_ipv4_addr>	Network
	<v_ipv4_netmask>	Netmask
	<v_ipv4_gw>	Gateway
	distance (For 90W PoE Model)	Set a distance for this route
	<v_distance> (For 90W PoE Model)	<1-255> Distance value for this route

3.2.92 ip route <v_ipv4_subnet> (For 90W PoE Model)

Description	Add new IP route	
Syntax	ip route <v_ipv4_subnet> <v_ipv4_gw> [distance <v_distance>]	
Parameter		
	Name	**Description**
	<v_ipv4_subnet>	Network/PrefixSize
	<v_ipv4_gw>	Gateway
	distance	Set a distance for this route
	<v_distance>	<1-255> Distance value for this route

3.2.93 ip routing

Description	Enable routing
Syntax	ip routing
Parameter	None

3.2.94 ip source binding interface

Description	Creates a new static entry in binding table. No form of the command deletes a static entry from the table

Syntax	ip source binding interface <port_type> <in_port_type_id> <vlan_var> <ipv4_var> <mac_var>	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<in_port_type_id>	Port list in 1/1 – max number of the ports
	<vlan_var>	Range: 1-4095
	<ipv4_var>	IPv4 address
	<mac_var>	MAC address

3.2.95 ip ssh (For 90W PoE Model)

Description	Set up Secure Shell	
Syntax	ip ssh ip ssh cipher { [aes128-ctr] [aes256-ctr] } ip ssh hmac { [hmac-sha1] [hmac-sha1-96] [hmac-sha2-256] } ip ssh keyex { [diffie-hellman-group1-sha1] [diffie-hellman-group14-sha1] [diffie-hellman-group14-sha256] [ecdh-sha2-nistp256] [ecdh-sha2-nistp384] [ecdh-sha2-nistp521] [curve25519-sha256] [curve25519-sha256-libssh-org] [kexguess2] } ip ssh regenerate-hostkey	
Parameter		
	Name	**Description**
	[aes128-ctr]	AES128-CTR
	[aes256-ctr]	AES256-CTR
	hmac-sha1	SHA1
	hmac-sha1-96	SHA1-96
	hmac-sha2-256	SHA1-256
	diffie-hellman-group1-sha1	diffie-hellman-group1-sha1
	diffie-hellman-group14-sha1	diffie-hellman-group14-sha1
	diffie-hellman-group14-sha256	diffie-hellman-group14-sha256
	ecdh-sha2-nistp256	ecdh-sha2-nistp256
	ecdh-sha2-nistp384	ecdh-sha2-nistp384
	ecdh-sha2-nistp521	ecdh-sha2-nistp521
	curve25519-sha256	curve25519-sha256
	curve25519-sha256-libssh-org	curve25519-sha256@libssh.org
	kexguess2	kexguess2@matt.ucc.asn.au
	regenerate-hostkey	Re-generate hostkeys for all cipher types, will take 1~2 minutes

3.2.96 ip ssh (For 30W PoE Model)

Description	Use the ip ssh global configuration command to enable the SSH. Use the no form of this command to disable the SSH.
Syntax	ip ssh ip ssh ciphers { aes128-ctr | aes256-ctr | 3des-ctr | aes128-cbc | aes256-cbc | twofish256-cbc | twofish-cbc | twofish128-cbc | 3des-cbc | blowfish-cbc }

	ip ssh hmac { hmac-sha1-96 | hmac-sha1 | hmac-sha2-256 | hmac-sha2-512 | hmac-md5 } ip ssh key-exchange-algorithms { curve25519-sha256 | ecdh-sha2-nistp521 | ecdh-sha2-nistp384 | ecdh-sha2-nistp256 | diffie-hellman-group14-sha1 | diffie-hellman-group1-sha1 | kexguess2 } ip ssh regenerate-hostkey	
Parameter		
	Name	**Description**
	aes128-ctr	AES128-CTR
	aes256-ctr	AES256-CTR
	3des-ctr	3DES-CTR
	aes128-cbc	AES128-CBC
	aes256-cbc	AES256-CBC
	twofish256-cbc	TwoFish256-CBC
	twofish-cbc	TwoFish-CBC
	twofish128-cbc	TwoFish128-CBC
	3des-cbc	3DES-CBC
	blowfish-cbc	BlowFish-CBC
	hmac-sha1-96	SHA1-96
	hmac-sha1	SHA1
	hmac-sha2-256	SHA2-256
	hmac-sha2-512	SHA2-512
	hmac-md5	MD5
	curve25519-sha256	curve25519-sha256@libssh.org
	ecdh-sha2-nistp521	ecdh-sha2-nistp521
	ecdh-sha2-nistp384	ecdh-sha2-nistp384
	ecdh-sha2-nistp256	ecdh-sha2-nistp256
	diffie-hellman-group14-sha1	diffie-hellman-group14-sha1
	diffie-hellman-group1-sha1	diffie-hellman-group1-sha1
	kexguess2	kexguess2@matt.ucc.asn.au
	regenerate-hostkey	Re-generate hostkeys for all cipher types, will take 1~2 minutes.

3.2.97 ip telnet

Description	Enable telnet
Syntax	ip telnet
Parameter	None

3.2.98 ip verify source

Description	Enable ip source guard mode
Syntax	ip verify source
Parameter	None

3.2.99 ip verify source translate

Description	Translate ip source from dynamic to static table
Syntax	ip verify source translate
Parameter	None

3.2.100 ipmc profile

Description	Enable IPMC profile filtering
Syntax	ipmc profile
Parameter	None

3.2.101 ipmc profile <profile_name>

Description	To enable IPMC profile.	
Syntax	ipmc profile <profile_name>	
Parameter		
	Name	**Description**
	<profile_name>	<word16> Profile name in 16 characters

3.2.102 ipmc range

Description	Create or update an IPMC profile range entry	
Syntax	ipmc range <word16> { <ipv4_mcast> [<ipv4_mcast>] | <ipv6_mcast> [<ipv6_mcast>] }	
Parameter		
	Name	**Description**
	<word16>	Range entry name in 16 characters
	<ipv4_mcast>	Valid IPv4 multicast address
	<ipv6_mcast>	Valid IPv6 multicast address

3.2.103 ipv6

Description	IPv6 configuration commands	
Syntax	ipv6 mld host-proxy [leave-proxy] ipv6 mld snooping ipv6 mld snooping vlan <vlan_list> ipv6 mld ssm-range <v_ipv6_mcast> <ipv6_prefix_length> ipv6 mld unknown-flooding ipv6 route <v_ipv6_subnet> <v_ipv6_ucast> [interface vlan <v_vlan_id>] [distance <v_distance>] ipv6 source binding interface <port_type> <port_type_id> [vlan <vlan_id>] <ipv6_ucast> <mac_ucast> (For 90W PoE Model) ipv6 verify source (For 90W PoE Model) ipv6 verify source translate (For 90W PoE Model)	
Parameter		
	Name	**Description**
	[leave-proxy]	MLD proxy for leave configuration
	snooping	Snooping MLD
	<vlan_list>	VLAN identifier (VID)
	<v_ipv6_mcast>	Valid IPv6 multicast address
	<ipv6_prefix_length>	<8-128> Prefix length ranges from 8 to 128
	unknown-flooding	Flooding unregistered IPv6 multicast traffic
	<v_ipv6_subnet>	<ipv6_subnet> IPv6 prefix x:x::y/z
	<v_ipv6_ucast>	IPv6 unicast address of next-hop
	<v_vlan_id>	VLAN ID needed for link-local address
	<v_distance>	<1-255> Distance value for this route
	<port_type>	Select port type.
	<port_type_id>	Port list in 1/1 – max number of the ports
	<vlan_id>	Select a VLAN id to configure
	<ipv6_ucast>	Select an IPv6 Address to configure, format

		xxxx::yyyy
	<mac_ucast>	Select a MAC address to configure
	source	Enables or disables the IPv6 Source Guard.
	translate	Translate command

3.2.104 json notification

Description	Configure JSON notification and generation	
Syntax	json notification host <hname> json notification listen <notification> <host>	
Parameter		
	Name	**Description**
	<hname>	<word32> Name of Notification host
	<notification>	Valid words are 'acl.status.ace.crossedThreshold.update' 'aggregation.status.notification.update' 'alarm.status.update' 'arpInspection.status.crossedThreshold.update' 'cfm.status.notification.update' 'ddmi.status.interface.crossedThreshold.update' 'ip.status.acd.ipv4.update' 'ip.status.global.notification.update' 'ip.status.interface.dhcpClient.update' 'ip.status.interface.ipv4.update' 'ip.status.interface.link.update' 'port.status.update' 'portSecurity.status.global.notification.update' 'portSecurity.status.interface.notification.update' 'qos.status.global.update'
	<host>	<word32> Name of JSON-RPC notification destination to receive updates

3.2.105 lacp system-priority

Description	Set the LACP system priority	
Syntax	lacp system-priority <1-65535>	
Parameter		
	Name	**Description**
	<1-65535>	Priority value, lower means higher priority

3.2.106 line

Description	Configure a terminal line	
Syntax	line { <0~16> | console 0 | vty <0~15> }	
Parameter		
	Name	**Description**
	<0~16>	List of line numbers
	console 0	Console terminal line number
	vty	Virtual terminal
	<0~15>	List of VTY numbers

3.2.107 lldp holdtime

Description	Sets LLDP hold time (The neighbor switch will discarded the LLDP information after 'hold time' multiplied with 'timer' seconds).	
Syntax	lldp holdtime <val>	
Parameter		
	Name	**Description**
	<val>	<2-10> 2-10 in second

3.2.108 lldp med datum

Description	Use the lldp med datum to configure the datum (geodetic system) to use.	
Syntax	lldp med datum { wgs84 | nad83-navd88 | nad83-mllw }	
Parameter		
	Name	**Description**
	wgs84	World Geodetic System 1984
	nad83-navd88	North American vertical datum 1983
	nad83-mllw	Mean lower low water datum 1983

3.2.109 lldp med fast

Description	Use the lldp med fast to configure the number of times the fast start LLDPDU are being sent during the activation of the fast start mechanism defined by LLDP-MED (1-10).	
Syntax	lldp med fast <v_1_to_10>	
Parameter		
	Name	**Description**
	<v_1_to_10>	Set fast repeat count to default value. Fast start repeat count<1-10>

3.2.110 lldp med location-tlv altitude

Description	Use the lldp med location-tlv altitude to configure the location altitude.	
Syntax	lldp med location-tlv altitude { meters | floors } <v_word11>	
Parameter		
	Name	**Description**
	meters	Specify the altitude in meters
	floors	Specify the altitude in floor
	<v_word11>	Altitude value. Valid range -2097151.9 to 2097151.9

3.2.111 lldp med location-tlv civic-addr

Description	Use lldp med location-tlv civic-addr to configure the civic address.	
Syntax	lldp med location-tlv civic-addr {{ country <line2>} | {state | county | city | district | block | street | leading-street-direction | trailing-street-suffix | street-suffix | house-no | house-no-suffix | landmark | additional-info | name | zip-code | building | apartment | floor | room-number | place-type | postal-community-name | p-o-box | additional-code } <line250>}	
Parameter		
	Name	**Description**
	country	Civic address information and postal information. The total number of characters for the combined civic address information must not exceed 250 characters. Note: 1) A non empty civic address location will use 2 extra characters in addition to the civic address location text. 2) The 2 letter country code is not part of the 250 characters limitation.
	<line2>	The two-letter ISO 3166 country code in capital ASCII letters - Example: DK, DE or US.
	state	National subdivisions (state, canton, region, province, prefecture)
	county	County, parish, gun (Japan), district
	city	City, township, shi (Japan) - Example: Copenhagen

	district	City division, borough, city district, ward, chou (Japan)
	block	Neighborhood, block
	street	Street - Example: Oxford Street
	leading-street-direction	Leading street direction - Example: N
	trailing-street-suffix	Trailing street suffix - Example: SW
	street-suffix	Street suffix - Example: Ave, Platz
	house-no	House number - Example: 21
	house-no-suffix	House number suffix - Example: A, 1/2
	landmark	Landmark or vanity address - Example: Columbia University
	additional-info	Additional location info - Example: South Wing
	name	Name (residence and office occupant) - Example: John Doe
	zip-code	Postal/zip code - Example: 2791
	building	Building (structure) - Example: Low Library
	apartment	Unit (Apartment, suite) - Example: Apt 42
	floor	Floor - Example: 4
	room-number	Room number - Example: 450F
	place-type	Place type - Example: Office
	postal-community-name	Postal community name - Example: Leonia
	p-o-box	Post office box (P.O. BOX) - Example: 12345
	additional-code	Additional code - Example: 1320300003
	<line250>	Value for the corresponding selected civic address.

3.2.112 lldp med location-tlv elin-addr

Description	Use the lldp med location-tlv elin-addr to configure value for the Emergency Call Service	
Syntax	lldp med location-tlv elin-addr <v_word25>	
Parameter		
	Name	**Description**
	<v_word25>	ELIN value. Up to 25 characters

3.2.113 lldp med location-tlv latitude

Description	Use the lldp med location-tlv latitude to configure the location latitude.	
Syntax	lldp med location-tlv latitude { north | south } <v_word8>	
Parameter		
	Name	**Description**
	north	Setting latitude direction to north
	south	Setting latitude direction to south
	<v_word8>	Latitude degrees (0.0000-90.0000)

3.2.114 lldp med location-tlv longitude

Description	Use the lldp med location-tlv longitude to configure the location longitude.	
Syntax	lldp med location-tlv longitude { west | east } <v_word9>	
Parameter		
	Name	**Description**
	west	Setting latitude direction to west
	east	Setting latitude direction to east
	<v_word9>	Longitude degrees (0.0000-180.0000)

3.2.115 lldp med media-vlan-policy

Description	Create a policy, which can be assigned to an interface.	
Syntax	lldp med media-vlan-policy <policy_index> { voice | voice-signaling | guest-voice-signaling | guest-voice | softphone-voice | video-conferencing | streaming-video | video-signaling } { untagged | tagged <v_vlan_id> [l2-priority <v_0_to_7>] } [dscp <v_0_to_63>]	
Parameter		
	Name	**Description**
	<policy_index>	<0-31> Policy id for the policy which is created
	voice	Create a voice policy
	voice-signaling	Create a voice signaling policy
	guest-voice-signaling	Create a guest voice signaling policy
	guest-voice	Create a guest voice policy
	softphone-voice	Create a softphone voice policy
	video-conferencing	Create a video conferencing policy
	streaming-video	Create a streaming video policy
	video-signaling	Create a video signaling policy
	untagged	The policy uses untagged frames
	tagged	The policy uses tagged frames
	<v_vlan_id>	1-4095. The VLAN the policy uses tagged frames
	l2-priority	Layer 2 priority. If not given then L2 priority value is set to 0
	<0-7>	Priority 0-7
	dscp	Differentiated Services Code Point. If not given then DSCP value is set to 0
	<v_0_to_63>	DSCP value 0-63

3.2.116 lldp reinit

Description	Sets LLDP reinitialization delay.	
Syntax	lldp reinit <val>	
Parameter		
	Name	**Description**
	<val>	<val>: <1-10>

3.2.117 lldp timer

Description	Sets LLDP TX interval (The time between each LLDP frame transmitted in seconds).	
Syntax	lldp timer <val>	
Parameter		
	Name	**Description**
	<val>	<val>: <5-32768>

3.2.118 lldp transmission-delay

Description	Sets LLDP transmission-delay. LLDP transmission delay (the amount of time that the transmission of LLDP frames will delayed after LLDP configuration has changed) in seconds.)	
Syntax	lldp transmission-delay <val>	
Parameter		
	Name	**Description**
	<val>	<val>: <1-8192>

3.2.119 logging host

Description	Set up logging host	
Syntax	logging host { <ipv4_addr> | <domain_name> }	
Parameter		
	Name	**Description**
	<ipv4_addr>	The IPv4 address of the log server
	<domain_name>	A valid name consist of a sequence of domain labels separated by '.', each domain label starting and ending with an alphanumeric character and possibly also containing '-' characters. The length of a domain label must be 63 characters or less

3.2.120 logging level

Description	Use the logging level global configuration command to configure what level of message will send to logging server	
Syntax	logging level { informational | notice | warning | error }	
Parameter		
	Name	**Description**
	error	Severity 3: Error conditions
	informational	Severity 6: Informational messages
	warning	Severity 4: Warning conditions
	notice	Severity 5: Normal but significant condition

3.2.121 logging notification listen (For 90W PoE Model)

Description	Set up logging notification listen	
Syntax	logging notification listen <name> level { informational | notice | warning | error } <node>	
Parameter		
	Name	**Description**
	<name>	<kword127> A name identifying the listen command
	error	Severity 3: Error conditions
	informational	Severity 6: Informational messages
	warning	Severity 4: Warning conditions
	notice	Severity 5: Normal but significant condition
	<node>	<line255> Identification of the notification source

3.2.122 logging on

Description	Use the logging on global configuration command to enable the logging server. Use the no form of this command to disable the logging server
Syntax	logging on
Parameter	None

3.2.123 loop-protect

Description	Enable loop protection function.
Syntax	loop-protect
Parameter	None

3.2.124 loop-protect transmit-time

Description	Configure the interval between each loop protection PDU sent on each port.
Syntax	loop-protect transmit-time <1-10>

Parameter		
	Name	**Description**
	<1-10>	Loop protection transmit time interval. Transmit time in second

3.2.125 loop-protect shutdown-time

Description	Configure the period for which a port will be kept disabled	
Syntax	loop-protect shutdown-time <0-604800>	
Parameter		
	Name	**Description**
	<0-604800>	Loop protection shutdown time interval. Shutdown time in second

3.2.126 mac address-table aging-time

Description	Set switch aging time, 0 to disable.	
Syntax	mac address-table aging-time <v_0_10_to_1000000>	
Parameter		
	Name	**Description**
	aging-time	Mac address aging time
	<v_0_10_to_1000000>	Range: 0 or 10-1000000. Aging time in seconds, 0 disables aging

3.2.127 mac address-table learning vlan

Description	VLAN learning	
Syntax	mac address-table learning vlan <vlan_list>	
Parameter		
	Name	**Description**
	<vlan_list>	<vlan_list>: 1-4095

3.2.128 mac address-table static

Description	Assign a static mac address to this port	
Syntax	mac address-table static <v_mac_addr> vlan <v_vlan_id> [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	<v_mac_addr>	MAC address
	<v_vlan_id>	1-4095
	<port_type>	Select port type.
	<v_port_type_list>	Port list in 1/1 – max number of the ports

3.2.129 mep (For 30W PoE Model)

Description	Configure MEP	
Syntax	mep <inst> [mip] { up | down } domain { port | evc | vlan | tp-link | tunnel-tp | pw | lsp } [vid <vid>] [flow <flow>] level <level> [interface <port_type> <port>]	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	mip	This MEP instance is a half-MIP
	up	This MEP is a UP-MEP
	down	This MEP is a Down-MEP
	port	This MEP is a Port domain MEP
	evc	This MEP is a EVC domain MEP

	vlan	This MEP is a VLAN domain MEP
	tp-link	This MEP is an MPLS-TP link domain MEP
	tunnel-tp	This MEP is an MPLS-TP tunnel domain MEP
	pw	This MEP is an MPLS-TP Pseudo-Wire domain MEP
	lsp	This MIP is an MPLS-TP LSP domain MIP
	<vid>	The port Domain MEP or EVC domain customer MIB VID
	<flow>	The VLAN, EVC, MPLS-TP link, MPLS-TP tunnel, MPLS-TP LSP or MPLS-TP Pseudo-Wire flow instance number
	<level>	<0-7> The MEG level value
	<port_type>	Select port type.
	<port>	Port list in 1/1 – max number of the ports

3.2.130 mep ais (For 30W PoE Model)

Description	Alarm Indication Signal	
Syntax	mep <inst> ais [fr1s | fr1m] [protect]	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	fr1s	Frame rate is 1 f/s
	fr1m	Frame rate is 1 f/min
	protect	The AIS can be used for protection. At the point of state change three AIS PDU is transmitted as fast as possible

3.2.131 mep aps (For 30W PoE Model)

Description	Automatic Protection Switching protocol	
Syntax	mep <inst> aps <prio> [multi | uni] { laps | { raps [octet <octet>] } }	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<prio>	<0-7> Priority in case of tagged OAM. In the MPLS and EVC domain this is the COS-ID
	multi	OAM PDU is transmitted with multicast MAC. Must me 'multi' in case of RAPS
	uni	OAM PDU is transmitted with unicast MAC. The MAC is taken from peer MEP MAC database. Only possible in case of LAPS
	laps	Linear Automatic Protection Switching protocol
	raps	Ring Automatic Protection Switching protocol.
	<octet>	Last OCTET value

3.2.132 mep cc (For 30W PoE Model)

Description	Continuity Check	
Syntax	mep <inst> cc <prio> [fr300s | fr100s | fr10s | fr1s | fr6m | fr1m | fr6h]	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<prio>	<0-7> Priority in case of tagged OAM. In the MPLS and EVC domain this is the COS-ID
	fr300s	Frame rate is 300 f/s
	fr100s	Frame rate is 100 f/s
	fr10s	Frame rate is 10 f/s
	fr1s	Frame rate is 1 f/s

	fr6m	Frame rate is 6 f/min
	fr1m	Frame rate is 1 f/min
	fr6h	Frame rate is 6 f/hour

3.2.133 mep ccm-tlv (For 30W PoE Model)

Description	The CCM TLV enable/disable	
Syntax	mep <inst> ccm-tlv	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.

3.2.134 mep client domain (For 30W PoE Model)

Description	Client flow domain	
Syntax	mep <inst> client domain { evc | vlan | lsp } flow <cflow> [level <level>] [ais-prio [<aisprio> | ais-highest]] [lck-prio [<lckprio> | lck-highest]]	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	evc	EVC client flow
	vlan	VLAN client flow
	lsp	MPLS-TP LSP client flow
	<cflow>	Client flow instance number value
	<level>	<0-7> The MEG level value
	<aisprio>	<0-7> AIS injection priority value
	ais-highest	Request the highest possible AIS priority
	<lckprio>	<0-7> LCK injection priority value
	lck-highest	Request the highest possible LCK priority

3.2.135 mep dm (For 30W PoE Model)

Description	Delay Measurement	
Syntax	mep <inst> dm <prio> [multi | { uni mep-id <mepid> }] [single | dual] [rdtrp | flow] interval <interval> last-n <lastn> mep <inst> dm bin fd <num_fd_var> mep <inst> dm bin ifdv <num_ifdv_var> mep <inst> dm bin threshold <threshold_var> mep <inst> dm ns mep <inst> dm overflow-reset mep <inst> dm proprietary mep <inst> dm syncronized	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<prio>	<0-7> Priority in case of tagged OAM. In the MPLS and EVC domain this is the COS-ID
	multi	OAM PDU is transmitted with multicast MAC
	<mepid>	Peer MEP-ID value
	single	Delay Measurement based on DMM/DMR PDU
	dual	Delay Measurement based on 1DM PDU transmission
	rdtrp	The two way delay is calculated as round trip delay. The far end residence time is not subtracted
	flow	The two way delay is calculated as round trip symmetrical flow delay. The far end residence time is subtracted
	<interval>	Interval value

	<lastn>	The last N value
	<num_fd_var>	<2-10> the number of FD Measurement Bins
	<num_ifdv_var>	<2-10> the number of IFDV Measurement Bins
	<threshold_var>	<1-50000> the threshold for each Delay Measurement Binning
	ns	Nano Seconds
	overflow-reset	Reset all Delay Measurement results on total delay counter overflow.
	proprietary	Proprietary Delay Measurement
	syncronized	Near enad and far end is real time synchronized

3.2.136 mep lb (For 30W PoE Model)

Description	Loop Back	
Syntax	mep <inst> lb <prio> [dei] [multi | { uni { { mep-id <mepid> } | { mac <mac> } } } | mpls ttl <mpls_ttl>] count <count> size <size> interval <interval>	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<prio>	<0-7> Priority in case of tagged OAM. In the MPLS and EVC domain this is the COS-ID
	[dei]	Drop Eligible Indicator in case of tagged OAM
	multi	OAM PDU is transmitted with multicast MAC. Not used for MPLS-TP
	<mepid>	Peer MEP-ID value. Not used for MPLS-TP
	<mac>	Loop Back target unicast MAC value
	<mpls_ttl>	<1-255> Time-To-Live value used for an MPLS-TP OAM LBM PDU
	<count>	Number of LBM PDUs to send value
	<size>	The number of bytes in the LBM PDU Data Pattern TLV
	<interval>	The interval between transmitting LBM PDU

3.2.137 mep lck (For 30W PoE Model)

Description	Locked Signal	
Syntax	mep <inst> lck [fr1s | fr1m]	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	fr1s	Frame rate is 1 f/s
	fr1m	Frame rate is 1 f/min

3.2.138 mep level (For 30W PoE Model)

Description	The MEG level of the MEP	
Syntax	mep <inst> level <level>	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<level>	<0-7> The MEG level value

3.2.139 mep link-state-tracking (For 30W PoE Model)

Description	Link State Tracking. When LST is enabled in an instance, Local SF or received 'isDown' in CCM Interface Status TLV, will bring down the residence port. Only valid in Up-MEP. The CCM rate must be 1 f/s or

	faster	
Syntax	mep <inst> link-state-tracking	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.

3.2.140 mep lm (For 30W PoE Model)

Description	Loss Measurement	
Syntax	mep <inst> lm <prio> [multi | uni] [single | dual] [fr10s | fr1s | fr6m | fr1m | fr6h] [flr <flr>] [threshold <loss_th>] mep <inst> lm flow-counting mep <inst> lm oam-counting { [y1731 | all] } mep <inst> lm-avail interval <interval> flr-threshold <flr_th> mep <inst> lm-avail maintenance mep <inst> lm-hli flr-threshold <flr_th> interval <interval> mep <inst> lm-notif los-int-cnt-holddown <los_int_cnt_holddown> los-th-cnt-holddown <los_th_cnt_holddown> hli-cnt-holddown <hli_cnt_holddown> mep <inst> lm-sdeg tx-min <tx_min> flr-threshold <flr_th> bad-threshold <bad_th> good-threshold <good_th>	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<prio>	<0-7> Priority in case of tagged OAM. In the MPLS and EVC domain this is the COS-ID
	multi	OAM PDU is transmitted with multicast MAC
	uni	OAM PDU is transmitted with unicast MAC. The MAC is taken from peer MEP MAC database. In case of LM there is only one peer MEP
	single	Single ended LM is based on LMM/LMR PDU
	dual	Dual ended LM is based on CCM PDU
	fr10s	Frame rate is 10 f/s
	fr1s	Frame rate is 1 f/s
	fr6m	Frame rate is 6 f/min
	fr1m	Frame rate is 1 f/min
	fr6h	Frame rate is 6 f/hour
	<flr>	The Frame Loss Ratio interval value in number of measurements. Default 5
	<loss_th>	Frame Loss threshold value. Default 1
	flow-counting	Loss Measurement is counting service frames per flow - all priority in one
	y1731	Loss Measurement is counting OAM frames as service frames as described in Y1731
	all	Loss Measurement is counting all OAM frames as service frames
	<interval>	Availability interval - number of measurements with same availability in order to change Availability state
	<flr_th>	<0-1000> Availability FLR Threshold in per mille
	maintenance	Availability Maintenance indicator
	<los_int_cnt_holddown>	Timer value in seconds
	<los_th_cnt_holddown>	Timer value in seconds
	<hli_cnt_holdd	Timer value in seconds

	own>	
	<tx_min>	Minimum number of frames that must be transmitted in a measurement before FLR is tested against the SDEG FLR threshold
	<bad_th>	Number of consecutive bad interval measurements required to set degrade state
	<good_th>	Number of consecutive good interval measurements required to clear degrade state

3.2.141 mep lt (For 30W PoE Model)

Description	Link Trace	
Syntax	mep <inst> lt <prio> { { mep-id <mepid> } | { mac <mac> } } ttl <ttl>	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<prio>	<0-7> Priority in case of tagged OAM. In the MPLS and EVC domain this is the COS-ID
	<mepid>	Peer MEP-ID value
	<mac>	Link Trace target unicast MAC value
	<ttl>	<0-255> Time To Live value

3.2.142 mep meg-id (For 30W PoE Model)

Description	The ITU/IEEE MEG-ID	
Syntax	mep <inst> meg-id <megid> { itu | itu-cc | { ieee [name <name>] } }	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<megid>	The MEG-ID string. This is either the ITU MEG-ID or the IEEE Short MA, depending on the selected MEG-ID format. The ITU max. is 13 characters. The ITU-CC max. is 15 characters. The IEEE max. is 16 characters
	itu	The MEG-ID has ITU format (ICC - UMC). The meg-id max. is 13 characters
	Itu-cc	The MEG-ID has ITU Country Code format (CC - ICC - UMC). The meg-id max. is 15 characters
	ieee	The MEG-ID (Short MA Name) has IEEE Character String format. The meg-id max. is 16 characters
	<name>	Maintenance Domain Name string. The max is 16 characters

3.2.143 mep mep-id (For 30W PoE Model)

Description	The ITU/IEEE MEG-ID	
Syntax	mep <inst> mep-id <mepid>	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<mepid>	The MEP-ID value

3.2.144 mep peer-mep-id (For 30W PoE Model)

Description	The peer MEP-ID	
Syntax	mep <inst> peer-mep-id <mepid> [mac <mac>]	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.

	<mepid>	The peer MEP-ID value
	<mac>	The peer MAC string

3.2.145 mep performance-monitoring (For 30W PoE Model)

Description	Performance monitoring Data Set collection (MEF35)	
Syntax	mep <inst> performance-monitoring	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.

3.2.146 mep syslog (For 30W PoE Model)

Description	Enable syslog	
Syntax	mep <inst> syslog	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.

3.2.147 mep tst (For 30W PoE Model)

Description	Test Signal	
Syntax	mep <inst> tst <prio> [dei] mep-id <mepid> [sequence] [all-zero | all-one | one-zero] rate <rate> size <size> mep <inst> tst rx mep <inst> tst tx	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<prio>	<0-7> Priority in case of tagged OAM. In the MPLS and EVC domain this is the COS-ID
	[dei]	Drop Eligible Indicator in case of tagged OAM
	<mepid>	Peer MEP-ID value
	[sequence]	Enable sequence number in TST PDU
	all-zero	Test pattern is set to all zero
	all-one	Test pattern is set to all one
	one-zero	Test pattern is set to 10101010
	<rate>	Transmission rate value
	<size>	Frame size value
	rx	Receive Test Signal
	tx	Transmit Test Signal

3.2.148 mep vid (For 30W PoE Model)

Description	The MEP VID	
Syntax	mep <inst> vid <vid>	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.
	<vid>	The MEP VID value

3.2.149 mep voe (For 30W PoE Model)

Description	MEP is VOE based	
Syntax	mep <inst> voe	
Parameter		
	Name	**Description**
	<inst>	<1-100> The MEP instance number.

3.2.150 mep os-tlv (For 30W PoE Model)

Description	Organization-Specific TLV	
Syntax	mep os-tlv oui <oui> sub-type <subtype> value <value>	
Parameter		
	Name	**Description**
	<oui>	<0-0xFFFFFF>
	<subtype>	<0-0xFF> Sub-Type value - one octet
	<value>	<0-0xFF> Value value - one octet

3.2.151 monitor session (For 90W PoE Model)

Description	Monitoring different system events	
Syntax	monitor session <session_number> [destination { interface (<port_type> [<di_list>]) | remote vlan <drvid> reflector-port <port_type> <rportid> } | source { interface (<port_type> [<si_list>]) [both | rx | tx] | remote vlan <srvid> | vlan <source_vlan_list> | cpu [both | rx | tx] }]	
Parameter		
	Name	**Description**
	<session_number>	<1-5> MIRROR session number
	destination	MIRROR destination interface or VLAN
	<port_type>	Select port type.
	<di_list>	Port list in 1/1 – max number of the ports
	remote	MIRROR destination/source Remote
	<drvid>	Remote MIRROR destination RMIRROR VLAN number
	reflector-port	Remote MIRROR reflector interface
	<port_type>	Select port type.
	<rportid>	Port list in 1/1 – max number of the ports
	source	MIRROR source interface, VLAN
	<port_type>	Select port type.
	<si_list>	Port list in 1/1 – max number of the ports
	both	MIRROR source receive both
	rx	MIRROR source receive Rx
	tx	MIRROR source receive Tx
	<srvid>	Remote MIRROR source RMIRROR VLAN number
	<source_vlan_list>	MIRROR source VLAN
	cpu	MIRROR destination/source CPU

3.2.152 monitor session (For 30W PoE Model)

Description	Monitoring different system events	
Syntax	monitor session <session_number> [destination { interface (<port_type> [<di_list>]) | remote vlan <drvid> reflector-port <port_type> <rportid> } | source { interface (<port_type> [<si_list>]) [both | rx | tx] | remote vlan <srvid> | vlan <source_vlan_list> | cpu [both | rx | tx] } | intermediate { interface (<port_type> [<ii_list>]) | remote vlan <irvid> }]	
Parameter		
	Name	**Description**
	<session_number>	<1> MIRROR session number
	enable	Enable a MIRROR session
	destination	MIRROR destination interface or VLAN
	<port_type>	Select port type.
	<di_list>	Port list in 1/1 – max number of the ports
	remote	MIRROR destination/source Remote

	<drvid>	Remote MIRROR destination RMIRROR VLAN number
	reflector-port	Remote MIRROR reflector interface
	<port_type>	Select port type.
	<rportid>	Port list in 1/1 – max number of the ports
	source	MIRROR source interface, VLAN
	<port_type>	Select port type.
	<si_list>	Port list in 1/1 – max number of the ports
	both	MIRROR source receive both
	rx	MIRROR source receive Rx
	tx	MIRROR source receive Tx
	<srvid>	Remote MIRROR source RMIRROR VLAN number
	<source_vlan_list>	MIRROR source VLAN
	cpu	MIRROR destination/source CPU
	<ii_list>	Port list in 1/1 – max number of the ports
	<irvid>	Remote MIRROR intermediate RMIRROR VLAN number

3.2.153 mvr

Description	Enable Multicast VLAN Registration.
Syntax	mvr
Parameter	None

3.2.154 mvr name <word16> channel <word16>

Description	Configure channel interface of MVR profile.	
Syntax	mvr name <word16> channel <word16>	
Parameter		
	Name	**Description**
	<word16>	Name. < 16 characters

3.2.155 mvr name <word16> frame priority

Description	Configure frame priority of MVR profile.	
Syntax	mvr name <word16> frame priority <0-7>	
Parameter		
	Name	**Description**
	<word16>	Name. < 16 characters
	<0-7>	Range : 0-7

3.2.156 mvr name <word16> frame tagged

Description	Configure frame tagged of MVR profile.	
Syntax	mvr name <word16> frame tagged	
Parameter		
	Name	**Description**
	<word16>	Name. < 16 characters

3.2.157 mvr name <word16> last-member-query-interval <0-31744>

Description	Configure the Last Member Query Interval of MVR profile.	
Syntax	mvr name <word16> last-member-query-interval <0-31744>	
Parameter		
	Name	**Description**
	<word16>	Name. < 16 characters
	<0-31744>	Range : 0-31744

3.2.158 mvr name <word16> mode

Description	Configure the mode of MVR profile.	
Syntax	mvr name <word16> mode { dynamic | compatible }	
Parameter		
	Name	**Description**
	<word16>	Name. < 16 characters
	dynamic	Dynamic MVR operation mode
	compatible	Compatible MVR operation mode

3.2.159 mvr name <word16> { election | igmp-address <ipv4_ucast> }

Description	Configure the MVR address of MVR profile	
Syntax	mvr name <word16> { election | igmp-address <ipv4_ucast> }	
Parameter		
	Name	**Description**
	<word16>	Name. < 16 characters
	election	Act as an IGMP Querier to join Querier-Election
	igmp-address	MVR address configuration used in IGMP
	<ipv4_ucast>	IPv4 address

3.2.160 mvr vlan

Description	Create a profile of MVR VLAN.	
Syntax	mvr vlan <vlan_list> [name <word16>]	
Parameter		
	Name	**Description**
	<vlan_list>	Range : 1-4095
	name	MVR multicast name
	<word16>	Name. < 16 characters

f

3.2.161 mvr vlan <vlan_list> channel <word16>

Mode	Configure Mode	
Description	Configure the channel of MVR profile	
Syntax	mvr vlan <vlan_list> channel <word16>	
Parameter		
	Name	**Description**
	<vlan_list>	Range : 1-4095
	<word16>	Name. < 16 characters

3.2.162 mvr vlan <vlan_list> frame priority

Description	Configure the frame priority of MVR VLAN	
Syntax	mvr vlan <vlan_list> frame priority <0-7>	
Parameter		
	Name	**Description**
	<vlan_list>	Range : 1-4095
	<0-7>	Range : 0-7

3.2.163 mvr vlan <vlan_list> frame tagged

Description	Set tagged IGMP/MLD frames will be sent.	
Syntax	mvr vlan <vlan_list> frame tagged	
Parameter		
	Name	**Description**
	<vlan_list>	Range : 1-4095

3.2.164 mvr vlan <vlan_list> last-member-query-interval

Description	Configure the Last Member Query Interval of MVR VLAN.	
Syntax	mvr vlan <vlan_list> last-member-query-interval <0-31744>	
Parameter		
	Name	**Description**
	<vlan_list>	Range : 1-4095
	<0-31744>	Range : 0-31744

3.2.165 mvr vlan <vlan_list> mode

Description	Configure the mode of MVR VLAN	
Syntax	mvr vlan <vlan_list> mode { dynamic | compatible }	
Parameter		
	Name	**Description**
	<vlan_list>	Range : 1-4095
	dynamic	Dynamic MVR operation mode
	compatible	Compatible MVR operation mode

3.2.166 mvr vlan <vlan_list> { election | igmp-address <ipv4_ucast> }

Description	Configure the MVR address of MVR VLAN	
Syntax	mvr vlan <vlan_list> { election | igmp-address <ipv4_ucast> }	
Parameter		
	Name	**Description**
	<vlan_list>	Range : 1-4095
	election	Act as an IGMP Querier to join Querier-Election
	igmp-address	MVR address configuration used in IGMP
	<ipv4_ucast>	IPv4 address

3.2.167 mvrp (For 90W PoE Model)

Description	Use this MVRP global configuration command to enable the MVRP feature globally
Syntax	mvrp
Parameter	None

3.2.168 mvrp managed vlan (For 90W PoE Model)

Description	Use this MVRP global configuration command to configure the list of MVRP-managed VLANs	
Syntax	mvrp managed vlan {all | none | [add | remove | except] <vlan_list>}	
Parameter		
	Name	**Description**
	all	All VLANs
	none	No VLANs
	add	Add VLANs to the current list
	remove	Remove VLANs from the current list
	except	All VLANs except the following
	<vlan_list>	<1- 4095> VLAN IDs of the managed VLANs of MVRP

3.2.169 no

Description	Function disable	
Syntax	no <commands>	
Parameter		
	Name	**Description**
	<commands>	Any of the commands

3.2.170 ntp

Description	Enable the NTP protocol
Syntax	ntp
Parameter	None

3.2.171 ntp server <1-5> ip-address

Description	Configure NTP server	
Syntax	ntp server <1-5> ip-address {<ipv4_ucast>|<domain_name>}	
Parameter		
	Name	**Description**
	<1-5>	Server. 1-5
	<ipv4_ucast>	IPv4 address
	<domain_name>	Domain name

3.2.172 poe firmware (For 90W PoE Model)

Description	PoE Firmware for controller	
Syntax	poe firmware <file>	
Parameter		
	Name	**Description**
	<file>	<url_file> The name of a file in the filesystem, e.g.29035200_1300_001.s19

3.2.173 poe supply (For 90W PoE Model)

Description	Use poe supply to specify the maximum power the power supply can deliver.	
Syntax	poe supply <power>	
Parameter		
	Name	**Description**
	<power>	<0-360> The power in Watt which the PoE power supply can deliver.

3.2.174 poe supply (For 30W PoE Model)

Description	Use poe supply to specify the maximum power the power supply can deliver.	
Syntax	poe supply <power>	
Parameter		
	Name	**Description**
	<power>	Value: 1-120 Maximum power the power supply can deliver.

3.2.175 poe management mode (For 30W PoE Model)

Description	Use management mode to configure PoE power management method.	
Syntax	poe management mode { class-consumption | class-reserved-power | allocation-consumption | allocation-reserved-power | lldp-consumption | lldp-reserved-power }	
Parameter		
	Name	**Description**
	allocation-consumption	Max. port power determined by allocated, and power is managed according to power consumption.
	allocation-reserved-power	Max. port power determined by allocated, and power is managed according to reserved power.

	class-consumption	Max. port power determined by class, and power is managed according to power consumption.
	class-reserved-power	Max. port power determined by class, and power is managed according to reserved power.
	lldp-consumption	Max. port power determined by LLDP Media protocol, and power is managed according to power consumption.
	lldp-reserved-power	Max. port power determined by LLDP Media protocol, and power is managed according to reserved power.

3.2.176 port-security

Description	Port Security	
Syntax	port-security aging port-security aging time <aging_time> port-security hold time <hold_time>	
Parameter		
	Name	**Description**
	aging	Enable/disable port security aging
	<aging_time>	<10-10000000> Aging time in seconds
	<hold_time> (For 90W PoE Model)	<10-10000000> Hold time in seconds

3.2.177 privilege

Description	Command privilege parameters.	
Syntax	privilege <mode_name> level <privilege> <cmd>	
Parameter		
	Name	**Description**
	<mode_name>	Valid words are 'cfm-dmn' 'cfm-dmn-svc' 'cfm-dmn-svc-mep' 'config-vlan' 'configure' 'dhcp-pool' 'erps' 'exec' 'if-vlan' 'interface' 'ipmc-profile' 'json-noti-host' 'line' 'llag' 'profile alarm' 'qos-map-egress' 'qos-map-ingress' 'snmps-host' 'stp-aggr'
	<privilege>	<0-15> Privilege level
	<cmd>	Initial valid words and literals of the command to modify, in 128 characters

3.2.178 profile

Description	Configure alarm profile parameters
Syntax	profile alarm
Parameter	None

3.2.179 prompt (For 90W PoE Model)

Description	Set prompt	
Syntax	prompt <prompt>	
Parameter		
	Name	**Description**
	<prompt>	Up to 32 chars of prompt. Precede prompt variables with a percent sign (%). Prompt variables: %h = hostname, %% = percent sign, %s = space, %t = tab, %D = date, %T = time, %Z =

		date and time (like '%DT%T' but ensures atomicity in case of %T rollover)

3.2.180 qos map cos-dscp

Description	Configure the DSCP Classification.	
Syntax	qos map cos-dscp <cos> dpl <dpl> dscp { <dscp_num> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } }	
Parameter		
	Name	**Description**
	cos-dscp	Map for COS to DSCP
	<cos>	<0~7> Specific class of service or range
	dpl	Specify drop precedence level
	<dpl> (For 90W PoE Model)	<0~3> Specific drop precedence level or range
	<dpl> (For 30W PoE Model)	0~1 Specific drop precedence level or range
	dscp	Specify DSCP
	<dscp_num>	<0~63> Specific DSCP or range
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)
	af22	Assured Forwarding PHB AF22(DSCP 20)
	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)
	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)
	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)
	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)
	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)

3.2.181 qos map dscp-classify

Description	Enabled the DSCP Ingress Classification.
Syntax	qos map dscp-classify { <dscp_num> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 |

	cs5 | cs6 | cs7 | ef | va } }	
Parameter		
	Name	**Description**
	<dscp_num>	<0~63> Specific DSCP or range
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)
	af22	Assured Forwarding PHB AF22(DSCP 20)
	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)
	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)
	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)
	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)
	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)

3.2.182 qos map dscp-cos

Description	Define the DSCP-to-CoS map	
Syntax	qos map dscp-cos { <dscp_num> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } cos <cos> dpl <dpl>	
Parameter		
	Name	**Description**
	<dscp_num>	<0~63> Specific DSCP or range
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)
	af22	Assured Forwarding PHB AF22(DSCP 20)
	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)
	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)

	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)
	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)
	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)
	<cos>	<0-7> Specify class of service
	<dpl> (For 90W PoE Model)	<0-3> Specify drop precedence level
	<dpl> (For 30W PoE Model)	<0-1> Specific drop precedence level

3.2.183 qos map dscp-egress-translation

Description	Configure the DSCP Egress Mapping Table.	
Syntax	qos map dscp-egress-translation { <dscp_num> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } to { <dscp_num_tr> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } }	
Parameter		
	Name	**Description**
	<dscp_num>	<0~63> Specific DSCP or range
	<dscp_num_tr>	<0~63> Specific DSCP or range
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)
	af22	Assured Forwarding PHB AF22(DSCP 20)
	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)
	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)
	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)
	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)

	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)

3.2.184 qos map dscp-ingress-translation

Description	Configure the DSCP Ingress Mapping Table.	
Syntax	qos map dscp-ingress-translation { <dscp_num> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } to { <dscp_num_tr> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } }	
Parameter		
	Name	**Description**
	<dscp_num>	<0~63> Specific DSCP or range
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)
	af22	Assured Forwarding PHB AF22(DSCP 20)
	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)
	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)
	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)
	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)
	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)

3.2.185 qos map egress (For 90W PoE Model)

Description	Create the qos egress map.	
Syntax	qos map egress <map_id>	
Parameter		
	Name	**Description**
	<map_id>	<0-511> Map ID

3.2.186 qos map ingress (For 90W PoE Model)

Description	Create the qos ingress map.	
Syntax	qos map ingress <map_id>	
Parameter		
	Name	**Description**
	<map_id>	<0-255> Map ID

3.2.187 qos qce refresh

Description	Refresh QCE.
Syntax	qos qce refresh
Parameter	None

3.2.188 qos qce

Description	QCE setting	
Syntax	qos qce { [update] } <qce_id>	
Parameter		
	Name	**Description**
	<qce_id>	<1~256> QCE ID
	update	Update an existing QCE

3.2.189 qos qce next/last

Description	Place QCE before the next QCE ID Place QCE at the end	
Syntax	qos qce { [update] } <qce_id> [{ next <qce_id_next> } | last]	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<qce_id_next>	<1-256> The next QCE ID
	last	Place QCE at the end

3.2.190 qos qce interface

Description	Set up QCE interface	
Syntax	qos qce { [update] } <qce_id> [interface (<port_type> [<port_list>])]	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<port_type>	Select port type.
	<port_list>	Port list in 1/1- max number of ports.

3.2.191 qos qce smac

Description	Set up matched SMAC. If 'qos qce addr destination' is set, this parameter specifies the DMAC	
Syntax	qos qce { [update] } <qce_id> [smac { <smac> | any }]	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<smac>	Matched SMAC (XX-XX-XX-XX-XX-XX)
	any	Match any SMAC

3.2.192 qos qce dmac

Description	Set up matched DMAC	
Syntax	qos qce { [update] } <qce_id> [dmac { <mac_addr> | unicast | multicast | broadcast | any }]	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<mac_addr>	Matched SMAC (XX-XX-XX-XX-XX-XX)
	unicast	Match unicast DMAC
	multicast	Match multicast DMAC
	broadcast	Match broadcast DMAC
	any	Match any DMAC

3.2.193 qos qce tag

Description	Set up tag options	
Syntax	qos qce { [update] } <qce_id> [tag { [type { untagged | tagged | c-tagged | s-tagged | any }] [vid { <ot_vid> | any }] [pcp { <ot_pcp> | any }] [dei { <ot_dei> | any }] }*1]	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	untagged	Match untagged frames
	tagged	Match tagged frames
	c-tagged	Match C-tagged frames
	s-tagged	Match S-tagged frames
	<ot_vid>	Matched VLAN ID value/range
	<ot_pcp>	Matched PCP value/range
	<ot_dei>	<0-1> Matched DEI
	any	Match tagged and untagged frames Match any VLAN ID Match any PCP Match any DEI

3.2.194 qos qce frame-type any

Description	Set up any matched frame type	
Syntax	qos qce { [update] } <qce_id> frame-type any	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	any	Match any frame type

3.2.195 qos qce frame-type etype

Description	Match EtherType frames	
Syntax	qos qce { [update] } <qce_id> frame-type etype [{ <etype_type> | any }]	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<etype_type>	<0x600-0x7ff,0x801-0x86dc,0x86de-0xffff> Matched EtherType

	any	Match any EtherType

3.2.196 qos qce frame-type llc

Description	Match LLC frames	
Syntax	qos qce { [update] } <qce_id> frame-type { llc [dsap { <llc_dsap> | any }] [ssap { <llc_ssap> | any }] [control { <llc_control> | any }] }	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<llc_dsap>	<0-0xff> Matched LLC DSAP
	<llc_ssap>	<0-0xff> Matched LLC SSAP
	<llc_control>	<0-0xff> Matched LLC Control byte
	any	Matched LLC DSAP Match any LLC SSAP Match any LLC Control byte

3.2.197 qos qce frame-type snap

Description	Match SNAP frames	
Syntax	qos qce { [update] } <qce_id> frame-type { snap [{ <snap_data> | any }	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<snap_data>	<0-0xffff> Setup matched SNAP EtherType
	any	Match any SNAP EtherType

3.2.198 qos qce frame-type ipv4

Description	Match IPv4 frames	
Syntax	qos qce { [update] } <qce_id> frame-type { ipv4 [proto { <pr4> | tcp | udp | any }] [sip { <sip4> | any }] [dip { <dip4> | any }] [dscp { <dscp4> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } | any }] [fragment { yes | no | any }] [sport { <sp4> | any }] [dport { <dp4> | any }] }	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<pr4>	<0-255> Matched IP protocol
	tcp	Match TCP frames
	udp	Match UDP frames
	<sip4>	Matched source IP address/mask
	<dscp4>	Matched DSCP value/range
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)
	af22	Assured Forwarding PHB AF22(DSCP 20)
	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)

	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)
	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)
	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)
	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)
	yes	Match IPv4 fragments
	no	Match IPv4 non-fragments
	<sp4>	Match UDP/TCP source port value/range
	<dp4>	Match UDP/TCP destination port value/range
	any	Match any IP protocol Match any source IP address Match any DSCP Match any IPv4 fragments Match any UDP/TCP source port Match any UDP/TCP destination port

3.2.199 qos qce frame-type ipv6

Description	Match IPv6 frames	
Syntax	qos qce { [update] } <qce_id> frame-type { ipv6 [proto { <pr6> | tcp | udp | any }] [sip { <sip6> | any }] [dip { <dip6> | any }] [dscp { <dscp6> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } | any }] [sport { <sp6> | any }] [dport { <dp6> | any }] } }]	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<pr6>	<0-255> Matched IP protocol
	tcp	Match TCP frames
	udp	Match UDP frames
	<sip6>	Matched source IP address/mask
	<dscp6>	Matched DSCP value/range
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)
	af22	Assured Forwarding PHB AF22(DSCP 20)

	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)
	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)
	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)
	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)
	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)
	<sp6>	Match UDP/TCP source port value/range
	<dp6>	Match UDP/TCP destination port value/range
	any	Match any IP protocol Match any source IP address Match any DSCP Match any UDP/TCP source port Match any UDP/TCP destination port

3.2.200 qos qce action

Description	Setup action	
Syntax	qos qce { [update] } <qce_id> [action { [cos { <action_cos> | default }] [dpl { <action_dpl> | default }] [pcp-dei { <action_pcp> <action_dei> | default }] [dscp { <action_dscp_dscp> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } | default }] [policy { <action_policy> | default }] [ingress-map { <uint> | default }] }*1]	
Parameter		
	Name	**Description**
	[update]	Update an existing QCE
	<qce_id>	<1-256> QCE ID
	<action_cos>	<0-7> Assign class of service
	<action_dpl>	<0-1> Assign drop precedence level
	<action_pcp>	<0-7> Assign PCP
	<action_dei>	<0-1> Assign DEI
	<action_dscp_dscp>	<0-63> Assign DSCP
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)

	af22	Assured Forwarding PHB AF22(DSCP 20)
	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)
	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)
	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)
	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)
	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)
	<action_policy>	<0-255> Assign ACL policy
	ingress-map <unit>	<0-255> Assign ingress map ID
	default	Keep existing class of service Keep existing drop precedence level Keep existing PCP and DEI Keep existing DSCP Keep existing ACL policy Keep existing ingress map

3.2.201 qos storm

Description	Configure storm policer.	
Syntax	qos storm { unicast | multicast | broadcast } <rate> [fps | kfps | kbps | mbps]	
Parameter		
	Name	**Description**
	storm	Storm policer
	unicast	Police unicast frames
	multicast	Police multicast frames
	broadcast	Police broadcast frames
	<rate> (For 90W PoE Model)	<1-13128147> Policer rate (default fps). Internally rounded up to the nearest value supported by the storm policer.
	<rate> (For 30W PoE Model)	<1-1024000> Policer rate (default fps). Internally rounded up to the nearest value supported by the storm policer.
	fps	Unit is frames per second (default)
	kfps	Unit is kiloframes per second
	kfbps	Unit is kilobits per second
	Mbps (For 90W PoE Model)	Unit is Megabits per second

3.2.202 radius-server attribute 32

Description	Set radius-server attribute 32 (NAS-Identifier)	
Syntax	radius-server attribute 32 <id>	
Parameter		
	Name	**Description**
	<id>	<id>: 1-253 characters

3.2.203 radius-server attribute 4

Description	Set radius-server attribute 4 (NAS-IP-Address)	
Syntax	radius-server attribute 4 <ipv4>	
Parameter		
	Name	**Description**
	<ipv4>	<ipv4>: IPv4 address

3.2.204 radius-server attribute 95

Description	Set radius-server attribute 95 (NAS-IP-Address)	
Syntax	radius-server attribute 95 <ipv6>	
Parameter		
	Name	**Description**
	<ipv6>	<NAS-IPv6-Address>

3.2.205 radius-server deadtime

Description	Use the radius-server deadtime command to configure the global RADIUS deadtime value.	
Syntax	radius-server deadtime <minutes>	
Parameter		
	Name	**Description**
	deadtime	Time to stop using a RADIUS server that doesn't respond
	<minutes>	<minutes>: 1-1440

3.2.206 radius-server host

Description	Use the radius-server host command to add a new RADIUS host.	
Syntax	radius-server host <host_name> [auth-port <auth_port>] [acct-port <acct_port>] [timeout <seconds>] [retransmit <retries>] [key { [unencrypted] <unencrypted_key> | encrypted <encrypted_key> }]	
Parameter		
	Name	**Description**
	acct-port	UDP port for RADIUS accounting server
	auth-port	UDP port for RADIUS authentication server
	key	Server specific key (overrides default) retransmit: Specify the number of retries to active server (overrides default)
	retransmit	Specify the number of retries to active server (overrides default)
	timeout	Time to wait for this RADIUS server to reply (overrides default)
	<unencrypted_key>	The UNENCRYPTED (Plain Text) secret key. Notice that you have no chance to get the Plain Text secret key after this command. The system will always display the ENCRYPTED password. 1-63 characters
	<encrypted_key>	The ENCRYPTED (hidden) secret key. Notice the

		ENCRYPTED secret key will be decoded by system internally. You cannot directly use it as same as the Plain Text and it is not human-readable text normally. 96-224 characters
	<host_name>	1-255 characters
	<auth_port>	<AuthPort : 0-65535>
	<acct_port>	<AcctPort : 0-65535>
	<seconds>	<Seconds : 1-1000>
	<retries>	<Retries : 1-1000>

3.2.207 radius-server key (For 90W PoE Model)

Description	Use the radius-server key command to configure the global RADIUS key.	
Syntax	radius-server key { [unencrypted] <unencrypted_key> | encrypted <encrypted_key> }	
Parameter		
	Name	**Description**
	<unencrypted_key>	The UNENCRYPTED (Plain Text) secret key. Notice that you have no chance to get the Plain Text secret key after this command. The system will always display the ENCRYPTED password. 1-63 characters
	<encrypted_key>	The ENCRYPTED (hidden) secret key. Notice the ENCRYPTED secret key will be decoded by system internally. You cannot directly use it as same as the Plain Text and it is not human-readable text normally. 96-224 characters

3.2.208 radius-server key (For 30W PoE Model)

Description	Use the radius-server key command to configure the global RADIUS key.	
Syntax	radius-server key [encrypted] <key>	
Parameter		
	Name	**Description**
	[encrypted]	The encrypted shared key
	<key>	<line1-63> The shared key

3.2.209 radius-server retransmit

Description	Use the radius-server retransmit command to configure the global RADIUS retransmit value.	
Syntax	radius-server retransmit <retries>	
Parameter		
	Name	**Description**
	retransmit	Specify the number of retries to active server
	<retries>	<retries>: 1-1000

3.2.210 radius-server timeout

Description	Use the radius-server timeout command to configure the global RADIUS timeout value.	
Syntax	radius-server timeout <seconds>	
Parameter		
	Name	**Description**
	timeout	Time to wait for a RADIUS server to reply
	<seconds>	<seconds>: 1-1000

3.2.211 ringv2

Description	Configure ring protection v2	
Syntax	ringv2 protect group1 ringv2 protect group2 ringv2 protect group3	
Parameter		
	Name	**Description**
	group1	Group1
	group2	Group2
	group3	Group3

3.2.212 rmon alarm

Description	Configure an RMON alarm.	
Syntax	rmon alarm <id> { ifInOctets | ifInUcastPkts | ifInNUcastPkts | ifInDiscards | ifInErrors | ifInUnknownProtos | ifOutOctets | ifOutUcastPkts | ifOutNUcastPkts | ifOutDiscards | ifOutErrors | ifOutQLen } <ifIndex> <interval> { absolute | delta } rising-threshold <rising_threshold> <rising_event_id> falling-threshold <falling_threshold> <falling_event_id> { [rising | falling | both] }	
Parameter		
	Name	**Description**
	<id>	1-65535
	ifInOctets	The total number of octets received on the interface, including framing characters
	ifInUcastPkts	The number of uni-cast packets delivered to a higher-layer protocol
	ifInNUcastPkts	The number of broad-cast and multi-cast packets delivered to a higher-layer protocol
	ifInDiscards	The number of inbound packets that are discarded even the packets are normal
	fInErrors	The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol
	ifInUnknownProtos	The number of the inbound packets that were discarded because of the unknown or un-support protocol
	ifOutOctets	The number of octets transmitted out of the interface, including framing characters
	ifOutUcastPkts	The number of uni-cast packets that request to transmi
	ifOutNUcastPkts	The number of broad-cast and multi-cast packets that request to transmit
	ifOutDiscards	The number of outbound packets that are discarded event the packets is normal
	ifOutErrors	The The number of outbound packets that could not be transmitted because of errors
	ifOutQLen	The length of the output packet queue (in packets)
	<ifIndex>	Interface index
	<interval>	<1-2147483647> Sample interval
	absolute	Test each sample directly
	delta	Test delta between samples
	<rising_threshold>	<-2147483648-2147483647> rising threshold value

	<rising_event_id>	<0-65535> Event to fire on rising threshold crossing
	<falling_threshold>	<-2147483648-2147483647> falling threshold value
	<falling_event_id>	<0-65535> Event to fire on falling threshold crossing
	both	Trigger alarm when the first value is larger than the rising threshold or less than the falling threshold (default)
	falling	rigger alarm when the first value is less than the falling threshold
	rising	Trigger alarm when the first value is larger than the rising threshold

3.2.213 rmon event

Description	Configure an RMON event	
Syntax	rmon event <id> [log] [trap [<word127>]] { [description <description>] }	
Parameter		
	Name	**Description**
	<id>	1-65535
	description	Specify a description of the event
	<description>	<line127> Event description. <=127 characters
	log	Generate RMON log when the event fires
	trap	Generate SNMP trap when the event fires
	<word127>	OBSOLETE: SNMP community string. <=127 characters

3.2.214 sflow agent-ip

Description	Configure the IPv4 address of the sFlow Agent	
Syntax	sflow agent-ip {ipv4 <ipv4_addr> | ipv6 <ipv6_addr>}	
Parameter		
	Name	**Description**
	<ipv4_addr>	IPv4 address. 0.0.0.0-255.255.255.255
	<ipv6_addr>	IPv6 address. 0:0:0:0:0:0:0:0-ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff

3.2.215 sflow collector-address

Description	Configure the Collector address of sflow.	
Syntax	sflow collector-address [<ipv4_addr>|<ipv6_ucast>|<domain_name>]	
Parameter		
	Name	**Description**
	<ipv4_addr>	IPv4 address identifying the collector receiver.
	<ipv6_ucast>	IPv6 address identifying the collector receiver.
	<domain_name>	Domain name identifying the collector receiver

3.2.216 sflow collector-port

Description	Configure the Collector port number of sflow.	
Syntax	sflow collector-port <1-65535>	
Parameter		
	Name	**Description**
	<1-65535>	Port number

3.2.217 sflow max-datagram-size

Description	Configure the Collector Maximum datagram size of sflow.	
Syntax	sflow max-datagram-size <200-1468>	
Parameter		
	Name	**Description**
	<200-1468>	Bytes

3.2.218 sflow timeout

Description	Receiver timeout measured in seconds. The switch decrements the timeout once per second, and as long as it is non-zero, the receiver receives samples. Once the timeout reaches 0, the receiver and all its configuration is reset to defaults.	
Syntax	sflow timeout <0-2147483647>	
Parameter		
	Name	**Description**
	<0-2147483647>	Timeout time range

3.2.219 snmp-server

Description	Enable SNMP server
Syntax	snmp-server
Parameter	None

3.2.220 snmp-server access

Description	Set up SNMP server access configuration	
Syntax	snmp-server access <group_name> model { v1 | v2c | v3 | any } level { auth | noauth | priv } [read <view_name>] [write <write_name>]	
Parameter		
	Name	**Description**
	<group_name>	<word32> Group name. <= 32 characters
	v1	v1 security model
	v2c	v2c security model
	v3	v3 security model
	any	Any security model
	auth	AuthNoPriv Security Level
	noauth	NoAuthNoPriv Security Level
	priv	AuthPriv Security Level
	read	Specify a read view for the group
	write	Specify a write view for the group
	<view_name>	<word32> Specify a read view name
	<write_name>	<word32> Specify write view name

3.2.221 snmp-server community (For 90W PoE Model)

Description	Set the SNMP community	
Syntax	snmp-server community <v3_comm> [{ ip-range <v_ipv4_addr> <v_ipv4_netmask> }] { <v3_sec> | encrypted <v3_sec_enc> }	
Parameter		
	Name	**Description**
	<v3_comm>	<word32> Security name. 32 characters
	<v_ipv4_addr>	IPv4 address. 0.0.0.0-255.255.255.255
	<v_ipv4_netmask>	IPv4 netmask. 0.0.0.0-255.255.255.255
	<v3_sec>	<word32> Community secret. 32 characters
	<v3_sec_enc>	<word96-160> Encrypted community secret. 96-

		160 characters

3.2.222 snmp-server community v2c (For 30W PoE Model)

Description	Set the SNMP v2c community	
Syntax	snmp-server community v2c <word127> [ro | rw]	
Parameter		
	Name	**Description**
	< word127 >	Community word
	< ro >	Read only
	<rw>	Read write

3.2.223 snmp-server community v3 (For 30W PoE Model)

Description	S Set the SNMP v3 community	
Syntax	snmp-server community v3 <word127> [<ipv4_addr> <ipv4_netmask>]	
Parameter		
	Name	**Description**
	< word127 >	Community word
	< ipv4_addr >	IPv4 address
	<ipv4_netmask>	IPv4 netmask

3.2.224 snmp-server contact

Description	Set the SNMP server's contact string	
Syntax	snmp-server contact <v_line255>	
Parameter		
	Name	**Description**
	<v_line255>	Contact string. <=255 characters.

3.2.225 snmp-server engine-id

Description	Set SNMP engine ID	
Syntax	snmp-server engine-id local <engineID>	
Parameter		
	Name	**Description**
	<engineID>	<word10-64> Local engine ID

3.2.226 snmp-server host

Description	To enter the SNMP host mode.	
Syntax	snmp-server host <conf_name>	
Parameter		
	Name	**Description**
	<conf_name>	<word32> Name of the host configuration

3.2.227 snmp-server location

Description	Set the SNMP server's location string	
Syntax	snmp-server location <v_line255>	
Parameter		
	Name	**Description**
	<v_line255>	Location string. <=255 characters

3.2.228 snmp-server security-to-group

Description	Set security-to-group configuration
Syntax	snmp-server security-to-group model { v1 | v2c | v3 } name <security_name> group <group_name>

Parameter		
	Name	**Description**
	v1	v1 security model
	v2c	v2c security model
	v3	v3 security model
	<security_name>	<word32> Security user name. <= 32 characters
	<group_name>	<word32> Security group name. <= 32 characters

3.2.229 snmp-server trap

Description	Set trap source configuration	
Syntax	snmp-server trap <source_name> [id <filter_id>] [<oid_subtree> { include | exclude }]	
Parameter		
	Name	**Description**
	<source_name> (For 90W PoE Model)	<cword> : Valid words are 'alarmTrapStatus' 'authenticationFailure' 'coldStart' 'entConfigChange' 'fallingAlarm' 'frerTrap' 'ipTrapGlobalsMain' 'ipTrapInterfacesLink' 'linkDown' 'linkUp' 'lldpRemTablesChange' 'newRoot' 'psecTrapGlobalsMain' 'psecTrapInterfaces' 'risingAlarm' 'topologyChange' 'warmStart'
	<filter_id> (For 90W PoE Model)	<0-127> Trap source filter ID
	<oid_subtree> (For 90W PoE Model)	<word255> OID to use as index filter. <=255 characters
	Include (For 90W PoE Model)	Include filter type
	Exclude (For 90W PoE Model)	Exclude filter type

3.2.230 snmp-server user

Description	Set the SNMPv3 user's configurations	
Syntax	snmp-server user <username> engine-id <engineID> [{ md5 { <md5_passwd> | { encrypted <md5_passwd_encrypt> } } | sha { <sha_passwd> | { encrypted <sha_passwd_encrypt> } } } [priv { des | aes } { <priv_passwd> | { encrypted <priv_passwd_encrypt> } }]]	
Parameter		
	Name	**Description**
	md5	Set MD5 protocol
	<username>	<word32> Username. <=32 characters
	<engineID>	<word10-64> Engine ID octet string. 10-64 characters
	<md5_passwd>	<word8-32> MD5 unencrypted password. 8-32 characters
	encrypted	Specifies an ENCRYPTED password will follow.
	<md5_passwd_encrypt>	<word16-64> MD5 encrypted password. 16-64 characters
	sha	Set SHA protocol

	<sha_passwd>	<word8-40> SHA unencrypted password
	<sha_passwd_encrypt>	<word16-80> SHA password. 16-80 characters
	priv	Set Privacy
	des	Set DES protocol
	aes	Set AES protocol
	<priv_passwd>	<word8-32> Privacy unencrypted password. 8-32 characters
	<priv_passwd_encrypt>	<word16-64> Set privacy password. 16-64 characters

3.2.231 snmp-server version (For 30W PoE Model)

Description	Set the SNMP server's version	
Syntax	snmp-server version { v1 | v2c | v3 }	
Parameter		
	Name	**Description**
	{ v1 | v2c | v3 }	SNMP v1,v2c,v3

3.2.232 snmp-server view

Description	Set up MIB view configuration	
Syntax	snmp-server view <view_name> <oid_subtree> { include | exclude }	
Parameter		
	Name	**Description**
	<view_name>	<word32> MIB view name. <= 32 characters
	<oid_subtree>	<word255> MIB view OID. <= 255 characters
	include	Included type from the view
	exclude	Excluded type from the view

3.2.233 spanning-tree aggregation

Description	Enable Spanning Tree protocol Aggregation mode
Syntax	spanning-tree aggregation
Parameter	None

3.2.234 spanning-tree edge bpdu-filter

Description	Enable BPDU filter.
Syntax	spanning-tree edge bpdu-filter
Parameter	None

3.2.235 spanning-tree edge bpdu-guard

Description	Enable BPDU guard
Syntax	spanning-tree edge bpdu-guard
Parameter	None

3.2.236 spanning-tree mode

Description	Sets STP protocol mode.	
Syntax	spanning-tree mode { stp | rstp | mstp }	
Parameter		
	Name	**Description**
	stp	802.1D Spanning Tree
	rstp	Rapid Spanning Tree (802.1w)
	mstp	Multiple Spanning Tree (802.1s)

3.2.237 spanning-tree mst <0-7> priority

Description	Specify an appropriate priority for a MSTI instance.	
Syntax	spanning-tree mst <0-7> priority <0-61440>	
Parameter		
	Name	**Description**
	<0-7>	Instance (CIST=0, MSTI1=1...)
	<0-61440>	Range : 0-61440

3.2.238 spanning-tree mst <0-7> vlan

Description	Specify VLANs mapped to a certain MSTI.	
Syntax	spanning-tree mst <0-7> vlan <vlan_list>	
Parameter		
	Name	**Description**
	<0-7>	Instance (CIST=0, MSTI1=1...)
	<vlan_list>	Range : 1-4095

3.2.239 spanning-tree mst forward-time

Description	Configure the forward time for all MST instances. The forward delay is the number of seconds a port waits before changing from its spanning-tree learning and listening states to the forwarding state.	
Syntax	spanning-tree mst forward-time <4-30>	
Parameter		
	Name	**Description**
	<4-30>	Range: 4-30

3.2.240 spanning-tree mst hello-time

Description	Configures the hello time for all MST instances.	
Syntax	spanning-tree mst hello-time <1-10>	
Parameter		
	Name	**Description**
	<1-10>	Range : 1-10

3.2.241 spanning-tree mst max-age

Description	Configure the maximum-aging time for all MST instances. MaxAge must be <= (FwdDelay-1)*2	
Syntax	spanning-tree mst max-age <6-40> [forward-time <4-30>]	
Parameter		
	Name	**Description**
	<6-40>	Range: 6-40
	<4-30>	Range: 4-30

3.2.242 spanning-tree mst max-hops

Description	Specify the number of hops in a region before the BPDU is discarded, and the information held for a port is aged.	
Syntax	spanning-tree mst max-hops <6-40>	
Parameter		
	Name	**Description**
	<6-40>	Range : 6-40

3.2.243 spanning-tree mst name <word32> revision

Description	Configure a name and revision number for this MSTI.
Syntax	spanning-tree mst name <word32> revision <0-65535>
Parameter	

	Name	Description
	<word32>	Name. < 33 characters
	<0-65535>	Revision range: 0-65535

3.2.244 spanning-tree recovery interval

Description	When enabled, a port that is in the error-disabled state can automatically be enabled after a certain time.	
Syntax	spanning-tree recovery interval <30-86400>	
Parameter		
	Name	Description
	<30-86400>	Range: 30-86400

3.2.245 spanning-tree transmit hold-count

Description	Sets max number of transmit BPDUs per sec	
Syntax	spanning-tree transmit hold-count <1-10>	
Parameter		
	Name	Description
	<1-10>	Range : 1-10

3.2.246 svl fid (For 90W PoE Model)

Description	Shared VLAN Learning (SVL) makes it possible to learn multiple VLANs (VIDs) on the same FID. MAC addresses that get classified to a given VID will be mapped to its FID and learned on that FID	
Syntax	svl fid <fid> vlan <vlan_list>	
Parameter		
	Name	Description
	<fid>	<1-4095> Filter ID
	<vlan_list>	<1-4095> VLAN List

3.2.247 tacacs-server deadtime

Description	Use the tacacs-server deadtime command to configure the global TACACS+ deadtime value.	
Syntax	tacacs-server deadtime <minutes>	
Parameter		
	Name	Description
	deadtime	Time to stop using a TACACS+ server that doesn't respond
	<minutes>	<1-1440> Time in minutes

3.2.248 tacacs-server host (For 90W PoE Model)

Description	Use the tacacs-server host command to add a new TACACS+ host.	
Syntax	tacacs-server host <host_name> [port <port>] [timeout <seconds>] [key { [unencrypted] <unencrypted_key> | encrypted <encrypted_key> }]	
Parameter		
	Name	Description
	<host_name>	<HostName> : word1-255>
	<port>	<Port : 0-65535>
	<seconds>	<Seconds : 1-1000>
	<unencrypted_key>	<unencrypted_key>: 1-63 characters
	<encrypted_key>	<encrypted_key>: 96-224 characters

3.2.249 tacacs-server host (For 30W PoE Model)

Description	Configure TACACS+ server	
Syntax	tacacs-server host <word1-255> [port <0-65535>] [timeout <1-1000>] [key <line1-63>]	
Parameter		
	Name	**Description**
	word1-255	Hostname or IP address
	0-65535	TCP port number
	1-1000	Wait time in seconds
	line1-63	The shared key

3.2.250 tacacs-server key (For 90W PoE Model)

Description	Use the tacacs-server key command to configure the global TACACS+ key.	
Syntax	tacacs-server key { [unencrypted] <unencrypted_key> | encrypted <encrypted_key> }	
Parameter		
	Name	**Description**
	<unencrypted_key>	The UNENCRYPTED (Plain Text) secret key. Notice that you have no chance to get the Plain Text secret key after this command. The system will always display the ENCRYPTED password. 1-63 characters
	<encrypted_key>	The ENCRYPTED (hidden) secret key. Notice the ENCRYPTED secret key will be decoded by system internally. You cannot directly use it as same as the Plain Text and it is not human-readable text normally. 96-224 characters

3.2.251 tacacs-server key (For 30W PoE Model)

Description	Configure TACACS+ encryption key	
Syntax	tacacs-server key <line1-63>	
Parameter		
	Name	**Description**
	line1-63	<line1-63> The encrypted shared key

3.2.252 tacacs-server timeout

Description	Use the tacacs-server timeout command to configure the global TACACS+ timeout value.	
Syntax	tacacs-server timeout <seconds>	
Parameter		
	Name	**Description**
	timeout	Time to wait for a TACACS+ server to reply
	<seconds>	<Seconds : 1-1000>

3.2.253 username (For 90W PoE Model)

Description	Establish User Name Authentication Use the username <username> privilege <level> password unencrypted global configuration command to add a user with unencrypted password for the local switch access Use the username <username> privilege <level> password encrypted <password> global configuration command to add a user with encrypted password for the local switch access Use the username <username> privilege <level> password none global

	configuration command to remove the password for specific username	
Syntax	username <input_username> privilege <priv_external> password { unencrypted | encrypted <encry_password> | none }	
Parameter		
	Name	**Description**
	<input_username>	<word31> User name allows letters, numbers and underscores
	<priv_external>	<0-14> User privilege level
	<encry_password>	<word128> The ENCRYPTED (hidden) user password. Notice the ENCRYPTED password will be decoded by system internally. You cannot directly use it as same as the Plain Text and it is not human-readable text normally
	none	NULL password

3.2.254 username (For 30W PoE Model)

Description	User account	
Syntax	username <username> privilege <priv> password encrypted <encry_password> username <username> privilege <priv> password none username <username> privilege <priv> password unencrypted <password>	
Parameter		
	Name	**Description**
	username	<Username : word31> User name allows letters, numbers and underscores
	privilege	Set user privilege level
	priv	User privilege level
	password	Specify the password for the user
	encrypted	Specifies an ENCRYPTED password will follow
	none	NULL password
	unencrypted	Specifies an UNENCRYPTED password will follow

3.2.255 vlan

Description	Enter a new VLAN ID to create a VLAN, or enter an existing VLAN ID to modify that VLAN.	
Syntax	vlan <vlan_list>	
Parameter		
	Name	**Description**
	<vlan_list>	1-4095

3.2.256 vlan ethertype s-custom-port

Description	Set EtherType for Custom S-ports	
Syntax	vlan ethertype s-custom-port <etype>	
Parameter		
	Name	**Description**
	<etype>	<0x0600-0xffff> EtherType (Range: 0x0600-0xffff)

3.2.257 vlan protocol

Description	Use the vlan protocol command to add protocol to group mapping.
Syntax	vlan protocol { { eth2 { <etype> | arp | ip | ipx | at } } | { snap { <oui> | rfc-1042 | snap-8021h } <pid> } | { llc <dsap> <ssap> } } group <grp_id>
Parameter	

	Name	Description
	eth2	Ethernet-based VLAN commands
	<etype>	<0x600-0xffff> Ether Type (Range: 0x600 - 0xFFFF)
	arp	Ether Type is ARP
	at	Ether Type is AppleTalk
	ip	Ether Type is IP
	ipx	Ether Type is IPX
	snap	SNAP-based VLAN group
	<oui>	<0x0-0xffffff> SNAP OUI (Range 0x000000 - 0XFFFFFF)
	rfc-1042	SNAP OUI is rfc-1042
	snap-8021h	SNAP OUI is 8021h
	<pid>	<0x0-0xffff> PID (Range: 0x0 - 0xFFFF)
	llc	LLC-based VLAN group
	<dsap>	<0x0-0xff> DSAP (Range: 0x00 - 0xFF)
	<ssap>	<0x0-0xff> SSAP (Range: 0x00 - 0xFF)
	group	Protocol-based VLAN group commands
	<grp_id>	<word16> Group Name (Range: 1 - 16 characters)

3.2.258 voice vlan

Description	Use the voice vlan global configuration command to enable voice vlan. Use the no form of this command to globally disable voice vlan.
Syntax	voice vlan
Parameter	None

3.2.259 voice vlan aging-time

Description	Use the voice vlan aging-time global configuration command to configure default voice vlan aging-time	
Syntax	voice vlan aging-time <aging_time>	
Parameter		
	Name	**Description**
	<aging_time>	<10-10000000> Aging time, 10-10000000 seconds

3.2.260 voice vlan class

Description	Use the voice vlan class global configuration command to configure voice vlan class.	
Syntax	voice vlan class <traffic_class>	
Parameter		
	Name	**Description**
	<traffic_class>	<0-7> Traffic class value

3.2.261 voice vlan oui

Description	Use the voice vlan oui global configuration command to set the oui entry for voice vlan	
Syntax	voice vlan oui <oui> [description <description>]	
Parameter		
	Name	**Description**
	<oui>	OUI value. XX-XX-XX
	<description>	<line32> Description line. Up to 32 charaters

3.2.262 voice vlan vid

Description	Use the voice vlan vid global configuration command to configure voice vlan vid	
Syntax	voice vlan vid <vid>	
Parameter		
	Name	**Description**
	<vid>	1-4095

3.2.263 web privilege group

Description	Configure the Privilege level.	
Syntax	web privilege group <group_name> level { [configRoPriv <configRoPriv>] [configRwPriv <configRwPriv>] [statusRoPriv <statusRoPriv>] [statusRwPriv <statusRwPriv>] }*1	
Parameter		
	Name	**Description**
	<group_name>	Valid words are 'Aggregation' 'Alarm' 'CFM' 'DDMI' 'DHCP' 'DHCPv6_Client' 'Debug' 'Diagnostics' 'ERPS' 'Firmware' 'IP' 'IPMC_Snooping' 'LACP' 'LLDP' 'Loop_Protect' 'MAC_Table' 'MRP' 'MVR' 'Miscellaneous' 'NTP' 'POE' 'Ports' 'Private_VLANs' 'QoS' 'RMirror' 'Security(access)' 'Security(network)' 'Spanning_Tree' 'System' 'VCL' 'VLANs' 'Voice_VLAN' 'XXRP' 'alm_profile' 'sFlow' 'tyndbg' 'uFDMA_AIL' 'uFDMA_CIL'
	configRoPriv	Configuration Read-only level
	<configRoPriv>	<0-15>
	configRwPriv	Configuration Read-write level
	<configRwPriv>	<0-15>
	statusRoPriv	Status/Statistics Read-only level
	<statusRoPriv>	<0-15>
	statusRwPriv	Status/Statistics Read-write level
	<statusRwPriv>	<0-15>

3.3 Interface Config Commands

3.3.1 access-list action

Description	Use the access-list action interface configuration command to configure access-list action. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	
Syntax	access-list action { permit | deny }	
Parameter		
	Name	**Description**
	permit	Permit
	deny	Deny

3.3.2 access-list logging

Description	Use the access-list logging interface configuration command to enable access-list logging. Use the no form of this command to disable access-list logging The access-list interface configuration will affect the received frames if it doesn't match any ACE Note: The logging feature only works when the packet length is less than 1518(without VLAN tags)
Syntax	access-list logging
Parameter	None

3.3.3 access-list mirror

Description	Use the access-list mirror interface configuration command to enable access-list mirror. Use the no form of this command to disable access-list mirror. The access-list interface configuration will affect the received frames if it doesn't match any ACE.
Syntax	access-list mirror
Parameter	None

3.3.4 access-list policy

Description	Use the access-list policy interface configuration command to configure the access-list policy value. The access-list interface configuration will affect the received frames if it doesn't match any ACE	
Syntax	access-list policy <0-255>	
Parameter		
	Name	**Description**
	<0-255>	The Value of Policy ID specified in decimal or hexadecimal

3.3.5 access-list port-state

Description	Use the access-list port-state interface configuration command to enable access-list port state. Use the no form of this command to disable access-list port state
Syntax	access-list port-state
Parameter	None

3.3.6 access-list rate-limiter

Description	Use the access-list rate-limiter interface configuration command to configure the access-list rate-limiter ID The access-list interface configuration will affect the received frames if it doesn't match any ACE	
Syntax	access-list rate-limiter <1-16>	
Parameter		
	Name	**Description**
	<1-16>	Rate limiter ID

3.3.7 access-list shutdown

Description	Use the access-list shutdown interface configuration command to enable access-list shutdown. Use the no form of this command to disable access-list shutdown The access-list interface configuration will affect the received frames if it doesn't match any ACE Note: The shutdown feature only works when the packet length is less than 1518(without VLAN tags)
Syntax	access-list shutdown
Parameter	None

3.3.8 access-list {redirect} interface

Description	Use the no access-list redirect interface configuration command to configure the access-list redirect interface. The access-list interface configuration will affect the received frames if it doesn't match any ACE. Note: The parameter of <port_type_id> is used for ACLv1, <port_type_list> is used for ACLv2. On stackable platforms, the feature only supported for local interfaces	
Syntax	access-list {redirect} interface { <port_type_id> | <port_type_list> }	
Parameter		
	Name	**Description**
	{redirect}	Redirect frame to specific port
	<port_type_id>	Select port type.
	<port_type_list>	Port list in 1/1 – max number of the ports

3.3.9 aggregation group mode

Description	Join an aggregation group and setting mode.	
Syntax	aggregation group <v_uint> mode { [active | on | passive] }	
Parameter		
	Name	**Description**
	<v_uint>	<1-6> The aggregation group ID
	active (For 90W PoE Model)	Active LACP
	on (For 90W PoE Model)	Static aggregation
	passive (For 90W PoE Model)	Passive LACP

3.3.10 description

Description	Specify a description of the port	
Syntax	description <dscr>	
Parameter		
	Name	**Description**

	<dscr>	<line255> Add an alphanumeric description of the interface

3.3.11 dot1x guest-vlan

Description	Enables guest VLAN
Syntax	dot1x guest-vlan
Parameter	None

3.3.12 dot1x port-control

Description	Sets the port security state	
Syntax	dot1x port-control { force-authorized | force-unauthorized | auto | single | multi | mac-based | sense }	
Parameter		
	Name	**Description**
	auto	Port-based 802.1X Authentication
	force-authorized	Port access is allowed
	force-unauthorized	Port access is not allowed
	mac-based	Switch authenticates on behalf of the client
	multi	Multiple Host 802.1X Authentication
	single	Single Host 802.1X Authentication
	sense	Port link up sense EAPOL packet then keep in 802.1X BPDU mode, if timeout goto MAC-based authentication

3.3.13 dot1x radius-qos

Description	Enable per-port state of RADIUS-assigned QoS.
Syntax	dot1x radius-qos
Parameter	None

3.3.14 dot1x radius-vlan

Description	Enables per-port state of RADIUS-assigned VLAN
Syntax	dot1x radius-vlan
Parameter	None

3.3.15 dot1x re-authenticate

Description	Refresh (restart) 802.1X authentication process.
Syntax	dot1x re-authenticate
Parameter	None

3.3.16 duplex

Description	Set up interface duplex	
Syntax	duplex { half | full | { auto [half | full] } }	
Parameter		
	Name	**Description**
	half	Forced half duplex
	full	Forced full duplex
	auto	Auto negotiation of duplex mode (obsolete, but still supported in startup-config)

3.3.17 excessive-restart

Description	Restart backoff algorithm after 16 collisions (No excessive-restart means discard frame after 16 collisions) Use excessive-restart to configure backoff algorithm in half duplex mode.

Syntax	excessive-restart
Parameter	None

3.3.18 fec (For 90W PoE Model)

Description	Control Forward Error Correction	
Syntax	fec { auto | r-fec | none }	
Parameter		
	Name	**Description**
	auto	Let the switch application decide which FEC (if any) to enable based on port and SFP transceiver type.
	r-fec	Force-enable R-FEC (Firecode Forward Error Correction, 802.3by clause 74).
	none	Do not use FEC. If using 802.3 clause 73 to negotiate speed, FEC may get enabled anyway if link partner requests it.

3.3.19 flowcontrol

Description	Use flowcontrol to configure flow control for the interface	
Syntax	flowcontrol {on | off}	
Parameter		
	Name	**Description**
	on	Enable flow control (not used on ports running clause 37 aneg)
	off	Disable flow control (not used on ports running clause 37 aneg)

3.3.20 frame-length-check

Description	Drop frames with mismatch between EtherType/Length field and actually payload size Enable 803.3 frame length check for ether-types below 0x0600
Syntax	frame-length-check
Parameter	None

3.3.21 green-ethernet

Description	Green Ethernet (Power reduction)	
Syntax	green-ethernet eee green-ethernet eee urgent-queues [<urgent_queue_range_list>] green-ethernet energy-detect green-ethernet short-reach	
Parameter		
	Name	**Description**
	eee	Powering down of PHYs when there is no traffic.
	<urgent_queue_range_list>	EEE Interface.
	energy-detect	Enable power saving for ports with no link partner.
	short-reach	Enable power saving for ports which is connect to link partner with short cable.

3.3.22 gvrp

Description	Enable GVRP on interface or interfaces
Syntax	gvrp
Parameter	None

3.3.23 ip arp inspection check-vlan

Description	Use the ip arp inspection check-vlan interface configuration command to configure a port as VLAN mode for ARP inspection purposes. Use the no form of this command to configure a port as default
Syntax	ip arp inspection check-vlan
Parameter	None

3.3.24 ip arp inspection logging

Description	Use the ip arp inspection logging interface configuration command to configure a port as some logging mode for ARP inspection purposes. Use the no form of this command to configure a port as logging none.	
Syntax	ip arp inspection logging { deny | permit | all }	
Parameter		
	Name	**Description**
	logging	ARP inspection logging mode configuration
	deny	Log denied entries
	permit	Log permitted entries
	all	Log all entries

3.3.25 ip arp inspection trust

Description	Use the ip arp inspection trust interface configuration command to configure a port as trusted for ARP inspection purposes. Use the no form of this command to configure a port as untrusted
Syntax	ip arp inspection trust
Parameter	None

3.3.26 ip dhcp snooping trust

Description	Use the ip dhcp snooping trust interface configuration command to configure a port as trusted for DHCP snooping purposes. Use the no form of this command to configure a port as untrusted
Syntax	ip dhcp snooping trust
Parameter	None

3.3.27 ip igmp snooping filter

Description	Apply the IGMP Snooping filter ID for specific interface	
Syntax	ip igmp snooping filter <word16>	
Parameter		
	Name	**Description**
	<word16>	Profile name in 16 characters

3.3.28 ip igmp snooping immediate-leave

Description	Enable IGMP Snooping Immediate-leave for specific interface
Syntax	ip igmp snooping immediate-leave
Parameter	None

3.3.29 ip igmp snooping max-groups

Description	Limit maximum number of IGMP group for specific interface.	
Syntax	ip igmp snooping max-groups <1-10>	
Parameter		
	Name	**Description**
	<1-10>	Maximum number of IGMP group registration

3.3.30 ip igmp snooping mrouter

Description	Configure Multicast router port mode for specific interface
Syntax	ip igmp snooping mrouter
Parameter	None

3.3.31 ip verify source

Description	Enable ip source guard in port
Syntax	ip verify source
Parameter	None

3.3.32 ip verify source limit

Description	Specify the maximum number of dynamic clients that can be learned on given port	
Syntax	ip verify source limit <cnt_var>	
Parameter		
	Name	**Description**
	<cnt_var>	<0-2> The number of limit

3.3.33 ipv6 mld snooping

Description	Multicast Listener Discovery	
Syntax	ipv6 mld snooping filter <profile_name> ipv6 mld snooping immediate-leave ipv6 mld snooping max-groups <throttling> ipv6 mld snooping mrouter	
Parameter		
	Name	**Description**
	<profile_name>	<word16> Profile name in 16 characters
	immediate-leave	Immediate leave configuration
	<throttling>	<1-10> Maximum number of MLD group registration
	mrouter	Multicast router port configuration

3.3.34 ipv6 verify source (For 90W PoE Model)

Description	Verify source command	
Syntax	ipv6 verify source ipv6 verify source limit <max_dynamic_clients>	
Parameter		
	Name	**Description**
	source	Source command
	<max_dynamic_clients>	<0-2> The number of max dynamic clients (0, 1 or 2)

3.3.35 lacp

Description	Enable LACP on an interface
Syntax	lacp
Parameter	None

3.3.36 lacp key (For 30W PoE Model)

Description	Key of the LACP aggregation	
Syntax	lacp key { <v_1_to_65535> | auto }	
Parameter		
	Name	**Description**
	<v_1_to_65535>	<1-65535> Key value

	auto	Choose a key based on port speed

3.3.37 lacp port-priority

Description	Sets the LACP port priority	
Syntax	lacp port-priority <1-65535>	
Parameter		
	Name	**Description**
	<1-65535>	Priority value, lower means higher priority

3.3.38 lacp role (For 30W PoE Model)

Description	Active / Passive (speak if spoken to) role	
Syntax	lacp role { active | passive }	
Parameter		
	Name	**Description**
	active	Transmit LACP BPDUs continously
	passive	Wait for neighbor LACP BPDUs before transmitting

3.3.39 lacp timeout

Description	Set the LACP timeout, i.e. how fast to transmit BPDUs, once a sec or once each 30 sec.	
Syntax	lacp timeout { fast | slow }	
Parameter		
	Name	**Description**
	fast	Transmit BPDU each second (fast timeout)
	slow	Transmit BPDU each 30th second (slow timeout)

3.3.40 lldp cdp-aware

Description	Configures if the interface shall be CDP aware (CDP discovery information is added to the LLDP neighbor table)
Syntax	lldp cdp-aware
Parameter	None

3.3.41 lldp med media-vlan policy-list

Description	Use the media-vlan policy-list to assign policy to the interface	
Syntax	lldp med media-vlan policy-list <range_list>	
Parameter		
	Name	**Description**
	<range_list>	Policies to assign to the interface

3.3.42 lldp med transmit-tlv

Description	Use the lldp med transmit-tlv to configure which TLVs to transmit to link partner.	
Syntax	lldp med transmit-tlv [capabilities] [location] [network-policy] [poe]	
Parameter		
	Name	**Description**
	[capabilities]	Enable transmission of the optional capabilities TLV
	[location]	Enable transmission of the optional location TLV
	[network-policy]	Enable transmission of the optional network-policy TLV
	[poe]	Enable/Disable transmission of the optional PoE TLV

3.3.43 lldp med type

Description	Select if the interface is working as 'Network Connectivity Device' or an 'Endpoint Device'. The difference between working as 'Network Connectivity Device' and an 'Endpoint Device' is a question of who is initializing the LLDP-MED TLVs transmission. A 'Network Connectivity Device' is not starting LLDP-MED TLVs transmission until it has detected an 'Endpoint Device' as link partner. An 'Endpoint Device' will start LLDP-MED TLVs transmission at once.	
Syntax	lldp med type {connectivity | end-point}	
Parameter		
	Name	**Description**
	connectivity	Work as connectivity device
	end-point	Work as end-point device

3.3.44 lldp receive

Description	Sets if switch shall update LLDP entry table with incoming LLDP information.
Syntax	lldp receive
Parameter	None

3.3.45 lldp tlv-select

Description	Enables/disables LLDP optional TLVs.	
Syntax	lldp tlv-select {management-address | port-description | system-capabilities | system-description | system-name}	
Parameter		
	Name	**Description**
	management-address	Enable/Disable transmission of management address
	port-description	Enable/Disable transmission of port description
	system-capabilities	Enable/Disable transmission of system capabilities
	system-description	Enable/Disable transmission of system description
	system-name	Enable/Disable transmission of system name

3.3.46 lldp transmit

Description	Sets if switch shall transmit LLDP frames
Syntax	lldp transmit
Parameter	None

3.3.47 lldp trap (For 90W PoE Model)

Description	Configures if an SNMP trap shall be emitted when the LLDP neighbor table changes for the interface
Syntax	lldp trap
Parameter	None

3.3.48 loop-protect

Description	Enable loop protection function on this interface
Syntax	loop-protect
Parameter	None

3.3.49 loop-protect action

Description	Configure the action taken when loops are detected on a port

Syntax	loop-protect action { [shutdown] [log] }	
Parameter		
	Name	**Description**
	[shutdown]	Shutdown port
	[log]	Generate log

3.3.50 loop-protect tx-mode

Description	Enable a port to actively generate loop protection PDUs
Syntax	loop-protect tx-mode
Parameter	None

3.3.51 mac address-table learning

Description	Enable learning on port	
Syntax	mac address-table learning [secure]	
Parameter		
	Name	**Description**
	[secure]	Port Secure mode

3.3.52 media-type

Description	Set up media type	
Syntax	media-type { rj45 | sfp | dual }	
Parameter		
	Name	**Description**
	rj45	RJ45 interface (copper interface)
	sfp	SFP interface (fiber interface)
	dual	Dual media interface (cu & fiber interface)

3.3.53 mrp periodic (For 90W PoE Model)

Description	Use this MRP per-port configuration command to enable PeriodicTransmission on that port
Syntax	mrp periodic
Parameter	None

3.3.54 mrp timers default (For 90W PoE Model)

Description	Use this MRP per-port configuration command to set the MRP timers to their default values on that port
Syntax	mrp timers default
Parameter	None

3.3.55 mrp timers (For 90W PoE Model)

Description	Use this MRP per-port configuration command to configure the MRP timers on that port	
Syntax	mrp timers { [join-time <1-20>] [leave-time <60-300>] [leave-all-time <1000-5000>] }*1	
Parameter		
	Name	**Description**
	<1-20>	Join-time in units of centiseconds. Range is 1-20. Default is 20
	<60-300>	Leave-time in units of centiseconds. Range is 60-300. Default is 60
	<1000-5000>	leave-all-time in units of centiseconds Range is 1000-5000. Default is 1000

3.3.56 mtu

Description	Use mtu to specify maximum frame size (1520-max-for-platform bytes)	
Syntax	mtu <max_length>	
Parameter		
	Name	**Description**
	<max_length>	<1520-10240> Maximum acceptable Rx frame size in bytes

3.3.57 mvr immediate-leave

Mode	Interface Config Mode
Description	Start Immediate-leave of MVR for specific interface
Syntax	mvr immediate-leave
Parameter	None

3.3.58 mvr name <word16> type

Description	Configure port role of specific MVR profile for specific interface	
Syntax	mvr name <word16> type { source | receiver }	
Parameter		
	Name	**Description**
	<word16>	MVR multicast VLAN name. < 16 characters
	source	MVR source port
	receiver	MVR receiver port

3.3.59 mvr vlan <vlan_list> type

Description	Specifies the VLAN in which multicast data is received	
Syntax	mvr vlan <vlan_list> type { source | receiver }	
Parameter		
	Name	**Description**
	<vlan_list>	MVR multicast VLAN list. 1-4095
	source	MVR source port
	receiver	MVR receiver port

3.3.60 mvrp (For 90W PoE Model)

Description	Use this MVRP interface configuration command to enable the MVRP feature on a specific interface
Syntax	mvrp
Parameter	None

3.3.61 poe (For 90W PoE Model)

Description	Set up PoE on an interface	
Syntax	poe lldp poe mode { disable | enable | schedule | auto-restart } poe operation { standard | plus | plusplus | poh } poe ping address { <v_ipv4_addr> | { <v_ipv6_addr> interface vlan <v_vlan_id> } } poe ping fail-action { nothing | { reboot [power-off <offtime_val>] } } poe ping { interval <interval_val> } [retry <retry_val>] poe power limit <power> poe priority { low | high | critical } poe reset <hh> <mm> <day_range_list> poe restart poe schedule { mon | tue | wed | thu | fri | sat | sun } { <time_range_list> }	
Parameter		
	Name	**Description**

	Lldp (For 90W PoE Model)	Enable poe lldp functionality
	mode	PoE mode.
	disable	Set poe to disable
	enable	Set poe to enable always
	schedule	Set poe to enable by scheduling
	auto-restart	Set poe to auto-restart by ping result, schedule mode still valid
	operation	Operation mode.
	standard	802.3at/af
	plus	uPoE
	plusplus	802.3bt
	poh	Set operation mode to PoH
	<v_ipv4_addr> (For 90W PoE Model)	IPv4 address to ping, i.e. PD's ip address
	<v_ipv6_addr> (For 90W PoE Model)	IPv6 address to ping, i.e. PD's ip address
	<v_vlan_id> (For 90W PoE Model)	VLAN ID
	Nothing (For 90W PoE Model)	Do nothing if ping fail
	<offtime_val> (For 90W PoE Model)	<3-120> Power off time interval (time to reboot PD)
	<interval_val> (For 90W PoE Model)	<10-120> Interval by seconds
	<retry_val> (For 90W PoE Model)	<1-5> Ping retry in a ping cycle
	<power> (For 30W PoE Model)	Maximum power for the interface (0-15.4 Watt for PoE standard mode, 0-30.0 Watt for PoE plus mode)
	priority	Interface priority.
	low	Set priority to low.
	high	Set priority to high.
	critical	Set priority to critical.
	reset	PoE power reset time.
	<hh>	<0-23> Hour.
	<mm>	<0-59> Minute.
	<day_range_list>	Day(s).(1:Sunday, 2:Monday, 3:Tuesday, 4:Wednesday, 5.Thuesday, 6:Friday, 7:Saturday)
	restart (For 90W PoE Model)	Set power off and on immediately, to reset PD
	schedule	PoE power scheduling during the week.
	mon	Monday
	tue	Tuesday
	wed	Wednesday
	thu	Thursday
	fri	Friday
	sat	Saturday
	sun	Sunday
	<time_range_list>	There are 48 time interval one day. Each interval has 30 minutes. ([1]<00:00-00:29> [2]<00:30-00:59> [3]<01:00-01:29> ... [47]<23:00-23:29> [48]<23:30-23:59>)

3.3.62 port-security (For 90W PoE Model)

Description	Set up port security on an interface	
Syntax	port-security port-security mac-address { [sticky] [<mac> [vlan <vlan_id>]] }*1 port-security maximum <limit> port-security maximum-violation <violate_limit> port-security violation { protect | restrict | shutdown }	
Parameter		
	Name	**Description**
	[sticky]	Add a sticky MAC address (not recommended to do so manually)
	<mac>	Unicast MAC address to add
	<vlan_id>	VLAN ID
	<limit>	<0-1023> Number of addresses
	<violate_limit>	<1-1023> Maximum number of violation MAC addresses
	protect	Don't do anything
	restrict	Keep recording violating MAC addresses
	shutdown	Shutdown the port

3.3.63 port-security (For 30W PoE Model)

Description	Set up port security on interface	
Syntax	port-security port-security maximum [<v_1_to_1024>] port-security violation { protect | trap | trap-shutdown | shutdown }	
Parameter		
	Name	**Description**
	<v_1_to_1024>	<1-1024> Number of addresses
	protect	Don't do anything
	trap	Send an SNMP trap
	trap-shutdown	Send an SNMP trap and shutdown the port
	shutdown	Shutdown the port

3.3.64 priority-flowcontrol prio (For 90W PoE Model)

Description	Use priority flowcontrol (802.1Qbb) to configure flow control per priority	
Syntax	priority-flowcontrol prio <0~7>	
Parameter		
	Name	**Description**
	<0~7>	Range of priorities (e.g. 0-4,6)

3.3.65 pvlan <range_list>

Description	Use the pvlan add or remove command to add a port from a PVLAN	
Syntax	pvlan <range_list>	
Parameter		
	Name	**Description**
	<range_list>	List of PVLANs. Range is from 1 to number of ports

3.3.66 pvlan isolation

Description	Use the pvlan isolation command to add the port into an isolation group
Syntax	pvlan isolation
Parameter	None

3.3.67 qos class <0-7> (For 90W PoE Model)

Description	Set qos class of service ID configuration	
Syntax	qos class <0-7>	
Parameter		
	Name	**Description**
	<0-7>	Class of service ID configuration

3.3.68 qos cos <0-7>

Description	Configure CoS of QoS for specific interface.	
Syntax	qos cos <0-7>	
Parameter		
	Name	**Description**
	<0-7>	Specific class of service

3.3.69 qos cut-through queue (For 90W PoE Model)

Description	Configure queue of Cut-through.	
Syntax	qos cut-through queue <0~7>	
Parameter		
	Name	**Description**
	<0~7>	Specific queue or range

3.3.70 qos dei <0-1>

Description	Configure DEI of QoS for specific interface.	
Syntax	qos dei <0-1>	
Parameter		
	Name	**Description**
	<0-1>	Specific Drop Eligible Indicator

3.3.71 qos dpl <0-3>

Description	Configure DPL of QoS for specific interface.	
Syntax	qos dpl <0-3>	
Parameter		
	Name	**Description**
	<0-3>	Specific drop precedence level

3.3.72 qos dscp-classify

Description	Configure DSCP Classify of QoS for specific interface	
Syntax	qos dscp-classify { zero | selected | any }	
Parameter		
	Name	**Description**
	dscp-classify	DSCP ingress classification
	zero	Classify to new DSCP if DSCP is 0
	selected	Classify to new DSCP if classify is enabled for specific DSCP value in global DSCP classify map
	any	Classify to new DSCP always

3.3.73 qos dscp-remark

Description	Configure DSCP egress remarking of QoS for specific interface	
Syntax	qos dscp-remark { rewrite | remap | remap-dp }	
Parameter		
	Name	**Description**
	dscp-remark	DSCP egress remarking
	rewrite	Rewrite DSCP field with classified DSCP value

		(no translation)
	remap	Rewrite DSCP field using classified DSCP remapped through global dscp-egress-translation map
	remap-dp	Rewrite DSCP field using classified DSCP and DPL remapped through global dscp-egress-translation map

3.3.74 qos dscp-translate

Mode	Interface Config Mode
Description	Configure DSCP ingress translation of QoS for specific interface
Syntax	qos dscp-translate
Parameter	None

3.3.75 qos egress-map (For 90W PoE Model)

Description	Implement egress map association ID in the port	
Syntax	qos egress-map <0-511>	
Parameter		
	Name	**Description**
	<0-511>	Map ID

3.3.76 qos ingress-map (For 90W PoE Model)

Description	Implement the ingress map association ID in the port	
Syntax	qos ingress-map <0-255>	
Parameter		
	Name	**Description**
	<0-255>	Map ID

3.3.77 qos map cos-tag

Description	Configure QoS class, DP level to PCP, DEI Mapping of QoS for specific interface	
Syntax	qos map cos-tag cos <0~7> dpl <0~1> pcp <0-7> dei <0-1>	
Parameter		
	Name	**Description**
	cos-tag	Map for cos to tag configuration
	cos	Specify class of service
	<0~7>	Specific class of service or range Specific PCP
	dpl	Specify drop precedence level
	<0~1>	Specific drop precedence level or range Specific DEI
	pcp	Specify PCP (Priority Code Point)
	dei	Specify DEI (Drop Eligible Indicator)

3.3.78 qos map tag-cos

Description	Configure PCP, DEI to QoS class, DP level Mapping of QoS for specific interface	
Syntax	qos map tag-cos pcp <0~7> dei <0~1> cos <0-7> dpl <0-3>	
Parameter		
	Name	**Description**
	<0-7>	Specific Priority Code Point Specific class of service
	<0~1>	Specific Drop Eligible Indicator

	<0-3>	Specific drop precedence level

3.3.79 qos pcp <0-7>

Description	Configure PCP of QoS for specific interface.	
Syntax	qos pcp <0-7>	
Parameter		
	Name	**Description**
	<0-7>	Specific Priority Code Point

3.3.80 qos policer

Description	Configure qos policer	
Syntax	qos policer <rate> [kbps | mbps | fps | kfps] [flowcontrol]	
Parameter		
	Name	**Description**
	policer	Policer configuration
	<rate>	<1-13128147> Policer rate (default kbps). Internally rounded up to the nearest value supported by the port policer.
	kbps	Unit is kilobits per second (default)
	mbps	Unit is Megabits per second
	fps	Unit is frames per second
	kfps	Unit is kiloframes per second
	[flowcontrol]	Enable flow control

3.3.81 qos qce (For 30W PoE Model)

Description	QoS Control Entry	
Syntax	qos qce { [addr { source | destination }]	
Parameter		
	Name	**Description**
	addr	Setup address match mode
	source	Match SMAC and SIP (default)
	destination	Match DMAC and DIP

3.3.82 qos queue-policer queue

Description	Configure Ingress Queue Policers Rate of QoS for specific interface	
Syntax	qos queue-policer queue <queue> <rate> [kbps | mbps]	
Parameter		
	Name	**Description**
	queue-policer	Queue policer configuration
	queue	Specify queue
	<queue>	<0~7> Specific queue or range
	<rate>	<1-13128147> Policer rate (default kbps). Internally rounded up to the nearest value supported by the port policer.
	kbps	Unit is kilobits per second (default)
	mbps	Unit is Megabits per second

3.3.83 qos queue-shaper queue

Description	Configure Egress Queue Shapers Rate of QoS for specific interface	
Syntax	qos queue-shaper queue <queue> <rate> [kbps | mbps] [excess | credit] [rate-type { line | data }]	
Parameter		
	Name	**Description**

	queue-shaper	Queue shaper configuration
	queue	Specify queue
	<queue>	<0~7> Specific queue or range
	<rate>	<1-13107100> Shaper rate (default kbps). Internally rounded up to the nearest value supported by the queue shaper.
	kbps	Unit is kilobits per second (default)
	mbps	Unit is Megabits per second
	excess	Allow use of excess bandwidth
	credit	Allow use of credit based shaper
	rate-type	Setup shaping rate type
	line	Line rate shaping
	data	Data rate shaping

3.3.84 qos shaper

Description	Configure Egress Port Shapers Rate of QoS for specific interface	
Syntax	qos shaper <rate> [kbps | mbps] [rate-type { line | data }]	
Parameter		
	Name	**Description**
	shaper	Shaper configuration
	<rate>	<1-13107100> Shaper rate (default kbps). Internally rounded up to the nearest value supported by the port shaper.
	kbps	Unit is kilobits per second (default)
	mbps	Unit is Megabits per second
	rate-type	Setup shaping rate type
	line	Line rate shaping
	data	Data rate shaping

3.3.85 qos storm (For 90W PoE Model)

Description	Configure storm policer	
Syntax	qos storm { unicast | broadcast | unknown } <rate> [fps | kfps | kbps | mbps]	
Parameter		
	Name	**Description**
	storm	Storm policer
	unicast	Police unicast frames
	broadcast	Police broadcast frames
	unknown	Police unknown (flooded) frames
	<rate>	<1-13128147> Policer rate (default kbps). Internally rounded up to the nearest value supported by the storm policer
	fps	Unit is frames per second
	kfps	Unit is kiloframes per second
	kbps	Unit is kilobits per second (default)
	mbps	Unit is Megabits per second

3.3.86 qos tag-remark

Description	Enable Tag-remark default mode of QoS for specific interface	
Syntax	qos tag-remark { pcp <0-7> dei <0-1> | mapped }	
Parameter		
	Name	**Description**
	tag-remark	Tag remarking configuration

	pcp	Specify default PCP
	<0-7>	Specific PCP
	dei	Specify default DEI
	<0-1>	Specific DEI
	mapped	Used mapped values (COS, DPL -> PCP, DEI)

3.3.87 qos trust dscp

Description	Enable DSCP Classification of QoS for specific interface.
Syntax	qos trust dscp
Parameter	None

3.3.88 qos trust tag

Description	Enable VLAN tag Classification of QoS for specific interface.
Syntax	qos trust tag
Parameter	None

3.3.89 qos wrr <w0> <w1>[<w2> [<w3>[<w4>[<w5>[<w6>[<w7>]]]]]]

Description	Specifies qos wrr mode.	
Syntax	qos wrr <w0> <w1>[<w2> [<w3>[<w4>[<w5>[<w6>[<w7>]]]]]]	
Parameter		
	Name	**Description**
	<w0>	<1-100> Weight for queue 0
	<w1>	<1-100> Weight for queue 1
	<w2>	<1-100> Weight for queue 2
	<w3>	<1-100> Weight for queue 3
	<w4>	<1-100> Weight for queue 4
	<w5>	<1-100> Weight for queue 5
	<w6> (For 90W PoE Model)	<1-100> Weight for queue 6
	<w7> (For 90W PoE Model)	<1-100> Weight for queue 7

3.3.90 rmon collection history

Description	Configure RMON History Configuration for specific interface	
Syntax	rmon collection history <1-65535> [buckets <1-65535>] [interval <1-3600>]	
Parameter		
	Name	**Description**
	buckets	Requested buckets of intervals. Default is 50 buckets
	interval	Interval to sample data for each bucket. Default is 1800 seconds
	<1-65535>	History entry ID Requested buckets of intervals
	<1-3600>	Interval in seconds to sample data for each bucket

3.3.91 rmon collection stats

Description	Configure RMON Statistics Configuration for specific interface	
Syntax	rmon collection stats <1-65535>	
Parameter		
	Name	**Description**

	<1-65535>	Statistics entry ID

3.3.92 sflow

Description	Enables flow sampling on this port.
Syntax	sflow
Parameter	None

3.3.93 sflow counter-poll-interval

Description	Configures the sFlow poll interval for an interface	
Syntax	sflow counter-poll-interval [<1-3600>]	
Parameter		
	Name	**Description**
	<1-3600>	Seconds

3.3.94 sflow max-sampling-size

Description	Specifies the maximum number of bytes to transmit per flow sample	
Syntax	sflow max-sampling-size [<14-200>]	
Parameter		
	Name	**Description**
	<14-200>	Bytes

3.3.95 sflow sampling-rate (For 90W PoE Model)

Description	Specifies the statistical sampling rate	
Syntax	sflow sampling-rate [<1-32767>]	
Parameter		
	Name	**Description**
	[<1-32767>]	Sampling rate

3.3.96 sflow sampling-rate (For 30W PoE Model)

Description	Specifies the statistical sampling rate	
Syntax	sflow sampling-rate [<sampling_rate>]	
Parameter		
	Name	**Description**
	<sampling_rate>	<1-4294967295> Sampling rate

3.3.97 shutdown

Description	Shutdown the interface
Syntax	shutdown
Parameter	None

3.3.98 snmp-server host (For 30W PoE Model)

Description	Set SNMP server's configurations	
Syntax	snmp-server host <conf_name> traps [linkup] [linkdown] [lldp]	
Parameter		
	Name	**Description**
	<conf_name>	<word32> Name of the host configuration
	linkup	Link up event
	linkdown	Link down event
	lldp	LLDP event

3.3.99 spanning-tree

Description	Enable Spanning Tree on this interface.

Syntax	spanning-tree
Parameter	None

3.3.100 spanning-tree auto-edge

Description	Enable auto edge function on this interface. When enabled, a port is automatically determined to be at the edge of the network when it receives no BPDUs
Syntax	spanning-tree auto-edge
Parameter	None

3.3.101 spanning-tree bpdu-guard

Description	Enable BPDU guard function on this interface. This feature protects ports from receiving BPDUs. It can prevent loops by shutting down a port when a BPDU is received instead of putting it into the spanning tree discarding state. If enabled, the port will disable itself upon receiving valid BPDU's
Syntax	spanning-tree bpdu-guard
Parameter	None

3.3.102 spanning-tree edge

Description	When an interface is attached to end nodes,can set it to Edge.
Syntax	spanning-tree edge
Parameter	None

3.3.103 spanning-tree link-type

Description	Sets the link type attached to an interface	
Syntax	spanning-tree link-type { point-to-point | shared | auto }	
Parameter		
	Name	**Description**
	point-to-point	Forced to point-to-point
	shared	Forced to Shared
	auto	Auto detect

3.3.104 spanning-tree mst <0-7> cost

Description	Configure MSTI and its' path cost value	
Syntax	spanning-tree mst <0-7> cost { <1-200000000> | auto }	
Parameter		
	Name	**Description**
	<0-7>	Instance (CIST=0, MSTI1=1...)
	<1-200000000>	Cost range
	auto	Use auto cost

3.3.105 spanning-tree mst <0-7> port-priority

Description	Configure MSTI and its' port priority	
Syntax	spanning-tree mst <0-7> port-priority <0-240>	
Parameter		
	Name	**Description**
	<0-7>	Instance (CIST=0, MSTI1=1...)
	<0-240>	Represents the priority field for the port identifier. Port priority must be divisible by 16, supported values are 0/16/32/48/64/80/96/112/128/144/160/176/192/208/224/240. Default value is 128

3.3.106 spanning-tree restricted-role

Description	Enable restricted role function. If enabled, this causes the port not to be selected as Root Port for the CIST or any MSTI, even if it has the best spanning tree priority
Syntax	spanning-tree restricted-role
Parameter	None

3.3.107 spanning-tree restricted-tcn

Description	Enable restricted TCN function. If enabled, this causes the port not to propagate received topology change notifications and topology changes to other ports
Syntax	spanning-tree restricted-tcn
Parameter	None

3.3.108 speed (For 90W PoE Model)

Description	Configures interface speed. If you use 10, 100, 1000 or one of the other keywords with the auto keyword the port will only advertise the specified speeds.	
Syntax	speed { 10 | 100 | 1000 | 2500 | 5g | 10g | auto }	
Parameter		
	Name	**Description**
	10	Force 10 Mbps
	100	Force 100 Mbps
	1000	Force 1000 Mbps
	2500	Force 2500 Mbps
	5g	Force 5 Gbps
	10g	Force 10 Gbps
	auto	Let the switch application decide whether to run aneg or a fixed speed - depending on port type and/or SFP transceiver types

3.3.109 speed (For 30W PoE Model)

Description	Configures interface speed. If you use 10, 100, 1000 or one of the other keywords with the auto keyword the port will only advertise the specified speeds.	
Syntax	speed { 1000 | 100 | 10 | auto { [10] [100] [1000] } }	
Parameter		
	Name	**Description**
	10	10 Mbps
	100	100 Mbps
	1000	1000 Mbps
	auto	Let the switch application decide whether to run aneg or a fixed speed - depending on port type and/or SFP transceiver types

3.3.110 switchport access vlan

Description	Use the switchport access vlan command to configure a port to a VLAN	
Syntax	switchport access vlan <pvid>	
Parameter		
	Name	**Description**
	<pvid>	VLAN ID of the VLAN when this port is in access mode. 1-4095

3.3.111 switchport forbidden vlan

Description	Adds or removes forbidden VLANs from the current list of forbidden VLANs	
Syntax	switchport forbidden vlan { add | remove } <vlan_list>	
Parameter		
	Name	**Description**
	add	Add to existing list
	remove	Remove from existing list
	<vlan_list>	VLAN IDs. 1-4095

3.3.112 switchport hybrid acceptable-frame-type

Description	Set acceptable frame type on a port of hybrid of the interface	
Syntax	switchport hybrid acceptable-frame-type { all | tagged | untagged }	
Parameter		
	Name	**Description**
	all	Allow all frames
	tagged	Allow only tagged frames
	untagged	Allow only untagged frames

3.3.113 switchport hybrid allowed vlan

Description	Set allowed VLAN characteristics when interface is in hybrid mode	
Syntax	switchport hybrid allowed vlan { all | none | [add | remove | except] <vlan_list> }	
Parameter		
	Name	**Description**
	all	All VLANs
	none	No VLANs
	add	Add VLANs to the current list
	remove	Remove VLANs from the current list
	except	All VLANs except the following
	<vlan_list>	VLAN IDs of the allowed VLANs when this port is in hybrid mode. 1-4095

3.3.114 switchport hybrid egress-tag

Description	Set egress VLAN tagging of hybrid of the interface	
Syntax	switchport hybrid egress-tag { none | all [except-native] }	
Parameter		
	Name	**Description**
	all	Tag all frames
	none	No egress tagging
	[except-native]	Tag all frames except frames classified to native VLAN of the hybrid port

3.3.115 switchport hybrid ingress-filtering

Description	Set VLAN Ingress filter of hybrid of the interface
Syntax	switchport hybrid ingress-filtering
Parameter	None

3.3.116 switchport hybrid native vlan

Description	Use the switchport native vlan command to configure a port VLAN ID for a hybrid port
Syntax	switchport hybrid native vlan <pvid>
Parameter	

	Name	Description
	<pvid>	VLAN ID of the native VLAN when this port is in hybrid mode. 1-4095

3.3.117 switchport hybrid port-type

Description	Set hybrid port-type of the interface	
Syntax	switchport hybrid port-type { unaware | c-port | s-port | s-custom-port }	
Parameter		
	Name	Description
	unaware	Port in not aware of VLAN tags
	c-port	Customer port
	s-port	Provider port
	s-custom-port	Custom Provider port

3.3.118 switchport mode

Description	Use the switchport mode command to define the type of the port.	
Syntax	switchport mode { access | trunk | hybrid }	
Parameter		
	Name	Description
	access	Set mode to ACCESS unconditionally
	trunk	Set mode to TRUNK unconditionally
	hybrid	Set mode to HYBRID unconditionally

3.3.119 switchport trunk allowed vlan

Description	Set allowed VLAN characteristics when interface is in trunk mode	
Syntax	switchport trunk allowed vlan { all | none | [add | remove | except] <vlan_list> }	
Parameter		
	Name	Description
	all	All VLANs
	none	No VLANs
	add	Add VLANs to the current list
	remove	Remove VLANs from the current list
	except	All VLANs except the following
	<vlan_list>	VLAN IDs of the allowed VLANs when this port is in trunk mode. 1-4095

3.3.120 switchport trunk native vlan

Description	Use the switchport native vlan command to configure a port VLAN ID for a trunk port	
Syntax	switchport trunk native vlan <pvid>	
Parameter		
	Name	Description
	<pvid>	VLAN ID of the native VLAN when this port is in trunk mode. 1-4095

3.3.121 switchport trunk vlan tag native

Description	Set vlan tag in native of trunk of the interface
Syntax	switchport trunk vlan tag native
Parameter	None

3.3.122 switchport vlan ip-subnet

Description	VCL IP Subnet-based VLAN configuration.

	Source IP address and mask (Format: xx.xx.xx.xx/mm.mm.mm.mm).	
Syntax	switchport vlan ip-subnet [id <1-128>] <ipv4_subnet> vlan <vlan_id>	
Parameter		
	Name	**Description**
	<1-128>	The index of the IP subnet entry (deprecated)
	<ipv4_subnet>	Source IP address and mask (Format: xx.xx.xx.xx/mm.mm.mm.mm)
	<vlan_id>	VLAN ID required for the group to VLAN mapping (Range: 1-4095)

3.3.123 switchport vlan mac

Description	Use the switchport vlan mac command to associate a MAC address to VLAN ID.	
Syntax	switchport vlan mac <mac_ucast> vlan <vlan_id>	
Parameter		
	Name	**Description**
	<mac_ucast>	48 bit unicast MAC address: xx:xx:xx:xx:xx:xx
	<vlan_id>	VLAN ID required for the group to VLAN mapping (Range: 1-4095)

3.3.124 switchport vlan protocol group

Description	Use the switchport vlan protocol group command to add group to vlan mapping	
Syntax	switchport vlan protocol group <word16> vlan <vlan_id>	
Parameter		
	Name	**Description**
	<word16>	Group Name (Range: 1 - 16 characters)
	<vlan_id>	VLAN ID required for the group to VLAN mapping (Range: 1-4095)

3.3.125 switchport voice vlan discovery-protocol

Description	Use the switchport voice vlan discovery-protocol interface configuration command to configure to switchport voice vlan discovery-protocol.	
Syntax	switchport voice vlan discovery-protocol { oui | lldp | both }	
Parameter		
	Name	**Description**
	oui	Detect telephony device by OUI address
	lldp	Detect telephony device by LLDP
	both	Detect telephony device by OUI address and LLDP

3.3.126 switchport voice vlan mode

Description	Use the switchport voice vlan mode interface configuration command to configure to switchport voice vlan mode.	
Syntax	switchport voice vlan mode { auto | force | disable }	
Parameter		
	Name	**Description**
	auto	Enable auto detect mode
	force	Force to join Voice VLAN
	disable	Disjoin Voice VLAN

3.3.127 switchport voice vlan security

Description	Use the switchport voice vlan security interface configuration command to

	configure switchport voice vlan security mode. Use the no form of this command to globally disable switchport voice vlan security mode
Syntax	switchport voice vlan security
Parameter	None

3.3.128 vcl { dmacdip | smacsip } (For 90W PoE Model)

Description	Configure port to match on either dmac/dip or smac/sip	
Syntax	vcl { dmacdip | smacsip }	
Parameter		
	Name	**Description**
	dmacdip	Do vcl matching on dmac/dip
	smacsip	Do vcl matching on smac/sip

3.4 VLAN Mode Commands

3.4.1 name <vlan_name>

Description	Configure VLAN name.	
Syntax	name <vlan_name>	
Parameter		
	Name	**Description**
	<vlan_name>	<vword32> The ASCII name for the VLAN

3.5 Interface VLAN Mode Commands

3.5.1 ip address <ipv4_subnet> (For 90W PoE Model)

Description	IP address configuration	
Syntax	ip address <ipv4_subnet>	
Parameter		
	Name	**Description**
	<ipv4_subnet>	IP address/prefix-size

3.5.2 ip address (For 90W PoE Model)

Description	Set up IP address configuration	
Syntax	ip address { { <address> <netmask> } | { dhcp [fallback <fallback_address> <fallback_netmask> [timeout <fallback_timeout>]] [client-id { <port_type> <client_id_interface> | ascii <ascii_str> | hex <hex_str> }] [hostname <hostname>] } }	
Parameter		
	Name	**Description**
	<address>	IP address
	<netmask>	IP netmask
	<fallback_address>	DHCP fallback address
	<fallback_netmask>	DHCP fallback netmask
	<fallback_timeout>	DHCP fallback timeout in seconds. Legal values are 0 to 4294967295 seconds
	<port_type>	Select port type.
	<client_id_interface>	Port list in 1/1- max number of ports
	<ascii_str>	<word31> A unique ASCII string is taken for DHCP client identifier
	<hex_str>	<word64> A unique hexadecimal value is taken for DHCP client identifier
	<hostname>	<domain_name63> A valid name consist of a sequence of domain labels separated by '.', each domain label starting and ending with an alphanumeric character and possibly also containing '-' characters. The length of a domain label must be 63 characters or less

3.5.3 ip address (For 30W PoE Model)

Description	IPv4 address configurations	
Syntax	ip address { { <address> <netmask> } | { dhcp [option66] [fallback <fallback_address> <fallback_netmask> [timeout <fallback_timeout>]] } }	
Parameter		
	Name	**Description**
	<address>	IP address
	<netmask>	IP netmask
	dhcp	Enable DHCP
	[option66]	Enable Option66
	fallback	DHCP fallback settings
	<fallback_address>	DHCP fallback address
	<fallback_netmask>	DHCP fallback netmask
	timeout	DHCP fallback timeout

	<fallback_timeout>	DHCP fallback timeout in seconds. Legal values are 0 to 4294967295 seconds

3.5.4 ip dhcp server

Description	Enable DHCP server.
Syntax	ip dhcp server
Parameter	None

3.5.5 ip igmp snooping

Description	Enable the designated VLAN interface IGMP snooping function
Syntax	ip igmp snooping
Parameter	None

3.5.6 ip igmp snooping compatibility

Description	Configure IGMP snooping version for specific VLAN	
Syntax	ip igmp snooping compatibility { auto | v1 | v2 | v3 }	
Parameter		
	Name	**Description**
	auto	Compatible with IGMPv1/IGMPv2/IGMPv3
	v1	Forced IGMPv1
	v2	Forced IGMPv2
	v3	Forced IGMPv3

3.5.7 ip igmp snooping last-member-query-interval

Description	Configure Last-member-query-interval of IGMP snooping for specific VLAN	
Syntax	ip igmp snooping last-member-query-interval <0-31744>	
Parameter		
	Name	**Description**
	<0-31744>	0 - 31744 tenths of seconds

3.5.8 ip igmp snooping priority

Description	Configure CoS priority of IGMP snooping for specific VLAN	
Syntax	ip igmp snooping priority <0-7>	
Parameter		
	Name	**Description**
	<0-7>	CoS priority ranges from 0 to 7

3.5.9 ip igmp snooping querier

Description	Enables the IGMP Snooping Querier on a VLAN.	
Syntax	ip igmp snooping querier { election | address <ipv4_ucast> }	
Parameter		
	Name	**Description**
	election	Act as an IGMP Querier to join Querier-Election
	<ipv4_ucast>	A valid IPv4 unicast address

3.5.10 ip igmp snooping query-interval

Description	Configure Querier-interval of IGMP snooping for specific VLAN	
Syntax	ip igmp snooping query-interval <1-31744>	
Parameter		
	Name	**Description**
	<1-31744>	1 - 31744 seconds

3.5.11 ip igmp snooping query-max-response-time

Description	Configure the maximum response time	
Syntax	ip igmp snooping query-max-response-time <0-31744>	
Parameter		
	Name	**Description**
	<0-31744>	0 - 31744 tenths of seconds

3.5.12 ip igmp snooping robustness-variable

Description	Configure Robustness Variable of IGMP snooping for specific VLAN	
Syntax	ip igmp snooping robustness-variable <1-255>	
Parameter		
	Name	**Description**
	<1-255>	Packet loss tolerance count from 1 to 255

3.5.13 ip igmp snooping unsolicited-report-interval

Description	Configure Unsolicited Report Interval of IGMP snooping for specific VLAN	
Syntax	ip igmp snooping unsolicited-report-interval <0-31744>	
Parameter		
	Name	**Description**
	<0-31744>	0 - 31744 seconds

3.5.14 ipv6 address

Description	IPv6 address configuration	
Syntax	ipv6 address <subnet>	
Parameter		
	Name	**Description**
	<subnet>	IPv6 prefix x:x::y/z

3.5.15 ipv6 address dhcp (For 30W PoE Model)

Description	Setting the interface.	
Syntax	ipv6 address dhcp [rapid-commit]	
Parameter		
	Name	**Description**
	dhcp	Enable DHCPv6 client function
	[rapid-commit]	Enable DHCPv6 client Rapid-Commit option

3.5.16 ipv6 mld snooping

Description	Snooping MLD
Syntax	ipv6 mld snooping
Parameter	None

3.5.17 ipv6 mld snooping compatibility

Description	Interface compatibility	
Syntax	ipv6 mld snooping compatibility { auto | v1 | v2 }	
Parameter		
	Name	**Description**
	auto	Compatible with MLDv1/MLDv2
	v1	Forced MLDv1
	v2	Forced MLDv2

3.5.18 ipv6 mld snooping last-member-query-interval

Description	Last Member Query Interval in tenths of seconds
Syntax	ipv6 mld snooping last-member-query-interval <ipmc_lmqi>

Parameter		
	Name	**Description**
	<ipmc_lmqi>	<0-31744> 0 - 31744 tenths of seconds

3.5.19 ipv6 mld snooping priority

Description	Interface CoS priority	
Syntax	ipv6 mld snooping priority <cos_priority>	
Parameter		
	Name	**Description**
	<cos_priority>	CoS priority ranges from 0 to 7

3.5.20 ipv6 mld snooping querier election

Description	Act as a MLD Querier to join Querier-Election
Syntax	ipv6 mld snooping querier election
Parameter	None

3.5.21 ipv6 mld snooping query-interval

Description	Query Interval in seconds	
Syntax	ipv6 mld snooping query-interval <ipmc_qi>	
Parameter		
	Name	**Description**
	<ipmc_qi>	1 - 31744 seconds

3.5.22 ipv6 mld snooping query-max-response-time

Description	Configure the maximum response time	
Syntax	ipv6 mld snooping query-max-response-time <ipmc_qri>	
Parameter		
	Name	**Description**
	<ipmc_qri>	0 - 31744 tenths of seconds

3.5.23 ipv6 mld snooping robustness-variable

Description	Robustness Variable	
Syntax	ipv6 mld snooping robustness-variable <ipmc_rv>	
Parameter		
	Name	**Description**
	<ipmc_rv>	Packet loss tolerance count from 1 to 255

3.5.24 ipv6 mld snooping unsolicited-report-interval

Description	Unsolicited Report Interval in seconds	
Syntax	ipv6 mld snooping unsolicited-report-interval <ipmc_uri>	
Parameter		
	Name	**Description**
	<ipmc_uri>	0 - 31744 seconds

3.6 CFM MD Mode Commands (For 90W PoE Model)

3.6.1 format

Description	Change format of this domain.	
Syntax	format {none | string <string1-43>}	
Parameter		
	Name	**Description**
	none	Not present (type 1)
	string	ASCII string (type 4)
	<string1-43>	Actual domain name (1-43 characters enclosed in double-quotes)

3.6.2 interface-status-tlv

Description	Include or exclude Interface Status TLV in PDUs included in this domain or let higher level determine (may be overridden in service)	
Syntax	interface-status-tlv {disable | enable | defer}	
Parameter		
	Name	**Description**
	disable	Exclude Interface Status TLV from PDUs in this domain.
	enable	Include Interface Status TLV in PDUs domain
	defer	Let the global CFM configuration determine whether to include Interface Status TLV in PDUs in this domain (default)

3.6.3 level <level>

Description	The command change level (MEG-level) of this domain. Default is 0.	
Syntax	level <level>	
Parameter		
	Name	**Description**
	<level>	level value: 0 ~ 7

3.6.4 organization-specific-tlv

Description	Include or exclude Organization-Specific TLV in PDUs included in this MD or let higher level determine (may be overridden in service)	
Syntax	organization-specific-tlv {disable | defer}	
Parameter		
	Name	**Description**
	disable	Exclude Organization-Specific TLV from PDUs in this domain.
	defer	Let the global CFM configuration determine whether to include an Organization-Specific TLV in PDUs in this domain (default)

3.6.5 port-status-tlv

Description	Include or exclude Port Status TLV in PDUs included in this domain or let higher level determine (may be overridden in service)	
Syntax	port-status-tlv {disable | enable | defer}	
Parameter		
	Name	**Description**
	disable	Exclude Port Status TLV from PDUs in this domain.

	enable	Include Port Status TLV in PDUs in this domain.
	defer	Let the global CFM configuration determine whether to include Port Status TLV in PDUs in this domain (default)

3.6.6 sender-id-tlv

Description	Default Sender ID TLV format to be used in PDUs in this domain (may be overridden in service)	
Syntax	sender-id-tlv {disable | chassis | management | chassis-management | defer}	
Parameter		
	Name	**Description**
	disable	Exclude Sender ID TLV from PDUs in this domain.
	chassis	Enable Sender ID TLV and send Chassis ID (MAC Address)
	management	Enable Sender ID TLV and send Management address (IPv4 Address)
	chassis-management	Enable Sender ID TLV and send both Chassis ID (MAC Address) and Management Address (IPv4 Address)
	defer	Let the global CFM configuration determine whether to send Sender ID TLVs on PDUs in this domain (default)

3.6.7 service

Description	Create or modify a Service (Maintenance Association/MA)	
Syntax	service <kword1-15>	
Parameter		
	Name	**Description**
	<kword1-15>	<kword1-15> : Service name

3.7 CFM MA Mode Commands (For 90W PoE Model)

3.7.1 continuity-check interval

Description	Specify the CCM interval for all MEPs in this service (maintenance association). Default is 1s.	
Syntax	continuity-check interval {3.3ms | 10ms | 100ms | 1s | 10s | 1min | 10min}	
Parameter		
	Name	**Description**
	3.3ms	3.3 ms between CCM frames (300 fps)
	10ms	10 ms between CCM frames (100 fps)
	100ms	100 ms between CCM frames (10 fps)
	1s	1 second between CCM frames (1 fps)
	10s	10 seconds between CCM frames
	1min	1 minute between CCM frames
	10min	10 minutes between CCM frames

3.7.2 format

Description	Configure the format used in MAID/MEGID for this service (maintenance association).	
Syntax	format {string <string1-45> | integer <0-65535> | primary-vid | icc <string13-13> | icc-cc <string15-15>}	
Parameter		
	Name	**Description**
	string	Character string (type 2)
	<string1-45>	Short MA name as string (1-45 printable characters enclosed in double-quotes, type 2)
	integer	2-octet integer (type 3)
	<0-65535>	Integer in range 0-65535 (type 3)
	primary-vid	2-octet integer (type 3) containing this service's primary VID.
	icc	ITU-T ICC-based format (type 32)
	<string13-13>	ITU-T ICC-based format (13 alphanumeric characters enclosed in double-quotes, type 32)
	icc-cc	ITU-T ICC-CC-based format (type 33)
	<string15-15>	ITU-T ICC-CC-based format (2 uppercase letters, 13 alphanumeric characters with an optional '/' in position 4-8, type 33)

3.7.3 interface-status-tlv

Description	Include or exclude Interface Status TLV in PDUs included in MEPs running in this service or let domain determine.	
Syntax	interface-status-tlv {disable | enable | defer}	
Parameter		
	Name	**Description**
	disable	Exclude Interface Status TLV from PDUs in MEPs running in this service
	enable	Include Interface Status TLV in PDUs in MEPs running in this service
	defer	Let the domain's Interface Status TLV configuration determine whether to include Interface Status TLV in PDUs in MEPs running

		in this service (default)

3.7.4 mep

Description	Create or modify a Maintenance association EndPoint (MEP).	
Syntax	mep <1-8191>	
Parameter		
	Name	**Description**
	<1-8191>	<1-8191> MEP-ID

3.7.5 organization-specific-tlv

Description	Include or exclude Organization-Specific TLV in PDUs on MEPs running in this service or let the domain determine.	
Syntax	organization-specific-tlv {disable | defer}	
Parameter		
	Name	**Description**
	disable	Exclude Organization-Specific TLV from PDUs on MEPs running in this service
	defer	Let the domain Organization-Specific TLV configuration determine whether to include Organization-Specific TLV in PDUs on MEPs running in this service (default)

3.7.6 port-status-tlv

Description	Include or exclude Port Status TLV in PDUs for MEPs included in this service or let domain determine.	
Syntax	port-status-tlv {disable | enable | defer}	
Parameter		
	Name	**Description**
	disable	Exclude Port Status TLV from PDUs for MEPs included in this service
	enable	Include Port Status TLV in PDUs for MEPs included in this service
	defer	Let the MD Port Status TLV configuration determine whether to include Port Status TLV in PDUs for MEPs included in this service (default)

3.7.7 sender-id-tlv

Description	Default Sender ID TLV format to be used in PDUs in MEPs running in this service.	
Syntax	sender-id-tlv {disable | chassis | management | chassis-management | defer}	
Parameter		
	Name	**Description**
	disable	Exclude Sender ID TLV from PDUs in MEPs running in this service
	chassis	Enable Sender ID TLV and send Chassis ID (MAC Address)
	management	Enable Sender ID TLV and send Management address (IPv4 Address)
	chassis-management	Enable Sender ID TLV and send both Chassis ID (MAC Address) and Management Address (IPv4 Address)
	defer	Let the MD Sender ID TLV configuration

		determine whether to send Sender ID TLVs on PDUs in this domain (default)

3.7.8 service

Description	Create or modify a Service (Maintenance Association/MA)	
Syntax	service <kword1-15>	
Parameter		
	Name	**Description**
	<kword1-15>	<kword1-15> : Service name

3.7.9 type

Description	Specify whether MEPs created in this service are port or VLAN MEPs	
Syntax	type { port | vlan <vid> }	
Parameter		
	Name	**Description**
	port	Set all MEPs created in this service as port/interface MEPs (default)
	vlan	Set all MEPs created in this service as VLAN MEPs.
	<vid>	1-4095 Choose the service's primary VID. MEPs created with VLAN set to 'inherit' uses this VLAN.

3.8 CFM MEP Mode Commands (For 90W PoE Model)

3.8.1 admin-state

Description	Set up admin state. Default is disable	
Syntax	admin-state { enable | disable }	
Parameter		
	Name	**Description**
	enable	Enable this MEP
	disable	Disable this MEP

3.8.2 alarm-level

Description	If a defect is detected with a priority higher than this level, a fault alarm notification will be generated.	
Syntax	alarm-level <1-6>	
Parameter		
	Name	**Description**
	<1-6>	A value of 1 will cause any defect to be reported as an alarm notification. A value of 6 will disable alarm notifications. See 802.1Q-2018, clause 20.9.5. (default:2)

3.8.3 alarm-time-absent

Description	The time in milliseconds that defects must be absent before a fault alarm notification is reset. Default is 10000 ms.	
Syntax	alarm-time-absent <2500-10000>	
Parameter		
	Name	**Description**
	<2500-10000>	The time in milliseconds that defects must be absent before a fault alarm notification is reset. Default is 10000 ms

3.8.4 alarm-time-present

Description	The time in milliseconds that defects must be present before a fault alarm notification is issued. Default is 2500 ms.	
Syntax	alarm-time-present <2500-10000>	
Parameter		
	Name	**Description**
	<2500-10000>	The time in milliseconds that defects must be present before a fault alarm notification is issued. Default is 2500 ms

3.8.5 continuity-check

Description	Enable generation of continuity-check messages (CCMs). Default is enable
Syntax	continuity-check
Parameter	None

3.8.6 direction

Description	Set whether this MEP is an Up- or a Down-MEP.
Syntax	direction {up | down}
Parameter	

	Name	Description
	up	MEP is an Up-MEP
	down	MEP is a Down-MEP(default)

3.8.7 interface

Description	The command choose which port this MEP is installed on	
Syntax	interface <port_type> <port>	
Parameter		
	Name	Description
	<port_type>	Select port type.
	<port>	Port list in 1/1 – max number of the ports

3.8.8 mep

Description	Create or modify a Maintenance association EndPoint (MEP).	
Syntax	mep <1-8191>	
Parameter		
	Name	Description
	<1-8191>	<1-8191> MEP-ID

3.8.9 pcp

Description	The command chooses PCP value in PDUs' VLAN tag. Not used if untagged. Default is 0	
Syntax	pcp <pcp>	
Parameter		
	Name	Description
	<pcp>	PCP value: 0 ~ 7 Default is 0

3.8.10 remote mep

Description	Specify the Remote MEPs that this MEP is expected to receive CCM PDUs from.	
Syntax	remote mep <1-8191>	
Parameter		
	Name	Description
	<1-8191>	<1-8191> : 1-8191 The Remote MEP's MEP-ID. (default:0)

3.8.11 service

Description	Create or modify a Service (Maintenance Association/MA)	
Syntax	service <kword1-15>	
Parameter		
	Name	Description
	<kword1-15>	<kword1-15> : Service name

3.8.12 smac

Description	Set a Source MAC address to be used in PDUs for this MEP. Default to use interface's.	
Syntax	smac <mac_ucast>	
Parameter		
	Name	Description
	<mac_ucast>	Select a unicast MAC address(default: 00:00:00:00:00:00)

3.8.13 vlan

Description	The command is to specify the VLAN for this MEP (default is that it inherits it from its service/maintenance association)	
Syntax	vlan { inherit | <vid> }	
Parameter		
	Name	**Description**
	inherit	Inherit from the service's type. If the service has type port, frames will be untagged. If the service has type VLAN, the MEP will become a VLAN MEP and use the service's VLAN ID.
	<vid>	1-4095 Use this VLAN ID. If the service has type port, a port MEP with this VLAN will be created. If the service has type VLAN, the MEP will become a VLAN MEP using this VLAN ID.

3.9 Interface LLAG Config Commands (For 90W PoE Model)

3.9.1 lacp failover

Description	Sets the LACP failover to non-reverte or reverte. It determines if the group will perform automatic link (re-)calculation when links with higher priority becomes available	
Syntax	lacp failover { revertive | non-revertive }	
Parameter		
	Name	**Description**
	revertive	Set as revertive
	non-revertive	Set as non-revertive

3.9.2 lacp max-bundle

Description	Sets the maximum number of active bundle LACP ports allowed in a port channel It determines the maximum number of active bundled LACP ports allowed in an aggregation	
Syntax	lacp max-bundle <1-13>	
Parameter		
	Name	**Description**
	<1-13>	Range: 1-13

3.10 ERPS Config Commands (For 90W PoE Model)

3.10.1 admin-state

Description	Enable or disable this ERPS instance	
Syntax	admin-state {enable | disable}	
Parameter		
	Name	**Description**
	enable	Enable this ERPS instance
	disable	Disable this ERPS instance

3.10.2 control-vlan

Description	Set the ERPS instance's control VLAN and PCP used in R-APS PDUs transmitted on both ring ports (if applicable).	
Syntax	control-vlan <vlan_id> [pcp <0-7>]	
Parameter		
	Name	**Description**
	<vlan_id>	The VLAN ID used in R-APS PDUs
	pcp	Choose a PCP to be used in the 802.1Q tag
	<0-7>	PCP value

3.10.3 guard-time

Description	The guard timer is used to prevent ring nodes from acting upon outdated R-APS PDUs upon topology changes.	
Syntax	guard-time <0-2000>	
Parameter		
	Name	**Description**
	<0-2000>	Guard-time value measured in milliseconds. Must be in multiples of 10 ms

3.10.4 hold-off-time

Description	When a new (or more severe) defect occurs, the hold-off timer will be started and the event will be reported after the timer expires	
Syntax	hold-off-time <0-10000>	
Parameter		
	Name	**Description**
	<0-10000>	Hold-off timer value measured in milliseconds. Must be in multiples of 100 ms

3.10.5 level

Description	Set the MD/MEG level used in R-APS PDUs. Default is 7.	
Syntax	level <0-7>	
Parameter		
	Name	**Description**
	<0-7>	MD/MEG level

3.10.6 node-id

Description	Controls the Node ID used inside the R-APS PDUs to uniquely identify this node (switch). Defaults to using 00:00:00:00:00:00	
Syntax	node-id <mac_ucast>	
Parameter		
	Name	**Description**

	<mac_ucast>	Node ID, which goes into the R-APS PDUs' Node ID field

3.10.7 port0 interface

Description	Assign an interface to ring port0	
Syntax	port0 interface <port_type> <port>	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port>	Port list in 1/1 – max number of the ports

3.10.8 port0 sf-trigger

Description	Choose whether port0's interface link state or a MEP installed on port0's interface is used as signal-fail trigger	
Syntax	port0 sf-trigger {link | {mep domain <kword1-15> service <kword1-15> mep-id <1-8191>}}	
Parameter		
	Name	**Description**
	link	Port0's interface link state is used as signal-fail trigger
	mep	A MEP installed on port0 is used as signal-fail trigger
	domain	The MEP's domain
	<kword1-15>	The MEP's domain name The MEP's service name within the domain
	service	The MEP's service within the domain
	mep-id	The MEP's MEP-ID
	<1-8191>	The MEP's MEP-I

3.10.9 port0 smac

Description	Set a source MAC address to be used in R-APS PDUs transmitted on port0. Default to use interface's	
Syntax	port0 smac <mac_ucast>	
Parameter		
	Name	**Description**
	<mac_ucast>	Select a unicast MAC address to be used as source MAC address in R-APS PDUs transmitted on port0

3.10.10 port1 interface

Description	Assign an interface to ring port1	
Syntax	Port1 interface <port_type> <port>	
Parameter		
	Name	**Description**
	<port_type>	Select port type.
	<port>	Port list in 1/1 – max number of the ports

3.10.11 port1 sf-trigger

Description	Choose whether port1's interface link state or a MEP installed on port1's interface is used as signal-fail trigger
Syntax	port1 sf-trigger {link | {mep domain <kword1-15> service <kword1-15> mep-id <1-8191>}}
Parameter	

	Name	Description
	link	Port1's interface link state is used as signal-fail trigger
	mep	A MEP installed on port0 is used as signal-fail trigger
	domain	The MEP's domain
	<kword1-15>	The MEP's domain name The MEP's service name within the domain
	service	The MEP's service within the domain
	mep-id	The MEP's MEP-ID
	<1-8191>	The MEP's MEP-I

3.10.12 port1 smac

Description	Set a source MAC address to be used in R-APS PDUs transmitted on port1. Default to use interface's	
Syntax	port1 smac <mac_ucast>	
Parameter		
	Name	Description
	<mac_ucast>	Select a unicast MAC address to be used as source MAC address in R-APS PDUs transmitted on port1

3.10.13 protected-vlans

Description	Set the list of VLANs protected by this ERPS instance.	
Syntax	protected-vlans <vlan_list>	
Parameter		
	Name	Description
	<vlan_list>	List of VLANs, e.g. 2-10,123-456,4044

3.10.14 revertive

Description	Set this instance to be revertive, that is, restore to default after the wait-to-restore timer has expired.
Syntax	revertive
Parameter	None

3.10.15 ring-id

Description	Controls the Ring ID, which is used in the last byte of the DMAC of R-APS PDUs. Ring IDs of received R-APS PDUs must match the configured Ring ID	
Syntax	ring-id <1-239>	
Parameter		
	Name	Description
	<1-239>	Ring ID. If using G.8032 version 1, this must be 1

3.10.16 ring-type

Description	Controls whether this is a major ring or a sub-ring. Only major rings are supported if using G.8032v1.	
Syntax	ring-type {major | sub-ring [virtual-channel] | interconnected-sub-ring {connected-ring <uint> [virtual-channel] [propagate-topology-change]}}	
Parameter		
	Name	Description
	major	Make this a major ring, which always has

		two ring ports
	sub-ring	Make this a non-interconnected sub-ring, which has two ring ports
	[virtual-channel]	Configure this sub-ring with a R-APS virtual channel, that is, R-APS PDUs are not forwarded between ring-port links if one end is blocked
	interconnected-sub-ring	Make this an interconnected sub-ring, which has only one ring port (port0), but connects to a major ring
	connected-ring	An interconnected sub-ring points to another ring with two ring ports (that is, that other ring cannot itself be an interconnected sub-ring), which receives flush notifications and may carry R-APS PDUs for the sub-ring
	<uint>	<1-64,3> ERPS instance number of the connected ring that this interconnected sub-ring connects to
	[virtual-channel]	Configure this interconnected sub-ring with a R-APS virtual channel, that is, R-APS PDUs are transmitted on the connected ring that this sub-ring connects to
	[propagate-topology-change]	If a topology-change occurs on this interconnected sub-ring, the connected ring also flushes its FDB. If this keyword is specified, the connected ring will also send Flush R-APS Event PDU onto its ring ports

3.10.17 rpl

Description	Controls whether this node holds the Ring Protection Link (RPL), and what role it has in that case. Use the no-form if this node doesn't hold the RPL.	
Syntax	rpl {owner | neighbor} {port0 | port1}	
Parameter		
	Name	**Description**
	owner	This node is RPL owner
	nerghbor	This node is RPL neighbor
	port0	This node's RPL is on ring port 0
	port1	This node's RPL is on ring port

3.10.18 version

Description	Specify whether to use G.8032v1 or G.8032v2 of the R-APS protocol	
Syntax	version {v1 | v2}	
Parameter		
	Name	**Description**
	v1	Use version 1 of the R-APS protocol
	v2	Use version 2 of the R-APS protocol

3.10.19 wait-to-restore

Description	Only used in revertive mode. Indicates the number of seconds after a defect has cleared until operation is switched back to the normal condition	
Syntax	wait-to-restore <1-720>	
Parameter		
	Name	**Description**

	<1-720>	Wait-to-restore measured in seconds

3.11 IPMC Profile Config Commands

3.11.1 default range

Description	Set a command to its defaults	
Syntax	default range <entry_name>	
Parameter		
	Name	**Description**
	<entry_name>	<word16> Range entry name in 16 characters

3.11.2 description

Description	Set the additional description for an IPMC profile	
Syntax	description <line64>	
Parameter		
	Name	**Description**
	<line64>	Description for the designated IPMC filtering profile

3.11.3 range

Description	Create or update the filtering rule in an IPMC profile	
Syntax	range <word16> { permit | deny } [log] [next <word16>]	
Parameter		
	Name	**Description**
	<word16>	Range entry name in 16 characters
	permit	Permit matching addresses
	deny	Deny matching addresses
	log	Log when matching
	next	Specify next entry used in profile. Default: Add entry last

3.12 SNMP Host Config Commands

3.12.1 host

Description	Sets SNMP trap host ipv4/ipv6 address configuration.	
Syntax	host <v_ipv6_ucast> [<udp_port>] [traps | informs] host { <ipv4_ucast> | <domain_name>} [<1-65535>] [traps | informs]	
Parameter		
	Name	**Description**
	<v_ipv6_ucast>	IP address of SNMP trap host
	<udp_port>	<1-65535> UDP port of the trap messages
	<ipv4_ucast>	IP address of SNMP trap host
	<domain_name>	Hostname of SNMP trap host
	<1-65535>	UDP port of the trap messages
	traps	Send Trap messages to this host
	informs	Send Inform messages to this host

3.12.2 informs retries

Description	Configure SNMP trap retry times and timeout.	
Syntax	informs retries <0-255> timeout <0-2147>	
Parameter		
	Name	**Description**
	<0-255>	Retires times
	<0-2147>	Timeout interval

3.12.3 shutdown

Mode	SNMP Host Config Mode
Description	Disable the trap configuration.
Syntax	shutdown
Parameter	None

3.12.4 traps (For 30W PoE Model)

Description	Set trap event configuration	
Syntax	traps [authentication snmp-auth-fail] [system [coldstart] [warmstart]] [switch [stp] [rmon]]	
Parameter		
	Name	**Description**
	authentication	AAA event group
	snmp-auth-fail	Authentication fail event
	system	System event group
	coldstart	Cold start event
	warmstart	Warm start event
	switch	Switch event group
	stp	STP event
	rmon	RMON event

3.12.5 version (For 90W PoE Model)

Description	Set SNMP trap version.
Syntax	version { v1 [{ <word63> | encrypted <word96-224> }] | v2 [{ <word63> | encrypted <word96-224> }] | v3 engineID <word10-64> [<word32>] }
Parameter	

	Name	Description
	v1	SNMP trap version 1
	v2	SNMP trap version 2
	v3	SNMP trap version 3
	<word63>	SNMP trap community
	<word96-224>	Use encrypted community secret
	<word10-64>	Trap server's engine ID
	<word32>	Security name

3.12.6 version

Description	Set SNMP trap version.	
Syntax	version { v1 [<v1_comm>] | v2 [<v2_comm>] | v3 [probe | engineID <v_word10_to_64>] [<securtyname>] }	
Parameter		
	Name	Description
	v1	SNMP trap version 1
	v2	SNMP trap version 2
	v3	SNMP trap version 3
	<v1_comm>	<word255> SNMP trap community
	<v2_comm>	<word255> SNMP trap community
	probe	Probe trap server's engine ID
	engineID	Configure trap server's engine ID
	<v_word10_to_64>	Trap server's engine ID
	<securtyname>	<word32> seucrity name

3.13 DHCP Pool Config Commands

3.13.1 address (For 90W PoE Model)

Description	Offer fixed IP address to client on specific interface, overruling client ID	
Syntax	address <v_ipv4_addr> interface <port_type> <ifc>	
Parameter		
	Name	**Description**
	<ipv4_ucast>	Address to offer on interface
	<port_type>	Select port type.
	<ifc>	Port list in 1/1 – max number of the ports

3.13.2 broadcast

Description	Set broadcast address in use on the client's subnet.	
Syntax	broadcast <ipv4_addr>	
Parameter		
	Name	**Description**
	<ipv4_addr>	Broadcast IP address

3.13.3 client-identifier

Description	Specifies the client identifier.	
Syntax	client-identifier { {fqdn | name} <line128> | mac-address <mac_addr> }	
Parameter		
	Name	**Description**
	fqdn	This is obsolete and use 'name' instead
	name	Client identifier other than hardware type
	<line128>	128 characters
	mac-address	MAC address type of client identifier
	<mac_addr>	MAC address of client

3.13.4 client-name

Description	Set client host name.	
Syntax	client-name <word32>	
Parameter		
	Name	**Description**
	<word32>	Client host name in 32 characters

3.13.5 default-router

Description	Specifies the IP address of the default router.	
Syntax	default-router <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast>]]]	
Parameter		
	Name	**Description**
	<ipv4_ucast>	Router's IP address

3.13.6 dns-server

Description	Set DNS servers address	
Syntax	dns-server <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast>]]]	
Parameter		
	Name	**Description**
	<ipv4_ucast>	Server's IP address

3.13.7 domain-name

Description	Specifies a domain-name.	
Syntax	domain-name <word128>	
Parameter		
	Name	**Description**
	<word128>	Domain name

3.13.8 hardware-address

Description	Specifies a hardware address	
Syntax	hardware-address <mac_ucast>	
Parameter		
	Name	**Description**
	<mac_ucast>	Client MAC address

3.13.9 host

Description	Set client IP address and mask.	
Syntax	host <ipv4_ucast> <ipv4_netmask>	
Parameter		
	Name	**Description**
	<ipv4_ucast>	IPv4 unicast address
	<ipv4_netmask>	IPv4 netmask

3.13.10 lease

Description	Configure the duration of the lease for an IP address.	
Syntax	lease { <day> [<hour> [<min>]] | infinite }	
Parameter		
	Name	**Description**
	<day>	Days. 0-365
	<hour>	Hours. 0-23
	<min>	Minutes. 0-59
	infinite	Infinite lease

3.13.11 netbios-name-server

Description	Specifies the netbios WINS server that is available to a Microsoft DHCP client	
Syntax	netbios-name-server <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast>]]]	
Parameter		
	Name	**Description**
	<ipv4_ucast>	Server's IP address

3.13.12 netbios-node-type

Description	Configure the NetBIOS node type for Microsoft DHCP clients	
Syntax	netbios-node-type { b-node | h-node | m-node | p-node }	
Parameter		
	Name	**Description**
	b-node	Broadcast node
	h-node	Hybrid node
	m-node	Mixed node
	p-node	Peer-to-peer node

3.13.13 netbios-scope

Description	Specify the NetBIOS over TCP/IP scope parameter for the client as

	specified in RFC 1001/1002	
Syntax	netbios-scope <line128>	
Parameter		
	Name	**Description**
	<line128>	NetBIOS scope identifier, in 128 characters

3.13.14 network

Description	Specify the subnet network number and mask of the DHCP address pool.	
Syntax	network <ipv4_ucast> <ipv4_netmask>	
Parameter		
	Name	**Description**
	<ipv4_ucast>	IPv4 unicast address
	<ipv4_netmask>	IPv4 netmask

3.13.15 nis-domain-name

Description	Set system's NIS domain name	
Syntax	nis-domain-name <word128>	
Parameter		
	Name	**Description**
	<word128>	NIS domain name, in 128 characters

3.13.16 nis-server

Description	Specify a list of IP addresses indicating NIS servers available to the client	
Syntax	nis-server <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast>]]]	
Parameter		
	Name	**Description**
	<ipv4_ucast>	Server's IP address

3.13.17 ntp-server

Description	Enable its software clock to be synchronized with the software clock of a NTP time server	
Syntax	ntp-server <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast>]]]	
Parameter		
	Name	**Description**
	<ipv4_ucast>	Server's IP address

3.13.18 reserved-only (For 90W PoE Model)

Description	Restrict addresses offered to clients to those specified by 'address' commands.
Syntax	reserved-only
Parameter	None

3.13.19 vendor class-identifier

Description	Set vendor configuration.	
Syntax	vendor class-identifier <string64> specific-info <word66>	
Parameter		
	Name	**Description**
	<string64>	Class identifier in 64 characters
	<word66>	Hex values in 64 octets

3.14 Line Config Commands

3.14.1 editing

Description	Enable command line editing
Syntax	editing
Parameter	None

3.14.2 exec-banner

Description	Enable the display of the EXEC banner
Syntax	exec-banner
Parameter	None

3.14.3 exec-timeout

Description	Inactivity timer; automatically log out after a period of inactivity. A value of zero disables automatic logout	
Syntax	exec-timeout <min> [<sec>]	
Parameter		
	Name	**Description**
	<min>	<0-1440> Timeout in minutes
	<sec>	<0-3600> Timeout in seconds

3.14.4 history size

Description	Set history buffer size	
Syntax	history size <history_size>	
Parameter		
	Name	**Description**
	<history_size>	<0-32> Number of history commands, 0 means disable

3.14.5 length

Description	Terminal length in lines, used for pagination. Zero disables pagination	
Syntax	length <length>	
Parameter		
	Name	**Description**
	<length>	<0,3-512> Number of lines on screen (0 for no pausing)

3.14.6 location

Description	Enter terminal location description	
Syntax	location <location>	
Parameter		
	Name	**Description**
	<location>	One text line describing the terminal's location in 32 characters

3.14.7 motd-banner

Description	Enable the display of the MOTD banner
Syntax	motd-banner
Parameter	None

3.14.8 privilege level

Description	Assign default privilege level	
Syntax	privilege level <privileged_level>	
Parameter		
	Name	**Description**
	<privileged_level>	<0-15> Default privilege level for line

3.14.9 width

Description	Terminal width in characters, used for pagination	
Syntax	width <width>	
Parameter		
	Name	**Description**
	<width>	Width range: <0,40-512>

3.15 Spanning Tree Aggregation Commands

3.15.1 spanning-tree

Description	Enable Spanning Tree under aggregation mode
Syntax	spanning-tree
Parameter	None

3.15.2 spanning-tree auto-edge

Description	Enable auto edge function. When enabled, a port is automatically determined to be at the edge of the network when it receives no BPDUs
Syntax	spanning-tree auto-edge
Parameter	None

3.15.3 spanning-tree bpdu-guard

Description	Enable BPDU guard function. This feature protects ports from receiving BPDUs. It can prevent loops by shutting down a port when a BPDU is received instead of putting it into the spanning tree discarding state. If enabled,the port will disable itself upon receiving valid BPDU's
Syntax	spanning-tree bpdu-guard
Parameter	None

3.15.4 spanning-tree edge

Description	When an interface is attached to end nodes,can set it to Edge.
Syntax	spanning-tree edge
Parameter	None

3.15.5 spanning-tree link-type { point-to-point | shared | auto }

Description	Sets the link type attached to an interface	
Syntax	spanning-tree link-type { point-to-point | shared | auto }	
Parameter		
	Name	**Description**
	point-to-point	Forced to point-to-point
	shared	Forced to Shared
	auto	Auto detect

3.15.6 spanning-tree mst <0-7> cost

Description	Configure MSTI and its' path cost value	
Syntax	spanning-tree mst <0-7> cost { <1-200000000> | auto }	
Parameter		
	Name	**Description**
	<0-7>	instance (CIST=0, MSTI1=1...)
	<1-200000000>	Cost range
	auto	Use auto cost

3.15.7 spanning-tree mst <0-7> port-priority

Description	Configure MSTI and its' port priority.	
Syntax	spanning-tree mst <0-7> port-priority <0-240>	
Parameter		
	Name	**Description**
	<0-7>	instance (CIST=0, MSTI1=1...)
	<0-240>	Represents the priority field for the port identifier. Port

		priority must be divisible by 16, supported values are 0/16/32/48/64/80/96/112/128/144/160/176/192/208/224/240. Default value is 128

3.15.8 spanning-tree restricted-role

Description	Enable restricted role function. If enabled, this causes the port not to be selected as Root Port for the CIST or any MSTI, even if it has the best spanning tree priority
Syntax	spanning-tree restricted-role
Parameter	None

3.15.9 spanning-tree restricted-tcn

Description	Enable restricted TCN function. If enabled, this causes the port not to propagate received topology change notifications and topology changes to other ports
Syntax	spanning-tree restricted-tcn
Parameter	None

3.16 QoS Map Egress Commands (For 90W PoE Model)

3.16.1 action

Description	Enable rewriting actions	
Syntax	action { [pcp] [dei] [dscp] }	
Parameter		
	Name	**Description**
	pcp	Enable rewriting of PCP
	dei	Enable rewriting of DEI
	dscp	Enable rewriting of DSCP

3.16.2 key

Description	Authentication key management	
Syntax	key { class | class-dpl | dscp | dscp-dpl }	
Parameter		
	Name	**Description**
	class	Use classified COSID value as key (default).
	class-dpl	Use classified COSID and DPL value as key.
	dscp	Use classified DSCP value as key.
	dscp-dpl	Use classified DSCP and DPL values as key.

3.16.3 map

Description	Configure the mapping between keys and values.	
Syntax	map { { { dscp { <dscp_num> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } } | { class <cosid_num> } } [dpl <dpl_num>] } to { [pcp <pcp>] [dei <dei>] [dscp <dscp>] }*1	
Parameter		
	Name	**Description**
	<dscp_num>	<0~63> Specific DSCP or range
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)
	af22	Assured Forwarding PHB AF22(DSCP 20)
	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)
	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)
	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)
	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)
	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)

	va	Voice Admit PHB(DSCP 44)
	<cosid_num>	<0~7> Specific COSID or range
	<dpl_num>	<0~3> Specific DPL or range
	<pcp>	<0-7> Assign PCP value
	<dei>	<0-1> Assign DEI value
	<dscp>	<0-63> Assign DSCP value

3.16.4 preset classes

Description	Preset the map to a specific number of traffic classes	
Syntax	preset classes <classes> [color-aware]	
Parameter		
	Name	**Description**
	<classes>	<1-8> Number of traffic classes
	[color-aware]	Set to color aware. Default is color unaware

3.17 QoS Map Ingress Commands (For 90W PoE Model)

3.17.1 action

Description	Enable classification actions	
Syntax	action { [class] [cos] [dpl] [pcp] [dei] [dscp] }	
Parameter		
	Name	**Description**
	class	Enable classification of COSID
	cos	Enable classification of COS
	dpl	Enable classification of DPL
	pcp	Enable rewriting of PCP
	dei	Enable rewriting of DEI
	dscp	Enable rewriting of DSCP

3.17.2 key

Description	Authentication key management	
Syntax	key { pcp | pcp-dei | dscp | dscp-pcp-dei }	
Parameter		
	Name	**Description**
	pcp	Use classified PCP value as key (default).
	pcp-dei	Use classified PCP and DEI values as key.
	dscp	Use the frame's DSCP value as key. For non-IP frames, no mapping is done.
	dscp-pcp-dei	Use the frame's DSCP value as key. For non-IP frames, use classified PCP and DEI values as key.

3.17.3 map

Description	Configure the mapping between keys and values.	
Syntax	map { { dscp { <dscp_num> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } } | { pcp <pcp_num> [dei <dei_num>] } } to { [class <cosid>] [cos <cos>] [dpl <dpl>] [pcp <pcp>] [dei <dei>] [dscp <dscp>] }*1	
Parameter		
	Name	**Description**
	<dscp_num>	<0~63> Specific DSCP or range
	be	Default PHB(DSCP 0) for best effort traffic
	af11	Assured Forwarding PHB AF11(DSCP 10)
	af12	Assured Forwarding PHB AF12(DSCP 12)
	af13	Assured Forwarding PHB AF13(DSCP 14)
	af21	Assured Forwarding PHB AF21(DSCP 18)
	af22	Assured Forwarding PHB AF22(DSCP 20)
	af23	Assured Forwarding PHB AF23(DSCP 22)
	af31	Assured Forwarding PHB AF31(DSCP 26)
	af32	Assured Forwarding PHB AF32(DSCP 28)
	af33	Assured Forwarding PHB AF33(DSCP 30)
	af41	Assured Forwarding PHB AF41(DSCP 34)
	af42	Assured Forwarding PHB AF42(DSCP 36)
	af43	Assured Forwarding PHB AF43(DSCP 38)
	cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
	cs2	Class Selector PHB CS1 precedence 2(DSCP 16)
	cs3	Class Selector PHB CS1 precedence 3(DSCP 24)

	cs4	Class Selector PHB CS1 precedence 4(DSCP 32)
	cs5	Class Selector PHB CS1 precedence 5(DSCP 40)
	cs6	Class Selector PHB CS1 precedence 6(DSCP 48)
	cs7	Class Selector PHB CS1 precedence 7(DSCP 56)
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)
	<pcp_num>	<0~7> Specific PCP or range
	<dei_num>	<0~1> Specific DEI or range
	<cosid>	<0-7> Assign COSID value
	<cos>	<0-7> Assign COS value
	<dpl>	<0-3> Assign DPL value
	<pcp>	<0-7> Assign PCP value
	<dei>	<0-1> Assign DEI value
	<dscp>	<0-63> Assign DSCP value

3.17.4 preset classes

Description	Preset the map to a specific number of traffic classes	
Syntax	preset classes <classes> [color-aware]	
Parameter		
	Name	**Description**
	<classes>	<1-8> Number of traffic classes
	[color-aware]	Set to color aware. Default is color unaware

3.18 RingV2 Group Mode Commands

3.18.1 chain-mode-fabric-attach (For 90W PoE Model)

Description	Enable/Disable ring group chain mode fabric attach	
Syntax	chain-mode-fabric-attach { disable | enable }	
Parameter		
	Name	**Description**
	disable	Set the specified Ring group chain mode fabric attach to Disabled
	enable	Set the specified Ring group chain mode fabric attach to Enabled

3.18.2 guard-time

Description	Set guard time	
Syntax	guard-time { <ringGuardTimerDef> }	
Parameter		
	Name	**Description**
	ringGuardTimerDef	<10-3600>, unit: secound. Default is 10 secounds

3.18.3 mode

Description	Enable/Disable ring group	
Syntax	mode { disable | enable }	
Parameter		
	Name	**Description**
	disable	Set the specified Ring group to Disabled
	enable	Set the specified Ring group to Enabled

3.18.4 node1

Description	Set Ring Node 1	
Syntax	node1 aggregation group <aggr_port_no> node1 { interface (<port_type> [<port_list>]) }	
Parameter		
	Name	**Description**
	<aggr_port_no> (For 90W PoE Model)	Aggregation Group ID: <1-6>
	<aggr_port_no> (For 30W PoE Model)	Aggregation Group ID: <1-4>
	<port_type>	Select port type
	<port_list>	Port list in 1/1 – max number of the ports

3.18.5 node2

Description	Set Ring Node 2	
Syntax	node2 aggregation group <aggr_port_no> node2 { interface (<port_type> [<port_list>]) }	
Parameter		
	Name	**Description**
	<aggr_port_no> (For 90W PoE Model)	Aggregation Group ID: <1-6>
	<aggr_port_no> (For 30W PoE Model)	Aggregation Group ID: <1-4>
	<port_type>	Select port type
	<port_list>	Port list in 1/1 – max number of the ports

3.18.6 role

Description	Set role for group	
Syntax	role { ring-master | ring-slave | coupling-primary | coupling-backup | dual-homing | chain-head | chain-tail | chain-member | b-chain-terminal-1 | b-chain-terminal-2 | b-chain-central-block | b-chain-member}	
Parameter		
	Name	**Description**
	ring-master	Set role to ring master
	ring-slave	Set role to ring slave
	coupling-primary	Set role to coupling primary
	coupling-backup	Set role to coupling backup
	dual-homing	Set role to dual homing
	chain-head	Set role to chain head
	chain-member	Set role to chain member
	chain-tail	Set role to chain tail
	b-chain-central-block	Set role to balancing chain central block
	b-chain-member	Set role to balancing chain member
	b-chain-	Set role to balancing chain terminal 1

	terminal-1	
	b-chain-terminal-2	Set role to balancing chain terminal 2

3.19 Profile Alarm Mode Commands

3.19.1 alarm (For 90W PoE Model)

Description	Set alarm content	
Syntax	alarm <alarmId> { mask | unmask | major | minor }	
Parameter		
	Name	**Description**
	<alarmId>	<101-112,151> 101~112: GE-1~12 Port link down, 151: Power alarm
	mask	Set alarm as mask, it means event will not be send notify.
	unmask	Set alarm as un-mask, it means event will be send notify.
	major	Set alarm level as major.
	minor	Set alarm level as minor.

3.19.2 alarm (For 30W PoE Model)

Description	Set alarm content	
Syntax	alarm <alarmId> { mask | unmask | major | minor } alarm high-temp { [set <set_value>] [clear <clear_value>] } alarm low-temp { [set <set_value>] [clear <clear_value>] }	
Parameter		
	Name	**Description**
	alarmId	<101-108,151,161-162> 101~108: GE-1~8 Port link down, 161: High Temp, 162: Low Temp, 151: Power alarm
	mask	Set alarm as mask, it means event will not be send notify
	unmask	Set alarm as un-mask, it means event will be send notify
	major	Set alarm level as major
	minor	Set alarm level as minor
	high-temp	Configure High Temperature Alarm threshold values
	low-temp	Configure Low Temperature Alarm threshold values
	<set_value>	70-100
	<clear_value>	55-85