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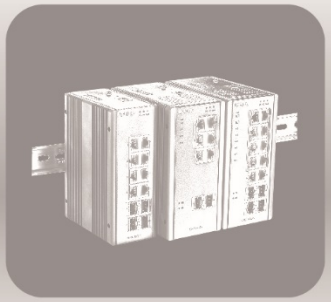
Building Networks for People



CLI Reference Guide

Product Model : DIS-300G Series
Industrial Gigabit Ethernet Switch
Release 1.00

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1. Scope

1.1 Scope

1.2 Audience

1.3 Pre-required Knowledge

1.4 Access to Hardware Interface

1.5 Related Documents

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 DIS-300G 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 DIS-300G Series.
- 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:

- DIS-300G Series Quick Installation Guide

2. Operator Interface

2.1 Introduction

2.2 Connect Interface

2.3 Authorization Level

2.4 Screen Description

2.5 Execution Modes

2.6 Getting Help

2.7 Terminal Key Function

2.8 Notation Conventions

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 user name/password is admin/admin. You should change the password as soon as possible, because the initial password is known to anyone who reads this manual. You can also change the user name or 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 DIS-300G Ethernet port(RJ45 Ethernet port)
2. Key-in the command under Telnet: ***telnet 10.90.90.90***
3. Login with default account and password.
   Username: admin
   Password: admin

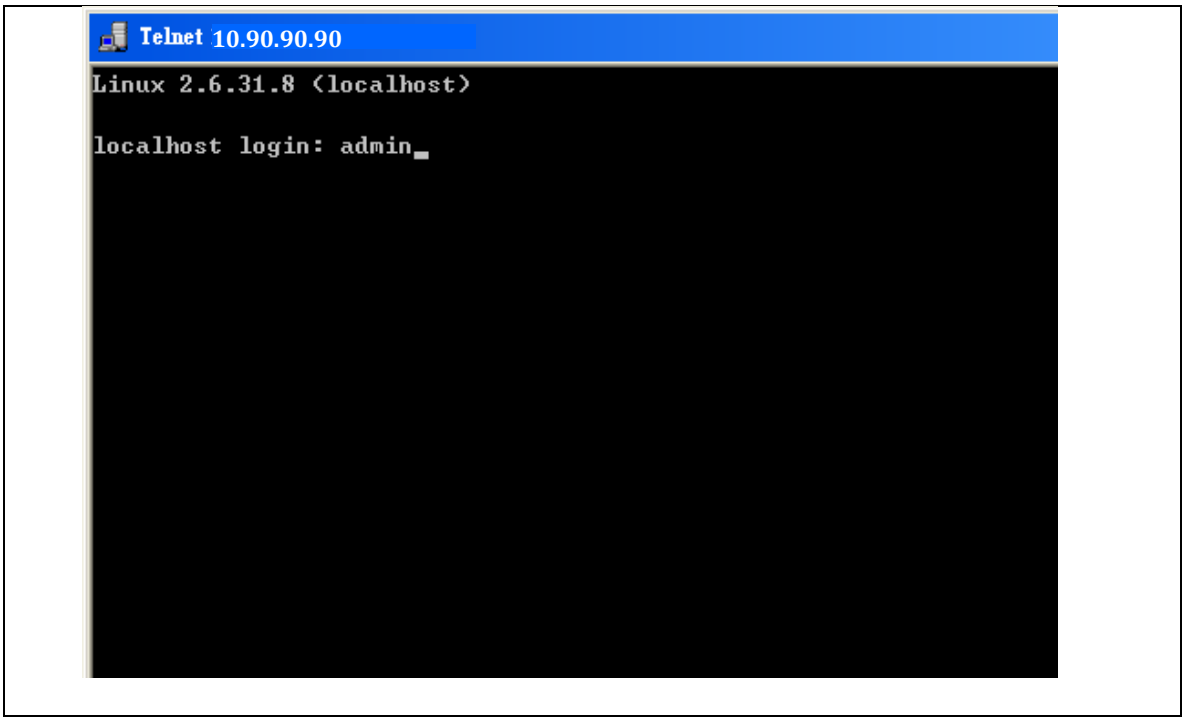

Figure 2-1 Screen Description

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	Access Level	Prompt
Init Mode	Guest	>
Enable Mode	Guest	#
Config Mode	Guest	(conf)#
Alarm Profile Config Mode	Engineer	(alarm-profile-conf)#
Gigabit Interface Config Mode	Engineer	(gigabit-intf-conf)#
ACL Profile Config Mode	Engineer	(acl-profile-conf)#
scheduler Profile Config Mode	Engineer	(sch-profile-conf)#
Vlan Interface Config Mode	Engineer	(vlan-intf-conf)#
IGMP MVR Profile Config Mode	Engineer	(igmp-mvr-profile-conf)#
IGMP ACL Profile Config Mode	Engineer	(igmp-acl-profile-conf)#
RingV2 Group Config Mode	Engineer	(ring)#
Trunk Group Config Mode	Engineer	(trunk-group-conf)#

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

3.1 Initialize Mode Commands

3.2 Enable Mode Commands

3.3 Configure Mode Commands

3.4 VLAN Mode Commands

3.5 Interface VLAN Mode Commands

3.6 Ring Group Mode Commands

3.7 Spanning Tree Configure Commands

3.8 sFlow Configure Command

3.9 SNMP Configure Command

3.10 Qos Function Command

3.11 IGMP Functional Commands

3.12 MVR Functional Commands

3.13 MLD Functional Commands

3.14 Authenticate Mode Commands

3.15 Loop-Protection Configure commands

3.16 LLDP Configure commands

3.17 RFC2544 Testing Configure Commands

3.18 GVRP Configure Commands

3.19 Voice VLAN Configure Commands

3 Commands Descriptions

3.1 Initialize Mode Commands

The commands in this section (except 'enable' command) can be executed under all command modes. These commands are global commands.

3.1.1 exit

Description	Exit current mode and quit CLI.
Syntax	exit
Parameter	None

3.1.2 configure terminal

Description	Enter configuration mode.
Syntax	configure terminal
Parameter	None

3.1.3 enable

Description	Enter enable mode.
Syntax	enable
Parameter	None

3.1.4 Show terminal

Description	Show CLI environment variables
Syntax	show terminal
Parameter	None

3.1.5 Show history

Description	Show command history (Note: commands issued in one execution mode only appear in history of that execution mode)
Syntax	show history
Parameter	None

3.1.6 Show clock

Description	Show current time
Syntax	show clock [detail]
Parameter	None

3.1.7 Show clock detail

Description	Show detailed information
Syntax	show clock detail
Parameter	None

3.2 Enable Mode Commands

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

3.2.1 configure terminal

Description	Enter configuration mode.
Syntax	configure
Parameter	None

3.2.2 disable

Description	Enter init mode.
Syntax	disable
Parameter	None

3.2.3 show aaa

Description	Show AAA
Syntax	show aaa
Parameter	None

3.2.4 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

3.2.5 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] [upnp] [arp-inspection] [mep] [ipmc] [ip-source-guard] [ip-mgmt] [conflicts] [switch <switch_list>]	
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

3.2.6 show aggregation

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

3.2.7 show alarm

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

3.2.8 show cpu-load

Description	CPU LOAD
Syntax	show cpu-load
Parameter	

3.2.9 show green-ethernet

Description	Green Ethernet	
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**
	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
	interface	Shows green ethernet status for a specific port or ports
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	port_list	<port_type_list> Port list in 1/1-14

3.2.10 show ip

Description	IP information	
Syntax	show ip	
Parameter		
	Name	**Description**
	arp	Address Resolution Protocol
	dhcp	Dynamic Host Configuration Protocol

	http	Hypertext Transfer Protocol
	igmp	Internet Group Management Protocol
	interface	IP interface status and configuration
	name-server	Domain Name System
	route	Display the current ip routing table
	source	source command
	ssh	Secure Shell
	statistics	Traffic statistics
	verify	verify command

3.2.11 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/IPv6 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

3.2.12 show ipv6

Description	IPv6 information	
Syntax	show ipv6	
Parameter		
	Name	**Description**
	interface	Select an interface to configure
	mld	Multicasat Listener Discovery
	neighbor	IPv6 neighbors
	route	IPv6 routes
	statistics	Traffic statistics

3.2.13 show lacp

Description	LACP information	
Syntax	show lacp { internal | statistics | system-id | neighbour }	
Parameter		
	Name	**Description**
	internal	Internal LACP configuration
	neighbour	Neighbour LACP status
	statistics	Internal LACP statistics
	system-id	LACP system id

3.2.14 show line

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

3.2.15 show logging

Description	Logging information

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

3.2.16 show loop-protec

Description	Loop protect information	
Syntax	show loop-protect [interface (<port_type> [<plist>])]	
Parameter		
	Name	**Description**
	interface	Interface status and configuration
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	plist	<port_type_list> Port list in 1/1-14

3.2.17 show ntp status

Description	Show SNTP information.
Syntax	show sntp
Parameter	None

3.2.18 show users

Description	Show account list.
Syntax	show account
Parameter	None

3.2.19 show running-cfg

Description	Show running configuration.
Syntax	show running-cfg
Parameter	None

3.2.20 show running-config interface Gigabit

Description	Show port config	
Syntax	show running-config interface (<port_type> [<list>]) [all-defaults]	
Parameter		
	Name	**Description**
	list	<port_type_list> Port list in 1/1-14
	all-defaults	Include most/all default values

3.2.21 show running-config interface vlan

Description	Show default running configuration.
Syntax	show running-config interface vlan <vlan_list> [all-defaults]
Parameter	None

3.2.22 show running-config all-defautls

Description	Show all default setting
Syntax	show running-config [all-defaults]
Parameter	None

3.2.23 show running-config feature

Description	Show running config feature

Syntax	show running-config feature <feature_name> [all-defaults]	
Parameter		
	Name	**Description**
	feature_name	CWORD Valid words are 'GVRP' 'access' 'access-list' 'aggregation' 'alm_profile' 'arp-inspection' 'auth' 'clock' 'dhcp' 'dhcp-snooping' 'dhcp_server' 'dns' 'dot1x' 'green-ethernet' 'http' 'icli' 'ip-igmp-snooping' 'ip-igmp-snooping-port' 'ip-igmp-snooping-vlan' 'ipmc-profile' 'ipmc-profile-range' 'ipv4' 'ipv6' 'ipv6-mld-snooping' 'ipv6-mld-snooping-port' 'ipv6-mld-snooping-vlan' 'lacp' 'lldp' 'logging' 'loop-protect' 'mac' 'monitor' 'mstp' 'mvr' 'mvr-port' 'ntp' 'phy' 'port' 'port-security' 'pvlan' 'qos' 'rmon' 'snmp' 'source-guard' 'ssh' 'tring_g1' 'tring_g2' 'tring_g3' 'user' 'vlan' 'voice-vlan' 'web-privilege-group-level'
	all-defaults	Include most/all default values

3.2.24 show running-config line

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

3.2.25 show running-config vlan

Description	VLAN information	
Syntax	show running-config vlan <list> [all-defaults]	
Parameter		
	Name	**Description**
	list	<vlan_list> List of VLAN numbers
	all-defaults	Include most/all default values

3.2.26 show version

Description	Show firmware hardware and software status update status.
Syntax	show version
Parameter	None

3.2.27 show clock

Description	Show current time.
Syntax	Show clock
Parameter	None

3.2.28 show ddmi

Description	Show DDMI configuration
Syntax	show ddmi
Parameter	None

3.2.29 show version

Description	Show version information.

Syntax	show version
Parameter	None

3.2.30 show system inventory

Description	Show system inventory.
Syntax	show system inventory
Parameter	None

3.2.31 show mac address table aging-time

Description	Show aging time for MAC learning table (system-wide).
Syntax	show aging time
Parameter	None

3.2.32 show mac address table

Description	Show MAC learning table.
Syntax	show mac address-table [conf | static | aging-time | { { learning | count } [interface <port_type> [<port_type_list>]] } | { address <mac_addr> [vlan <vlan_id>] } | vlan <vlan_id> | interface <port_type> [<port_type_list>]]
Parameter	None

3.2.33 show mac address table conf

Description	User added static mac addresses	
Syntax	show mac address-table [conf | static | aging-time | { { learning | count } [interface (<port_type> [<v_port_type_list>])] } | { address <v_mac_addr> [vlan <v_vlan_id>] } | vlan <v_vlan_id_1> | interface (<port_type> [<v_port_type_list_1>])]	
Parameter		
	Name	**Description**

3.2.34 show mac address table count

Description	Total number of mac addresse	
Syntax	show mac address-table [conf | static | aging-time | { { learning | count } [interface (<port_type> [<v_port_type_list>])] } | { address <v_mac_addr> [vlan <v_vlan_id>] } | vlan <v_vlan_id_1> | interface (<port_type> [<v_port_type_list_1>])]	
Parameter		
	Name	**Description**

3.2.35 show mac address table learning

Description	Learn/disable/secure stat	
Syntax	show mac address-table [conf | static | aging-time | { { learning | count } [interface (<port_type> [<v_port_type_list>])] } | { address <v_mac_addr> [vlan <v_vlan_id>] } | vlan <v_vlan_id_1> | interface (<port_type> [<v_port_type_list_1>])]	
Parameter		
	Name	**Description**

3.2.36 show mac address table static

Description	All static mac addresses

Syntax	show mac address-table [conf | static | aging-time | { { learning | count } [interface (<port_type> [<v_port_type_list>])] } | { address <v_mac_addr> [vlan <v_vlan_id>] } | vlan <v_vlan_id_1> | interface (<port_type> [<v_port_type_list_1>])]	
Parameter		
	Name	**Description**

3.2.37 show mac address table interface

Description	Show MAC learning table per port.	
Syntax	show mac address-table [interface <port_type> [<port_type_list>]]	
Parameter		
	Name	**Description**
	<portNo>	**Valid values**: 1 ~10 **Type**: Mandatory

3.2.38 show mac address vlan <vlanid>

Description	Show MAC learning table per VLAN index.	
Syntax	show mac address-table { learning | count } vlan <vlan_id>	
Parameter		
	Name	**Description**
	<vlanid>	**Valid values**: 1~4094 **Type**: Mandatory

3.2.39 show mvr

Description	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
	v_vlan_list	<vlan_list> MVR multicast VLAN list
	name	Search by MVR name
	mvr_name	<MvrName : word16> MVR multicast VLAN name
	group-database	Multicast group database from MVR
	interface	Search by port
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	v_port_type_list	PORT_LIST, Port list in 1/1-14
	sfm-information	Including source filter multicast information from MVR
	detail	Detail information/statistics of MVR group database

3.2.40 show fdb static table

Description	Show static MAC forwarding table.
Syntax	show mac address-table static
Parameter	None

3.2.41 show fdbstatic interface gigabit <portNo>

Description	Show static MAC forwarding table per gigabit port.	
Syntax	Show mac address-table { learning | count } [interface <port_type> [<port_type_list>]]	
Parameter		
	Name	**Description**

	<port_type>	Port type in Fast, Giga or Tengiga ethernet
	<portNo>	**Valid values**: 1 ~ 10 **Type**: Mandatory

3.2.42 show fdbstatic vlan <vlanid>

Description	Show static MAC forwarding table per VLAN index.	
Syntax	show mac address-table { learning | count } vlan <vlanid>	
Parameter		
	Name	**Description**
	<vlanid>	**Valid values:** 1~4094 **Type**: Mandatory

3.2.43 show interface port < port_type_list >

Description	Show interface information per \port.	
Syntax	show interface <port_type> [<port_type_list>] status	
Parameter		
	Name	**Description**
	<port_type>	Port type in Fast, Giga or Tengiga ethernet
	<portNo>	**Valid values**: 1 ~ 10 **Type**: Mandatory

3.2.44 show interface port <portNo> statistics

Description	Show Ethernet counter per gigabit port.	
Syntax	show interface <port_type> [<port_type_list>] statistics	
Parameter		
	Name	**Description**
	<port_type>	Port type in Fast, Giga or Tengiga ethernet
	<portNo>	**Valid values**: 1 ~ 10 **Type**: Mandatory
	counter	Show Gigabit Ethernet counter.

3.2.45 show platform phy

Description	PHYs' information	
Syntax	show platform phy [interface (<port_type> [<v_port_type_list>])] show platform phy id [interface (<port_type> [<v_port_type_list>])] show platform phy instance show platform phy status [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	id	ID
	instance	PHY Instance Information
	status	Status
	interface	Interface
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	v_port_type_list	PORT_LIST, Port list in 1/1-14

3.2.46 show poe

Description	Show PoE status and information for each port	
Syntax	show poe show poe [interface (<port_type> [<v_port_type_list>])]	
Parameter		
	Name	**Description**
	poe	Power over Ethernet
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	v_port_type_list	PORT_LIST, Port list in 1/1-14

3.2.47 show port-security

Description	Port security	
Syntax	show port-security	
Parameter		
	Name	**Description**
	port	Show MAC Addresses learned by Port Security
	switch	Show Port Security status
	interface	Interface
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	v_port_type_list	PORT_LIST, Port list in 1/1-14

3.2.48 show profile alarm

Description	Profile alarm
Syntax	show profile alarm
Parameter	None

3.2.49 show sflow

Description	Sflow information	
Syntax	show sflow show sflow statistics { receiver [<rcvr_idx_list>] | samplers [interface [<samplers_list>] (<port_type> [<v_port_type_list>])] }	
Parameter		
	Name	**Description**
	receiver	Show statistics for receiver
	samplers	Show statistics for samplers
	interface	Interface
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	v_port_type_list	<port_type_list> Port list in 1/1-14

3.2.50 show snmp

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	<Community : word127> 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	<Engiedid : word10-32> Security Engine ID
	view	MIB view configuration
	view_name	<ViewName : word32> MIB view name
	oid_subtree	<OidSubtree : word255> MIB view OID

3.2.51 show spanning-tree

Description	System Wide Spanning Tree Setting/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**
	active	STP active interfaces
	detailed	STP statistics
	interface	Choose port
	mst	Configuration
	summary	STP summary

3.2.52 show switchport forbidden

Description	Lookup VLAN Forbidden port entry	
Syntax	show switchport forbidden [{ vlan <vid> } | { name <name> }]	
Parameter		
	Name	**Description**
	vlan	Show forbidden access for specific VLAN id
	vid	VLAN id
	name	Show forbidden access for specific VLAN name
	name	VLAN name

3.2.53 show tacacs-server

Description	TACACS+ configuration
Syntax	show tacacs-server
Parameter	

3.2.54 show vlan

Description	Show bridge port memberset/status.
Syntax	show vlan
Parameter	None

3.2.55 show vlan id

Description	Show bridge port member set/status per VLAN index (1~4094).	
Syntax	show vlan id <vlanid>	
Parameter		
	Name	**Description**
	<vlanid>	**Valid values**: 1~4094 **Type**: Mandatory.

3.2.56 show vlan name

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.

3.2.57 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

3.2.58 show vlan ip-subnet

Description	Show VLAN ip-subnet entries	
Syntax	show vlan ip-subnet [id <subnet_id>]	
Parameter		
	Name	**Description**
	id	Show a specific ip-subnet entry
	subnet_id	<1-128> The specific ip-subnet to show

3.2.59 show vlan mac

Description	Show VLAN MAC entries	
Syntax	show vlan mac [address <mac_addr>]	
Parameter		
	Name	**Description**
	address	Show a specific MAC entry
	mac_addr	<mac_ucast> The specific MAC entry to show

3.2.60 show vlan protocol

Description	Protocol-based VLAN status	
Syntax	show vlan protocol [eth2 { <etype> | arp | ip | ipx | at }] [snap { <oui> | rfc-1042 | snap-8021h } <pid>] [llc <dsap> <ssap>]	
Parameter		
	Name	**Description**
	eth2	Ethernet protocol based VLAN status
	etype	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
	llc	LLC-based VLAN status
	dsap	<0x0-0xff> DSAP (Range: 0x00 - 0xFF)
	ssap	<0x0-0xff> SSAP (Range: 0x00 - 0xFF)
	snap	SNAP-based VLAN status
	oui	<0x0-0xffffff> SNAP OUI (Range 0x000000 - 0XFFFFFF)
	rfc-1042	SNAP OUI is rfc-1042
	snap-8021h	SNAP OUI is 8021h

3.2.61 show vlan status

Description	Show the VLANs configured for each interface	
Syntax	show vlan status [interface (<port_type> [<plist>])] [combined | admin | nas | mvr | voice-vlan | mstp | erps | vcl | evc | gvrp | all | conflicts]	
Parameter		
	Name	**Description**
	admin	Show the VLANs configured by administrator
	all	Show all VLANs configured
	combined	Show the VLANs configured by a combination
	conflicts	Show VLANs configurations that has conflicts
	gvrp	Show the VLANs configured by GVRP
	interface	Show the VLANs configured for a specific interface(s)
	mstp	Show the VLANs configured by MSTP.
	mvr	Show the VLANs configured by MVR
	nas	Show the VLANs configured by NAS
	vcl	Show the VLANs configured by VCL
	voice-vlan	Show the VLANs configured by Voice VLAN

3.2.62 show qos-queue-mapping

Description	Show CoS queue mapping table.
Syntax	show qos maps
Parameter	None

3.2.63 show interface ports <portNo> priority

Description	Show QoS per gigabit port.	
Syntax	show interface <port_type> [<port_type_list>] statistics { priority [<0~7>] }	
Parameter		
	Name	**Description**
	priority [<0~7>]	**Valid values**:0 ~7 **Type**: Mandatory
	<port_type>	Port type in Fast, Giga or Tengiga ethernet
	<portNo>	**Valid values**:0 ~ 10 **Type**: Mandatory

3.2.64 show qos

Description	Show scheduler profile table.
Syntax	show queue-scheduler profile
Parameter	None

3.2.65 show queue-shaper

Description	Show queue shaper information.

Syntax	show queue-shaper
Parameter	None

3.2.66 show port-shaper

Description	Show port shaper information.
Syntax	show port-shaper
Parameter	None

3.2.67 show pvlan [<pvlan_list>]

Description	PVLAN ID	
Syntax	show pvlan [<pvlan_list>]	
Parameter		
	Name	**Description**
	pvlan_list	PVLAN ID to show configuration for

3.2.68 show pvlan isolation [interface <port_type> [<port_type_list>]]

Description	Show all port isolation information.	
Syntax	show pvlan isolation [interface <port_type> [<port_type_list>]]	
Parameter	None	
	Name	**Description**
	<port_type>	Port type in Fast, Giga or Tengiga ethernet
	<portNo>	**Valid values**: 1 ~ 10 **Type**: Mandatory

3.2.69 show interface gigabit <portNo> port-isolation

Description	Show isolation information per gigabit port.	
Syntax	show pvlan isolation [interface <port_type> [<port_type_list>]]	
Parameter		
	Name	**Description**
	<portNo>	**Valid values**: 1 ~ 10 **Type**: Mandatory

3.2.70 show interface gigabit <portNo> storm-control

Description	Show storm control information per gigabit port.	
Syntax	show interface gigabit <portNo> storm-control	
Parameter		
	Name	**Description**
	<port_type>	Port type in Fast, Giga or Tengiga ethernet
	<portNo>	**Valid values**: 1~10 **Type**: Mandatory

3.2.71 show interface gigabit <portNo> transceiver

Description	Show interface transceiver	
Syntax	show interface GigabitEthernet interface <port_type_list> transceiver	
Parameter		
	Name	**Description**
	<portNo>	**Valid values**: 11 ~ 14 (for 14 port model) **Type**: Mandatory

3.2.72 show qos interface

Description	QoS interface information	
Syntax	show qos [{ interface [(<port_type> [<port>])] }	
Parameter		
	Name	**Description**
	interface	Interface
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	port	PORT_LIST, Port list in 1/1-14

3.2.73 show qos maps

Description	MAPS	
Syntax	show qos maps { maps [dscp-cos] [dscp-ingress-translation] [dscp-classify] [cos-dscp] [dscp-egress-translation] }	
Parameter		
	Name	**Description**
	cos-dscp	Map for cos to dscp
	dscp-classify	Map for dscp classify enable
	dscp-cos	Map for dscp to cos
	dscp-egress-translation	Map for dscp egress translation
	dscp-ingress-translation	Map for dscp ingress translation

3.2.74 show qos qce

Description	QCE	
Syntax	show qos { qce [<qce>] }	
Parameter		
	Name	**Description**
	qce	<Id : 1-256> QCE ID

3.2.75 show qos storm {unknown-uc|unknown-mc|broadcast}

Description	Show storm control information by VLAN.	
Syntax	show vlan unknown-uc show vlan unknown-mc show vlan broadcast	
Parameter		
	Name	**Description**
	unknown-uc	Show unknown unicast storm control information by VLAN. **Type**: Mandatory
	unknown-mc	Show unknown multicast storm control information by VLAN. **Type**: Mandatory
	broadcast	Show broadcast storm control information by VLAN. **Type**: Mandatory

3.2.76 show port-mirror

Description	Show port mirror information.
Syntax	show port-mirror
Parameter	None

3.2.77 show ringv2

Description	Show ring protect information
Syntax	show ring

Parameter	None

3.2.78 show rmon

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

3.2.79 show interface gigabit <portNo>

Description	Show interface gigaport information	
Syntax	show interface gigabit <portNo>	
Parameter		
	Name	**Description**
	<portNo>	Gigabit port. **Valid values**: 1 ~ 10 **Type**: Mandatory

3.2.80 show ext-tpid

Description	Show TPID for the VLAN Tag
Syntax	show ext-tpid
Parameter	None

3.2.81 show interface vlan

Description	Show VLAN interface information of all VLANs.
Syntax	show interface vlan
Parameter	None

3.2.82 show interface vlan <vlanid>

Description	Show VLAN interface information of specify VLAN.	
Syntax	show interface vlan <vlanid>	
Parameter		
	Name	**Description**
	<vlanid>	VLAN ID. **Valid values**: 1 ~ 4094 **Type**: Mandatory

3.2.83 show protocol-vlan

Description	Show protocol based VLAN information for all entries.
Syntax	show protocol-vlan
Parameter	None

3.2.84 show interface gigabit <portNo> vlan

Description	Show vlan information per port
Syntax	show interface gigabit <portNo> vlan

Parameter		
	Name	**Description**
	<portNo>	Gigabit port. **Valid values**: 1 ~ 10 **Type**: Mandatory

3.2.85 show vlan-trans

Description	Show VLAN translation table for all
Syntax	show vlan-trans
Parameter	None

3.2.86 show multicast-fdb

Description	Show IGMP group membership table
Syntax	show multicast-fdb
Parameter	None

3.2.87 show dot1x

Description	Show dot1x information.
Syntax	show dot1x
Parameter	None

3.2.88 show dot1x status

Description	Show dot1x stats.
Syntax	show dot1x status [interface <port_type> [<port_type_list>]] [brief]
Parameter	None

3.2.89 show dot1x statistics

Description	Show dot1x statistics	
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 Backend Server statistics
	interface	Interface
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	v_port_type_list	PORT_LIST, Port list in 1/1-14

3.2.90 show radius-server [statistics]

Description	show radius-server statistics	
Syntax	show radius-server [statistics]	
Parameter		
	Name	**Description**
	[statistics]	Count radius packet statistics

3.2.91 show rfc2544 profile [<word32>]

Description	show rfc2544 profile name	
Syntax	show rfc2544 profile [<word32>]	
Parameter		
	Name	**Description**

	<word32>	rfc2544 profile name

3.2.92 show voice

Description	Vlan for voice traffic	
Syntax	show voice vlan [oui <oui> | interface (<port_type> [<port_list>])]	
Parameter		
	Name	**Description**
	vlan	Vlan for voice traffic
	oui	OUI configuration
	oui	OUI value
	interface	Select an interface to configure
	port_type	GigabitEthernet, 1 Gigabit Ethernet Port
	port_list	<port_type_list> Port list in 1/1-14

3.2.93 show web

Description	Web privilege	
Syntax	show web privilege group [<group_name>] level	
Parameter		
	Name	**Description**
	privilege	Web privilege
	group	Web privilege grou
	group_name	CWORD Valid words are 'Aggregation' 'DHCP' 'Debug' 'Dhcp_Client' 'Diagnostics' 'EEE' 'Green_Ethernet' 'IP2' 'IPMC_Snooping' 'LACP' 'LLDP' 'Loop_Protect' 'MAC_Table' 'MVR' 'Maintenance' 'Mirroring' 'NTP' 'Ports' 'Private_VLANs' 'QoS' 'RPC' 'Security' 'Spanning_Tree' 'System' 'Timer' 'VCL' 'VLANs' 'Voice_VLAN' 'XXRP' 'sFlow'
	level	Web privilege group level

3.3 Configure Mode Commands

Commands that can be executed under Configure Mode

3.3.1 interface gigabit <portNo>

Description	Gigabit Ethernet interface. (enter gigabit interface mode)	
Syntax	interface gigabit <portNo>	
Parameter		
	Name	**Description**
	<portNo>	**Valid values**: 1 ~ 10 **Type**: Mandatory

3.3.2 interface vlan <vlanid>

Description	Vlan Ethernet interface (enter mode of interface vlan)	
Syntax	interface vlan <vlanid>	
Parameter		
	Name	**Description**
	<vlanid>	**Valid values**: 1 ~ 4094 **Type**: Mandatory

3.3.3 aaa

Description	Authentication	
Syntax	aaa authentication	
Parameter		
	Name	**Description**
	authentication	Authentication

3.3.4 access

Description	Management configuration	
Syntax	access management	
Parameter		
	Name	**Description**
	management	Access management configuration

3.3.5 access-list

Description	Enter Acl Profile Config Mode	
Syntax	profile acl	
Parameter	**Name**	**Description**
	<vlanid>	**Valid values**: 1 ~ 4094 **Type**: Mandatory
Parameter	None	

3.3.6 aggregation mode

Description	Traffic distribution mode	
Syntax	aggregation mode { dmac | ip | port | smac }	
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

3.3.7 alarm history clear

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

3.3.8 banner

Description	Banner control	
Syntax	banner { LINE | exec | login | motd }	
Parameter		
	Name	**Description**
	LINE	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

3.3.9 ddmi

Description	Enable DDMI function
Syntax	ddmi
Parameter	None

3.3.10 default access-list rate-limiter

Description	Rate limiter	
Syntax	default access-list rate-limiter [<rate_limiter_list>]	
Parameter		
	Name	**Description**
	RateLimiterId : 1-16	Rate limiter ID

3.3.11 profile sch

Description	Enter Scheduling Profile Config Mode
Syntax	profile sch
Parameter	None

3.3.12 ntp server <1-5> ip-address <ip>

Description	Set NTP server address.	
Syntax	ntp server <1-5> ip-address { <ipv4_ucast> | <ipv6_ucast> | <hostname> }	
Parameter		
	Name	**Description**
	<1-5>	index number
	<ipv4> <ipv6 >	**Type**: Mandatory
	<hostname>	Server name

3.3.13 clock timezone

Description	Set time zone.
Syntax	clock timezone <word16> <-23-23> [<0-59>]
Parameter	

	Name	Description
	< word16>	**Valid values**: please see 'list timezone' **Type**: Mandatory
	default	Set time zone to default (GMT/UTC). **Type**: Mandatory

3.3.14 clock summer-time set [start-time] [end-time]

Description	Set date/time.	
Syntax	clock summer-time <word16> date [<1-12> <1-31> <2000-2097> <hhmm> <1-12> <1-31> <2000-2097> <hhmm> [<1-1440>]]	
Parameter		
	Name	**Description**
	< word16>	**Valid values**: please see 'list timezone' **Type**: Mandatory
	<day>	**Valid values**: 1 ~ 31 **Type**: Mandatory
	<month>	**Valid values**: 1 ~ 12 **Type**: Mandatory
	<year>	**Valid values**: 2000-2097 **Type**: Mandatory
	<minute>	**Valid values**: 0 ~ 59 **Type**: Mandatory
	<second>	**Valid values**: 0 ~ 59 **Type**: Optional

3.3.15 account add <username>

Description	Add an account.	
Syntax	username <word31> privilege <0-15> password encrypted <word4-44>	
Parameter		
	Name	**Description**
	< word31>	**Valid values**: 1 ~ 31 characters **Type**: Mandatory
	<0-15>	**Valid values**: 0 ~ 15 **Type**: Mandatory
	< word4-44>	**Valid values**: 4-44 characters **Type**: Mandatory

3.3.16 account delete <username>

Description	Delete an account.	
Syntax	no username <word31>	
Parameter		
	Name	**Description**
	< word31>	**Valid values**: 1 ~ 31 characters **Type**: Mandatory

3.3.17 syslog {enable|disable}

Description	Disable or enable syslog service.
Syntax	logging on no logging on
Parameter	None

3.3.18 configuration save and replace

Description	Save and install configuration	
Syntax	copy { startup-config | running-config | <Filename> } { startup-config | running-config | < Filename > } [syntax-check]	
Parameter		
	Name	**Description**
	running-config	Currently running configuration
	startup-config	Startup configuration
	syntax-check	Perform syntax check on source configuration
	Filename	File in FLASH or on TFTP server

3.3.19 clear ip igmp snooping statistics

Description	clear ipigmpsnoopingstatisti	
Syntax	clear ip igmp snooping [vlan<vlan_list>] statistics	
Parameter		
	Name	**Description**
	vlan_list	VLAN list.

3.3.20 clear logging

Description	clear logging	
Syntax	clear logging [info] [warning] [error] [switch <switch_list>]	
Parameter		
	Name	**Description**
	info	Information
	warning	Warning
	error	Error
	Switch list	List of switch ID, ex, 1,3-5,6

3.3.21 clear mac address-table

Description	clear mac address-table
Syntax	clear mac address-table
Parameter	

3.3.22 debug

Description	Set prompt for testing	
Syntax	debug prompt	
Parameter		
	Name	**Description**
	<word>	Word for prompt in 32 char's

3.3.23 delete

Description	Delete one file in flash: file system	
Syntax	delete <word>	
Parameter		
	Name	**Description**
	<word>	Name of file to delete

3.3.24 dir

Description	Directory of all files in flash: file system

Syntax	dir
Parameter	

3.3.25 do

Description	To run exec commands in config mode	
Syntax	do <line>	
Parameter		
	Name	**Description**
	<line>	Exec Command

3.3.26 duplex

Description	Set duplex mode	
Syntax	duplex { half | full | auto [half | full] }	
Parameter		
	Name	**Description**
	half	Forced half duplex.
	full	Forced full duplex.
	auto	Auto negotiation of duplex mode.
	[half | full]	Advertise half /full duplex.

3.3.27 editing

Description	Enable command line editing
Syntax	editing
Parameter	

3.3.28 firmware

Description	Firmware swap and upgrade	
Syntax	firmware { swap | upgrade }	
Parameter		
	Name	**Description**
	swap	Swap between Active and Alternate firmware image
	upgrade	Firmware upgrade

3.3.29 flowcontrol

Description	Enable/Disable flow control.	
Syntax	flowcontrol { on | off }	
Parameter		
	Name	**Description**
	on	Enable flow control.
	off	Disable flow control.

3.3.30 frame-sizes

Description	Select the frame sizes that the enabled tests will loop through	
Syntax	frame-sizes { [64] [128] [256] [512] [1024] [1280] [1518] [2000] [9600] }	
Parameter		
	Name	**Description**
	64	Enable testing with 64-byte TST PDUs
	128	Enable testing with 128-byte TST PDUs
	256	Enable testing with 256-byte TST PDUs
	512	Enable testing with 512-byte TST PDUs
	1024	Enable testing with 1024-byte TST PDUs

	1280	Enable testing with 1280-byte TST PDUs
	1518	Enable testing with 1518-byte TST PDUs
	2000	Enable testing with 2000-byte TST PDUs
	9600	Enable testing with 9600-byte TST PDUs

3.3.31 green-etherneteee

Description	Powering down of PHYs when there is no traffic.
Syntax	green-etherneteee
Parameter	

3.3.32 green-etherneteee optimize-for-power

Description	Set if EEE shall be optimized for least power consumption (else optimized for least traffic latency).
Syntax	green-etherneteee optimize-for-power
Parameter	

3.3.33 green-etherneteee urgent-queues

Description	Enables EEE urgent queue. An urgent queue means that latency is kept to a minimum for traffic goin to that queue. Note: EEE power savings will be reduced.	
Syntax	green-etherneteee urgent-queues [<range_list>]	
Parameter		
	Name	**Description**
	range_list	EEE Interface.

3.3.34 help

Description	Description of the interactive help system
Syntax	help
Parameter	

3.3.35 iparp inspection

Description	iparp inspection
Syntax	iparp inspection
Parameter	

3.3.36 ip arp inspection translate

Description	IP ARP inspection entry interface configuration	
Syntax	ip arp inspection translate [interface <port_type><port_type_id><vlan_id><mac_ucast><ipv4_ucast>]	
Parameter		
	Name	**Description**
	port_type	Port type in Fast, Giga or Tengigaethernet
	port_type_id	Port ID in the format of switch-no/port-no
	vlan_id	Select a VLAN id to configure
	mac_ucast	Select a MAC address to configure
	ipv4_ucast	Select an IP Address to configure

3.3.37 ip arp inspection entry

Description	arp inspection entry interface config
Syntax	ip arp inspection entry interface <port_type> <in_port_type_id> <vlan_var> <mac_var> <ipv4_var>
Parameter	

	Name	Description
	port_type	Port type in Fast, Giga or Tengigaethernet
	in_port_type_id	Port ID in the format of switch-no/port-no
	vlan_var	Select a VLAN id to configure
	mac_var	Select a MAC address to configure
	ipv4_var	Select an IP Address to configure

3.3.38 ip arp inspection vlan

Description	IP ARP inspection vlan setting	
Syntax	ip arp inspection vlan<vlan_list>	
Parameter		
	Name	Description
	vlan_list	arp inspection vlan list

3.3.39 ip dns proxy

Description	IP DNS proxy service
Syntax	ipdns proxy
Parameter	

3.3.40 ip http secure-redirect

Description	IP http secure-redirect
Syntax	ip http secure-redirect
Parameter	

3.3.41 ip http secure-server

Description	IP Secure HTTP web server
Syntax	ip http secure-server
Parameter	

3.3.42 ip source binding interface

Description	IP source binding entry interface configuration	
Syntax	Ip source binding interface <port_type> <port_type_id> <vlan_id> <ipv4_ucast> <mac_ucast>	
Parameter		
	Name	Description
	port_type	Port type in Fast, Giga or Tengigaethernet
	port_type_id	Port ID in the format of switch-no/port-no
	vlan_id	Select a VLAN id to configure
	ipv4_ucast	Select an IP Address to configure
	mac_ucast	Select a MAC address to configure

3.3.43 ip ssh

Description	IP Secure Shell
Syntax	ipssh
Parameter	

3.3.44 ip name-server

Description	IP name server	
Syntax	ip name-server { <v_ipv4_ucast> | dhcp [interface vlan <v_vlan_id>] }	
Parameter		
	Name	Description
	v_ipv4_ucast	A valid IPv4 unicast address

	dhcp	Dynamic Host Configuration Protocol
	v_vlan_id	VLAN identifier(s): VID

3.3.45 ip route

Description	IP Route	
Syntax	ip route <v_ipv4_addr> <v_ipv4_netmask> <v_ipv4_gw>	
Parameter		
	Name	**Description**
	v_ipv4_addr	Network
	v_ipv4_netmask	Netmask
	v_ipv4_gw	Gateway

3.3.46 ip routing

Description	IP routing
Syntax	ip routing
Parameter	

3.3.47 ip verify

Description	IP verify	
Syntax	ip verify [source] [translate]	
Parameter		
	Name	**Description**
	source	verify source
	translate	ip verify source translate all entries

3.3.48 ipmc profile

Description	IPMC profile configuration
Syntax	ipmc profile
Parameter	

3.3.49 ipmc range

Description	A range of IPv4/IPv6 multicast addresses for the profile	
Syntax	ipmc range <word16> { <ipv4_mcast> [<ipv4_mcast>] | <ipv6_mcast> [<ipv6_mcast>] }	
Parameter		
	Name	**Description**
	word16	Range entry name in 16 char's
	ipv4_mcast	Valid IPv4 multicast address
	ipv4_mcast	Valid IPv4 multicast address that is not less than start address
	ipv6_mcast	Valid IPv6 multicast address
	ipv6_mcast	Valid IPv6 multicast address that is not less than start address

3.3.50 lacp

Description	LACP system priority	
Syntax	lacp system-priority <v_1_to_65535>	
Parameter		
	Name	**Description**
	system-priority	System priority
	<v_1_to_65535>	Priority value, lower means higher priority

3.3.51 line

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

3.3.52 login host

Description	Domain name and IP address	
Syntax	logging host { <v_ipv4_ucast> | <v_word45> }	
Parameter		
	Name	**Description**
	hostname	Donain name of the log server
	ipv4_ucast	IP address of the log server

3.3.53 login level

Description	Log level	
Syntax	logging level { info | warning | error }	
Parameter		
	Name	**Description**
	error	Error
	info	Information
	warning	Warning

3.3.54 login on

Description	Log on
Syntax	logging on
Parameter	

3.3.55 logout

Description	System logout
Syntax	logout
Parameter	

3.3.56 mac address-table aging-time

Description	MAC table entries/configuration	
Syntax	mac address-table aging-time <v_0_10_to_1000000>	
Parameter		
	Name	**Description**
	<v_0_10_to_1000000>	Aging time in seconds, 0 disables aging

3.3.57 mac address-table static

Description	MAC table entries/configuration	
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	48 bit MAC address
	v_vlan_id	VLAN IDs 1-4095
	port_type	Select an interface to configure
	v_port_type_list	Port list

3.3.58 more

Description	File in FLASH or on TFTP server
Syntax	more <Path>
Parameter	

3.3.59 no

Description	Function disable	
Syntax	no { debug | port-securit | terminal }	
Parameter		
	Name	**Description**
	debug	Debugging functions
	port-securit	Port security (psec limit)
	terminal	Set terminal line parameters

3.3.60 ping

Description	The ping function	
Syntax	ping { ip | ipv6 }	
Parameter		
	Name	**Description**
	ip	IP (ICMP) echo
	ipv6	IPv6 (ICMPv6) echo

3.3.61 port-security

Description	Port security	
Syntax	port-security [aging] [time <v_10_to_10000000>]	
Parameter		
	Name	**Description**
	aging	Enable/disable port security aging
	time	Time in seconds between check for activity on learned MAC addresses
	v_10_to_10000000	<10-10000000> seconds

3.3.62 privilege

Description		
Syntax	privilege { exec | configure | config-vlan | line | interface | if-vlan | ipmc-profile | snmps-host | stp-aggr | dhcp-pool | rfc2544-profile } level <privilege> <cmd>	
Parameter		
	Name	**Description**
	config-vlan	VLAN Configuration Mode
	configure	Global configuration mod
	dhcp-pool	DHCP Pool Configuration Mode
	exec	Exec mode
	if-vlan	VLAN Interface Mode
	interface	Port List Interface Mode
	ipmc-profile	IPMC Profile Mode
	line	Line configuration mode
	rfc2544-profile	RFC2544 Profile Mode
	snmps-host	SNMP Server Host Mode
	stp-aggr	STP Aggregation Mode

3.3.63 reload

Description	System or configuration reset	
Syntax	reload { cold | default }	
Parameter		
	Name	**Description**
	cold	Reload cold
	defaults	Reload defaults without rebooting

3.3.64 rmon

Description	RMON	
Syntax	rmon {alarm | event}	
Parameter		
	Name	**Description**
	alarm	Configure an RMON alarm
	event	Configure an RMON event

3.3.65 rmon alarm

Description	RMON Alarm	
Syntax	rmon alarm <id> <oid_str> <interval> { absolute | delta } rising-threshold <rising_threshold> [<rising_event_id>] falling-threshold <falling_threshold> [<falling_event_id>] { [rising | falling | both] }	
Parameter		
	Name	**Description**
	id	Alarm entry ID
	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
	ifInNUcastPkts	The number of broad-cast and multi-cast packets delivered to a higher-layer protocol
	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
	ifInUnknownProtos	The number of the inbound packets that were discarded because of the unknown or un-support protocol
	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
	ifOutNUcastPkts	The number of broad-cast and multi-cast packets that request to transmit
	ifOutOctets	The number of octets transmitted out of the interface, including framing characters
	ifOutUcastPkts	The number of uni-cast packets that request to transmi
	interval	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

3.3.66 rmon alarm

Description	RMON Event	
Syntax	rmon event <id> [log] [trap <community>] { [description <description>] }	
Parameter		
	Name	**Description**
	description	Specify a description of the event
	log	Generate RMON log when the event fires
	trap	Generate SNMP trap when the event fires

3.3.67 terminal

Description	Terminal control	
Syntax	terminal { editing | exec-timeout | help | history | length | width }	
Parameter		
	Name	**Description**
	editing	Enable command line editing
	exec-timeout	Set the EXEC timeout
	help	Description of the interactive help system
	history	Control the command history function
	length	Set number of lines on a screen
	width	Set width of the display terminal

3.3.68 vlan <vlanid>

Description	Configure VLAN.	
Syntax	vlan <vlanid>	
Parameter		
	Name	**Description**
	<vlanid>	Create an empty VLAN index. **Valid values**: 1 ~ 4094 **Type**: Mandatory

3.3.69 vlan <vlanid> <name>

Description	Configure VLAN's name.	
Syntax	vlan <vlanid> <name>	
Parameter		
	Name	**Description**
	<vlanid>	Create an empty VLAN index. **Valid values**: 1 ~ 4094 **Type**: Mandatory

	<name>	VLAN Name (0~31) **String Size**:0~31 **Type**: Mandatory

3.3.70 vlan disable <vlanid>

Description	Delete VLAN memberset/setting.	
Syntax	vlan disable <vlanid>	
Parameter		
	Name	**Description**
	<vlanid>	**Valid values**: 1 ~ 4094 **Type**: Mandatory

3.3.71 mac address-table aging-time <time>

Description	Configure aging time for a bridge port.	
Syntax	mac address-table aging-time <time>	
Parameter		
	Name	**Description**
	<time>	**Valid values**: 10 ~ 1000000 (seconds), 0: disable aging **Type**: Mandatory

3.3.72 mtu <value>

Description	MTU size.	
Syntax	mtu <value>	
Parameter		
	Name	**Description**
	<value>	Range. **Valid values**: 1536~9000 (bytes) **Type**: Mandatory

3.3.73 media-type

Description	Configure 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).

3.3.74 monitor destination interface

Description	The destination port. That is the port that trafficed should be mirrored to.	
Syntax	monitor destination interface <port_type> <port_type_id>	
Parameter		
	Name	**Description**
	<port_type	Port type
	<port_type_id>	Port Number

3.3.75 monitor source interface

Description	Mirror Interface traffic	
Syntax	monitor source { { interface (<port_type> [<v_port_type_list>]) }	
Parameter		
	Name	**Description**

	port_type	1 Gigabit Ethernet Port
	v_port_type_lis	Port list

3.3.76 monitor source cpu

Description	Mirror Interface traffic	
Syntax	monitor source { cpu [<cpu_switch_range>] } } { both | rx | tx }	
Parameter		
	Name	**Description**
	both	Setting source port to both will mirror both ingress and egress traffic
	rx	Setting source port to rx will mirror ingress traffic
	tx	Setting source port to tx will mirror egress traffic

3.3.77 speed

Description	Configures interface speed. If you use 10, 100, or 1000 keywords with the auto keyword the port will only advertise the specified speeds.	
Syntax	speed { 10g | 2500 | 1000 | 100 | 10 | auto { [10] [100] [1000] } }	
Parameter		
	Name	**Description**
	1000	1Gbps
	100	100Mbps
	10	10Mbps
	auto	Auto negotiation
	[10]	10Mbps
	[10 0]	100Mbps
	[1000]	1Gbps

3.3.78 tacacs-server host

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

3.3.79 tacacs-server key

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

3.3.80 tacacs-server timeout

Description	Time to wait for a TACACS+ server to reply	
Syntax	tacacs-server timeout <1-1000>	
Parameter		
	Name	**Description**
	1-1000	Wait time in seconds

3.3.81 traps

Description	trap event configuration	
Syntax	traps [aaa authentication] [system [coldstart] [warmstart]] [switch [stp] [rmon]]	
Parameter		
	Name	**Description**
	aaa authentication	AAA authentication fail event
	coldstart	Cold start event
	warmstart	Warm start event
	stp	STP event
	rmon	RMON event

3.3.82 upnp

Description	Set UPnP's configurations
Syntax	upnp
Parameter	

3.3.83 upnp advertising-duration

Description	Set UPnP's advertising duration	
Syntax	upnp advertising-duration <100-86400>	
Parameter		
	Name	**Description**
	100-86400	advertising duration

3.3.84 upnp ttl

Description	Set UPnP's TTL value	
Syntax	upnp ttl <1-255>	
Parameter		
	Name	**Description**
	1-255	TTL value

3.3.85 username

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

3.3.86 web

Description	
Syntax	web privilege group <group_name> level { [cro <cro>] [crw <crw>] [sro

	<sro>] [srw <srw>] }*1	
Parameter		
	Name	**Description**
	privilege	Web privilege
	group	Web privilege group
	group_name	Valid words are 'Aggregation' 'DHCP' 'Debug' 'Dhcp_Client' 'Diagnostics' 'EEE' 'Green_Ethernet' 'IP2' 'IPMC_Snooping' 'LACP' 'LLDP' 'Loop_Protect' 'MAC_Table' 'MVR' 'Maintenance' 'Mirroring' 'NTP' 'Ports' 'Private_VLANs' 'QoS' 'RPC' 'Security' 'Spanning_Tree' 'System' 'Timer' 'VCL' 'VLANs' 'Voice_VLAN' 'XXRP' 'sFlow'
	level	Web privilege group level
	cro	Configuration Read-only level
	crw	Configuration Read-write level
	sro	Status/Statistics Read-only level
	srw	Status/Statistics Read-write level
	cro	<Cro : 0-15>
	crw	<Crw : 0-15>
	sro	<Sro : 0-15>
	srw	<Srw : 0-15>

3.3.87 flow-control {enable|disble}

Description	Enable/Disable flow-control.	
Syntax	flow-control {enable|disble}	
Parameter		
	Name	**Description**
	enable	Enable flow-control.
	disable	Disable flow-control.

3.3.88 speed

Description	Configure gigabit Ethernet speed and Copper/SFP for gigabit port 7~8. (port1~6 Only support copper, no SFP) (port 9, 10 only support auto)	
Syntax	speed {auto|full-l000mbps|full-100mbps|full-10mbps|half-100mbps|half-10mbps}	
Parameter		
	Name	**Description**
	auto	Auto negotiation.
	full-l000mbps	Set 1000Mbps full duplexing.
	full-100mbps	Set 100Mbps full duplexing.
	full-10mbps	Set 10Mbps full duplexing.
	half-100mbps	Set 100Mbps half duplexing.
	half-10mbps	Set 10Mbps half duplexing.

3.3.89 port {enable/disable}

Description	Set interface gigabit port enable or disable.	
Syntax	port {enable/disable}	
Parameter		
	Name	**Description**
	disable	Turn off gigabit port.
	enable	Turn off gigabit port.

3.3.90 Date/Time

Description	Set device date and time	
Syntax	clock datetime <2000-2037> <1-12> <1-31> <0-23> <0-59> <0-59>	
Parameter		
	Name	**Description**
	<2000-2037>	year
	<1-12>	month
	<1-31>	Date
	<0-23>	Hour
	<0-59>	minute
	<0-59>	Second

3.4 VLAN Mode Commands

3.4.1 vlan

Description	VLAN commands	
Syntax	vlan <vlan_list>	
Parameter		
	Name	**Description**
	vlan_lis	ISL VLAN IDs 1~4095

3.4.2 vlan ethertype s-custom-port

Description	Vlan Ether type for custom S-ports configuration	
Syntax	vlan ethertype s-custom-port <0x0600-0xffff>	
Parameter		
	Name	**Description**
	0x0600-0xffff	Ethertype (Range: 0x0600-0xffff)

3.4.3 vlan protocol

Description		
Syntax	vlan protocol { { eth2 { <0x600-0xffff> | arp | ip | ipx | at } } | { snap { <0x0-0xffffff> | rfc_1042 | snap_8021h } <0x0-0xffff> } | { llc <0x0-0xff> <0x0-0xff> } } group <word16>	
Parameter		
	Name	**Description**
	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
	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)
	0x0-0xff	DSAP (Range: 0x00 - 0xFF)
	0x0-0xff	SSAP (Range: 0x00 - 0xFF)
	word16	Group Name (Range: 1 - 16 characters)

3.4.4 vlan-trunking

Description	Change whether trunking of unknown VLANs is enabled
Syntax	vlan-trunking

Parameter	

3.4.5 switchport access vlan

Description	Set switch access mode of the interface	
Syntax	switchport access vlan <vlan_id>	
Parameter		
	Name	**Description**
	vlan_id	VLAN ID of the VLAN when this port is in access mode

3.4.6 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

3.4.7 switchport hybrid acceptable-frame-type

Description	Set acceptable frame type on a port	
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

3.4.8 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

3.4.9 switchport hybrid egress-tag

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

3.4.10 switchport hybrid ingress-filtering

Description	VLAN Ingress filter configuration	
Syntax	switchport hybrid ingress-filtering	
Parameter		

3.4.11 switchport mode

Description	Set switching mode	
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 unconditionall

3.4.12 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

3.4.13 switchport vlan protocol group

Description	Protocol-based VLAN group commands	
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)

3.5 Interface VLAN Mode Commands

3.5.1 interface

Description	Interface configuration	
Syntax	interface <port_type> [<port_type_list>]	
Parameter		
	Name	**Description**
	port_type	Port type in Fast, Giga or Tengigaethernet
	port_type_list	List of Port ID, ex, 1/1,3-5;2/2-4,6

3.5.2 interface vlan

Description	VLAN interface configurations	
Syntax	interface vlan<vlan_list>	
Parameter		
	Name	**Description**
	vlan_list	List of VLAN interface numbers, 1~4095

3.5.3 ip address

Description	IPv4 address configurations	
Syntax	ip address { { <ipv4_addr><ipv4_netmask> } | { dhcp [fallback <ipv4_addr><ipv4_netmask> [timeout <uint>]] } }	
Parameter		
	Name	**Description**
	ipv4_addr	IP address
	ipv4_netmask	IP netmask
	dhcp	Enable DHCP
	fallback	DHCP fallback settings
	ipv4_addr	DHCP fallback address
	ipv4_netmask	DHCP fallback netmask
	timeout	DHCP fallback timeout
	uint	DHCP fallback timeout in seconds

3.5.4 ip name-server

Description	Interface Internet Protocol config commands Domain Name System	
Syntax	ip name-server { <ipv4_ucast> | dhcp [interface vlan<vlan_id>] }	
Parameter		
	Name	**Description**
	ipv4_ucast	A valid IPv4 unicast address
	vlan_id	VLAN identifier(s): VID

3.5.5 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 addres

3.5.6 ip dhcp pool

Description	Pool name in 32 characters
Syntax	ip dhcp pool <pool_name>
Parameter	

3.5.7 ip dhcp server

Description	DHCP Server
Syntax	ip dhcp server
Parameter	

3.5.8 ip dhcp relay

Description	DHCP relay agent configuration
Syntax	ipdhcp relay
Parameter	

3.5.9 ip dhcp relay information option

Description	IP DHCP relay information option(Option 82)
Syntax	ipdhcp relay information option
Parameter	

3.5.10 ip dhcp retry interface vlan

Description	Restart the DHCP query process	
Syntax	ipdhcp retry interface vlan<vlan_id>	
Parameter		
	Name	**Description**
	vlan_id	Vlan ID

3.5.11 ip dhcp snooping

Description	IP DHCP snooping
Syntax	ipdhcp snooping
Parameter	

3.5.12 ip helper-address

Description	DHCP relay server	
Syntax	ip helper-address <v_ipv4_ucast>	
Parameter		
	Name	**Description**
	Ip : ipv4_ucast	IP address of the DHCP relay server

3.5.13 ipv6 address

Description	Configure the IPv6 address of an interface	
Syntax	ipv6 address <ipv6_subnet>	
Parameter		
	Name	**Description**
	ipv6_subnet	IPv6 prefix x:x::y/z

3.5.14 ipv6mtu

Description	IPv6 Maximum transmission unit	
Syntax	ipv6 mtu<1280-1500>	
Parameter		
	Name	**Description**
	1280-1500	MTU value in bytes

3.6 RingV2 Group Mode Commands

3.6.1 ringv2 protect

Description	To configure ring protection.	
Syntax	ring protect	
Parameter		
	Name	**Description**
	group1	Configure ring protection v2 group1 (Ring)
	group2	Configure ring protection v2 group2 (Ring)
	group3	Configure ring protection v2 group3 (Chain)

3.6.2 guard-time

Description	Set guard time	
Syntax	guard-time { <ringGuardTimerDef> }	
Parameter		
	Name	**Description**
	ringGuardTimerDef	<10-3600>, unit: secound. Default is 10 secounds

3.6.3 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

3.6.4 node1 interface GigabitEthernet <portNo>}

Description	Set interface of ring protection node	
Syntax	node1 interface GigabitEthernet <portNo>	
Parameter		
	Name	**Description**
	<portNo>	**Valid values**: 1~max port index.

3.6.5 node2 interface GigabitEthernet <portNo>}

Description	Set interface of ring protection node	
Syntax	Node2 interface GigabitEthernet <portNo>	
Parameter		
	Name	**Description**
	<portNo>	**Valid values**: 1~max port index.

3.6.6 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-terminal-1	Set role to balancing chain terminal 1
	b-chain-terminal-2	Set role to balancing chain terminal 2

3.7 Spanning Tree

3.7.1 spanning-tree

Description	Enable/disable STP on this interface	
Syntax	spanning-tree	
Parameter		
	Name	**Description**

3.7.2 spanning-tree aggregation

Description	Spanning Tree protocol	
Syntax	spanning-tree aggregation	
Parameter		
	Name	**Description**

3.7.3 spanning-tree auto-edge

Description	Auto detect edge status	
Syntax	**3.7.4 spanning-tree auto-edge**	
Parameter		
	Name	**Description**

3.7.5 spanning-tree bpdu-guard

Description	Enable/disable BPDU guard	
Syntax	spanning-tree bpdu-guard	
Parameter		
	Name	**Description**

3.7.6 spanning-tree edge

Description	Edge port spanning-tree STP Bridge	
Syntax	spanning-tree edge	
Parameter		
	Name	**Description**

3.7.7 spanning-tree edge bpdu-filter

Description	Enable BPDU filter (stop BPDU tx/rx)	
Syntax	spanning-tree edge bpdu-filter	
Parameter		
	Name	**Description**

3.7.8 spanning-tree mode

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

3.7.9 spanning-tree mst cost

Description	STP bridge instance STP Cost of this port	
Syntax	spanning-tree mst <0-7> cost { <1-200000000> | auto }	
Parameter		
	Name	**Description**
	<0-7>	instance 0-7 (CIST=0, MST2=1...)
	<1-200000000>	STP Cost of this port

3.7.10 spanning-tree mst port-priority

Description	port-priority	
Syntax	spanning-tree mst <0-7> port-priority <0-240>	
Parameter		
	Name	**Description**
	<0-7>	instance 0-7 (CIST=0, MST2=1...)
	<0-240>	STP priority of this port

3.7.11 spanning-tree mst priority

Description	Priority of the instance Range in seconds	
Syntax	spanning-tree mst <0-7> priority <0-61440>	
Parameter		
	Name	**Description**
	<0-7>	instance 0-7 (CIST=0, MST2=1...)

	<0-61440>	Priority of the instance

3.7.12 spanning-tree mst vlan

Description	VLAN keyword	
Syntax	spanning-tree mst <0-7> vlan <vlan_list>	
Parameter		
	Name	**Description**
	<0-7>	instance 0-7 (CIST=0, MST2=1...)
	<vlan_list>	Range of VLANs

3.7.13 spanning-tree mst forward-time

Description	forward-time Delay between port states	
Syntax	spanning-tree mst forward-time <4-30>	
Parameter		
	Name	**Description**
	<4-30>	Delay between port states

3.7.14 spanning-tree mst max-age

Description	Max bridge age before timeout.	
Syntax	spanning-tree mst max-age <6-40> [forward-time <4-30>]	
Parameter		
	Name	**Description**
	<6-40>	Max bridge age before timeout
	<4-30>	forward-time

3.7.15 spanning-tree mst max-hops

Description	MSTP bridge max hop count	
Syntax	spanning-tree mst max-hops <6-40>	
Parameter		
	Name	**Description**
	<6-40>	MSTP bridge max hop count

3.7.16 spanning-tree mst name

Description	Name of the bridge Revision Revision keyword	
Syntax	spanning-tree mst name <word32> revision <0-65535>	
Parameter		
	Name	**Description**
	<word32>	Name of the bridge
	<0-65535>	Revision keyword

3.7.17 spanning-tree mst <instance>

Description	instance 0-7 (CIST=0, MST2=1...)	
Syntax	spanning-tree mst <instance> priority <prio> spanning-tree mst <instance> vlan <v_vlan_list>	
Parameter		
	Name	**Description**
	instance	<Instance : 0-7> instance 0-7 (CIST=0,

		MST2=1...)
	priority	Priority of the instance
	vlan	VLAN keyword
	prio	<Prio : 0-61440> Range in seconds
	v_vlan_list	<vlan_list> Range of VLANs

3.7.18 spanning-tree recovery

Description	Recovery	
Syntax	spanning-tree recovery interval <interval>	
Parameter		
	Name	**Description**
	interval	The interval
	interva	Interval : 30-86400> Range in seconds

3.7.19 spanning-tree transmit

Description	Transmit	
Syntax	spanning-tree transmit hold-count <holdcount>	
Parameter		
	Name	**Description**
	hold-count	Max number of transmit BPDUs per sec
	holdcount	<Holdcount : 1-10> 1-10 per sec, 6 is default

3.8 sFlow Configure Command

3.8.1 sflow

Description	Enables/disables flow sampling on this port.	
Syntax	sflow [<range_list>]	
Parameter		
	Name	**Description**
	< range_list >	Sampler instance

3.8.2 sflow agent-ip

Description	The agent IP address used as agent-address in UDP datagrams. Defaults to IPv4 loopback address.	
Syntax	sflow agent-ip { ipv4 <ipv4_addr> | ipv6 <ipv6_addr> }	
Parameter		
	Name	**Description**
	< ipv4_addr >	Ipv4 address
	< ipv6_addr>	ipv6 address

3.8.3 sflow collector-address

Description	Sflow runtime, see sflow_icli_functions	
Syntax	sflow collector-address [receiver <range_list>] [<word>]	
Parameter		
	Name	**Description**
	< range_list >	Sampler instance

3.8.4 sflow max-datagram-size

Description	Statistics flow Maximum datagram size.	
Syntax	sflow max-datagram-size [receiver <range_list>] <200-1468>	
Parameter		
	Name	**Description**

	<range_list>	receiver list
	<200-1468>	packet byte

3.8.5 sflow max-sampling-size

Description	Specifies the maximum number of bytes to transmit per flow sample.	
Syntax	sflow max-sampling-size [sampler <range_list>] [<14-200>]	
Parameter		
	Name	**Description**
	< range_list >	Sampler instance
	<200-1468>	packet byte

3.8.6 sflow collector-port

Description	Collector UDP port	
Syntax	sflow collector-port [receiver <rcvr_idx_list>] <collector_port>	
Parameter		
	Name	**Description**
	collector_port	<Collector Port : 1-65535> Port number

3.8.7 sflow sampling-rate

Description	Specifies the statistical sampling rate. The sample rate is specified as N to sample 1/Nth of the packets n the monitored flows. There are no restrictions on the value, but the switch will adjust it to the closest possible sampling rate.	
Syntax	sflow sampling-rate [sampler <range_list>] [<1-4294967295>]	
Parameter		
	Name	**Description**
	< range_list >	Sampler instance
	<1-4294967295>	Sampling rate

3.8.8 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 [receiver <range_list>] <0-2147483647>	
Parameter		
	Name	**Description**
	< range_list >	Sampler instance
	<0-2147483647>	Number of seconds.

3.9 SNMP Configure Command

3.9.1 snmp-server

Description	Enable SNMP server	
Syntax	snmp-server	
Parameter		
	Name	**Description**

3.9.2 snmp-server access

Description	snmp-server access configuration
Syntax	snmp-server access < group name > model { v1 | v2c | v3 | any } level { auth | noauth | priv } [read <word255>] [write <word255>]
Parameter	

	Name	Description
	< group name >	32 words
	< v1 | v2c | v3 | any >	V1~v3 security model
	< level >	security level
	{ auth | noauth | priv }	authNoPriv Security Level
		noAuthNoPriv Security Level
		authPriv Security Level
	read	specify a read view for the group
	<word255>	read view name

3.9.3 snmp-server community v2c

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

3.9.4 snmp-server community v3

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

3.9.5 snmp-server host

Description	Set SNMP server's configurations	
Syntax	snmp-server host <word32>	
Parameter		
	Name	Description
	< word32 >	Name of the host configuration

3.9.6 snmp-server host traps

Description	Set SNMP host's configurations	
Syntax	snmp-server host < Name of the host configuration > traps [linkup] [linkdown] [lldp]	
Parameter		
	Name	Description
	< Name of the host configuration >	Name of the host configuration
	<200-1468>	packet byte
	[linkup]	Link up event
	[linkdown]	Link down event
	[lldp]	LLDP event

3.9.7 snmp-server trap

Description	Set SNMP server's configurations	
Syntax	snmp-server trap	
Parameter		
	Name	Description

3.9.8 snmp-server user

Description	Set the SNMPv3 user's configurations
Syntax	snmp-server user <Username> engine-id <Engine ID octet string> [{ md5 <word8-32> | sha <word8-40> } [priv { des | aes } <word8-

	32>]]	
Parameter		
	Name	**Description**
	<Username >	32 words
	<Engine ID octet string>	word10-32
	MD5	Set MD5 protocol
	sha	Set SHA protocol
	<word8-40>	SHA password
	priv	Set Privacy
	{ des | aes }	Set DES/AES protocol
	<word8-32>	Set privacy password

3.9.9 snmp-server version

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

3.9.10 snmp-server view

Description	Snmp MIB view configuration	
Syntax	snmp-server view <word32> <word255> { include | exclude }	
Parameter		
	Name	**Description**
	< word32 >	MIB view name
	< word255>	MIB view OID
	{ include | exclude }	Included/Excluded type from the view

3.9.11 SNMP trap receive ipv6 host

Description	host configuration	
Syntax	host <ipv6_ucast> [<1-65535>] [traps | informs]	
Parameter		
	Name	**Description**
	ipv6_ucast	IP address of SNMP trap host
	1-65535	UDP port of the trap messges
	traps	Send Trap messages to this host
	informs	Send Inform messages to this host

3.9.12 snmp-server contact

Description	SNMP server contact	
Syntax	snmp-server contact <v_line255>	
Parameter		
	Name	**Description**
	v_line255	<line255> contact string

3.9.13 snmp-server engine-id

Description	SNMP server engine ID	
Syntax	snmp-server engine-id local <engineID>	
Parameter		
	Name	**Description**
	local	Set SNMP local engine ID
	engineID	<Engineid : word10-32> local engine ID

3.9.14 snmp-server location

Description	SNMP server loation

Syntax	snmp-server location <v_line255>	
Parameter		
	Name	**Description**
	v_line255	<line255> location string

3.9.15 snmp-server security-to-group

Description	SNMP server security	
Syntax	snmp-server security-to-group model { v1 | v2c | v3 } name <security_name> group <group_name>	
Parameter		
	Name	**Description**
	model	security model
	v1	v1 security model
	v2c	v2c security model
	v3	v3 security model
	name	security user
	security_name	<SecurityName : word32> security user name
	group	security group
	group_name	<GroupName : word32> security group name

3.9.16 SNMP trap receive ipv4 host

Description	host configuration	
Syntax	host { <ipv4_ucast> | <hostname> } [<1-65535>] [traps | informs]	
Parameter		
	Name	**Description**
	Ipv4_ucast	IP address of SNMP trap host
	hostname	hostname of SNMP trap host
	1-65535	UDP port of the trap messges
	traps	Send Trap messages to this host
	informs	Send Inform messages to this host

3.10 Qos Function Command

3.10.1 qos qce

Description	QCE setting	
Syntax	qos qce { <Id : 1-256> | refresh | update }	
Parameter		
	Name	**Description**
	<Id : 1-256>	QCE ID
	refresh	Refresh QCE tables in hardware
	update	Update an existing QCE

3.10.2 qos storm

Description	QoS storm	
Syntax	qos storm { unicast | multicast | broadcast } { { <rate> [kfps] } | { 1024 kfps } }	
Parameter		
	Name	**Description**
	broadcast	Police broadcast frames
	multicast	Police multicast frames
	unicast	Police unicast frames
	<rate>	1024, Rate is 1024 kfps

		<Rate : 1,2,4,8,16,32,64,128,256,512> Policer rate (default fps)

3.10.3 qos cos

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

3.10.4 qos dscp-classify

Description	Set qos dscp-classify.	
Syntax	qos dscp-classify { zero | selected | any }	
Parameter		
	Name	**Description**

3.10.5 qos dscp-remark

Description	Set qos dscp-remark	
Syntax	qos dscp-remark { rewrite | remap | remap-dp }	
Parameter		
	Name	**Description**

3.10.6 qos dscp-translate

Description	Enable qos dscp-translate mode
Syntax	qos dscp-translate

3.10.7 qos map cos-dscp

Description	Configure cos mapping to dscptable	
Syntax	qos map cos-dscp <0~7> dpl <0~1> dscp { <0-63> | { 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**
	<0~7>	Cos level
	<0~1>	Specific drop precedence level
	<0-63>	Dscp level
	be	Default PHB(DSCP 0) for best effort traffic
	af11~13	Assured Forwarding PHB 11~13(DSCP 10,12,14)
	af22~23	Assured Forwarding PHB 22~23(DSCP 20,22)
	af31~33	Assured Forwarding PHB 31~33(DSCP 26,28,30)
	Af41~43	Assured Forwarding PHB 41~43(DSCP 34,36,38)
	cs1~7	Class Selector PHB CS1~7 precedence 1~7(DSCP 8*(cs value))
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)

3.10.8 qos map cos-dscp

Description	Configure dscp mapping to cos table	
Syntax	qos map dscp-cos { <0~63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } cos <0-7> dpl <dpl>	
Parameter		
	Name	**Description**
	<0~7>	Cos level

	<0-63>	Dscp level
	be	Default PHB(DSCP 0) for best effort traffic
	af11~13	Assured Forwarding PHB 11~13(DSCP 10,12,14)
	af22~23	Assured Forwarding PHB 22~23(DSCP 20,22)
	af31~33	Assured Forwarding PHB 31~33(DSCP 26,28,30)
	Af41~43	Assured Forwarding PHB 41~43(DSCP 34,36,38)
	cs1~7	Class Selector PHB CS1~7 precedence 1~7(DSCP 8*(cs value))
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)
	<0~1>	Specific drop precedence level

3.10.9 qos map dscp-egress-translation

Description	Configure dscp egress-translation	
Syntax	qos map dscp-egress-translation { <0~63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } <0~1> to { <0-63> | { 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**
	<0~7>	Cos level
	<0-63>	Dscp level
	be	Default PHB(DSCP 0) for best effort traffic
	af11~13	Assured Forwarding PHB 11~13(DSCP 10,12,14)
	af22~23	Assured Forwarding PHB 22~23(DSCP 20,22)
	af31~33	Assured Forwarding PHB 31~33(DSCP 26,28,30)
	Af41~43	Assured Forwarding PHB 41~43(DSCP 34,36,38)
	cs1~7	Class Selector PHB CS1~7 precedence 1~7(DSCP 8*(cs value))
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)
	<0~1>	Specific drop precedence level

3.10.10 qos map dscp-ingress-translation

Description	Configure dscp ingress-translation	
Syntax	qos map dscp-ingress-translation { <0~63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } to { <0-63> | { 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**
	<0~7>	Cos level
	<0-63>	Dscp level
	be	Default PHB(DSCP 0) for best effort traffic

	af11~13	Assured Forwarding PHB 11~13(DSCP 10,12,14)
	af22~23	Assured Forwarding PHB 22~23(DSCP 20,22)
	af31~33	Assured Forwarding PHB 31~33(DSCP 26,28,30)
	Af41~43	Assured Forwarding PHB 41~43(DSCP 34,36,38)
	cs1~7	Class Selector PHB CS1~7 precedence 1~7(DSCP 8*(cs value))
	ef	Expedited Forwarding PHB(DSCP 46)
	va	Voice Admit PHB(DSCP 44)
	<0~1>	Specific drop precedence level

3.10.11 qos policer

Description	Configure qos policer	
Syntax	qos policer <unit> [fps] [flowcontrol]	
Parameter		
	Name	**Description**
	< unit >	Traffic meter
	< fps >	Frame rate
	[flowcontrol]	Enable flowcontrol mode

3.10.12 qos wrr

Description	Specifies qos wrr mode	
Syntax	qos wrr <1-100> <1-100> <1-100> <1-100> <1-100> <1-100>	
Parameter		
	Name	**Description**
	<1-100>	every level proportion

3.10.13 qos queue-shaper

Description	Configure queue-shaper command	
Syntax	qos queue-shaper queue <0~7> <uint> [excess]	
Parameter		
	Name	**Description**
	<1-100>	every level proportion
	<unit>	Traffic meter
	[excess]	Agree the shaper could be excess or not

3.10.14 qos queue-policer

Description	Configure queue-policer command	
Syntax	qos queue-policer queue <0~7> <uint>	
Parameter		
	Name	**Description**
	<0~7>	Queue number
	<uint>	Traffic meter

3.10.15 qos shaper <unit>

Description	Configure qos shaper command	
Syntax	qos shaper <uint>	
Parameter		
	Name	**Description**
	<1-100>	every level proportion
	<unit>	Traffic meter

3.11 IGMP Functional Commands

3.11.1 ip igmp host-proxy [leave-proxy]

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

3.11.2 ip igmp snooping

Description	Snooping igmp
Syntax	ip igmp snooping
Parameter	

3.11.3 ip igmp snooping immediate-leave

Description	IP IGMP snooping immediate leave configuration
Syntax	Ip igmp snooping immediate-leave
Parameter	

3.11.4 ip igmp snooping last-member-query-interval

Description	IP IGMP snooping Last Member Query Interval in tenths of seconds	
Syntax	ip igmp snooping last-member-query-interval <0-31744>	
Parameter		
	Name	**Description**
	0-31744	0 - 31744 tenths of seconds

3.11.5 ip igmp snooping max-groups

Description	IGMP group throttling configuration	
Syntax	ip igmp snooping max-groups <1-10>	
Parameter		
	Name	**Description**
	1-10	Maximun number of IGMP group registration

3.11.6 ip igmp snooping mrouter

Description	IP IGMP snooping Multicast router port configuration
Syntax	Ip igmp snooping mrouter
Parameter	

3.11.7 ip igmp snooping querier

Description	IP IGMP querier configuration	
Syntax	ip igmp snooping querier { election | address <ipv4_ucast> }	
Parameter		
	Name	**Description**
	election	Act as an IGMP Querier to join Querier-Election
	address	IGMP Querier address configuration
	ipv4_ucast	A valid IPv4 unicast address

3.11.8 ip igmp snooping query-interval

Description	IP IGMP snooping Query-Intervalin seconds	
Syntax	ip igmp snooping query-interval <1-31744>	
Parameter		
	Name	**Description**
	1-317	1 - 31744 seconds

3.11.9 ip igmp snooping vlan

Description	ipigmp snooping vlan IDs	
Syntax	ip igmp snooping vlan<vlan_list>	
Parameter		
	Name	**Description**
	vlan_list	VLAN identifier(s): VID

3.11.10 ip igmp ssm-range

Description	SSM range	
Syntax	ip igmp ssm-range <v_ipv4_mcast> <ipv4_prefix_length>	
Parameter		
	Name	**Description**
	v_ipv4_mcast	Valid IPv4 multicast address
	ipv4_prefix_length	Length

3.11.11 ip igmp unknown-flooding

Description	IP IGMP flooding unregistered IPv4 multicast traffic
Syntax	ip igmp unknown-flooding
Parameter	

3.11.12 clear ip igmp snooping statistics

Description	clear ip igmp snooping statisti	
Syntax	clear ip igmp snooping [vlan<vlan_list>] statistics	
Parameter		
	Name	**Description**
	vlan_list	VLAN list.

3.12 MVR Functional Commands

3.12.1 mvr

Description	Multicast VLAN Registration configuration	
Syntax	mvr	
Parameter		
	Name	**Description**

3.12.2 mvr immediate-leave

Description	mvr immediate leave configuration	
Syntax	mvr immediate-leave	
Parameter		
	Name	**Description**

3.12.3 mvr name channel

Description	Multicast VLAN name and channel configuration	
Syntax	mvr name <word16> channel <word16>	
Parameter		
	Name	**Description**
	name <word16>	MVR multicast VLAN name
	channel <word16>	Profile name in 16 char's

3.12.4 mvr frame priority

Description	Multicast VLAN interface CoS priority	
Syntax	mvr name <word16> frame priority <0-7>	
Parameter		
	Name	**Description**
	name <word16>	MVR multicast VLAN name

	priority <0-7>	CoS priority ranges from 0 to 7

3.12.5 mvr name <word16> frame tagged

Description	MVR control frame in TX, Tagged IGMP/MLD frames will be sent	
Syntax	mvr name <word16> frame tagged	
Parameter		
	Name	**Description**
	name <word16>	MVR multicast VLAN name

3.12.6 mvr name <word16> igmp-address <ipv4_ucast>

Description	MVR address configuration used in IGMP	
Syntax	mvr name <word16> igmp-address <ipv4_ucast>	
Parameter		
	Name	**Description**
	name <word16>	MVR multicast VLAN name
	<ipv4_ucast>	A valid IPv4 unicast address

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

Description	Configure last Member Query Interval in tenths of seconds	
Syntax	mvr name <word16> last-member-query-interval <0-31744>	
Parameter		
	Name	**Description**
	name <word16>	MVR multicast VLAN name
	<0-31744>	0 - 31744 tenths of seconds

3.12.8 mvr name <word16> mode

Description	Dynamic MVR operation mode	
Syntax	mvr name <word16> mode { dynamic | compatible }	
Parameter		
	Name	**Description**
	dynamic	Dynamic MVR operation mode
	compatible	Compatible MVR operation mode

3.12.9 mvr name <word16> type

Description	MVR port role configuration	
Syntax	mvr name <word16> type { source | receiver }	
Parameter		
	Name	**Description**
	source	MVR source port
	receiver	MVR receiver port

3.12.10 mvr vlan

Description	Multicast VLAN Registration configuration	
Syntax	mvr vlan <vlan_list> [name <word16>]	
Parameter		
	Name	**Description**
	< vlan_list >	MVR multicast VLAN list
	name <word16>	MVR multicast VLAN name in 16 char's

3.12.11 mvr vlan <vlan_list> channel

Description	MVR channel configuration	
Syntax	mvr vlan <vlan_list> channel <word16>	
Parameter		
	Name	**Description**
	< vlan_list >	MVR multicast VLAN list
	channel <word16>	MVR multicast channel name in 16 char's

3.12.12 mvr vlan <vlan_list> frame priority

Description	Interface CoS priority
Syntax	mvr vlan <vlan_list> frame priority <0-7>

Parameter		
	Name	**Description**
	< vlan_list >	MVR multicast VLAN list
	<0-7>	CoS priority ranges from 0 to 7

3.12.13 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 >	MVR multicast VLAN list

3.12.14 mvr vlan <vlan_list> igmp-address

Description	Set tagged IGMP/MLD frames will be sent	
Syntax	mvr vlan <vlan_list> igmp-address <ipv4_ucast>	
Parameter		
	Name	**Description**
	< vlan_list >	MVR multicast VLAN list
	<ipv4_ucast>	A valid IPv4 unicast address for IGMP

3.12.15 mvr vlan <vlan_list> mode

Description	Dynamic MVR vlan operation mode	
Syntax	mvr vlan <vlan_list> mode { dynamic | compatible }	
Parameter		
	Name	**Description**
	< vlan_list >	MVR multicast VLAN list
	dynamic	Dynamic MVR operation mode
	compatible	Compatible MVR operation mode

3.12.16 mvr vlan <vlan_list> type

Description	MVR vlan role configuration	
Syntax	mvr vlan <vlan_list> type { source | receiver }	
Parameter		
	Name	**Description**
	< vlan_list >	MVR multicast VLAN list
	source	MVR source port
	receiver	MVR receiver port

3.13 MLD Functional Commands

3.13.1 ipv6 mld host-proxy

Description	IPv6 MLD proxy configuration	
Syntax	ipv6 mld host-proxy [leave-proxy]	
Parameter		
	Name	**Description**
	leave-proxy	MLD proxy for leave configuration

3.13.2 ipv6 mld snooping

Description	ipv6 mld snooping
Syntax	ipv6 mld snooping
Parameter	

3.13.3 ipv6 mld snooping compatibility

Description	IPv6 MLD snooping compatibility configuration	
Syntax	ipv6 mld snooping compatibility { auto | v1 | v2 }	
Parameter		
	Name	**Description**

	auto	Compatible with MLDv1/MLDv2
	v1	Forced MLDv1
	v2	Forced MLDv2

3.13.4 ipv6 mld snooping immediate-leave

Description	IPv6 MLD snooping immediate-leave configuration
Syntax	ipv6 mld snooping immediate-leave
Parameter	

3.13.5 ipv6 mld snooping last-member-query-interval

Description	ipv6 mld snooping last member query interval in tenths of seconds	
Syntax	ipv6 mld snooping last-member-query-interval <0-31744>	
Parameter		
	Name	**Description**
	0-31744	0 - 31744 tenths of seconds

3.13.6 ipv6 mld snooping max-groups

Description	IPv6 MLD group throttling configuration	
Syntax	ipv6 mld snooping max-groups <1-10>	
Parameter		
	Name	**Description**
	1-10	Maximun number of MLD group registration

3.13.7 ipv6 mld snooping mrouter

Description	ipv6 mld snooping multicast router port configuration
Syntax	ipv6 mld snooping mrouter
Parameter	

3.13.8 ipv6 mld snooping query-interval

Description	IPv6 MLD snooping query interval in seconds	
Syntax	ipv6 mld snooping query-interval <1-31744>	
Parameter		
	Name	**Description**
	1-31744	1 - 31744 seconds

3.13.9 ipv6 mld snooping query-max-response-time

Description	IPv6 MLD snooping querymaxresponse interval in tenths of seconds	
Syntax	ipv6 mld snooping query-max-response-time <0-31744>	
Parameter		
	Name	**Description**
	0-31744	0 - 31744 tenths of seconds

3.13.10 ipv6 mld snooping vlan

Description	ipv6 mld snooping vlan	
Syntax	ipv6 mld snooping vlan<vlan_list>	
Parameter		
	Name	**Description**
	vlan_list	VLAN identifier(s): VID

3.13.11 ipv6 mld ssm-range

Description	SSM range
Syntax	ipv6 mld ssm-range <v_ipv6_mcast> <ipv6_prefix_length>
Parameter	

	Name	Description
	v_ipv6_mcast	Valid IPv6 multicast address
	ipv6_prefix_length	length

3.13.12 ipv6 mld unknown-flooding

Description	Flooding unregistered IPv6 multicast traffic
Syntax	ipv6 mld unknown-flooding
Parameter	

3.13.13 ipv6 route

Description	IPv6 Route	
Syntax	ipv6 route <v_ipv6_subnet> { <v_ipv6_ucast> | interface vlan <v_vlan_id> <v_ipv6_addr> }	
Parameter		
	Name	**Description**
	v_ipv6_subnet	IPv6 prefix x:x::y/z
	v_ipv6_ucast	IP address of the DHCP relay server
	v_vlan_id	VLAN ID
	v_ipv6_addr	IP address

3.14 Authenticate Mode Commands

3.14.1 radius-server attribute 32

Description	Configure radius-server attribute	
Syntax	radius-server attribute 32 <id>	
Parameter		
	Name	**Description**
	id	Id : line1-253

3.14.2 radius-server attribute 4

Description	Configure radius-server attribute	
Syntax	radius-server attribute 4 <ipv4_ucast>	
Parameter		
	Name	**Description**
	<ipv4_ucast>	ipv4_ucast address

3.14.3 radius-server attribute 95

Description	Configure radius-server attribute	
Syntax	radius-server attribute 95 <ipv6_ucast>	
Parameter		
	Name	**Description**
	<ipv6_ucast>	Ipv6_ucast address

3.14.4 radius-server deadtime

Description	Configure adius-server deadtime	
Syntax	radius-server deadtime <1-1440>	
Parameter		
	Name	**Description**
	<1-1440>	Time in minutes

3.14.5 radius-server host [auth-port] [acct-port] [timeout] [retransmit] [key]

Description	Configure adius-server host behavior

Syntax	radius-server host <word1-255> [auth-port <0-65535>] [acct-port <0-65535>] [timeout <1-1000>] [retransmit <1-1000>] [key <line1-63>]	
Parameter		
	Name	**Description**
	<word1-255>	Hostname or IP address
	auth-port <0-65535>	UDP port number for RADIUS authentication server
	acct-port <0-65535>	UDP port number for RADIUS accounting server
	timeout <1-1000>	Wait time in seconds for this RADIUS server to reply (overrides default)
	retransmit <1-1000>	

3.14.6 radius -server key

Description	radius-server key	
Syntax	radius-server key <key>	
Parameter		
	Name	**Description**
	key	<Key : line1-63> The shared key

3.14.7 radius-server retransmit

Description	radius-server retransmit	
Syntax	radius-server retransmit <retries>	
Parameter		
	Name	**Description**
	retries	<Retries : 1-1000> Number of retries for a transaction

3.14.8 radius-server timeout

Description	radius-server timeout	
Syntax	radius-server timeout <seconds>	
Parameter		
	Name	**Description**
	seconds	<Seconds : 1-1000> Wait time in second

3.14.9 tacacs-server deadtime <1-1440>

Description	Time to stop using a TACACS+ server that doesn't respond	
Syntax	tacacs-server deadtime <1-1440>	
Parameter		
	Name	**Description**
	< <1-1440>	Time in minutes

3.14.10 tacacs-server host [auth-port] [timeout] [key]

Description	Configure tacacs-server host behavior	
Syntax	tacacs-server host <word1-255> [port <0-65535>] [timeout <1-1000>] [key <line1-63>]	
Parameter		
	Name	**Description**
	< <1-1440>	TCP port number

3.14.11 tacacs-server deadtime <1-1440>

Description	Time to stop using a TACACS+ server that doesn't respond	
Syntax	tacacs-server deadtime <1-1440>	
Parameter		
	Name	**Description**
	< <1-1440>	Time in minutes

3.14.12 tacacs-server deadtime <1-1440>

Description	Time to stop using a TACACS+ server that doesn't respond	
Syntax	tacacs-server deadtime <1-1440>	
Parameter		
	Name	**Description**
	< <1-1440>	Time in minutes

3.14.13 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.

3.14.14 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

3.14.15 dot1x max-reauth-req

Description	Max value of authentication request	
Syntax	dot1x max-reauth-req <1-255>	
Parameter		
	Name	**Description**
	<1-255>	number of times

3.14.16 dot1x re-authentication

Description	re-authentication
Syntax	dot1x re-authentication
Parameter	

3.14.17 dot1x system-auth-controln

Description	System authentication control
Syntax	dot1x system-auth-control

Parameter	

3.14.18 dot1x timeout

Description	Timeout control	
Syntax	dot1x timeout { quiet-period <v_10_to_1000000>} | { 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
	tx-period	the time between EAPOL retransmissions

3.14.19 dot1x guest-vlan

Description	G Enables/disables Guest VLAN globally or on one or more ports	
Syntax	dot1x guest-vlan dot1x guest-vlan<1-4095>	
Parameter		
	Name	**Description**
	<1-4095>	Guest VLAN ID used when entering the Guest VLAN.

3.14.20 dot1x initialize

Description	Forces a reinitialization of the clients on the port and thereby a reauthentication immediately.	
Syntax	dot1x initialize [interface <port_type> [<port_type_list>]]	
Parameter		
	Name	**Description**
	<port_type>	Port type in Fast, Giga or Tengigaethernet
	<port_type_list>	List of Port ID, ex, 1/1,3-5;2/2-4,6

3.14.21 dot1x port-control

Description	Sets the port security state.	
Syntax	dot1x port-control { force-authorized | force-unauthorized | auto | single | multi | mac-based }	
Parameter		
	Name	**Description**
	force-authorized	Port access is allowed
	force-unauthorized	Port access is not allowed
	auto	Port-based 802.1X Authentication
	single	Single Host 802.1X Authentication
	multi	Multiple Host 802.1X Authentication
	mac-based	Switch authenticates on behalf of the client

3.14.22 dot1x radius-vlan

Description	Enables/disables per-port state of RADIUS-assigned VLAN.
Syntax	dot1x radius-vlan
Parameter	

3.14.23 show radius-server [statistics]

Description	show radius-server statistics
Syntax	show radius-server [statistics]
Parameter	

	Name	Description
	[statistics]	Count radius packet statistics

3.14.24 enable

Description	Privilege level control	
Syntax	Enable { password [level <priv>] <password>} | { secret { 0 | 5 } [level <priv>] <password>}	
Parameter		
	Name	Description
	password	Assign the privileged level clear password
	secret	Assign the privileged level secret

3.14.25 end

Description	Level exit
Syntax	end
Parameter	

3.14.26 exit

Description	Level exit
Syntax	end
Parameter	

3.14.27 hostname

Description	This system's network name
Syntax	hostname <hostname>
Parameter	

3.15 Loop-Protection Configure commands

3.15.1 loop-protect

Description	Loop protection configuration on port
Syntax	loop-protect
Parameter	

3.15.2 loop-protect action

Description	Loop protection configuration on port	
Syntax	loop-protect action { [shutdown] [log]	
Parameter		
	Name	Description
	shutdown	Shutdown port
	log	Generate log

3.15.3 loop-protect shutdown-time

Description	Loop protection shutdown time interval	
Syntax	loop-protect shutdown-time <0-604800>	
Parameter		
	Name	Description
	0-604800	Shutdown time in second

3.15.4 loop-protect transmit-time

Description	Loop protection transmit time interval

Syntax	loop-protect transmit-time <1-10>	
Parameter		
	Name	**Description**
	1-10	Transmit time in second

3.15.5 loop-protect tx-mode

Description	Loop protection actively generate PDUs
Syntax	loop-protect tx-mode
Parameter	

3.16 LLDP Configure commands

3.16.1 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 <2-10>	
Parameter		
	Name	**Description**
	<2-10>	Holdtime 2-10 seconds

3.16.2 lldp med

Description	LLDP MED	
Syntax	See Description	
Parameter		
	Name	**Description**
	datum	Datum (geodetic system) type nad83-mllw: Mean lower low water datum 1983 nad83-navd88: North American vertical datum 1983 wgs84: World Geodetic System 1984
	fast	Number of times to repeat LLDP frame transmission at fast start <v_1_to_10> : <1-10>
	location-tlv	LLDP-MED Location Type Length Value parameter altitude: Altitude parameter civic-addr: Civic address information and postal information elin-addr: Emergency Location Identification Number, (e.g. E911 and others), such as defined by TIA or NENA. latitude: Latitude parameter longitude: Longitude parameter
	media-vlan-policy	Use the media-vlan-policy to create a policy, which can be assigned to an interface

		<Index : 0-31> : Policy id for the policy which is created

3.16.3 lldp receive

Description	Enable/Disable decoding of received LLDP frames.
Syntax	lldp receive

3.16.4 lldp reinit <1-10>

Description	LLDP tx reinitialization delay in seconds.	
Syntax	lldp reinit <1-10>	
Parameter		
	Name	**Description**
	<1-10>	Reinitialization delay time

3.16.5 lldp timer <5-32768>

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

3.16.6 lldp tlv-select

Description	Which optional TLVs to transmit.	
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.

3.16.7 lldp transmission-delay

Description	Sets LLDP transmision-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 <1-8192>	
Parameter		
	Name	**Description**
	<1-8192>	transmission-delay seconds

3.16.8 lldp transmit

Description	Enable/Disabled transmision of LLDP frames.
Syntax	lldp transmit

Parameter	

3.17 RFC2544 Testing Configure Commands

3.17.1 rfc2544 profile <word32>

Description	RFC2544 profile configuration	
Syntax	rfc2544 profile <word32>	
Parameter		
	Name	Description
	<word32>	Profile name up to 32 characters long

3.17.2 rfc2544 rename profile

Description	Rename an existing profile	
Syntax	rfc2544 rename profile <word32> <word32>	
Parameter		
	Name	Description
	profile <word32>	Old profile name
	<word32>	New profile name

3.17.3 rfc2544 save <word32> <word>

Description	Save a report to a file on a TFTP server	
Syntax	rfc2544 save <word32> <word>	
Parameter		
	Name	Description
	<word32>	Name of existing report to save
	<word>	TFTP server URL on the form tftp://server[:port]/path-to-file

3.17.4 rfc2544 start <word32> profile <word32> [desc <line128>]

Description	Start execution of a pre-configured profile	
Syntax	rfc2544 start <word32> profile <word32> [desc <line128>]	
Parameter		
	Name	Description
	start <word32>	Unique name of resulting report
	profile <word32>	Name of existing profile to execute
	desc <line128>	Description that will appear in the report

3.17.5 rfc2544 stop <word32>

Description	Stop execution of an ongoing test	
Syntax	rfc2544 stop <word32>	
Parameter		
	Name	Description
	<word32>	Report name to stop execution of

3.17.6 show rfc2544 profile [<word32>]

Description	show rfc2544 profile name	
Syntax	show rfc2544 profile [<word32>]	
Parameter		
	Name	Description
	<word32>	rfc2544 profile name

3.18 GVRP Configure Commands

3.18.1 gvrp

Description	Enable GVRP on port(s)
Syntax	gvrp
Parameter	

3.18.2 gvrpjoin request vlan

Description	Emit a Join-Request for test purpose	
Syntax	gvrp join-request vlan<vlan_list>	
Parameter		
	Name	**Description**
	vlan_list	List of VLANs

3.18.3 gvrpleave request vlan

Description	Emit a leave-Request for test purpose	
Syntax	gvrp leave-request vlan<vlan_list>	
Parameter		
	Name	**Description**
	vlan_list	List of VLANs

3.18.4 gvrp max-vlans

Description	gvrpmaximum number of VLANs	
Syntax	gvrp max-vlans<1-4095>	
Parameter		
	Name	**Description**
	<1-4095>	A valid range is from 1-4095.

3.18.5 gvrp time { [join-time <1-20>] [leave-time <60-300>] [leave-all-time <1000-50>]

Description	Set gvrp time	
Syntax	gvrp time { [join-time <1-20>] [leave-time <60-300>] [leave-all-time <1000-5000>] }	
Parameter		
	Name	**Description**
	1-20	join timer, available from 1 to 20
	60-300	leave timer, available from 60 to 300
	1000-5000	leaveall timer, available from 1000 to 5000

3.19 Voice VLAN Configure Commands

3.19.1 voice vlan

Description	Vlan for Voice appliance attributes
Syntax	voice vlan
Parameter	

3.19.2 voice vlan aging-time

Description	Set secure learning aging time for voice traffic	
Syntax	voice vlan aging-time <10-10000000>	
Parameter		
	Name	**Description**
	10-10000000	Aging time, 10-10000000 seconds

3.19.3 voice vlan class

Description	Set voice traffic class	
Syntax	voice vlan class { <0-7> | low | normal | medium | high }	
Parameter		
	Name	**Description**
	0-7	Traffic class value
	low	Traffic class low (0)
	normal	Traffic class normal (1)
	medium	Traffic class medium (2)
	high	Traffic class high (3)

3.19.4 voice vlan oui

Description	Set voice traffic OUI configuration	
Syntax	voice vlan oui <oui> [description <line32>]	
Parameter		
	Name	**Description**
	oui	OUI value
	description	Set description for the OUI
	line32	Description line

3.19.5 voice vlan vid

Description	Set voice VLAN ID	
Syntax	voice vlan vid <vlan_id>	
Parameter		
	Name	**Description**
	<vlan_id>	VLAN ID, 1-4095

3.20 Profile alarm Commands

3.20.1 profile alarm

Description	Profile alarm
Syntax	profile alarm
Parameter	

3.20.2 alarm

Description	Set alarm content	
Syntax	alarm <alarmId> { mask | unmask | major | minor }	
Parameter	101~114: GE-1~14 Port link down (for 14 port model)	
	Name	**Description**
	alarmId	151: set 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

3.21 PoE Commands

3.21.1 poe management mode

Description	Use management mode to configure PoE power management method.
Syntax	poe management mode <mode>

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.

3.21.2 poe supply

Description	Use poe supply to specify the maximum power the power supply can deliver.	
Syntax	poe supply <power>	
Parameter		
	Name	**Description**
	<power>	Value: 1-240 Maximum power the power supply can deliver.

3.21.3 poe 4pairs

Description	Enable 4pairs mode.
Syntax	poe 4pairs
Parameter	

3.21.4 poe mode

Description	Set PoE mode.	
Syntax	poe mode <mode>	
Parameter		
	Name	**Description**
	disable	Set poe to disable
	enable	Set poe to enable always
	schedule	Set poe to enable by scheduling

3.21.5 poe operation

Description	Set PoE operation mode.	
Syntax	poe operation <af/at>	
Parameter		
	Name	**Description**
	af	Set operation mode to 802.3af(Maximum power 15.4W)

	at	Set operation mode to 802.3at(Maximum power 30.0 W)

3.21.6 poe power

Description	Set maximum power for port in allocation mode.	
Syntax	poe power limit <power>	
Parameter		
	Name	**Description**
	<power>	Maximum power for the interface (0-15.4 Watt for PoE standard mode, 0-30.0 Watt for PoE plus mode)

3.21.7 poe priority

Description	Set PoE port priority	
Syntax	poe priority <priority>	
Parameter		
	Name	**Description**
	critical	Set priority to critical.
	high	Set priority to high.
	low	Set priority to low.

3.21.8 poe reset

Description	Set PoE power reset time.	
Syntax	poe reset <Hour> <Minute> <range_list>	
Parameter		
	Name	**Description**
	<0-23>	Hour
	<0-59>	Minute
	<range_list>	Day(s).(1:Sunday, 2:Monday, 3:Tuesday, 4:Wednesday, 5:Thuesday, 6:Friday, 7:Saturday)

3.21.9 poe schedule

Description	Set PoE power scheduling during the week.	
Syntax	poe schedule <Day> <range_list>	
Parameter		
	Name	**Description**
	fri mon sat sun thu tue wed	Day
	<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>).