ES0152 / ES0152P

52-Port GbE (PoE) Managed Switch

CLI User Manual

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EMC Information

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Warning: Operation of this equipment in a residential environment could cause radio interference.

KCC Statement

유선 제품용 / A 급 기기 (업무용 방송 통신 기기)

이 기기는 업무용 (A 급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며 , 가정 외의 지역에서 사용하는 것을 목적으로 합니다 .

Suggestion: Shielded twisted pair (STP) cables must be used with the unit to ensure compliance with FCC & CE standards.

RoHS

This product is RoHS compliant.

Content

Chapter 5. CONFIGURE Commands of CLI

About This Manual

The CLI User Manual provides specific information about using CLI to operate this switch.

Overview

Chapter 1, *Introduction***,** introduces you the release version, purpose, and audience for ES0152 / ES0152P CLI user guide.

Chapter 2, *CLI Management***,** provides step-by-step instructions for CLI management, including login, commands of CLI, and global commands of CLI.

Chapter 3, *CABLEDIAG of CLI***,** shows a description, syntax, parameter, and example for CABLEDIAG commands.

Chapter 4, *CLEAR of CLI***,** shows a table of CLEAR commands with description, syntax, parameter, and example.

Chapter 5, *CONFIGURE Commands of CLI***,** shows a table of CONFIGURE commands with description, syntax, parameter and example.

Chapter 6, *COPY Commands of CLI***,** shows a description, syntax, parameter, and example for COPY commands.

Chapter 7, *DELETE Commands of CLI***,** shows a description, syntax, parameter, and example for DELETE commands.

Chapter 8, *DIR Commands of CLI***,** shows a description, syntax, parameter, and example for DIR commands.

Chapter 9, *DISABLE Commands of CLI***,** shows a description, syntax, parameter, and example for DISABLE commands.

Chapter 10, *DO Commands of CLI***,** shows a description, syntax, parameter, and example for DO commands.

Chapter 11, *DOT1X Commands of CLI***,** shows a description, syntax, parameter, and example for DOT1X commands.

Chapter 12, *ENABLE Commands of CLI***,** shows a description, syntax, parameter, and example for ENABLE commands.

Chapter 13, *FIRMWARE of CLI***,** shows a description, syntax, parameter, and example for FIRMWARE commands.

Chapter 14, *IP Commands of CLI***,** shows a description, syntax, parameter, and example for IP commands.

Chapter 15, *IPV6 Commands of CLI***,** shows a description, syntax, parameter, and example for IPV6 commands.

Chapter 16, *MORE of CLI***,** shows a description, syntax, parameter, and example for MORE commands.

Chapter 17, *NO Commands of CLI***,** shows a description, syntax, parameter, and example for NO commands.

Chapter 18, *PING of CLI***,** shows a description, syntax, parameter, and example for PING commands.

Chapter 19, *PLATFORM Commands of CLI***,** shows a description, syntax, parameter, and example for PLATFORM commands.

Chapter 20, *RELOAD of CLI***,** shows a description, syntax, parameter, and example for RELOAD commands.

Chapter 21, *SEND of CLI***,** shows a description, syntax, parameter, and example for SEND commands.

Chapter 22, *SHOW of CLI***,** shows a table of SHOW commands with description, syntax, parameter and example.

Chapter 23, *TERMINAL of CLI***,** shows a description, syntax, parameter, and example for TERMINAL commands.

Chapter 24, *TRACEOUTE of CLI***,** shows a description, syntax, parameter, and example for TRACEOUTE commands.

Chapter 25, *CLI COMMAND REFERENCES***,** explains the privilege level, and a table of commands with description, privilege level, and the corresponding mode.

Product Information

For information about all ATEN products and how they can help you connect without limits, visit ATEN on the Web or contact an ATEN Authorized Reseller. Visit ATEN on the Web for a list of locations and telephone numbers:

International	http://www.aten.com

Chapter 1
About This Guide

Purpose

This guide gives specific information on how to operate CLI to manage this switch.

Audience

The guide is intended for use by network administrators who are responsible for operating and maintaining network equipment; consequently, it requires a basic working knowledge of general switch functions, the RS-232 Console, Internet Protocol (IP), and Telnet Protocol.

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Chapter 2
CLI Management

Overview

The following description briefly describes how to build up the network connection.

- Attach the RJ45 serial port on the switch's front panel that is used to connect to the switch for telnet configuration
- At "Com Port Properties" Menu, configure the parameters as below: (see the next section)

Spec	
Baud Rate	115200 bps
Stop Bits	1
Data Bits	8
Parity	N
Flow Control	None

2-1 Login

The command-line interface (CLI) is a text-based interface. User can access the CLI through either a direct serial connection to the device or a Telnet session (Default IP address: **192.168.1.1**). The default username and password to login into the Managed Switch are listed below:

Username: admin

Password: <none>

Note:<none> means empty string.

After you log in successfully, the prompt will be shown as "<sys_name>#" . See the following figures. It means you behave as an administrator and have the privilege for setting the Managed Switch. If you log in as a guest instead of an administrator, the prompt will be shown as "<sys_name>>". It means you behave as a guest and are only allowed to set the system under the administrator. Each CLI command has its privilege.

Example:

```
Username: admin
Password:
ES0152#
```

Note:For "<sys_name>#", we will use ES0152 as an example for our ES0152 / ES0152P CLI User Manual.

2-2 Commands of CLI

The CLI is divided into serveral modes. If a user has enouth privilege to run a particular command, the user has to run the command in the correct mode. To see the command modes, please input "**?**" after the system prompt, then all the commands will be listed in the screen. The command modes are listed as belows:

Command Modes

MODE:	PROMPT	COMMAND FUNTION IN THIS MODE
exec	<sys_name>#	Display current configuration, diagnostics, maintenance
config	<sys_name>(config)#	Configure features other than those below
config-if	<sys_name>(config-interface)#	Configure ports
config-if-vlan	<sys_name>(config-if-vlan)#	Configure static vlan
config-line	<sys_name>(config-line)#	Line Configuration
config-impc-profile	<sys_name>(config-impc-profile)#	IPMC Profile
config-snmp-host	<sys_name>(config-snmp-host)#	SNMP Server Host
config-stp-aggr	<sys_name>(config-stp-aggr)#	STP Aggregation
config-dhcp-pool	<sys_name>(config-dhcp-pool)#	DHCP Pool Configuration
config-rfc2544-profile	<sys_name>(config-rfc2544-profile)#	RFC2544 Profile

Commands reside in the corresponding modes could run only in that mode. If a user wants to run a particular command, the user has to change the mode to the appropriate mode. The command modes are organized as a tree, and users start from the enable mode. The following table explains how to change from one mode to another.

Note:The Commands and parameters are not case-sensitive, which means that any uppercase or lowercase character can be entered.

Change Between Command Modes

MODE	ENTER MODE	LEAVE MODE
exec	--	--
config	Config terminal	exit
config-interface	Interface <port-type> <port-type-list>	exit
config-vlan	Interface vlan <vlan_list>	exit

2-3 Global Commands of CLI

Summary:

```
ES0152# ?
CableDiag      Cable Diagnostic keyword
clear          Reset functions
configure      Enter configuration mode
copy           Copy from source to destination
delete         Delete one file in flash file system
dir            Directory of all files in flash file
               system
disable        Turn off privileged commands
do             To run exec commands in config mode
dot1x          IEEE Standard for port-based Network
               Access Control
enable         Turn on privileged commands
exit           Exit from the CLI
firmware       Firmware
help           Description of the interactive help
               system
ip             IPv4 commands
ipv6           IPv6 configuration commands
logout         Exit from EXEC mode
more           Display file
no             Negate a command or set its defaults
ping           Send ICMP echo messages
platform       Platform configuration
reload         Reload system
send           Send a message to other tty lines
show           Show running system information
terminal       Set terminal line parameters
traceroute     Trace the route to HOST
```

Exit

Exit from EXEC mode.

Syntax:

Exit

Parameters:

None.

Example:

```
ES0152(config)# exit
```

Help

Description of the interactive help system.

Syntax:

Help

Parameters:

None.

Example:

```
ES0152# help

Help may be requested at any point in a command by
entering a question mark '?'. If nothing matches, the
help list will be empty and you must backup until
entering a '?' shows the available options.

Two styles of help are provided:

1. Full help is available when you are ready to enter a
command argument (e.g. 'show ?') and describes each
possible argument.

2. Partial help is provided when an abbreviated
argument is entered and you want to know what arguments
match the input (e.g. 'show pr?'.)
```

logout

Exit from EXEC mode.

Syntax:

Logout

Parameters:

None.

Example:

```
ES0152# logout
Username:
```

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Chapter 3
CABLEDIAG of CLI

Overview

Cable Diagnostic keyword.

Syntax:

CableDiag interface GigabitEthernet <port_type_id>

Parameters:

Parameter	Description
Interface	Interface keyword
GigabitEthernet	1 Gigabit Ethernet Port
<port_type_id>	Port ID in 1/1-48

Example:

```
ES0152# CableDiag interface GigabitEthernet 1/1

Starting Cable Diagnostic - Please wait

Interface               Link Status    Test Result
Length
----------------------  ------------  ------------  -

GigabitEthernet 1/1     Link Down      detect error or
check cable length is between 7-120 meters

ES0152# CableDiag interface GigabitEthernet 1/48

Starting Cable Diagnostic - Please wait

Interface               Link Status    Test Result
Length
----------------------  ------------  ------------  -

GigabitEthernet 1/48    1G             detect error or
check cable length is between 7-120 meters
```

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Chapter 4
CLEAR of CLI

Overview

Table: CLEAR Commands

Command	Function
access	Access management
access-list	Access list
dot1x	IEEE Standard for port-based Network Access Control
ip	Clear DHCP Relay statistics
ipv6	IPv6 configuration commands
lacp	Clear LACP statistics
lldp	Clear LLDP statistics for one or more given
logging	Syslog
mac	MAC Address Table
mvr	Multicast VLAN Registration configuration
port-security	Port Security
sflow	Statistics flow
spanning-tree	Execute protocol migration check on interfaces
statistics	Clear statistics for one or more given interface
system	System

4-1 access

Access management.

Syntax:

Clear access-list ace statistics

Parameters:

Parameter:	Description
Ace	Access list entry
Statistics	Traffic statistics

Example:

```
ES0152# clear access-list ace statistics
```

4-2 access-list

Access list.

Syntax:

Clear access-list ace statistics

Parameters:

Parameter:	Description
Ace	Access list entry
Statistics	Traffic statistics

Example:

```
ES0152# clear access-list ace statistics
```

4-3 dot1x

IEEE Standard for port-based Network Access Control.

Syntax:

Clear dot1x statistics

Clear dot1x statistics interface GigabitEthernet <PORT_TYPE_LIST>

Parameters:

Parameter	Description
Statistics	Clear the statistics counters
Interface	Interface
GigabitEthernet	1 Gigabit Ethernet Port
PORT_TYPE_LIST	Port list in 1/1-26 for Gigabitethernet

Example:

```
ES0152# clear dot1x statistics interface
GigabitEthernet 1/1-26
```

4-4 ip

Clear DHCP Relay statistics.

Syntax:

Clear ip dhcp relay statistics

Parameters:

Parameter	Description
Dhcp	Clear DHCP Relay statistics
Relay	Clear DHCP Relay statistics
Statistics	Clear DHCP Relay statistics

Example:

```
ES0152# clear  ip dhcp relay statistics
```

4-5 ipv6

IPv6 configuration commands.

Syntax:

Clear ipv6 mld snooping [vlan <v_vlan_list>] statistics

Clear ipv6 neighbors

Clear ipv6 statistics [system] [interface vlan <v_vlan_list>] [icmp] [icmp-msg <type>]

Parameters:

Parameter	Description
Mld	Multicasat Listener Discovery
Neighbors	Ipv6 neighbors
statistics	Traffic statistics
snooping	Snooping MLD
statistics	Running MLD snooping counters
vlan	Ipv6 interface traffic
<vlan_list>	VLAN identifier(s): VID
icmp	IPv6 ICMP traffic
icmp-msg	IPv6 ICMP traffic for designated message type

Parameter	Description
interface	Select an interface to configure
system	IPv6 system traffic
< 0~255>	ICMP message type ranges from 0 to 255

Example:

```
ES0152# clear ipv6 mld snooping vlan 3 statistics
ES0152# clear ipv6 neighbors
ES0152# Clear ipv6 statistics system icmp icmp-msg 2
```

4-6 lacp

Clear LACP statistics.

Syntax:

Clear lacp statistics

Parameters:

Parameter	Description
Statistics	Clear all LACP statistics

Example:

```
ES0152# clear lacp statistics
```

4-7 lldp

Clear LLDP statistics for one or more given interface.

Syntax:

Clear lldp statistics { global | (interface [* | GigabitEthernet <port_list>]) }

Parameters:

Parameter	Description
Statistics	Clear LLDP statistics
Global	Clear global counters
Interface	Interface
GigabitEthernet	GigabitEthernet
*	All ports

Parameter	Description
<port_list>	Port List S/X-Y,Z (1/1-52)

Example:

```
ES0152# clear lldp statistics interface *
```

4-8 logging

Syslog.

Syntax:

Clear logging [info] [warning] [error]

Parameters:

Parameter	Description
Error	Error
Info	Information
Warning	Warning

Example:

```
ES0152# clear logging info error warning
```

4-9 mac

MAC Address Table.

Syntax:

Clear mac address-table

Parameters:

Parameter	Description
Address-table	Flush MAC Address table

Example:

```
ES0152# clear mac address-table
```

4-10 mvr

Multicast VLAN Registration configuration

Syntax:

Clear mvr[vlan <v_vlan_list> | name <mvr_name>] statistics

Parameters:

Parameter	Description
Name	MVR multicast name
Statistics	Running MVR protocol counters
Vlan	MVR multicast vlan
<word16>	MVR multicast VLAN name
<vlan_list>	MVR multicast VLAN list

Example:

```
ES0152# clear  mvr vlan 25 statistics
```

4-11 port-security

Port security.

Syntax:

Clear port-security dynamic address <mac_addr>

Clear port-security dynamic interface [* (<port_type_list> | vlan) | GigabitEthernet]

Parameters:

Parameter	Description
Dynamic	Dynamic entries
Address	Clear a specific <VLAN, MAC>-tuple
Interface	Port interface
Vlan	Delete all MAC addresses on a given VLAN
<mac_addr>	MAC address to clear
*	All switches or All ports
GigabitEthernet	1 Gigabit Ethernet Port
<port_type_list>	Port list for all port types
Vlan	VLAN keyword
<vlan_id>	VLANs on interface to clear all MAC addresses for
<port_type_list>	Port list in 1/1-52

Example:

```
ES0152# clear port-security dynamic interface
GigabitEthernet 1/1 *
```

4-12 sflow

Statistics flow.

Syntax:

Clear sflow Statistics { receiver [<receiver_index_list>] | samplers [interface [<samplers_list>] (<port_type> [<v_port_type_list>])] }

Parameters:

Parameter	Description
Interface	Interface
Receiver	Clear statistics for receiver
<port_type>	GigabitEthernet
<samplers : option>	Runtime
<port_type_list>	Port list in 1/1-48 for Gigabitethernet

Example:

```
ES0152# clear sflow statistics interface
GigabitEthernet 1/1-48
```

4-13 spanning-tree

Execute protocol migration check on interfaces.

Syntax:

Clear spanning-tree detected-protocols interface (* | GigabitEthernet <port_list>)

Parameters:

Parameter	Description
Detected-protocols	Clear spanning-tree detected protocols, i.e. mcheck.
Interface	Interface
GigabitEthernet	GigabitEthernet
*	All ports
<port_type_list>	Port List S/X-Y,Z (1/1-52)

Example:

```
ES0152# clear spanning-tree detected-protocols
interface *
```

4-14 statistics

Clear statistics for a given interface.

Syntax:

Clear statistics interface (* | GigabitEthernet <port_list>)

Parameters:

Parameter	Description
Interface	Interface
GigabitEthernet	GigabitEthernet
*	All switches or All ports
<port__list>	Port List S/X-Y,Z (1/1-52)

Example:

```
ES0152# clear statistics GigabitEthernet 1/1-52
```

4-15 system

System.

Syntax:

Clear system led status (all | fatal | software) [| (begin | exclude | include) <line>]

Parameters:

Parameter	Description
Led	Led
Status	Status
All	Clear all error status of the system LED and back to normal indication
Fatal	Clear fatal error status of the system LED
Software	Clear generic software error status of the system LED
|	Output modifiers
Begin	Begin with the line that matches
Exclude	Exclude lines that match

Parameter	Description
Include	Include lines that match
<line>	String to match output lines

Example:

```
ES0152# clear system led status software
```

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Chapter 5
CONFIGURE Commands of CLI

Overview

Table: CONFIGURE Commands

Command	Function
terminal	Configure from the terminal
aaa	Authentication, Authorization and Accounting
access	Access management
access-list	Access list
aggregating	Aggregation mode
banner	Define a banner
clock	Configure time-of-day clock
default	Set a command to its defaults
dms	DMS Mode
do	To run exec commands in config mode
dot1x	IEEE Standard for port-based Network Access Control
enable	Modify enable password parameters
end	Go back to EXEC mode
event	Trap event severity level
exit	Exit from Configuration mode
green-ethernet	Green ethernet (Power reduction)
gvrp	Enable GVRP feature
help	Description of the interactive help system
hostname	Set system's network name
interface	Select an interface to configure
ip	Internet Protocol
ipmc	IPv4/IPv6 multicast configuration
ipv6	IPv6 configuration commands
lacp	Lacp system configuration
line	Configure a terminal line

Command	Function
lldp	LLDP configurations
logging	Syslog
loop-protect	Loop protection configuration
mac	MAC table entries/configuration
monitor	Monitoring different system events
mvr	MVR multicast VLAN list
mvrp	Enable MVRP feature globally
no	Negate a command or set its defaults
ntp	Configure NTP
poe	Power over Ethernet
port-security	Enable/disable port security globally
privilege	Privilege level
prompt	Set prompt
qos	Quality of Service
radius-server	Configure RADIUS
rmon	Remote Monitoring
sflow	Statistics flow
smtp	Set email information
snmp-server	Set SNMP server's configurations
spanning-tree	Spanning Tree protocol
svl	Shared VLAN Learning
switch2go-management	Switch2go Management configuration
system	Set the SNMP server's configurations
tacacs-server	Configure TACACS+
udld	Enable UDLD in the aggressive or normal mode and to set the configurable message timer on all fiber-optic ports.
upnp	Set UPnP's configurations
username	Establish User Name Authentication
vlan	VLAN commands
voice	VLAN for voice traffic
web	Web

5-1 terminal

Configure from the terminal.

Syntax:

Configure terminal

Parameters:

Parameter	Description
Terminal	Configure from the terminal.

Example:

```
ES0152# configure terminal
```

5-1.1 aaa

Authentication, Authorization and Accounting.

Syntax:

AAA authentication login [ssh | telnet | http] [local | radius | tacacs]

AAA authentication service-port [ssh | telnet | http | https] <0-65535>

AAA authentication redirect

AAA authorization (ssh | telnet) tacacs commands <0-15> fallback

AAA authorization (ssh | telnet) tacacs commands <0-15> config-commands fallback

AAA accounting (ssh | telnet) tacacs

AAA accounting (ssh | telnet) tacacs commands <0-15> [exec]

Parameters:

Parameter	Description
Authentication	Authentication.
Authorization	Authorization.
Accounting	Accounting.
Login	Login.
Service-port	Service port.
Redirect	HTTP redirect HTTPS.
SSH	Configure SSH.

Parameter	Description
Telnet	Configure Telnet.
HTTP	Configure HTTP.
Local	Use local database for authentication.
Radius	Use RADIUS for authentication.
TACACS	Use TACACS+ for authentication.
HTTPS	Configure HTTPS.
<0-65535>	Service port (0..65535).
Telnet	Telnet.
SSH	SSH.
TACACS	Configure Telnet.
Commands	Cmd Lvl (0..15).
<0-15>	Cmd Lvl (0..15).
Config-commands	Config-commands.
Fallback	Fallback.
TACACS	Configure SSH.
Exec	Config-commands.

Example:

```
ES0152(config)# aaa authentication login http radius
```

5-1.2 access

Access management.

Syntax:

Access management <1..16> <1..4095> A.B.C.D[/mask] { [web] [snmp] [telnet] | all }

Access management <1..16> <1..4095> A.B.C.D[/mask] { [web] | [snmp] | [telnet] | [all] }

Parameters:

Parameter	Description
Management	Access management configuration.
<1-16>	ID of access management entry (1..16).
<1..4095>	VID of access management entry (1..4095).

Parameter	Description
A.B.C.D[/mask]	A valid IPv4 unicast address.
All	All services.
SNMP	SNMP service.
Telnet	Telnet/SSH service.
Web	Web service.

Example:

```
ES0152(config)# access management 10 3 192.168.1.1 all
```

5-1.3 access-list

Access list.

Table: configure - access-list Commands

Command	Function	Page
ace	Access list entry	See p. 27

5-1-3.1 ace

Access list entry.

Syntax:

Access-list ace <1-384> action [deny | permit | shutdown]

Access-list ace <1-384> action { (deny | permit | shutdown) [ingress | mirror | metering | counter | frame-type] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress [any | interface] [mirror | metering | counter | frame-type] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any mirror [disable | metering | counter | frame-type] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any metering [disable | <16-1000000>] [mirror | counter | frame-type] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any counter [disable | mirror | metering | frame-type] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any frame-type any [mirror | metering | counter] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any frame-type any mirror [disable | metering | counter] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any frame-type any metering [disable | <16-1000000>] [mirror | counter] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any frame-type any counter [disable | mirror | metering] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any frame-type etype [mirror | metering | counter | ctag | ctag-priority | ctag-vid | stag | stag-priority | stag-vid | dmac-type | dmac | smac | etype-value] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any frame-type ipv4 [mirror | metering | counter | dip | sip | ip-protocol | ip-flag | tos] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any frame-type ipv4-icmp [mirror | metering | counter | dip | sip | ip-flag | tos | icmp-code | icmp-type] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any frame-type ipv4-tcp [mirror | metering | counter | dip | sip | ip-flag | tos | dport | sport | tcp-flag] }

Access-list ace <1-384> action { (deny | permit | shutdown) ingress any frame-type ipv4-udp [mirror | metering | counter | dip | sip | ip-flag | tos | dport | sport] }

Access-list ace <1-384> ingress { any | interface [* | GigabitEthernet <port_list>] }

Access-list ace <1-384> ingress any [action | mirror | metering | counter | frame-type]

Access-list ace <1-384> ingress interface { * [<port_list> | action | mirror | metering | counter | frame-type] | GigabitEthernet <port_list> }

Access-list ace <1-384> mirror disable

Access-list ace <1-384> mirror [disable | action | ingress | metering | counter | frame-type]

Access-list ace <1-384> metering [disable | <16-1000000000>]

Access-list ace <1-384> metering { (disable | <16-1000000000>) [action | ingress | mirror | counter | frame-type] }

Access-list ace <1-384> counter disable

Access-list ace <1-384> counter [disable | action | ingress | mirror | metering | frame-type]

Access-list ace <1-384> frame-type any

Access-list ace <1-384> frame-type any [action | ingress | mirror | metering | counter]

Access-list ace <1-384> frame-type etype [action | ingress | mirror | metering | counter | ctag | ctag-priority | ctag-vid | stag | stag-priority | stag-vid | dmac-type | dmac | smac | etype-value]

Access-list ace <1-384> frame-type etype [ctag | stag] [any | tagged | untagged]

Access-list ace <1-384> frame-type etype [ctag-priority | stag-priority] [any | 0-1 | 0-3 | 2-3 | 4-5 | 4-7 | 6-7 | <0-7>]

Access-list ace <1-384> frame-type etype [ctag-vid | stag-vid] [any | <vlan_id>]

Access-list ace <1-384> frame-type etype dmac-type [any | broadcast | multicast | unicast]

Access-list ace <1-384> frame-type etype [dmac | smac] [any | <mac_addr>]

Access-list ace <1-384> frame-type etype etype-value [any | <0x0000-0xFFFF>]

Access-list ace <1-384> frame-type ipv4 [action | ingress | mirror | metering | counter | dip | sip | ip-protocol | ip-flag | tos]

Access-list ace <1-384> frame-type ipv4-icmp [action | ingress | mirror | metering | counter | dip | sip | ip-flag | tos | icmp-code | icmp-type]

Access-list ace <1-384> frame-type ipv4-tcp [action | ingress | mirror | metering | counter | dip | sip | ip-flag | tos | dport | sport | tcp-flag]

Access-list ace <1-384> frame-type ipv4-udp [action | ingress | mirror | metering | counter | dip | sip | ip-flag | tos | dport | sport]

Parameters:

Parameter	Description
<1-384>	ACE ID (1..384).
Action	Access list action.
Ingress	Ingress Port.
Mirror	Mirror frame to destination mirror port.
Metering	Bandwidth limitation on the traffic flow.
Counter	Count the packet if the ACE rule is matched.
Frame-type	Frame type.
Deny	Deny.
Permit	Permit.
Shutdown	Shutdown the interface.

Parameter	Description
Any	Don't-care the ingress interface.
Interface	Select an interface to configure.
*	All switches or All ports.
GigabitEthernet	GigabitEthernet.
<port_list>	Port list in (1/1-52).
Disable	Disable metering.
Disable	Disable mirror.
Disable	Disable counter.
<16-1000000000>	Metering bandwidth in Kbps (16..1000000000).
Any	Don't-care the frame type.
Etype	Frame type of etype.
IPv4	Frame type of IPv4.
IPv4-ICMP	Frame type of IPv4 ICMP.
IPv4-TCP	Frame type of IPv4 TCP.
IPv4-UDP	Frame type of IPv4 UDP.
DIP	Destination IP address field.
SIP	Source IP address field.
IP-protocol	IP protocol.
IP-flag	IP flag.
Tos	IPv4 traffic class field.
ICMP-code	ICMP code field.
ICMP-type	ICMP type field.
Ctag	C-VLAN Tag.
Ctag-priority	C-VLAN Tag-priority.
Ctag-VID	C-VLAN ID field.
Stag	S-VLAN Tag.
Stag-priority	S-VLAN Tag-priority.
Stag-VID	S-VLAN ID field.
DMAC-type	The type of destination MAC address.
DMAC	Destination MAC address field.
SMAC	Source MAC address field.
Etype-value	Ether type value.
Dport	TCP/UDP destination port field.

Parameter	Description
Sport	TCP/UDP source port field.
Cp-flag	TCP flag.
Any	Don't-care tagged or untagged.
Tagged	Tagged.
Untagged	Untagged.
Any	Don't-care the value of tag priority field.
0-1	The range of tag priority.
0-3	The range of tag priority.
2-3	The range of tag priority.
4-5	The range of tag priority.
4-7	The range of tag priority.
6-7	The range of tag priority.
<0-7>	The value of tag priority (0..7).
Any	Don't-care the value of VID field.
<vlan_id>	The value of VID field (1-4095).
Any	Don't-care the type of destination MAC address.
Broadcast	Broadcast destination MAC address.
Multicast	Multicast destination MAC address.
Unicast	Unicast destination MAC address.
Any	Don't-care the value of destination MAC address field.
<mac_addr>	The value of destination MAC address field.
Any	Don't-care the value of source MAC address field.
<mac_addr>	The value of source MAC address field.
Any	Don't-care the value of etype field.
<0x0000-0xFFFF>	The value of etype field.

Example:

```
ES0152(config)# access-list ace 10 action deny
```

5-1.4 aggregation

Aggregation mode.

Syntax:

Aggregation mode [dst-ip | dst-mac | src-dst-ip | src-dst-mac | src-ip | src-mac]

Parameters:

Parameter	Description
Mode	Traffic distribution mode.
Dst-IP	Destination IP address affects the distribution.
Dst-MAC	Destination MAC affects the distribution.
Src-dst-IP	Source and Destination IP affect the distribution.
Src-dst-MAC	Source and Destination MAC affect the distribution.
Src-IP	Source IP address affects the distribution.
Src-MAC	Source MAC affects the distribution.

Example:

```
ES0152(config)# aggregation mode dst-ip
```

5-1.5 banner

Define a login banner.

Syntax:

Banner [motd] <banner>

Banner exec <banner>

Banner login <banner>

Parameters:

Parameter	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.

Example:

```
ES0152(config)# banner exec LINE
Enter TEXT message.  End with the character 'L'.
L
```

5-1.6 clock

Configure time-of-day clock.

Syntax:

Clock set <word10><word8>

Clock timezone { [acronym <word16>] | [clock_offset <-12:00-12:00>] }

Clock summer-time mode_type <1-12> <1-5> <1-7> <0-23> <1-12> <1-5> <1-7> <0-23> <1-1440>

Parameters:

Parameter	Description
Set	Set clock.
Summer-time	Configure summer (daylight savings) time.
Timezone	Configure time zone.
<word10>	yyyy/mm/dd.
<word10>	hh:mm:ss.
Acronym	Name of time zone.
Clock_offset	Offset from UTC.
Word16	Name of time zone. (word16).
<-12 :00-12 :00>	Hours offset from UTC.
Mode_type	Enable or Disable time zone in summer. (disable/enable).
<1-12>	Month to start. (1..12).
<1-5>	Week number to start. (1..5).
<1-7>	Weekday to start. (1..7).
<0-23>	Hour to start. (0..23).
<1-12>	Month to end. (1..12).
<1-5>	Week number to end. (1..5).
<1-7>	Weekday to end. (1..7).
<0-23>	Hour to end. (0..23).
<1-1440>	Offset to add in minutes. (1..1440).

Example:

```
ES0152(config)# clock set 2014/11/04 10:22:03
2014-11-04T10:22:03+00:00
ES0152(config)# do show clock
```

```
System Time     : 2014-11-04T10:22:48+00:00
```

5-1.7 default

Set a command to its defaults.

Syntax:

Default access-list rate-limiter [<rate_limiter_list>]

Parameters:

Parameter	Description
Access-list	Access list.
Rate-limiter	Rate limiter.
<RateLimiterId : 1-16>	Rate limiter ID.

Example:

```
ES0152(config)# default access-list rate-limiter 3
```

5-1.8 dms

DMS Mode.

Syntax:

Dms mode

Dms mode [high-priority | enabled | disabled]

Parameters:

Parameter	Description
Mode	DMS mode.
High-priority	High priority.
Enabled	Enabled.
Disabled	Disabled.

Example:

```
ES0152(config)# dms mode disabled
```

5-1.9 do

To run exec commands in config mode.

Syntax:

Do < LINE >{[< LINE >]}

Do clear access-list ace statistics

Do clear ip dhcp relay statistics

Do clear lldp statistics { global | [interface (GigabitEthernet <port_list> | *)] }

Do clear logging [error | info | warning]

Do clear spanning-tree detected-protocols interface (GigabitEthernet <port_list> | *)

Do clear statistics interface (GigabitEthernet <port_list> | * <port_list>)

Parameters:

Parameter	Description
Clear	Reset functions.
Configure	Enter configuration mode.
Copy	Copy from source to destination.
Delete	Delete one file in flash file system.
Diagnostics	Diagnostics.
Dir	Directory of all files in flash file system.
Find-switch	Turn on and off all LED light 3 times in 15 seconds.
Firmware	Firmware.
Logout	Exit from EXEC mode.
More	Display file.
Ping	Send ICMP echo messages.
Reload	Reload system.
Show	Show running system information.
SSL	Setup SSL certificate.
Terminal	Set terminal line parameters.
Traceroute	Trace the route to HOST.
Access-list	Access list.
IP	Clear DHCP Relay statistics.
LLDP	Clear LLDP statistics for one or more given interface.
Logging	Syslog.
MAC	MAC Address Table.
Spanning-tree	Execute protocol migration check on interfaces.

Parameter	Description
Statistics	Clear statistics for one or more given interface.
Ace	Access list entry.
Statistics	Traffic statistics.
DHCP	Clear DHCP Relay statistics.
Relay	Clear DHCP Relay statistics.
Statistics	Clear DHCP Relay statistics.
Statistics	Clear LLDP statistics.
Global	Clear global counters.
Interface	Interface.
GigabitEthernet	GigabitEthernet.
*	All ports.
<port_list>	Port List S/X-Y,Z (1/1-52).
Error	Error.
Info	Information.
Warning	Warning.
Address-table	Flush MAC Address table.
Detected-protocols	Clear spanning-tree detected protocols, i.e. mcheck.
Interface	Interface.
*	All switches or All ports.

Example:

```
ES0152(config)# do clear statistics interface
GigabitEthernet 1/1-52
```

5-1.10 dot1x

IEEE Standard for port-based Network Access Control.

Syntax:

Dot1x authentication timer re-authenticate <1-3600>

Dot1x feature guest-vlan

Dot1x guest-vlan [<1-4095> | supplicant]

Dot1x max-reauth-req <1-255>

Dot1x re-authentication

Dot1x system-auth-control

Dot1x timeout tx-period <1-65535>

Parameters:

Parameter	Description
Authentication	Authentication.
Feature	Globally enables/disables a dot1x feature functionality.
Guest-VLAN	Guest VLAN.
Max-reauth-req	The number of times a Request Identity EAPOL frame is sent without response before considering entering the Guest VLAN.
Re-authentication	Set Re-authentication state.
System-auth-control	Set the global NAS state.
Timeout	Timeout.
Timer	Timer.
Re-authenticate	The period between re-authentication attempts in seconds.
<1-3600>	Seconds (1..3600).
Guest-VLAN	Globally enables/disables state of guest-vlan.
<1-4095>	Guest VLAN ID used when entering the Guest VLAN (1..4095).
Supplicant	The switch remembers if an EAPOL frame has been received on the port for the life-time of the port. Once the switch considers whether to enter the Guest VLAN, it will first check if this option is enabled or disabled. If disabled (unchecked; default), the switch will only enter the Guest.
<1-255>	Number of times (1..255).
Tx-period	The time between EAPOL retransmissions.
<1-65535>	Seconds (1..65535).

Example:

```
ES0152(config)# dot1x authentication timer re-
authenticate 1000
ES0152(config)# dot1x feature guest-vlan
ES0152(config)# dot1x guest-vlan 33
ES0152(config)# dot1x max-reauth-req 3
ES0152(config)# dot1x re-authentication
ES0152(config)# dot1x system-auth-control
ES0152(config)# dot1x timeout tx-period 3000
```

5-1.11 enable

Modify enable password parameters.

Syntax:

Enable password [<level> <1-15>] <WORD>

Enable secret { 0 | 5 } [< level> <1-15>] <WORD>

Parameters:

Parameter	Description
Password	Assign the privileged level clear password.
Secret	Assign the privileged level secret.
WORD	The UNENCRYPTED (cleartext) password.
Level	Set exec level password.
<1-15>	Level number.
0	Specifies an UNENCRYPTED password will follow.
5	Specifies an UNENCRYPTED secret will follow .

Example:

```
ES0152(config)# enable password level 10 999
```

5-1.12 end

Go back to EXEC mode.

Syntax:

End

Example:

```
ES0152 (config)# end
```

5-1.13 event

Trap event level.

Syntax:

Event group [aclaccess-mgmt | arp-inspection | auth-failed | bsc-protection | cold-start | dhcp | dhcp-snooping | ip-source-guard | lacp | link-updown | login | logout | loop-protection | mac-table | maintenance | mgmt-ip-change | nas | port | port-security | rmon | sfp | spanning-tree | system | user | warm-start **]** { [level < 0-7 >] | { syslog [enable | disable] } | { trap [enable | disable] } }

Event group [acl | aclaccess-mgmt | arp-inspection | auth-failed | bsc-protection | cold-start | dhcp | dhcp-snooping | ip-source-guard | lacp | link-updown | login | logout | loop-protection | mac-table | maintenance | mgmt-ip-change | nas | port | port-security | rmon | sfp | spanning-tree | system | user | warm-start **]** [level | syslog | trap]

Event group [acl | aclaccess-mgmt | arp-inspection | auth-failed | bsc-protection | cold-start | dhcp | dhcp-snooping | ip-source-guard | lacp | link-updown | login | logout | loop-protection | mac-table | maintenance | mgmt-ip-change | nas | port | port-security | rmon | sfp | spanning-tree | system | user | warm-start **]** [level | syslog | trap] < 0-7 > { syslog [enable | disable] [trap] } | { trap [enable | disable] [syslog] }

Parameters:

Parameter	Description
Group	Trap Event group name.
ACL	Group ID ACL.
Access-mgmt	Group ID ACCESS-MGMT.
Arp-inspection	Group ID ARP-INSPECTION.
Auth-failed	Group ID AUTH-FAILED.
Bsc-protection	Group ID BCS-PROTECTION.
Cold-start	Group ID COLD-START.
DHCP	Group ID DHCP.
DHCP-snooping	Group ID DHCP-SNOOPING.
IP-source-guard	Group ID IP-SOURCE-GUARD.
LACP	Group ID LACP.
Link-updown	Group ID LINK-UPDOWN.
Login	Group ID LOGIN.
Logout	Group ID LOGOUT.
Loop-protection	Group ID LOOP-PROTECTION.
MAC-table	Group ID MAC-TABLE.
Maintenance	Group ID MAINTENANCE.
Mgmt-IP-change	Group ID MGMT-IP-CHANGE.
Nas	Group ID NAS.
Port	Group ID PORT.
Port-security	Group ID PORT-SECURITY.

Parameter	Description
Rmon	Group ID RMON.
SFP	Group ID SFP.
Spanning-tree	Group ID SPANNING-TREE.
System	Group ID SYSTEM.
User	Group ID USER.
Warm-start	Group ID WARM-START.
Level	Event group level.
Syslog	Syslog mode.
Trap	Trap mode.
<0-7>	<0> Emergency ,<1> Alert ,<2> Critical ,<3> Error ,<4> Warning ,<5> Notice ,<6> Informationl ,<7> Debug (0..7).
Enable	Syslog mode enable.
Disable	Syslog mode disable.
Enable	Trap mode enable.
Disable	Trap mode disable.

Example:

```
ES0152(config)# event group lacp trap enable
```

5-1.14 green-ethernet

Green ethernet (Power reduction).

Syntax:

Green-ethernet eee optimize-for-power

Parameters:

Parameter	Description
EEE	Powering down of PHYs when there is no traffic.
Optimize-for-power	Set if EEE shall be optimized for least power consumption (else optimized for least traffic latency).

Example:

```
ES0152(config)# green-ethernet eee optimize-for-power
```

5-1.15 gvrp

Enable GVRP feature.

Syntax:

Gvrp

Gvrp max-vlans <1-4095>

Gvrp time { [join-time <1-20>] [leave-time <60-300>] [leave-all-time <1000-5000>] }*1

Parameters:

Parameter	Description
Time	Config gvrp timer value in units of centi seconds [cs].

Example:

```
ES0152(config)# gvrp max-vlans 333
ES0152(config)# gvrp time join-time 13 leave-all-time
3000 leave-time 200
```

5-1.16 help

Description of the interactive help system.

Syntax:

Help

Parameter:

None.

Example:

```
ES0152(config)# help
Help may be requested at any point in a command by
entering
a question mark '?'.  If nothing matches, the help list
will
be empty and you must backup until entering a '?' shows
the
available options.
Two styles of help are provided:
1. Full help is available when you are ready to enter a
   command argument (e.g. 'show ?') and describes each
possible
```

```
   argument.
2. Partial help is provided when an abbreviated
argument is entered
   and you want to know what arguments match the input
   (e.g. 'show pr?'.)
```

5-1.17 hostname

Set system's network name.

Syntax:

Hostname <WORD>

Parameters:

Parameter	Description
WORD	This system's network name.

Example:

```
ES0152(config)# hostname abc
abc(config)#
```

5-1.18 interface

Select an interface to configure.

Syntax:

Interface vlan <vlan_list>

Interface vlan <vlan_list> end

Interface vlan <vlan_list> exit

Interface vlan <vlan_list> ip (address | dhcp | igmp) <ipv4_addr> <ipv4_netmask>

Interface vlan <vlan_list> ip address dhcp

Interface vlan <vlan_list> ip address dhcp fallback <ipv4_addr> <ipv4_netmask>

Interface vlan <vlan_list> ip address dhcp fallback <ipv4_addr> <ipv4_netmask> timeout

Interface vlan <vlan_list> ip address dhcp fallback <ipv4_addr> <ipv4_netmask> timeout <0-4294967295>

Interface GigabitEthernet <port_list>

Parameters:

Parameter	Description
VLAN	VLAN interface configurations.
GigabitEthernet	1 Gigabit Ethernet Port.
<vlan_list>	List of VLAN interface numbers, 1~4094 (1-4095).
!	Comments.
End	Go back to EXEC mode.
Exit	Exit from current mode.
IP	Interface Internet Protocol config commands.
IPv6	Interface IPv6 config commands.
No	Negate a command or set its defaults.
Address	Address configuraton.
DHCP	Dynamic Host Configuration Protocol.
IGMP	IP mode.
<ipv4_addr>	IP address (X.X.X.X).
DHCP	Enable DHCP client.
<ipv4_netmask>	IP netmask (X.X.X.X).
Fallback	DHCP fallback settings.
Timeout	DHCP fallback timeout.
<0-4294967295>	DHCP fallback timeout in seconds (0..4294967295).
Address	Address configuraton.
Mld	IPv6 mode.
<port_list>	Port List S/X-Y,Z (1/1-52).

Example:

```
ES0152(config)# interface GigabitEthernet 1/1-52
ES0152(config-if)#
ES0152(config-if)#  interface vlan 3
ES0152(config-if-vlan)#
```

5-1.19 ip

Internet Protocol.

Syntax:

IP arp inspection

IP arp inspection entry interface [* | GigabitEthernet <port_id>] <vlan_id> <mac_ucast> <ipv4_ucast>

IP arp inspection vlan <vlan_list>

IP arp inspection vlan <vlan_list> logging [deny | permit | all]

IP dhcp pool <vlan_id>

IP dhcp relay

IP dhcp relay information option

IP dhcp relay information policy { drop | keep | replace }

IP dhcp snooping

IP helper-address <ipv4_ucast>

IP igmp snooping

IP igmp host-proxy

IP igmp ssm-range <ipv4_mcast> <4-32>

IP igmp unknown-flooding

IP name-server { <ipv4_ucast> | [dhcp interface vlan <vlan_id>] }

IP route <ipv4_addr> <ipv4_netmask> <ipv4_ucast>

IP source binding interface [* | GigabitEthernet <port_id>] <ipv4_ucast> <mac_ucast>

IP verify source

Parameters:

Parameter	Description
Arp	Address Resolution Protocol.
DHCP	Dynamic Host Configuration Protocol.
Helper-address	DHCP helper server address.
IGMP	Internet Group Management Protocol.
Name-server	Domain Name System.
Route	Add IP route.
Source	Source command.
Verify	Verify command.
Inspection	ARP inspection.

Parameter	Description
Entry	Arp inspection entry.
VLAN	Arp inspection vlan setting.
Interface	Select an interface to configure.
*	All switches or All ports.
GigabitEthernet	GigabitEthernet.
<port_id>	Port ID in (1/1-52).
<vlan_id>	Select a VLAN id to configure (1-4095).
<mac_ucast>	Select a MAC address to configure.
<ipv4_ucast>	Select an IP Address to configure (X.X.X.X).
<vlan_list>	Arp inspection vlan list (1-4095).
Logging	ARP inspection vlan logging mode config.
All	Log all entries.
Deny	Log denied entries.
Permit	Log permitted entries.
Pool	DHCP server pool.
Relay	DHCP relay.
Snooping	DHCP snooping.
<vlan_id>	VLAN id of DHCP server pool (1-4095).
Information	DHCP information option <Option 82>.
Option	DHCP option 82.
Policy	Policy for handling the receiving DHCP packet already include the information option.
Drop	Drop the package.
Keep	Keep the original relay information.
Replace	Replace the original relay information.
<ipv4_ucast>	IP Address (X.X.X.X).
Snooping	Snooping IGMP.
Host-proxy	IGMP proxy configuration.
Unknown-flooding	Flooding unregistered IPv4 multicast traffic.
Ssm-range	IPv4 address range of Source Specific Multicast.
<ipv4_mcast>	Valid IPv4 multicast address (X.X.X.X).
<4-32>	Prefix length ranges from 4 to 32.
<ipv4_ucast>	A valid IPv4 unicast address (X.X.X.X).

Parameter	Description
DHCP	Dynamic Host Configuration Protocol.
Interface	Select an interface to configure.
VLAN	VLAN Interface.
<vlan_id>	VLAN identifier(s): VID (1-4095).
<ipv4_addr>	Network (X.X.X.X).
<ipv4_netmask>	Netmask (X.X.X.X).
<ipv4_ucast>	Gateway (X.X.X.X).
Binding	IP source binding.
Interface	IP source binding entry interface config.
<ipv4_ucast>	Select an unicast IP address to configure (X.X.X.X).
<mac_ucast>	Select an unicast MAC address to configure.
Source	Verify source.

Example:

```
ES0152(config)# ip arp inspection
ES0152(config)# ip dhcp relay
ES0152(config)# ip helper-address 192.168.1.1
ES0152(config)# ip name-server 192.168.1.6
ES0152(config)# ip route 192.168.1.1 255.255.255.0
192.168.1.100
ES0152(config)# ip verify source
IP Source Guard:
        Translate 0 dynamic entries into static entries.
```

5-1.20 ipmc

IPv4/IPv6 multicast configuration.

Syntax:

Ipmc profile word16

Ipmc range word16 [<ipv4_mcast> | <ipv6_mcast>]

Ipmc mode

Parameters:

Parameter	Description
Profile	IPMC profile provides the rules for specific group addresses.
Range	A range of IPv4/IPv6 multicast addresses for the profile.
Mode	IPMC profile mode.
Word16	Profile name in 16 char's (word16).
Word16	Range entry name in 16 char's (word16).
<ipv4_mcast>	Valid IPv4 multicast address.
<ipv6_mcast>	Valid IPv6 multicast address.

Example:

```
ES0152(config)# ipmc profile test
ES0152(config-ipmc-profile)#
```

5-1.21 ipv6

IPv6 configuration commands.

Syntax:

IPv6 mld host-proxy

IPv6 mld snooping

IPv6 mld ssm-range <ipv6_mcast> Unsigned integer

IPv6 mld unknown-flooding

Parameters:

Parameter	Description
Mld	Multicasat Listener Discovery.
Host-proxy	MLD proxy configuration.
Snooping	Snooping MLD.
Ssm-range	IPv6 address range of Source Specific Multicast.
Unknown-flooding	Flooding unregistered IPv6 multicast traffic.
<ipv6_mcast>	Valid IPv6 multicast address (X:X:X:X:X:X:X:X).
Unsigned integer	Prefix length ranges from 4 to 32.

Example:

```
ES0152(config)# ipv6 mld host-proxy
```

```
ES0152(config)# ipv6 mld snooping
```

5-1.22 lacp

Lacp system configuration.

Syntax:

LACP system-priority <1-65535>

Parameters:

Parameter	Description
System-priority	System priority.
<1-65535>	Aggregation group number (1..65535).

Example:

```
ES0152(config)# lacp system-priority 333
```

5-1.23 line

Configure a terminal line.

Syntax:

Line { <0~16> | console 0 | vty <0~15> }

Parameters:

Parameter	Description
<0~16>	List of line numbers.
Console	Console terminal line.
0	Console Line number.
Vty	Virtual terminal.
<0~15>	List of vty numbers.

Example:

```
ES0152(config)# line  console 0
ES0152(config-line)#
```

5-1.24 lldp

LLDP configurations.

Syntax:

LLDP holdtime <2-10>

LLDP med datum [wgs84 | nad83_navd88 | nad83_mllw]

LLDP med fast <1-10>

LLDP med location-tlv altitude [meters | floors] <-32767-32767>

LLDP med location-tlv civic-addr [country | state | county | city | district | block | street | leading-street-direction | trailing-street-suffix | street-suffix | house-no | house-no-suffix | landmark | additional-info | name | zip-code | building | apartment | floor | room-number | place-type | postal-community-name | p-o-box | additional-code] [word50 | word2]

LLDP med location-tlv elin-addr <phone_call_str>

LLDP med location-tlv latitude [north | south] <0-90>

LLDP med location-tlv longitude [west | east] <0-180>

LLDP med media-vlan-policy <0-31> { voice | voice-signaling | guest-voice-signaling | guest-voice | softphone-voice | video-conferencing | streaming-video | video-signaling } { tagged <1-4095> | untagged } [l2-priority <0-7>] [dscp <0-63>]

LLDP reinit <1-10>

LLDP timer <5-32768>

LLDP transmission-delay <1-8192>

Parameters:

Parameter	Description
Holdtime	Sets LLDP hold time.
Med	Media Endpoint Discovery.
Reinit	Sets LLDP reinit time.
Timer	Sets LLDP TX interval.
Transmission-delay	Sets LLDP transmision-delay.
<2-10>	The neighbor switch will discarded the LLDP information after hold time multiplied with timer seconds (2..10).
Datum	Datum type.
Fast	Number of times to repeat LLDP frame transmission at fast start.
Location-tlv	LLDP-MED Location Type Length Value parameter.
Media-VLAN-policy	Use the media-vlan-policy to create a policy, which can be assigned to an interface.
Nad83_mllw	Mean lower low water datum 1983.

Parameter	Description
Nad83_navd88	North American vertical datum 1983.
Wgs84	World Geodetic System 1984.
<1-10>	Fast start repeat count (1..10).
Altitude	Altitude parameter.
Civic-addr	Civic address information and postal information.
Elin-addr	Emergency Location Identification Number.
Latitude	Latitude parameter.
Longitude	Longitude parameter.
Meter	Specify the altitude in meters.
Floors	Specify the altitude in floor.
<-32767-32767>	Specify the altitude in floor (-32767..32767).
<-32767-32767>	Specify the altitude in meters (-32767..32767).
Country	The two-letter ISO 3166 country code in capital ASCII letters.
Word2	Example: DK, DE or US (word2) (for **country**).
State	National subdivisions.
Word50	State, canton, region, province, prefecture (word50) (for **state**).
County	County, parish, gun (Japan), district.
Word50	County, parish, gun (Japan), district (word50) (for **county**).
City	City, township, shi (Japan) - Example: Copenhagen.
Word50	City, township, shi (Japan) - Example:Copenhagen (word50) (for **city**).
District	City division, borough, city district, ward, chou (Japan).
Word50	City division, borough, city district, ward, chou (Japan) (word50) (for **district**).
Block	Neighbourhood, block.
Word50	Neighborhood, block (word50) (for **block**).
Street	Street.
Word50	Example: Poppelvej (word50) (for **street**).
Leading-street-direction	Leading street direction.
Word50	Example: N (word50) (for **leading-street-direction**).
Trailing-street-suffix	Trailing street suffix.
Word50	Example: SW (word50) (for **trailing-street-suffix**).

Parameter	Description
Street-suffix	Street suffix – Example.
Word50	Example: Ave, Platz (word50) (for **street-suffix**).
House-no	House number.
Word50	Example: 21 (word50) (for **house-no**).
House-no-suffix	House number suffix.
Word50	Example: A, 1/2 (word50) (for **house-no-suffix**).
Landmark	Landmark or vanity address.
Word50	Example: Columbia University (word50) (for **landmark**).
Additional-info	Additional location info.
Word50	Example: South Wing (word50) (for **additional-info**).
Name	Name (residence and office occupant).
Word50	Example: Flemming Jahn (word50) (for **name**).
Zip-code	Postal/zip code.
Word50	Example: 2791 (word50) (for **zip-code**).
Building	Building (structure).
Word50	Example: Low Library (word50) (for **building**).
Apartment	Unit (Apartment, suite).
Word50	Example: Apt 42 (word50) (for **apartment**).
Floor	Floor.
Word50	Example: 4 (word50) (for **floor**).
Room-number	Room number.
Word50	Example: 450F (word50) (for **room-number**).
Place-type	Place type.
Word50	Example: Office (word50) (for **place-type**).
Postal-community-name	Postal community name.
Word50	Example: Leonia. (word50) (for **postal-community-name**).
P-O-Box	Post office box (P.O. BOX).
Word50	Example: 12345 (word50) (for **p-o-box**).
Additional-code	Additional code.
Word50	Example: 1320300003 (word50) (for **additional-code**).
<phone_call_str>	ELIN value.
North	Setting latitude direction to north.

Parameter	Description
South	Setting latitude direction to south.
<0-90>	Setting latitude direction to south (0..90).
East	Setting longitude direction to east.
West	Setting longitude direction to west.
<0-180>	Setting longitude direction to east (0..180).
<0-31>	Policy ID for the policy which is created.
Voice	Create a voice policy.
Voice-signaling	Create a voice signaling policy.
Guest-voice-signaling	Create a guest voice signaling policy.
Guest-voice	Create a guest voice policy.
Softphone-voice	Create a softphone voice policy.
Video-conferencing	Create a video conferencing policy.
Streaming-video	Create a streaming video policy.
Video-signaling	Create a video signaling policy.
Tagged	The policy uses tagged frames.
Untagged	The policy uses un-tagged frames.
<1-4095>	The VLAN the policy uses tagged frames (1..4095).
l2-priority	Layer 2 priority.
<0-7>	Priority 0-7 (0..7).
Dscp	Differentiated Services Code Point.
<0-63>	DSCP value 0-63 (0..63).
<1-10>	LLDP tx reinitialization delay in seconds (1..10).
<5-32768>	The time between each LLDP frame transmitted in seconds (5..32768).
<1-8192>	LLDP transmission delay (1..8192).

Example:

```
ES0152(config)# lldp holdtime 5
ES0152(config)# lldp med fast 5
ES0152(config)# lldp reinit 3
ES0152(config)# lldp timer 555
ES0152(config)# lldp transmission-delay 333
```

```
Note: According to IEEE 802.1AB-clause 10.5.4.2 the
transmission-delay must not be larger than LLDP timer *
0.25. LLDP timer changed to 13332
```

5-1.25 logging

Syslog.

Syntax:

Logging host <1-6> { <ipv4_ucast> | <hostname> }

Logging on

Parameters:

Parameter	Description
Host	Host.
On	Enable syslog server.
<1-6>	Host number (1..6).
<hostname>	Donain name of the log server.
<ipv4_ucast>	IP address of the log server (X.X.X.X).

Example:

```
ES0152(config)# logging host 3 192.155.3.2
ES0152(config)#
ES0152(config)# logging on
```

5-1.26 loop-protect

Loop protection configuration.

Syntax:

Loop-protect

Loop-protect shutdown-time <10-604800>

Loop-protect transmit-time <1-10>

Parameters:

Parameter	Description
Shutdown-time	Loop protection shutdown time interval.
Transmit-time	Loop protection transmit time interval.

Parameter	Description
<10-604800>	Shutdown time in second (10..604800).
<1-10>	Transmit time in second (1..10).

Example:

```
ES0152(config)# loop-protect
ES0152(config)# loop-protect shutdown-time 333
ES0152(config)# loop-protect transmit-time 3
```

5-1.27 mac

MAC table entries/configuration.

Syntax:

MAC address-table aging-time <10-1000000>

MAC address-table static <mac_addr> vlan <vlan_id> { (interface [* | GigabitEthernet <port_id>]) | block }

Parameters:

Parameter	Description
Address-table	MAC table entries/configuration.
Aging-time	Mac address aging time.
Static	Static MAC address.
<10-1000000>	Aging time in seconds (10..1000000).
<mac_addr>	48 bit MAC address: xx:xx:xx:xx:xx:xx.
VLAN	VLAN keyword.
<vlan_id>	VLAN IDs 1-4095 (1-4095).
Block	Drop the packet which MAC Address and VLAN ID is match.
Interface	Select an interface to configure.
*****	All switches or All ports.
Gigabitethernet	1 Gigabit Ethernet port.
<port_id>	Port ID in (1/1-52).

Example:

```
ES0152(config)# mac address-table aging-time 3333
```

5-1.28 monitor

Monitoring different system events.

Syntax:

Monitor session 1

Monitor session 1 destination interface [* | GigabitEthernet] <port_id>

Monitor session 1 source interface [* | GigabitEthernet] <port_list> [both | rx | tx]

Monitor session 1 source interface [* | GigabitEthernet] [both | rx | tx]

Parameters:

Parameter	Description
Session	Configure a MIRROR session.
<1>	MIRROR session number (1..1).
Destination	MIRROR destination interface.
Source	MIRROR source interface.
Interface	MIRROR destination interface.
*	All switches or All ports,
GigabitEthernet	GigabitEthernet.
<port_id>	Port ID in (1/1-52).
Interface	MIRROR source interface.
<port_list>	Port List S/X-Y,Z (1/1-52).
Both	Mirror both ingress and egress traffic.
Rx	Mirror ingress traffic.
Tx	Mirror egress traffic.

Example:

```
ES0152(config)# monitor session 1 destination interface
GigabitEthernet 1/9
ES0152(config)# monitor session 1 source interface
GigabitEthernet 1/5 both
```

5-1.29 mvr

MVR multicast VLAN list.

Syntax:

Mvr

Mvr vlan <vlan_list> name word16

Mvr vlan <vlan_list> channel word16

Mvr vlan <vlan_list> frame priority <Priority : 0-7>

Mvr vlan <vlan_list> frame tagged untagged/tagged

Mvr vlan <vlan_list> igmp-address <ipv4_addr>

Mvr vlan <vlan_list> last-member-query-interval <Range : 0-31744 tenths of seconds>

Mvr vlan <vlan_list> mode [dynamic | compatible]

Parameters:

Parameter	Description
VLAN	MVR multicast vlan list.
<vlan_list>	MVR multicast VLAN list (1-4095).
Name	MVR multicast name.
Frame	MVR control frame in TX.
Mode	MVR mode of operation.
Last-member-query-interval	Last Member Query Interval in tenths of seconds.
Channel	MVR channel configuration.
IGMP-address	MVR address configuration used in IGMP.
Word16	Range entry name in 16 char's (word16).
Word16	Profile name in 16 char's (word16).
Priority	Interface CoS priority
Tagged	Tagged IGMP/MLD frames will be sent.
<Priority : 0-7>	Range : 0-7 (0..7).
Untagged/tagged	Tagged mode.
<ipv4_addr>	A valid IPv4 unicast address (X.X.X.X).
<Range : 0-31744 tenthsf seconds>	Last Member Query Interval in tenths of seconds (0..31744).
Compatible	Compatible MVR operation mode.
Dynamic	Dynamic MVR operation mode MVR mode of operation.

Example:

```
ES0152(config)# mvr vlan 10 mode dynamic
```

5-1.30 mvrp

Enable MVRP feature globally.

Syntax:

Mvrp managed

Mvrp managed vlan <vlan_list>

Mvrp managed vlan (add | except | remove) <vlan_list>

Mvrp managed vlan (all | none)

Parameters:

Parameter	Description
Managed	Set list of MVRP-managed VLANs.
VLAN	Set managed VLANs of MVRP.
<vlan_list>	VLAN IDs of the managed VLANs of MVRP.
Add	Add VLANs to the current list.
All	All VLANs.
Except	All VLANs except the following.
None	No VLANs.
Remove	Remove VLANs from the current list.

Example:

```
ES0152(config)# mvrp managed vlan all
```

5-1.31 no

Negate a command or set its defaults.

Table: configure - no Commands

Command	Function	Page
aaa	Authentication, Authorization, and Accounting	See p. 59
access	Access management	See p. 60
access-list	Access list	See p. 60

Command	Function	Page
aggregation	Aggregation mode	See p. 61
banner	Define a login banner	See p. 61
clock	Configure time-of-day clock	See p. 61
dot1x	IEEE Standard for port-based Network Access Control	See p. 62
enable	Modify enable password parameters	See p. 63
green-ethernet	Green ethernet (Power reduction)	See p. 64
gvrp	Enable GVRP feature	See p. 64
hostname	Set system's network name	See p. 65
interface	Select an interface to configure	See p. 65
ip	Internet Protocol	See p. 65
ipmc	IPv4/IPv6 multicast configuration	See p. 68
ivp6	IPv6 configuration commands	See p. 68
lacp	LACP system configuration	See p. 69
lldp	LLDP configurations	See p. 69
logging	Syslog	See p. 71
loop-protect	Loop protection configuration	See p. 72
mac	MAC table entries/configuration	See p. 72
monitor	Monitoring different system events	See p. 73
mvr	Multicast VLAN Registration configuration	See p. 74
mvrp		See p. 74
ntp	Configure NTP	See p. 74
poe	Power Over Ethernet	See p. 74
port-security	Enable/disable port security globally	See p. 75
Privilege	Privilege level	See p. 75
Prompt	Default the prompt to %h	See p. 76
qos	Quality of Service	See p. 76
radius-server	Configure RADIUS	See p. 77
rmon	Remote Monitoring	See p. 79
s-flow	Statistics flow	See p. 79
snmp-server	Enable SNMP server	See p. 80
spanning-tree	Spanning Tree protocol	See p. 81

Command	Function	Page
svl	Unmap Shared VLAN Learning for a range or all FIDs	See p. 82
switch2go-management	SwitchAlert Management configuration	See p. 83
system	Set the SNMP server's configurations	See p. 83
tacacs-server	Configure TACACS+	See p. 84
udld	Disable UDLD configuration on all fiber-optic ports	See p. 85
upnp	Set UPnP's configurations	See p. 85
username	Establish User Name Authentication	See p. 86
vlan	Vlan commands	See p. 86
voice	Voice appliance attributes	See p. 87
web	Web	See p. 88

5-1.31.1 aaa

Authentication, Authorization, and Accounting.

Syntax:

No aaa authentication login [telnet | ssh | http]

No aaa authentication service-port [ssh | telnet | http | https]

No aaa authentication redirect

No aaa authorization [ssh | telnet]

No aaa accounting [ssh | telnet]

Parameters:

Parameter	Description
Authentication	Authentication.
Authorization	Authorization.
Accounting	Accounting.
Login	Login.
Service-port	Service port.
Redirect	HTTP redirect HTTPS.
HTTP	Configure HTTP.
SSH	Configure SSH.
Telnet	Configure Telnet.

Parameter	Description
HTTPS	Configure HTTPS.
Telnet	Telnet.
SSH	SSH.

Example:

```
ES0152(config)# no aaa authentication  login ssh
```

5-1.31.2 access

Access management.

Syntax:

No access management [<1~16>]

No access management

Parameters:

Parameter	Description
Management	Access management configuration.
<1~16>	ID of access management entry (1..16).

Example:

```
ES0152(config)# no access management
```

5-1.31.3 access-list

Access list.

Syntax:

No access-list ace <1~384>

Parameters:

Parameter	Description
Ace	Access list entry.
<1-384>	ACE ID (1-384).

Example:

```
ES0152(config)# access-list ace 1
```

5-1.31.4 aggregation

Aggregation mode.

Syntax:

No aggregation mode

Parameters:

Parameter	Description
Mode	Traffic distribution mode.

Example:

```
ES0152(config)# no aggregation mode
```

5-1.31.5 banner

Define a login banner.

Syntax:

No banner [motd]

No banner exec

No banner login

Parameters:

Parameter	Description
Exec	Set EXEC process creation banner.
Login	Set login banner.
Motd	Set Message of the Day banner.

Example:

```
ES0152(config)# no banner login
```

5-1.31.6 clock

Configure time-of-day clock.

Syntax:

No clock summer-time

No clock timezone

Parameters:

Parameter	Description
Summer-time	Configure summer (daylight savings) time.
Timezone	Configure time zone.

Example:

```
ES0152(config)# no clock summer-time
ES0152(config)# no clock timezone
```

5-1.31.7 dot1x

IEEE Standard for port-based Network Access Control.

Syntax:

No dot1x authentication timer re-authenticate

No dot1x feature guest-vlan

No dot1x guest-vlan

No dot1x guest-vlan supplicant

No dot1x max-reauth-req

No dot1x re-authentication

No dot1x system-auth-control

No dot1x timeout tx-period

Parameters:

Parameter	Description
Authentication	Authentication.
Feature	Globally enables/disables a dot1x feature functionality.
Guest-VLAN	Guest VLAN.
Max-reauth-req	The number of time a Request Identity EAPOL frame is sent without response before considering entering the Guest VLAN.
Re-authentication	Set Re-authentication state.
System-auth-control	Set the global NAS state.
Timeout	Timeout.
Timer	Timer.
Re-authenticate	The period between re-authentication attempts in seconds.

Parameter	Description
Guest-VLAN	Globally enables/disables state of guest-vlan.
Supplicant	The switch remembers if an EAPOL frame has been received on the port for the life-time of the port. Once the switch considers whether to enter the Guest VLAN, it will first check if this option is enabled or disabled. If disabled (unchecked; default), the switch will only enter the Guest VLAN if an EAPOL frame has not been received on the port for the life-time of the port. If enabled (checked), the switch will consider entering the Guest VLAN even if an EAPOL frame has been received on the port for the life-time of the port.
Tx-period	The time between EAPOL retransmissions.

Example:

```
ES0152(config)# no dot1x authentication timer re-
authenticate
ES0152(config)# no dot1x guest-vlan supplicant
ES0152(config)# no dot1x max-reauth-req
ES0152(config)# no dot1x re-authentication
ES0152(config)# no dot1x system-auth-control
ES0152(config)# no dot1x timeout tx-period
```

5-1.31.8 enable

Modify enable password parameters.

Syntax:

No enable password [level <1-15>]

No enable secret [0|5 { level <1-15> }]

Parameters:

Parameter	Description
Password	Assign the privileged level clear password.
Secret	Assign the privileged level secret.
0	Specifies an UNENCRYPTED password will follow.
5	Specifies an ENCRYPTED password will follow.
Level	Set exec level password.
<1-15>	Level number.

Example:

```
ES0152(config)# no enable secret level 15
ES0152(config)# no enable password level 15
```

5-1.31.9 green-ethernet

Green ethernet (Power reduction).

Syntax:

No green-ethernet eee optimize-for-power

Parameters:

Parameter	Description
EEE	Powering down of PHYs when there is no traffic.
Optimize-for-power	Set if EEE shall be optimized for least power consumption (else optimized for least traffic latency).

Example:

```
ES0152(config)# no green-ethernet eee optimize-for-
power
```

5-1.31.10 gvrp

Enable GVRP feature.

Syntax:

Gvrp

Gvrp max-vlans <maxvlans>

Gvrp time { [join-time <jointime>] [leave-time <leavetime>] [leave-all-time <leavealltime>] }*1

Parameters:

Parameter	Description
Max-vlans	Number of simultaniously VLANs that GVRP can control.
Time	Config GARP protocol timer parameters. IEEE 802.1D-2004, clause 12.11.
Join-time	Set GARP protocol parameter JoinTime. See IEEE 802.1D-2004, clause 12.11.

Parameter	Description
Leave-all-time	Set GARP protocol parameter LeaveAllTime. See IEEE 802.1D-2004, clause 12.11.
Leave-time	Set GARP protocol parameter LeaveTime. See IEEE 802.1D-2004, clause 12.11.

Example:

```
ES0152(config)#no gvrp max-vlans 1
ES0152(config)#no gvrp time join-time 10
ES0152(config)#no gvrp time leave-all-time 2000
ES0152(config)#no gvrp time leave-time 70
```

5-1.31.11 hostname

Set system's network name.

Syntax:

No hostname

Example:

```
ES0152(config)# no hostname
```

5-1.31.12 interface

Select an interface to configure.

Syntax:

No interface vlan < vlan_list >

Parameters:

Parameter	Description
VLAN	Vlan interface configurations.
<vlan_list>	List of VLAN interface numbers, 1~4094 (1-4095).

Example:

```
ES0152(config)# no interface vlan 10
```

5-1.31.13 ip

Internet Protocol.

Syntax:

No ip arp inspection

No ip arp inspection entry interface { * | [Gigabitethernet <port_id>] } <vlan_id> <mac_ucast> <ipv4_ucast>

No ip arp inspection vlan <vlan_list> logging

No dhcp pool <vlan_id>

No ip dhcp relay information [option | policy]

No ip dhcp relay

No ip dhcp snooping

No ip helper-address

No ip igmp host-proxy

No ip igmp snooping

No ip igmp unknown-flooding

No ip name-server

No ip route <ipv4_addr> <ipv4_netmask> <ipv4_ucast>

No ip source binding interface { [* | Gigabitethernet] <port_id> <ipv4_ucast> <mac_ucast> }

No ip verify source

Parameters:

Parameter	Description
Arp	Address Resolution Protocol.
DHCP	Dynamic Host Configuration Protocol.
Helper-address	DHCP helper server address.
IGMP	Set IGMP.
Name-server	Domain Name System.
Route	Add IP route.
Source	Source command.
Verify	Verify command.
Inspection	ARP inspection.
Entry	Arp inspection entry.
VLAN	Arp inspection vlan setting.
Interface	Select an interface to configure.

Parameter	Description
GigabitEthernet	GigabitEthernetPort.
*	All switches or All ports.
<port_id>	Port ID in (1/1-52).
<vlan_id>	Select a VLAN id to configure (1-4095).
<mac_ucast>	Select a MAC address to configure.
<ipv4_ucast>	Select an IP Address to configure (X.X.X.X).
<vlan_list>	Arp inspection vlan list (1-4095).
Logging	ARP inspection vlan logging mode config.
Pool	DHCP server pool.
Relay	DHCP relay.
Snooping	DHCP snooping.
<vlan_id>	VLAN id of DHCP server pool (1-4095).
Information	DHCP information option(Option 82).
Option	DHCP option 82.
Policy	Policy for handling the receiving DHCP packet already include the information option.
Host-proxy	IGMP proxy configuration.
Snooping	Snooping IGMP.
Unknown-flooding	Flooding unregistered IPv4 multicast traffic.
<ipv4_addr>	Network (X.X.X.X).
<ipv4_netmask>	Netmask (X.X.X.X).
<ipv4_ucast>	Gateway (X.X.X.X).
Binding	IP source binding.
Interface	IP source binding entry interface config.
<ipv4_ucast>	Select an unicast IP address to configure (X.X.X.X).
<mac_ucast>	Select an unicast MAC address to configure.
Source	Verify source.

Example:

```
ES0152(config)# no ip arp inspection vlan 3 logging
ES0152(config)# no ip helper-address
ES0152(config)# no ip igmp snooping
ES0152(config)# no ip name-server
```

```
ES0152(config)# no ip verify source
```

5-1.31.14 ipmc

IPv4/IPv6 multicast configuration.

Syntax:

No mode

No ipmc profile word16

No ipmc range word16

Parameters:

Parameter	Description
Profile	IPMC profile configuration.
Range	A range of IPv4/IPv6 multicast addresses for the profile.
Mode	IPMC profile mode.
Word16	Range entry name in 16 char's (word16).
Word16	Profile name in 16 char's (word16).

Example:

```
ES0152(config)# no ipmc profile aa
```

5-1.31.15 ipv6

IPv6 configuration commands.

Syntax:

No ipv6 mld host-proxy

No ipv6 mld snooping

No ipv6 mld unknown-flooding

Parameters:

Parameter	Description
Mld	Multicasat Listener Discovery.
Host-proxy	MLD proxy configuration.
Snooping	Snooping MLD.
Unknown-flooding	Flooding unregistered IPv6 multicast traffic.

Example:

```
ES0152(config)# no ipv6 mld snooping
```

5-1.31.16 lacp

Lacp system configuration.

Syntax:

No lacp system-priority

Parameters:

Parameter	Description
System-priority	System priority.

Example:

```
ES0152(config)# no lacp system-priority
```

5-1.31.17 lldp

LLDP configurations.

Syntax:

No lldp holdtime

No lldp med datum

No lldp med fast

No lldp med location-tlv altitude

No lldp med location-tlv civic-addr [country | state | county | city | district | block | street | leading-street-direction | trailing-street-suffix | street-suffix | house-no | house-no-suffix | landmark | additional-info | name | zip-code | building | apartment | floor | room-number | place-type | postal-community-name | p-o-box | additional-code]

No lldp med location-tlv elin-addr

No lldp med location-tlv latitude

No lldp med location-tlv longitude

No lldp med media-vlan-policy <0~31>

No lldp reinit

No lldp timer

No lldp transmission-delay

Parameters:

Parameter	Description
Holdtime	LLDP hold time.
Med	Media Endpoint Discovery.
Reinit	LLDP reinit time.
Timer	LLDP TX interval.
Transmission-delay	LLDP transmision-delay.
Datum	Datum type.
Fast	Number of times to repeat LLDP frame transmission at fast start.
Location-tlv	LLDP-MED Location Type Length Value parameter.
Media-VLAN-policy	Use the media-VLAN-policy to create a policy, which can be assigned to an interface.
Altitude	Altitude parameter.
Latitude	Latitude parameter.
Longitude	Longitude parameter.
Elin-addr	Emergency Location Identification Number.
Civic-addr	Civic address information and postal information.
Country	The two-letter ISO 3166 country code in capital ASCII letters.
State	National subdivisions.
County	County, parish, gun (Japan), district.
City	City, township, shi (Japan) - Example: Copenhagen.
District	City division, borough, city district, ward, chou (Japan).
Block	Neighbourhood, block.
Street	Street.
Leading-street-direction	Leading street direction.
Trailing-street-suffix	Trailing street suffix.
Street-suffix	Street suffix.
House-no	House number.
House-no-suffix	House number suffix.
Landmark	Landmark or vanity address.
Additional-info	Additional location info.

Parameter	Description
Name	Name (residence and office occupant).
Zip-code	Postal/zip code.
Building	Building (structure).
Apartment	Unit (Apartment, suite).
Floor	Floor.
Room-number	Room number.
Place-type	Place type.
Postal-community-name	Postal community name.
P-O-Box	Post office box (P.O. BOX).
Additional-code	Additional code.
<0~31>	Policy id for the policy which is created (0..31).

Example:

```
ES0152(config)# no lldp holdtime
ES0152(config)# no lldp med location-tlv civic-addr
floor
ES0152(config)# no lldp reinit
ES0152(config)# no lldp timer
ES0152(config)# no lldp transmission-delay
```

5-1.31.18 logging

Syslog.

Syntax:

No logging host <1-6>

No logging on

Parameters:

Parameter	Description
Host	Host.
On	Enable syslog server.
<1-6>	Host number (1..6).

Example:

```
ES0152(config)# no logging host 3
ES0152(config)# no logging on
```

5-1.31.19 loop-protect

Loop protection configuration.

Syntax:

No loop-protect

No loop-protect shutdown-time

No loop-protect transmit-time

Parameters:

Parameter	Description
Shutdown-time	Loop protection shutdown time interval.
Transmit-time	Loop protection transmit time interval.

Example:

```
ES0152(config)# no loop-protect shutdown-time
ES0152(config)# no loop-protect transmit-time
```

5-1.31.20 mac

MAC table entries/configuration.

Syntax:

No mac address-table aging-time

No mac address-table static <mac_addr> vlan <vlan_id>

No mac address-table static <mac_addr>

Parameters:

Parameter	Description
Address-table	Mac table entries configuration/table.
Aging-time	Mac address aging time.
Static	Static MAC address.
<mac_addr>	48 bit MAC address: xx:xx:xx:xx:xx:xx.
VLAN	VLAN keyword.

Parameter	Description
<vlan_id>	VLAN IDs 1-4095 (1-4095),

Example:

```
ES0152(config)# no mac address-table aging-time
ES0152(config)# no mac address-table static <mac_addr>
```

5-1.31.21 monitor

Monitoring different system events.

Syntax:

No monitor session <1>

No monitor session <1> destination

No monitor session <1> source interface [* | Gigabitethernet] <port_list> [both | rx | tx]

Parameters:

Parameter	Description
Session	Configure a MIRROR session.
<1>	MIRROR session number (1..1).
Destination	MIRROR destination interface.
Source	MIRROR source interface.
Interface	Mirror source Interface.
*	All switches or All ports.
Gigabitethernet	GigabitEthernet.
<port_list>	Port List S/X-Y,Z (1/1-52).
Both	Mirror both ingress and egress traffic.
Rx	Mirror ingress traffic.
Tx	Mirror egress traffic.

Example:

```
ES0152(config)# no monitor session 1 destination
ES0152(config)# no monitor session 1 source interface
GigabitEthernet 1/5 both
```

5-1.31.22 mvr

Multicast VLAN Registration configuration.

Syntax:

No mvr

Example:

```
ES0152(config)# no mvr
```

5-1.31.23 mvrp

None.

Syntax:

No mvrp

Example:

```
ES0152(config)# no mvrp
```

5-1.31.24 ntp

Configure NTP.

Syntax:

No ntp

No ntp server <1-6>

No ntp interval

Parameters:

Parameter	Description
Server	Configure NTP server.
Interval	Configure NTP interval.
<1-6>	Index number (1..6).

Example:

```
ES0152(config)# no ntp server 2
```

5-1.31.25 poe

Enable/disable Power Over Ethernet.

Syntax:

No poe capacitor-detection

No poe management mode

No poe ping-check

No poe profile

No poe profile id <id>

No poe reboot-chip

Parameters:

Parameter	Description
Capacitor-detection	PoE capacitor-detection.
Management	POE_MANAGEMENT_MODE_HELP.
Ping-check	Enable POE Ping Check.
Profile	Erase poe scheduling profile.
Reboot-chip	Erase all poe reboot scheduling.
Mode	Mode.
ID	Erase poe scheduling profile ID.

Example:

```
ES0152(config)# no poe capacitor-detection
```

5-1.31.26 port-security

Enable/disable port security globally.

Syntax:

No port-security

Example:

```
ES0152(config)# no port-security
```

5-1.31.27 privilege

Privilege level.

Syntax:

No privilege group [access-mgmt | arp-inspection | auth-method | dhcp-relay | dhcp-snooping | diagnostic | dot1x | eee | event | forward-failure | ip | ipmc | ip-

source-guard | lacp | lldp | loop-protection | mac-table | mirror | mvr | poe | port | port-security | qos | radius | snmp | stp | system | upnp | vlan] level

No privilege group level

Parameters:

Parameter	Description
Group	Privilege group name.
<group>	Privilege group name (access-mgmt / arp-inspection / auth-method / dhcp-relay / dhcp-snooping / diagnostic / dot1x / eee / event / forward-failure / ip / ipmc / ip-source-guard / lacp / lldp / loop-protection / mac-table / mirror / mvr / poe / port / port-security / qos / radius / snmp / stp / system / upnp / vlan).
Level	Privilege group level.

Example:

```
ES0152(config)# no privilege group access-mgmt level
```

5-1.31.28 prompt

Default the prompt to %h.

Syntax:

No prompt

Parameter:

None.

Example:

```
ES0152(config)# no prompt
```

5-1.31.29 Qos

Quality of Service.

Syntax:

No qos map cos-queue

No qos map cos-queue <0-7>

No qos map dscp-queue

No qos map dscp-queue <0-63>

No qos map precedence-queue

No qos map precedence-queue <0-7>

No qos map queue-cos

No qos map queue-cos <0-7>

No qos map queue-dscp

No qos map queue-dscp <0-7>

No qos map queue-precedence

No qos map queue-precedence <0-7>

No qos trust

Parameters:

Parameter	Description
Map	QoS Global Map/Table.
Trust	Restore global trust mode to default value.
Cos-queue	Map for CoS to queue.
Dscp-queue	Map for DSCP to queue.
Precedence-queue	Map for IP Precedence to queue.
Queue-cos	Map for queue to CoS.
Queue-dscp	Map for queue to DSCP.
Queue-precedence	Map for queue to IP Precedence.
<0-7>	Specify class of service (0..7).
<0-63>	Specify DSCP (0..63).
<0-7>	Specify IP Precedence (0..7).
<0-7>	The queue number for mapping to a specific CoS value (0..7).
<0-7>	The queue number for maaping to a specific DSCP value (0..7).
<0-7>	The queue number for mapping to a specific IP Precedence value (0..7).

Example:

```
ES0152(config)# no qos map cos-queue 3
```

5-1.31.30 radius-server

Configure RADIUS.

Syntax:

No radius-server attribute [32 | 4 | 95]

No radius-server deadtime

No radius-server host word255

No radius-server host word255 [acct-port <AcctPort : 0-65535>]

No radius-server host word255 [auth-port <AuthPort : 0-65535>]

No radius-server host word255 [auth-port <AuthPort : 0-65535>] [acct-port <AcctPort : 0-65535>]

No radius-server key

No radius-server retransmit

No radius-server timeout

Parameters:

Parameter	Description
Attribute	
Deadtime	Time to stop using a RADIUS server that doesn't respond.
Host	Specify a RADIUS server.
Key	Set RADIUS encryption key.
Retransmit	Specify the number of retries to active server.
Timeout	Time to wait for a RADIUS server to reply.
32	
4	
95	
Word255	Hostname or IP address (word255).
Acct-port	UDP port for RADIUS accounting server.
Auth-port	UDP port for RADIUS authentication server.
<AcctPort : 0-65535>	UDP port number (0..65535).
<AuthPort : 0-65535>	UDP port number (0..65535).

Example:

```
ES0152(config)# no radius-server attribute 4
ES0152(config)# no radius-server deadtime
ES0152(config)# no radius-server key
ES0152(config)# no radius-server retransmit
ES0152(config)# no radius-server timeout
ES0152(config)# no radius-server host aa auth-port 3
acct-port 3
```

5-1.31.31 rmon

Remote Monitoring.

Syntax:

No rmon (alarm | event) <1-65535>

Parameters:

Parameter	Description
Alarm	Configure an RMON alarm.
Event	Configure an RMON event.
<1-65535>	Alarm entry ID (1..65535).
<1-65535>	Event entry ID (1..65535),

Example:

```
ES0152(config)# no rmon alarm 1000
```

5-1.31.32 sflow

Statistics flow.

Syntax:

No sflow agent-ip

No sflow collector-address

No sflow collector-port

No sflow max-datagram-size

No sflow timeout

Parameters:

Parameter	Description
Agent-ip	Sets the agent IP address used as agent-address in UDP datagrams to 127.0.0.1.
Collector-address	Collector address.
Collector-port	Collector UDP port.
Max-datagram-size	Maximum datagram size.
Timeout	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.

Example:

```
ES0152(config)# no sflow agent-ip
ES0152(config)# no sflow collector-address
ES0152(config)# no sflow collector-port
ES0152(config)# no sflow max-datagram-size
ES0152(config)# no sflow timeout
```

5-1.31.33 snmp-server

Set SNMP server's configurations.

Syntax:

No snmp-server access <Groupname : word32> model [v1 | v2c | v3 | any] level [auth | noauth | priv]

No snmp-server community { v2c | write-mode | [v3 <Community : word127>] }

No snmp-server security-to-group model { v1 | v2c | v3 } name <Securityname : word32>

No snmp-server user <Username : word32>

No snmp-server view <Viewname : word32> <Oidsubtree : word128>

Parameters:

Parameter	Description
Access	Access configuration.
Community	Set the SNMP community.
Security-to-group	Security-to-group configuration.
User	Set the SNMPv3 user's configurations.
View	MIB view configuration.
<Groupname : word32>	Group name (word32).
Model	Security model.
v1	v1 security model.
v2c	v2c security model.
v3	v3 security model.
Any	Any security model.
Level	Security level.

Parameter	Description
Auth	AuthNoPriv Security Level.
Noauth	NoAuthNoPriv Security Level.
Priv	AuthPriv Security Level.
Write-mode	SNMPv2c write mode.
v2c	SNMPv2c.
v3	SNMPv3.
<Community : word32>	Specify Community name (word32).
Model	Security model.
v1	v1 security model.
v2c	v2c security model.
v3	v3 security model.
Name	Security user.
<SecurityName : word32>	Security user name (word32).
<Username : word32	Security user name (word32).
<Viewname : word32>	MIB view name (word32).
<Oidsubtree : word128>	MIB view OID (word128).

Example:

```
ES0152(config)# no snmp-server access 333 model any
level auth
ES0152(config)# no snmp-server community v2c
ES0152(config)# no snmp-server security-to-group model
v2c name 132
ES0152(config)# no snmp-server View aa a
```

5-1.31.34 spanning-tree

Spanning Tree protocol.

Syntax:

No spanning-tree

No spanning-tree mode

No spanning-tree mst <0-4094> [priority | vlan]

No spanning-tree mst forward-time

No spanning-tree mst max-age

No spanning-tree mst max-hops

No spanning-tree mst name

Parameters:

Parameter	Description
Mode	STP protocol mode.
Mst	STP bridge instance.
<0-4094>	MST instance ID , 0 is for CIST (0..4094).
Forward-time	Delay between port states.
Max-age	Max bridge age before timeout.
Max-hops	MSTP bridge max hop count.
Name	Name keyword.
Priority	Priority of the instance.
VLAN	VLAN keyword.

Example:

```
ES0152(config)# no spanning-tree mode
ES0152(config)# no spanning-tree mst max-age
```

5-1.31.35 svl

Unmap Shared VLAN Learning for a range or all FIDs.

Syntax:

No svl fid [<1~4095> | all]

Parameters:

Parameter	Description
FID	Filter ID keyword.
<1~4095>	List of filter IDs to default.
All	Default all Filter IDs.

Example:

```
ES0152(config)# no svl fid all
```

5-1.31.36 switch2go-management

SwitchAlert Management configuration.

Syntax:

No switch2go-management port-name interface [* | GigabitEthernet] <port_type_list>

Parameters:

Parameter	Description
Port-name	Interface specific description.
Interface	Select an interface to configure.
*	All switches or All ports.
GigabitEthernet	1 Gigabit Ethernet Port.
<port_type_list>	Port list for all port types.
<port_type_list>	Port list in 1/1-26.

Example:

```
ES0152(config)# no switch2go-management port-name
interface *
```

5-1.31.37 system

Set the SNMP server's configurations.

Syntax:

No system contact

No system description

No system location

No system name

No system reboot

Parameters:

Parameter	Description
Name	Clear the SNMP server's system model name string.
Contact	Clear the SNMP server's contact string.
Location	Clear the SNMP server's location string.

Parameter	Description
Description	Clear the system description string.
Reboot	Erase all Switch Reboot scheduling.

Example:

```
ES0152(config)# no system name
ES0152(config)# no system contact
ES0152(config)# no system location
```

5-1.31.38 tacacs-server

Configure TACACS+.

Syntax:

No tacacs-server deadtime

No tacacs-server host word255

No tacacs-server host word255 port <AcctPort : 0-65535>

No tacacs-server key

No tacacs-server timeout

Parameters:

Parameter	Description
Deadtime	Time to stop using a TACACS+ server that doesn't respond.
Host	Specify a TACACS+ server.
Key	Set TACACS+ encryption key.
Timeout	Time to wait for a TACACS+ server to reply.
Word255	Hostname or IP address (word255).
Port	UDP port for TACACS+ accounting server.
<AcctPort : 0-65535>	UDP port number (0..65535).

Example:

```
ES0152(config)# no tacacs-server deadtime
ES0152(config)# no tacacs-server host 192.168.1.1 port
10000
ES0152(config)# no tacacs-server key
ES0152(config)# no tacacs-server timeout
```

5-1.31.39 udld

Disable UDLD configuration on all fiber-optic ports.

Syntax:

No udld

Parameters:

Parameter	Description
Aggressive	Disable UDLD aggressive mode on all fiber-optic interfaces.
Enable	Disable UDLD on all fiber-optic interfaces.

Example:

```
ES0152(config)# no udld enable
% Only fiber ports are allowed, port_no: 1
% Only fiber ports are allowed, port_no: 2
% Only fiber ports are allowed, port_no: 3
% Only fiber ports are allowed, port_no: 4
% Only fiber ports are allowed, port_no: 5
```

5-1.31.40 upnp

Set UPnP's configurations.

Syntax:

No upnp

No upnp advertising-duration

No upnp interface-vlan

No upnp ttl

Parameters:

Parameter	Description
Advertising-duration	Set advertising duration.
Interface-vlan	Set ip-interface vlan.
TTL	Set TTL value.

Example:

```
ES0152(config)# no upnp advertising-duration
ES0152(config)# no upnp interface-vlan
ES0152(config)# no upnp ttl
```

5-1.31.41 username

Establish User Name Authentication.

Syntax:

No username word31

Parameters:

Parameter	Description
Word31	User name allows letters, numbers and underscores (word31).

Example:

```
ES0152(config)# username aaa
```

5-1.31.42 vlan

VLAN commands.

Syntax:

No vlan ethertype s-custom-port

No vlan <vlan_list>

No vlan ip-subnet <ipv4_addr> <ipv4_netmask> vlan <vlan_id>

No vlan mac <mac_ucast> vlan <vlan_id>

No vlan protocol eth2 <ethernet value> group word16

No vlan protocol llc <dsap value > <ssap vlaue> group word16

No vlan protocol snap <snap oui> <pid value> group word16

Parameters:

Parameter	Description
<vlan_list>	List of VLAN interface numbers, 1~4094 (1-4095).
Ethertype	Ether type for Custom S-ports.
IP-subnet	IP subnet based VLAN configuration.

Parameter	Description
MAC	MAC-based VLAN commands.
Protocol	Protocol-based VLAN commands.
S-custom-port	Custom S-ports configuration.
<ipv4_addr>	The specific ip-subnet to set. (X.X.X.X).
<ipv4_netmask>	Source IP address (X.X.X.X).
VLAN	VLAN keyword.
<vlan_id>	VLAN ID required for the group to VLAN mapping. (1-4095).
<mac_ucast>	48 bit unicast MAC address: xx:xx:xx:xx:xx:xx.
Eth2	Ethernet protocol based VLAN status.
LLC	LLC-based VLAN group.
Snap	SNAP-based VLAN group.
<ethernet vlaue>	Ether Type(Range: 0x600 - 0xFFFF).
Group	Protocol-based VLAN group commands.
<Word16>	Group Name (Range: 1 - 16 characters) (word16).
<dsap value>	DSAP(Range: 0x00 - 0xFF).
<ssap value>	SSAP(Range: 0x00 - 0xFF).
<snap oui>	SNAP OUI (must be 0x000000).
<pid oui>	PID (Range: 0x0000 - 0xFFFFFF).

Example:

```
ES0152(config)# no vlan 3
ES0152(config)# no vlan ethertype s-custom-port
```

5-1.31.43 voice

Vlan for voice traffic.

Syntax:

No voice vlan

No voice vlan aging-time

No voice vlan class

No voice vlan oui <oui>

No voice vlan vid <vlan_id>

Parameters:

Parameter	Description
VLAN	voice_VLAN_mode help.
Oui	OUI configuration.
VID	Set VLAN ID.
<oui>	OUI configuration.
<vlan_id>	VLAN IDs 1-4095 (1-4095).

Example:

```
ES0152(config)# no voice vlan vid 3
```

5-1.31.44 web

Web.

Syntax:

No web privilege group [<group_name>] level

Parameters:

Parameter	Description
Privilege	Web privilege.
Group	Web privilege group.
<CWORD>	Valid words are 'Aggregation' 'Debug' 'Dhcp_Client' 'Diagnostics' 'EEE' 'GARP' 'GVRP' ''Green_Ethernet' 'IP2' 'IPMC_Snooping' 'LACP' 'LLDP' 'Loop_Protect' 'MAC_Table' 'MEP' 'MVR' 'Maintenance' 'Mirroring' 'NTP' 'POE' 'Ports' 'Private_VLANs' 'QoS' 'RPC' 'Security' 'Spanning_Tree' 'System' 'Timer' 'UPnP' 'VCL' 'VLANs' 'Voice_VLAN' 'XXRP' 'sFlow'.
Level	Web privilege group level.

Example:

```
ES0152(config)# no web privilege group LACP level
```

5-1.32 ntp

Configure NTP.

Syntax:

Ntp

Ntp interval <10-2880>

Ntp server <1-6> ip-address <hostname>

Ntp server <1-6> ip-address <ipv4_ucast>

Parameters:

Parameter	Description
Server	Configure NTP server.
Interval	Configure NTP interval.
<1-6>	Index number (1..6).
IP-address	IP address.
<ipv4_ucast>	IPv4 address (x.x.x.x).
<hostname>	Domain name.
<10-2880>	Interval val range from 10 to 2880 min. (10..2880).

Example:

```
ES0152(config)# ntp server 3 ip-address 192.168.1.1
```

5-1.33 poe

Configure poe.

Syntax:

Poe capacitor-detect

Poe auto-check

Poe profile id <1-16> (Mon | Tue | Wed | Thr | Fri | Sat | Sun | name) <0-23> <0-55> <0-23> <0-55>

Parameters:

Parameter	Description
Capacitor-detect	Enable capacitor detection.
Auto-check	Enable Ping Check.
Profile	Poe scheduling profile.
ID	Poe scheduling profile id, from 1 to 16.
<1-16>	Profile id (1..16).

Parameter	Description
Mon	Monday.
Tue	Tuesday.
Wed	Wednesday.
Thr	Thursday.
Fri	Friday.
Sat	Saturday.
Sun	Sunday.
Name	Name.
<0-23>	Start hour (0..23).
<0-55>	Start miniute (0..55).
<0-23>	End hour (0..23)
<0-55>	End miniute (0..55)

Example:

```
ES0152(config)# poe capacitor-detect
ES0152(config)# poe auto-check
ES0152(config)# poe profile id 4 Mon 0 0 0 0
```

5-1.34 port-security

Enable/disable port security globally.

Syntax:

Port-security

Example:

```
ES0152(config)# port-security
```

5-1.35 privilege

Command privilege parameters.

Syntax:

Privilege group <group> level ro <0-15> rw <0-15>

Parameters:

Parameter	Description
Group	Privilege group name.

Parameter	Description
<group>	Privilege group name (access-mgmt / arp-inspection / auth-method / dhcp-relay / dhcp-snooping / diagnostic / dot1x / eee / event / forward-failure / ip / ipmc / ip-source-guard / lacp / lldp / loop-protection / mac-table / mirror / mvr / poe / port / port-security / qos / radius / snmp / stp / system / upnp / vlan).
Level	Privilege group level.
Ro	Read-only level.
<0-15>	Privilege level (0..15).
Rw	Read-write level.

Example:

```
ES0152(config)# privilege group access-mgmt level ro 3
rw 5
```

5-1.36 prompt

Set prompt.

Syntax:

Prompt

Parameters:

Parameter	Description
<word32>	Up to 32 chars of prompt. Precede prompt variables with a percent sign (%). Prompt variables: %h = hostname, %% = percent sign, %s = space, %t = tab, %D = date, %T = time, %Z = date and time (like '%DT%T' but ensures atomicity in case of %T rollover).

Example:

```
ES0152(config)# prompt %h
```

5-1.37 qos

Quality of Service.

Syntax:

Qos map cos-dscp <0-7> to <0-7>

Qos map dscp-queue <0-63> to <0-7>

Qos map precedence-queue <0-7> to <0-7>

Qos map queue-cos <0-7> to <0-7>

Qos map queue-dscp <0-7> to <0-63>

Qos map queue-precedence <0-7> to <0-7>

Qos trust cos

Qos trust cos-dscp

Qos trust dscp

Qos trust ip-precedence

Parameters:

Parameter	Description
Map	QoS Global Map/Table.
Trust	Global trust mode configuration.
Cos-queue	Map for CoS to queue.
Dscp-queue	Map for DSCP to queue.
Precedence-queue	Map for IP Precedence to queue.
Queue-cos	Map for queue to CoS.
Queue-dscp	Map for queue to DSCP.
Queue-precedence	Map for queue to IP Precedence.
<0-7>	Specify class of service (0..7).
To	Specify the queue to which the CoS will be mapped.
<0-7>	The queue number to which the following CoS values are mapped (0..7).
<0-63>	Specify DSCP (0..63).
To	Specify the queue to which the DSCP will be mapped.
<0-7>	The queue number to which the following DSCP values are mapped (0..7).
<0-7>	Specify IP Precedence (0..7).
To	Specify the queue to which the IP Precedence will be mapped.
<0-7>	The queue number to which the following IP Precedence values are mapped (0..7).
<0-7>	The queue number for mapping to a specific CoS value (0..7).
To	Specify the CoS to which the queue will be mapped.
<0-7>	Specify class of service (0..7).
<0-7>	The queue number for maaping to a specific DSCP value (0..7).
To	Specify the DSCP to which the queue will be mapped.

Parameter	Description
<0-63>	Specify DSCP (0..63).
<0-7>	The queue number for mapping to a specific IP Precedence value (0..7).
To	Specify the IP Precedence to which the queue will be mapped.
<0-7>	Specify IP Precedence (0..7).
Cos	Prioritize packet based on the CoS/802.1p field in the VLAN tag.
Cos-dscp	Uses the CoS mode for non-IP packet and DSCP mode for IP packet.
Dscp	Prioritize packet based on the DSCP field in the IP header.
IP-precedence	Prioritize packet based on the IP precedence.

Example:

```
ES0152(config)# qos map cos-queue 3 to 5
```

5-1.38 radius-server

Configure RADIUS.

Syntax:

Radius-server attribute 32 word255

Radius-server attribute 4 <ipv4_ucast>

Radius-server attribute 95 <ipv6_addr>

Radius-server deadtime <Minutes : 1-1440>

Radius-server host word255 [auth-port <Authport : 0-65535>] [acct-port <Acctport : 0-65535>] [timeout <Seconds : 1-1000>] [retransmit <Retries :1-1000>] [key word63]

Radius-server key word63

Radius-server retransmit <Retries : 1-1000>

Radius-server timeout <Seconds : 1-1000>

Parameters:

Parameter	Description
Attribute	
Deadtime	Time to stop using a RADIUS server that doesn't respond.
Host	Specify a RADIUS server.

Parameter	Description
Key	Set RADIUS encryption key.
Retransmit	Specify the number of retries to active server.
Timeout	Time to wait for a RADIUS server to reply.
32	
4	
95	
Word255	(word255).
<ipv4_ucast>	(X.X.X.X).
<ipv6_addr>	(X:X:X:X:X:X:X:X).
<Minutes : 1-1440>	Time in minutes (1..1440).
Word255	Hostname or IP address (word255).
Acct-port	UDP port for RADIUS accounting server.
Auth-port	UDP port for RADIUS authentication server.
Key	Server specific key (overrides default).
Retransmit	Specify the number of retries to active server (overrides default).
Timeout	Time to wait for this RADIUS server to reply (overrides default).
<AuthPort : 0-65535>	UDP port number (0..65535).
<AcctPort : 0-65535>	UDP port number (0..65535).
<Seconds : 1-1000>	Wait time in seconds (1..1000).
<Retries : 1-1000>	Number of retries for a transaction (1..1000).
Word63	The shared key (word63).

Example:

```
ES0152(config)# radius-server host device key 12
```

5-1.39 rmon

Remote Monitoring.

Syntax:

Rmon alarm <1-65535> [ifInOctets | ifInUcastPkts | ifInNUcastPkts | ifInDiscards | ifInErrors | ifInUnknownProtos | ifOutOctets | ifOutUcastPkts | ifOutNUcastPkts | ifOutDiscards | ifOutErrors] <uint> <1-2147483647> [absolute | delta] rising-threshold <-2147483648-2147483647> [<0-65535> |

falling-threshold] <-2147483648-2147483647> [<0-65535>] { [rising | falling | both] }

Rmon event <1-65535> [log] [trap <word31>] { [description <word127>] }

Parameters:

Parameter	Description
Alarm	Configure an RMON alarm.
Event	Configure an RMON event.
<1-65535>	Alarm entry ID (1..65535).
IfInOctets	The total number of octets received on the interface, including framing characters.
IfInUcastPkts	The number of uni-cast packets delivered to a higher-layer protocol.
IfInNUcastPkts	The number of broad-cast and multi-cast packets delivered to a higher-layer protocol.
IfInDiscards	The number of inbound packets that are discarded even the packets are normal.
IfInErrors	The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol.
IfInUnknownProtos	The number of the inbound packets that were discarded because of the unknown or un-support protocol.
IfOutOctets	The number of octets transmitted out of the interface , including framing characters.
IfOutUcastPkts	The number of uni-cast packets that request to transmit.
IfOutNUcastPkts	The number of broad-cast and multi-cast packets that request to transmit.
IfOutDiscards	The number of outbound packets that are discarded event the packets is normal.
IfOutErrors	The The number of outbound packets that could not be transmitted because of errors.
<uint>	IfIndex(1..9).
<1-2147483647>	Sample interval(1.. 2147483647).
Absolute	Test each sample directly.
Delta	Test delta between samples.
Rising-threshold	Configure the rising threshold.
<-2147483648-2147483647>	Rising threshold value(-2147483648..2147483647).
<0-65535>	Event to fire on rising threshold crossing(0..65535).

Parameter	Description
Falling-threshold	Configure the falling threshold.
<-2147483648-2147483647>	Falling threshold value(-2147483648..2147483647).
Rising	Trigger alarm when the first value is larger than the rising threshold.
Falling	Trigger alarm when the first value is less than the falling threshold.
Both	Trigger alarm when the first value is larger than the rising threshold or less than the falling threshold (default).
<1-65535>	Event entry ID (1..65535).
Description	Specify a description of the event.
Log	Generate RMON log when the event fires.
Trap	Generate SNMP trap when the event fires.
Word127	Event description (word127).
Word31	SNMP community string (word31).

Example:

```
ES0152(config)# rmon alarm 10000 ifInErrors 6 9999
absolute rising-threshold 0 falling-threshold 0 both
```

5-1.40 sflow

Statistics flow.

Syntax:

Sflow agent-ip { ipv4 <ipv4_addr> | ipv6 <ipv6_addr> }

Sflow collector-address{ <ipv4_addr> | <ipv6_addr> }

Sflow collector-port <1-65535>

Sflow max-datagram-size [receiver <range_list>] <200-1468>

Sflow timeout [receiver <range_list>] <0-2147483647>

Parameters:

Parameter	Description
Agent-ip	The agent IP address used as agent-address in UDP datagrams. Defaults to IPv4 loopback address.
IPv4	IPv4 address.
IPv6	IPv6 address.

Parameter	Description
<ipv4_addr>	IPv6 address.
<ipv6_addr>	IPv4 address.
Collector-address	Collector address.
Collector-port	Collector UDP port.
<1-65535>	Port Number.
Cax-datagram-size	Maximum datagram size.
<200-1468>	Bytes.
Timeout	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.
<0-2147483647>	Number in seconds .

Example:

```
ES0152(config)# sflow agent-ip ipv4 192.168.1.2
ES0152(config)# sflow collector-port 3
ES0152(config)# sflow max-datagram-size 333
ES0152(config)# sflow timeout 3333
```

5-1.41 smtp

Set email information.

Syntax:

Smtp delete mailaddress <1-6>

Smtp delete [returnpath | sender | server | username]

Smtp mailaddress <1-6> <word47>

Smtp (returnpath | sender | server) <word47>

Smtp username <word31> <word31>

Parameters:

Parameter	Description
Delete	Delete command.
Mailaddress	Configure email address.
Returnpath	Configure email returnpath.
Sender	Configure email sender.

Parameter	Description
Server	Configure email server.
Username	Configure email user name.
Mailaddress	Delete email address.
Returnpath	Delete returnpath.
Sender	Delete sender.
Server	Delete email server.
Username	Delete username and password.
<1-6>	Email address index.
<word47>	Up to 47 characters describing mail address.
<word47>	Up to 47 characters describing returnpath.
<word47>	Up to 47 characters describing sender.
<word47>	Up to 47 characters describing email server
<word31>	Up to 47 characters describing user name.
<word31>	Configure email password.

Example:

```
ES0152(config)# smtp delete mailaddress 1
ES0152(config)# smtp delete returnpath
```

5-1.42 snmp-server

Set SNMP server's configurations.

Syntax:

Smtp-server

Table: Configure - snmp-server Commands

Command	Function	Page
access	access configuration	See p. 99
community	Set the SNMP community	See p. 99
security-to-group	security-to-group configuration	See p. 100
user	Set the SNMPv3 user's configurations	See p. 100
view	MIB view configuration	See p. 101

5-1.42.1access

Access configuration.

Syntax:

Snmp-server access <GroupName : word32> model [v1 | v2c | v3 | any] level [auth | noauth | priv]

Parameters:

Parameter	Description
<GroupName : word32>	Group name (word32).
Model	Security model.
Any	Any security model.
v1	v1 security model.
v2c	v2c security model.
v3	v3 security model.
Level	Security level.
Auth	AuthNoPriv Security Level.
Noauth	NoAuthNoPriv Security Level.
Priv	AuthPriv Security Level.

Example:

```
ES0152(config)# snmp-server access text model v2c level
noauth write text
```

5-1.42.2 community

Set the SNMP community.

Syntax:

Snmp-server community write-mode
Snmp-server community v2c <Community : word32> [ro | rw]
Snmp-server community v3 <Community : word32> <ipv4_ucast> <0-32>

Parameters:

Parameter	Description
Write-mode	SNMPv2c write mode.
v3	SNMPv3.

Parameter	Description
v2c	SNMPv2c.
<Community : word32>	Specify community name (word32).
Ro	Read only.
Rw	Read write.
<ipv4_ucast>	IPv4 address (X.X.X.X).
<0-32>	IPv4 netmask (0..32).

Example:

```
ES0152(config)# snmp-server community v2c text ro
```

5-1.42.3 security-to-group

Security-to-group configuration.

Syntax:

Snmp-server security-to-group model [v1 | v2c | v3] name <SecurityName : word32> group <GroupName : word32>

Parameters:

Parameter	Description
Model	Security model.
v1	v1 security model.
v2c	v2c security model.
v3	v3 security model.
Name	Security user.
<SecurityName : word32>	Security group name (word32).
Group	Security use.
<GroupName : word32>	Group name (word32).

Example:

```
ES0152(config)# snmp-server security-to-group model v2c
name text group text
```

5-1.42.4 user

Set the SNMPv3 user's configurations.

Syntax:

Snmp-server user <Username : word32>

Snmp-server user <Username : word32> { [md5 <Md5Passwd : word8-32> | [sha <ShaPasswd : word8-40>] }

Snmp-server user <Username : word32> { [md5 <Md5Passwd : word8-32> | [sha <ShaPasswd : word8-40>] } priv [des | aes] <word8-32>

Parameters:

Parameter	Description
<Username : word32>	Security user name (word32).
MD5	Set MD5 protocol.
SHA	Set SHA protocol.
<Md5Passwd : word8-32>	MD5 password (word8-32).
<ShaPasswd word8-40>	SHA password (word8-40).
Priv	Set Privacy.
DES	Set DES protocol.
AES	Set AES protocol.
<word8-32>	Set AES protocol (word8-32).

Example:

```
ES0152(config)# snmp-server user text md5 12345678 priv
aes 12345678
```

5-1.42.5 view

MIB view configuration.

Syntax:

Snmp-server view <ViewName : word32> <OidSubtree : word255> [include | exclude]

Parameters:

Parameter	Description
<ViewName : word32>	MIB view name (word32).
<OidSubtree : word255>	MIB view OID (word128).
Include	Ixcluded type from the view.

Parameter	Description
Exclude	Excluded type from the view.

Example:

```
ES0152(config)# snmp-server view text .1 include
```

5-1.43 spanning-tree

Spanning Tree protocol.

Table: configure - spanning-tree Commands

Command	Function	Page
mode	STP protocol mode	See p. 102
mst	STP bridge instance	See p. 102

5-1.43.1 mode

STP protocol mode.

Syntax:

Spanning-tree mode [stp | rstp | mstp]

Parameters:

Parameter	Description
Mstp	Multiple Spanning Tree (802.1s).
Rstp	Rabid Spanning Tree (802.1w).
Stp	802.1D Spanning Tree.

Example:

```
ES0152(config)# spanning-tree mode stp
```

5-1.43.2 mst

STP bridge instance.

Syntax:

Spanning-tree mst <0-4094> priority <0-61440>

Spanning-tree mst <0-4094> vlan <vlan_list>

Spanning-tree mst forward-time <4-30>

Spanning-tree mst max-age < 6-40>

Spanning-tree mst max-hops <6-40>

Spanning-tree mst name <word32> revision <0-65535>

Parameters:

Parameter	Description
<0-4094>	MST instance ID , 0 is for CIST (0..4094).
Forward-time	Delay between port states.
Max-age	Max bridge age before timeout.
Max-hops	MSTP bridge max hop count.
Name	Name keyword.
Priority	Priority of the instance.
VLAN	VLAN keyword.
<0-61440>	Priority value (0..61440).
<vlan_list>	Range of VLANs (1-4095).
<4-30>	Range in seconds (4..30).
<6-40>	Range in seconds (6..40).
<6-40>	Hop count range (6..40).
<word32>	Name of the bridge (word32).
Revision	Revision keyword.
<0-65535>	Revision number (0..65535).

Example:

```
ES0152(config)# spanning-tree mst 7 vlan 10
```

5-1.44 svl

Shared VLAN Learning.

Syntax:

Svl fid <1-4095> vlan <vlan_list>

Parameters:

Parameter	Description
FID	Filter ID keyword.
<1-4095>	Filter ID.
VLAN	VLAN keyword.
<vlan_list>	VLAN List.

Example:

```
ES0152(config)# svl fid 1 vlan
```

5-1.45 switch2go-management

Switch2go Management configuration.

Syntax:

Switch2go-management delete <1-6>

Switch2go-management get activity-code

Switch2go-management (port-name | port-role) interface [GigabitEthernet <port_type_list> (<line47> | * | GigabitEthernet)] | [* (<line47> | <port_type_list>)]

Switch2go-management server <word47>

Switch2go-management switch2go-mode [disable | enable]

Parameters:

Parameter	Description
Delete	Delete Mobile in List.
Get	Get Activity Code Action from SwitchAlert Management Server.
Port-name	Interface specific description.
Port-role	Configure Port Role.
Server	Configure SwitchAlert Management server IP address.
Switch2go-mode	Configure Switch2go Management mode.
<1-6>	Mobile ID, available value is from 1 to 6.
Activity-code	Get Activity Code Action from SwitchAlert Management Server.
Automatic	Enable NAT Option as Automatic.
Manual	Enable NAT Option as Manual.
<1-65535>	Port number.

Parameter	Description
Interface	Select an interface to configure.
*	All switches or All ports.
GigabitEthernet	1 Gigabit Ethernet Port.
<line47>	Up to 47 characters describing this interface.
<port_type_list>	Port list for all port types.
<word47>	SwitchAlert Management IP address or host name.
Disable	Disable SwitchAlert Management mode.
Enable	Enable SwitchAlert Management mode.

Example:

```
ES0152(config)# switch2go-management delete 1
ES0152(config)# switch2go-management get activity-code
```

5-1.46 system

Set SNMP server's configurations.

Syntax:

System contact word128

System location word128

System name word128

Parameters:

Parameter	Description
Contact	Set the SNMP server's contact string.
Location	Set the SNMP server's location string.
Name	Set the SNMP server's system model name string.
Word128	Name string (word128).
Word128	Contact string (word128).
Word128	Location string (word128).

Example:

```
ES0152(config)# system contact 222
ES0152(config)# system location 333
ES0152(config)# system name GE
```

5-1.47 tacacs-server

Configure TACACS+.

Syntax:

Tacacs-server deadtime <Minutes : 1-1440>

Tacacs-server host word255

Tacacs-server host word255 [port <AcctPort : 0-65535>] [timeout <Seconds : 1-1000>] [key word63]

Tacacs-server key word63

Tacacs-server timeout <Seconds : 1-1000>

Parameters:

Parameter	Description
Deadtime	Time to stop using a TACACS+ server that doesn't respond.
Host	Specify a TACACS+ server.
Key	Set TACACS+ encryption key.
Timeout	Time to wait for a TACACS+ server to reply.
<Minutes : 1-1440>	Time in minutes (0..1440).
Word255	Hostname or IP address (word255).
Port	UDP port for TACACS+ accounting server.
Timeout	Time to wait for this TACACS+ server to reply (overrides default).
Key	Server specific key (overrides default).
<AcctPort : 0-65535>	TCP port number (0..65535).
<Seconds : 1-1000>	Wait time in seconds(0..1000).
Word63	The shared key (word63).

Example:

```
ES0152(config)# tacacs-server deadtime 300
ES0152(config)# tacacs-server key 33
ES0152(config)# tacacs-server timeout 300
```

5-1.48 udld

Enable UDLD in the aggressive or normal mode and to set the configurable message timer on all fiber-optic ports.

Syntax:

Udld [aggressive | enable | message]

Parameters:

Parameter	Description
Aggressive	Enables UDLD in aggressive mode on all fiber-optic ports.
Enable	Enables UDLD in normal mode on all fiber-optic ports.
Message	Configures the period of time between UDLD probe messages on ports that are in the advertisement phase and are determined to be bidirectional. The range is from 7 to 90 seconds(Currently default message time interval 7 sec is supported).

Example:

```
ES0152(config)# udld aggressive
% Only fiber ports are allowed, port_no: 1
% Only fiber ports are allowed, port_no: 2
% Only fiber ports are allowed, port_no: 3
% Only fiber ports are allowed, port_no: 4
% Only fiber ports are allowed, port_no: 5
% Only fiber ports are allowed, port_no: 6
% Only fiber ports are allowed, port_no: 7
% Only fiber ports are allowed, port_no: 8
% Only fiber ports are allowed, port_no: 9
% Only fiber ports are allowed, port_no: 10
% Only fiber ports are allowed, port_no: 11
% Only fiber ports are allowed, port_no: 12
% Only fiber ports are allowed, port_no: 13
% Only fiber ports are allowed, port_no: 14
% Only fiber ports are allowed, port_no: 15
% Only fiber ports are allowed, port_no: 16
% Only fiber ports are allowed, port_no: 17
% Only fiber ports are allowed, port_no: 18
% Only fiber ports are allowed, port_no: 19
% Only fiber ports are allowed, port_no: 20
```

```
% Only fiber ports are allowed, port_no: 21
% Only fiber ports are allowed, port_no: 22
% Only fiber ports are allowed, port_no: 23
% Only fiber ports are allowed, port_no: 24
% Only fiber ports are allowed, port_no: 25
% Only fiber ports are allowed, port_no: 26
% Only fiber ports are allowed, port_no: 27
% Only fiber ports are allowed, port_no: 28
% Only fiber ports are allowed, port_no: 29
% Only fiber ports are allowed, port_no: 30
% Only fiber ports are allowed, port_no: 31
% Only fiber ports are allowed, port_no: 32
% Only fiber ports are allowed, port_no: 33
% Only fiber ports are allowed, port_no: 34
% Only fiber ports are allowed, port_no: 35
% Only fiber ports are allowed, port_no: 36
% Only fiber ports are allowed, port_no: 37
% Only fiber ports are allowed, port_no: 38
% Only fiber ports are allowed, port_no: 39
% Only fiber ports are allowed, port_no: 40
% Only fiber ports are allowed, port_no: 41
% Only fiber ports are allowed, port_no: 42
% Only fiber ports are allowed, port_no: 43
% Only fiber ports are allowed, port_no: 44
% Only fiber ports are allowed, port_no: 45
% Only fiber ports are allowed, port_no: 46
% Only fiber ports are allowed, port_no: 47
% Only fiber ports are allowed, port_no: 48
```

5-1.49 upnp

Set UPnP’s configurations.

Syntax:

Upnp

Upnp advertising-duration <advertising duration>

Upnp interface-vlan <VLAN_id>

Upnp ttl <TTL value>

Parameters:

Parameter	Description
Advertising-duration	Set advertising duration.
Interface-vlan	Set ip-interface VLAN.
TTL	Set TTL value.
<advertising duration>	Value is 66..86400 (66..86400).
<vlan_id>	Value is 1..4095 (1-4095).
<TTL value>	Value is 1..255 (1..255).

Example:

```
ES0152(config)# upnp advertising-duration 88
ES0152(config)# upnp ttl 25
```

5-1.50 username

Establish User Name Authentication.

Syntax:

Username word31 privilege <privilegeLevel : 0-15> password encrypted word4-44

Username word31 privilege <privilegeLevel : 0-15> password none

Username word31 privilege <privilegeLevel : 0-15> password unencrypted word31

Parameters:

Parameter	Description
Word31	User name allows letters, numbers and underscores (word31).
Privilege	Set user privilege level.
<privilegeLevel : 0-15>	User privilege level (0..15).
Password	Specify the password for the user.

Parameter	Description
Encrypted	Specifies an ENCRYPTED password will follow.
None	NULL password.
Unencrypted	Specifies an UNENCRYPTED password will follow.
Word4-44	The ENCRYPTED (hidden) user password. Notice the ENCRYPTED password will be decoded by system internally. You cannot directly use it as same as the Plain Text and it is not human-readable text normally. (word4-44).
Word31	The UNENCRYPTED (Plain Text) user password. Any printable characters including space is accepted. Notice that you have no chance to get the Plain Text password after this command. The system will always display the ENCRYPTED password. (word31).

Example:

```
ES0152(config)# username jefferson privilege 15
password none
```

5-1.51 vlan

VLAN commands.

Syntax:

Vlan <vlan_list>

Vlan ethertype s-custom-port <ethernet value>

Vlan protocol eth2 <ethernet value> group word16

Vlan protocol llc <dsap value> <ssap value> group word16

Vlan protocol snap <snap oui> <pid value> group word16

Vlan ip-subnet <ipv4_addr> <ipv4_netmask> vlan <vlan_id>

Vlan mac <mac_ucast> vlan <vlan_id>

Parameters:

Parameter	Description
<vlan_list>	List of VLAN interface numbers, 1~4094 (1-4095).
Ethertype	Ether type for Custom S-ports.
Protocol	Protocol-based VLAN status.
IP-subnet	IP-subnet VLAN configuration.
MAC	MAC-based VLAN commands.

Parameter	Description
S-custom-port	Custom S-ports configuration.
<ethernet value>	Ether Type(Range: 0x600 - 0xFFFF).
Eth2	Ethernet-based VLAN commands.
LLC	LLC-based VLAN group.
Snap	SNAP-based VLAN group.
Group	Protocol-based VLAN group commands.
<word16>	Group Name (Range: 1 - 16 characters) (word16).
<dsap value>	DSAP(Range: 0x00 - 0xFF).
<ssap value>	SSAP(Range: 0x00 - 0xFF).
<snap oui>	SNAP OUI(must be 0x000000).
<pid value>	PID(Range: 0x0000 - 0XFFFF).
<ipv4_addr>	Source IP address (X.X.X.X).
<ipv4_netmask>	Source IP address (X.X.X.X).
VLAN	VLAN keyword.
<vlan_id>	VLAN ID required for the group to VLAN mapping (1-4095).
<mac_ucast>	48 bit unicast MAC address: xx:xx:xx:xx:xx:xx.

Example:

```
ES0152(config)# vlan ethertype s-custom-port 0x1111
ES0152(config)# vlan protocol eth2 0x6000 group aa
```

5-1.52 voice

Vlan for voice traffic.

Syntax:

Voice vlan oui <oui>

Voice vlan oui <oui> description word32

Voice vlan vid <vlan_id>

Voice vlan vid <vlan_id> aging-time <AgingTime : 10-10000000>

Voice vlan vid <vlan_id> aging-time <AgingTime : 10-10000000> class <class : 0-7>

Parameters:

Parameter	Description
VLAN	voice_VLAN_mode help.
VID	Set a entry VLAN ID.
Oui	OUI configuration.
<vlan_id>	VLAN IDs 1-4095 (1-4095).
Aging-time	Set a entry secure learning aging time.
Class	Set a entry traffic class.
<AgingTime : 10-10000000>	Aging time, 10-10000000 seconds (10..10000000).
<0-7>	Traffic class value (0..7).
<oui>	OUI value.
Description	Set description for the OUI.
Word32	Description line (word32).

Example:

```
ES0152(config)# voice vlan aging-time 3333
ES0152(config)# voice vlan class 7
ES0152(config)# voice vlan vid 3333
```

5-1.53 web

Web.

Syntax:

Web privilege group <CWORD> level { [cro <0-15>] [crw <0-15>] [sro <0-15>] [srw <0-15>] }

Parameters:

Parameter	Description
Privilege	Web privilege.
Group	Web privilege group.

Parameter	Description
CWORD	Valid words are 'Aggregation' 'Debug' 'Dhcp_Client' 'Green_Ethernet' 'IP2' 'IPMC_Snooping' 'LACP' 'LLDP' 'Loop_Protect' 'MAC_Table' 'MEP' 'MVR' 'Maintenance' 'Mirroring' 'NTP' 'POE' 'Ports' 'Private_VLANs' 'QoS' 'RPC' 'Security' 'Spanning_Tree' 'System' 'Timer' 'UPnP' 'VCL' 'VLAN_Translation' 'VLANs' 'Voice_VLAN' '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.

Example:

```
ES0152(config)# web privilege group ptp level sro 10
```

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Chapter 6
COPY Commands of CLI

Overview

Copy from source to destination.

Syntax:

Copy running-config [startup-config | flash:filename | tftp://server/path-to-file]

Copy startup-config [running-config | flash:filename | tftp://server/path-to-file]

Copy flash:filename [startup-config | running-config | tftp://server/path-to-file]

Copy tftp://server/path-to-file [startup-config | running-config | flash:filename]

Parameters:

Parameter	Description
Running-config	Current running configuration
Startup-config	Startup configuration
Flash:filename	File in FLASH
Tftp://server/path-to-file	File on TFTP server

Example:

```
ES0152# copy startup-config  running-config
```

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Chapter 7
DELETE Commands of CLI

Overview

Delete one file in flash: file system.

Syntax:

Delete string

Parameters:

Parameter	Description
String	File in FLASH

Example:

```
ES0152# delete text
```

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Chapter 8
DIR Commands of CLI

Overview

Directory of all files in flash: file system.

Syntax:

Dir

Parameters:

None.

Example:

```
ES0152# dir
startup-config
```

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Chapter 9
DISABLE Commands of CLI

Overview

Turn off privileged commands.

Syntax:

Disable <0-15>

Parameters:

Parameter	Description
<0-15>	Privilege level

Example:

```
ES0152# disable 1
```

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Chapter 10
DO Commands of CLI

Overview

To run exec commands in config mode.

Syntax:

Do <LINE>{[LINE]}

Parameters:

Parameter	Description
LINE	Exec Command

Example:

```
ES0152# do show clock
System Time     : 2011-01-01T00:03:44+00:00
```

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Chapter 11
DOT1X Commands of CLI

Overview

IEEE Standard for port-based Network Access Control.

Syntax:

Dot1x initialize [interface (<port_type> [<plist>])]

Parameters:

Parameter	Description
Initialize	Force re-authentication immediately
Interface	Interface
*	All switches or All ports
Gigabitethernet	1 GigabitEthernet port
<port_type_list>	Port list for all port types
<port_type_list>	Port list in 1/1-52

Example:

```
ES0152# dot1x initialize interface GigabitEthernet 1/1-
26
```

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Chapter 12
ENABLE Commands of CLI

Overview

Turn on privileged commands.

Syntax:

Enable <1-15>

Parameters:

Parameter	Description
<0-15>	Choose privileged level

Example:

```
ES0152# enable 10
```

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Chapter 13
FIRMWARE of CLI

Overview

Firmware.

Syntax:

Firmware swap

Firmware upgrade <tftp://server/path-and-filename>

Parameters:

Parameter	Description
Swap	Swap between Active and Alternate firmware image
Upgrade	Upgrade
<tftp://server/path-and-filename>	TFTP Server IP address, path and file name for the server containing the new image

Example:

```
ES0152# firmware upgrade tftp://192.168.1.1/running-
config

Programming image...
```

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Chapter 14
IP Commands of CLI

Overview

IPv4 commands.

Syntax:

IP dhcp retry interface vlan <vlan_id>

Parameters:

Parameter	Description
DHCP	DHCP commands
Retry	Restart the DHCP query process
Interface	Interface
VLAN	VLAN interface
<vlan_id>	VLAN ID

Example:

```
ES0152# ip dhcp retry interface vlan
```

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Chapter 15
IPV6 Commands of CLI

Overview

IPV6 configuration commands.

Syntax:

IPv6 dhcp-client restart interface vlan <vlan_list>

Parameters:

Parameter	Description
DHCP-client	Manage DHCPv6 client service
Restart	Retart DHCPv6 client service
Interface	Select an interface to configure
VLAN	VLAN of IPv6 interface
<vlan_list>	IPv6 interface VLAN list

Example:

```
ES0152# ipv6 dhcp-client restart interface vlan
```

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Chapter 16
MORE of CLI

Overview

Display file.

Syntax:

More String

Parameters:

Parameter	Description
String	File in FLASH

Example:

```
ES0152# copy running-config startup-config
ES0152# more startup-config
username admin privilege 15 password none
!
!
interface GigabitEthernet 1/1
!
interface GigabitEthernet 1/2
!
interface GigabitEthernet 1/3
!
interface GigabitEthernet 1/4
!
interface GigabitEthernet 1/5
!
interface GigabitEthernet 1/6
.
.
```

```
interface GigabitEthernet 1/N
!
!
interface vlan 1
 ip address 192.168.1.1 255.255.255.0
!
ip route 0.0.0.0 0.0.0.0 192.168.1.254
end
```

Chapter 17
NO Commands of CLI

Overview

Negate a command or set its defaults.

Syntax:

No debug prompt

Parameters:

Parameter	Description
Debug	Debugging functions
Terminal	Set terminal line parameters
Gdbserver	
Interrupt	Application-handled interrupt source
IPv6	IPv6 configuration commands
Trace	
|	Output modifiers
Begin	Begin with the line that matches
Exclude	Exclude lines that match
Include	Include lines that match
<line>	String to match output lines
Monitor	Print a line on the console everytime the corresponding source interrupt fires
Source	Select a particular source interrupt to monitor
<cword>	Valid words are 'AMS' 'CLK_ADJ' 'CLK_TSTAMP' 'EGR_ENGINE_ERR' 'EGR_FIFO_OVERFLOW' 'EGR_RW_FCS_ERR' 'EGR_TIMESTAMP_CAPTURED' 'EXT_1_SYNC' 'EXT_SYNC' 'FLNK' 'FOS' 'INGR_ENGINE_ERR' 'INGR_RW_FCS_ERR' 'INGR_RW_PREAM_ERR' 'LOCS' 'LOL' 'LOS' 'LOSX' PTP_PIN_0' 'PTP_PIN_1' 'PTP_PIN_2' 'PTP_PIN_3' 'PUSH_BUTTON' 'SYNC' 'VOE'
Nd	IPv6 Neighbor Discovery debugging
Hunt	

Parameter	Description
Editing	Enable command line editing
Exec-timeout	Set the EXEC timeout
History	Control the command history function
Length	Set number of lines on a screen
Width	Set width of the display terminal
Size	Set history buffer size

Example:

```
ES0152# no debug ipv6 nd
  IPv6 Neighbor Discovery events debugging is off
```

Chapter 18
PING of CLI

Overview

Send ICMP echo messages.

Syntax:

Ping ip <ipv4_addr>

Ping ip <ipv4_addr> [repeat <Count : 1-60>] [size <Size : 2-1452>]

Ping ipv6 <ipv6_addr>

Ping ipv6 <ipv6_addr> [repeat <Count : 1-60>] [size <Size : 2-1452>]

Parameters:

Parameter	Description
IP	IP (ICMP) echo
IPv6	IPv6 (ICMPv6) echo
<ipv4_addr>	ICMP destination address (X.X.X.X)
Repeat	Specify repeat count
Size	Specify datagram size
<Count : 1-60>	1-60; Default is 5 (1..60)
<Size : 2-1452>	2-1452; Default is 56 (excluding MAC, IP and ICMP headers) (2..1452)
<ipv6_addr>	ICMPv6 destination address (X:X:X:X:X:X:X:X)

Example:

```
ES0152# ping ip 192.168.1.1 repeat 3 size 3
PING 192.168.1.1 (192.168.1.1): 3 data bytes
11 bytes from 192.168.1.1: seq=0 ttl=64
11 bytes from 192.168.1.1: seq=1 ttl=64
11 bytes from 192.168.1.1: seq=2 ttl=64

--- 192.168.1.1 ping statistics ---
```

```
3 packets transmitted, 3 packets received, 0% packet
loss
```

Chapter 19
PLATFORM Commands of CLI

Overview

Platform configuration.

Syntax:

Platform debug (allow | deny)

Parameters:

Parameter	Description
Debug	Debug command setting
Allow	Allow debug commands
Deny	Deny debug commands

Example:

```
ES0152# platform debug deny
```

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Chapter 20
RELOAD of CLI

Overview

Reload system.

Syntax:

Reload cold

Reload defaults

Reload defaults keep-ip

Parameters:

Parameter	Description
Cold	Reload cold
Defaults	Reload defaults without rebooting
Keep-IP	Attepmt to keep VLAN1 IP setup

Example:

```
ES0152# reload defaults keep-ip
```

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Chapter 21
SEND of CLI

Overview

Send a message to other tty lines.

Syntax:

Send { * | <session_list> | console 0 | vty <vty_list> } <message>

Parameterss:

Parameter	Description
*	All tty lines
<0~16>	Send a message to multiple lines
Console	Primary terminal line
0	Send a message to a specific line
Vty	Virtual terminal
<0~15>	Send a message to multiple lines
<LINE128>	Message to be sent to lines, in 128 char's

Example:

```
ES0152# send * yes,i do
Enter TEXT message.  End with the character 'y'.

y

----------------------------------------
*** Message from line 0:
yes,i do

----------------------------------------
```

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Chapter 22
SHOW of CLI

Overview

Show running system information.

Table: SHOW Commands

Command	Function
aaa	Login methods.
access	Access management configuration.
access-list	Access list.
aggregation	Aggregation configuration and status.
clock	Configure time-of-day clock.
dot1x	IEEE Standard for port-based Network Access Control.
event	Show trap event configuration.
green-ethernet	Green ethernet (Power reduction).
history	Display the session command history.
interface	Interface status and configuration.
ip	Internet Protocol.
ipmc	IPv4/IPv6 multicast configuration.
ipv6	IPv6 configuration commands.
lacp	LACP configuration/status.
line	TTY line information.
lldp	Show lldp configuration.
logging	Syslog.
loop-protect	Show Loop protection.
mac	MAC Address Table information.
monitor	Monitoring different system events.
mrp	MRP status.
mvr	Internet Protocol.
ntp	Configure NTP.
platform	Platform configuration.

Command	Function
poe	Power over ethernet.
port-secuirty	Show port security.
privilege	Display privilege level configuration.
process	Process.
pvlan	PVLAN status.
qos	Quality of Service.
radius-server	RADIUS configuration.
rmon	RMON statistics.
running-config	Current operating configuration.
sflow	Statistics flow.
smtp	Show email information.
snmp	Display SNMP configurations.
spanning-tree	Spanning Tree protocol.
svl	Shared VLAN Learning configuration.
switch2go-management	Show Switch2go Management information.
switchport	Display switching mode characteristics.
system	Show system information.
tacacs-server	TACACS+ configuration.
terminal	Display terminal configuration parameters.
udld	Uni Directional Link Detection (UDLD) configurations, statistics and status.
upnp	Show UPnP configurations.
user-privilege	Users privilege configuration.
users	Display information about terminal lines.
version	System software status.
vlan	VLAN status.
voice	Show voice.
web	Web.

22-1 aaa

Login methods.

Syntax:

Show aaa

Example:

```
ES0152# show aaa
Automatic Redirect : Disabled

 Client Method1 Method2 Method3 Service Port
------- ------- ------- ------- ------------
 telnet   local                        23
    ssh   local                        22
   http   local                        80
  https                               443

Authorization :
 Client Method Cmd Lvl Cfg Cmd Fallback
------- ------ ------- ------- --------
 telnet   none       0
    ssh   none       0
Accounting :
 Client Method Cmd Lvl Exec
------- ------ ------- ----
 telnet   none       0
    ssh   none       0
```

22-2 access

Access management configuration.

Syntax:

Show access management

Show access management <1~16>

Parameters:

Parameter	Description
Management	Access management configuration.
<1~16>	ID of access management entry list (1-16).

Example:

```
ES0152# show access management 3
Switch access management mode is : Disable
Idx VID  IP Address          HTTP/HTTPS SNMP TELNET/SSH
--- ---- ------------------- ---------- ---- ---------
```

22-3 access-list

Access list.

Syntax:

Show access-list ace

Show access-list ace <1~384>

Parameters:

Parameter	Description
Ace	Access list entry.
<1~384>	ACE ID (1-384).

Example:

```
ES0152# show access-list ace 3

Switch access-list ace number: 0
```

22-4 aggregation

Aggregation configuration and status.

Syntax:

Show aggregation aggregators

Show aggregation lacp

Show aggregation mode

Show aggregation status

Parameters:

Parameter	Description
Aggregators	Aggregator status.

Parameter	Description
LACP	LACP local and neighbor info.
Mode	Traffic distribution mode.
Status	Aggregation port status.

Example:

```
ES0152# show aggregation mode
Aggregation Hash Mode : src-dst-mac
LACP System Priority : 32768
```

22-5 clock

Configure time-of-day clock.

Syntax:

Show clock

Example:

```
ES0152# show clock
System Time : 2017-01-01 01:30:50
```

22-6 dot1x

IEEE Standard for port-based Network Access Control.

Syntax:

Show dot1x status

Show dot1x status interface { * | [Gigbitethernet <port _list>] }

Show dot1x statistics [eapol | radius | all] interface { * | [Gigbitethernet <port _list>] }

Show dot1x statistics [eapol | radius | all]

Parameters:

Parameter	Description
Statistics	Shows statistics for either eapol or radius.
Status	Shows dot1x status, such as admin state, port state and last source.
Interface	Interface.

Parameter	Description
*	All Ports.
Gigbitethernet	1 Gigabit Ethernet Port.
<port _list>	Port ID (1/1-52).
All	Show all dot1x statistics.
Eapol	Show EAPOL statistics.
Radius	Show Backend Server statistics.

Example:

```
ES0152# show dot1x statistics radius
                   Rx Access   Rx Other    Rx Auth.
Interface            Challenges  Requests    Successes
---------------------  ----------  ----------  --------
GigabitEthernet 1/1   0           0           0
GigabitEthernet 1/2   0           0           0
GigabitEthernet 1/3   0           0           0
GigabitEthernet 1/4   0           0           0
GigabitEthernet 1/5   0           0           0
.
.
.
.
GigabitEthernet 1/N   0           0             -
ES0152#
ES0152# show dot1x statistics radius
                       Rx Auth.    Tx          MAC
Interface              Failures    Responses   Address
---------------------- ----------  ----------  -------
GigabitEthernet 1/1   0           0           -
GigabitEthernet 1/2   0           0           -
GigabitEthernet 1/3   0           0           -
GigabitEthernet 1/4   0           0           -
GigabitEthernet 1/5   0           0           -
```

```
.
.
.
.
GigabitEthernet 1/N   0           0           -
```

22-7 event

Show trap even configuration.

Syntax:

Show event

Example:

```
ES0152# show event
Group Name                        Severity Level
--------------------------------  ----------------
ACCESS-MGMT                       Info
ACL                               Info
ARP-INSPECTION                    Warning
AUTH-FAILED                       Warning
BSC-PROTECTION                    Info
Cold-Start                        Warning
DHCP                              Info
DHCP-SNOOPING                     Info
IP-SOURCE-GUARD                   Info
LACP                              Info
LINK-UPDOWN                       Warning
LOGIN                             Info
LOGOUT                            Info
LOOP-PROTECTION                   Info
MAC-TABLE                         Info
MAINTENANCE                       Info
MGMT-IP-CHANGE                    Info
NAS                               Info
```

```
PORT                                Info
PORT-SECURITY                       Info
RMON                                Info
SFP                                 Info
SPANNING-TREE                       Info
SYSTEM                              Info
USER                                Info
Warm-Start                          Warning
ES0152# show event
Group Name                          Syslog Mode
--------------------------------  ----------------
ACCESS-MGMT                         Enabled
ACL                                 Enabled
ARP-INSPECTION                      Enabled
AUTH-FAILED                         Enabled
BSC-PROTECTION                      Enabled
Cold-Start                          Enabled
DHCP                                Enabled
DHCP-SNOOPING                       Enabled
IP-SOURCE-GUARD                     Enabled
LACP                                Enabled
LINK-UPDOWN                         Enabled
LOGIN                               Enabled
LOGOUT                              Enabled
LOOP-PROTECTION                     Enabled
MAC-TABLE                           Enabled
MAINTENANCE                         Enabled
MGMT-IP-CHANGE                      Enabled
NAS                                 Enabled
PORT                                Enabled
PORT-SECURITY                       Enabled
RMON                                Enabled
```

```
SFP                                 Enabled
SPANNING-TREE                       Enabled
SYSTEM                              Enabled
USER                                Enabled
Warm-Start                          Enabled

ES0152# show event
Group Name                          Trap Mode
---------------------------------  ----------------
ACCESS-MGMT                         Disabled
ACL                                 Disabled
ARP-INSPECTION                      Disabled
AUTH-FAILED                         Disabled
BSC-PROTECTION                      Disabled
Cold-Start                          Disabled
DHCP                                Disabled
DHCP-SNOOPING                       Disabled
IP-SOURCE-GUARD                     Disabled
LACP                                Disabled
LINK-UPDOWN                         Disabled
LOGIN                               Disabled
LOGOUT                              Disabled
LOOP-PROTECTION                     Disabled
MAC-TABLE                           Disabled
MAINTENANCE                         Disabled
MGMT-IP-CHANGE                      Disabled
NAS                                 Disabled
PORT                                Disabled
PORT-SECURITY                       Disabled
RMON                                Disabled
SFP                                 Disabled
SPANNING-TREE                       Disabled
```

```
SYSTEM                                  Disabled
USER                                    Disabled
Warm-Start                              Disabled
```

22-8 green-ethernet

Green ethernet (Power reduction).

Syntax:

Show green-ethernet [interface <port_type> <port_type_list>]

Show green-ethernet eee [interface <port_type> <port_type_list>]

Show green-ethernet energy-detect [interface <port_type> <port_type_list>]

Show green-ethernet short-reach [interface <port_type> <port_type_list>]

Parameters:

Parameter	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.
Interface	Shows green ethernet status for a specific port or ports.
Short-reach	Shows green ethernet short-reach status for a specific.
Interface	
*	All Switches or All ports.
<port_type >	GigabitEthernet or.
<port_type_list>	Port list in 1/1-26 for Gigabitethernet.

Example:

```
ES0152# show green-ethernet eee
Interface               Lnk  EEE Capable  EEE Enabled
Power Save
----------------------  ---  -----------  -----------
---------------
GigabitEthernet 1/1     No   Yes          No
GigabitEthernet 1/2     No   Yes          No
GigabitEthernet 1/3     No   Yes          No
GigabitEthernet 1/4     No   Yes          No
```

```
GigabitEthernet 1/5     No   Yes          No
GigabitEthernet 1/6     No   Yes          No
GigabitEthernet 1/7     No   Yes          No
GigabitEthernet 1/8     No   Yes          No
GigabitEthernet 1/9     No   Yes          No
ES0152# show green-ethernet eee
Interface                  LP EEE Capable   In
Power Save
----------------------  ---  -----------  -----------
----------------
GigabitEthernet 1/1     No                No
GigabitEthernet 1/2     No                No
GigabitEthernet 1/3     No                No
GigabitEthernet 1/4     No                No
GigabitEthernet 1/5     No                No
GigabitEthernet 1/6     No                No
GigabitEthernet 1/7     No                No
GigabitEthernet 1/8     No                No
GigabitEthernet 1/9     No                No
```

22-9 history

Display the session command history.

Syntax:

Show history [| {begin | exclude | include } <LINE>]

Parameters:

Parameter	Description
|	Output modifiers.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show history
  show evc statistics
  show green-ethernet EEE
  show green-ethernet EEE interface GigabitEthernet
  show history
```

22-10 interface

Interface status and configuration.

Syntax:

Show interface vlan <vlan_list>

Show interface vlan

Show interface { * | [GigabitEthernet <port _list>] } green-ethernet

Show interface { * | [GigabitEthernet <port _list>] } capabilities

Show interface { * | [GigabitEthernet <port _list>] } statistics [bytes | discards | errors | packets] [up | down]

Show interface { * | [GigabitEthernet <port _list>] } statistics [up | down] [bytes | discards | errors | packets]

Show interface { * | [GigabitEthernet <port _list>] } status

Parameters:

Parameter	Description
VLAN	VLAN status.
GigabitEthernet	GigabitEthernet.
*	All switches or All ports.
<vlan_list>	List of VLAN interface numbers (1-4095).
<port_list>	Port List S/X-Y,Z (1/1-52).
Green-ethernet	Display green-ethernet.
Status	Display status.
Statistics	Display statistics.
Capabilities	Display interface capabilities.
Bytes	Show byte statistics.
Discards	Show discard statistics.

Parameter	Description
Errors	Show error statistics.
Packets	Show packet statistics.
Up	Show ports which are up.
Down	Show ports which are down.

Example:

```
ES0152# show interface GigabitEthernet 1/1-3
capabilities


GigabitEthernet 1/1 Capabilities:
SFP Type: None
SFP Vendor name:
SFP Vendor PN:
SFP Vendor revision:

GigabitEthernet 1/2 Capabilities:
SFP Type: None
SFP Vendor name:
SFP Vendor PN:
SFP Vendor revision:

GigabitEthernet 1/3 Capabilities:
SFP Type: None
SFP Vendor name:
SFP Vendor PN:
SFP Vendor revision:
```

22-11 ip

Internet Protocol.

Syntax:

Show ip arp

Show ip arp inspection

Show ip arp inspection entry { [dhcp-snooping interface] | [interface] | [static interface] } { * | [GigabitEthernet <port _list>] }

Show ip arp inspection interface { * | [GigabitEthernet <port _list>] }

Show ip arp inspection vlan <vlan_list>

Show ip dhcp pool

Show ip dhcp pool <vlan_id>

Show ip dhcp relay

Show ip dhcp relay statistics

Show ip dhcp server

Show ip dhcp server status

Show ip dhcp snooping

Show ip dhcp snooping table

Show ip dhcp snooping interface { * | [GigabitEthernet <port _list>] }

Show ip dhcp snooping statistics

Show ip dhcp snooping statistics interface { * | [GigabitEthernet <port _list>] }

Show ip igmp snooping

Show ip igmp snooping [detail | group-database | mrouter | vlan]

Show ip interface brief

Show ip name-server

Show ip route

Show ip source binding

Show ip source binding dhcp-snooping

Show ip source binding dhcp-snooping interface { * | [GigabitEthernet <port _list>] }

Show ip source binding interface { * | [GigabitEthernet <port _list>] }

Show ip source binding static

Show ip source binding static interface { * | [GigabitEthernet <port _list>] }

Show ip verify source

Show ip verify source interface { * | [GigabitEthernet <port _list>] }

Parameters:

Parameter	Description
Arp	Address Resolution Protocol.
DHCP	Dynamic Host Configuration Protocol.
IGMP	Internet Protocol.
Interface	IP interface status and configuration.
Name-server	Domain Name System.
Route	Display the current ip routing table.
Source	Source command.
Verify	Verify command.
Inspection	ARP inspection.
Entry	Arp inspection entries.
Interface	Select an interface to configure.
VLAN	VLAN configuration.
DHCP-snooping	Learn from DHCP snooping.
Static	Setting from static entries.
GigabitEthernet	GigabitEthernet.
*	All switches or All ports.
<port_list>	Port List S/X-Y,Z (1/1-52).
<vlan_list>	Select a VLAN id to configure (1-4095).
Pool	DHCP server pool.
Relay	DHCP relay.
Server	DHCP server.
Snooping	DHCP snooping.
<vlan_id>	VLAN id of DHCP server pool (1-4095).
Statistics	DHCP option 82.
Status	DHCP server status.
Table	Show IP DHCP snooping table.
Statistics	Display DHCP snooping statistics information.
Snooping	Snooping IGMP.
Detail	Detail running information/statistics of IGMP snooping.
Group-database	Multicast group database from IGMP.

Parameter	Description
Mrouter	Multicast router port status in IGMP.
VLAN	Search by VLAN.
Brief	Brief IP interface status.
Binding	IP source binding.
Interface	IP verify source interface config.
Source	Verify source.

Example:

```
ES0152# show ip interface brief
Interface       Address            Method       Status
--------------- ------------------- ------------ ---
VLAN1            192.168.1.1/24       Manual        UP
```

22-12 ipmc

IPv4/IPv6 multicast configuration.

Syntax:

Show ipmc profile [<ProfileName : word16>] [detail] [| {begin | exclude | include } <LINE>]

Show ipmc range [<EntryName : word16>] [| {begin | exclude | include } <LINE>]

Parameters:

Parameter	Description
Profile	IPMC profile configuration.
Range	A range of IPv4/IPv6 multicast addresses for the profile.
<ProfileName : word16>	Profile name in 16 char's.
Detail	Detail information of a profile.
<EntryName : word16>	Range entry name in 16 char's.
|	Output modifiers.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show ipmc range
```

22-13 ipv6

IPv6 configuration commands.

Syntax:

Show ipv6 mld snooping [vlan | group-database | detail | mrouter]

Show ipv6 mld snooping

Show ipv6 interface

Show ipv6 interface vlan <vlan_list> brief

Show ipv6 neighbor

Show ipv6 neighbor interface vlan <vlan_list>

Show ipv6 route

Show ipv6 route interface vlan <vlan_list>

Parameters:

Parameter	Description
Mld	IPv6 configuration commands.
Interface	IPv6 configuration commands.
Neighbor	IPv6 neighbors.
Route	IPv6 routes.
Snooping	Snooping MLD.
Detail	Detail running information/statistics of MLD snooping.
Group-database	Multicast group database from MLD.
Mrouter	Multicast router port status in MLD.
VLAN	Search by VLAN.
VLAN	VLAN of IPv6 interface.
<vlan_list>	IPv6 interface VLAN list (1-4095).
Brief	Brief summary of IPv6 status and configuration.
Interface	Select an interface to configure.

Example:

```
ES0152# show ipv6 mld snooping detail
```

```
MLD Snooping is disabled to stop snooping IGMP control
plane.
Multicast streams destined to unregistered MLD groups
will be flooding.
```

22-14 lacp

LACP configuration/status.

Syntax:

Show lacp { internal | statistics | system-id | neighbour } [| {begin | exclude | include } <LINE>]

Parameters:

Parameter	Description
Internal	Internal LACP configuration.
Neighbour	Neighbour LACP status.
Statistics	Internal LACP statistics.
System-id	LACP system ID.
|	Output modifiers.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show lacp internal
Port  Mode      Key   Role    Timeout  Priority
----  --------  ----  ------  -------  --------
1     Disabled  Auto  Active  Fast     32768
2     Disabled  Auto  Active  Fast     32768
3     Disabled  Auto  Active  Fast     32768
4     Disabled  Auto  Active  Fast     32768
5     Disabled  Auto  Active  Fast     32768
6     Disabled  Auto  Active  Fast     32768
7     Disabled  Auto  Active  Fast     32768
```

22-15 line

TTY line information.

Syntax:

Show line [alive] [| {begin | exclude | include } <LINE>]

Parameters:

Parameter	Description
Alive	Display information about alive lines.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show line alive
Line is con 0.
    * You are at this line now.
    Alive from Console.
    Default privileged level is 2.
    Command line editing is enabled
    Display EXEC banner is enabled.
    Display Day banner is enabled.
    Terminal width is 80.
          length is 24.
             history size is 32.
             exec-timeout is 10 min 0 second.
    Current session privilege is 15.
    Elapsed time is 0 day 0 hour 26 min 52 sec.
    Idle time is 0 day 0 hour 0 min 0 sec.
```

22-16 lldp

Show lldp configuration.

Syntax:

Show lldp

Show lldp interface { * | [GigabitEthernet <port _list>] }

Show lldp med media-vlan-policy

Show lldp med media-vlan-policy <policy_list>

Show lldp med remote-device

Show lldp med remote-device interface { * | [GigabitEthernet <port _list>] }

Show lldp neighbors

Show lldp neighbors interface { * | [GigabitEthernet <port _list>] }

Show lldp statistics

Show lldp statistics [interface <port_type> <port_type_list>] [| {begin | exclude | include } <LINE>]

Parameters:

Parameter	Description
Interface	Interface to display.
Med	Display LLDP-MED neighbors information.
Neighbors	Display LLDP neighbors information.
Statistics	Display LLDP statistics information.
*	All Switches or All ports.
Gigabitethernet	GigabitEthernet.
<port_list>	Port List S/X-Y,Z (1/1-52).
Media-VLAN-policy	Display media VLAN policies.
Remote-device	Display remote device LLDP-MED neighbors information.
<policy_list>	e.g. 0,1,2, (0-31).
Interface	Interface to display.

Example:

```
ES0152# show lldp interface GigabitEthernet 1/4
LLDP Configuration
====================================
TX Interval : 30 sec
TX Hold : 4 sec
```

```
TX Delay : 2 sec
TX Reinit : 2 sec

GigabitEthernet 1/4
----------------------------
TX/RX Mode : Disabled
CDP Aware  : Disable
Port Descr : Enable
Sys Name : Enable
Sys Descr : Enable
Sys Capa : Enable
Mgmt Addr : Enable
```

22-17 logging

Syslog.

Syntax:

Show logging [<loggin_id : 1-4294967295> | alert | crit | debug | emerg | error | info | notice | warning]

Show logging

Parameters:

Parameter	Description
<logging_id: 1-4294967295>	Logging ID (1..4294967295).
Alert	Alert.
Crit	Critical.
Debug	Debug.
Emerg	Emergency.
Error	Error.
Info	Information.
Notice	Notice.
Warning	Warning.

Example:

```
ES0152# show logging info
```

```
Switch logging host mode is disable
Host address 1 :
Host address 2 :
Host address 3 :
Host address 4 :
Host address 5 :
Host address 6 :

Number of entries on Switch:
ID    Level    Time                    Message
----  -------  ----------------------  -----------------
3     Info     2017-01-01 00:01:16    LOGIN: Login
passed for user 'admin'
4     Info     2017-01-01 00:15:21    LOGOUT: User
'admin' logout
5     Info     2017-01-01 00:15:35    LOGIN: Login
passed for user 'admin'
6     Info     2017-01-01 00:25:38    LOGOUT: User
'admin' logout
7     Info     2017-01-01 01:02:02    LOGIN: Login
passed for user 'admin'
8     Info     2017-01-01 01:12:03    LOGOUT: User
'admin' logout
```

22-18 loop-protect

Show Loop protection.

Syntax:

Show loop-protect

Show loop-protect interface { ***** | [GigabitEthernet <port _list>] }

Parameters:

Parameter	Description
Interface	Interface status and configuration.
*****	All Switches or All ports.

Parameter	Description
Gigabitethernet	GigabitEthernet.
<port_list>	Port List S/X-Y,Z (1/1-52).

Example:

```
ES0152# show loop-protect interface GigabitEthernet 1/3
Loop Protection Configuration
=====================================
Loop Protection   : Disable
Transmission Time : 5 sec
Shutdown Time     : 180 sec

GigabitEthernet 1/3
------------------------------
Mode : Enabled
Action : Shutdown
Transmit mode : Disabled
The number of loops : 0
loop : -
Status : Down
```

22.29 mac

Mac Address Table information.

Syntax:

Show mac address-table

Show mac address-table address <mac_ucast>

Show mac address-table address <mac_ucast> vlan <vlan_id>

Show mac address-table [aging-time| conf |static]

Show mac address-table count

Show mac address-table count interface { * | [GigabitEthernet <port _list>] }

Show mac address-table interface { * | [GigabitEthernet <port _list>] }

Show mac address-table learning

Show mac address-table learning interface { * | [GigabitEthernet <port _list>] }

Show mac address-table vlan <vlan_id>

Parameters:

Parameter	Description
Address-table	MAC Address Table.
Address	MAC address lookup.
Aging-time	Aging time.
Conf	User added static mac addresses.
Count	Total number of mac addresses.
Interface	Select an interface to configure.
Learning	Learn/disable/secure state.
Static	All static mac addresses.
VLAN	Addresses in this VLAN.
<mac_ucast>	48 bit MAC address: xx:xx:xx:xx:xx:xx.
VLAN	VLAN lookup.
<vlan_id>	VLAN IDs 1-4095 (1-4095).
*	All Switches or All ports.
Gigabitethernet	GigabitEthernet.
<port_list>	Port List S/X-Y,Z (1/1-52).

Example:

```
ES0152# show mac address-table count interface
GigabitEthernet 1/4

Port                                Count
---------------------------------  -----
GigabitEthernet 1/4                0


Total addresses in table: 1
```

22-20 monitor

Monitoring different system events.

Syntax:

Show monitor [session (<1-5> | all | remote)]

Parameters:

Parameter	Description
Session	MIRROR session.
<1-5>	MIRROR session number.
All	Show all MIRROR sessions.
Remote	Show only Remote MIRROR sessions.

Example:

```
ES0152# show monitor

Session 1
---------
Mode                        : Disabled
Type                        : Mirror
Source VLAN(s)              :
CPU Port                    :

Session 2
---------
Mode                        : Disabled
Type                        : Mirror
Source VLAN(s)              :
CPU Port                    :

Session 3
---------
Mode                        : Disabled
Type                        : Mirror
Source VLAN(s)              :
CPU Port                    :
```

```
Session 4
---------
Mode                        : Disabled
Type                        : Mirror
Source VLAN(s)              :
CPU Port                    :

Session 5
---------
Mode                        : Disabled
Type                        : Mirror
Source VLAN(s)              :
CPU Port                    :
```

22-21 mrp

MRP status.

Syntax:

Show mrp status [all | mvrp] interface [(* | GigabitEthernet) <port_type_list>]

Parameters:

Parameter	Description
Status	Show a collection of MRP statistics for each interface.
All	Show MRP statistics for all MRP Applications.
Interface	Show a collection of MRP statistics for a specific interface(s).
Mvrp	Show MRP statistics for the MVRP Application.
*	All switches or All ports.
GigabitEthernet	1 Gigabit Ethernet Port.
<port_type_list>	Port list for all port types.
<port_type_list>	Port list in 1/1-52.

Example:

```
ES0152# show mrp status all
GigabitEthernet 1/1 :
```

```
---------------------
MRP Appl  FailedRegistrations  LastPduOrigin
--------  -------------------  -------------
MVRP      0                    00-00-00-00-00-00

GigabitEthernet 1/2 :
---------------------
MRP Appl  FailedRegistrations  LastPduOrigin
--------  -------------------  -------------
MVRP      0                    00-00-00-00-00-00

GigabitEthernet 1/3 :
---------------------
MRP Appl  FailedRegistrations  LastPduOrigin
--------  -------------------  -------------
MVRP      0                    00-00-00-00-00-00
GigabitEthernet 1/4 :
---------------------
MRP Appl  FailedRegistrations  LastPduOrigin
--------  -------------------  -------------
MVRP      0                    00-00-00-00-00-00

GigabitEthernet 1/5 :
---------------------
MRP Appl  FailedRegistrations  LastPduOrigin
--------  -------------------  -------------
MVRP      0                    00-00-00-00-00-00
,
,
,
,
,
```

```
,
,
GigabitEthernet 1/51 :
----------------------
MRP Appl  FailedRegistrations  LastPduOrigin
--------  -------------------  -------------
MVRP      0                    00-00-00-00-00-00

GigabitEthernet 1/52 :
----------------------
MRP Appl  FailedRegistrations  LastPduOrigin
--------  -------------------  -------------
MVRP      0                    00-00-00-00-00-00
```

22-22 mvr

Multicast VLAN Registration configuration.

Syntax:

Show mvr

Show mvr detail

Show mvr group-database

Parameters:

Parameter	Description
Detail	Detail running information/statistics of MVR.
Group-database	Multicast group database from MVR.

Example:

```
ES0152# show mvr group-database
MVR is currently disabled, please enable MVR to start
group registration.

MVR Group Database
```

```
Switch-1 MVR Group Count: 0
```

22-23 ntp

Configure NTP.

Syntax:

Show ntp status

Parameters:

Parameter	Description
Status	Status.

Example:

```
ES0152# show ntp status
NTP Mode : Disable
Interval : 1440 min
Idx   Server IP host address (a.b.c.d) or a host name
string
---   ------------------------------------------------
1
2
3
4
5
6
```

22-24 platform

Platform configuration.

Syntax:

Show platform phy [interface (<port_type> [<v_port_type_list>])] [| {begin | exclude | include } <LINE>]

Show platform phy id [interface (<port_type> [<v_port_type_list>])] [| {begin | exclude | include } <LINE>]

Show platform phy instance [| {begin | exclude | include } <LINE>]

Show platform phy status [interface (<port_type> [<v_port_type_list>])] [| {begin | exclude | include } <LINE>]

Parameters:

Parameter	Description
PHY	PHYs' information.
|	Output modifiers.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show platform phy
Port   API Inst   WAN/LAN/1G Mode       Duplex
----   ---------  ---------  ----       ------     ----
1      Default    1G         PD       -          -
2      Default    1G         PD       -          -
3      Default    1G         PD       -          -
ES0152# show platform phy
Port Speed      Link
     ------     ----
1          ,No
2          ,No
3          ,No
```

22-25 poe

Show poe.

Syntax:

Show poe auto-check

Show poe config

Show poe config interface { * | [GigabitEthernet <port _list>] }

Show poe power-delay

Show poe power-delay interface { * | [GigabitEthernet <port _list>] }

Show poe profile

Show poe profile id <1-16>

Show poe status

Show poe status interface { * | [GigabitEthernet <port _list>] }

Parameters:

Parameter	Description
Status	Display PoE (Power Over Ethernet) status for the switch.
Config	Display PoE (Power Over Ethernet) config for the switch.
Auto-check	Display PoE Auto Checking config for the switch.
Power-delay	Display PoE (Power Over Ethernet) Power Delay config for the switch.
Profile	Poe scheduling profile.
Interface	Interface status and configuration.
*	All Switches or All ports.
Gigabitethernet	GigabitEthernet
<port_list>	Port List S/X-Y,Z (1/1-52).
ID	Show poe profile.
<1-16>	Profile id (1..16).

Example:

```
ES0152# show poe status interface GigabitEthernet 1/1-2


Interface               PD Class  Port Status
----------------------  --------  ------------------
GigabitEthernet 1/1             -  No PD detected
GigabitEthernet 1/2             -  No PD detected
Total
ES0152# show poe status interface GigabitEthernet 1/1-2

                Power  Power   Current
Interface           Alloc [W] Used[W] Used[mA] Priority
```

```
----------------------  --------  --------------------
                            0.0     0.0         0 Low
                            0.0     0.0         0 Low
Total                   0.0     0.0         0
```

22-26 port-security

Show port security.

Syntax:

Show port-security switch interface { * | [GigabitEthernet <port _list>] }

Parameters:

Parameter	Description
Switch	Show Port Security status.
Interface	Interface status and configuration.
*	All Switches or All ports.
Gigabitethernet	GigabitEthernet.
<port_list>	Port List S/X-Y,Z (1/1-52).

Example:

```
ES0152# show port-security switch interface
GigabitEthernet 1/4
Interface                State          MAC Cnt
-----------------------  -------------  -------
GigabitEthernet 1/4      Disabled       -
```

22-27 privilege

Display privilege level configuration.

Syntax:

Show privilege group <group> level

Show privilege group level

Parameters:

Parameter	Description
Group	Privilege group name.

Parameter	Description
<group>	Privilege group name (access-mgmt / arp-inspection / auth-method / dhcp-relay / dhcp-snooping / diagnostic / dot1x / eee / event / forward-failure / ip / ipmc / ip-source-guard / lacp / lldp / loop-protection / mac-table / mirror / mvr / poe / port / port-security / qos / radius / snmp / stp / system / upnp / vlan).
Level	Privilege group level.

Example:

```
ES0152# show privilege group access-mgmt level
Group Name                       Read-only  Read-write
-------------------------------  ---------  ----------
access-mgmt                              5          10
```

22-28 process

Process.

Syntax:

Show process [list] [| | detail] (begin | exclude | include) <line>

Show process load

Parameters:

Parameter	Description
List	List.
Load	Load.
|	Output modifiers.
Detail	Optionally show thread call stack.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<line>	String to match output lines.

Example:

```
ES0152# show process load
^@0.59 0.51 0.49 1/170 184
```

22-29 pvlan

PVLAN status.

Syntax:

Show pvlan

Show pvlan <pvlan_list>

Show pvlan isolation

Show pvlan isolation interface { * | [GigabitEthernet <port _list>] }

Parameters:

Parameter	Description
<pvlan_list>	PVLAN ID to show configuration for (1-10).
Isolation	Show isolation configuration.
Interface	Show isolation configuration for specify interface.
*	All Switches or All ports.
Gigabitethernet	GigabitEthernet.
<port_list>	Port List S/X-Y,Z (1/1-52).

Example:

```
ES0152# show pvlan isolation
Port                              Isolation
--------------------------------- ---------
GigabitEthernet 1/1               Disabled
GigabitEthernet 1/2               Disabled
GigabitEthernet 1/3               Disabled
GigabitEthernet 1/4               Disabled
GigabitEthernet 1/5               Disabled
.
.
.
.
GigabitEthernet 1/N              Disabled
```

22-30 qos

Quality of Service.

Syntax:

Show qos

Show qos interface

Show qos interface { ***** | [GigabitEthernet <port _list>] }

Show qos map [cos-queue | dscp-queue | precedence-queue | queue-cos | queue-dscp | queue-precedence]

Parameters:

Parameter	Description
Interface	QoS Interface status and configuration.
Map	Display global QoS Maps/Tables.
*****	All Switches or All ports.
Gigabitethernet	GigabitEthernet
<port_list>	Port List S/X-Y,Z (1/1-52).
Cos-queue	Map for CoS to queue.
Dscp-queue	Map for DSCP to queue.
Precedence-queue	Map for IP Precedence to queue.
Queue-cos	Map for queue to CoS.
Queue-dscp	Map for queue to DSCP.
Queue-precedence	Map for queue to IP Precedence.

Example:

```
ES0152# show qos map queue-precedence


Queue to IP Precedence mappings
 Queue           0  1  2  3  4  5  6  7
---------------+-----------------------
 IP Precedence   0  1  2  3  4  5  6  7
```

22-31 radius-server

RADIUS configuration.

Syntax:

Show radius-server

Show radius-server statistics

Parameters:

Parameter	Description
Statistics	RADIUS statistics.

Example:

```
ES0152# show radius-server statistics
Global RADIUS Server Timeout      : 5 seconds
Global RADIUS Server Retransmit   : 3 times
Global RADIUS Server Deadtime     : 0 minutes
Global RADIUS Server Key          :
Global RADIUS Server Attribute 4  :
Global RADIUS Server Attribute 95 :
Global RADIUS Server Attribute 32 :
```

22-32 rmon

RMON statistics.

Syntax:

Show rmon history

Show rmon history <1-65535>

Show rmon statistics

Show rmon statistics <1-65535>

Show rmon alarm

Show rmon alarm <1-65535>

Show rmon event

Show rmon event <1-65535>

Parameters:

Parameter	Description
History	Display the RMON history table.
Statistics	Display the RMON statistics table.
Alarm	Display the RMON alarm table.
Event	Display the RMON event table.
<1-65535>	History entry list (1..65535).
<1-65535>	Statistics entry list (1..65535).
<1-65535>	Alarm entry list (1..65535).
<1-65535>	Event entry list (1..65535).

Example:

```
ES0152# show rmon statistics 5
```

22-33 running-config

Current operating configuration.

Syntax:

Show running-config

Parameters:

Parameter	Description
CWORD	Valid words are GVRP' 'access' 'access-list' 'dhcp' 'dhcp-snooping' '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' 'mep' 'monitor' 'mstp' 'mvr' 'mvr-port' 'ntp' 'phy' 'poe' 'port' 'port-security' 'pvlan' 'qos' 'rmon' 'sflow' 'snmp' 'source-guard' 'ssh' 'system' 'upnp' 'user' 'vlan' 'voice-vlan'.

Example:

```
ES0152# show running-config
username admin privilege 15 password none
!
```

```
!
interface GigabitEthernet 1/1
!
interface GigabitEthernet 1/2
!
interface GigabitEthernet 1/3
!
interface GigabitEthernet 1/4
!
interface GigabitEthernet 1/5
!
interface GigabitEthernet 1/6
!
.
.
.
.
.
.
interface GigabitEthernet 1/N
!
!
interface vlan 1
 ip address 192.168.1.1 255.255.255.0
!
ip route 0.0.0.0 0.0.0.0 192.168.1.254
end
```

22-34 sflow

Statistics flow.

Syntax:

Show sflow [sflow statistics { receiver [<rcvr_idx_list>] | samplers [interface [<samplers_list>] (<port_type> [<v_port_type_list>])] }]

Parameters:

Parameter	Description
Statistics	SFlow statistics.
Receiver	Show statistics for receiver.
Samplers	Show statistics for samplers.
Interface	Show statistics for a specific interface or interfaces.
*	All switches or All ports.
Gigabitethernet	1 Gigabit Ethernet Port.
10GigabitEthernet	10 Gigabit Ethernet Port.
<port_type_list>	Port list in 1/1-48.
|	Output modifiers.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show sflow

Agent Configuration:
====================

Agent Address: 127.0.0.1

Receiver Configuration:
=======================

Owner        : <none>
Receiver     : 0.0.0.0
UDP Port     : 6343
Max. Datagram: 1400 bytes
```

```
Time left    : 0 seconds


No enabled collectors (receivers). Skipping displaying
per-port info.
```

22-35 smtp

Show email information.

Syntax:

Show smtp

Example:

```
ES0152# show smtp
Mail Server     :
User Name       :
Password        :
Sender          :
Return Path     :
Email Adress 1  :
Email Adress 2  :
Email Adress 3  :
Email Adress 4  :
Email Adress 5  :
Email Adress 6  :
```

22-36 snmp

Display SNMP configurations/

Syntax:

Show snmp

Show snmp access

Show snmp access <GroupName : word32> [v1 | v2c | v3 | any] [auth | noauth | priv]

Show snmp community v3

Show snmp community v3 <Community : word32>

Show snmp security-to-group [v1 | v2c | v3] <SecurityName : word32>

Show snmp user

Show snmp user <UserName : word32>

Show snmp view

Show snmp view <ViewName : word32> <OidSubtree : word128>

Parameters:

Parameter	Description
Access	Access configuration .
Community	Community.
Security-to-group	Security-to-group configuration.
User	User.
View	MIB view configuration.
<GroupName : word32>	Group name (word32).
v1	v1 security model.
v2c	v2c security model.
v3	v3 security model.
Any	Any security model.
Auth	AuthNoPriv Security Level.
Noauth	NoAuthNoPriv Security Level.
Priv	AuthPriv Security Level.
v3	SNMPv3.
<Community : word32>	Specify community name (word32).
<SecurityName : word32>	Security group name (word32).
<UserName : word32>	Security user name (word32).
<ViewName : word32>	MIB view name (word32).
<OidSubtree : word128>	MIB view OID (word128).

Example:

```
ES0152# show snmp
SNMP Configuration
Read Community                : public
Write Community               : private
```

```
Write Mode                      : enabled

SNMPv3 Communities Table:

SNMPv3 Users Table:

SNMPv3 Groups Table:

SNMPv3 Accesses Table:

SNMPv3 Views Table:
```

22-37 spanning-tree

Spanning Tree protocol.

Syntax:

Show spanning-tree mst configuration

Show spanning-tree mst <0-4094>

Show spanning-tree mst <0-4094> port

Show spanning-tree mst <0-4094> port configuration

Parameters:

Parameter	Description
Mst	STP bridge instance.
<0-4094>	MST instance ID , 0 is for CIST (0..4094).
Configuration	MST Region Info and MSTI VLAN map.
Port	MST port status.
Configuration	MST port configuration.

Example:

```
ES0152# show spanning-tree mst configuration
Multiple Spanning Tree Protocol : Disable
Force Version : MSTP
Region Name : 00-40-C7-01-03-05
```

```
Revision Level : 0

MSTI 0 (CIST) : vlan 1-4094
```

22-38 svl

Shared VLAN Learning configuration.

Syntax:

Show svl fid [| (begin | exclude | include) <line>] | <1~4095>

Show svl fid

Parameters:

Parameter	Description
|	Output modifiers.
FID	Show a given FID.
VLAN	Show a given VLAN ID.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<line>	String to match output lines.
<1~4095>	List of FIDs to show.

Example:

```
ES0152# show svl fid 1
FID   VLANs
----  ------------------------------
   1  1 (default)
```

22-39 switch2go-management

Show Switch2go Management information.

Syntax:

Show switch2go-management> [mobile-link | options | setting]

Parameters:

Parameter	Description
Mobile-link	Show Registered Mobile Device List.
Options	Show Port Name Service configurations.
Setting	Show Switch2go Management configuration.

Example:

```
ES0152# show switch2go-management setting
Switch2go Mode            : Disabled
Server Address            : ipush.cloudapp.net
Server State              :
```

22-40 switchport

Display switching mode characteristics.

Syntax:

Show switchport forbidden [{ vlan <vlan_id> } | { name <word> }] [| {begin | exclude | include } <LINE>

Parameters:

Parameter	Description
Forbidden	Lookup VLAN Forbidden port entry.
Name	Name - Show forbidden access for specific VLAN name.
VLAN	VID - Show forbidden access for specific VLAN id.
<vlan_id>	VLAN ID.
<word>	VLAN name.
|	Output modifiers.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show switchport forbidden
Forbidden VLAN table is empty
```

22-41 system

Show system information.

Syntax:

Show system

Parameters:

None.

Example:

```
ES0152# show system
Model Name          :
System Description : Hardware Version   : v1.01
Mechanical Version : v1.01
Firmware Version    : v1.00.844
MAC Address         : 00-40-C7-1F-00-7D
Serial Number       : C020316AR2900005
System Name         :
Location            :
Contact             :
System Date         : 2017-01-01 00:23:25 +0000
System Uptime       : 0 days, 0:23:40
```

22-42 tacacs-server

TACACS+ configuration.

Syntax:

Show tacacs-server

Example:

```
ES0152# show tacacs-server
Global TACACS+ Server Timeout      : 5 seconds
Global TACACS+ Server Deadtime     : 0 minutes
Global TACACS+ Server Key          :
```

22-43 terminal

Display terminal configuration parameters.

Syntax:

Show terminal [| {begin | exclude | include } <LINE>

Parameters:

Parameter	Description
|	Output modifiers.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show terminal
Line is con 0.
    * You are at this line now.
    Alive from Console.
    Default privileged level is 2.
    Command line editing is enabled
    Display EXEC banner is enabled.
    Display Day banner is enabled.
    Terminal width is 80.
             length is 24.
             history size is 32.
             exec-timeout is 10 min 0 second.

    Current session privilege is 15.
    Elapsed time is 0 day 0 hour 29 min 24 sec.
    Idle time is 0 day 0 hour 0 min 0 sec.
```

22-44 udld

Uni Directional Link Detection (UDLD) configurations, statistics and status.

Syntax:

Show privilege group <group> level

Show privilege group level

Parameters:

Parameter	Description
|	Output modifiers.
Interface	Choose port.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<line>	String to match output lines.
*	All switches or All ports.
GigabitEthernet	1 Gigabit Ethernet Port.
<port_type_list>	Port list for all port types.
<port_type_list>	Port list in 1/1-52.

Example:

```
ES0152# show udld interface GigabitEthernet 1/1

GigabitEthernet 1/1
-------------------------------------------------------
--------------
UDLD Mode                 : Disable
Admin State               : Disable
Message Time Interval(Sec): 7
Device ID(local)          : 00-19-92-DB-00-6A
Device Name(local)        :
Bidirectional state       : Indeterminant

No neighbor cache information stored
--------------------
```

22-45 upnp

Show UPnP configurations.

Syntax:

Show upnp

Example:

```
ES0152# show upnp
UPnP Mode                   : Disabled
Interface VLAN              : 1
UPnP TTL                    : 4
UPnP Advertising Duration   : 100
```

22-46 user-privilege

Users privilege configuration.

Syntax:

Show user-privilege

Example:

```
ES0152# show user-privilege
username admin privilege 15 password none
```

22-47 users

Display information about terminal lines.

Syntax:

Show users myself [| {begin | exclude | include } <LINE>

Parameters:

Parameter	Description
Myself	Display information about mine.
|	Output modifiers.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show user myself
Line is vty 0.
```

```
* You are at this line now.
Connection is from 192.168.10.119:4123 by Telnet.
User name is admin.
Privilege is 15.
Elapsed time is 0 day 1 hour 33 min 27 sec.
Idle time is 0 day 0 hour 0 min 0 sec.
```

22-48 version

System software status.

Syntax:

Show version

Example:

```
ES0152# show version
Active Image
------------
Partition        : secondary
Version          : v1.00.844
Date             : 2017-03-06 13:37:35 UTC

Alternate Image
------------
Partition        : primary
Version          : v0.91.422
Date             : 2016-11-18 13:45:16 UTC
```

22-49 vlan

VLAN status.

Syntax:

Show vlan

Show vlan brief

Show vlan id <vlan_list>

Show vlan ip-subnet

Show vlan ip-subnet address

Show vlan ip-subnet address< ipv4_addr>

Show vlan mac config

Show vlan mac config address <mac_ucast>

Show vlan mac status

Show vlan mac status address <mac_ucast>

Show vlan mapping

Show vlan protocol

Show vlan protocol { [eth2 <ethernet value>] | [llc <dsap value> <ssap value>] | [snap <snap oui> <pid value>] }

Show vlan status

Show vlan status [admin | all | combined | gvrp | mstp | mvr | nas | vcl | voice-vlan]

Show vlan status [admin | all | combined | gvrp | mstp | mvr | nas | vcl | voice-vlan] interface { * | [GigabitEthernet <port _list>] }

Show vlan status interface { * | [GigabitEthernet <port _list>] } [admin | all | combined | gvrp | mstp | mvr | nas | vcl | voice-vlan]

Parameters:

Parameter	Description
Brief	VLAN summary information.
ID	VLAN status by VLAN ID.
IP-subnet	Show VLAN IP-subnet entries.
MAC	Show VLAN MAC entries.
Mapping	Show VLAN Selective QinQ entries.
Protocol	Protocol-based VLAN status.
Status	Show the VLANs configured for each interface.
<vlan_list>	VLAN ID to show configuration for (1-4095).
Address	Show a specific ip-subnet entry.
<ipv4_addr>	The specific ip-subnet to show. (X.X.X.X).
Config	Show VLAN MAC config.
Status	Show VLAN MAC status.

Parameter	Description
Address	Show a specific MAC entry.
<mac_ucast>	The specific MAC entry to show.
Eth2	Ethernet protocol based VLAN status.
LLC	LLC-based VLAN group.
Snap	SNAP-based VLAN group.
<ethernet value>	Ether Type(Range: 0x600 - 0xFFFF).
<dsap value>	DSAP(Range: 0x00 - 0xFF).
<ssap value>	SSAP(Range: 0x00 - 0xFF).
<snap oui>	SNAP OUI(must be 0x000000).
<pid value>	PID(Range: 0x0000 - 0XFFFF).
Admin	Show the VLANs configured by administrator.
All	Show all VLANs configured.
Combined	Show the VLANs configured by a combination.
Gvrp	Show the VLANs configured by GVRP.
Interface	Show the VLANs configured for a specific interface.
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.
*	All Switches or All ports.
Gigabitethernet	GigabitEthernet.
<port_list>	Port List S/X-Y,Z (1/1-52).

Example:

```
ES0152# show vlan status all interface GigabitEthernet
1/4
GigabitEthernet 1/4 :
---------------------
VLAN User  PortType      PVID  Frame Type    Ing Filter
---------  ------------  ----  ------------  --------
Admin      C-Port         1     All            Enabled
NAS
```

```
GVRP
MVR
Voice VLAN
MSTP
DMS
VCL
Combined   C-Port         1     All            Enabled
ES0152# show vlan status all interface GigabitEthernet
1/4
GigabitEthernet 1/4 :
---------------------
VLAN User         Tx Tag
---------  ------------ ---
Admin            None
NAS
GVRP
MVR
Voice VLAN
MSTP
DMS
VCL
Combined         None
```

22-50 voice

Show voice.

Syntax:

Show voice vlan

Parameters:

Parameter	Description
VLAN	Show voice VLAN.

Example:

```
ES0152# show voice vlan
no Switch voice setting

Voice VLAN switchport is configured on following:

GigabitEthernet 1/1 :
---------------------
GigabitEthernet 1/1 switchport voice vlan mode is
forced
GigabitEthernet 1/1 switchport voice security is
disabled
GigabitEthernet 1/1 switchport voice discovery protocol
is oui

GigabitEthernet 1/2 :
---------------------
GigabitEthernet 1/2 switchport voice vlan mode is
forced
GigabitEthernet 1/2 switchport voice security is
disabled
GigabitEthernet 1/2 switchport voice discovery protocol
is oui

GigabitEthernet 1/3 :
---------------------
GigabitEthernet 1/3 switchport voice vlan mode is
forced
GigabitEthernet 1/3 switchport voice security is
disabled
GigabitEthernet 1/3 switchport voice discovery protocol
is oui

GigabitEthernet 1/4 :
---------------------
```

```
GigabitEthernet 1/4 switchport voice vlan mode is
forced
GigabitEthernet 1/4 switchport voice security is
disabled
GigabitEthernet 1/4 switchport voice discovery protocol
is oui


GigabitEthernet 1/5 :
----------------------
GigabitEthernet 1/5 switchport voice vlan mode is
forced
GigabitEthernet 1/5 switchport voice security is
disabled
GigabitEthernet 1/5 switchport voice discovery protocol
is oui


GigabitEthernet 1/6 :
----------------------
GigabitEthernet 1/6 switchport voice vlan mode is
forced
GigabitEthernet 1/6 switchport voice security is
disabled
GigabitEthernet 1/6 switchport voice discovery protocol
is oui
.
.
.
.
.
.
.
.
GigabitEthernet 1/N :
----------------------
```

```
GigabitEthernet 1/N switchport voice vlan mode is
forced
GigabitEthernet 1/N switchport voice security is
disabled
GigabitEthernet 1/N switchport voice discovery protocol
is oui
```

22-51 web

Web.

Syntax:

Show web privilege group [<cword>] level [| {begin | exclude | include } <LINE>

Parameter:

Parameter	Description
Privilege	Web privilege.
Group	Web privilege group.
CWORD	Valid words are 'Aggregation' 'DHCP' 'Debug' 'Dhcp_Client' 'Diagnostics' 'EEE' 'GARP' 'GVRP' 'Green_Ethernet' 'IP2' 'IPMC_Snooping' 'LACP' 'LLDP' 'Loop_Protect' 'MAC_Table' 'MVR' 'Maintenance' 'Mirroring' 'NTP' 'POE' 'Ports' 'Private_VLANs' 'QoS' 'RPC' 'Security' 'Spanning_Tree' 'System' 'Timer' 'UPnP' 'VCL' 'VLANs' 'Voice_VLAN' 'XXRP' 'sFlow' 'sFlow'
Level	Web privilege group level.
|	Output modifiers.
Begin	Begin with the line that matches.
Exclude	Exclude lines that match.
Include	Include lines that match.
<LINE>	String to match output lines.

Example:

```
ES0152# show web privilege group level
Group Name                          Privilege Level
```

	CRO	CRW	SRO	SRW
ACTIVATE	5	10	5	10
Aggregation	5	10	5	10
cloud_management	5	10	5	10
Debug	15	15	15	15
DHCP	5	10	5	10
Dhcp_Client	5	10	5	10
Diagnostics	5	10	5	10
EEE	5	10	5	10
GARP	5	10	5	10
Green_Ethernet	5	10	5	10
GVRP	5	10	5	10
IP2	5	10	5	10
IPMC_Snooping	5	10	5	10
LACP	5	10	5	10
LLDP	5	10	5	10
Loop_Protect	5	10	5	10
MAC_Table	5	10	5	10
Maintenance	15	15	15	15
Mirroring	5	10	5	10
MVR	5	10	5	10
NTP	5	10	5	10
POE	5	10	5	10
Ports	5	10	1	10
Private_VLANs	5	10	5	10
QoS	5	10	5	10
RPC	5	10	5	10
Security	5	10	5	10
sFlow	5	10	5	10
Spanning_Tree	5	10	5	10
System	5	10	1	10

```
Timer                          5  10   5  10
Trap_Event                     5  10   5  10
Trouble_Shooting               5  10   5  10
UPnP                           5  10   5  10
VCL                            5  10   5  10
VLANs                          5  10   5  10
Voice_VLAN                     5  10   5  10
VTUN                           5  10   5  10
XXRP                           5  10   5  10
```

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Chapter 23
TERMINAL of CLI

Overview

Set terminal line parameters.

Syntax:

Terminal exec-timeout <0-1440>

Parameters:

Parameter	Description
Exec-timeout	Set the EXEC timeout
<0-1440>	Timeout in minutes

Example:

```
ES0152# terminal exec-timeout 3
```

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Chapter 24
TRACEOUTE of CLI

Overview

Copy from source to destination.

Syntax:

Traceroute ip <ipv4_addr>

Traceroute ip <ipv4_addr> { protocol [icmp | udp] } [wait <1-60>] [ttl <1-255>] [nqueries <1-10>]

Traceroute ipv6 <ipv6_addr>

Traceroute ipv6 <ipv6_addr> { protocol [icmp | udp] } [wait <1-60>] [ttl <1-255>] [nqueries <1-10>]

Parameters:

Parameter	Description
IP	Internet protocol version 4
IPv6	Internet protocol version 6
<ipv4_addr>	IP destination address (X.X.X.X)
Protocol	IP Protocol
Wait	Set the number of seconds to wait for response to a probe
TTL	Set the max number of hops
Nqueries	Set the number of probes per each hop
ICMP	Use ICMP ECHO for tracerouting (default)
UDP	Use UDP Port for tracerouting
TCP	Use TCP Sync for tracerouting (default)
<1-60>	Time in seconds to wait for a response. Default is 3s. (1..60)
<1-255>	Max time-to-live. Default is 30. (1..255)
<1-10>	Max time-to-live. Default is 3. (1..10)
<ipv6_addr>	IPv6 destination address (X:X:X:X:X:X:X:X)

Example:

```
ES0152# traceroute ip 192.168.1.1 protocol icmp wait 3
ttl 5 nqueries 6

traceroute to 192.168.1.1 (192.168.1.1), 5 hops max, 38
byte packets

 1  192.168.1.1 (192.168.1.1)  10.000 ms  0.000 ms
0.000 ms  0.000 ms  0.000 ms  0.000 ms
```

Chapter 25
CLI COMMAND REFERENCES

Overview

This chapter introduces the CLI privilege level and command modes.

- The privilege level determines whether or not the user could run the particular commands.
- If the user could run the particular command, then the user has to run the command in the correct mode.

25-1 Privilege level

Every command has a privilege level (0-15). Users can run a command if the session's privilege level is greater than or equal to the command's privilege level. The session's privilege level initially comes from the login account's privilege level, though it is possible to change the session's privilege level after logging in.

PRIVILEGE LEVEL	TYPES OF COMMANDS AT THIS PRIVILEGE LEVEL
0	Display basic system information
13	Configure features except for login accounts, the authentication method sequence, multiple logins, and administrator and enable passwords.
15	Configure login accounts, the authentication method sequence, multiple logins, and administrator and enable passwords.

25-2 Command modes

The CLI is divided into several modes. If a user has enough privilege to run a particular command, the user has to run the command in the correct mode. The modes that are available depend on the session's privilege level.

See next page for a complete command table with description, privilege level, and the corresponding mode.

Command Table

COMMAND	DESCRIPTION	P	M
show access management	Use the show access management user EXEC command without keywords to display the access management configuration, or use the statistics keyword to display statistics, or use the <AccessId> keyword to display the specific access management entry.	15	EXEC
clear access management statistics	Use the clear access management statistics privileged EXEC command to clear the statistics maintained by access management.	15	EXEC
access management	Use the access management global configuration command to enable the access management. Use the no form of this command to disable the access management.	15	GLOBAL _CONFIG
access management <1-16> <1-4094> <ipv4_addr> [to <ipv4_addr>] { [web] [snmp] [telnet] | all }	Use the access management <AccessId> global configuration command to set the access management entry for IPv4 address.	15	GLOBAL _CONFIG
access management <1-16> <1-4094> <ipv6_addr> [to <ipv6_addr>] { [web] [snmp] [telnet] | all }	Use the access management <AccessId> global configuration command to set the access management entry for IPv6 address.	15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
no access management <1~16>	Use the no access management <AccessIdList> global configuration command to delete the specific access management entry.	15	GLOBAL_CONFIG
access-list action { permit | deny }	Use the access-list action interface configuration command to configure access-list action. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST
access-list rate-limiter <1-16>	Use the access-list rate-limiter interface configuration command to configure the access-list rate-limiter ID . The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST
no access-list rate-limiter	Use the no access-list rate-limiter interface configuration command to disable the access-list rate-limiter. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST
access-list { redirect | port-copy } interface { <port_type_id> | <port_type_list> }	Use the no access-list redirect interface configuration command to configure the access-list redirect interface.	15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
no access-list { redirect | port-copy }	Use the no access-list redirect interface configuration command to disable the access-list redirect. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST
access-list mirror	Use the access-list mirror interface configuration command to enable access-list mirror. Use the no form of this command to disable access-list mirror. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST
access-list logging	Use the access-list logging interface configuration command to enable access-list logging. Use the no form of this command to disable access-list logging. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST
access-list shutdown	Use the access-list shutdown interface configuration command to enable access-list shutdown. Use the no form of this command to disable access-list shutdown. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
access-list evc-policer <1-256>	Use the access-list evc-policer interface configuration command to configure the access-list evc-policer ID. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST
no access-list evc-policer	Use the no access-list evc-policer interface configuration command to configure the access-list evc-policer ID. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST
access-list policy <0-255>	Use the access-list policy interface configuration command to configure the access-list policy value. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST
no access-list policy	Use the no access-list policy interface configuration command to restore the default access-list policy ID. The access-list interface configuration will affect the received frames if it doesn't match any ACE.	15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
access-list port-state	Use the access-list port-state interface configuration command to enable access-list port state. Use the no form of this command to disable access-list port state.	15	INTERFACE_PORT_LIST
access-list rate-limiter [<1~16>] { pps <1,2,4,8,16,32,64,128,256,512>| 100pps <1-32767> | kpps <1,2,4,8,16,32,64,128,256,512,1024> | 100kbps <0-10000> }	Use the access-list rate-limiter global configuration command to configure the access-list rate-limiter.	15	INTERFACE_PORT_LIST
default access-list rate-limiter [<1~16>]	Use the default access-list rate-limiter global configuration command to restore the default setting of access-list rate-limiter.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
access-list ace [update] <1-256> [next {<1-256>|last}] [ingress {switch <switch_id>|switch-port {<1-53>|<1~53>}|interface {<port_-type_id>|<port_type_list>}|any}] [policy <0-255> [policy-bitmask <0x0-0xFF>]] [tag {tagged|untagged|any}] [vid {<1-4095>|any}] [tag-priority {<0-7>|0-1|2-3|4-5|6-7|0-3|4-7|any}] [dmac-type {unicast|multicast|broadcast|any}] [frametype { any| etype [etype-value {<0x600-0x7ff,0x801-0x805,0x807-0x86dc,0x86de-0xffff>|any}] [smac {<mac_addr>|any}] [dmac {<mac_addr>|any}]| arp [sip {<ipv4_sub-net>|any}] [dip {<ipv4_subnet>|any}] [smac {<mac_addr>|any}] [arp-opcode {arp|rarp|other|any}] [arp-flag [arp-request {<0-1>|any}] [arp-smac {<0-1>|any}] [arp-tmac {<0-1>|any}] [arp-len {<0-1>|any}] [arp-ip {<0-1>|any}] [arp-ether {<0-1>|any}]]| ipv4 [sip {<ipv4_subnet>|any}] [dip {<ipv4_subnet>|any}] [ip-protocol {<0,2-5,7-16,18-255>|any}] [ip-flag [ip-ttl {<0-1>|any}] [ip-options {<0-1>|any}] [ip-fragment {<0-1>|any}]]| ipv4-icmp [sip {<ipv4_-subnet>|any}] [dip {<ipv4_subnet>|any}] [icmp-type {<0-255>|any}] [icmp-code {<0-255>|any}] [ip-flag [ip-ttl {<0-1>|any}] [ip-options {<0-1>|any}] [ip-fragment {<0-1>|any}]]| ipv4-udp [sip {<ipv4_subnet>|any}] [dip {<ipv4_subnet>|any}] [sport {<0-65535> [to <0-65535>]|any}] [dport {<0-65535> [to <0-65535>]|any}] [ip-flag [ip-ttl {<0-1>|any}] [ip-options {<0-1>|any}] [ip-frag-ment {<0-1>|any}]]| ipv4-tcp [sip {<ipv4_sub-net>|any}] [dip {<ipv4_subnet>|any}] [sport {<0-65535> [to <0-65535>]|any}] [dport {<0-65535> [to <0-65535>]|any}] [ip-flag [ip-ttl {<0-1>|any}] [ip-options {<0-1>|any}] [ip-fragment {<0-1>|any}]] [tcp-flag [tcp-fin {<0-1>|any}] [tcp-syn {<0-1>|any}] [tcp-rst {<0-1>|any}] [tcp-psh {<0-1>|any}] [tcp-ack {<0-1>|any}] [tcp-urg {<0-1>|any}]]| ipv6 [next-header {<0-5,7-16,18-57,59-255>|any}] [sip {<ipv6_addr> [sip-bit-mask <uint>]|any}] [hop-limit {<0-1>|any}]| ipv6-icmp [sip {<ipv6_addr> [sip-bitmask <uint>]|any}] [icmp-type {<0-255>|any}] [icmp-code {<0-255>|any}] [hop-limit {<0-1>|any}]| ipv6-udp [sip {<ipv6_addr> [sip-bitmask <uint>]|any}] [sport {<0-65535> [to <0-65535>]|any}] [dport {<0-65535> [to <0-65535>]|any}] [hop-limit {<0-1>|any}]| ipv6-tcp [sip {<ipv6_addr> [sip-bitmask <uint>]|any}] [sport {<0-65535> [to <0-65535>]|any}] [dport {<0-65535> [to <0-65535>]|any}] [hop-limit {<0-1>|any}] [tcp-flag [tcp-fin {<0-1>|any}] [tcp-syn {<0-1>|any}] [tcp-rst {<0-1>|any}] [tcp-psh {<0-1>|any}] [tcp-ack {<0-1>|any}] [tcp-urg {<0-1>|any}]]}] [action {permit|deny|filter {switchport <1~53>|interface <port_type_list>}}] [rate-limiter {<1-16>|disable}] [evc-policer {<1-256>|disable}] [{redirect|port-copy} {switchport {<1-53>|<1~53>}|interface {<port_type_id>|<port_-type_list>}|disable}] [mirror [disable]] [logging [disable]] [shutdown [disable]] [lookup [disable]]	Use the access-list ace global configuration command to set the access-list ace. The command without the update keywrod will creates or overwrites an existing ACE, any unspecified parameter will be set to its default value. Use the update keyword to update an existing ACE and only specified parameter are modified. The ACE must ordered by an appropriate sequence, the received frame will only be hit on the first matched ACE. Use the next or last keyword to adjust the ACE's sequence order.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
no access-list ace <1~256>	Use the no access-list ace global configuration command to delete the access-list ace.	15	GLOBAL_CONFIG
show access-list [interface [<port_type_list>]] [rate-limiter [<1~16>]] [ace statistics [<1~256>]]	Use the show access-list privilege EXEC command without keywords to display the access-list configuration, or particularly the show access-list interface for the access-list interface configuration, or use the rate-limiter keyword to display access-list rate-limiter configuration, or use the ace keyword to display access-list ace configuration.	15	EXEC
clear access-list ace statistics	Use the clear access-list ace statistics privileged EXEC command to clear the statistics maintained by access-list, including access-list interface statistics and ACE's statistics.	15	EXEC

COMMAND	DESCRIPTION	P	M
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>]	Use the show access-list ace-status privilege EXEC command without keywords to display the access-list ace status for all access-list users, or particularly the access-list user for the access-list ace status. Use conflicts keyword to display the access-list ace that doesn't apply on on the hardware. In other word, it means the specific ACE is not applied to the hardware due to hardware limitations.	15	EXEC
show aggregation [mode]		15	EXEC
aggregation mode { [smac] [dmac] [ip] [port] }		15	GLOBAL_CONFIG
no aggregation mode		15	GLOBAL_CONFIG
aggregation group <uint>		15	INTERFACE_PORT_LIST
no aggregation group		15	INTERFACE_PORT_LIST
ip arp inspection	Use the ip arp inspection global configuration command to globally enable ARP inspection. Use the no form of this command to globally disable ARP inspection.	13	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
ip arp inspection vlan <vlan_list>	Use the ip arp inspection global configuration command to globally enable ARP inspection. Use the no form of this command to globally disable ARP inspection.	13	GLOBAL_CONFIG
ip arp inspection vlan <vlan_list> logging { deny | permit | all }		13	GLOBAL_CONFIG
no ip arp inspection vlan <vlan_list> logging		13	GLOBAL_CONFIG
ip arp inspection entry interface <port_type_id> <vlan_id> <mac_ucast> <ipv4_ucast>		13	GLOBAL_CONFIG
arp_inspection_translate		13	GLOBAL_CONFIG
arp_inspection_port_mode	Use the ip arp inspection trust interface configuration command to configure a port as trusted for ARP inspection purposes. Use the no form of this command to configure a port as untrusted.	13	INTERFACE_PORT_LIST
arp_inspection_port_check_vlan	Use the ip arp inspection check-vlan interface configuration command to configure a port as VLAN mode for ARP inspection purposes. Use the no form of this command to configure a port as default.	13	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
ip arp inspection logging { deny | permit | all }	Use the ip arp inspection logging interface configuration command to configure a port as some logging mode for ARP inspection purposes. Use the no form of this command to configure a port as logging none.	13	INTERFACE_PORT_LIST
no ip arp inspection logging	Use the no ip arp inspection logging interface configuration command to configure a port as default logging mode for ARP inspection purposes.	13	INTERFACE_PORT_LIST
show ip arp inspection [interface <port_type_list> | vlan <vlan_list>]		0	EXEC
show ip arp inspection entry [dhcp-snooping | static] [interface <port_type_list>]		13	EXEC
aaa authentication login { telnet | ssh | http } { [local | radius | tacacs] ... }	Use the aaa authentication login command to configure the authentication methods.	15	GLOBAL_CONFIG
no aaa authentication login { telnet | ssh | http }		15	GLOBAL_CONFIG
radius-server timeout <1-1000>	Use the radius-server timeout command to configure the global RADIUS timeout value.	15	GLOBAL_CONFIG
no radius-server timeout	Use the no radius-server timeout command to reset the global RADIUS timeout value to default.	15	GLOBAL_CONFIG
radius-server retransmit <1-1000>	Use the radius-server retransmit command to configure the global RADIUS retransmit value.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
no radius-server retransmit	Use the no radius-server retransmit command to reset the global RADIUS retransmit value to default.	15	GLOBAL_CONFIG
radius-server deadtime <1-1440>	Use the radius-server deadtime command to configure the global RADIUS deadtime value.	15	GLOBAL_CONFIG
no radius-server deadtime	Use the no radius-server deadtime command to reset the global RADIUS deadtime value to default.	15	GLOBAL_CONFIG
radius-server key <line1-63>	Use the radius-server key command to configure the global RADIUS key.	15	GLOBAL_CONFIG
no radius-server key	Use the no radius-server key command to remove the global RADIUS key.	15	GLOBAL_CONFIG
radius-server attribute 4 <ipv4_ucast>		15	GLOBAL_CONFIG
no radius-server attribute 4		15	GLOBAL_CONFIG
radius-server attribute 95 <ipv6_ucast>		15	GLOBAL_CONFIG
no radius-server attribute 95		15	GLOBAL_CONFIG
radius-server attribute 32 <line1-253>		15	GLOBAL_CONFIG
no radius-server attribute 32		15	GLOBAL_CONFIG
radius-server host <word1-255> [auth-port <0-65535>] [acct-port <0-65535>] [timeout <1-1000>] [retransmit <1-1000>] [key <line1-63>]	Use the radius-server host command to add a new RADIUS host.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
no radius-server host <word1-255> [auth-port <0-65535>] [acct-port <0-65535>]	Use the no radius-server host command to delete an existing RADIUS host.	15	GLOBAL _CONFIG
tacacs-server timeout <1-1000>	Use the tacacs-server timeout command to configure the global TACACS+ timeout value.	15	GLOBAL _CONFIG
no tacacs-server timeout	Use the no tacacs-server timeout command to reset the global TACACS+ timeout value to default.	15	GLOBAL _CONFIG
tacacs-server deadtime <1-1440>	Use the tacacs-server deadtime command to configure the global TACACS+ deadtime value.	15	GLOBAL _CONFIG
no tacacs-server deadtime	Use the no tacacs-server deadtime command to reset the global TACACS+ deadtime value to default.	15	GLOBAL _CONFIG
tacacs-server key <line1-63>	Use the tacacs-server key command to configure the global TACACS+ key.	15	GLOBAL _CONFIG
no tacacs-server key	Use the no tacacs-server key command to remove the global TACACS+ key.	15	GLOBAL _CONFIG
tacacs-server host <word1-255> [port <0-65535>] [timeout <1-1000>] [key <line1-63>]	Use the tacacs-server host command to add a new TACACS+ host.	15	GLOBAL _CONFIG
no tacacs-server host <word1-255> [port <0-65535>]	Use the no tacacs-server host command to delete an existing TACACS+ host.	15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
show aaa	Use the show aaa command to view the currently active authentication login methods.	15	GLOBAL_CONFIG
show radius-server [statistics]	Use the show radius-server command to view the current RADIUS configuration and statistics.	15	EXEC
show tacacs-server	Use the show tacacs-server command to view the current TACACS+ configuration.	15	EXEC
debug auth { telnet | ssh | http } <word31> [<word31>]		debug	EXEC
clock summer-time <word16> recurring [<1-5> <1-7> <1-12> <hhmm> <1-5> <1-7> <1-12> <hhmm> [<1-1440>]]		13	GLOBAL_CONFIG
clock summer-time <word16> date [<1-12> <1-31> <2000-2097> <hhmm> <1-12> <1-31> <2000-2097> <hhmm> [<1-1440>]]		13	GLOBAL_CONFIG
no clock summer-time		13	GLOBAL_CONFIG
clock timezone <word16> <-23-23> [<0-59>]		13	GLOBAL_CONFIG
no clock timezone		13	GLOBAL_CONFIG
show clock detail		0	EXEC
clock summer-time <word16> recurring [<1-5> <1-7> <1-12> <hhmm> <1-5> <1-7> <1-12> <hhmm> [<1-1440>]]		13	GLOBAL_CONFIG
clock summer-time <word16> date [<1-12> <1-31> <2000-2097> <hhmm> <1-12> <1-31> <2000-2097> <hhmm> [<1-1440>]]		13	GLOBAL_CONFIG
no clock summer-time		13	GLOBAL_CONFIG
clock timezone <word16> <-23-23> [<0-59>]		13	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
no clock timezone		13	GLOBAL _CONFIG
show clock detail		0	EXEC
show ip dhcp detailed statistics { server | client | snooping | relay | normal-forward | combined } [interface <port_type_list>]	Use the show ip dhcp detailed statistics user EXEC command to display statistics. Notice that the normal forward per-port TX statistics isn't increased if the incoming DHCP packet is done by L3 forwarding mechanism. Notice that the normal forward per-port TX statistics isn't increased if the incoming DHCP packet is done by L3 forwarding mechanism.	0	EXEC
clear ip dhcp detailed statistics { server | client | snooping | relay | helper | all } [interface <port_type_list>]	Use the clear ip dhcp detailed statistics privileged EXEC command to clear the statistics, or particularly the IP DHCP statistics for the interface. Notice that except for clear statistics on all interfaces, clear the statistics on specific port may not take effect on global statistics since it gathers the different layer overview.	15	EXEC
clear ip dhcp relay statistics	Use the clear ip dhcp relay statistics privileged EXEC command to clear the statistics maintained by IP DHCP realy.	15	EXEC

COMMAND	DESCRIPTION	P	M
show ip dhcp relay [statistics]	Use the show ip dhcp relay user EXEC command without keywords to display the DHCP relay configuration, or use the statistics keyword to display statistics.	0	EXEC
ip dhcp relay	Use the ip dhcp relay global configuration command to enable the DHCP relay server. Use the no form of this-command to disable the DHCP relay server.	15	GLOBAL _CONFIG
ip helper-address <ipv4_ucast>	Use the ip helper-address global configuration command to configure the host address of DHCP relay server.	15	GLOBAL _CONFIG
no ip helper-address	Use the no ip helper-address global configuration command to clear the host address of DHCP relay server.	15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
ip dhcp relay information option	Use the ip dhcp relay information option global configuration command to enable the DHCP relay information option. Use the no form of this command to disable the DHCP relay information option. The option 82 circuit ID format as "[vlan_id][module_id][port_no]". The first four characters represent the VLAN ID, the fifth and sixth characters are the module ID(in standalone device it always equal 0, in stackable device it means switch ID), and the last two characters are the port number. For example, "00030108" means the DHCP message receive form VLAN ID 3, switch ID 1, port No 8. And the option 82 remote ID value is equal the switch MAC address.	15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
ip dhcp relay information policy { drop | keep | replace }	Use the ip dhcp relay information policy global configuration command to configure the DHCP relay information policy. When DHCP relay information mode operation is enabled, if the agent receives a DHCP message that already contains relay agent information it will enforce the policy. The 'Replace' policy is invalid when relay information mode is disabled.	15	GLOBAL_CONFIG
no ip dhcp relay information policy	Use the ip dhcp relay information policy global configuration command to restore the default DHCP relay information policy.	15	GLOBAL_CONFIG
show ip dhcp pool [<word32>]		0	EXEC
show ip dhcp pool counter [<word32>]		debug	EXEC
show ip dhcp excluded-address		0	EXEC
show ip dhcp server binding [state {allocated | committed | expired}] [type {automatic | manual | expired}]		0	EXEC
show ip dhcp server binding <ipv4_ucast>		0	EXEC
show ip dhcp server		0	EXEC
show ip dhcp server statistics		0	EXEC
show ip dhcp server declined-ip		0	EXEC
show ip dhcp server declined-ip <ipv4_addr>		0	EXEC
clear ip dhcp server binding <ipv4_ucast>		13	EXEC
clear ip dhcp server binding { automatic | manual | expired }		13	EXEC
clear ip dhcp server statistics		13	EXEC

COMMAND	DESCRIPTION	P	M
ip dhcp server		13	GLOBAL_CONFIG
ip dhcp excluded-address <ipv4_addr> [<ipv4_addr>]		13	GLOBAL_CONFIG
no ip dhcp pool <word32>		13	GLOBAL_CONFIG
ip dhcp server		13	INTER-FACE_VLAN
network <ipv4_addr> <ipv4_netmask>		13	DHCP_POOL
no network		13	DHCP_POOL
broadcast <ipv4_addr>		13	DHCP_POOL
no broadcast		13	DHCP_POOL
default-router <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast>]]]		13	DHCP_POOL
no default-router		13	DHCP_POOL
lease { <0-365> [<0-23> [<uint>]] | infinite }		13	DHCP_POOL
no lease		13	DHCP_POOL
domain-name <word128>		13	DHCP_POOL
no domain-name		13	DHCP_POOL
dns-server <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast>]]]		13	DHCP_POOL
no dns-server		13	DHCP_POOL
ntp-server <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast>]]]		13	DHCP_POOL
no ntp-server		13	DHCP_POOL

COMMAND	DESCRIPTION	P	M
netbios-name-server <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_u-cast>]]]		13	DHCP_POOL
no netbios-name-server		13	DHCP_POOL
netbios-node-type { b-node | h-node | m-node | p-node }		13	DHCP_POOL
no netbios-node-type		13	DHCP_POOL
netbios-scope <line128>		13	DHCP_POOL
no netbios-scope		13	DHCP_POOL
nis-domain-name <word128>		13	DHCP_POOL
no nis-domain-name		13	DHCP_POOL
nis-server <ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast> [<ipv4_ucast>]]]		13	DHCP_POOL
no nis-server		13	DHCP_POOL
host <ipv4_ucast> <ipv4_netmask>		13	DHCP_POOL
no host		13	DHCP_POOL
client-identifier { fqdn <line128> | mac-address <mac_addr> }		13	DHCP_POOL
no client-identifier		13	DHCP_POOL
hardware-address <mac_ucast>		13	DHCP_POOL
no hardware-address		13	DHCP_POOL
client-name <word32>		13	DHCP_POOL
no client-name		13	DHCP_POOL

COMMAND	DESCRIPTION	P	M
vendor class-identifier <string64> specific-info <hexval32>		13	DHCP_POOL
no vendor class-identifier <string64>		13	DHCP_POOL
debug dhcp server memsize		debug	EXEC
debug dhcp server declined add <ipv4_addr>		debug	EXEC
debug dhcp server declined delete <ipv4_addr>		debug	EXEC
show ip dhcp snooping [interface <port_-type_list>]	Use the show ip dhcp snooping user EXEC command to display the DHCP snooping configuration.	0	EXEC
show ip dhcp snooping [statistics] [interface <port_type_list>]	Use the show ip dhcp snooping user EXEC command without keywords to display the DHCP snooping configuration, or particularly the ip dhcp snooping statistics for the interface, or use the statistics keyword to display statistics.	0	EXEC
clear ip dhcp snooping statistics [interface <port_type_list>]	Use the clear ip dhcp snooping statistics privileged EXEC command to clear the statistics maintained by IP DHCP snooping, or particularly the IP DHCP snooping statistics for the interface.	15	EXEC
ip dhcp snooping	Use the ip dhcp snooping global configuration command to globally enable DHCP snooping. Use the no form of this command to globally disable DHCP snooping.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
dhcp_snooping_port_mode	Use the ip dhcp snooping trust interface configuration command to configure a port as trusted for DHCP snooping purposes. Use the no form of this command to configure a port as untrusted.	15	INTERFACE_PORT_LIST
show ip dhcp snooping table	Use the show ip dhcp snooping table user EXEC command to display the IP assigned information that is obtained from DHCP server except for local VLAN interface IP addresses.	15	EXEC
ip name-server { <ipv4_ucast> | dhcp [interface vlan <vlan_id>] }	Set the DNS server for resolving domain names	15	GLOBAL_CONFIG
no ip name-server	Stop resolving domain names by accessing DNS server	15	GLOBAL_CONFIG
show ip name-server	Display the active domain name server information	0	EXEC
ip dns proxy	Enable DNS proxy service	15	GLOBAL_CONFIG
show version	Use show version to display firmware information.	0	EXEC
firmware upgrade <word>	Use firmware upgrade to load new firmware image to the switch.	15	EXEC
firmware swap	Use firmware swap to swap the active and alternative firmware images.	15	EXEC
show green-ethernet fan	Shows Fan status (chip Temperature and fan speed).	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
green-ethernet fan temp-on <-127-127>	Sets temperature at which to turn fan on to the lowest speed.	15	GLOBAL _CONFIG
no green-ethernet fan temp-on	Sets temperature at which to turn fan on to the lowest speed to default.	15	GLOBAL _CONFIG
green-ethernet fan temp-max <-127-127>	Sets temperature where the fan must be running at full speed.	15	GLOBAL _CONFIG
no green-ethernet fan temp-max	Sets temperature at which the fan shall be running at full speed to default.	15	GLOBAL _CONFIG
green-ethernet led interval <0~24> intensity <0-100>	Use green-ethernet led interval to configure the LED intensity at specific interval of the day.	15	GLOBAL _CONFIG
no green-ethernet led interval <0~24>		15	GLOBAL _CONFIG
green-ethernet led on-event { [link-change <0-65535>] [error] }*1	Use green-ethernet led on-event to configure when to turn LEDs intensity to 100%%.	15	GLOBAL _CONFIG
no green-ethernet led on-event [link-change] [error]		15	GLOBAL _CONFIG
show green-ethernet eee [interface <port_type_list>]	Shows Green Ethernet EEE status.	15	EXEC
show green-ethernet short-reach [interface <port_type_list>]	Shows Green Ethernet short-reach status.	15	EXEC
show green-ethernet energy-detect [interface <port_type_list>]	Shows Green Ethernet energy-detect status.	15	EXEC
show green-ethernet [interface <port_type_list>]	Shows Green Ethernet status.	15	EXEC
green-ethernet eee	Sets EEE mode.	15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
green-ethernet eee urgent-queues [<range_list>]	Sets EEE urgeent queues.	15	INTER-FACE_PORT_LIST
green-ethernet eee optimize-for-power	Sets if EEE should be optimized for least traf-fic latency or least power comsumption	15	GLOBAL_CONFIG
green-ethernet energy-detect	Enables energy-detect power savings.	15	INTER-FACE_PORT_LIST
green-ethernet short-reach	Enables short-reach power savings.	15	INTER-FACE_PORT_LIST
show ip http server secure status	Use the show ip http server secure status privileged EXEC com-mand to display the secure HTTP web server status.	15	EXEC
ip http secure-server	Use the ip http secure-server global configu-ration command to enable the secure HTTP web server. Use the no form of this command to disable the secure HTTP web server.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
ip http secure-redirect	Use the http secure-redirect global configuration command to enable the secure HTTP web redirection. When the secure HTTP web server is enabled, the feature automatic redirect the none secure HTTP web connection to the secure HTTP web connection. Use the no form of this command to disable the secure HTTP web redirection.	15	GLOBAL_CONFIG
reload { { { cold | warm } [sid <1-16>] } | { defaults [keep-ip] } }	Reload system, either cold (reboot) or restore defaults without reboot.	15	EXEC
show running-config [all-defaults]		15	EXEC
show running-config feature <cword> [all-defaults]		15	EXEC
show running-config interface <port_type_list> [all-defaults]		15	EXEC
show running-config interface vlan <vlan_list> [all-defaults]		15	EXEC
show running-config vlan <vlan_list> [all-defaults]		15	EXEC
show running-config line vty <range_list> [all-defaults]		15	EXEC
copy { startup-config | running-config | <word> } { startup-config | running-config | <word> } [syntax-check]		15	EXEC
dir		15	EXEC
more <word>		15	EXEC
delete <word>		debug	EXEC
debug icfg wipe-flash-fs-conf-block		debug	EXEC
debug icfg wipe-specific-block {local|global} <uint>		debug	EXEC

COMMAND	DESCRIPTION	P	M
debug icfg silent-upgrade status		debug	EXEC
debug icfg dir		debug	EXEC
debug icfg error-trace <line>		debug	EXEC
ip routing	Enable routing for IPv4 and IPv6	15	GLOBAL_CONFIG
no ip routing	Disable routing for IPv4 and IPv6	15	GLOBAL_CONFIG
ip address {{<ipv4_addr> <ipv4_net-mask>} | {dhcp [fallback <ipv4_addr> <ipv4_netmask> [timeout <uint>]]}}	IP address configura-tion	15	INTER-FACE_VLAN
ip dhcp retry interface vlan <vlan_id>	Restart the dhcp client	15	EXEC
no ip address	IP address configura-tion	15	INTER-FACE_VLAN
ip route <ipv4_addr> <ipv4_netmask> <ipv4_addr>	Add new IP route	15	GLOBAL_CONFIG
no ip route <ipv4_addr> <ipv4_netmask> <ipv4_addr>	Delete an existing IP route	15	GLOBAL_CONFIG
show interface vlan [<vlan_list>]	Vlan interface status	15	EXEC
show ip interface brief	Brief IP interface status	0	EXEC
show ip arp	Print ARP table	0	EXEC
clear ip arp	Clear ARP cache	0	EXEC
show ip route	Routing table status	0	EXEC
ping ip <word1-255> [repeat <1-60>] [size <2-1452>] [interval <0-30>]		0	EXEC
clear ip statistics [system] [interface vlan <vlan_list>] [icmp] [icmp-msg <0~255>]		0	EXEC
show ip statistics [system] [interface vlan <vlan_list>] [icmp] [icmp-msg <0~255>]		0	EXEC

COMMAND	DESCRIPTION	P	M
debug ipstack log [ERR|NOERR] [WARN-ING|NOWARNING] [NOTICE|NONOTICE] [INFO|NOINFO] [DEBUG|NODEBUG] [MDEBUG|NOMDEBUG] [IOCTL|NOIOCTL] [INIT|NOINIT] [ADDR|NOADDR] [FAIL|NOFAIL] [EMERG|NOEMERG] [CRIT|NOCRIT]		debug	EXEC
debug ip kmem		debug	EXEC
debug ip route		debug	EXEC
debug ip sockets		debug	EXEC
debug ip lpm stat ip <vlan_list>		debug	EXEC
debug ip lpm stat ipv6 <vlan_list>		debug	EXEC
debug ip lpm stat clear <vlan_list>		debug	EXEC
debug ip lpm sticky clear		debug	EXEC
debug ip lpm usage		debug	EXEC
debug ip global interface table change		debug	EXEC
debug ip vlan ipv4 created <vlan_list>		debug	EXEC
debug ip vlan ipv4 changed <vlan_list>		debug	EXEC
debug ip vlan ipv6 created <vlan_list>		debug	EXEC
debug ip vlan ipv6 changed <vlan_list>		debug	EXEC
show ip igmp snooping mrouter [detail]		0	EXEC
clear ip igmp snooping [vlan <vlan_list>] statistics		15	EXEC
show ip igmp snooping [vlan <vlan_list>] [group-database [interface <port_-type_list>] [sfm-information]] [detail]		0	EXEC

COMMAND	DESCRIPTION	P	M
ip igmp snooping		15	GLOBAL _CONFIG
ip igmp unknown-flooding		15	GLOBAL _CONFIG
ip igmp host-proxy [leave-proxy]		15	GLOBAL _CONFIG
ip igmp ssm-range <ipv4_mcast> <4-32>		15	GLOBAL _CONFIG
no ip igmp ssm-range		15	GLOBAL _CONFIG
ip igmp snooping vlan <vlan_list>		15	GLOBAL _CONFIG
no ip igmp snooping vlan [<vlan_list>]		15	GLOBAL _CONFIG
ip igmp snooping		15	INTER-FACE_VLAN
ip igmp snooping querier { election | address <ipv4_ucast> }		15	INTER-FACE_VLAN
no ip igmp snooping querier { election | address }		15	INTER-FACE_VLAN
ip igmp snooping compatibility { auto | v1 | v2 | v3 }		15	INTER-FACE_VLAN
no ip igmp snooping compatibility		15	INTER-FACE_VLAN
ip igmp snooping priority <0-7>		15	INTER-FACE_VLAN
no ip igmp snooping priority		15	INTER-FACE_VLAN
ip igmp snooping robustness-variable <1-255>		15	INTER-FACE_VLAN

COMMAND	DESCRIPTION	P	M
no ip igmp snooping robustness-variable		15	INTER-FACE_VLAN
ip igmp snooping query-interval <1-31744>		15	INTER-FACE_VLAN
no ip igmp snooping query-interval		15	INTER-FACE_VLAN
ip igmp snooping query-max-response-time <0-31744>		15	INTER-FACE_VLAN
no ip igmp snooping query-max-response-time		15	INTER-FACE_VLAN
ip igmp snooping last-member-query-interval <0-31744>		15	INTER-FACE_VLAN
no ip igmp snooping last-member-query-interval		15	INTER-FACE_VLAN
ip igmp snooping unsolicited-report-interval <0-31744>		15	INTER-FACE_VLAN
no ip igmp snooping unsolicited-report-interval		15	INTER-FACE_VLAN
ip igmp snooping immediate-leave		15	INTER-FACE_VLAN
ip igmp snooping mrouter		15	INTER-FACE_PORT_LIST
ip igmp snooping max-groups <1-10>		15	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
no ip igmp snooping max-groups		15	INTER-FACE_PORT_LIST
ip igmp snooping filter <word16>		15	INTER-FACE_PORT_LIST
no ip igmp snooping filter		15	INTER-FACE_PORT_LIST
ipv6 mld snooping		15	GLOBAL_CONFIG
ipv6 mld unknown-flooding		15	GLOBAL_CONFIG
ipv6 mld host-proxy [leave-proxy]		15	GLOBAL_CONFIG
ipv6 mld ssm-range <ipv6_mcast> <8-128>		15	GLOBAL_CONFIG
no ipv6 mld ssm-range		15	GLOBAL_CONFIG
ipv6 mld snooping vlan <vlan_list>		15	GLOBAL_CONFIG
no ipv6 mld snooping vlan [<vlan_list>]		15	GLOBAL_CONFIG
ipv6 mld snooping immediate-leave		15	INTER-FACE_PORT_LIST
ipv6 mld snooping mrouter		15	INTER-FACE_PORT_LIST
ipv6 mld snooping max-groups <1-10>		15	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
no ipv6 mld snooping max-groups		15	INTER-FACE_PORT_LIST
ipv6 mld snooping filter <word16>		15	INTER-FACE_PORT_LIST
no ipv6 mld snooping filter		15	INTER-FACE_PORT_LIST
show ipv6 mld snooping mrouter [detail]		0	EXEC
clear ipv6 mld snooping [vlan <vlan_list>] statistics		15	EXEC
show ipv6 mld snooping [vlan <vlan_list>] [group-database [interface <port_-type_list>] [sfm-information]] [detail]		0	EXEC
ipv6 mld snooping		15	INTER-FACE_VLAN
ipv6 mld snooping querier election		15	INTER-FACE_VLAN
ipv6 mld snooping compatibility { auto | v1 | v2 }		15	INTER-FACE_VLAN
no ipv6 mld snooping compatibility		15	INTER-FACE_VLAN
ipv6 mld snooping priority <0-7>		15	INTER-FACE_VLAN
no ipv6 mld snooping priority		15	INTER-FACE_VLAN
ipv6 mld snooping robustness-variable <1-255>		15	INTER-FACE_VLAN

COMMAND	DESCRIPTION	P	M
no ipv6 mld snooping robustness-variable		15	INTER-FACE_VLAN
ipv6 mld snooping query-interval <1-31744>		15	INTER-FACE_VLAN
no ipv6 mld snooping query-interval		15	INTER-FACE_VLAN
ipv6 mld snooping query-max-response-time <0-31744>		15	INTER-FACE_VLAN
no ipv6 mld snooping query-max-response-time		15	INTER-FACE_VLAN
ipv6 mld snooping last-member-query-interval <0-31744>		15	INTER-FACE_VLAN
no ipv6 mld snooping last-member-query-interval		15	INTER-FACE_VLAN
ipv6 mld snooping unsolicited-report-interval <0-31744>		15	INTER-FACE_VLAN
no ipv6 mld snooping unsolicited-report-interval		15	INTER-FACE_VLAN
ip verify source		13	GLOBAL_CONFIG
i ip verify source		13	INTER-FACE_PORT_LIST
ip verify source limit <0-2>		13	INTER-FACE_PORT_LIST
no ip verify source limit		13	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
ip verify source translate		13	GLOBAL_CONFIG
show ip verify source [interface <port_type_list>]		0	EXEC
show ip source binding [dhcp-snooping | static] [interface <port_type_list>]		13	EXEC
ip source binding interface <port_type_id> <vlan_id> <ipv4_ucast> <mac_ucast>		13	GLOBAL_CONFIG
ip source binding interface <port_type_id> <vlan_id> <ipv4_ucast> <ipv4_netmask>		13	GLOBAL_CONFIG
show lacp { internal | statistics | system-id | neighbour }	Show LACP configuration and status	15	EXEC
clear lacp statistics	Clear all LACP statistics	15	EXEC
lacp system-priority <1-65535>	Set the LACP system priority	15	GLOBAL_CONFIG
lacp	Enable LACP on an interface	15	INTERFACE_PORT_LIST
lacp key { <1-65535> | auto }	Set the LACP key	15	INTERFACE_PORT_LIST
lacp role { active | passive }	Set the LACP role, active or passive in transmitting BPDUs	15	INTERFACE_PORT_LIST
lacp timeout { fast | slow }	Set the LACP timeout, i.e. how fast to transmit BPDUs, once a sec or once each 30 sec.	15	INTERFACE_PORT_LIST
lacp port-priority <1-65535>	Set the lacp port priority,	15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
lldp holdtime <2-10>	Sets LLDP hold time (The neighbor switch will discarded the LLDP information after \"hold time\" multiplied with \"timer\" seconds)	15	GLOBAL _CONFIG
no lldp holdtime		15	GLOBAL _CONFIG
lldp timer <5-32768>	Sets LLDP TX interval (The time between each LLDP frame transmitted in seconds).	15	GLOBAL _CONFIG
no lldp timer		15	GLOBAL _CONFIG
lldp reinit <1-10>	Sets LLDP reinitialization delay.	15	GLOBAL _CONFIG
no lldp reinit	Sets LLDP reinitialization delay.	15	GLOBAL _CONFIG
lldp tlv-select {management-address | port-description | system-capabilities | system-description | system-name}	Enables/disables LLDP optional TLVs.	15	INTERFACE_PORT_LIST
lldp transmit	Sets if switch shall transmit LLDP frames.	15	INTERFACE_PORT_LIST
lldp receive	Sets if switch shall update LLDP entry table with incoming LLDP information.	15	INTERFACE_PORT_LIST
show lldp neighbors [interface <port_type_list>]	Shows the LLDP neighbors information.	0	EXEC
show lldp statistics [interface <port_type_list>]	Shows the LLDP statistics information.	0	EXEC
clear lldp statistics	Clears the LLDP statistics.	0	EXEC

COMMAND	DESCRIPTION	P	M
lldp transmission-delay <1-8192>	Sets LLDP transmission-delay. LLDP transmission delay (the amount of time that the transmission of LLDP frames will delayed after LLDP configuration has changed) in seconds.)	15	GLOBAL_CONFIG
no lldp transmission-delay		15	GLOBAL_CONFIG
lldp cdp-aware	Configures if the interface shall be CDP aware (CDP discovery information is added to the LLDP neighbor table)	15	INTERFACE_PORT_LIST
show lldp med remote-device [interface <port_type_list>]	Show LLDP-MED neighbor device information.	0	EXEC
show lldp med media-vlan-policy [<0~31>]	Show media vlan policy(ies)	0	EXEC
lldp med location-tlv latitude { north | south } <word8>	Use the lldp med location-tlv latitude to configure the location latitude.	15	GLOBAL_CONFIG
no lldp med location-tlv latitude	Use no lldp med location-tlv latitude to configure the latitude location to north 0 degrees.	15	GLOBAL_CONFIG
lldp med location-tlv longitude { west | east } <word9>	Use the lldp med location-tlv longitude to configure the location longitude.	15	GLOBAL_CONFIG
no lldp med location-tlv longitude	Use no lldp med location-tlv longitude to configure the longitude location to north 0 degrees.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
lldp med location-tlv altitude { meters | floors } <word11>	Use the lldp med location-tlv altitude to configure the location altitude.	15	GLOBAL_CONFIG
no lldp med location-tlv altitude	Use the lldp med location-tlv altitude to configure the location altitude.	15	GLOBAL_CONFIG
lldp med location-tlv civic-addr { country | state | county | city | district | block | street | leading-street-direction | trailing-street-suffix | street-suffix | house-no | house-no-suffix | landmark | additional-info | name | zip-code | building | apartment | floor | room-number | place-type | postal-community-name | p-o-box | additional-code } <string250>	Use lldp med location-tlv civic-addr to configure the civic address.	15	GLOBAL_CONFIG
no lldp med location-tlv civic-addr { country | state | county | city | district | block | street | leading-street-direction | trailing-street-suffix | street-suffix | house-no | house-no-suffix | landmark | additional-info | name | zip-code | building | apartment | floor | room-number | place-type | postal-community-name | p-o-box | additional-code }		15	GLOBAL_CONFIG
lldp med location-tlv elin-addr <dword25>	Use the lldp med location-tlv elin-addr to configure value for the Emergency Call Service	15	GLOBAL_CONFIG
no lldp med location-tlv elin-addr	Use the no lldp med location-tlv elin-addr to configure value for the Emergency Call Service to default value.	15	GLOBAL_CONFIG
lldp med transmit-tlv [capabilities] [location] [network-policy]	Use the lldp med transmit-tlv to configure which TLVs to transmit to link partner.	15	INTERFACE_PORT_LIST
no lldp med transmit-tlv [capabilities] [location] [network-policy]		15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
lldp med datum { wgs84 | nad83-navd88 | nad83-mllw }	Use the lldp med datum to configure the datum (geodetic system) to use.	15	GLOBAL_CONFIG
no lldp med datum		15	GLOBAL_CONFIG
lldp med fast <1-10>	Use the lldp med fast to configure the number of times the fast start LLDPDU are being sent during the activation of the fast start mechanism defined by LLDP-MED (1-10).	15	GLOBAL_CONFIG
no lldp med fast		15	GLOBAL_CONFIG
lldp med media-vlan-policy <0-31> { voice | voice-signaling | guest-voice-signaling | guest-voice | softphone-voice | video-conferencing | streaming-video | video-signaling } { tagged <vlan_id> | untagged } [l2-priority <0-7>] [dscp <0-63>]	Use the media-vlan-policy to create a policy, which can be assigned to an interface.	15	GLOBAL_CONFIG
no lldp med media-vlan-policy <0~31>		15	GLOBAL_CONFIG
lldp med media-vlan policy-list <range_list>	Use the media-vlan policy-list to assign policy to the interface.	15	INTERFACE_PORT_LIST
loop-protect	Loop protection configuration	15	GLOBAL_CONFIG
loop-protect transmit-time <1-10>	Loop protection transmit time interval	15	GLOBAL_CONFIG
no loop-protect transmit-time		15	GLOBAL_CONFIG
loop-protect shutdown-time <0-604800>	Loop protection shutdown time interval	15	GLOBAL_CONFIG
no loop-protect shutdown-time		15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
loop-protect	Loop protection configuration	15	INTERFACE_PORT_LIST
loop-protect action { [shutdown] [log] }*1		15	INTERFACE_PORT_LIST
no loop-protect action		15	INTERFACE_PORT_LIST
loop-protect tx-mode		15	INTERFACE_PORT_LIST
show loop-protect [interface <port_type_list>]		13	EXEC
mac address-table learning [secure]	Enable learning on port	15	INTERFACE_PORT_LIST
show mac address-table [conf | static | aging-time | { { learning | count } [interface <port_type_list>] } | { address <mac_addr> [vlan <vlan_id>] } | vlan <vlan_id> | interface <port_type_list>]		0	EXEC
clear mac address-table		15	EXEC
mac address-table static <mac_addr> vlan <vlan_id> interface <port_type_list>	Assign a static mac address to this port	15	GLOBAL_CONFIG
mac address-table aging-time <0,10-1000000>	Set switch aging time, 0 to disable.	15	GLOBAL_CONFIG
no mac address-table aging-time	Default aging time.	15	GLOBAL_CONFIG
monitor destination interface <port_type_id>	Sets monitor destination port.	15	GLOBAL_CONFIG
no monitor destination	Sets monitor destination port.	15	GLOBAL_CONFIG
monitor source { { interface <port_type_list> } | { cpu [<range_list>] } } { both | rx | tx }	Sets monitor source port(s).	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
no monitor source { { interface <port_-type_list> } | { cpu [<range_list>] } }	Sets monitor source port(s).	15	GLOBAL _CONFIG
debug chip [{ 0 | 1 | all }]		deb ug	EXEC
debug api [interface <port_type_list>] [{ ail | cil }] [{ init | misc | port | counters | phy | vlan | pvlan | mac-table | acl | qos | aggr | stp | mirror | evc | erps | eps | packet | fdma | ts | pts | wm | ipmc | stack | cmef | mplscore | mplsoam | vxlat | oam | sgpio | l3 | afi | macsec }] [full] [clear]		deb ug	EXEC
debug suspend		deb ug	EXEC
debug resume		deb ug	EXEC
debug kr-conf [cm1 <-32-31>] [c0 <-32-31>] [cp1 <-32-31>] [ampl <300-1275>] [{ ps25 | ps35 | ps55 | ps70 | ps120 }] [en-ob | dis-ob] [ser-inv | ser-no-inv]		deb ug	INTER-FACE_P ORT_LIS T
show spanning-tree [summary | active | { interface <port_type_list> } | { detailed [interface <port_type_list>] } | { mst [config-uration | { <0-7> [interface <port_type_list>] }] }]		15	EXEC
clear spanning-tree { { statistics [interface <port_type_list>] } | { detected-protocols [interface <port_type_list>] } }		15	EXEC
spanning-tree mode { stp | rstp | mstp }		15	GLOBAL _CONFIG
no spanning-tree mode		15	GLOBAL _CONFIG
spanning-tree transmit hold-count <1-10>		15	GLOBAL _CONFIG
no spanning-tree transmit hold-count		15	GLOBAL _CONFIG
spanning-tree mst max-hops <6-40>		15	GLOBAL _CONFIG
no spanning-tree mst max-hops		15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
spanning-tree mst max-age <6-40> [forward-time <4-30>]		15	GLOBAL_CONFIG
no spanning-tree mst max-age		15	GLOBAL_CONFIG
spanning-tree mst forward-time <4-30>		15	GLOBAL_CONFIG
no spanning-tree mst forward-time		15	GLOBAL_CONFIG
spanning-tree edge bpdu-filter		15	GLOBAL_CONFIG
spanning-tree edge bpdu-guard		15	GLOBAL_CONFIG
spanning-tree recovery interval <30-86400>		15	GLOBAL_CONFIG
no spanning-tree recovery interval		15	GLOBAL_CONFIG
spanning-tree mst <0-7> priority <0-61440>		15	GLOBAL_CONFIG
no spanning-tree mst <0-7> priority		15	GLOBAL_CONFIG
spanning-tree mst <0-7> vlan <vlan_list>		15	GLOBAL_CONFIG
no spanning-tree mst <0-7> vlan		15	GLOBAL_CONFIG
spanning-tree mst name <word32> revision <0-65535>		15	GLOBAL_CONFIG
no spanning-tree mst name		15	GLOBAL_CONFIG
spanning-tree		15	INTERFACE_PORT_LIST
spanning-tree edge		15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
spanning-tree auto-edge		15	INTER-FACE_PORT_LIST
spanning-tree link-type { point-to-point | shared | auto }		15	INTER-FACE_PORT_LIST
no spanning-tree link-type		15	INTER-FACE_PORT_LIST
spanning-tree restricted-role		15	INTER-FACE_PORT_LIST
spanning-tree restricted-tcn		15	INTER-FACE_PORT_LIST
spanning-tree bpdu-guard		15	INTER-FACE_PORT_LIST
spanning-tree mst <0-7> cost { <1-200000000> | auto }		15	INTER-FACE_PORT_LIST
no spanning-tree mst <0-7> cost		15	INTER-FACE_PORT_LIST
spanning-tree mst <0-7> port-priority <0-240>		15	INTER-FACE_PORT_LIST
no spanning-tree mst <0-7> port-priority		15	INTER-FACE_PORT_LIST
spanning-tree		15	STP_-AGGR

COMMAND	DESCRIPTION	P	M
spanning-tree edge		15	STP_-AGGR
spanning-tree auto-edge		15	STP_-AGGR
spanning-tree link-type { point-to-point | shared | auto }		15	STP_-AGGR
no spanning-tree link-type		15	STP_-AGGR
spanning-tree restricted-role		15	STP_-AGGR
spanning-tree restricted-tcn		15	STP_-AGGR
spanning-tree bpdu-guard		15	STP_-AGGR
spanning-tree mst <0-7> cost { <1-200000000> | auto }		15	STP_-AGGR
no spanning-tree mst <0-7> cost		15	STP_-AGGR
spanning-tree mst <0-7> port-priority <0-240>		15	STP_-AGGR
no spanning-tree mst <0-7> port-priority		15	STP_-AGGR
mvr vlan <vlan_list> type { source | receiver }		15	INTER-FACE_PORT_LIST
mvr name <word16> type { source | receiver }		15	INTER-FACE_PORT_LIST
no mvr vlan <vlan_list> type		15	INTER-FACE_PORT_LIST
no mvr name <word16> type		15	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
mvr immediate-leave		15	INTER-FACE_PORT_LIST
clear mvr [vlan <vlan_list> | name <word16>] statistics		15	EXEC
show mvr [vlan <vlan_list> | name <word16>] [group-database [interface <port_type_list>] [sfm-information]] [detail]		0	EXEC
mvr		15	GLOBAL_CONFIG
mvr vlan <vlan_list> [name <word16>]		15	GLOBAL_CONFIG
no mvr vlan <vlan_list>		15	GLOBAL_CONFIG
mvr vlan <vlan_list> mode { dynamic | com-patible }		15	GLOBAL_CONFIG
mvr name <word16> mode { dynamic | compatible }		15	GLOBAL_CONFIG
no mvr vlan <vlan_list> mode		15	GLOBAL_CONFIG
no mvr name <word16> mode		15	GLOBAL_CONFIG
mvr vlan <vlan_list> igmp-address <ipv4_ucast>		15	GLOBAL_CONFIG
mvr name <word16> igmp-address <ipv4_ucast>		15	GLOBAL_CONFIG
no mvr vlan <vlan_list> igmp-address		15	GLOBAL_CONFIG
no mvr name <word16> igmp-address		15	GLOBAL_CONFIG
mvr vlan <vlan_list> frame priority <0-7>		15	GLOBAL_CONFIG
mvr vlan <vlan_list> frame tagged		15	GLOBAL_CONFIG
mvr name <word16> frame priority <0-7>		15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
mvr name <word16> frame tagged		15	GLOBAL _CONFIG
no mvr vlan <vlan_list> frame priority		15	GLOBAL _CONFIG
no mvr name <word16> frame priority		15	GLOBAL _CONFIG
mvr vlan <vlan_list> last-member-query-interval <0-31744>		15	GLOBAL _CONFIG
mvr name <word16> last-member-query-interval <0-31744>		15	GLOBAL _CONFIG
no mvr vlan <vlan_list> last-member-query-interval		15	GLOBAL _CONFIG
no mvr name <word16> last-member-query-interval		15	GLOBAL _CONFIG
mvr vlan <vlan_list> channel <word16>		15	GLOBAL _CONFIG
no mvr vlan <vlan_list> channel		15	GLOBAL _CONFIG
no mvr name <word16> channel		15	GLOBAL _CONFIG
show dot1x statistics { eapol | radius | all} [interface <port_type_list>]	Shows statistics for either eapol or radius.	0	EXEC
show dot1x status [interface <port_-type_list>] [brief]	Shows dot1x status, such as admin state, port state and last source.	0	EXEC
clear dot1x statistics [interface <port_-type_list>]	Clears the statistics counters	15	EXEC
dot1x re-authentication	Set Re-authentication state	15	GLOBAL _CONFIG
dot1x authentication timer re-authenticate <1-3600>	The period between re-authentication attempts in seconds	15	GLOBAL _CONFIG
no dot1x authentication timer re-authenti-cate		15	GLOBAL _CONFIG
dot1x timeout tx-period <1-65535>	the time between EAPOL retransmis-sions.	15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
no dot1x timeout tx-period		15	GLOBAL_CONFIG
dot1x authentication timer inactivity <10-1000000>	Time in seconds between check for activity on successfully authenticated MAC addresses.	15	GLOBAL_CONFIG
no dot1x authentication timer inactivity		15	GLOBAL_CONFIG
dot1x timeout quiet-period <10-1000000>	Time in seconds before a MAC-address that failed authentication gets a new authentication chance.	15	GLOBAL_CONFIG
no dot1x timeout quiet-period		15	GLOBAL_CONFIG
dot1x re-authenticate	Refresh (restart) 802.1X authentication process.	15	INTERFACE_PORT_LIST
dot1x initialize [interface <port_type_list>]	Force re-authentication immediately	15	EXEC
dot1x system-auth-control	Set the global NAS state	15	GLOBAL_CONFIG
dot1x port-control { force-authorized | force-unauthorized | auto | single | multi | mac-based }	Sets the port security state.	15	INTERFACE_PORT_LIST
no dot1x port-control	Sets the port security state.	15	INTERFACE_PORT_LIST
dot1x guest-vlan	Enables/disables guest VLAN	15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
dot1x max-reauth-req <1-255>	The number of times a Request Identity EAPOL frame is sent without response before considering entering the Guest VLAN	15	GLOBAL _CONFIG
no dot1x max-reauth-req	The number of times a Request Identity EAPOL frame is sent without response before considering entering the Guest VLAN	15	GLOBAL _CONFIG
dot1x guest-vlan <1-4095>	Guest VLAN ID used when entering the Guest VLAN.	15	GLOBAL _CONFIG
no dot1x guest-vlan	Guest VLAN ID used when entering the Guest VLAN.	15	GLOBAL _CONFIG
dot1x guest-vlan supplicant	The switch remembers if an EAPOL frame has been received on the port for the life-time of the port. Once the switch considers whether to enter the Guest VLAN, it will first check if this option is enabled or disabled. If disabled (unchecked; default), the switch will only enter the Guest VLAN if an EAPOL frame has not been received on the port for the life-time of the port. If enabled (checked), the switch will consider entering the Guest VLAN even if an EAPOL frame has been received on the port for the life-time of the port.	15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
dot1x radius-qos	Enables/disables per-port state of RADIUS-assigned QoS.	15	INTER-FACE_PORT_LIST
dot1x radius-vlan	Enables/disables per-port state of RADIUS-assigned VLAN.	15	INTER-FACE_PORT_LIST
dot1x feature { [guest-vlan] [radius-qos] [radius-vlan] }*1	Globally enables/disables a dot1x feature functionality	15	GLOBAL_CONFIG
show dot1x statistics { eapol | radius | all} [interface <port_type_list>]	Shows statistics for either eapol or radius.	0	EXEC
ntp	Enable NTP	13	GLOBAL_CONFIG
ntp server <1-5> ip-address {<ipv4_u-cast>|<ipv6_ucast>|<hostname>}		13	GLOBAL_CONFIG
ntp server <1-5> ip-address {<ipv4_u-cast>|<hostname>}		13	GLOBAL_CONFIG
no_ntp_server_ip_address		13	GLOBAL_CONFIG
show ntp status		13	EXEC
show platform phy [interface <port_-type_list>]	Show PHY module's information for all or a given interface	15	EXEC
show platform phy id [interface <port_-type_list>]	Platform PHY's IDs	15	EXEC
show platform phy instance		15	EXEC
show platform phy failover		15	EXEC
platform phy instance restart { cool | warm }		15	EXEC
platform phy instance default-activate		15	EXEC
show platform phy status [interface <port_-type_list>]		15	EXEC
no platform phy instance		15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
platform phy failover		15	INTER-FACE_PORT_LIST
debug phy read [<0~31>] [<0-0xffff>] [addr-sort]		debug	INTER-FACE_PORT_LIST
debug phy write [<0~31>] <0-0xffff> [<0-0xffff>]		debug	INTER-FACE_PORT_LIST
debug phy do-page-chk [enable|disable]		debug	EXEC
debug phy force-pass-through-speed {10G | 1G | 100M }		debug	INTER-FACE_PORT_LIST
debug phy reset		debug	INTER-FACE_PORT_LIST
debug phy gpio <0-13> mode {out-put|input|alternative}		debug	INTER-FACE_PORT_LIST
debug phy gpio <0-13> get		debug	INTER-FACE_PORT_LIST
show poe [interface <port_type_list>]	Use the show poe to show PoE status.	0	EXEC
poe mode { standard | plus }	Use poe mode to con-figure of PoE mode.	15	INTER-FACE_PORT_LIST
no poe mode	Use poe mode to con-figure of PoE mode.	15	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
poe priority { low | high | critical }	Use poe priority to configure PoE priority.	15	INTERFACE_PORT_LIST
no poe priority	Use poe priority to configure PoE priority.	15	INTERFACE_PORT_LIST
poe management mode { class-consumption | class-reserved-power | allocation-consumption | allocation-reserved-power | lldp-consumption | lldp-reserved-power }	Use management mode to configure PoE power management method.	15	GLOBAL_CONFIG
no poe management mode		15	GLOBAL_CONFIG
poe power limit { <fword2.1> }	Use poe power limit to configure the maximum allowed power for the interface when power management is in allocation mode.	15	INTERFACE_PORT_LIST
no poe power limit	Use poe power limit to configure the maximum allowed power for the interface when power management is in allocation mode.	15	INTERFACE_PORT_LIST
poe supply sid <1~16> <1-2000>	Use poe supply to specify the maximum power the power supply can deliver.	15	GLOBAL_CONFIG
no poe supply [sid <1~16>]		15	GLOBAL_CONFIG
poe schedule-mode	Configure PoE Schedule mode.	15	INTERFACE_PORT_LIST
no poe schedule-mode	disable PoE power management method.	15	INTERFACE_PORT_LIST
poe select-all <range_list>	Configure PoE Schedule mode.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
no poe schedule-all <range_list>	disable PoE power management method.	15	GLOBAL _CONFIG
poe delay-mode <range_list>	Configure PoE Power Delay mode.	15	GLOBAL _CONFIG
no poe delay-mode <range_list>		15	GLOBAL _CONFIG
poe delay-time <range_list> <0-300>	Configure PoE Power Delay time.	15	GLOBAL _CONFIG
poe hour <0-23>	This command is used to set hour time per week to enable PoE.	15	INTER-FACE_P ORT_LIS T
no poe hour <0-23>	This command is used to set hour time per week to disable PoE.	15	INTER-FACE_P ORT_LIS T
poe Sun	This command is used to set hour time on Sunday to enable PoE.	15	INTER-FACE_P ORT_LIS T
no poe Sun	This command is used to set hour time on Sunday to disble PoE.	15	INTER-FACE_P ORT_LIS T
poe Mon	This command is used to set hour time on Monday to enable PoE.	15	INTER-FACE_P ORT_LIS T
no poe Mon	This command is used to set hour time on Monday to disable PoE.	15	INTER-FACE_P ORT_LIS T
poe Tue	This command is used to set hour time on Tuesday to enable PoE.	15	INTER-FACE_P ORT_LIS T
no poe Tue	This command is used to set hour time on Tuesday to disable PoE.	15	INTER-FACE_P ORT_LIS T

COMMAND	DESCRIPTION	P	M
poe Wed	This command is used to set hour time on Wednesday to enable PoE.	15	INTER-FACE_PORT_LIST
no poe Wed	This command is used to set hour time on Wednesday to disable PoE.	15	INTER-FACE_PORT_LIST
poe Thr	This command is used to set hour time on Thursday to enable PoE.	15	INTER-FACE_PORT_LIST
no poe Thr	This command is used to set hour time on Thursday to enable PoE.	15	INTER-FACE_PORT_LIST
poe Fri	This command is used to set hour time on Friday to enable PoE.	15	INTER-FACE_PORT_LIST
no poe Fri	This command is used to set hour time on Friday to disable PoE.	15	INTER-FACE_PORT_LIST
poe Sat	This command is used to set hour time on Saturday to enable PoE.	15	INTER-FACE_PORT_LIST
no poe Sat	This command is used to set hour time on Saturday to disable PoE.	15	INTER-FACE_PORT_LIST
show interface <port_type_list> statistics [{ packets | bytes | errors | discards | filtered | { priority [<0~7>] } }] [{ up | down }]	Shows the statistics for the interface.	0	EXEC
show interface <port_type_list> veriphy	Run and display cable diagnostics.	0	EXEC
clear statistics [interface] <port_type_list>	Clears the statistics for the interface.	0	EXEC
show interface <port_type_list> capabilities		0	EXEC

COMMAND	DESCRIPTION	P	M
show interface <port_type_list> status	Display status for the interface.	0	EXEC
mtu <'VTSS_MAX_FRAME_LENGTH_-STANDARD'-'VTSS_MAX_-FRAME_LENGTH_MAX'>	Use mtu to specify maximum frame size (1518-9600 bytes).	15	INTER-FACE_P ORT_LIS T
no mtu	Use no mtu to set max-imum frame size to default.	15	INTER-FACE_P ORT_LIS T
shutdown	Use shutdown to shut-down the interface.	15	INTER-FACE_P ORT_LIS T
speed {2500 | 1000 | 100 | 10 | auto {[10] [100] [1000]} }	Configures interface speed. If you use 10, 100, or 1000 keywords with the auto keyword the port will only adver-tise the specified speeds.	15	INTER-FACE_P ORT_LIS T
no speed	Use "no speed" to con-figure interface to default speed.	15	INTER-FACE_P ORT_LIS T
duplex { half | full | auto [half | full] }	Use duplex to config-ure interface duplex mode.	15	INTER-FACE_P ORT_LIS T
no duplex	Use "no duplex" to set duplex to default.	15	INTER-FACE_P ORT_LIS T
media-type { rj45 | sfp | dual }	Use media-type to con-figure the interface media type.	15	INTER-FACE_P ORT_LIS T
no media-type	Use to configure the interface media-type type to default.	15	INTER-FACE_P ORT_LIS T

COMMAND	DESCRIPTION	P	M
flowcontrol { on | off }	Use flowcontrol to configure flow control for the interface.	15	INTERFACE_PORT_LIST
no flowcontrol	Use no flowcontrol to set flow control to default.	15	INTERFACE_PORT_LIST
excessive-restart	Use excessive-restart to configure backoff algorithm in half duplex mode.	15	INTERFACE_PORT_LIST
show web privilege group [<cword>] level		0	EXEC
web privilege group <cword> level { [cro <0-15>] [crw <0-15>] [sro <0-15>] [srw <0-15>] }*1		15	GLOBAL_CONFIG
no web privilege group [<cword>] level		15	GLOBAL_CONFIG
show port-security port [interface <port_type_list>]	Show MAC Addresses learned by Port Security	0	EXEC
show port-security switch [interface <port_type_list>]	Show Port Security status.	0	EXEC
no port-security shutdown [interface <port_type_list>]	Reopen one or more ports whose limit is exceeded and shut down.	15	EXEC
port-security	Enable/disable port security globally.	15	GLOBAL_CONFIG
port-security aging	Enable/disable port security aging.	15	GLOBAL_CONFIG
port-security aging time <10-10000000>	Time in seconds between check for activity on learned MAC addresses.	15	GLOBAL_CONFIG
no port-security aging time		15	GLOBAL_CONFIG
port-security	Enable/disable port security per interface.	15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
port-security maximum [<1-1024>]	Maximum number of MAC addresses that can be learned on this set of interfaces.	15	INTER-FACE_PORT_LIST
no port-security maximum		15	INTER-FACE_PORT_LIST
port-security violation { protect | trap | trap-shutdown | shutdown }	The action involved with exceeding the limit.	15	INTER-FACE_PORT_LIST
no port-security violation	The action involved with exceeding the limit.	15	INTER-FACE_PORT_LIST
pvlan <range_list>	Use the pvlan add or remove command to add or remove a port from a PVLAN.	13	INTER-FACE_PORT_LIST
pvlan isolation	Use the pvlan isolation command to add the port into an isolation group.	13	INTER-FACE_PORT_LIST
show pvlan [<range_list>]	Use the show pvlan command to view the PVLAN configuration.	13	EXEC
show pvlan isolation [interface <port_-type_list>]	Use the show pvlan isolation command to view the PVLAN isolation configuration.	13	EXEC
show qos [{ interface [<port_type_list>] } | wred | { maps [dscp-cos] [dscp-ingress-translation] [dscp-classify] [cos-dscp] [dscp-egress-translation] } | storm | { qce [<1-256>] }]		15	EXEC
qos map dscp-cos { <0~63> | <dscp> } cos <0-7> dpl <dpl>		15	GLOBAL_CONFIG
no qos map dscp-cos { <0~63> | <dscp> }		15	GLOBAL_CONFIG
qos map dscp-ingress-translation { <0~63> | <dscp> } to { <0-63> | <dscp> }		15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
no qos map dscp-ingress-translation { <0~63> | <dscp> }		15	GLOBAL _CONFIG
qos map dscp-classify { <0~63> | <dscp> }		15	GLOBAL _CONFIG
qos map cos-dscp <0~7> dpl <0~1> dscp { <0-63> | <dscp> }		15	GLOBAL _CONFIG
no qos map cos-dscp <0~7> dpl <0~1>		15	GLOBAL _CONFIG
qos map dscp-egress-translation { <0~63> | <dscp> } <0~1> to { <0-63> | <dscp> }		15	GLOBAL _CONFIG
no qos map dscp-egress-translation { <0~63> | <dscp> } <0~1>		15	GLOBAL _CONFIG
qos wred queue <0~5> min-th <0-100> mdp-1 <0-100> mdp-2 <0-100> mdp-3 <0-100>		15	GLOBAL _CONFIG
qos wred queue <0~5> min-fl <0-100> max <1-100> [fill-level]		15	GLOBAL _CONFIG
no qos wred queue <0~5>		15	GLOBAL _CONFIG
qos storm { unicast | multicast | broadcast } { { <1,2,4,8,16,32,64,128,256,512> [kfps] } | { 1024 kfps } }		15	GLOBAL _CONFIG
no qos storm { unicast | multicast | broadcast }		15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
qos qce { [update] } <uint> [{ next <uint> } | last] [interface <port_type_list>] [smac { <mac_addr> | <oui> | any }] [dmac { <mac_addr> | unicast | multicast | broadcast | any }] [tag { [type { untagged | tagged | c-tagged | s-tagged | any }] [vid { <vcap_vr> | any }] [pcp { <pcp> | any }] [dei { <0-1> | any }] }*1] [inner-tag { [type { untagged | tagged | c-tagged | s-tagged | any }] [vid { <vcap_vr> | any }] [pcp { <pcp> | any }] [dei { <0-1> | any }] }*1] [frame-type { any | { etype [{ <0x600-0x7ff,0x801-0x86dc,0x86de-0xffff> | any }] } | { llc [dsap { <0-0xff> | any }] [ssap { <0-0xff> | any }] [control { <0-0xff> | any }] } | { snap [{ <0-0xffff> | any }] } | { ipv4 [proto { <0-255> | tcp | udp | any }] [sip { <ipv4_-subnet> | any }] [dip { <ipv4_subnet> | any }] [dscp { <vcap_vr> | <dscp> | any }] [fragment { yes | no | any }] [sport { <vcap_vr> | any }] [dport { <vcap_vr> | any }] } | { ipv6 [proto { <0-255> | tcp | udp | any }] [sip { <ipv4_subnet> | any }] [dip { <ipv4_subnet> | any }] [dscp { <vcap_vr> | <dscp> | any }] [sport { <vcap_vr> | any }] [dport { <vcap_vr> | any }] } }] [action { [cos { <0-7> | default }] [dpl { <0-1> | default }] [pcp-dei { <0-7> <0-1> | default }] [dscp { <0-63> | <dscp> | default }] [policy { <uint> | default }] }*1]		15	GLOBAL_CONFIG
no qos qce <'QCE_ID_START'~'QCE_ID_END'>		15	GLOBAL_CONFIG
qos qce refresh		15	GLOBAL_CONFIG
qos cos <0-7>		15	GLOBAL_CONFIG
no qos cos		15	INTERFACE_PORT_LIST
qos dpl <dpl>		15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
no qos dpl		15	INTER-FACE_PORT_LIST
qos pcp <0-7>		15	INTER-FACE_PORT_LIST
no qos pcp		15	INTER-FACE_PORT_LIST
qos dei <0-1>		15	INTER-FACE_PORT_LIST
no qos dei		15	INTER-FACE_PORT_LIST
qos trust tag		15	INTER-FACE_PORT_LIST
qos trust dscp		15	INTER-FACE_PORT_LIST
qos map tag-cos pcp <0~7> dei <0~1> cos <0-7> dpl <dpl>		15	INTER-FACE_PORT_LIST
no qos map tag-cos pcp <0~7> dei <0~1>		15	INTER-FACE_PORT_LIST
qos policer <uint> [fps] [flowcontrol]		15	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
no qos policer		15	INTER-FACE_PORT_LIST
qos queue-policer queue <0~7> <uint>		15	INTER-FACE_PORT_LIST
qos queue-policer queue <0~7> <uint>		15	INTER-FACE_PORT_LIST
no qos queue-policer queue <0~7>		15	INTER-FACE_PORT_LIST
qos wrr <1-100> <1-100> <1-100> <1-100> <1-100> <1-100>		15	INTER-FACE_PORT_LIST
no qos wrr		15	INTER-FACE_PORT_LIST
qos shaper <uint>		15	INTER-FACE_PORT_LIST
no qos shaper		15	INTER-FACE_PORT_LIST
qos queue-shaper queue <0~7> <uint> [excess]		15	INTER-FACE_PORT_LIST
no qos queue-shaper queue <0~7>		15	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
qos tag-remark { pcp <0-7> dei <0-1> | mapped }		15	INTER-FACE_PORT_LIST
no qos tag-remark		15	INTER-FACE_PORT_LIST
qos map cos-tag cos <0~7> dpl <0~1> pcp <0-7> dei <0-1>		15	INTER-FACE_PORT_LIST
no qos map cos-tag cos <0~7> dpl <0~1>		15	INTER-FACE_PORT_LIST
qos dscp-translate		15	INTER-FACE_PORT_LIST
qos dscp-classify { zero | selected | any }		15	INTER-FACE_PORT_LIST
no qos dscp-classify		15	INTER-FACE_PORT_LIST
qos dscp-remark { rewrite | remap | remap-dp }		15	INTER-FACE_PORT_LIST
no qos dscp-remark		15	INTER-FACE_PORT_LIST
qos storm { unicast | broadcast | unknown } <100-13200000> [fps]		15	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
no qos storm { unicast | broadcast | unknown }		15	INTER-FACE_PORT_LIST
qos qce { [addr { source | destination }] [key { double-tag | normal | ip-addr | mac-ip-addr }] }*1		15	INTER-FACE_PORT_LIST
no qos qce { [addr] [key] }*1		15	INTER-FACE_PORT_LIST
debug qos shaper cir { <100-3300000> [cbs <4096-258048>] } { [eir <100-3300000> [ebs <4096-258048>]] }		debug	INTER-FACE_PORT_LIST
no debug qos shaper		debug	INTER-FACE_PORT_LIST
debug qos queue-shaper queue <0~7> { cir <100-3300000> [cbs <4096-258048>] } { [eir <100-3300000> [ebs <4096-258048>]] } [excess]		debug	INTER-FACE_PORT_LIST
no debug qos queue-shaper queue <0~7>		debug	INTER-FACE_PORT_LIST
debug show qos shapers		debug	EXEC
debug qos cmef [{ enable | disable }]		debug	EXEC
show rmon statistics [<1~65535>]		15	EXEC
show rmon history [<1~65535>]		15	EXEC
show rmon alarm [<1~65535>]		15	EXEC
show rmon event [<1~65535>]		15	EXEC

COMMAND	DESCRIPTION	P	M
rmon alarm <1-65535> <word255> <1-2147483647> {absolute | delta} rising-threshold <-2147483648-2147483647> [<0-65535>] falling-threshold <-2147483648-2147483647> [<0-65535>] {[rising | falling | both]}		15	GLOBAL_CONFIG
no rmon alarm <1-65535>		15	GLOBAL_CONFIG
rmon event <1-65535> [log] [trap <word127>] {[description <line127>]}		15	GLOBAL_CONFIG
no rmon event <1-65535>		15	GLOBAL_CONFIG
rmon collection stats <1-65535>		15	INTER-FACE_PORT_LIST
no rmon collection stats <1-65535>		15	INTER-FACE_PORT_LIST
rmon collection history <1-65535> [buck-ets <1-65535>] [interval <1-3600>]		15	INTER-FACE_PORT_LIST
no rmon collection history <1-65535>		15	INTER-FACE_PORT_LIST
show sflow statistics { receiver [<range_list>] | samplers [interface [<range_list>] <port_type_list>]}	Use sflow statistics to show statistics for either receiver or sam-ple interface.	0	EXEC
show sflow	Use show sflow to dis-play the current sFlow configuration.	0	EXEC
clear sflow statistics { receiver [<range_list>] | samplers [interface [<range_list>] <port_type_list>] }	Clearing statistics.	15	EXEC

COMMAND	DESCRIPTION	P	M
sflow agent-ip {ipv4 <ipv4_addr> | ipv6 <ipv6_addr>}	The agent IP address used as agent-address in UDP datagrams. Defaults to IPv4 loop-back address.	15	GLOBAL _CONFIG
no sflow agent-ip	Sets the agent IP address used as agent-address in UDP datagrams to 127.0.0.1.	15	GLOBAL _CONFIG
sflow timeout [receiver <range_list>] <0-2147483647>	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.	15	GLOBAL _CONFIG
no sflow timeout [receiver <range_list>]	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.	15	GLOBAL _CONFIG
sflow collector-address [receiver <range_list>] [<word>]	Collector address	15	GLOBAL _CONFIG
no sflow collector-address [receiver <range_list>]		15	GLOBAL _CONFIG
sflow collector-port [receiver <range_list>] <1-65535>	Collector UDP port. Valid range is 0-65536.	15	GLOBAL _CONFIG
no sflow collector-port [receiver <range_list>]	Collector UDP port. Valid range is 0-65536.	15	GLOBAL _CONFIG
sflow max-datagram-size [receiver <range_list>] <200-1468>	Maximum datagram size.	15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
no sflow max-datagram-size [receiver <range_list>]	Maximum datagram size.	15	GLOBAL _CONFIG
sflow sampling-rate [sampler <range_list>] [<1-4294967295>]	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.	15	INTER-FACE_P ORT_LIS T
sflow max-sampling-size [sampler <range_list>] [<14-200>]	Specifies the maximum number of bytes to transmit per flow sample.	15	INTER-FACE_P ORT_LIS T
no sflow max-sampling-size [sampler <range_list>]	Specifies the maximum number of bytes to transmit per flow sample.	15	INTER-FACE_P ORT_LIS T
sflow counter-poll-interval [sampler <range_list>] [<1-3600>]	The interval - in seconds - between counter poller samples.	15	INTER-FACE_P ORT_LIS T
no sflow counter-poll-interval [<range_list>]	The interval - in seconds - between counter poller samples.	15	INTER-FACE_P ORT_LIS T
sflow [<range_list>]	Enables/disables flow sampling on this port.	15	INTER-FACE_P ORT_LIS T
show smtp	Email information	0	EXEC
smtp delete { server | username | sender | returnpath | mailaddress <1-6> }	Delete email server	15	GLOBAL _CONFIG
smtp mailaddress <1-6> <word47>	Set email server	15	GLOBAL _CONFIG
smtp returnpath <word47>		15	GLOBAL _CONFIG
smtp returnpath <word47>		15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
smtp sender <word47>		15	GLOBAL _CONFIG
smtp username <word31> <word31>		15	GLOBAL _CONFIG
smtp server <word47>		15	GLOBAL _CONFIG
smtp level <0-7>		15	GLOBAL _CONFIG
show snmp		15	EXEC
show snmp community v3 [<word127>]		15	EXEC
show snmp user [<word32> <word10-32>]			
show snmp security-to-group [{ v1 | v2c | v3 } <word32>]			
show snmp access [<word32> { v1 | v2c | v3 | any } { auth | noauth | priv }]			
show snmp view [<word32> <word255>]			
snmp-server	Enable SNMP server.	13	GLOBAL _CONFIG
snmp-server engine-id local <word10-32>	To specify SNMP server's engine ID.	13	GLOBAL _CONFIG
no snmp-server engined-id local	To set SNMP server's engine ID to default value.	15	GLOBAL _CONFIG
snmp-server version { v1 | v2c | v3 }	Set the SNMP server version to SNMPv1, SNMPv2c or SNMPv3.	15	GLOBAL _CONFIG
no snmp-server version	Set SNMP server's version to default setting.	15	GLOBAL _CONFIG
snmp-server community v2c <word127> [ro | rw]		15	GLOBAL _CONFIG
snmp-server community v3 <word127> [<ipv4_addr> <ipv4_netmask>]		15	GLOBAL _CONFIG
no snmp-server community v2c		15	GLOBAL _CONFIG
no snmp-server community v3 <word127>		15	GLOBAL _CONFIG

COMMAND	DESCRIPTION	P	M
snmp-server user <word32> engine-id <word10-32> [{md5 <word8-32> | sha <word8-40> } [priv { des | aes } <word8-32>]]		15	GLOBAL_CONFIG
no snmp-server user <word32> engine-id <word10-32>		15	GLOBAL_CONFIG
snmp-server security-to-group model { v1 | v2c | v3 } name <word32> group <word32>		15	GLOBAL_CONFIG
no snmp-server security-to-group model { v1 | v2c | v3 } name <word32>		15	GLOBAL_CONFIG
snmp-server access <word32> model { v1 | v2c | v3 | any } level { auth | noauth | priv } [read <word255>] [write <word255>]		15	GLOBAL_CONFIG
no snmp-server access <word32> model { v1 | v2c | v3 | any } level { auth | noauth | priv }		15	GLOBAL_CONFIG
snmp-server view <word32> <word255> { include | exclude }		15	GLOBAL_CONFIG
no snmp-server view <word32> <word255>		15	GLOBAL_CONFIG
snmp-server contact <line255>	To specify the system contact string.	15	GLOBAL_CONFIG
no snmp-server contact	To clear the system contact string.	15	GLOBAL_CONFIG
snmp-server location <line255>	To specify the system location string.	15	GLOBAL_CONFIG
no snmp-server location	To specify the system location string.	15	GLOBAL_CONFIG
show snmp mib context	Use the show snmp mib context user EXEC command to display \ the supported MIBs in the switch.	15	EXEC

COMMAND	DESCRIPTION	P	M
show snmp mib ifmib ifIndex	Use the show snmp mib ifmib ifIndex user EXEC command to \ display the SNMP ifIndex(defined in IF-MIB) mapping \ information in the switch.	15	EXEC
show snmp mib redefine	Use the show snmp mib redefine user EXEC command to display \ the rede-fined MIBs in the switch, that are differ-ent \ definitions from the standard MIBs.	15	EXEC
snmp-server trap		15	GLOBAL _CONFIG
no snmp-server host <word32>		15	GLOBAL _CONFIG
shutdown		15	SNMPS_ HOST
host { <ipv4_ucast> | <hostname> } [<1-65535>] [traps | informs]		15	SNMPS_ HOST
host <ipv6_ucast> [<1-65535>] [traps | informs]		15	SNMPS_ HOST
no host		15	SNMPS_ HOST
version { v1 [<word127>] | v2 [<word127>] | v3 [probe | engineID <word10-32>] [<word32>] }		15	SNMPS_ HOST
no version		15	SNMPS_ HOST
informs retries <0-255> timeout <0-2147>		15	SNMPS_ HOST
no informs		15	SNMPS_ HOST

COMMAND	DESCRIPTION	P	M
traps [aaa authentication] [system [cold-start] [warmstart]] [switch [stp] [rmon]]		15	SNMPS_HOST
no traps		15	SNMPS_HOST
snmp-server host <word32> traps [linkup] [linkdown] [lldp]		15	INTER-FACE_PORT_LIST
no snmp-server host <word32> traps		15	INTER-FACE_PORT_LIST
show snmp host [<word32>] [system] [switch] [interface] [aaa]		15	EXEC
switch stack re-elect	Config commands for the switches in the stack	13	EXEC
switch stack priority {local | <1-16>} <1-4>	Configure master election priority	13	GLOBAL_CONFIG
switch stack swap <1-16> <1-16>	Swap switch ID	13	GLOBAL_CONFIG
no switch stack <1-16>		13	GLOBAL_CONFIG
switch stack <1-16> mac <mac_ucast>	MAC address of the switch	13	GLOBAL_CONFIG
switch stack { enable | disable }	Enable/disable stacking	13	GLOBAL_CONFIG
switch stack interface <port_type_list>	Configure stacking interface	13	GLOBAL_CONFIG
show switch stack [details]	Show switch Detail information	0	EXEC
show switch stack debug	Show switch Debug information	debug	EXEC
show ip ssh	Use the show ip ssh privileged EXEC \ command to display the SSH status.	15	EXEC

COMMAND	DESCRIPTION	P	M
ip ssh	Use the ip ssh global configuration command to \ enable the SSH. Use the no form of this \ command to disable the SSH.	15	GLOBAL_CONFIG
show network-clock	Show selector state.	0	EXEC
clear network-clock clk-source <range_list>	Clear active WTR timer.	15	EXEC
network-clock clk-source <range_list> nominate { clk-in | {interface <port_type_id>} }	Nominate a clk input to become a selectable clock source.	15	GLOBAL_CONFIG
no network-clock clk-source <range_list> nominate		15	GLOBAL_CONFIG
network-clock input-source { 1544khz | 2048khz | 10mhz }	Sets the station clock input frequency	15	GLOBAL_CONFIG
no network-clock input-source		15	GLOBAL_CONFIG
network-clock output-source { 1544khz | 2048khz | 10mhz }	Sets the station clock output frequency	15	GLOBAL_CONFIG
no network-clock output-source		15	GLOBAL_CONFIG
network-clock clk-source <range_list> aneg-mode { master | slave | forced}	Sets the preferred negotiation.	15	GLOBAL_CONFIG
no network-clock clk-source <range_list> aneg-mode		15	GLOBAL_CONFIG
network-clock clk-source <range_list> hold-timeout <3-18>	The hold off timer value in 100 ms.Valid values are range 3-18.	15	GLOBAL_CONFIG
no network-clock clk-source <range_list> hold-timeout		15	GLOBAL_CONFIG
network-clock selector { { manual clk-source <uint> } | selected | nonrevertive | revertive | holdover | freerun }	Selection mode of nominated clock sources	15	GLOBAL_CONFIG
no network-clock selector		15	GLOBAL_CONFIG
network-clock clk-source <range_list> priority <0-1>	Priority of nominated clock sources.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
no network-clock clk-source <range_list> priority		15	GLOBAL _CONFIG
network-clock wait-to-restore <0-12>	WTR time (0-12 min) '0' is disable	15	GLOBAL _CONFIG
no network-clock wait-to-restore		15	GLOBAL _CONFIG
network-clock ssm-holdover { prc | ssua | ssub | eec2 | eec1 | dnu | inv }	Hold Over SSM over-write	15	GLOBAL _CONFIG
no network-clock ssm-holdover		15	GLOBAL _CONFIG
network-clock ssm-freerun { prc | ssua | ssub | eec2 | eec1 | dnu | inv }	Free Running SSM overwrite	15	GLOBAL _CONFIG
no network-clock ssm-freerun		15	GLOBAL _CONFIG
network-clock clk-source <range_list> ssm-overwrite { prc | ssua | ssub | eec2 | eec1 | dnu }	Clock source SSM overwrite	15	GLOBAL _CONFIG
no network-clock clk-source <range_list> ssm-overwrite		15	GLOBAL _CONFIG
network-clock option { eec1 | eec2 }	EEC options	15	GLOBAL _CONFIG
no network-clock option		15	GLOBAL _CONFIG
network-clock synchronization ssm	SSM enable/disable.	15	INTER-FACE_P ORT_LIS T
show logging [info] [warning] [error] [switch <switch_list>]	Use the show logging privileged EXEC com-mand without key-words to display the logging configuration, or particularly the log-ging message sum-mary for the logging level.	15	EXEC

COMMAND	DESCRIPTION	P	M
show logging <1-4294967295> [switch <switch_list>]	Use the show logging privileged EXEC command with logging ID to display the detail logging message. OC_CMD_DEFAULT =	15	EXEC
clear logging [info] [warning] [error] [switch <switch_list>]	Use the clear logging privileged EXEC command to clear the logging message.	15	EXEC
logging on	Use the logging on global configuration command to enable the logging server. Use the no form of this command to disable the logging server.	15	GLOBAL _CONFIG
logging host { <ipv4_ucast> | <hostname> }	Use the logging host global configuration command to configure the host address of logging server.	15	GLOBAL _CONFIG
no logging host	Use the no logging host global configuration command to clear the host address of logging server.	15	GLOBAL _CONFIG
logging level { info | warning | error }	Use the logging level global configuration command to configure what level of message will send to logging server.	15	GLOBAL _CONFIG
show clock	Show running system information	0	EXEC
show version	System hardware and software status	0	EXEC

COMMAND	DESCRIPTION	P	M
password unencrypted <line31>	Use the password encrypted <password> global configuration command to configure administrator password with unencrypted password for the local switch access.	15	GLOBAL_CONFIG
password encrypted <word4-44>	Use the password encrypted <password> global configuration command to configure administrator password with encrypted password for the local switch access.	15	GLOBAL_CONFIG
password none	Use the password none global configuration command to remove the administrator password.	15	GLOBAL_CONFIG
show system	Show system information	0	EXEC
system contact <line255>	To specify the system contact string.	15	GLOBAL_CONFIG
no system contact	To clear the system contact string.	15	GLOBAL_CONFIG
system location <line255>	To specify the system location string.	15	GLOBAL_CONFIG
no system location	To specify the system location string.	15	GLOBAL_CONFIG
system name <line255>	To specify the system mode name string.	15	GLOBAL_CONFIG
no system name	To specify the system model name string.	15	GLOBAL_CONFIG
show thermal-protect [interface <port_type_list>]	Shows thermal protection status (chip temperature and port status).	15	EXEC

COMMAND	DESCRIPTION	P	M
thermal-protect prio <0~3> temperature <0-255>	Thermal protection configuirations.	15	GLOBAL_CONFIG
no thermal-protect prio <0~3>	Sets temperature at which to turn ports with the corresponding priority off.	15	GLOBAL_CONFIG
thermal-protect port-prio <0-3>	Sets temperature at which to turn ports with the corresponding priority off.	15	INTERFACE_PORT_LIST
no thermal-protect port-prio	Sets temperature at which to turn ports with the corresponding priority off.	15	INTERFACE_PORT_LIST
show upnp		15	EXEC
upnp		15	GLOBAL_CONFIG
upnp ttl <1-255>		15	GLOBAL_CONFIG
no upnp ttl		15	GLOBAL_CONFIG
upnp advertising-duration <100-86400>		15	GLOBAL_CONFIG
no upnp advertising-duration		15	GLOBAL_CONFIG
username <word31> privilege <0-15> password unencrypted <line31>	Use the username <username> privilege <level> password encrypted <password> global configuration command to add a user with unencrypted password for the local switch access.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
username <word31> privilege <0-15> password encrypted <word4-44>	Use the username <username> privilege <level> password encrypted <password> global configuration command to add a user with encrypted password for the local switch access.	15	GLOBAL_CONFIG
username <word31> privilege <0-15> password none	Use the username <username> privilege <level> password none global configuration command to remove the password for specific username.	15	GLOBAL_CONFIG
no username <word31>	Use the no username <username> global configuration command to delete a local user.	15	GLOBAL_CONFIG
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>		13	GLOBAL_CONFIG
switchport vlan mac <mac_ucast> vlan <vlan_id>	Use the switchport vlan mac command to associate a MAC address to VLAN ID.	13	INTERFACE_PORT_LIST
switchport vlan protocol group <word16> vlan <vlan_id>	Use the no form of this command to remove the group to vlan mapping.	13	INTERFACE_PORT_LIST
show vlan protocol [eth2 {<0x600-0xffff>|arp|ip|ipx|at}] [snap {<0x0-0xffffff>|rfc-1042|snap-8021h} <0x0-0xffff>] [llc <0x0-0xff> <0x0-0xff>]	Use the switchport vlan protocol group command to add group to vlan mapping.	13	EXEC
show vlan mac [address <mac_ucast>]		13	EXEC
show vlan ip-subnet [id <1-128>]		13	EXEC

COMMAND	DESCRIPTION	P	M
switchport vlan ip-subnet id <1-128> <ipv4_subnet> vlan <vlan_id>		13	INTER-FACE_PORT_LIST
no switchport vlan ip-subnet id <1~128>		13	INTER-FACE_PORT_LIST
debug vcl policy <uint>		debug	INTER-FACE_PORT_LIST
no debug vcl policy		debug	GLOBAL_CONFIG
debug show vcl policy		debug	EXEC
switchport mode {access | trunk | hybrid}	Use the switchport mode command to define the type of the port.	13	INTER-FACE_PORT_LIST
no switchport mode		13	INTER-FACE_PORT_LIST
switchport access vlan <vlan_id>	Use the switchport access vlan command to configure a port to a VLAN. Valid VLAN IDs are 1 to 4095.	13	INTER-FACE_PORT_LIST
no switchport access vlan		13	INTER-FACE_PORT_LIST
switchport trunk native vlan <vlan_id>	Use the switchport native vlan command to configure a port VLAN ID for a trunk port.	13	INTER-FACE_PORT_LIST
no switchport trunk native vlan	Set trunk mode characteristics of the interface	13	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
switchport hybrid native vlan <vlan_id>	Use the switchport native vlan command to configure a port VLAN ID for a hybrid port.	13	INTER-FACE_PORT_LIST
no switchport hybrid native vlan	Set hybrid mode characteristics of the interface	13	INTER-FACE_PORT_LIST
switchport hybrid port-type { unaware | c-port | s-port | s-custom-port }	Set hybrid characteristics of the interface	13	INTER-FACE_PORT_LIST
no switchport hybrid port-type	Set hybrid characteristics of the interface	13	INTER-FACE_PORT_LIST
switchport hybrid ingress-filtering	Set hybrid characteristics of the interface	13	INTER-FACE_PORT_LIST
switchport hybrid acceptable-frame-type { all | tagged | untagged }	Set hybrid characteristics of the interface	13	INTER-FACE_PORT_LIST
no switchport hybrid acceptable-frame-type	Set hybrid characteristics of the interface	13	INTER-FACE_PORT_LIST
switchport hybrid egress-tag {none | all [except-native]}	Set hybrid characteristics of the interface	13	INTER-FACE_PORT_LIST
no switchport hybrid egress-tag	Set hybrid characteristics of the interface	13	INTER-FACE_PORT_LIST
switchport trunk vlan tag native	Set trunk characteristics of the interface	13	INTER-FACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
switchport trunk allowed vlan {all | none | [add | remove | except] <vlan_list>}	Set trunk mode characteristics of the interface	13	INTERFACE_PORT_LIST
no switchport trunk allowed vlan	Set trunk characteristics of the interface,	13	INTERFACE_PORT_LIST
switchport hybrid allowed vlan {all | none | [add | remove | except] <vlan_list>}	Set hybrid characteristics of the interface	13	INTERFACE_PORT_LIST
no switchport hybrid allowed vlan	Set hybrid characteristics of the interface	13	INTERFACE_PORT_LIST
vlan ethertype s-custom-port <0x0600-0xffff>		13	GLOBAL_CONFIG
no vlan {{ethertype s-custom-port} | <vlan_list>}		15	GLOBAL_CONFIG
show interface <port_type_list> switchport [access | trunk | hybrid]	Use the how interfaces command to display the administrative and operational status of all interfaces or a specified interface.	0	EXEC
show vlan [id <vlan_list> | name <vword32> | brief]	Use the show vlan command to view the VLAN configuration.	13	EXEC
show vlan status [interface <port_type_list>] [combined|admin|nas|mvr|voice-vlan|mstp|erps|vcl|evc|gvrp|all|conflicts]	Use the show VLAN status command to view the VLANs configured for each interface.	13	EXEC
name <vword32>	Use the name <vword32> command to configure VLAN name.	13	CONFIG_VLAN
no name	The no form of this command will restore the VLAN name to its default.	13	CONFIG_VLAN

COMMAND	DESCRIPTION	P	M
switchport forbidden vlan {add|remove} <vlan_list>	Adds or removes forbidden VLANs from the current list of forbidden VLANs	15	INTERFACE_PORT_LIST
no switchport forbidden vlan	Allows for adding VLANs to an interface	15	INTERFACE_PORT_LIST
show switchport forbidden [{vlan <vlan_id>} | {name <word>}]	Lookup VLAN Forbidden port entry.	0	EXEC
voice vlan	Use the voice vlan global configuration command to enable voice vlan. Use the no form of this command to globally disable voice vlan.	15	GLOBAL_CONFIG
voice vlan vid <vlan_id>	Use the voice vlan vid global configuration command to configure voice vlan vid.	15	GLOBAL_CONFIG
no voice vlan vid	Use the no voice vlan vid global configuration command to restore the default voice vlan vid.	15	GLOBAL_CONFIG
voice vlan aging-time <10-10000000>	Use the voice vlan aging-time global configuration command to configure default voice vlan aging-time.	15	GLOBAL_CONFIG
no voice vlan aging-time	Use the no voice vlan aging-time global configuration command to restore the default voice vlan aging-time.	15	GLOBAL_CONFIG
voice vlan class { <0-7> | low | normal | medium | high }	Use the voice vlan class global configuration command to configure voice vlan class.	15	GLOBAL_CONFIG

COMMAND	DESCRIPTION	P	M
no voice vlan class	Use the no voice vlan class global configuration command to restore the default voice vlan class.	15	GLOBAL_CONFIG
voice vlan oui <oui> [description <line32>]	Use the voice vlan oui global configuration command to set the oui entry for voice vlan.	15	GLOBAL_CONFIG
no voice vlan oui <oui>	Use the no voice vlan oui global configuration command to delete the oui entry.	15	GLOBAL_CONFIG
switchport voice vlan mode { auto | force | disable }	Use the switchport voice vlan mode interface configuration command to configure to switchport voice vlan mode.	15	INTERFACE_PORT_LIST
no switchport voice vlan mode	Use the no switchport voice vlan mode interface configuration command to restore the default switchport voice vlan mode.	15	INTERFACE_PORT_LIST
switchport voice vlan security	Use the switchport voice vlan security interface configuration command to configure switchport voice vlan security mode. Use the no form of this command to globally disable switchport voice vlan security mode.	15	INTERFACE_PORT_LIST
switchport voice vlan discovery-protocol {oui | lldp | both}	Use the switchport voice vlan discovery-protocol interface configuration command to configure to switchport voice vlan discovery-protocol.	15	INTERFACE_PORT_LIST

COMMAND	DESCRIPTION	P	M
no switchport voice vlan discovery-protocol	Use the no switchport voice vlan discovery-protocol interface configuration command to restore the default switchport voice vlan discovery-protocol.	15	INTERFACE_PORT_LIST
show voice vlan [oui <oui> | interface <port_type_list>]	Use the show voice vlan privilege EXEC command without keywords to display the voice vlan configuration, or particularly switchport configuration for the interface, or use the oui keyword to display oui table.	15	EXEC
debug gvrp protocol-state interface <port_type_list> vlan <vlan_list>		debug	EXEC
debug gvrp msti		debug	EXEC
debug gvrp statistic		debug	EXEC
gvrp		15	GLOBAL_CONFIG
gvrp time { [join-time <1-20>] [leave-time <60-300>] [leave-all-time <1000-5000>] }*1		15	GLOBAL_CONFIG
gvrp max-vlans <1-4095>		15	GLOBAL_CONFIG
gvrp		15	INTERFACE_PORT_LIST
gvrp join-request vlan <vlan_list>		15	INTERFACE_PORT_LIST
gvrp leave-request vlan <vlan_list>		15	INTERFACE_PORT_LIST

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