

COMMAND-LINE INTERFACE (CLI) GUIDE

LGB1110A, LGB1126A-R2

GIGABIT MANAGED ENET SWITCH

24/7 TECHNICAL SUPPORT AT 1.877.877.2269 OR VISIT BLACKBOX.COM

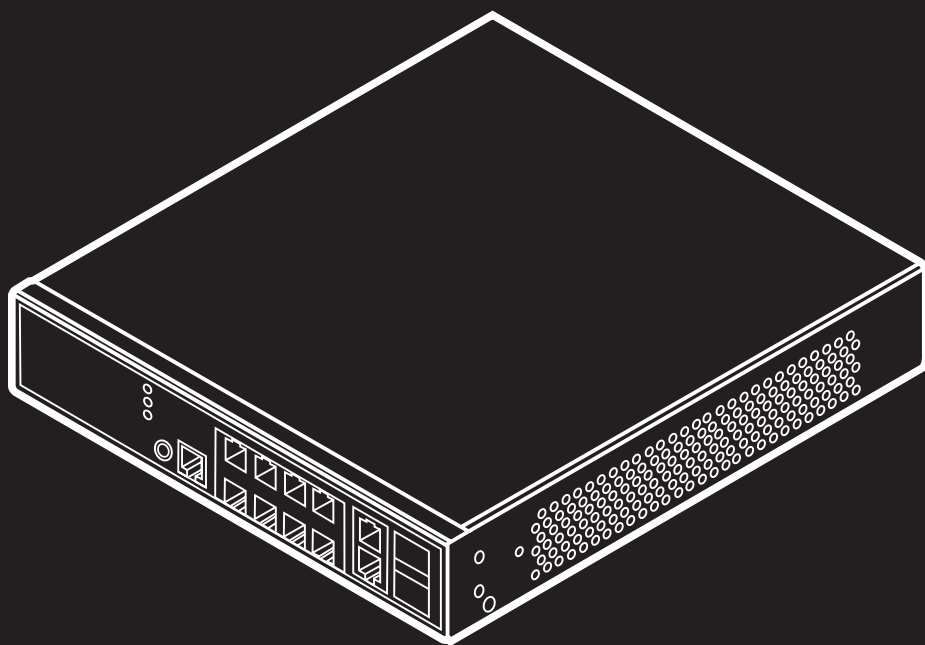


TABLE OF CONTENTS

ABOUT THIS GUIDE.....	4
REVISION HISTORY	5
1. CLI MANAGEMENT.....	6
1.1 Login	6
1.2 Commands of CLI.....	7
1.3 Global Commands of CLI.....	8
2. CLEAR OF CLI	12
3. CONFIGURE COMMANDS OF CLI	22
3.1 Access List.....	63
3.2 NO	66
3.3 QoS	97
3.4 SNMP Server	102
3.5 Spanning Tree.....	109
4. COPY COMMANDS OF CLI	113
5. DEBUG COMMANDS OF CLI	114
6. DELETE COMMANDS OF CLI.....	115
7. DIR COMMANDS OF CLI.....	116
8. DISABLE COMMANDS OF CLI	117
9. DO COMMANDS OF CLI	118
10. DOT1X COMMANDS OF CLI.....	119
11. ENABLE OF CLI	120
12. FIRMWARE OF CLI.....	121
13. NO OF CLI	122
14. PING OF CLI	123



TABLE OF CONTENTS

15. RELOAD OF CLI	124
16. SEND OF CLI.....	125
17. SHOW OF CLI.....	126
18. TERMINAL OF CLI	181
19. IP OF CLI.....	183
20. TRACEROUTE	184
21. CLI COMMAND REFERENCES	185
21.1 Privilege Level	185
21.2 Command Modes.....	185



ABOUT THIS GUIDE

ABOUT THIS GUIDE

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

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



REVISION HISTORY

REVISION HISTORY

Release Number: 6.38

Date: 10/19/2015

Revision: A1

ADDITIONAL DOCUMENTATION

This CLI Guide and related documents available on the Black Box web site apply to Version 6.38 of the Gigabit Managed Ethernet Switch.

To download documentation from the Web site:

1. Go to www.blackbox.com
2. Enter the part number (LGB1110A or LGB1126A-R2) in the search box.
3. Click on the product in the "Product Results" page.
4. Click on the "Support" tab on the product page,
and select the document you wish to download.

If you have any trouble accessing the Black Box site to download the manual, you can contact our Technical Support at 877-877-2269 or info@blackbox.com.



CHAPTER 1: CLI MANAGEMENT

Follow these steps to connect to the network.

- ◆ Using a DB9 RS-232 to RJ-45 cable, connect a terminal or terminal emulator to the Gigabit Managed Ethernet Switch to access the command-line interface.
- ◆ Attach the RJ-45 serial port on the switch's front panel to connect to the switch for console configuration.
- ◆ Attach the other end of the DB9 cable to an ASCII terminal emulator or PC Com-1, 2 port. For example, a PC runs the Microsoft Windows HyperTerminal utility.
- ◆ At the "Com Port Properties" Menu, configure the parameters as below:

Baud rate: 115200

Stop bits: 1

Data bits: 8

Parity: N

Flow control: none

1.1 LOGIN

The command-line interface (CLI) is a text-based interface. Users can access the CLI through either a direct serial connection to the device or a Telnet session. The default user name and password to log in to the Managed Switch are listed below:

Username: admin

Password: <none>

NOTE: <NONE> MEANS AN EMPTY STRING

See the screen below.

```
Username: admin
Password:
LGB1110A#
```

After you login successfully, the prompt will be: <sys_name># .

If you login as an administrator, you will have privileges for setting the Managed Switch.

If you login as a guest, the prompt will be: <sys_name>>. You will not be able to set the Managed Switch while logged in as a guest. Each CLI command has specific privileges.



CHAPTER 1: CLI MANAGEMENT

1.2 COMMANDS OF CLI

The CLI is divided into several modes. If a user has privileges to run a particular command, the user has to run the command in the correct mode. To see the commands of the mode, input “?” after the system prompt, then all commands will be listed in the screen. The command modes are listed next.

TABLE 1-1. COMMAND MODES

MODE	PROMPT	COMMAND FUNCTION 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-impcc-profile	<sys_name>(config-impcc-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 mode and can run only in that mode. If a user wants to run a particular command, the user has to change to the appropriate mode. The command modes are organized as a tree, and users start in enable mode. The following table explains how to change from one mode to another.

TABLE 1-2. CHANGE BETWEEN COMMAND MODES

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

CHAPTER 1: CLI MANAGEMENT

1.3 GLOBAL COMMANDS OF CLI

```
LGB1110A# ?
clear          Reset functions
configure      Enter configuration mode
copy           Copy from source to destination
debug          Debugging functions
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 EXEC mode
firmware       Firmware upgrade/swap
help           Description of the interactive help system
ip            IPv4 commands
logout         Exit from EXEC mode
more           Display file
no             Negate a command or set its defaults
ping          Send ICMP echo messages
reload         Reload system.
send           Send a message to other tty lines
show           Show running system information
terminal       Set terminal line parameters
```



CHAPTER 1: CLI MANAGEMENT

EXIT

Exit from EXEC mode.

SYNTAX

Exit

PARAMETER

None

EXAMPLE

```
LGB1110A (config) # exit  
LGB1110A#
```



CHAPTER 1: CLI MANAGEMENT

HELP

Description of the interactive help system.

SYNTAX

help

PARAMETER

None

EXAMPLE

```
LGB1110A# 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?'.)

LGB1110A#
LGB1110A# logout

press ENTER to get started
```



CHAPTER 1: CLI MANAGEMENT

LOGOUT

Exit from EXEC mode.

SYNTAX

logout

PARAMETER

None

END

Go back to EXEC mode.

SYNTAX

end

EXAMPLE

```
(config)# end
LGB1110A#
```

CHAPTER 2. CLEAR OF CLI

TABLE 2-1. CLEAR COMMANDS

COMMAND	FUNCTION
access	Access management
access-list	Access list
dot1x	IEEE Standard for port-based Network Access Control
ip	Interface Internet Protocol config commands
ipv6	IPv6 configuration commands
lACP	Clear LACP statistics
lldp	Clear LLDP statistics
logging	Syslog
mac	MAC Address Table
mvr	Multicast VLAN Registration configuration
sflow	Statistics flow
spanning-tree	STP Bridge
statistics	Clear statistics for a given interface

ACCESS

Access management

SYNTAX

clear access management statistics

PARAMETER

management Access management configuration.
statistics Statistics data.

EXAMPLE

```
LGB1110A# clear access management statistics
LGB1110A#
```



CHAPTER 2. CLEAR OF CLI

ACCESS LIST

Access list

SYNTAX

Clear access-list ace statistics

PARAMETER

ace	Access list entry
statistics	Traffic statistics

EXAMPLE

```
LGB1110A# clear access-list ace statistics
LGB1110A#
```

DOTX

IEEE Standard for port-based Network Access Control.

SYNTAX

Clear dot1x statistics

Clear dot1x statistics interface GigabitEthernet < PORT_TYPE_LIST >

PARAMETER

statistics	Clears the statistics counters
interface	Interface
GigabitEthernet	1 Gigabit Ethernet Port
PORT_TYPE_LIST	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A# clear dot1x statistics interface GigabitEthernet 1/1-10
LGB1110A#
```

CHAPTER 2. CLEAR OF CLI

IP

Interface Internet Protocol config commands

SYNTAX

```
clear ip arp
```

```
clear ip dhcp detailed statistics { server | client | snooping | relay | helper | all } [ interface ( <port_type> [ <in_port_list> ] ) ]
```

```
clear ip dhcp relay statistics
```

```
clear ip dhcp server binding <ip>
```

```
clear ip dhcp server binding { automatic | manual | expired }
```

```
clear ip dhcp server statistics
```

```
clear ip dhcp snooping statistics [ interface ( <port_type> [ <in_port_list> ] ) ]
```

```
clear ip igmp snooping [ vlan <v_vlan_list> ] statistics
```

```
clear ip statistics [ system ] [ interface vlan <v_vlan_list> ] [ icmp ] [ icmp-msg <type> ]
```

PARAMETER

arp	Clear ARP cache
dhcp	Dynamic Host Configuration Protocol
igmp	Internet Group Management Protocol
statistics	Traffic statistics
relay	DHCP relay agent configuration
snooping	DHCP snooping
interface	Select an interface to configure
GigabitEthernet	1 Gigabit Ethernet Port
vlan	IPv4 traffic interface
<vlan_list>	VLAN identifier(s): VID



CHAPTER 2. CLEAR OF CLI

EXAMPLE

```
LGB1110A# clear ip arp
LGB1110A# clear ip dhcp detailed statistics all interface
GigabitEthernet 1/1-10
LGB1110A# clear ip dhcp relay statistics
LGB1110A# clear ip dhcp server binding 192.168.1.11
LGB1110A# clear ip dhcp server binding automatic
LGB1110A# clear ip dhcp server statistics
LGB1110A# Clear ip dhcp snooping statistics interface
GigabitEthernet 1/1-10
LGB1110A# clear ip igmp snooping vlan 1 statistics
LGB1110A# clear ip statistics system interface
LGB1110A# clear ip statistics system interface vlan 1 icmp
icmp-msg 2
```

CHAPTER 2. CLEAR OF CLI

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> ]
```

PARAMETER

mld	Multicast 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
interface	Select an interface to configure
system	IPv6 system traffic
< 0-255>	ICMP message type ranges from 0 to 255

EXAMPLE

```
LGB1110A# clear ipv6 mld snooping vlan 3 statistics
LGB1110A# clear ipv6 neighbors
LGB1110A# Clear ipv6 statistics system icmp icmp-msg 2
```



CHAPTER 2. CLEAR OF CLI

LACP

Clear LACP statistics

SYNTAX

Clear lacp statistics

PARAMETER

statistics Clear all LACP statistics

EXAMPLE

```
LGB1110A# clear lacp statistics
LGB1110A#
```

LLDP

Clear LLDP statistics

SYNTAX

Clear lldp statistics

Clear lldp statistics| begin | exclude | include >< LINE >

PARAMETER

statistics	Clears LLDP statistics.
	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

```
LGB1110A# clear lldp statistics | begin LINE
LGB1110A#
```

CHAPTER 2. CLEAR OF CLI

LOGGING

Syslog

SYNTAX

```
clear logging [ info ] [ warning ] [ error ] [ switch <switch_list> ]
```

PARAMETER

error	Error
info	Information
warning	Warning

EXAMPLE

```
LGB1110A# clear logging info error warning  
LGB1110A#
```

MAC

MAC Address Table

SYNTAX

```
Clear mac address-table
```

PARAMETER

address-table
Flush MAC Address table.

EXAMPLE

```
LGB1110A# clear mac address-table  
LGB1110A#
```



CHAPTER 2. CLEAR OF CLI

MVR

Multicast VLAN Registration configuration.

SYNTAX

```
clear mvr [ vlan <v_vlan_list> | name <mvr_name> ] statistics
```

PARAMETER

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

```
LGB1110A# clear mvr vlan 25 statistics  
LGB1110A#
```

CHAPTER 2. CLEAR OF CLI

SFLOW

Statistics flow

SYNTAX

```
clear sflow statistics { receiver [ <receiver_index_list> ] | samplers [ interface [ <samplers_list> ] ( <port_type> [ <v_port_type_list> ] ) ] }
```

PARAMETER

interface	Interface
receiver	Clear statistics for receiver.
<port_type>	GigabitEthernet
<Samplers : option>	runtime
<port_type_list>	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A# clear sflow statistics interface GigabitEthernet  
1/1-10
```



CHAPTER 2. CLEAR OF CLI

SPANNING TREE

STP Bridge

SYNTAX

```
clear spanning-tree {{ statistics [ interface ( <port_type> [ <v_port_type_list> ] ) ] } | { detected-protocols [ interface ( <port_type> [ <v_port_type_list_1> ] ) ] } }
```

PARAMETER

detected-protocols	Set the STP migration check
statistics	STP statistics
interface	Choose port
<port_type>	GigabitEthernet
<port_type_list>	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A# clear spanning-tree detected-protocols interface GigabitEthernet  
1/1-10
```

STATISTICS

Clear statistics for a given interface

SYNTAX

```
clear statistics interface <port_type> <port_type_list>  
clear statistics <port_type> <port_type_list>
```

PARAMETER

<port_type>	GigabitEthernet
<port_type_list>	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A# clear statistics GigabitEthernet 1/1-10  
LGB1110A#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI**TABLE 3-1. CONFIGURE COMMANDS**

COMMAND	FUNCTION
terminal	Configure from the terminal
aaa	Authentication, Authorization and Accounting
access	Access management
access-list	Access list
aggregation	Aggregation mode
banner	Define a login banner
clock	Configure time-of-day clock
default	Set a command to its defaults
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
exit	Exit from Configuration mode
event	Trap event severity level
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 settings
line	Configure a terminal line
lldp	LLDP configurations
logging	Syslog
loop-protect	Loop protection configuration
mac	MAC table entries/configuration
monitor	Set monitor configuration
mvr	Multicast VLAN Registration configuration
no	Negate a command or set its defaults
ntp	Configure NTP
port-security	Enable/disable port security globally
Privilege	Command privilege parameters
qos	Quality of Service
radius-server	Configure RADIUS
rmon	Remote Monitoring
sflow	Statistics flow
snmp-server	Set SNMP server's configurations
spanning-tree	Spanning Tree protocol



CHAPTER 3: CONFIGURE COMMANDS OF CLI

TABLE 3-1 (CONTINUED). CONFIGURE COMMANDS

COMMAND	FUNCTION
system	Set the SNMP server's configurations
tacacs-server	Configure TACACS+
upnp	Set UPnP's configurations
username	Establish User Name Authentication
vlan	VLAN commands
voice	Voice appliance attributes
web	Web



CHAPTER 3: CONFIGURE COMMANDS OF CLI

TERMINAL

Configure from the terminal.

SYNTAX

configure terminal

EXAMPLE

```
LGB1110A# configure terminal
LGB1110A(config)#
```

AAA

Authentication, Authorization and Accounting

SYNTAX

```
aaa authentication login { console | telnet | ssh | http } {{ local | radius | tacacs } [{ local | radius | tacacs } ] }
```

PARAMETER

authentication	Authentication
login	Login
console	Configure Console
http	Configure HTTP
ssh	Configure SSH
telnet	Configure Telnet
local	Use local database for authentication
radius	Use RADIUS for authentication
tacacs	Use TACACS+ for authentication

EXAMPLE

```
LGB1110A(config)# aaa authentication login http radius
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

ACCESS

Access management

SYNTAX

access management

```
access management <access_id> <access_vid> <start_addr> [ to <end_addr> ] { [ web ] [ snmp ] [ telnet ] | all }
```

PARAMETER

management	Access management configuration
< 1-16>	ID of access management entry
< 1-4094>	The VLAN ID for the access management entry
< ipv4_addr>	Start IPv4 address
< ipv6_addr>	Start IPv6 address
all	All services
snmp	SNMP service
telnet	TELNET/SSH service
to	End address of the range
web	Web service

EXAMPLE

```
LGB1110A(config)# access management 10 3 192.168.1.1 all
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

AGGREGATION

Aggregation mode

SYNTAX

```
aggregation mode {[ dmac ][ ip ][ dmac ][ port ]}
```

PARAMETER

mode Traffic distribution mode

dmac Destination MAC affects the distribution

ip IP address affects the distribution

port IP port affects the distribution

smac Source MAC affects the distribution

EXAMPLE

```
LGB1110A(config)# aggregation mode ip port dmac smac  
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

BANNER

Define a login banner

SYNTAX

banner [motd] <banner>

banner exec <banner>

banner login <banner>

PARAMETER

<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

```
LGB1110A(config)# banner exec LINE
Enter TEXT message. End with the character 'L'.
L
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

CLOCK

Configure time-of-day clock

SYNTAX

```
clock set <icliDate> <icliTime>
```

```
clock summer-time <word16> date [ <start_month_var> <start_date_var> <start_year_var> <start_hour_var> <end_month_var>  
<end_date_var> <end_year_var> <end_hour_var> [ <offset_var> ] ]
```

```
clock summer-time <word16> recurring [ <start_week_var> <start_day_var> <start_month_var> <start_hour_var> <end_week_var>  
<end_day_var> <end_month_var> <end_hour_var> [ <offset_var> ] ]
```

```
clock timezone <word_var> <hour_var> [ <minute_var> ]
```

PARAMETER

set	set clock
summer-time	Configure summer (daylight savings) time
timezone	Configure time zone
<date>	yyyy/mm/dd
<time>	hh:mm:ss
<2000-2097>	Year to start
hh:mm	Time to start (hh:mm)
<1-12>	Month to end
<1-31>	Date to end
<2000-2097>	Year to end
hh:mm	Time to end (hh:mm)
<1-1440>	Offset to add in minutes
<1-5>	Week number to start
<1-7>	Weekday to start
<1-12>	Month to start

EXAMPLE

```
LGB1110A(config)# clock set 2014/11/04 10:22:03  
2014-11-04T10:22:03+00:00  
LGB1110A(config)# do show clock  
System Time      : 2011-01-01T00:05:48+00:00
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

DEFAULT

Set a command to its defaults

SYNTAX

```
default access-list rate-limiter [ <rate_limiter_list> ]
```

PARAMETER

access-list	Access list
rate-limiter	Rate limiter
<RateLimiterId : 1-16>	Rate limiter ID

EXAMPLE

```
LGB1110A(config)# default access-list rate-limiter 3  
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

DO

To run exec commands in config mode

SYNTAX

```
do <LINE >{[<LINE >]}
```

PARAMETER

<LINE> Exec Command

EXAMPLE

```
LGB1110A(config)# do show vlan
VLAN  Name                               Ports
-----
-----
1     default                               GigabitEthernet 1/1, GigabitEthernet 1/2,
GigabitEthernet 1/3,
                                           GigabitEthernet 1/4, GigabitEthernet 1/5
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

DOT1X

IEEE Standard for port-based Network Access Control

SYNTAX

```
dot1x authentication timer inactivity <v_10_to_100000>
dot1x authentication timer re-authenticate <v_1_to_3600>
dot1x feature { [ guest-vlan ] [ radius-qos ] [ radius-vlan ] }*1
dot1x guest-vlan <value>
dot1x guest-vlan supplicant
dot1x max-reauth-req <value>
dot1x re-authentication
dot1x system-auth-control
dot1x timeout quiet-period <v_10_to_1000000>
dot1x timeout tx-period <v_1_to_65535>
```

PARAMETER

authentication	Authentication
feature	Globally enables/disables a dot1x feature functionality
guest-vlan	Guest VLAN
max-reauth-req	Guest VLAN ID used when entering the Guest VLAN.
re-authentication	Set Re-authentication state
system-auth-control	Set the global NAS state
timeout	timeout
timer	timer
inactivity	Time in seconds between check for activity on successfully authenticated MAC addresses.
re-authenticate	The period between re-authentication attempts in seconds
<10-1000000>	seconds
<1-3600>	seconds
guest-vlan	Globally enables/disables state of guest-vlan
radius-qos	Globally enables/disables state of RADIUS-assigned QoS.
radius-vlan	Globally enables/disables state of RADIUS-assigned VLAN.
<1-4095>	The number of times a Request Identity EAPOL frame is sent without response before considering entering the Guest VLAN.
supplicant	The switch remembers if an EAPOL frame has been received on the port for the life-time of the port. Once the switch considers whether to enter the Guest VLAN, it will first check if this option is enabled or disabled. If disabled (unchecked; default), the switch will only enter the Guest VLAN if an EAPOL frame has not been received on the port for the life-time of the port. If enabled (checked), the switch will consider entering the Guest VLAN even if an EAPOL frame has been received on the port for the life-time of the port.



CHAPTER 3: CONFIGURE COMMANDS OF CLI

<1-255>	number of times
quiet-period	Time in seconds before a MAC-address that failed authentication gets a new authentication chance.
tx-period	the time between EAPOL retransmissions.
<10-1000000>	seconds
<1-65535>	seconds

EXAMPLE

```
LGB1110A(config)# dot1x authentication timer inactivity 1000
LGB1110A(config)# dot1x feature guest-vlan radius-qos radius-vlan
LGB1110A(config)# dot1x guest-vlan 33
LGB1110A(config)# dot1x max-reauth-req 3
LGB1110A(config)# dot1x re-authentication
LGB1110A(config)# dot1x system-auth-control
LGB1110A(config)# dot1x timeout quiet-period 3000
```

ENABLE

Modify enable password parameters

SYNTAX

```
enable password [ <level> <1-15> ] <WORD>
enable secret { 0 | 5 } [ <level> <1-15> ] <WORD>
```

PARAMETER

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 ENCRYPTED secret will follow

EXAMPLE

```
LGB1110A(config)# enable password level 10 999
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

EVENT

Trap event severity level

SYNTAX

```
event group <group_name> { level <lvl> | syslog { enable | disable } | trap { enable | disable } | smtp { enable | disable } | ipush { enable | disable } }
```

PARAMETER

Group	Configure trap event severity level
<word32>	ACL, ACL_Log, Access_Mgmt, Auth_Failed, Cold_Start, Config_Info, FAN_FAIL, Firmware_Upgrade, Import_Export, LACP, Link_Status, Login, Logout, Loop_Protect, Mgmt_IP_Change, Module_Change, NAS, Password_Change, Port_Security, Temperature, VLAN, Voltage, Warm_Start

EXAMPLE

```
LGB1110A(config)# event group VLAN trap enable
LGB1110A(config)#
```

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
```

PARAMETER

time	config gvrp timer value in units of centi seconds [cs]
------	--

EXAMPLE

```
LGB1110A(config)# gvrp max-vlans 333
LGB1110A(config)# gvrp time join-time 13 leave-all-time 3000 leave-time 200
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

HOSTNAME

Set system's network name

SYNTAX

hostname < WORD >

PARAMETER

WORD This system's network name.

EXAMPLE

```
LGB1110A(config)# hostname abc
abc(config)#
```

INTERFACE

Select an interface to configure

SYNTAX

interface (<port_type> [<plist>])

interface vlan <vlist>

PARAMETER

<port_type>	GigabitEthernet
vlan	VLAN interface configurations
<vlan_list>	List of VLAN interface numbers, 1-4095
<port_type_list>	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A(config)# interface vlan 3
LGB1110A(config-if-vlan)# ip address dhcp
LGB1110A(config-if-vlan)#
LGB1110A(config)# interface GigabitEthernet 1/1-10
LGB1110A(config-if)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

IP

Internet Protocol

SYNTAX

ip arp inspection

ip arp inspection entry interface <port_type> <in_port_type_id> <vlan_var> <mac_var> <ipv4_var>

ip arp inspection translate [interface <port_type> <in_port_type_id> <vlan_var> <mac_var> <ipv4_var>]

ip arp inspection vlan <in_vlan_list>

ip arp inspection vlan <in_vlan_list> logging { deny | permit | all }

ip dhcp excluded-address <low_ip> [<high_ip>]

ip dhcp pool <pool_name>

ip dhcp relay

ip dhcp relay information option

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

ip dhcp server

ip dhcp snooping

ip dns proxy

ip helper-address <v_ipv4_ucast>

ip http secure-redirect

ip http secure-server

ip igmp host-proxy [leave-proxy]

ip igmp snooping

ip igmp snooping vlan <v_vlan_list>

ip igmp ssm-range <v_ipv4_mcast> <ipv4_prefix_length>

ip igmp unknown-flooding

ip name-server { <v_ipv4_addr> | dhcp [interface vlan <v_vlan_id>] }

ip route <v_ipv4_addr> <v_ipv4_netmask> <v_ipv4_gw>

ip routing

ip source binding interface <port_type> <in_port_type_id> <vlan_var> <ipv4_var> <mac_var>

ip ssh

ip verify source

ip verify source translate

CHAPTER 3: CONFIGURE COMMANDS OF CLI

PARAMETER

arp	Address Resolution Protocol
dhcp	Dynamic Host Configuration Protocol
dns	Domain Name System
helper-address	DHCP relay server
http	Hypertext Transfer Protocol
igmp	Internet Group Management Protocol
name-server	Domain Name System
route	Add IP route
routing	Enable routing for IPv4 and IPv6
source	source command
ssh	Secure Shell
verify	verify command
inspection	ARP inspection
entry	arp inspection entry
interface	arp inspection entry interface config
<port_type>	Port type in Fast, Giga ethernet
<port_type_id>	Port ID in the format of switch-no/port-no
<vlan_id>	Select a VLAN id to configure
<mac_ucast>	Select a MAC address to configure
<ipv4_ucast>	Select an IP Address to configure
deny	log denied entries
permit	log permitted entries
all	log all entries
translate	arp inspection translate all entries
vlan	arp inspection vlan setting
<vlan_list>	arp inspection vlan list
relay	DHCP relay agent information
information	DHCP information option <Option 82>
option	DHCP option
information	DHCP information option(Option 82)
policy	Policy for handling the receiving DHCP packet already include the information option
drop	Drop the package when receive a DHCP message that already contains relay information
keep	Keep the original relay information when receive a DHCP message that already contains it
replace	Replace the original relay information when receive a DHCP message that already contains it
server	Enable DHCP server
snooping	DHCP snooping
proxy	DNS proxy service
secure-redirect	Secure HTTP web redirection



CHAPTER 3: CONFIGURE COMMANDS OF CLI

secure-server	Secure HTTP web server
snooping	Snooping IGMP
<word16>	Profile name in 16 char's
vlan	IGMP VLAN
ssm-range	IPv4 address range of Source Specific Multicast
<ipv4_mcast>	Valid IPv4 multicast address
<4-32>	Prefix length ranges from 4 to 32
unknown-flooding	Flooding unregistered IPv4 multicast traffic
<ipv4_ucast>	A valid IPv4 unicast address
dhcp	Dynamic Host Configuration Protocol
interface	Select an interface to configure
vlan	VLAN Interface
<vlan_id>	VLAN identifier(s): VID
<ipv4_addr>	Network
<ipv4_netmask>	Netmask
<ipv4_addr>	Gateway
binding	ip source binding
interface	ip source binding entry interface config
<port_type>	* or Gigabitethernet
*	All switches or All ports
Gigabitethernet	1 Gigabitethernet Port
<port_type_id>	Port ID in the format of switch-no/port-no, ex 1/1-10 for Gigabitethernet
<vlan_id>	Select a VLAN id to configure
<ipv4_ucast>	Select an IP Address to configure
<ipv4_netmask>	Select a subnet mask to configure
<mac_ucast>	Select a MAC address to configure
source	verify source
limit	limit command
<0-2>	the number of limit
translate	ip verify source translate all entries
login	ARP inspection vlan logging mode config

CHAPTER 3: CONFIGURE COMMANDS OF CLI

EXAMPLE

```
LGB1110A(config)# ip arp inspection
LGB1110A(config)# ip dhcp relay
LGB1110A(config)# ip dns proxy
LGB1110A(config)# ip helper-address 192.168.1.1
LGB1110A(config)# ip http secure-server
LGB1110A(config)# ip igmp snooping vlan 3
LGB1110A(config)# ip name-server 192.168.1.6
LGB1110A(config)# ip route 192.168.1.1 255.255.255.0 192.168.1.100
LGB1110A(config)# ip routing
LGB1110A(config)# ip ssh
LGB1110A(config)# ip verify source translate
IP Source Guard:
    Translate 0 dynamic entries into static entries.
```

IPMC

IPv4/IPv6 multicast configuration

SYNTAX

ipmc profile

ipmc profile <profile_name>

ipmc range <entry_name> { <v_ipv4_mcast> [<v_ipv4_mcast_1>] | <v_ipv6_mcast> [<v_ipv6_mcast_1>] }

PARAMETER

profile	IPMC profile configuration
range	A range of IPv4/IPv6 multicast addresses for the profile
< word16>	Range entry name in 16 char's
<ipv4_mcast>	Valid IPv4 multicast address
<ipv6_mcast>	Valid IPv6 multicast address

EXAMPLE

```
LGB1110A(config)# ipmc profile test
LGB1110A(config-ipmc-profile)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

IPv6

IPv6 configuration commands

SYNTAX

```
ipv6 mld host-proxy [ leave-proxy ]
```

```
ipv6 mld snooping
```

```
ipv6 mld snooping vlan <v_vlan_list>
```

```
ipv6 mld ssm-range <v_ipv6_mcast> <ipv6_prefix_length>
```

```
ipv6 mld unknown-flooding
```

```
ipv6 route <v_ipv6_subnet> { <v_ipv6_ucast> | interface vlan <v_vlan_id> <v_ipv6_addr> }
```

PARAMETER

mld	Multicasat Listener Discovery
route	Configure static routes
host-proxy	MLD proxy configuration
snooping	Snooping MLD
ssm-range	IPv6 address range of Source Specific Multicast
unknown-flooding	Flooding unregistered IPv6 multicast traffic
leave-proxy	MLD proxy for leave configuration
vlan	MLD VLAN
<vlan_list>	VLAN identifier(s): VID
<ipv6_mcast>	Valid IPv6 multicast address
X:X:X:X::X/<0-128>	IPv6 prefix x:x::y/z

EXAMPLE

```
LGB1110A(config)# ipv6 mld host-proxy leave-proxy
LGB1110A(config)# ipv6 mld snooping vlan 1
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

LACP

LACP settings

SYNTAX

```
lacp system-priority <1-65535>
```

PARAMETER

system-priority	System priority
<1-65535>	Priority value, lower means higher priority

EXAMPLE

```
LGB1110A(config)# lacp system-priority 333  
LGB1110A(config)#
```

LINE

Configure a terminal line

SYNTAX

```
line { <0-16> | console 0 | vty <0-15> }
```

PARAMETER

<0-16>	List of line numbers
console	Console terminal line
0	Console Line number
vtty	Virtual terminal
<0-15>	List of vty numbers

EXAMPLE

```
LGB1110A(config)# line console 0  
LGB1110A(config-line)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

LLDP

LACP 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 } <word11>`

`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>`

`lldp med location-tlv elin-addr <dword25>`

`lldp med location-tlv latitude { north | south } <word8>`

`lldp med location-tlv longitude { west | east } <word9>`

`lldp med media-vlan policy-list <range_list>`

`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>]`

`lldp reinit <1-10>`

`lldp timer <5-32768>`

`lldp transmission-delay <1-8192>`

PARAMETER

holdtime	Sets LLDP hold time (The neighbor switch will discard the LLDP information after “hold time” multiplied with “timer” seconds).
med	Media Endpoint Discovery.
reinit	LLDP tx reinitialization delay in seconds.
timer	Sets LLDP TX interval (The time between each LLDP frame transmitted in seconds).
transmission-delay	Sets LLDP transmission-delay. LLDP transmission delay (the amount of time that the transmission of LLDP frames will be delayed after LLDP configuration has changed) in seconds.)
<2-10>	2-10 seconds.
<1-10>	1-10 seconds.
<5-32768>	5-32768 seconds.
<1-8192>	1-8192 seconds.
datum	Datum (geodetic system) 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
nad83_navd88	North American vertical datum 1983

CHAPTER 3: CONFIGURE COMMANDS OF CLI

wgs84	World Geodetic System 1984
altitude	Altitude parameter
meter	Altitude value
floors	Altitude value
civic-addr	Civic address information and postal information
country	The two-letter ISO 3166 country code in capital ASCII letters - Example: DK, DE or US.
state	National subdivisions (state, canton, region, province, prefecture).
county	County, parish, gun (Japan), district.
city	City, township, shi (Japan) - Example: Copenhagen.
district	City division, borough, city district, ward, chou (Japan).
block	Neighbourhood, block.
street	Street - Example: Poppelvej.
leading-street-direction	Leading street direction - Example: N.
trailing-street-suffix	Trailing street suffix - Example: SW.
street-suffix	Street suffix - Example: Ave, Platz.
house-no	House number - Example: 21.
house-no-suffix	House number suffix - Example: A, 1/2.
landmark	Landmark or vanity address - Example: Columbia University.
additional-info	Additional location info - Example: South Wing.
name	Name (residence and office occupant) - Example: Flemming Jahn.
zip-code	Postal/zip code - Example: 2791.
building	Building (structure) - Example: Low Library.
apartment	Unit (Apartment, suite) - Example: Apt 42.
floor	Floor - Example: 4.
room-number	Room number - Example: 450F.
place-type	Place type - Example: Office.
postal-community-name	Postal community name - Example: Leonia.
p-o-box	Post office box (P.O. BOX) - Example: 12345.
additional-code	Additional code - Example: 1320300003.
<string250>	Value for the corresponding selected civic address.
elin-addr	Emergency Location Identification Number, (e.g. E911 and others), such as defined by TIA or NENA.
<dword25>	ELIN value
north	Setting latitude direction to north.
south	Setting latitude direction to south.
<word8>	Latitude degrees (0.0000-90.0000).
policy-list	Assignment of policies.
<range_list>	Policies to assign to the interface.
<0-31>	Policy id for the policy which is created.



CHAPTER 3: CONFIGURE COMMANDS OF CLI

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.
<vlan_id>	The VLAN the policy uses tagged frames.
untagged	The policy uses un-tagged frames.
l2-priority	Layer 2 priority.
<0-7>	Priority 0-7
dscp	Differentiated Services Code Point.
<0-63>	DSCP value 0-63.

EXAMPLE

```
LGB1110A(config)# lldp holdtime 5
LGB1110A(config)# lldp med fast 5
LGB1110A(config)# lldp reinit 3
LGB1110A(config)# lldp timer 555
LGB1110A(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
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

LOGGING

Syslog

SYNTAX

```
logging host { <ipv4_ucast> | <hostname> }
```

```
logging level { info | warning | error }
```

```
logging on
```

PARAMETER

host	host
<ipv4_ucast>	IP address of the log server
<hostname>	Domain name of the log server
level	level
info	Information
warning	Warning
error	Error
on	Enable syslog server

EXAMPLE

```
LGB1110A(config)# logging level error  
LGB1110A(config)# logging on  
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

LOOP-PROTECT

Loop protection configuration

SYNTAX

loop-protect

loop-protect shutdown-time <0-604800>

loop-protect transmit-time <1-10>

PARAMETER

shutdown-time Loop protection shutdown time interval

<0-604800> Shutdown time in second

transmit-time Loop protection transmit time interval

<1-10> Transmit time in second

EXAMPLE

```
LGB1110A(config)# loop-protect
LGB1110A(config)# loop-protect shutdown-time 333
LGB1110A(config)# loop-protect transmit-time 3
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

MAC

MAC table entries/configuration

SYNTAX

```
mac address-table aging-time <0,10-1000000>
```

```
mac address-table static <mac_addr> vlan <vlan_id> interface <port_type> <port_type_list>
```

PARAMETER

address-table	Mac Address Table
aging-time	Mac address aging time
<0,10-1000000>	Aging time in seconds, 0 disables aging
static	Static MAC address
<mac_addr>	48 bit MAC address: xx:xx:xx:xx:xx:xx
vlan	VLAN keyword
<vlan_id>	VLAN IDs 1-4095
interface	Select an interface to configure
<port_type>	Port type * or Gigabitethernet
*	All switches or All ports
Gigabitethernet	1 Gigabit Ethernet port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A(config)# mac address-table aging-time 3333
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

MONITOR

Set monitor configuration

SYNTAX

```
monitor destination interface <port_type> <port_type_id>
```

```
monitor source { interface <port_type> <port_type_list> | cpu } { both | rx | tx }
```

PARAMETER

destination	The destination port. That is the port that traffic should be mirrored to.
interface	Interface to mirror traffic to.
source	The source port. That is the source port to be mirrored to the destination port.
interface	Mirror interface traffic.
<port_type>	1 Gigabit Ethernet port
*	All switches or all ports.
<port_type_list>	Port list in 1/1-10.
cpu	Mirror CPU traffic.
both	Setting source port to both will mirror both ingress and egress traffic.
rx	Setting source port to rx will mirror both ingress traffic.
tx	Setting source port to tx will mirror both egress traffic.
<port_type>	Port type in GigabitEthernet
<port_type_list>	Port list in 1/1-10 for GigabitEthernet

EXAMPLE

```
LGB1110A(config)# monitor destination interface GigabitEthernet 1/10
LGB1110A(config)# monitor source  cpu both
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

MVR

Multicast VLAN Registration configuration

SYNTAX

```

mvr
mvr name <mvr_name> channel <profile_name>
mvr name <mvr_name> frame priority <cos_priority>
mvr name <mvr_name> frame tagged
mvr name <mvr_name> igmp-address <v_ipv4_ucast>
mvr name <mvr_name> last-member-query-interval <ipmc_lmqi>
mvr name <mvr_name> mode { dynamic | compatible }
mvr vlan <v_vlan_list> [ name <mvr_name> ]
mvr vlan <v_vlan_list> channel <profile_name>
mvr vlan <v_vlan_list> frame priority <cos_priority>
mvr vlan <v_vlan_list> frame tagged
mvr vlan <v_vlan_list> igmp-address <v_ipv4_ucast>
mvr vlan <v_vlan_list> last-member-query-interval <ipmc_lmqi>
mvr vlan <v_vlan_list> mode { dynamic | compatible }

```

PARAMETER

name	MVR multicast name
<word16>	MVR multicast VLAN name
channel	MVR channel configuration
<word16>	Profile name in 16 char's
frame	MVR control frame in TX
priority	Interface CoS priority
<0-7>	CoS priority ranges from 0 to 7
tagged	Tagged IGMP/MLD frames will be sent
igmp-address	MVR address configuration used in IGMP
<ipv4_ucast>	A valid IPv4 unicast address MVR multicast VLAN name
last-member-query-interval	Last Member Query Interval in tenths of seconds
<0-31744>	0 - 31744 tenths of seconds
mode	MVR mode of operation
dynamic	Dynamic MVR operation mode
compatible	Compatible MVR operation mode
vlan	MVR multicast vlan
<vlan_list>	MVR multicast VLAN list



CHAPTER 3: CONFIGURE COMMANDS OF CLI

channel	MVR channel configuration
<word16>	Profile name in 16 char's
frame	MVR control frame in TX
priority	Interface CoS priority
<0-7>	CoS priority ranges from 0 to 7
igmp-address	MVR address configuration used in IGMP
<ipv4_ucast>	A valid IPv4 unicast address
<vlan_list>	MVR multicast VLAN list
last-member-query-interval	Last Member Query Interval in tenths of seconds
<0-31744>	0 - 31744 tenths of seconds
compatible	Compatible MVR operation mode

EXAMPLE

```
LGB1110A(config)# mvr vlan 10 mode dynamic
LGB1110A(config)#
```

NTP

Configure NTP

SYNTAX

```
ntp
ntp server <1-5> ip-address <hostname>
ntp server <1-5> ip-address <ipv4_ucast>
ntp server <1-5> ip-address <ipv6_ucast>
```

PARAMETER

server	Configure NTP server
<1-5>	index number
ip-address	ip address
<ipv4_ucast>	ipv4 address
<ipv6_ucast>	ipv6 address
<hostname>	domain name

EXAMPLE

```
LGB1110A(config)# ntp server 3 ip-address 192.168.1.1
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

PORT-SECURITY

Enable/disable port security globally

SYNTAX

port-security

port-security aging

port-security aging time <v_10_to_10000000>

PARAMETER

aging Time in seconds between check for activity on learned MAC addresses.

time Time in seconds between check for activity on learned MAC addresses.

<10-10000000> seconds

EXAMPLE

```
LGB1110A(config)# port-security aging time 1000
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

PRIVILEGE

Command privilege parameters

SYNTAX

```
privilege { exec | configure | config-vlan | line | interface | if-vlan | ipmc-profile | snmps-host | stp-aggr | dhcp-pool | rfc2544-profile }  
level <privilege> <cmd>
```

PARAMETER

config-vlan	VLAN Configuration Mode
configure	Global configuration mode
dhcp-pool	DHCP Pool Configuration Mode
exec	Exec mode
if-vlan	VLAN Interface Mode
interface	Port List Interface Mode
ipmc-profile	IPMC Profile Mode
line	Line configuration mode
rfc2544-profile	RFC2544 Profile Mode
snmps-host	SNMP Server Host Mode
stp-aggr	STP Aggregation Mode
level	Set privilege level of command
<LINE>	Initial valid words and literals of the command to modify, in 128 characters

EXAMPLE

```
LGB1110A(config)# privilege config-vlan level 10 LINE  
LGB1110A(config)# privilege configure level 10 LINE  
LGB1110A(config)# privilege dhcp-pool level 10 LINE  
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

RADIUS-SERVER

Configure RADIUS

SYNTAX

```
radius-server attribute 32 <line1-255>
radius-server attribute 4 <ipv4_ucast>
radius-server attribute 95 <ipv6_ucast>
radius-server deadtime <1-1440>
radius-server host { <word1-255> | <ipv4_ucast> | <ipv6_ucast> } [ auth-port <0-65535> ] [ acct-port <0-65535> ] [ timeout <1-1000> ]
[ retransmit <1-1000> ] [ key <line1-63> ]
radius-server key <line1-63>
radius-server retransmit <1-1000>
radius-server timeout <1-1000>
```

PARAMETER

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
<Minutes : 1-1440>	Time in minutes
<Host4 : ipv4_ucast>	IPv4 address
<Host6 : ipv6_ucast>	IPv6 address
<HostName : word1-255>	Hostname
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
<Seconds : 1-1000>	Wait time in seconds
<Key : line1-63>	The shared key
<1-1000>	Number of retries for a transaction



CHAPTER 3: CONFIGURE COMMANDS OF CLI

EXAMPLE

```
LGB1110A(config)# radius-server host device key 12
LGB1110A(config)#
```

RMON

Remote Monitoring

SYNTAX

```
rmon alarm <1-65535> <WORD> <1-2147483647> { absolute | delta } rising-threshold <-2147483648-2147483647> [ <0-65535> ]
falling-threshold <-2147483648-2147483647> [ <0-65535> ] { [ rising | falling | both ] }
```

```
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 <word127> ] { [ description <line127> ] }
```

PARAMETER

Attribute

alarm	Configure an RMON alarm
event	Configure an RMON event
<1-65535>	Alarm entry ID
<WORD>	MIB object to monitor
<1-2147483647>	Sample interval
absolute	Test each sample directly
delta	Test delta between samples
rising-threshold	Configure the rising threshold
<-2147483648-2147483647>	rising threshold value
<0-65535>	Event to fire on rising threshold crossing
falling-threshold	Configure the falling threshold
<-2147483648-2147483647>	falling threshold value
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)
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

CHAPTER 3: CONFIGURE COMMANDS OF CLI

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
<1-2147483647>	Sample interval
absolute	Test each sample directly
delta	Test delta between samples
rising-threshold	Configure the rising threshold

EXAMPLE

```
LGB1110A(config)# rmon alarm 10000 ifInErrors 10 9999 absolute rising-threshold  
0 falling-threshold 0 both  
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

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>
```

PARAMETER

agent-ip	The agent IP address used as agent-address in UDP datagrams. Defaults to IPv4 loopback address.
ipv4	ipv4 address
ipv6	ipv6 address
<ipv4_addr>	ipv6 address
<ipv6_addr>	ipv4 address
collector-address	Collector address
collector-port	Collector UDP port
<1-65535>	Port Number
max-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 are reset to defaults.
<0-2147483647>	Number in seconds

EXAMPLE

```
LGB1110A(config)# sflow agent-ip ipv4 192.168.1.2  
LGB1110A(config)# sflow collector-port 3  
LGB1110A(config)# sflow max-datagram-size 333  
LGB1110A(config)# sflow timeout 3333  
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

SYSTEM

Set the SNMP server's configurations

SYNTAX

system contact <v_line255>

system location <v_line255>

system name <v_line255>

PARAMETER

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.
<line255>	Maximum number of 255 character strings.

EXAMPLE

```
LGB1110A(config)# system contact 222
LGB1110A(config)# system location 333
LGB1110A(config)# system name GE
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

TACACS-SERVER

Configure TACACS+

SYNTAX

```
tacacs-server deadtime <minutes>
```

```
tacacs-server host <host_name> [ port <port> ] [ timeout <seconds> ] [ key <key> ]
```

```
tacacs-server key <key>
```

```
tacacs-server timeout <seconds>
```

PARAMETER

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
<Key : line1-63>	The shared key
<Seconds : 1-1000>	Wait time in seconds
<word1-255>	Hostname
<ipv4_ucast>	IPv4 address
<ipv6_ucast>	IPv6 address
port	TCP port for TACACS+ server
<0-65535>	TCP port number

EXAMPLE

```
LGB1110A(config)# tacacs-server deadtime 300
LGB1110A(config)# tacacs-server host 192.168.1.2
LGB1110A(config)# tacacs-server key 33
LGB1110A(config)# tacacs-server timeout 300
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

UPNP

Set UPnP's configurations

SYNTAX

upnp

upnp advertising-duration <100-86400>

upnp ttl <1-255>

PARAMETER

advertising-duration Set advertising duration

ttl Set TTL value

<100-86400> advertising duration

<1-255> TTL value

EXAMPLE

```
LGB1110A(config)# upnp advertising-duration 8
LGB1110A(config)# upnp ttl 25
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

USERNAME

Establish User Name Authentication

SYNTAX

```
username <username> privilege <priv> password encrypted <encry_password>
```

```
username <username> privilege <priv> password none
```

```
username <username> privilege <priv> password unencrypted <password>
```

PARAMETER

<Username : word31>	User name allows letters, numbers and underscores
privilege	Set user privilege level
<privilegeLevel : 0-15>	User privilege level
password	Specify the password for the user
encrypted	Specifies that an ENCRYPTED password will follow
none	NULL password
unencrypted	Specifies that an UNENCRYPTED password will follow
<Password : line31>	The UNENCRYPTED (Plain Text) user password. Any printable character including a space is accepted. Notice that you do not have to make a change to get the Plain Text password after this command. The system will always display the ENCRYPTED password.
<Password : word4-44>	The ENCRYPTED (hidden) user password. The ENCRYPTED password will be decoded by system internally. You cannot use it directly as Plain Text, as it is not human-readable text.

EXAMPLE

```
LGB1110A(config)# username jefferson privilege 15 password  
none
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

VLAN

VLAN commands

SYNTAX

vlan <vlan_list>

vlan ethertype s-custom-port <0x0600-0xffff>

vlan protocol { { eth2 { <0x600-0xffff> | arp | ip | ipx | at } } | { snap { <0x0-0xfffff> | rfc_1042 | snap_8021h } <0x0-0xffff> } | { llc <0x0-0xff> <0x0-0xff> } } group <word16>

PARAMETER

<vlan_list>	ISL VLAN IDs 1-4095
ethertype	Ether type for Custom S-ports
protocol	Protocol-based VLAN commands
s-custom-port	Custom S-ports configuration
<0x0600-0xffff>	Ether type (Range: 0x0600-0xffff)
eth2	Ethernet-based VLAN commands
<0x600-0xffff>	Ether Type(Range: 0x600 - 0xFFFF)
arp	Ether Type is ARP
ip	Ether Type is IP
ipx	Ether Type is IPX
at	Ether Type is AppleTalk
snap	SNAP-based VLAN group
<0x0-0xfffff>	SNAP OUI (Range 0x000000 - 0FFFFFFF)
rfc_1042	SNAP OUI is rfc_1042
snap_8021h	SNAP OUI is 8021h
<0x0-0xffff>	PID (Range: 0x0 - 0xFFFF)
llc	LLC-based VLAN group
<0x0-0xff>	DSAP (Range: 0x00 - 0xFF)
<0x0-0xff>	SSAP (Range: 0x00 - 0xFF)
group	Protocol-based VLAN group commands
<word16>	Group Name (Range: 1–16 characters)

EXAMPLE

```
LGB1110A(config)# vlan ethertype s-custom-port 0x1111
LGB1110A(config)# vlan protocol eth2 arp group 123
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

VOICE

Voice appliance attributes

SYNTAX

voice vlan

voice vlan aging-time <aging_time>

voice vlan class { <traffic_class> | low | normal | medium | high }

voice vlan oui <oui> [description <description>]

voice vlan vid <vid>

PARAMETER

advertising-duration	Set advertising duration
vlan	Vlan for voice traffic
aging-time	Set secure learning aging time
<10-10000000>	Aging time, 10-10000000 seconds
class	Set traffic class
<0-7>	Traffic class value
oui	OUI configuration
<oui>	OUI value
description	Set description for the OUI
<line32>	Description line
vid	Set VLAN ID
<vlan_id>	VLAN ID, 1-4095

EXAMPLE

```
LGB1110A(config)# voice vlan aging-time 3333
LGB1110A(config)# voice vlan class 7
LGB1110A(config)# voice vlan vid 3333
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

WEB

Web

SYNTAX

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

PARAMETER

privilege	Web privilege
group	Web privilege group
CWORD	Valid words are Aggregation, Debug, Dhcp_Client, Green_Ethernet, IP2, IPMC_Snooping, LACP, LLDP, Loop_Protect, MAC_Table, MEP, MVR, Maintenance, Mirroring, NTP, 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

```
LGB1110A(config)# web privilege group ptp level sro 10  
(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

3.1 ACCESS LIST

TABLE 3-2. CONFIGURE – ACCESS LIST COMMANDS

COMMAND	FUNCTION
ace	Access list entry
rate-limiter	Rate limiter

RATE LIMITER

Rate limiter

SYNTAX

```
access-list rate-limiter [ <1~16> ] { pps <0-3276700> | 100kbps <0-10000> }
```

PARAMETER

100kbps	100k bits per second
<RateLimiterList: 1-16>	Rate limiter ID
<PpsRate: 0-3276700>	Rate value
<0-10000>	Rate value

EXAMPLE

```
LGB1110A (config) # access-list rate-limiter 100kbps 111
LGB1110A (config) #
```

ACE

Access list entry

SYNTAX

```
access-list ace{ update<1-256> | <1-256> } [action< deny | filter | permit >]
access-list ace{ update<1-256> | <1-256> } [dmac-type < any | broadcast | multicast | unicast >]
access-list ace{ update<1-256> | <1-256> } [frametype < any | arp | etype | ipv4 | ipv4-icmp | ipv4-tcp | ipv4-udp | ipv6 | ipv6-icmp |
ipv6-tcp | ipv6-udp >]
access-list ace{ update<1-256> | <1-256> } [ingress] [ ingress interface { <port_type> <port_type_id> | <port_type> <port_type_list>
} | any ] ]
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

```

access-list ace{ update<1-256> | <1-256> } [ logging [ disable ] ]
access-list ace{ update<1-256> | <1-256> } [ lookup [ disable ] ]
access-list ace{ update<1-256> | <1-256> } [ mirror [ disable ] ]
access-list ace{ update<1-256> | <1-256> } [ next { <1-256> | last } ]
access-list ace{ update<1-256> | <1-256> } [ policy <0-255> [ policy-bitmask <0x0-0xFF> ] ]
access-list ace{ update<1-256> | <1-256> } [ rate-limiter { <1-16> | disable } ]
access-list ace{ update<1-256> | <1-256> } [ redirect | interface { <port_type> <port_type_id> | <port_type> <port_type_list> } |
disable ] ]
access-list ace{ update<1-256> | <1-256> } [ shutdown ]
access-list ace{ update<1-256> | <1-256> } [ tag { tagged | untagged | any } ]
access-list ace{ update<1-256> | <1-256> } [ tag-priority { <0-7> | any } ]
access-list ace{ update<1-256> | <1-256> } [ vid { <1-4095> | any } ]

```

PARAMETER

action	Access list action
dmac-type	The type of destination MAC address
frametype	Frame type
ingress	Ingress
logging	Logging frame information
lookup	Second lookup
mirror	Mirror frame to destination mirror port
next	insert the current ACE before the next ACE ID
policy	Policy
rate-limiter	Rate limiter
redirect	Redirect frame to specific port
shutdown	Shutdown incoming port
tag	Tag
tag-priority	Tag priority
vid	VID field
deny	Deny
filter	Filter
permit	Permit
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 frame type
arp	Frame type of ARP
etype	Frame type of etype



CHAPTER 3: CONFIGURE COMMANDS OF CLI

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 TCP
ipv6	Frame type of IPv4
ipv6-icmp	Frame type of IPv6 ICMP
ipv6-tcp	Frame type of IPv6 TCP
ipv6-udp	Frame type of IPv6 UDP
interface	Select an interface to configure
<port_type>	Gigabitethernet
*	All switches or All ports
Gigabitethernet	1 Gigabit Ethernet port
<port_type_id>	Port ID in the format of switch-no/port-no ex, 1/1-10 for Gigabitethernet
<port_type>	* or Gigabitethernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10
any	Don't-care the ingress interface
<0-255>	Policy ID
policy-bitmask	The bitmask for policy ID
<0x0-0xFF>	The value of policy bitmask
<1-4095>	The value of VID field
<0-7>	The value of tag priority

EXAMPLE

```
LGB1110A(config)# access-list ace 10 action deny
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI**3.2 NO****TABLE 3-2. CONFIGURE – NO COMMANDS**

COMMAND	FUNCTION
aaa	Authentication, Authorization and Accounting
access	Access management
access-list	Access list
aggregation	Aggregation mode
banner	Define a login banner
clock	Configure time-of-day clock
dot1x	IEEE Standard for port-based Network Access Control
enable	Modify enable password parameters
gvrp	Enable GVRP feature
hostname	Set system's network name
interface	none
ip	Internet Protocol
ipmc	IPv4/IPv6 multicast configuration
ipv6	IPv6 configuration commands
lACP	LACP settings
lldp	LLDP configurations
logging	Syslog
loop-protect	Loop protection configuration
mac	MAC table entries/configuration
monitor	Set monitor configuration
mvr	Multicast VLAN Registration configuration
ntp	Configure NTP
port-security	Enable/disable port security globally
Privilege	Command privilege parameters
qos	Quality of Service
radius-server	Configure RADIUS
rmon	Remote Monitoring
sflow	Statistics flow
snmp-server	Enable SNMP server
spanning-tree	STP Bridge
system	Set the SNMP server's configurations
tacacs-server	Configure TACACS+
upnp	Set UPnP configurations
username	Establish User Name Authentication
vlan	Vlan commands
voice	Voice appliance attributes
web	Web



CHAPTER 3: CONFIGURE COMMANDS OF CLI

Authentication, Authorization and Accounting

SYNTAX

```
no aaa authentication login { console | telnet | ssh | http }
```

PARAMETER

authentication	Authentication
login	Login
console	Disable Console
http	Disable HTTP
ssh	Disable SSH
telnet	Disable Telnet

EXAMPLE

```
LGB1110A(config)# no aaa authentication login ssh  
LGB1110A(config)#
```

ACCESS

Access management

SYNTAX

```
no access management [<1-16>]  
no access management
```

PARAMETER

management	Access management configuration
<1-16>	ID of access management entry

EXAMPLE

```
LGB1110A(config)# no access management  
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

ACCESS LIST

Access list

SYNTAX

no access-list ace <1-256>

PARAMETER

ace	Access list entry
<Aceld: 1-256>	ACE ID

EXAMPLE

```
LGB1110A(config)# access-list ace 1
LGB1110A(config)#
```

AGGREGATION

Aggregation mode

SYNTAX

no aggregation mode

PARAMETER

mode	Traffic distribution mode
------	---------------------------

EXAMPLE

```
LGB1110A(config)# no aggregation mode
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

BANNER

Define a login banner

SYNTAX

no banner [motd]

no banner exec

no banner login

PARAMETER

exec Set EXEC process creation banner

login Set login banner

motd Set Message of the Day banner

EXAMPLE

```
LGB1110A(config)# no banner login
LGB1110A(config)#
```

CLOCK

Configure time-of-day clock

SYNTAX

no clock summer-time

no clock timezone

PARAMETER

summer-time Configure summer (daylight savings) time

timezone Configure time zone

EXAMPLE

```
LGB1110A(config)# no clock summer-time
LGB1110A(config)# no clock timezone
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

DOT1X

IEEE Standard for port-based Network Access Control

SYNTAX

```
no dot1x authentication timer inactivity
no dot1x authentication timer re-authenticate
no dot1x feature { [ guest-vlan ] [ radius-qos ] [ radius-vlan ] }
no dot1x guest-vlan [supplicant]
no dot1x max-reauth-req
no dot1x re-authentication
no dot1x system-auth-control
no dot1x timeout quiet-period
no dot1x timeout tx-period
```

PARAMETER

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
inactivity	Time in seconds between check for activity on successfully authenticated MAC addresses.
re-authenticate	The period between re-authentication attempts in seconds
guest-vlan	Globally enables/disables state of guest-vlan
radius-qos	Globally enables/disables state of RADIUS-assigned QoS.
radius-vlan	Globally enables/disables state of RADIUS-assigned VLAN.
supplicant	The switch remembers if an EAPOL frame has been received on the port for the lifetime 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 lifetime 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 lifetime of the port.
quiet-period	Time in seconds before a MAC-address that failed authentication gets a new authentication chance.
tx-period	the time between EAPOL retransmissions.



CHAPTER 3: CONFIGURE COMMANDS OF CLI

EXAMPLE

```
LGB1110A(config)# no dot1x authentication timer inactivity
LGB1110A(config)# no dot1x feature guest-vlan radius-qos radius-vlan
LGB1110A(config)# no dot1x guest-vlan supplicant
LGB1110A(config)# no dot1x max-reauth-req
LGB1110A(config)# no dot1x re-authentication
LGB1110A(config)# no dot1x system-auth-control
LGB1110A(config)# no dot1x timeout tx-period
LGB1110A(config)#
```

ENABLE

Modify enable password parameters

SYNTAX

```
no enable password [ level <1-15> ]
```

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

PARAMETER

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

```
LGB1110A(config)# no enable secret level 15
LGB1110A(config)# no enable password level 15
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

GVRP

Enable GVRP feature

SYNTAX

gvrp

gvrp max-vlans <maxvlans>

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

PARAMETER

max-vlans Number of VLANs that GVRP can control simultaneously.

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

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

```
LGB1110A(config)#no gvrp max-vlans 1
LGB1110A(config)#no gvrp time join-time 10
LGB1110A(config)#no gvrp time leave-all-time 2000
LGB1110A(config)#no gvrp time leave-time 70
LGB1110A(config)#
```

HOSTNAME

Set system's network name.

SYNTAX

no hostname

EXAMPLE

```
LGB1110A(config)# no hostname
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

INTERFACE

Enable GVRP feature

SYNTAX

no interface vlan < vlan_list >

PARAMETER

vlan Vlan interface configurations
<vlan_list> Vlan list

EXAMPLE

```
LGB1110A(config)# no interface vlan 10
LGB1110A(config)#
```

IP

Set system's network name

SYNTAX

no ip arp inspection
no ip arp inspection entry interface Gigabitethernet <port_type_id> <vlan_id> <mac_ucast> <ipv4_ucast>
no ip arp inspection vlan <vlan_list> [logging]
no dhcp excluded-address [<ip_address> [<ip_address>]]
no dhcp pool <WORD>
no ip dhcp relay [information {option| policy }]
no ip dhcp server
no ip dhcp snooping
no ip dns proxy
no ip helper-address
no ip http secure-redirect
no ip http secure-server
no ip igmp host-proxy [leave-proxy]
no ip igmp snooping
no ip igmp snooping vlan [<vlan_list>]
no ip igmp ssm-range
no ip igmp unknown-flooding



CHAPTER 3: CONFIGURE COMMANDS OF CLI

```
no ip name-server
no ip route <ipv4_addr> <ipv4_netmask> <ipv4_addr>
no ip routing
no ip source binding interface GigabitEthernet <port_type_id> <vlan_id> <ipv4_ucast>{ <ipv4_netmask>|<mac_ucast>}
no ip ssh
no ip verify source
```

PARAMETER

arp	Address Resolution Protocol
inspection	ARP inspection
entry	arp inspection entry
interface	arp inspection entry interface config
GigabitEthernet	1 Gigabit Ethernet Port
<port_type_id>	Port ID in the format of switch-no/port-no, 1/1-10 for Gigabitetherne
<vlan_id>	Select a VLAN id to configure
<mac_ucast>	Select a MAC address to configure
<ipv4_ucast>	Select an IP Address to configure
vlan	arp inspection vlan setting
<vlan_list>	arp inspection vlan list
logging	ARP inspection vlan logging mode config
dhcp	Dynamic Host Configuration Protocol
excluded-address	Prevent DHCP from assigning certain address
<ip_address>	Low IP address and High IP address
<WORD>	Pool name in 32 characters
pool	Configure DHCP address pools
relay	DHCP relay agent configuration
server	enable DHCP server
snooping	DHCP snooping
information	DHCP information option(Option 82)
option	DHCP option
policy	Policy for handling the receiving DHCP packet already include the information option
snooping	DHCP snooping
dns	Domain Name System
proxy	DNS proxy service
helper-address	None.
http	Hypertext Transfer Protocol
secure-redirect	Secure HTTP web redirection
secure-server	Secure HTTP web server



CHAPTER 3: CONFIGURE COMMANDS OF CLI

igmp	Internet Group Management Protocol
host-proxy	IGMP proxy configuration
leave-proxy	IGMP proxy for leave configuration
snooping	Snooping IGMP
vlan	IGMP VLAN
<vlan_list>	VLAN identifier(s): VID
ssm-range	IPv4 address range of Source Specific Multicast
unknown-flooding	Flooding unregistered IPv4 multicast traffic
name-server	Domain Name System
Route	none
<ipv4_addr>	Network
<ipv4_netmask>	Netmask
<ipv4_gateway>	Gateway
routing	Disable routing for IPv4 and IPv6
source	source command
binding	ip source binding
interface	ip source binding entry interface config
Gigabitethernet	1 Gigabitethernet port
<port_type_id>	Port ID in the format of switch-no/port-no, ex., 1/1-10 for Gigabitethernet
<vlan_id>	Select a VLAN id to configure
<ipv4_ucast>	Select an IP Address to configure
<ipv4_netmask>	Select a subnet mask to configure
<mac_ucast>	Select a MAC address to configure
ssh	Secure Shell
verify	verify command
source	verify source

CHAPTER 3: CONFIGURE COMMANDS OF CLI

EXAMPLE

```
LGB1110A(config)# no ip arp inspection vlan 3 logging
LGB1110A(config)# no ip dhcp relay information option
LGB1110A(config)# no ip dns proxy
LGB1110A(config)# no ip helper-address
LGB1110A(config)# no ip http secure-redirect
LGB1110A(config)# no ip igmp snooping
LGB1110A(config)# no ip name-server
LGB1110A(config)# no ip routing
LGB1110A(config)# no ip ssh
```

IPMC

IPv4/IPv6 multicast configuration

SYNTAX

no ipmc profile <Profilename : word16>

no ipmc range <Entryname : word16>

PARAMETER

profile	IPMC profile configuration
<Profilename : word16>	Profile name in 16 char's
range	A range of IPv4/IPv6 multicast addresses for the profile
<Entryname : word16>	Range entry name in 16 characters

EXAMPLE

```
LGB1110A(config)# no ipmc profile
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

IPv6

IPv6 configuration commands

SYNTAX

```
no ipv6 mld host-proxy [ leave-proxy ]
```

```
no ipv6 mld snooping
```

```
no ipv6 mld snooping [vlan <vlan_list> ]
```

```
no ipv6 mld ssm-range
```

```
no ipv6 mld unknown-flooding
```

```
no ipv6 route <ipv6_subnet> { <ipv6_ucast> | interface vlan <vlan_id> <ipv6_linklocal> }
```

PARAMETER

mld	Multicasat Listener Discovery
host-proxy	MLD proxy configuration
leave-proxy	MLD proxy for leave configuration
snooping	Snooping MLD
vlan	MLD VLAN
<vlan_list>	VLAN identifier(s): VID
ssm-range	IPv6 address range of Source Specific Multicast
unknown-flooding	Flooding unregistered IPv6 multicast traffic
route	Configure static routes
<ipv6_subnet>	IPv6 prefix x:x::y/z
<ipv6_ucast>	IPv6 unicast address (except link-local address) of next-hop
interface	Select an interface to configure
vlan	VLAN Interface
<vlan_id>	VLAN identifier(s): VID
<ipv6_linklocal>	IPv6 link-local address of next-hop

EXAMPLE

```
LGB1110A(config)# no ipv6 mld snooping
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

LACP

LACP settings

SYNTAX

```
no lacp system-priority <1-65535>
```

PARAMETER

system-priority	System priority
<1-65535>	Priority value, lower means higher priority

EXAMPLE

```
LGB1110A(config)# no lacp system-priority 10000  
LGB1110A(config)#
```

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
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

PARAMETER

holdtime	Sets LLDP hold time (The neighbor switch will discard the LLDP information after the “hold time” multiplied by “timer” in seconds).
med	Media Endpoint Discovery.
reinit	Sets LLDP reinitialization delay.
timer	Sets LLDP TX interval (The time between each LLDP frame transmitted in seconds).
tlv-select	Which optional TLVs to transmit.
transmission-delay	Sets LLDP transmission-delay. LLDP transmission delay (the amount of time that the transmission of LLDP frames will be delayed after LLDP configuration has changed) in seconds.)
datum	Set datum to default value.
fast	Set fast repeat count to default value.
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	Setting altitude to default.
civic-addr	Civic address information and postal information
elin-addr	Set elin address to default value.
latitude	Setting Latitude parameter to default.
longitude	Setting longitude to default.
additional-code	Additional code - Example: 1320300003.
additional-info	Additional location info - Example: South Wing.
apartment	Unit (Apartment, suite) - Example: Apt 42.
block	Neighborhood, block.
building	Building (structure) - Example: Low Library.
city	City, township, shi (Japan) - Example: Copenhagen.
country	The two-letter ISO 3166 country code in capital ASCII letters - Example: DK, DE or US.
county	County, parish, gun (Japan), district.
district	City division, borough, city district, ward, chou (Japan).
floor	Floor - Example: 4.
house-no	House number - Example: 21.
house-no-suffix	House number suffix - Example: A, 1/2.
landmark	Landmark or vanity address - Example: Columbia University.
leading-street-direction	Leading street direction - Example: N.
name	Name (residence and office occupant) - Example: Flemming Jahn.
p-o-box	Post office box (P.O. BOX) - Example: 12345.
place-type	Place type - Example: Office.
postal-community-name	Postal community name - Example: Leonia.
room-number	Room number - Example: 450F.
state	National subdivisions (state, canton, region, province, prefecture).
street	Street - Example: Poppelvej.

CHAPTER 3: CONFIGURE COMMANDS OF CLI

street-suffix	Street suffix - Example: Ave, Platz.
trailing-street-suffix	Trailing street suffix - Example: SW.
zip-code	Postal/zip code - Example: 2791.
<0~31>	Policy to delete.

EXAMPLE

```
LGB1110A(config)# no lldp holdtime
LGB1110A(config)# no lldp med location-tlv civic-addr floor
LGB1110A(config)# no lldp reinit
LGB1110A(config)# no lldp timer
LGB1110A(config)# no lldp transmission-delay
LGB1110A(config)#
```

LOGGING

Syslog

SYNTAX

no logging host
no logging on

PARAMETER

host host
on Enable syslog server

EXAMPLE

```
LGB1110A(config)# no logging host
LGB1110A(config)# no logging on
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

LOOP-PROTECT

Loop protection configuration

SYNTAX

no loop-protect

no loop-protect shutdown-time

no loop-protect transmit-time

PARAMETER

shutdown-time Loop protection shutdown time interval

transmit-time Loop protection transmit time interval

EXAMPLE

```
LGB1110A(config)# no loop-protect shutdown-time
LGB1110A(config)# no loop-protect transmit-time
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

MAC

MAC table entries/configuration

SYNTAX

```
no mac address-table aging-time [<0,10-1000000> ]
```

```
no mac address-table static <mac_addr> vlan <vlan_id> interface {*[Gigabitethernet [<port_type_list>]}
```

PARAMETER

address-table	Mac table entries configuration/table
aging-time	Mac address aging time
<0,10-1000000>	Aging time in seconds, 0 disables aging
static	Static MAC address
<mac_addr>	48 bit MAC address: xx:xx:xx:xx:xx:xx
vlan	VLAN keyword
<vlan_id>	VLAN IDs 1-4095
interface	Select an interface to configure
Gigabitethernet	1 Gigabit Ethernet port
<port_type_list>	Port list in 1/1-10 for Gigaethernet

EXAMPLE

```
LGB1110A(config)# no mac address-table aging-time 10000  
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

MONITOR

Set monitor configuration

SYNTAX

no monitor destination

no monitor source { interface Gigabitethernet <port_type_list> | cpu

PARAMETER

Destination

source The source port(s). That is the ports to be mirrored to the destination port.

cpu Mirror CPU traffic.

interface Mirror Interface traffic.

Gigabitethernet 1 Gigabit Ethernet Port

<port_type_list> Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A(config)# no monitor destination
LGB1110A(config)# no monitor source cpu
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

MVR

Multicast VLAN Registration configuration

SYNTAX

```
no mvr
no mvr name <word16> channel
no mvr name <word16> frame priority
no mvr name <word16> frame tagged
no mvr name <word16> igmp-address
no mvr name <word16> last-member-query-interval
no mvr name <word16> mode
no mvr vlan <vlan_list>
no mvr vlan <vlan_list> channel
no mvr vlan <vlan_list> frame priority
no mvr vlan <vlan_list> frame tagged
no mvr vlan <vlan_list> igmp-address
no mvr vlan <vlan_list> last-member-query-interval
no mvr vlan <vlan_list> mode [{channel | frame | igmp-address | last-member-query-interval}]
```

PARAMETER

name	MVR multicast name
<word16>	MVR multicast VLAN name
channel	MVR channel configuration
frame	MVR control frame in TX
priority	Interface CoS priority
tagged	Tagged IGMP/MLD frames will be sent
igmp-address	MVR address configuration used in IGMP
last-member-query-interval	Last Member Query Interval in tenths of seconds
mode	MVR mode of operation
vlan	MVR multicast vlan
<vlan_list>	MVR multicast VLAN list

EXAMPLE

```
LGB1110A(config)# no mvr vlan 12 mode
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

NTP

Configure NTP.

SYNTAX

no ntp

no ntp server <1-5>

PARAMETER

server Configure NTP server

<1-5> index number

EXAMPLE

```
LGB1110A(config)# no ntp server 2
LGB1110A(config)#
```

PORT-SECURITY

Enable/disable port security globally.

SYNTAX

no port-security

no port-security aging

no port-security aging time

PARAMETER

aging Enable/disable port security aging.

time Time in seconds between check for activity on learned MAC addresses.

EXAMPLE

```
LGB1110A(config)# no port-security aging time
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

RADIUS-SERVER

Configure RADIUS

SYNTAX

no radius-server attribute {32 | 4 | 95}

no radius-server deadline

no radius-server host { <word1-255> | <ipv4_ucast> | <ipv6_ucast> } [auth-port <0-65535>] [acct-port <0-65535>]

no radius-server key

no radius-server retransmit

no radius-server timeout

PARAMETER

Attribute

deadline 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

EXAMPLE

```
LGB1110A(config)# no radius-server attribute 4
LGB1110A(config)# no radius-server deadline
LGB1110A(config)# no radius-server key
LGB1110A(config)# no radius-server retransmit
LGB1110A(config)# no radius-server timeout
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

RMON

Remote Monitoring

SYNTAX

```
no rmon alarm <alarm : 1-65535>
```

```
no rmon event<event : 1-65535>
```

PARAMETER

alarm	Configure an RMON alarm
event	Configure an RMON event
<alarm : 1-65535>	Alarm entry ID
<event: 1-65535>	Event entry ID

EXAMPLE

```
LGB1110A(config)# no rmon alarm 1000  
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

SFLOW

Statistics flow

SYNTAX

```
no sflow agent-ip
no sflow collector-address
no sflow collector-port
no sflow max-datagram-size
no sflow timeout
```

PARAMETER

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

```
LGB1110A(config)# no sflow agent-ip
LGB1110A(config)# no sflow collector-address
LGB1110A(config)# no sflow collector-port
LGB1110A(config)# no sflow max-datagram-size
LGB1110A(config)# no sflow timeout
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

SNMP-SERVER

Enable SNMP server

SYNTAX

no snmp-server

no snmp-server access <Groupname : word32> model { v1 | v2c | v3 | any } level { auth | noauth | priv }

no snmp-server community v2c

no snmp-server community v3 <Community : word127>

no snmp-server contact

no snmp-server engined-id local

no snmp-server host <Conf : word32>

no snmp-server location

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

no snmp-server trap

no snmp-server user <Username : word32> engine-id <Engineid : word10-32>

no snmp-server version

no snmp-server view <Viewname : word32> <Oidsubtree : word255>

PARAMETER

access	access configuration
<Groupname : word32>	group name
model	security model
v1	v1 security model
v2c	v2c security model
v3	v3 security model
any	any security model
level	security level
auth	authNoPriv Security Level
noauth	noAuthNoPriv Security Level
priv	authPriv Security Level
community	Set the SNMP community
contact	Clear the SNMP server's contact string
engined-id	Set SNMP engine ID
host	Set SNMP host's configurations
location	Clear the SNMP server's location string
security-to-group	security-to-group configuration
trap	Set trap's configurations

CHAPTER 3: CONFIGURE COMMANDS OF CLI

user	user who can access SNMP server
version	Set the SNMP server's version
view	MIB view configuration
<Community : word127>	
local	Set SNMP local engine ID
<ConfName : word32>	Name of the host configuration
model	security model
v1	v1 security model
v2c	v2c security model
v3	v3 security model
name	security user
<SecurityName : word32>	security user name
<Username : word32>	name of user
engine-id	engine ID
<Engineid : word10-32>	engine ID octet string
<Viewname : word32>	MIB view name
<Oidsubtree : word255>	MIB view OID

EXAMPLE

```
LGB1110A(config)# no snmp-server access 333 model any level auth
LGB1110A(config)# no snmp-server community v2c
LGB1110A(config)# no snmp-server engineid local
LGB1110A(config)# no snmp-server host 333
LGB1110A(config)# no snmp-server location
LGB1110A(config)# no snmp-server security-to-group model v2c name 132
LGB1110A(config)# no snmp-server trap
LGB1110A(config)# no snmp-server version
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

SPANNING-TREE

STP Bridge

SYNTAX

```
no spanning-tree edge bpdu-filter
no spanning-tree edge bpdu-guard
no spanning-tree mode
no spanning-tree mst <instance> priority
no spanning-tree mst <instance> vlan
no spanning-tree mst forward-time
no spanning-tree mst max-age
no spanning-tree mst max-hops
no spanning-tree mst name
no spanning-tree recovery interval
no spanning-tree transmit hold-count
```

PARAMETER

edge	Edge ports
mode	STP protocol mode
mst	STP bridge instance
recovery	The error recovery timeout
transmit	BPDU to transmit
bpdu-filter	Enable BPDU filter (stop BPDU tx/rx)
bpdu-guard	Enable BPDU guard
<Instance : 0-7>	instance 0-7 (CIST=0, MST2=1...)
priority	Priority of the instance
forward-time	Delay between port states
max-age	Max bridge age before timeout
max-hops	MSTP bridge max hop count
name	Name keyword
vlan	VLAN keyword
interval	The interval
hold-count	Max number of transmit BPDUs per sec
<Holdcount : 1-10>	1-10 per sec, 6 is default



CHAPTER 3: CONFIGURE COMMANDS OF CLI

EXAMPLE

```
LGB1110A(config)# no spanning-tree edge bpdu-filter
LGB1110A(config)# no spanning-tree mode
LGB1110A(config)# no spanning-tree mst max-age
LGB1110A(config)# no spanning-tree recovery interval
LGB1110A(config)# no spanning-tree transmit hold-count
LGB1110A(config)#
```

TACACS-SERVER

Configure TACACS+

SYNTAX

```
no tacacs-server deadtime
no tacacs-server host <host_name> [ port <port> ]
no tacacs-server key
no tacacs-server timeout
```

PARAMETER

deadtime	Time to stop using a TACACS+ server that doesn't respond
host	Specify a TACACS+ server
<Hostname : word1-255>	Host name or IP address
key	Set TACACS+ encryption key
timeout	Time to wait for a TACACS+ server to reply
key	Server specific key (overrides default)
port	TCP port for TACACS+ server
timeout	Time to wait for this TACACS+ server to reply (overrides default)
<Port : 0-65535>	TCP port number

EXAMPLE

```
LGB1110A(config)# no tacacs-server deadtime
LGB1110A(config)# no tacacs-server host 192.168.1.1 port 10000
LGB1110A(config)# no tacacs-server key
LGB1110A(config)# no tacacs-server timeout
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

UPNP

Set UPnP's configurations

SYNTAX

no upnp

no upnp advertising-duration

no upnp ttl

PARAMETER

advertising-duration Set advertising duration

ttl Set TTL value

EXAMPLE

```
LGB1110A(config)# no upnp advertising-duration
LGB1110A(config)# no upnp ttl
LGB1110A(config)#
```

USERNAME

Establish User Name Authentication

SYNTAX

no username <Username : word31>

PARAMETER

<Username : word31> User name allows letters, numbers and underscores

EXAMPLE

```
LGB1110A(config)# no username admin
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

VLAN

Vlan commands

SYNTAX

```
no vlan protocol { { eth2 { <0x600-0xffff> | arp | ip | ipx | at } } | { snap { <0x0-0xfffff> | rfc_1042 | snap_8021h } <0x0-0xffff> } | { llc  
<0x0-0xff> <0x0-0xff> } } group <word16>
```

```
no vlan { [ ethertype s-custom-port ] | <vlan_list> }
```

PARAMETER

protocol	Protocol-based VLAN commands
eth2	Ethernet-based VLAN commands
<0x600-0xffff>	Ether Type(Range: 0x600 - 0xFFFF)
arp	Ether Type is ARP
ip	Ether Type is IP
ipx	Ether Type is IPX
at	Ether Type is AppleTalk
snap	SNAP-based VLAN group
<0x0-0xfffff>	SNAP OUI (Range 0x000000 - 0FFFFFFF)
rfc_1042	SNAP OUI is rfc_1042
snap_8021h	SNAP OUI is 8021h
<0x0-0xffff>	PID (Range: 0x0 - 0xFFFF)
llc	LLC-based VLAN group
<0x0-0xff>	DSAP (Range: 0x00 - 0xFF)
<0x0-0xff>	SSAP (Range: 0x00 - 0xFF)
group	Protocol-based VLAN group commands
<word16>	Group Name (Range: 1 - 16 characters)
<vlan_list>	Vlan list
ethertype	
s-custom-por	

EXAMPLE

```
LGB1110A(config)# no vlan 3  
LGB1110A(config)# no vlan ethertype s-custom-port  
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

VOICE

Voice appliance attributes

SYNTAX

no voice vlan

no voice vlan aging-time

no voice vlan class

no voice vlan oui <oui>

no voice vlan vid

PARAMETER

vlan	Vlan for voice traffic
aging-time	Set secure learning aging time
class	Set traffic class
oui	OUI configuration
<oui>	Traffic class value
vid	Set VLAN ID

EXAMPLE

```
LGB1110A(config)# no voice vlan vid
LGB1110A(config)# no voice vlan class
LGB1110A(config)# no voice vlan aging-time
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

WEB

Web

SYNTAX

no web privilege group [<group_name>] level

PARAMETER

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, Ports, Private_VLANs, QoS, RPC, Security, Spanning_Tree, System, Timer, UPnP, VCL, VLANs, Voice_VLAN, XXRP, sFlow
level	Web privilege group level

EXAMPLE

```
LGB1110A(config)# no web privilege group LACP level
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

3.3 QOS

TABLE 3-3. CONFIGURE – QOS COMMANDS

COMMAND	FUNCTION
map	Global QoS Map/Table
qce	QoS Control Entry
storm	Storm policer

MAP

Global QoS Map/Table

SYNTAX

```
qos map cos-dscp <0~7> dpl <dpl : 0~1> dscp { <DscpNum : 0-63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } }
```

```
qos map dscp-classify { <dscpNum : 0~63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } }
```

```
qos map dscp-cos { < dscpNum : 0~63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } cos <Cos : 0-7> dpl <dpl>
```

```
qos map dscp-egress-translation { < DscpNum : 0~63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } <Dpl : 0~1> to { <Dscpnum : 0-63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } }
```

```
qos map dscp-ingress-translation { < DscpNum : 0~63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } } to { < DscpNum : 0-63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } }
```

PARAMETER

cos-dscp	Map for cos to dscp
dscp-classify	Map for dscp classify enable
dscp-cos	Map for dscp to cos
dscp-egress-translation	Map for dscp egress translation
dscp-ingress-translation	Map for dscp ingress translation
dpl	Specify drop precedence level
<Dpl : 0~1>	Specific drop precedence level or range
dscp	Specify DSCP
<DscpNum : 0-63>	Specific DSCP
cos	Specify class of QoS
<Cos : 0-7>	Specific class of QoS
af11	Assured Forwarding PHB AF11(DSCP 10)
af12	Assured Forwarding PHB AF12(DSCP 12)

CHAPTER 3: CONFIGURE COMMANDS OF CLI

af13	Assured Forwarding PHB AF13(DSCP 14)
af21	Assured Forwarding PHB AF21(DSCP 18)
af22	Assured Forwarding PHB AF22(DSCP 20)
af23	Assured Forwarding PHB AF23(DSCP 22)
af31	Assured Forwarding PHB AF31(DSCP 26)
af32	Assured Forwarding PHB AF32(DSCP 28)
af33	Assured Forwarding PHB AF33(DSCP 30)
af41	Assured Forwarding PHB AF41(DSCP 34)
af42	Assured Forwarding PHB AF42(DSCP 36)
af43	Assured Forwarding PHB AF43(DSCP 38)
be	Default PHB(DSCP 0) for best effort traffic
cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
cs2	Class Selector PHB CS2 precedence 2(DSCP 16)
cs3	Class Selector PHB CS3 precedence 3(DSCP 24)
cs4	Class Selector PHB CS4 precedence 4(DSCP 32)
cs5	Class Selector PHB CS5 precedence 5(DSCP 40)
cs6	Class Selector PHB CS6 precedence 6(DSCP 48)
cs7	Class Selector PHB CS7 precedence 7(DSCP 56)
ef	Expedited Forwarding PHB(DSCP 46)
va	Voice Admit PHB(DSCP 44)

EXAMPLE

```
LGB1110A(config)# qos map cos-dscp 5 dpl 1 dscp 20
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

QCE

QoS Control Entry

SYNTAX

qos qce refresh

```
qos qce { [ update ] } <Id : 1-256> [ { next <Id : 1-256> } | last ] [ ingress interface *|Gigabitethernet <PORT_LIST> ] [ tag { tagged | untagged | any } ] [ vid { <vlan_list> | any } ] [ pcp { <pcp> | any } ] [ dei { <Dpl : 0-1> | any } ] [ smac { <mac_addr> | <oui> | any } ] [ dmac-type { unicast | multicast | broadcast | any } ] [ frametype { 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 } ] [ dscp { <0~63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } | any } ] [ frag { yes | no | any } ] [ sport { <0~65535> | any } ] [ dport { <0~65535> | any } ] } | { ipv6 [ proto { <0-255> | tcp | udp | any } ] [ sip { <ipv4_subnet> | any } ] [ dscp { <0~63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } | any } ] [ sport { <0~65535> | any } ] [ dport { <0~65535> | any } ] } } ] [ action { [ cos { <0-7> | default } ] [ dpl { <0-1> | default } ] [ dscp { <0-63> | { be | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef | va } | default } ] } ] }
```

PARAMETER

<Id : 1-256>	QCE ID
refresh	Refresh QCE tables in hardware
update	Update an existing QCE
action	Specify action
dei	Specify DEI (Drop Eligible Indicator)
dmac-type	Specify DMAC type
frametype	Specify frame type
ingress	Ingress interfaces
last	Place QCE at the end
next	Place QCE before the next QCE ID
pcp	Specify PCP (Priority Code Point)
smac	Specify SMAC. If “qos qce dmac-dip” is set, this parameter specifies the DMAC
tag	Specify tag options
vid	Specify VLAN ID
cos	Specify class of service
dpl	Specify drop precedence level
dscp	Specify DSCP
cos	Specify class of service
<Cos : 0-7>	Specific class of service
default	Keep default class of service
<Dpl : 0-1>	Specific drop precedence level
default	Keep default drop precedence level
<Dscp : 0-63>	Specific DSCP

CHAPTER 3: CONFIGURE COMMANDS OF CLI

af11	Assured Forwarding PHB AF11(DSCP 10)
af12	Assured Forwarding PHB AF12(DSCP 12)
af13	Assured Forwarding PHB AF13(DSCP 14)
af21	Assured Forwarding PHB AF21(DSCP 18)
af22	Assured Forwarding PHB AF22(DSCP 20)
af23	Assured Forwarding PHB AF23(DSCP 22)
af31	Assured Forwarding PHB AF31(DSCP 26)
af32	Assured Forwarding PHB AF32(DSCP 28)
af33	Assured Forwarding PHB AF33(DSCP 30)
af41	Assured Forwarding PHB AF41(DSCP 34)
af42	Assured Forwarding PHB AF42(DSCP 36)
af43	Assured Forwarding PHB AF43(DSCP 38)
be	Default PHB(DSCP 0) for best effort traffic
cs1	Class Selector PHB CS1 precedence 1(DSCP 8)
cs2	Class Selector PHB CS2 precedence 2(DSCP 16)
cs3	Class Selector PHB CS3 precedence 3(DSCP 24)
cs4	Class Selector PHB CS4 precedence 4(DSCP 32)
cs5	Class Selector PHB CS5 precedence 5(DSCP 40)
cs6	Class Selector PHB CS6 precedence 6(DSCP 48)
cs7	Class Selector PHB CS7 precedence 7(DSCP 56)
default	Keep default DSCP
ef	Expedited Forwarding PHB(DSCP 46)
va	Voice Admit PHB(DSCP 44)
any	Any
broadcast	Broadcast
multicast	Multicast
unicast	Unicast
etype	Ethernet frames
ipv4	IPv4 frames
ipv6	IPv6 frames
llc	LLC frames
snap	SNAP frames
<Etype : 0x600-0x7ff,0x801-0x86dc,0x86de-0xffff>	Specific EtherType
interface	Interfaces
<Next : 1-256>	The next QCE ID
<Pcp : pcp>	Specific PCP (0-7) or range (0-1, 2-3, 4-5, 6-7, 0-3 or 4-7)
<Smac : mac_addr>	Specific SMAC (XX-XX-XX-XX-XX-XX)



CHAPTER 3: CONFIGURE COMMANDS OF CLI

tagged	Tagged frames only
untagged	Untagges frames only
<Vid : vlan_list>	Specific VLAN ID or range
interface	Interfaces
Gigabitethernet	1 Gigabit Ethernet Port
<PORT_LIST>	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A(config)# qos qce 100 vid any
LGB1110A(config)#
```

STORM

Storm policer

SYNTAX

```
qos storm { unicast | multicast | broadcast } <Rate : 1,2,4,8,16,32,64,128,256,512,1024> [ kfps ]
```

PARAMETER

broadcast	Police broadcast frames
multicast	Police multicast frames
unicast	Police unicast frames
<Rate: 1,2,4,8,16,32,64,128,256,512,1024>	Policer rate (default fps)
kfps	Rate is kfps

EXAMPLE

```
LGB1110A(config)# qos storm broadcast 256 kfps
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

3.4 SNMP-SERVER

Set SNMP server's configurations

SYNTAX

snmp-server

TABLE 3-4. CONFIGURE – SNMP-SERVER COMMANDS

COMMAND	FUNCTION
access	access configuration
community	Set the SNMP community
contact	Set the SNMP server's contact string
engine-id	Set SNMP engine ID
host	Set SNMP host's configurations
location	Set the SNMP server's location string
security-to-group	security-to-group configuration
trap	Set trap's configurations
user	Set the SNMPv3 user's configurations
version	Set the SNMP server's version
view	MIB view configuration

ACCESS

access configuration

SYNTAX

```
snmp-server access <GroupName : word32> model { v1 | v2c | v3 | any } level { auth | noauth | priv } [ read <ViewName : word255> ] [ write <WriteName : word255> ]
```

PARAMETER

<GroupName : word32>	group name
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



CHAPTER 3: CONFIGURE COMMANDS OF CLI

read	specify a read view for the group
write	specify a write view for the group
<ViewName : word255>	read view name
<WriteName : word255>	write view name

EXAMPLE

```
LGB1110A(config)# snmp-server access text model v2c level noauth write
text
LGB1110A(config)#
```

COMMUNITY

Set the SNMP community

SYNTAX

```
snmp-server community v2c <Community : word127> [ ro | rw ]
snmp-server community v3 <word127> [ <ipv4_addr> <ipv4_netmask> ]
```

PARAMETER

v2c	SNMPv2c
<Community : word127>	Community word
ro	Read only
rw	Read write
v3	SNMPv3
<Community : word127>	Community word
<ipv4_addr>	IPv4 address
<ipv4_netmask>	IPv4 netmask

EXAMPLE

```
LGB1110A(config)# snmp-server community v2c text
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

CONTACT

Set the SNMP server's contact string

SYNTAX

```
snmp-server contact <line255>
```

PARAMETER

contact	Set the SNMP server's contact string
<line255>	contact string

EXAMPLE

```
LGB1110A(config)# snmp-server contact text
LGB1110A(config)#
```

ENGINE-ID

Set SNMP engine ID

SYNTAX

```
snmp-server engine-id local <Engineid : word10-32>
```

PARAMETER

local	Set SNMP local engine ID
<Engineid : word10-32>	local engine ID

EXAMPLE

```
LGB1110A(config)# snmp-server engine-id local 1234567891
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

HOST

Set SNMP host's configurations

SYNTAX

```
snmp-server host <word32>
```

PARAMETER

<word32> Name of the host configuration

EXAMPLE

```
LGB1110A(config)# snmp-server host text  
LGB1110A(config-snmps-host)#
```

LOCATION

Set the SNMP server's location string

SYNTAX

```
snmp-server location <line255>
```

PARAMETER

<line255> location string

EXAMPLE

```
LGB1110A(config)# snmp-server location text  
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

SECURITY-TO-GROUP

security-to-group configuration

SYNTAX

```
snmp-server security-to-group model { v1 | v2c | v3 } name <SecurityName : word32> group <GroupName : word32>
```

PARAMETER

model	security model
v1	v1 security model
v2c	v2c security model
v3	v3 security model
name	security user
<SecurityName : word32>	security user name
group	security group
<GroupName : word32>	security group name

EXAMPLE

```
LGB1110A(config)# snmp-server security-to-group model v2c name text
group text
LGB1110A(config)#
```

TRAP

Set trap's configurations

SYNTAX

```
snmp-server trap
```

EXAMPLE

```
LGB1110A(config)# snmp-server trap
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

USER

Set the SNMPv3 user's configurations

SYNTAX

```
snmp-server user <Username : word32> engine-id <Engineid : word10-32> [ { md5 <Md5Passwd : word8-32> | sha <ShaPasswd : word8-40> } [ priv { des | aes } <word8-32> ] ]
```

PARAMETER

<Username : word32>	Username
engine-id	engine ID
<Engineid : word10-32>	Engine ID octet string
md5	Set MD5 protocol
<Md5Passwd : word8-32>	MD5 password
sha	Set SHA protocol
<ShaPasswd word8-40>	SHA password
priv	Set Privacy
des	Set DES protocol
aes	Set AES protocol
<word8-32>	Set privacy password

EXAMPLE

```
LGB1110A(config)# snmp-server user text engine-id 1234567891 md5  
12345678 priv aes 12345678  
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

VERSION

Set the SNMP server's version

SYNTAX

```
snmp-server version { v1 | v2c | v3 }
```

PARAMETER

v1	SNMPv1
v2c	SNMPv2c
v3	SNMPv3

EXAMPLE

```
LGB1110A(config)# snmp-server version v2c  
LGB1110A(config)#
```

VIEW

MIB view configuration

SYNTAX

```
snmp-server view <ViewName : word32> <OidSubtree : word255> { include | exclude }
```

PARAMETER

<ViewName : word32>	MIB view name
<OidSubtree : word255>	MIB view OID
include	Included type from the view
exclude	Excluded type from the view

EXAMPLE

```
LGB1110A(config)# snmp-server view text .1 include  
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

3.5 SPANNING-TREE

Spanning Tree protocol

TABLE 3-5. CONFIGURE – SPANNING-TREE COMMANDS

COMMAND	FUNCTION
aggregation	Aggregation mode
edge	Edge ports
mode	STP protocol mode
mst	STP bridge instance
recovery	The error recovery timeout
transmit	BPDU's to transmit

AGGREGATION

Aggregation mode

SYNTAX

spanning-tree aggregation

EXAMPLE

```
IGB1110A(config)# spanning-tree aggregation
IGB1110A(config-stp-aggr)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

EDGE

Edge ports

SYNTAX

spanning-tree edge bpdu-filter
spanning-tree edge bpdu-guard

PARAMETER

bpdu-filter Enable BPDU filter (stop BPDU tx/rx)
bpdu-guard Enable BPDU guard

EXAMPLE

```
LGB1110A(config)# spanning-tree edge bpdu-filter  
LGB1110A(config)#
```

MODE

STP protocol mode

SYNTAX

spanning-tree mode { stp | rstp | mstp }

PARAMETER

mstp Multiple Spanning Tree (802.1s)
rstp Rapid Spanning Tree (802.1w)
stp 802.1D Spanning Tree

EXAMPLE

```
LGB1110A(config)# spanning-tree mode stp  
LGB1110A(config)#
```



CHAPTER 3: CONFIGURE COMMANDS OF CLI

MST

STP bridge instance

SYNTAX

```
spanning-tree mst <Instance : 0-7> priority <Prio : 0-61440>
```

```
spanning-tree mst < Instance : 0-7> vlan <vlan_list>
```

```
spanning-tree mst forward-time <Fwdtime : 4-30>
```

```
spanning-tree mst max-age <Maxage : 6-40> [ forward-time <Fwdtime : 4-30> ]
```

```
spanning-tree mst max-hops <Maxhops : 6-40>
```

```
spanning-tree mst name <Name : word32> revision <0-65535>
```

PARAMETER

<Instance : 0-7>	instance 0-7 (CIST=0, MST2=1...)
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
<Prio : 0-61440>	Range in seconds
<vlan_list>	Range of VLANs
<Fwdtime : 4-30>	Range in seconds
<Maxage : 6-40>	Range in seconds
<Maxhops : 6-40>	Hop count range
<Name : word32>	Name of the bridge
revision	Revision keyword
<0-65535>	Revision number

EXAMPLE

```
LGB1110A(config)# spanning-tree mst 7 vlan 10
LGB1110A(config)#
```

CHAPTER 3: CONFIGURE COMMANDS OF CLI

RECOVERY

The error recovery timeouts

SYNTAX

spanning-tree recovery interval <Interval : 30-86400>

PARAMETER

interval	The interval
<Interval : 30-86400>	Range in seconds

EXAMPLE

```
LGB1110A(config)# spanning-tree recovery interval 50
LGB1110A(config)#
```

TRANSMIT

BPDUs to transmit

SYNTAX

spanning-tree transmit hold-count <Holdcount : 1-10>

PARAMETER

hold-count	Max number of transmit BPDUs per sec
<Holdcount : 1-10>	1-10 per sec, 6 is default

EXAMPLE

```
LGB1110A(config)# spanning-tree transmit hold-count 5
LGB1110A(config)#
```



CHAPTER 4: COPY COMMANDS OF CLI

COPY

Copy from source to destination.

SYNTAX

```
copy { startup-config | running-config | < flash:filename | tftp://server/path-and-filename > } { startup-config | running-config | < flash:filename | tftp://server/path-and-filename > } [ syntax-check ] [ { begin | exclude | include } { <LINE > } ]
```

PARAMETER

flash:filename tftp://server/path-and-filename	File in FLASH or on TFTP server
running-config	Currently running configuration
startup-config	Startup configuration
	Output modifiers
syntax-check	Perform syntax check on source configuration
begin	Begin with the line that matches
exclude	Exclude lines that match
include	Include lines that match
<LINE>	String to match output lines

EXAMPLE

```
LGB1110A# copy startup-config running-config syntax-check | include  
#
```

CHAPTER 5: DEBUG COMMANDS OF CLI

DEBUG

Debugging functions

SYNTAX

debug prompt text

PARAMETER

prompt Set prompt for testing

WORD Word for prompt in 32 characters

EXAMPLE

```
LGB1110A# debug prompt test  
test#
```



CHAPTER 6: DELETE COMMANDS OF CLI

DELETE

Delete one file in flash: file system

SYNTAX

Delete <Path : word>

PARAMETER

<Path : word> Name of file to delete

EXAMPLE

```
LGB1110A# delete text  
LGB1110A#
```

CHAPTER 7: DIR COMMANDS OF CLI

DIR

Directory of all files in flash: file system

SYNTAX

Dir [| begin | exclude | include <LINE>]

PARAMETER

	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

```
LGB1110A# dir
Directory of flash:
  r- 2011-01-01 00:00:00      720 default-config
  rw 2011-01-01 00:00:11    1777 startup-config
2 files, 2497 bytes total.
```



CHAPTER 8: DISABLE COMMANDS OF CLI

DISABLE

Turn off privileged commands

SYNTAX

disable <0-15>

PARAMETER

<0-15> Privilege level

EXAMPLE

```
LGB1110A# disable 10
LGB1110A#
```



CHAPTER 9: DO COMMANDS OF CLI

DO

Run exec commands in config mode

SYNTAX

Do <LINE>{[LINE]}

PARAMETER

LINE Exec Command

EXAMPLE

```
LGB1110A# do show clock
System Time      : 2011-01-01T00:03:44+00:00
```



CHAPTER 10: DOTX OF CLI

DOTX

IEEE Standard for port-based Network Access Control

SYNTAX

```
dot1x initialize [ interface ( <port_type> [ <plist> ] ) ]
```

PARAMETER

initialize	Force re-authentication immediately
interface	Interface
*	All switches or All ports
Gigabitethernet	1 GigabitEthernet port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A# dot1x initialize interface GigabitEthernet 1/1-10  
LGB1110A#
```

CHAPTER 11: ENABLE OF CLI

ENABLE

Turn on privileged commands

SYNTAX

Enable <1-15>

PARAMETER

<0-15> Choose privileged level

EXAMPLE

```
LGB1110A# enable 10  
LGB1110A#
```



CHAPTER 12: FIRMWARE OF CLI

FIRMWARE

Firmware upgrade/swap

SYNTAX

firmware swap

firmware upgrade < TFTPServer_path_file : word >

PARAMETER

swap

Swap between Active and Alternate firmware image.

upgrade

Firmware upgrade

<TFTPServer_path_file : word >

TFTP Server IP address, path and file name for the server containing the new image.

EXAMPLE

```
LGB1110A# firmware upgrade tftp://192.168.1.1/path/LGB1110A
Programming image...
LGB1110A#
```

CHAPTER 13: NO OF CLI

NO

Negate a command or set its defaults

SYNTAX

no debug prompt

PARAMETER

debug	Debugging functions
prompt	Clear prompt for testing

EXAMPLE

```
LGB1110A# no debug prompt
LGB1110A#
```



CHAPTER 14: PING OF CLI

PING

Send ICMP echo messages

SYNTAX

```
ping ip <word1-255> [ repeat <Count : 1-60> ] [ size <Size : 2-1452> ] [ interval <Seconds : 0-30> ]
```

```
ping ipv6 <ipv6_addr> [ repeat <Count : 1-60> ] [ size <Size : 2-1452> ] [ interval <Seconds : 0-30> ] [ interface vlan <vlan_id> ]
```

PARAMETER

ip	IP (ICMP) echo
<word1-255>	ICMP destination address
repeat	Specify repeat count
<Count : 1-60>	1-60; Default is 5
size	Specify datagram size
<Size : 2-1452>	2-1452; Default is 56 (excluding MAC, IP and ICMP headers)
interval	Specify repeat interval
<Seconds : 0-30>	0-30; Default is 0
ipv6	IPv6 (ICMPv6) echo
<ipv6_addr>	ICMPv6 destination address
repeat	Specify repeat count
<1-60>	1-60; Default is 5
size	Specify datagram size
<2-1452>	2-1452; Default is 56 (excluding MAC, IP and ICMP headers)
interval	Specify repeat interval
<0-30>	0-30; Default is 0
interface	Select an interface to configure
vlan	VLAN Interface
<vlan_id>	VLAN identifier(s): VID

EXAMPLE

```
LGB1110A# ping ip 33 interval 22 repeat 33 size 444  
PING server 0.0.0.33, 444 bytes of data initialize interfac
```

CHAPTER 15: RELOAD OF CLI

RELOAD

Reload system

SYNTAX

```
reload {{{ cold | warm } [ sid <usid> ] } | { defaults [ keep-ip ] } }
```

PARAMETER

cold	Reload cold, i.e. reboot.
defaults	Reload defaults without rebooting.
keep-ip	Attempt to keep VLAN1 IP setup.

EXAMPLE

```
LGB1110A# reload defaults
% Reloading defaults. Please stand by.
LGB1110A# reload cold
% Cold reload in progress, please stand by.
LGB1110A# +M25PXX : Init device with JEDEC ID 0x20BA19.
Luton26 board detected (VSC7427 Rev. D).

RedBoot(tm) bootstrap and debug environment [ROMRAM]
Non-certified release, version 1_15a-Vitesse - built 18:36:46, Sep 9 2014

Copyright (C) 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009
Free Software Foundation, Inc.

RedBoot is free software, covered by the eCos license, derived from the
GNU General Public License. You are welcome to change it and/or distribute
copies of it under certain conditions. Under the license terms, RedBoot's
source code and full license terms must have been made available to you.
Redboot comes with ABSOLUTELY NO WARRANTY.
```



CHAPTER 16: SEND OF CLI

SEND

Send a message to other tty lines

SYNTAX

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

PARAMETER

*	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
<LINE>	Message to be sent to lines, in 128 characters

EXAMPLE

```
LGB1110A# send * yes,i do
Enter TEXT message. End with the character 'y'.

y

-----

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

-----

LGB1110A#
```

CHAPTER 17: SHOW OF CLI

Show running system information

TABLE 17-1. SHOW COMMANDS

COMMAND	FUNCTION
aaa	Login methods
access	Access management
access-list	Access list
aggregation	Aggregation port configuration
clock	Configure time-of-day clock
dot1x	IEEE Standard for port-based Network Access Control
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	Display LLDP neighbors information
logging	Syslog
loop-protect	Loop protection configuration
mac	Mac Address Table information
mvr	Multicast VLAN Registration configuration
ntp	Configure NTP
port-security	
Privilege	Display command privilege
pvlan	PVLAN status
qos	Quality of Service
radius-server	RADIUS configuration
rmon	RMON statistics
running-config	Show running system information
sflow	Statistics flow
snmp	Display SNMP configurations
spanning-tree	STP Bridge
switchport	Display switching mode characteristics
system	show system information
tacacs-server	TACACS+ configuration
terminal	Display terminal configuration parameters
upnp	Display UPnP configurations
users	Display information about terminal lines
version	System hardware and software status



CHAPTER 17: SHOW OF CLI

TABLE 17-1 (CONTINUED). SHOW COMMANDS

COMMAND	FUNCTION
vlan	VLAN status
voice	Voice appliance attributes
web	Web

AAA

Login methods

SYNTAX

```
show aaa [ | {begin | exclude | include } <LINE>]
```

PARAMETER

	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

```
LGB1110A# show aaa
console : local
telnet  : local
ssh     : local
http    : local
LGB1110A#
```

ACCESS

Access management

SYNTAX

```
show access management [ statistics | <access_id_list> ]
```

CHAPTER 17: SHOW OF CLI

PARAMETER

management	Access management configuration
statistics	Statistics data
<AccessidList : 1~16>	ID of access management entry
	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

```
LGB1110A# show access management
Switch access management mode is disabled

W: WEB/HTTPS
S: SNMP
T: TELNET/SSH

Idx VID  Start IP Address          End IP Address             W S T
-----  -
- - -

LGB1110A# show access management statistics

Access Management Statistics:
-----

HTTP    Receive:      0  Allow:      0  Discard:    0
HTTPS  Receive:      0  Allow:      0  Discard:    0
SNMP    Receive:      0  Allow:      0  Discard:    0
TELNET  Receive:      0  Allow:      0  Discard:    0
SSH     Receive:      0  Allow:      0  Discard:    0

LGB1110A#
```



CHAPTER 17: SHOW OF CLI

ACCESS-LIST

Access list

SYNTAX

```
show access-list [ interface [ * | Gigabitetherne <PORT_LIST> ] ] [ rate-limiter [ <RateLimiterList : 1~16> ] ] [ ace statistics [ <Aceld : 1~256> ] ]
```

```
show access-list ace-status [ static ] [ loop-protect ] [ dhcp ] [ upnp ] [ arp-inspection ] [ mep ] [ ipmc ] [ ip-source-guard ] [ ip-mgmt ] [ conflicts ]
```

PARAMETER

interface	Select an interface to configure
*	All Switches or All Ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10
rate-limiter	Rate limiter
< RateLimiterList : 1-16>	Rate limiter ID
ace	Access list entry
statistics	Traffic statistics
<Aceld : 1-256>	ACE ID
ace-status	The local ACEs status
static	The ACEs that are configured by users manually
loop-protect	The ACEs that are configured by Loop Protect module
dhcp	The ACEs that are configured by DHCP module
upnp	The ACEs that are configured by UPnP module
arp-inspection	The ACEs that are configured by ARP Inspection module
mep	The ACEs that are configured by MEP module
ipmc	The ACEs that are configured by IPMC module
ip-source-guard	The ACEs that are configured by IP Source Guard module
ip-mgmt	The ACEs that are configured by IP Management module
conflicts	The conflicts ACEs that does not applied to the hardware due to hardware limitations
	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

CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# show access-list ace statistics rate-limiter

Switch access-list ace number: 0

Switch access-list rate limiter ID 1 is 1 pps
Switch access-list rate limiter ID 2 is 1 pps
Switch access-list rate limiter ID 3 is 1 pps
Switch access-list rate limiter ID 4 is 1 pps
Switch access-list rate limiter ID 5 is 1 pps
Switch access-list rate limiter ID 6 is 1 pps
Switch access-list rate limiter ID 7 is 1 pps
Switch access-list rate limiter ID 8 is 1 pps
Switch access-list rate limiter ID 9 is 1 pps
Switch access-list rate limiter ID 10 is 1 pps
Switch access-list rate limiter ID 11 is 1 pps
Switch access-list rate limiter ID 12 is 1 pps
Switch access-list rate limiter ID 13 is 1 pps
Switch access-list rate limiter ID 14 is 1 pps
Switch access-list rate limiter ID 15 is 1 pps
Switch access-list rate limiter ID 16 is 1 pps

LGB1110A#
```



CHAPTER 17: SHOW OF CLI

AGGREGATION

Aggregation port configuration

SYNTAX

```
show aggregation [ mode ] [ | {begin | exclude | include } <LINE>]
```

PARAMETER

mode	Traffic distribution mode
	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

```
LGB1110A# show aggregation Mode
Aggregation Mode:

SMAC : Enabled
DMAC : Disabled
IP   : Enabled
Port : Enabled
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

CLOCK

Configure time-of-day clock

SYNTAX

show clock [detail]

PARAMETER

detail Display detailed information

EXAMPLE

```
LGB1110A# show clock detail
System Time      : 2011-01-01T00:53:57+00:00

Timezone : Timezone Offset : 0 ( 0 minutes)
Timezone Acronym :

Daylight Saving Time Mode : Disabled.
Daylight Saving Time Start Time Settings :
    Week: 0
    Day: 0
    Month: 0
    Date: 0
    Year: 0
    Hour: 0
    Minute: 0
Daylight Saving Time End Time Settings :
    Week: 0
    Day: 0
    Month: 0
    Date: 0
    Year: 0
    Hour: 0
    Minute: 0
Daylight Saving Time Offset : 1 (minutes)
```



CHAPTER 17: SHOW OF CLI

DOT1X

IEEE Standard for port-based Network Access Control.

SYNTAX

```
show dot1x statistics { eapol | radius | all } [ interface <port_type> <port_type_list> ] [ | {begin | exclude | include } <LINE> ]
```

```
show dot1x status [ interface ( <port_type> [ <port_type_list> ] ) ] [ brief ] [ | {begin | exclude | include } <LINE> ]
```

PARAMETER

statistics	Shows statistics for either eapol or radius.
all	Show all dot1x statistics
eapol	Show EAPOL statistics
radius	Show Backend Server statistics
<port_type >	GigabitEthernet
<port_type_list>	Port list in 1/1-10 for GigabitEthernet
Status	Shows dot1x status, such as admin state, port state and last source.
brief	Show status in a brief format
interface	Interface
*	All Switches or All Ports
GigabitEthernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for GigabitEthernet

EXAMPLE

```
LGB1110A# show dot1x statistics radius
```

Interface	Rx Access Challenges	Rx Other Requests	Rx Auth. Successes	Rx Auth. Failures	Tx Responses	MAC Address
GigabitEthernet 1/1	0	0	0	0	0	-
GigabitEthernet 1/2	0	0	0	0	0	-
GigabitEthernet 1/3	0	0	0	0	0	-
GigabitEthernet 1/4	0	0	0	0	0	-
GigabitEthernet 1/5	0	0	0	0	0	-

```
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

GREEN-ETHERNET

Green ethernet (Power reduction)

SYNTAX

```

sshshow 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> ]

```

PARAMETER

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 1/1-10 for Gigabitethernet

EXAMPLE

```

LGB1110A# show green-ethernet eee
Interface          Lnk  EEE Capable  EEE Enabled  LP  EEE Capable  In
Power Save
-----
-----
GigabitEthernet 1/1  No  Yes         No          No  No          No
GigabitEthernet 1/2  No  Yes         No          No  No          No
GigabitEthernet 1/3  No  Yes         No          No  No          No
GigabitEthernet 1/4  No  Yes         No          No  No          No
GigabitEthernet 1/5  No  Yes         No          No  No          No
GigabitEthernet 1/6  No  Yes         No          No  No          No
GigabitEthernet 1/7  No  Yes         No          No  No          No
GigabitEthernet 1/8  No  Yes         No          No  No          No
GigabitEthernet 1/9  No  Yes         No          No  No          No

```



CHAPTER 17: SHOW OF CLI

HISTORY

Display the session command history

SYNTAX

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

PARAMETER

	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

```
LGB1110A# show history
  show evc statistics
  show green-ethernet EEE
  show green-ethernet EEE interface GigabitEthernet
  show history
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

INTERFACE

Interface status and configuration

SYNTAX

```
show interface <port_type> <port_type_list> [ switchport [ access | trunk | hybrid ] ]
```

```
show interface <port_type> <port_type_list> capabilities
```

```
show interface <port_type> <port_type_list> statistics [ { packets | bytes | errors | discards | filtered | { priority [ <0-7> } ] } ] [ { up | down } ]
```

```
show interface <port_type> <port_type_list> status
```

```
show interface <port_type> <port_type_list> veriphy
```

```
show interface vlan [ <vlan_list> ]
```

PARAMETER

<port_type>	Gigabitethernet
*	All Switches or All ports
Gigabitethernet	1 Gigabitethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
capabilities	Display capabilities.
statistics	Display statistics counters.
status	Display status.
switchport	Show interface switchport information
veriphy	Run cable diagnostics and show result.
bytes	Show byte statistics.
discards	Show discard statistics.
down	Show ports which are down
errors	Show error statistics.
filtered	Show filtered statistics.
packets	Show packet statistics.
priority	Queue number
up	Show ports which are up
vlan	VLAN status
<vlan_list>	VLAN list



CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# 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:

LGB1110A#
```

IP

Internet Protocol

SYNTAX

```
show ip arp
```

```
show ip arp inspection [ interface <port_type> <port_type_list> ] | vlan <vlan_list> ]
```

```
show ip arp inspection entry [ dhcp-snooping | static ] [ interface <port_type> <port_type_list> ]
```

```
show ip dhcp relay [ statistics ]
```

```
show ip dhcp snooping [ statistics ] [ interface <port_type> <port_type_list> ]
```

```
show ip http server secure status
```

```
show ip igmp snooping [ vlan <vlan_list> ] [ group-database [ interface <port_type> <port_type_list> ] [ sfm-information ] ] [ detail ]
```

```
show ip igmp snooping mrouter [ detail ]
```

CHAPTER 17: SHOW OF CLI

```
show ip interface brief
show ip name-server
show ip route
show ip source binding [ dhcp-snooping | static ] [ interface <port_type> <port_type_list> ]
show ip ssh
show ip statistics [ system ] [ interface vlan <vlan_list> ] [ icmp ] [ icmp-msg <0~255> ]
show ip verify source [ interface <port_type> <port_type_list> ]
```

PARAMETER

arp	Address Resolution Protocol
inspection	ARP inspection
interface	arp inspection entry interface config
<port_type>	Gigabitethernet
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
vlan	VLAN configuration
<vlan_list>	Select a VLAN id to configure
entry	arp inspection entries
dhcp-snooping	learn from dhcp snooping
static	setting from static entries
dhcp	Dynamic Host Configuration Protocol
relay	DHCP relay agent configuration
statistics	Traffic statistics
snooping	DHCP snooping
http	Hypertext Transfer Protocol
server	HTTP web server
secure	Secure
status	Status
igmp	Internet Group Management Protocol
snooping	Snooping IGMP
vlan	Search by VLAN
<vlan_list>	VLAN identifier(s): VID
group-database	Multicast group database from IGMP
sfm-information	Including source filter multicast information from IGMP
detail	Detail running information/statistics of IGMP snooping
mrouter	Multicast router port status in IGMP
detail	Detail running information/statistics of IGMP snooping
interface	IP interface status and configuration
brief	Brief IP interface status
name-server	Domain Name System



CHAPTER 17: SHOW OF CLI

route	Display the current ip routing table
binding	ip source binding
dhcp-snooping	learn from dhcp snooping
ssh	Secure Shell
system	IPv4 system traffic
icmp	IPv4 ICMP traffic
icmp-msg	IPv4 ICMP traffic for designated message type
<0~255>	ICMP message type ranges from 0 to 255
verify	verify command
source	verify source vlan

```
LGB1110A# show ip statistics system

IPv4 statistics:

Rcvd: 411 total in 36226 bytes
      273 local destination, 0 forwarding
      0 header error, 0 address error, 0 unknown protocol
      0 no route, 0 truncated, 138 discarded

Sent: 0 total in 0 byte
      0 generated, 0 forwarded
      0 no route, 0 discarded

Frag: 0 reassemble (0 reassembled, 0 couldn't reassemble)
      0 fragment (0 fragmented, 0 couldn't fragment)
      0 fragment created

Mcast: 411 received in 36226 bytes
      0 sent in 0 byte

Bcast: 273 received, 0 sent

LGB1110A#
```



CHAPTER 17: SHOW OF CLI

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> ]
```

PARAMETER

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

```
LGB1110A# show ipmc range
LGB1110A#
```



CHAPTER 17: SHOW OF CLI

IPV6

IPv6 configuration commands

SYNTAX

```
show ipv6 interface [ vlan <vlan_list> { brief | statistics } ] [ | {begin | exclude | include } <LINE> ]
show ipv6 mld snooping [ vlan <vlan_list> ] [ group-database [ interface <port_type> <port_type_list> ] [ sfm-information ] ] [ detail ]
show ipv6 mld snooping mrouter [ detail ]
show ipv6 neighbor [ interface vlan <vlan_list> ]
show ipv6 route [ interface vlan <vlan_list> ]
show ipv6 statistics [ system ] [ interface vlan <vlan_list> ] [ icmp ] [ icmp-msg <Type : 0-255> ]
```

PARAMETER

interface	Select an interface to configure
vlan	VLAN of IPv6 interface
<vlan_list>	IPv6 interface VLAN list
brief	Brief summary of IPv6 status and configuration
statistics	Traffic statistics
mld	Multicast Listener Discovery
snooping	Snooping MLD
vlan	Search by VLAN
<vlan_list>	VLAN identifier(s): VID
group-database	Multicast group database from MLD
interface	Search by port
<port_type>	Gigabitethernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
sfm-information	Including source filter multicast information from MLD
detail	Detail running information/statistics of MLD snooping
mrouter	Multicast router port status in MLD
neighbor	IPv6 neighbors
route	IPv6 routes
statistics	Traffic statistics
system	IPv6 system traffic
icmp	IPv6 ICMP traffic
icmp-msg	IPv6 ICMP traffic for designated message type
<Type : 0~255>	ICMP message type ranges from 0 to 255



CHAPTER 17: SHOW OF CLI

	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

```
LGB1110A# show ipv6 statistics system

IPv6 statistics:

Rcvd: 2 total in 112 bytes
      0 local destination, 0 forwarding
      0 header error, 0 address error, 0 unknown protocol
      0 no route, 0 truncated, 2 discarded
Sent: 8 total in 512 bytes
      14 generated, 0 forwarded
      3 no route, 0 discarded
Frag: 0 reassemble (0 reassembled, 0 couldn't reassemble)
      0 fragment (0 fragmented, 0 couldn't fragment)
      0 fragment created
Mcast: 2 received in 112 bytes
        8 sent in 512 bytes
Bcast: 0 received, 0 sent

LGB1110A#
```



CHAPTER 17: SHOW OF CLI

LACP

LACP configuration/status

SYNTAX

```
show lacp { internal | statistics | system-id | neighbor } [ | {begin | exclude | include } <LINE>]
```

PARAMETER

internal	Internal LACP configuration
neighbor	Neighbor 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

```
LGB1110A# 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
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

LINE

TTY line information

SYNTAX

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

PARAMETER

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

```
LGB1110A# 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.
    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.

LGB1110A#
```



CHAPTER 17: SHOW OF CLI

LLDP

Display LLDP neighbors information

SYNTAX

```
show lldp med media-vlan-policy [ <0~31> ] [ | {begin | exclude | include } <LINE> ]
show lldp med remote-device [ interface <port_type> <port_type_list> ] [ | {begin | exclude | include } <LINE> ]
show lldp neighbors [ interface <port_type> <port_type_list> ] [ | {begin | exclude | include } <LINE> ]
show lldp statistics [ interface <port_type> <port_type_list> ] [ | {begin | exclude | include } <LINE> ]
```

PARAMETER

med	Display LLDP-MED neighbors information.
neighbors	Display LLDP neighbors information.
statistics	Display LLDP statistics information.
media-vlan-policy	Display media vlan policies.
remote-device	Display remote device LLDP-MED neighbors information.
<0~31>	List of policies.
Interface	
<port_type >	GigabitEthernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
	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

```
LGB1110A# show lldp med media-vlan-policy
No policies defined
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

LOGGING

Syslog

SYNTAX

```
show logging <loggin_id : 1-4294967295> [ | {begin | exclude | include } <LINE>]
```

```
show logging [ info ] [ warning ] [ error ] [ | {begin | exclude | include } <LINE>]
```

PARAMETER

<logging_id: 1-4294967295>	Logging ID
error	Error
info	Information
warning	Warning
	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

```
LGB1110A# show logging info
Switch logging host mode is disabled
Switch logging host address is null
Switch logging level is information

Number of entries:
Info   : 3
Warning: 158
Error  : 0
All    : 161

ID   Level  Time                               Message
----  -----  -----
  1  Info   1970-01-01T00:00:00+00:00  Switch just made a cold boot.
  2  Info   1970-01-01T00:00:03+00:00  Link up on port 1
161  Info   1970-01-01T02:25:55+00:00  Link down on port 1
LGB1110A#
```



CHAPTER 17: SHOW OF CLI

LOOP-PROTECT

Loop protection configuration

SYNTAX

```
show loop-protect [ interface <port_type> <port_type_list> ]
```

PARAMETER

interface	Interface status and configuration
<port_type >	GigabitEthernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A# show loop-protect

Loop Protection Configuration
=====
Loop Protection   : Enable
Transmission Time : 1 sec
Shutdown Time    : 180 sec

GigabitEthernet 1/1
-----
Loop protect mode is enabled.
Actions are both of shutdown and log.
-- --
The number of loops is 0.
Status is down.

GigabitEthernet 1/2
-----
Loop protect mode is enabled.
-- more --, next page: Space, continue: g, quit: ^C   No loop.
```



CHAPTER 17: SHOW OF CLI

MAC

Mac Address Table information

SYNTAX

```
show mac address-table [ conf | static | aging-time | { { learning | count } [ interface <port_type> <port_type_list> ] } | { address  
<mac_addr> [ vlan <vlan_id> ] } | vlan <vlan_id> | interface <port_type> <port_type_list> ] [ | {begin | exclude | include } <LINE> ]
```

PARAMETER

address-table	Mac Address Table
conf	User added static mac addresses
static	All static mac addresses
aging-time	Aging time
learning	Learn/disable/secure state
count	Total number of mac addresses
interface	Select an interface to configure
<port_type>	Gigabitethernet
*	All switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10
address	MAC address lookup
<mac_addr>	48 bit MAC address: xx:xx:xx:xx:xx:xx
vlan	VLAN lookup
<vlan_id>	VLAN IDs 1-4095
vlan	Addresses in this VLAN
<vlan_id>	VLAN IDs 1-4095
interface	Select an interface to configure
<port_type>	igabitethernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
	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



CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# show mac address-table static
LGB1110A#
```

MVR

Multicast VLAN Registration configuration

SYNTAX

```
show mvr [ vlan <vlan_list> | name <word16> ] [ group-database [ interface <port_type> <port_type_list> ] [ sfm-information ] ] [
detail ] [ | {begin | exclude | include } <LINE> ]
```

PARAMETER

vlan	Search by VLAN
<vlan_list>	MVR multicast VLAN list
name	Search by MVR name
<word16>	MVR multicast VLAN name
group-database	Multicast group database from MVR
interface	Search by port
<port_type>	* or Gigabitethernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
sfm-information	Including source filter multicast information from MVR
detail	Detail information/statistics of MVR group database
	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

CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# show mvr vlan 10 detail

MVR is currently disabled, please enable MVR to start group registration.
% Invalid MVR IGMP VLAN 10.

% Invalid MVR MLD VLAN 10.

LGB1110A#
```

PLATFORM

Platform specific information

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> ]
```

PARAMETER

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



CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# show platform phy
```

Port	API Inst	WAN/LAN/1G	Mode	Duplex	Speed	Link
1	Default	1G	PD	-	-	,No
2	Default	1G	PD	-	-	,No
3	Default	1G	PD	-	-	,No
4	Default	1G	PD	-	-	,Yes
5	Default	1G	PD	-	-	,No
6	Default	1G	PD	-	-	,No
7	Default	1G	PD	-	-	,No
8	Default	1G	PD	-	-	,No
9	Default	1G	PD	-	-	,No
10	Default	1G	PD	-	-	,No
11	Default	1G	PD	-	-	,No
12	Default	1G	PD	-	-	,No

CHAPTER 17: SHOW OF CLI

NTP

show NTP

SYNTAX

show ntp status

PARAMETER

status status

EXAMPLE

```
LGB1110A# show ntp status
NTP Mode : disabled
Idx  Server IP host address (a.b.c.d) or a host name string
---  -----
1
2
3
4
5
LGB1110A#
```



CHAPTER 17: SHOW OF CLI

PORT-SECURITY

show NTP

SYNTAX

```
show port-security port [ interface <port_type> <port_type_list> ] [ | {begin | exclude | include } <LINE>
```

```
show port-security switch [ interface <port_type> <port_type_list> ] [ | {begin | exclude | include } <LINE>
```

PARAMETER

port	Show MAC Addresses learned by Port Security
switch	Show Port Security status.
Interface	
<port_type >	GigabitEthernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
	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

```
LGB1110A# show port-security port interface GigabitEthernet 1/2
GigabitEthernet 1/2
-----
MAC Address          VID   State   Added          Age/Hold Time
-----
<none>

LGB1110A#
```

CHAPTER 17: SHOW OF CLI

PRIVILEGE

SYNTAX

```
show privilege [ | {begin | exclude | include } <LINE>
```

PARAMETER

	Output modifiers
begin	Begin with the line that matches
exclude	Exclude lines that match
include	Include lines that match

EXAMPLE

```
LGB1110A# show privilege

-----
| The order is as the input sequence and |
| the last one has the highest priority. |
-----

privilege line level 5 LINE
```



CHAPTER 17: SHOW OF CLI

PVLAN

PVLAN status

SYNTAX

```
show pvlan<range_list>
```

```
show pvlan isolation interface <port_type> <port_type_list>
```

PARAMETER

<range_list>	PVLAN id to show configuration for
isolation	show isolation configuration
<port_type >	GigabitEthernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
	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

```
LGB1110A# show pvlan isolation interface GigabitEthernet 1/1-2
Port                               Isolation
-----
GigabitEthernet 1/1                Disabled
GigabitEthernet 1/2                Disabled
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

QOS

Quality of Service

SYNTAX

```
show qos [ { interface [ <port_type> <port_type_list> ] } | wred | { maps [ dscp-cos ] [ dscp-ingress-translation ] [ dscp-classify ] [ cos-dscp ] [ dscp-egress-translation ] } | storm | { qce [ <Qce : 1-256> ] } ] [ | { begin | exclude | include } <LINE>
```

PARAMETER

interface	Interface
<port_type >	GigabitEthernet
*	All switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
maps	Global QoS Maps/Tables
qce	QoS Control Entry
storm	Storm policer
wred	Weighted Random Early Discard
cos-dscp	Map for cos to dscp
dscp-classify	Map for dscp classify enable
dscp-cos	Map for dscp to cos
dscp-egress-translation	Map for dscp egress translation
dscp-ingress-translation	Map for dscp ingress translation
<Qce : 1-256>	QCE 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



CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# show qos storm
```

```
qos storm:
```

```
=====
```

```
Unicast : disabled          1
```

```
Multicast: disabled        1
```

```
Broadcast: disabled        1
```

```
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

RADIUS-SERVER

RADIUS configuration

SYNTAX

```
show radius-server [statistics] [ | {begin | exclude | include } <LINE>
```

PARAMETER

statistics	RADIUS statistics
	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

```
LGB1110A# show radius-server
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 :
No hosts configured!
LGB1110A#
```



CHAPTER 17: SHOW OF CLI

RMON

RMON statistics

SYNTAX

```
show rmon alarm [ <1~65535> ] [ | {begin | exclude | include } <LINE>
show rmon event [ <1~65535> ] [ | {begin | exclude | include } <LINE>
show rmon history [ <1~65535> ] [ | {begin | exclude | include } <LINE>
show rmon statistics [ <1~65535> ] [ | {begin | exclude | include } <LINE>
```

PARAMETER

alarm	Display the RMON alarm table
event	Display the RMON event table
history	Display the RMON history table
statistics	Display the RMON statistics table
<1~65535>	Alarm/Event/History/Statistics entry list
	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

```
LGB1110A# show rmon alarm
LGB1110A#
```

RUNNING-CONFIG

Show running system information

SYNTAX

```
show running-config [ all-defaults ] [ | {begin | exclude | include } <LINE>
show running-config feature <CWORD> [ all-defaults ] [ | {begin | exclude | include } <LINE>
show running-config interface <port_type> <port_type_list> [ all-defaults ] [ | {begin | exclude | include } <LINE>
show running-config interface vlan <vlan_list> [ all-defaults ] [ | {begin | exclude | include } <LINE>
show running-config line { console | vty } <range_list> [ all-defaults ] [ | {begin | exclude | include } <LINE>
show running-config vlan <vlan_list> [ all-defaults ] [ | {begin | exclude | include } <LINE>
```

CHAPTER 17: SHOW OF CLI

PARAMETER

all-defaults	Include most/all default values
feature	Show configuration for specific feature
interface	Show specific interface(s)
line	Show line settings
vlan	VLAN
CWORD	Valid words are GVRP, access, access-list, aggregation, arp-inspection, auth, clock, 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, port, port-security, pvlan, qos, rmon, sflow, snmp, source-guard, ssh, system, upnp, user, vlan, voice-vlan, web-privilege-group-level
<port_type >	GigabitEthernet
*	All switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
<vlan_list>	List of VLAN numbers
console	Console
vtty	VTY
<range_list>	List of console/VTYs
	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

```
LGB1110A# show running-config interface vlan 3
Building configuration...

end

LGB1110A#
```



CHAPTER 17: SHOW OF CLI

SFLOW

Statistics flow

SYNTAX

```
show sflow [ statistics { receiver | samplers [[ <range_list> ] <port_type> <port_type_list> ] } ] [ | {begin | exclude | include } <LINE>
```

PARAMETER

statistics	sFlow statistics.
receiver	Show statistics for receiver.
samplers	Show statistics for samplers.
<range_list>	runtime, see sflow_licli_functions.c
<port_type >	GigabitEthernet
*	All switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
	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

CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# 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.
LGB1110A#
```



CHAPTER 17: SHOW OF CLI

SNMP

Display SNMP configurations

SYNTAX

show snmp

show snmp access [<GroupName : word32> { v1 | v2c | v3 | any } { auth | noauth | priv }] [| {begin | exclude | include } <LINE>

show snmp community v3 [<Community : word127>] [| {begin | exclude | include } <LINE>

show snmp host [<ConfName : word32>] [system] [switch] [interface] [aaa] [| {begin | exclude | include } <LINE>

show snmp security-to-group [{ v1 | v2c | v3 } <SecurityName : word32>] [| {begin | exclude | include } <LINE>

show snmp user [<UserName : word32> <Engineld : word10-32>] [| {begin | exclude | include } <LINE>

show snmp view [<ViewName : word32> <OidSubtree : word255>] [| {begin | exclude | include } <LINE>

PARAMETER

access	access configuration
<GroupName : word32>	Group name
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
community	Community
v3	SNMPv3
<Community : word127>	Specify community name
host	Set SNMP host's configurations
<ConfName : word32>	Name of the host configuration
system	System event group
switch	Switch event group
interface	Interface event group
aaa	AAA event group
security-to-group	security-to-group configuration
<SecurityName : word32>	security group name
user	User
<UserName : word32>	Security user name
<Engineld : word10-32>	Security Engine ID
view	MIB view configuration

CHAPTER 17: SHOW OF CLI

<ViewName : word32>	MIB view name
<OidSubtree : word255>	MIB view OID
	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

```
LGB1110A# show snmp
SNMP Configuration
SNMP Mode           : enabled
SNMP Version        : 2c
Read Community      : public
Write Community     : private
Trap Mode           : disabled
Trap Version        : 1

SNMPv3 Communities Table:
Community   : public
Source IP   : 0.0.0.0
Source Mask : 0.0.0.0

Community   : private
Source IP   : 0.0.0.0
Source Mask : 0.0.0.0

SNMPv3 Users Table:
User Name    : default_user
Engine ID    : 800007e5017f000001
-- more --, next page: Space, continue: g, quit: ^C
```



CHAPTER 17: SHOW OF CLI

SPANNING-TREE

STP Bridge

SYNTAX

```
show spanning-tree [ summary | active | { interface <port_type> <port_type_list> } | { detailed [ interface <port_type> <port_type_list> ] } | { mst [ configuration | { <0-7> [ interface <port_type> <port_type_list> ] } ] } ] [ { begin | exclude | include } <LINE>
```

PARAMETER

summary	STP summary
active	STP active interfaces
interface	Choose port
<port_type>	Gigabitethernet
*	All switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
detailed	STP statistics
interface	List of port type and port ID, ex, 1/1-10
mst	Configuration
configuration	STP bridge instance no (0-7, CIST=0, MST2=1...)
<0-7>	Choose port
<port_type >	GigabitEthernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
	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



CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# show snmp

SNMP Configuration
SNMP Mode           : enabled
SNMP Version        : 2c
Read Community      : public
Write Community     : private
Trap Mode           : disabled
Trap Version        : 1

SNMPv3 Communities Table:
Community   : public
Source IP   : 0.0.0.0
Source Mask : 0.0.0.0

Community   : private
Source IP   : 0.0.0.0
Source Mask : 0.0.0.0

SNMPv3 Users Table:
User Name    : default_user
Engine ID    : 800007e5017f000001

LGB1110A# show spanning-tree ?
|           Output modifiers
active      STP active interfaces
detailed    STP statistics
interface   Choose port
mst         Configuration
summary     STP summary
<cr>

LGB1110A# show spanning-tree
CIST Bridge STP Status
Bridge ID   : 32768.00-40-C7-01-02-03
Root ID     : 32768.00-40-C7-01-02-03
Root Port   : -
```



CHAPTER 17: SHOW OF CLI

SWITCHPORT

Display switching mode characteristics

SYNTAX

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

PARAMETER

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

```
LGB1110A# show switchport forbidden
Forbidden VLAN table is empty
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

TACACS-SERVER

TACACS+ configuration

SYNTAX

```
show tacacs-server [ | {begin | exclude | include } <LINE>
```

PARAMETER

	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

```
LGB1110A# show tacacs-server
Global TACACS+ Server Timeout      : 5 seconds
Global TACACS+ Server Deadtime     : 0 minutes
Global TACACS+ Server Key          :
No hosts configured!
LGB1110A#
```



CHAPTER 17: SHOW OF CLI

SYSTEM

show system information

SYNTAX

show system

PARAMETER

None

EXAMPLE

```
LGB1110A# show system
Model Name           :
System Description   :
Location            :
Contact             :
Platform Name       :
System Date         : 2011-01-01T01:41:34 00:00
System Uptime       : 01:41:34
Bootloader Version  : v1.15a
Firmware Version    : v6.02 2014-09-23
Hardware Version    : v1.02
Mechanical Version  :
Serial Number       : XXXXYZZZZZZ
MAC Address         : 00-40-c7-01-02-03
Memory              : Total=84677 KBytes, Free=63281 KBytes,
Max=63281 KBytes
FLASH               : 0x40000000-0x41ffffff, 512 x 0x10000 blocks
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

TERMINAL

Display terminal configuration parameters

SYNTAX

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

PARAMETER

	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

```
LGB1110A# 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.

LGB1110A#
```



CHAPTER 17: SHOW OF CLI

UPNP

Display UPnP configurations

SYNTAX

```
show upnp [ | {begin | exclude | include } <LINE>
```

PARAMETER

	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

```
LGB1110A# show upnp
UPnP Mode           : Disabled
UPnP TTL            : 4
UPnP Advertising Duration : 100
LGB1110A#
```

CHAPTER 17: SHOW OF CLI

USERS

Display information about terminal lines

SYNTAX

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

PARAMETER

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

```
LGB1110A# 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.
```



CHAPTER 17: SHOW OF CLI

VERSION

System hardware and software status

SYNTAX

show version [| {begin | exclude | include } <LINE>

PARAMETER

	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



CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# show version

MEMORY      : Total=84677 KBytes, Free=63281 KBytes, Max=63281 KBytes
FLASH       : 0x40000000-0x41ffffff, 512 x 0x10000 blocks
MAC Address  : 00-40-c7-01-02-03
Previous Restart : Cold

System Contact  :
System Name     :
System Location :
System Time     : 2011-01-01T01:43:12+00:00
System Uptime   : 01:43:12

Active Image
-----
Image          : managed
Version        : LGB1110A (standalone) v6.02
Date           : 2014-09-23T13:35:25+08:00

Alternate Image
-----
Image          : managed.bk
Version        :
Date           :

-----
SID : 1
-----

Chipset ID     : VSC0
Board Type     : LGB1110A
Port Count     : 26
Product        : Vitesse LGB1110A Switch
Software Version : LGB1110A (standalone) v6.02
Build Date     : 2014-09-23T13:35:25+08:00
```



CHAPTER 17: SHOW OF CLI

VLAN

VLAN status

SYNTAX

```
show vlan [ id <vlan_list> | name <vword32> | brief ]
```

```
show vlan protocol [ eth2 { <0x600-0xffff> | arp | ip | ipx | at } ] [ snap { <0x0-0xfffff> | rfc_1042 | snap_8021h } <0x0-0xffff> ] [ llc <0x0-0xff> <0x0-0xff> ]
```

```
show vlan status [admin [interface] | all | combined | conflicts | gvrp | interface | mstp | mvr | nas | vcl | voice-vlan ] [<port_type ><port_type_list>]
```

PARAMETER

id	VLAN status by VLAN id
<vlan_list>	VLAN IDs 1–4095
name	VLAN status by VLAN name
<vword32>	A VLAN name
brief	VLAN summary information
protocol	Protocol-based VLAN status
eth2	Ethernet protocol based VLAN status
<0x600-0xffff>	Ether Type(Range: 0x600 - 0xFFFF)
arp	Ether Type is ARP
ip	Ether Type is IP
ipx	Ether Type is IPX
at	Ether Type is AppleTalk
snap	SNAP-based VLAN status
<0x0-0xfffff>	SNAP OUI (Range 0x000000 - 0FFFFFFF)
rfc_1042	SNAP OUI is rfc_1042
snap_8021h	SNAP OUI is 8021h
<0x0-0xffff>	PID (Range: 0x0 - 0xFFFF)
llc	LLC-based VLAN status
<0x0-0xff>	DSAP (Range: 0x00 - 0xFF)
<0x0-0xff>	SSAP (Range: 0x00 - 0xFF)
admin	Show the VLANs configured by administrator.
all	Show all VLANs configured.
combined	Show the VLANs configured by a combination.
conflicts	Show VLANs configurations that has conflicts.
gvrp	Show the VLANs configured by GVRP.
interface	Show the VLANs configured for a specific interface(s).

CHAPTER 17: SHOW OF CLI

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.
interface	Show the VLANs configured for a specific interface(s).
<port_type >	GigabitEthernet
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet

EXAMPLE

```
LGB1110A# show vlan
VLAN  Name                               Interfaces
-----
1     default                               Gi 1/1-10

LGB1110A#
```



CHAPTER 17: SHOW OF CLI

VOICE

Voice appliance attributes

SYNTAX

```
show voice vlan [ oui <oui> | interface <port_type> <port_type_list> ] [ | {begin | exclude | include } <LINE>
```

PARAMETER

vlan	Vlan for voice traffic
oui	OUI configuration
<oui>	OUI value
interface	Select an interface to configure
<port_type>	* or Gigabitethernet
*	All Switches or All ports
Gigabitethernet	1 Gigabit Ethernet Port
<port_type_list>	Port list in 1/1-10 for Gigabitethernet
	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

CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# show voice vlan
Switch voice vlan is disabled
Switch voice vlan ID is 1000
Switch voice vlan aging-time is 86400 seconds
Switch voice vlan traffic class is 7

Telephony OUI  Description
-----  -----
00-01-E3      Siemens AG phones
00-03-6B      Cisco phones
00-0F-E2      H3C phones
00-60-B9      Philips and NEC AG phones
00-D0-1E      Pingtel phones
00-E0-75      Polycom phones

GigabitEthernet 1/1 :
-----

GigabitEthernet 1/1 switchport voice vlan mode is disabled
GigabitEthernet 1/1 switchport voice security is disabled
GigabitEthernet 1/1 switchport voice discovery protocol is oui
-- more --, next page: Space, continue: g, quit: ^C
```



CHAPTER 17: SHOW OF CLI

WEB

web

SYNTAX

```
show web privilege group [ <cword> ] level [ | {begin | excludFe | include } <LINE>
```

PARAMETER

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, 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

CHAPTER 17: SHOW OF CLI

EXAMPLE

```
LGB1110A# 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
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



CHAPTER 18: TERMINAL OF CLI

CLI

Set terminal line parameters

SYNTAX

terminal editing

terminal exec-timeout <0-1440> [<0-3600>]

terminal help

terminal history size <0-32>

terminal length <0 or 3-512>

terminal width <0 or 40-512>

PARAMETER

editing	Enable command line editing
exec-timeout	Set the EXEC timeout
help	Description of the interactive help system
history	Control the command history function
length	Set number of lines on a screen
width	Set width of the display terminal
<0-1440>	Timeout in minutes
<0-3600>	Timeout in seconds
size	Set history buffer size
<0-32>	Number of history commands, 0 means disable
<0 or 3-512>	Number of lines on screen (0 for no pausing)
<0 or 40-512>	Number of characters on a screen line (0 for unlimited width)



CHAPTER 18: TERMINAL OF CLI

EXAMPLE

```
LGB1110A# terminal 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?'.)

```
LGB1110A#
```



CHAPTER 19: IP OF CLI

IP

IPv4 commands

SYNTAX

```
ip dhcp retry interface vlan <vlan_id>
```

PARAMETER

dhcp	Dhcp commands
retry	Restart the DHCP query process
interface	Interface
vlan	Vlan interface
<vlan_id>	Vlan ID

EXAMPLE

```
LGB1110A# ip dhcp retry interface vlan 1
% Failed to restart DHCP client on VLAN = 1.
```



CHAPTER 20: TRACEROUTE

TRACEROUTE

Copy from source to destination

SYNTAX

```
traceroute ip <v_ip_addr> [ protocol { icmp | udp | tcp } ] [ wait <v_wait_time> ] [ ttl <v_max_ttl> ] [ nqueries <v_nqueries> ]
```

PARAMETER

ip	IP
<word1-255>	destination address
nqueries	Specify number of probe packets
protocol	Specify protocol including icmp, udp and tcp
ttl	Specify max TTL
wait	Specify wait time

EXAMPLE

```
LGB1110A# traceroute ip 22 nqueries 3 protocol icmp ttl 3 wait 3
traceroute to 22 (0.0.0.22), 3 hops max, 140 byte packets
 1 * * *
 2 * * *
 3 * * *
LGB1110A#
```



CHAPTER 21: COMMAND REFERENCES

This chapter introduces the CLI privilege level and command modes.

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

21.1 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.

TABLE 21-1. COMMAND PRIVILEGE LEVELS

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

21.2 COMMAND MODES

The CLI is divided into several modes. If a user has the 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.

TABLE 21-2. COMMAND SUMMARY

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	0	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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

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
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
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



CHAPTER 21: COMMAND REFERENCES**TABLE 21-2 (CONTINUED). COMMAND SUMMARY**

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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
<pre>access-list ace [update] <1-256> [next <1-256> last] [ingress {switch <switch_id> switchport <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_ subnet> 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-fragment <0-1> any]] ipv4-tcp [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-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- bitmask <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]]</pre>	<p>Use the access-list ace global configuration command to set the access-list ace. The command without the update keyword will create 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 be 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.</p>	15	GLOBAL_CONFIG



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

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
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 words, 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 <unit>		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
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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

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 { console telnet ssh http } { [local radius tacacs] ... }	Use the aaa authentication login command to configure the authentication methods.	15	GLOBAL_CONFIG
no aaa authentication login { console 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
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



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

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
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 { console 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>]]		15	GLOBAL_CONFIG

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
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 relay.	15	EXEC
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
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 from 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



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

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
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	INTERFACE_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> [<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

CHAPTER 21: COMMAND REFERENCES**TABLE 21-2 (CONTINUED). COMMAND SUMMARY**

COMMAND	DESCRIPTION	P	M
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
netbios-name-server <ipv4_ucast> [<ipv4_ucast> <ipv4_ucast> [<ipv4_ucast>]]		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
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



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
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
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 onto 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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
green-ethernet eee urgent-queues [<range_list>]	Sets EEE urgent queues	15	INTERFACE_PORT_LIST
green-ethernet eee optimize-for-power	Sets if EEE should be optimized for least traffic latency or least power consumption	15	GLOBAL_CONFIG
green-ethernet energy-detect	Enables energy-detect power savings	15	INTERFACE_PORT_LIST
green-ethernet short-reach	Enables short-reach power savings.	15	INTERFACE_PORT_LIST
show ip http server secure status	Use the show ip http server secure status privileged EXEC command to display the secure HTTP web server status.	15	EXEC
ip http secure-server	Use the ip http secure-server global configuration command to enable the secure HTTP web server. Use the no form of this command to disable the secure HTTP web server.	15	GLOBAL_CONFIG
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 <word> [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 { console vty } <range_list> [all-defaults]		15	EXEC



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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} <unit>		debug	EXEC
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_netmask>} {dhcp [fallback <ipv4_addr> <ipv4_netmask> [timeout <uint>]]}}	IP address configuration	15	INTERFACE_VLAN
ip dhcp retry interface vlan <vlan_id>	Restart the dhcp client	15	EXEC
no ip address	IP address configuration	15	INTERFACE_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
debug ipstack log [ERR NOERR] [WARNING NOWARNING] [NOTICE NONOTICE] [INFO NOINFO] [DEBUG NODEBUG] [MDEBUG NOMDEBUG] [IOCTL NOIOCTL] [INIT NOINIT] [ADDR NOADDR] [FAIL NOFAIL] [EMERG NOEMERG] [CRIT NOCRIT]		debug	EXEC

CHAPTER 21: COMMAND REFERENCES**TABLE 21-2 (CONTINUED). COMMAND SUMMARY**

COMMAND	DESCRIPTION	P	M
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
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	INTERFACE_VLAN
ip igmp snooping querier { election address <ipv4_ucast> }		15	INTERFACE_VLAN
ip igmp snooping compatibility { auto v1 v2 v3 }		15	INTERFACE_VLAN
no ip igmp snooping compatibility		15	INTERFACE_VLAN
ip igmp snooping priority <0-7>		15	INTERFACE_VLAN
no ip igmp snooping priority		15	INTERFACE_VLAN
ip igmp snooping robustness-variable <1-255>		15	INTERFACE_VLAN
no ip igmp snooping robustness-variable		15	INTERFACE_VLAN
ip igmp snooping query-interval <1-31744>		15	INTERFACE_VLAN
no ip igmp snooping query-interval		15	INTERFACE_VLAN
ip igmp snooping query-max-response-time <0-31744>		15	INTERFACE_VLAN
no ip igmp snooping query-max-response-time		15	INTERFACE_VLAN



CHAPTER 21: COMMAND REFERENCES**TABLE 21-2 (CONTINUED). COMMAND SUMMARY**

COMMAND	DESCRIPTION	P	M
ip igmp snooping last-member-query-interval <0-31744>		15	INTERFACE_VLAN
no ip igmp snooping last-member-query-interval		15	INTERFACE_VLAN
ip igmp snooping unsolicited-report-interval <0-31744>		15	INTERFACE_VLAN
no ip igmp snooping unsolicited-report-interval		15	INTERFACE_VLAN
ip igmp snooping immediate-leave		15	INTERFACE_VLAN
ip igmp snooping mrouter		15	INTERFACE_PORT_LIST
ip igmp snooping max-groups <1-10>		15	INTERFACE_PORT_LIST
no ip igmp snooping max-groups		15	INTERFACE_PORT_LIST
ip igmp snooping filter <word16>		15	INTERFACE_PORT_LIST
no ip igmp snooping filter		15	INTERFACE_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	INTERFACE_VLAN
ipv6 mld snooping mrouter		15	INTERFACE_VLAN
ipv6 mld snooping max-groups <1-10>		15	INTERFACE_VLAN
no ipv6 mld snooping max-groups		15	INTERFACE_PORT_LIST
ipv6 mld snooping filter <word16>		15	INTERFACE_PORT_LIST
no ipv6 mld snooping filter		15	INTERFACE_PORT_LIST
show ipv6 mld snooping mrouter [detail]	text here	0	EXEC
clear ipv6 mld snooping [vlan <vlan_list>] statistics	text here	15	EXEC
show ipv6 mld snooping [vlan <vlan_list>] [group-database [interface <port_type_list>] [sfm-information]] [detail]	text here	0	EXEC

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
ipv6 mld snooping		15	INTERFACE_VLAN
ipv6 mld snooping querier election		15	INTERFACE_VLAN
ipv6 mld snooping compatibility { auto v1 v2 }		15	INTERFACE_VLAN
no ipv6 mld snooping compatibility		15	INTERFACE_VLAN
ipv6 mld snooping priority <0-7>		15	INTERFACE_VLAN
no ipv6 mld snooping priority		15	INTERFACE_VLAN
ipv6 mld snooping robustness-variable <1-255>		15	INTERFACE_VLAN
no ipv6 mld snooping robustness-variable		15	INTERFACE_VLAN
ipv6 mld snooping query-interval <1-31744>		15	INTERFACE_VLAN
no ipv6 mld snooping query-interval		15	INTERFACE_VLAN
ipv6 mld snooping query-max-response-time <0-31744>		15	INTERFACE_VLAN
no ipv6 mld snooping query-max-response-time		15	INTERFACE_VLAN
ipv6 mld snooping last-member-query-interval <0-31744>		15	INTERFACE_VLAN
no ipv6 mld snooping last-member-query-interval		15	INTERFACE_VLAN
ipv6 mld snooping unsolicited-report-interval <0-31744>		15	INTERFACE_VLAN
no ipv6 mld snooping unsolicited-report-interval		15	INTERFACE_VLAN
ip verify source		13	GLOBAL_CONFIG
i ip verify source		13	INTERFACE_PORT- LIST
ip verify source limit <0-2>		13	INTERFACE_PORT- LIST
no ip verify source limit		13	INTERFACE_PORT- LIST
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>		0	EXEC
show lacp { internal statistics system-id neighbor }	Show LACP configuration and status	15	EXEC



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
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		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
lldp transmission-delay <1-8192>	Sets LLDP transmission-delay. LLDP transmission delay (the amount of time that the transmission of LLDP frames will be 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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
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.	0	INTERFACE_PORT_LIST
no lldp med transmit-tlv [capabilities] [location] [network-policy]		15	INTERFACE_PORT_LIST
lldp med datum { wgs84 nad83-navd88 nad83-mlw }	Use the lldp med datum to configure the datum (geodetic system) to use.	15	GLOBAL_CONFIG
no lldp med datum		15	GLOBAL_CONFIG



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
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>]		15	INTERFACE_PORT_LIST
mac address-table learning [secure]	Enable learning on port	15	GLOBAL_CONFIG
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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
no monitor source { { interface <port_type_list> } { cpu [<range_list>] }	Sets monitor source port(s).	15	GLOBAL_CONFIG
show green-ethernet [interface <port_type_list>]	Shows Green Ethernet status	15	GLOBAL_CONFIG
debug chip [{ 0 1 all }]	text here	debug	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]		debug	EXEC
debug suspend		debug	EXEC
debug resume		debug	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]		debug	INTERFACE_PORT_LIST
show spanning-tree [summary active { interface <port_type_list> } { detailed [interface <port_type_list>] { mst [configuration { <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
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



CHAPTER 21: COMMAND REFERENCES**TABLE 21-2 (CONTINUED). COMMAND SUMMARY**

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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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	INTERFACE_PORT_LIST
mvr name <word16> type { source receiver }		15	INTERFACE_PORT_LIST
no mvr vlan <vlan_list> type		15	INTERFACE_PORT_LIST
no mvr name <word16> type		15	INTERFACE_PORT_LIST
mvr immediate-leave		15	INTERFACE_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 compatible }		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
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



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
show green-ethernet [interface <port_type_list>]		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-authenticate		15	GLOBAL_CONFIG
dot1x timeout tx-period <1-65535>	The time between EAPOL retransmissions.	15	GLOBAL_CONFIG
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		15	INTERFACE_PORT_LIST
dot1x guest-vlan	Enables/disables guest VLAN	15	INTERFACE_PORT_LIST
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		15	GLOBAL_CONFIG
dot1x guest-vlan <1-4095>	Guest VLAN ID used when entering the Guest VLAN.	15	GLOBAL_CONFIG
no dot1x guest-vlan		15	GLOBAL_CONFIG

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
dot1x radius-qos	Enables/disables per-port state of RADIUS-assigned QoS.	15	INTERFACE_PORT_LIST
dot1x radius-vlan	Enables/disables per-port state of RADIUS-assigned VLAN.	15	INTERFACE_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_ucast> <ipv6_ucast> <hostname>}		13	GLOBAL_CONFIG
ntp server <1-5> ip-address {<ipv4_ucast> <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
platform phy failover		15	INTERFACE_PORT_LIST
debug phy read [<0~31>] [<0-0xffff>] [addr-sort]		debug	INTERFACE_PORT_LIST
debug phy write [<0~31>] <0-0xffff> [<0-0xffff>]		debug	INTERFACE_PORT_LIST
debug phy do-page-chk [enable disable]		debug	EXEC
debug phy force-pass-through-speed {1G 100M 10M}		debug	INTERFACE_PORT_LIST
debug phy reset		debug	INTERFACE_PORT_LIST
debug phy gpio <0-13> mode {output input alternative}		debug	INTERFACE_PORT_LIST



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
debug phy gpio <0-13> get		15	INTERFACE_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
show interface <port_type_list> status	Display status for the interface.	0	EXEC
mtu <'VTSS_MAX_FRAME_LENGTH_STANDARD'-'V TSS_MAX_FRAME_LENGTH_MAX'>	Use mtu to specify maximum frame size (1518-9600 bytes).	15	INTERFACE_PORT_LIST
no mtu	Use no mtu to set maximum frame size to default.	15	INTERFACE_PORT_LIST
shutdown	Use shutdown to shutdown the interface.	15	INTERFACE_PORT_LIST
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 advertise the specified speeds.	15	INTERFACE_PORT_LIST
no speed	Use "no speed" to configure interface to default speed.	15	INTERFACE_PORT_LIST
duplex { half full auto [half full] }	Use duplex to configure interface duplex mode.	15	INTERFACE_PORT_LIST
no duplex	Use "no duplex" to set duplex to default	15	INTERFACE_PORT_LIST
media-type { rj45 sfp dual }	Use media-type to configure the interface media type.	15	INTERFACE_PORT_LIST
no media-type	Use to configure the interface media-type type to default.	15	INTERFACE_PORT_LIST
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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
port-security maximum [<1-1024>]	Maximum number of MAC addresses that can be learned on this set of interfaces.	15	INTERFACE_PORT_LIST
no port-security maximum		15	INTERFACE_PORT_LIST
port-security violation { protect trap trap-shutdown shutdown }	The action involved with exceeding the limit.	15	INTERFACE_PORT_LIST
no port-security violation	The action involved with exceeding the limit.	15	INTERFACE_PORT_LIST
pvlan <range_list>	Use the pvlan add or remove command to add or remove a port from a PVLAN.	13	INTERFACE_PORT_LIST
pvlan isolation	Use the pvlan isolation command to add the port into an isolation group.	13	INTERFACE_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
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



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

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
no qos dpl		15	INTERFACE_PORT_LIST
qos pcp <0-7>		15	INTERFACE_PORT_LIST
no qos pcp		15	INTERFACE_PORT_LIST
qos dei <0-1>		15	INTERFACE_PORT_LIST
no qos dei		15	INTERFACE_PORT_LIST
qos trust tag		15	INTERFACE_PORT_LIST
qos trust dscp		15	INTERFACE_PORT_LIST
qos map tag-cos pcp <0~7> dei <0~1> cos <0-7> dpl <dpl>		15	INTERFACE_PORT_LIST

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
no qos map tag-cos pcp <0~7> dei <0~1>		15	INTERFACE_PORT_LIST
qos policer <uint> [fps] [flowcontrol]		15	INTERFACE_PORT_LIST
no qos policer		15	INTERFACE_PORT_LIST
qos queue-policer queue <0~7> <uint>		15	INTERFACE_PORT_LIST
no qos queue-policer queue <0~7>		15	INTERFACE_PORT_LIST
qos wrr <1-100> <1-100> <1-100> <1-100> <1-100> <1-100>		15	INTERFACE_PORT_LIST
no qos wrr		15	INTERFACE_PORT_LIST
qos shaper <uint>		15	INTERFACE_PORT_LIST
no qos shaper		15	INTERFACE_PORT_LIST
qos queue-shaper queue <0~7> <uint> [excess]		15	INTERFACE_PORT_LIST
no qos queue-shaper queue <0~7>		15	INTERFACE_PORT_LIST
qos tag-remark { pcp <0-7> dei <0-1> mapped }		15	INTERFACE_PORT_LIST
no qos tag-remark		15	INTERFACE_PORT_LIST
qos map cos-tag cos <0~7> dpl <0~1> pcp <0-7> dei <0-1>		15	INTERFACE_PORT_LIST
no qos map cos-tag cos <0~7> dpl <0~1>		15	INTERFACE_PORT_LIST
qos dscp-translate		15	INTERFACE_PORT_LIST
qos dscp-classify { zero selected any }		15	INTERFACE_PORT_LIST
no qos dscp-classify		15	INTERFACE_PORT_LIST
qos dscp-remark { rewrite remap remap-dp }		15	INTERFACE_PORT_LIST
no qos dscp-remark		15	INTERFACE_PORT_LIST
qos storm { unicast broadcast unknown } <100-1320000> [fps]		15	INTERFACE_PORT_LIST
no qos storm { unicast broadcast unknown }		15	INTERFACE_PORT_LIST
qos qce { [addr { source destination }] [key { double-tag normal ip-addr mac-ip-addr }] } *1		15	INTERFACE_PORT_LIST
no qos qce { [addr] [key] } *1		15	INTERFACE_PORT_LIST
debug qos shaper cir { <100-3300000> [cbs <4096-258048>] } { [eir <100-3300000> [ebs <4096-258048>]] }		debug	INTERFACE_PORT_LIST
no debug qos shaper		debug	INTERFACE_PORT_LIST
debug qos queue-shaper queue <0~7> { cir <100-3300000> [cbs <4096-258048>] } { [eir <100-3300000> [ebs <4096-258048>]] } [excess]		debug	INTERFACE_PORT_LIST
no debug qos queue-shaper queue <0~7>		debug	INTERFACE_PORT_LIST
debug show qos shapers		debug	EXEC
debug qos cmef [{ enable disable }]		debug	EXEC



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
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	INTERFACE_PORT_LIST
no rmon collection stats <1-65535>		15	INTERFACE_PORT_LIST
rmon collection history <1-65535> [buckets <1-65535>] [interval <1-3600>]		15	INTERFACE_PORT_LIST
no rmon collection history <1-65535>		15	INTERFACE_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 sample interface.	0	EXEC
show sflow	Use show sflow to display the current sFlow configuration.	0	EXEC
clear sflow statistics { receiver [<range_list>] samplers [interface [<range_list>] <port_type_list>] }	Clearing statistics.	15	EXEC
sflow agent-ip {ipv4 <ipv4_addr> ipv6 <ipv6_addr>}	The agent IP address used as agent-address in UDP datagrams. Defaults to IPv4 loopback 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>]	.	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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
sflow max-datagram-size [receiver <range_list> <200-1468>	Maximum datagram size.	15	GLOBAL_CONFIG
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	INTERFACE_PORT_LIST
sflow max-sampling-size [sampler <range_list> [<14-200>]	Specifies the maximum number of bytes to transmit per flow sample.	15	INTERFACE_PORT_LIST
no sflow max-sampling-size [sampler <range_list>]		15	INTERFACE_PORT_LIST
sflow counter-poll-interval [sampler <range_list> [<1-3600>]	The interval - in seconds - between counter poller samples.	15	INTERFACE_PORT_LIST
no sflow counter-poll-interval [<range_list>]	The interval - in seconds - between counter poller samples.	15	INTERFACE_PORT_LIST
sflow [<range_list>]	Enables/disables flow sampling on this port.	15	INTERFACE_PORT_LIST
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
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



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
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
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 redefined MIBs in the switch, that are different \ 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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
version { v1 [<word127>] v2 [<word127>] v3 [probe engineID <word10-32>] [<word32>] }		15	SNMPS_HOST
no version		15	SNMPS_HOST
no informs		15	SNMPS_HOST
traps [aaa authentication] [system [coldstart] [warmstart]] [switch [stp] [rmon]]		15	SNMPS_HOST
no traps		15	SNMPS_HOST
snmp-server host <word32> traps [linkup] [linkdown] [lldp]		15	INTERFACE_PORT_LIST
no snmp-server host <word32> traps		15	INTERFACE_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
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



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
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 overwrite	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	EXEC
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	GLOBAL_CONFIG
show logging [info] [warning] [error] [switch <switch_list>]	Use the show logging privileged EXEC command without keywords to display the logging configuration, or particularly the logging message summary for the logging level.	15	EXEC
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_uicast> <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

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

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 clear the system location string.	15	GLOBAL_CONFIG
system name <line255>	To specify the system mode name string.	15	GLOBAL_CONFIG
no system name	To clear the system mode name string.	15	GLOBAL_CONFIG
show thermal-protect [interface <port_type_list>]	Shows thermal protection status (chip temperature and port status)..	15	EXEC
thermal-protect prio <0~3> temperature <0-255>	Thermal protection configurations.	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 on.	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	GLOBAL_CONFIG
upnp		15	EXEC
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
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



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
vlan protocol {{eth2 {<0x600-0xffff> arp ip ipx at}} {snap {<0x0-0xffff> 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 {<0x0-0xffff> 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
switchport vlan ip-subnet id <1-128> <ipv4_subnet> vlan <vlan_id>		13	INTERFACE_PORT_LIST
no switchport vlan ip-subnet id <1~128>		13	INTERFACE_PORT_LIST
debug vcl policy <uint>		debug	INTERFACE_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	13	INTERFACE_PORT_LIST
no switchport mode		13	INTERFACE_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	INTERFACE_PORT_LIST
no switchport access vlan		13	INTERFACE_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	INTERFACE_PORT_LIST
no switchport trunk native vlan	Set trunk mode characteristics of the interface	13	INTERFACE_PORT_LIST
switchport hybrid native vlan <vlan_id>	Use the switchport native vlan command to configure a port VLAN ID for a hybrid port.	13	INTERFACE_PORT_LIST
no switchport hybrid native vlan	Set hybrid mode characteristics of the interface	13	INTERFACE_PORT_LIST
switchport hybrid port-type { unaware c-port s-port s-custom-port }	Set hybrid characteristics of the interface	13	INTERFACE_PORT_LIST
no switchport hybrid port-type	Set hybrid characteristics of the interface	13	INTERFACE_PORT_LIST
switchport hybrid ingress-filtering	Set hybrid characteristics of the interface	13	INTERFACE_PORT_LIST
switchport hybrid acceptable-frame-type { all tagged untagged }	Set hybrid characteristics of the interface	13	INTERFACE_PORT_LIST
no switchport hybrid acceptable-frame-type	Set hybrid characteristics of the interface	13	INTERFACE_PORT_LIST
switchport hybrid egress-tag {none all [except-native]}	Set hybrid characteristics of the interface	13	INTERFACE_PORT_LIST

CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
no switchport hybrid egress-tag	Set hybrid characteristics of the interface	13	INTERFACE_PORT_LIST
switchport trunk vlan tag native	Set trunk characteristics of the interface	13	INTERFACE_PORT_LIST
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 show 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 mv voice-vlan mstp erps vcl evcl 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
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
no voice vlan class	Use the no voice vlan class global configuration command to restore the default voice vlan class.	15	GLOBAL_CONFIG



CHAPTER 21: COMMAND REFERENCES

TABLE 21-2 (CONTINUED). COMMAND SUMMARY

COMMAND	DESCRIPTION	P	M
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
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

**NEED HELP?
LEAVE THE TECH TO US**

**LIVE 24/7
TECHNICAL
SUPPORT**

1.877.877.2269

