



ISCOM 2800 Series Switch Command Notebook

Software Verion - ISCOMOS 1.3

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Chapter 1 Preface

1.1 Audience

This guide is for experienced network administrators who are responsible for configuring and maintaining Catalyst 4500 series switches.

1.2 Abbreviation

GARP: Generic Attribute Registration Protocol

GVRP: GARP VLAN Registration Protocol

GMRP: GARP Multicast Registration Protocol

LACP: Link Aggregation Control Protocol

STP: Spanning Tree Protocol

VLAN: Virtual LAN

DHCP: Dynamic Host Configuration Protocol

BOOTP: BOOTSTRAP PROTOCOL

IGMP: Internet Group Management Protocol

QoS: Quality of Service

CoS: Class of Service

ToS: Type of Service

DSCP: Differentiated Services Code Point

WRR: Weighted Round Robin

CIDR: Classless Inter Domain Routing

EGP: Exterior Gateway Protocol

ICMP: Internet Control Message Protocol

IGP: Interior Gateway Protocol

InARP: Inverse ARP

MBZ: Must be Zero

MIB: Management Information Base

OSPF: Open Shortest Path First

PDU: Protocol Data Unit

RIP: Routing Information Protocol

1.3 Reference

1. <ISCOM2800 Series Switch Configuration Manual>

Chapter 2 Command Line Interface

2.1 Environment

ISCOM2800 hardware environment: ISCOM2800 REV.A.0.

Software environment: ISCOMOS 1.3.

2.2 Command Mode

Mode	What you use it for	How to access	Mode id
User exec	To connect the remote device, change terminal settings on a temporary basis, perform basic tests, and display system information.	Login	Raisecom>
Privileged user exec	To set operating parameters. The privileged command set includes the commands in users exec mode, as well as configure command. Use configure command to access other command mode	From user exec mode, enter the enable command and enable password	Raisecom#
Global configuration	To configure features that affect the system as whole.	From privileged EXEC mode enter config .	Raisecom(config)#
interface configuration	To enable or modify the operation of a Gigabit or fast Ethernet interface.	From global configuration mode, enter interface port portid	Raisecom(config-port)#
Layer 2 interface config mode	Configure the L2 interface parameter under this mode	Under global exec, enter interface aggregator id command.	Raisecom(config-aggregator)#
Layer 3 interface config mode	Configure the L3 interface parameter under this mode	Under global exec, enter interface ip id command.	Raisecom(config-ip)#
VLAN config mode	Configure VLAN operation parameter	Under global exec, enter Vlan vlan_id command.	Raisecom(config-vlan)#
Route config mode	Configure routing parameters, including RIP routing mode and OSPF routing mode	Under global exec, enter route protocol name command.	Raisecom(config-router-rip)#

Chapter 3 command-line of system

3.1 arp add

[Introduction]

Add ARP new items.

arp add *ip-address mac-address*

[Parameter]

- *ip-address* format: A.B.C.D
- *mac-address* format: HHHH.HHHH.HHHH

[Default]

None

[Mode]

Privileged configuration

[Guide]

ARP mapping table is maintained by dynamic ARP protocol on general circumstance. ARP searches the resolving result of IP address mapping to MAC. It is not required to involve administrator. When it is required to add static ARP table items, manually operation for ARP mapping table is required. This kind of IP address in ARP table item must belong to layer 3 interfaces.

Use **no arp add** *ip-address* to delete ARP table item.

[Command Execution Echo]

- *set successfully!*
Adding static MAC address list successfully
- *set fail!*
Adding static MAC address list fails

[For example]

- Add a static MAC address item. Set IP address as 10.0.0.1 and MAC address 0050.8d4b.fd1e
Raisecom(config)#arp add 10.0.0.1 0050.8d4b.fd1e
- Delete table IP address 10.0.0.1 in ARP mapping table
Raisecom(config)#no arp add 10.0.0.1

[Relevant command]

Command	Description
clear arp	Clear ARP all table items
show arp	Show ARP all table items

3.2 arp timeout

[Function Introduction]

Set dynamic ARP table existing time. If it is timeout, arp dynamic items will be deleted.

arp timeout *secs*

[Parameter]

- *secs* - seconds, 0-2147483 integer.

[Default]

The default timeout value of ARP dynamic table item is 1200 seconds.

[Mode]

Global configuration and privileged users

[Guide]

Set timeout value of ARP dynamic table item. If the value is 0 second, ARP dynamic table

item isn't aging.

[Command Execution Echo]

- set successfully!
- set fail!

[For Example]

- Set timeout value of ARP dynamic table item is 1500 seconds.
Raisecom(config)# arp timeout 1500
- Recover default timeout value of ARP dynamic table item is 1200 seconds.
Raisecom(config)# no arp timeout

[Relevant commands]

Command	Description
clear arp	Delete all arp table items
show arp	Show all arp table items

3.3 clear

[Function Introduction]

Use **clear** to clear the screen.

clear

[Parameter]

None

[Mode]

Initial mode, privileged configuration mode, global configuration mode, VLAN configuration mode, interface configuration mode, router protocol configuration mode; common user, and privileged user

[Guide]

Clear the shown information on the screen.

[Command Execution Echo]

None

[For example]

Raisecom> **clear**

[Relevant command]

None

3.4 clear arp

[Function introduction]

Clear all items of ARP mapping table

clear arp

[Parameter]

None

[Default]

None

[Mode]

Privileged exec and privileged users

[Guide]

If it is required to delete ARP table, use **clear arp**.

[Command Execution Echo]

- set successfully!
Clear ARP list successfully
- set fail!

Clear ARP list unsuccessfully

[For example]

Clear ARP table

Raisecom(config)#clear arp

[Relevant command]

command	Description
arp add	Add a static MAC address item
show arp	Show all items of ARP mapping table

3.5 clockset

[Function introduction]

Use **clockset** to modify system data and time

clockset <1-24> <0-60> <0-60> <2000-2199> <1-12> <1-31>

[Parameter]

- <1-24> hour
- <0-60> minute
- <0-60> second
- <2000-2199> year
- <1-12> month
- <1-31> date

[Mode]

Privilege exec and privilege users

[Guide]

Use **clockset** to modify date and time and they are saved in NVRAM. They can not disappear although the power supply is off.

[Command Execution Echo]

set successfully.

Command executed successfully

[For example]

Raisecom# clockset 8 30 0 2003 9 30

System date is modified as 30th Sep, 2003, 8:30:00

[Relevant command]

command	Description
show clock	Show the current time of system

3.6 config

[Function introduction]

Use **config** to access global configuration mode.

config [terminal]

[Parameter]

terminal

[Mode]

Privileged exec and privileged user

[Guide]

None

[Command Execution Echo]

set successfully.

Command executed successfully

[For example]

Raisecom#config terminal

[Relevant command]

Command	Description
exit	Return to parent mode or exit
Quit	Return to parent mode or exit

3.7 debug

[Function Introduction]

[no] **debug** (**all** | **system** | **ospf** | **rip** | **gvrp** | **igmp-snooping** | **cli** | **driver** | **dhcp** | **snmp** | **stp** | **lACP** | **radius** | **dot1x** | **qos** | **rmon** | **sntp** | **telnet** | **arp** | **ip** | **config**)

[Parameter]

all	debug all functions
arp	arp debug
cli	cli debug
config	system config information
dhcp	dhcp debug
driver	driver debug
gvrp	gvrp debug
igmp-snooping	igmp-snooping debug
ip	ip debug
lACP	lACP debug
ospf	ospf debug
qos	qos debug
radius	radius debug
rip	rip debug
rmon	rmon debug
snmp	snmp debug
sntp	sntp debug
stp	stp debug
system	system debug
telnet	telnet debug

[Default]

Config module open
System module open
Others debug functionalities closed

[Mode]

Privileged exec and privileged user

[Guide]

Use this command to be some or all module debug functionalities available.

[Command Execution Echo]

None

[For example]

Raisecom#debug all

[Relevant command]

Command	Description
logging	Configure system log

3.8 dhcp server active

[Function Introduction]

in appointed VLAN, enable DHCP SERVER. **dhcp-server deactive** disable DHCP SERVER.

dhcp-server active

dhcp-server deactive

[parameter]

none

[default]

after DHCP SERVER is enabled, DHCP protocol is available in VLAN default config.

[mode]

VLAN configuration; Privileged user.

[guide]

[Command Execution Echo]

- active DHCP server success on VLAN
- active DHCP server failure on VLAN
- deactive DHCP server success on VLAN
- deactive DHCP server failure on VLAN

[for example]

- set DHCP SERVER available on VLAN1
Raisecom(config)# **vlan 1**
Raisecom(config-vlan)# **dhcp-server active**
- set DHCP SERVER unavailable on VLAN1
Raisecom(config-vlan)# **dhcp-server deactive**

[relevant command]

Command	Description
dhcp-server enable	Start DHCP SERVER
show dhcp-server	Show DHCP SERVER config and statistical information

3.9 dhcp-server enable

[Function Introduction]

dhcp-server enable start DHCP SERVER. **dhcp-server disable** stop DHCP SERVER.

[parameter]

none

[default]

the default setting is DHCP SERVER protocol disable.

[mode]

global configuration;Privileged user.

[guide]

[Command Execution Echo]

- Enable DHCP server success
- Enable DHCP server failure
- Disable DHCP server success
- Disable DHCP server failure

[for example]

- Raisecom(config)# **dhcp-server enable**
- Raisecom(config)# **dhcp-server disable**

[relevant command]

Command	Description
dhcp-server active	Start DHCP SERVER on some VLAN
show dhcp-server	Show DHCP SERVER config and statistical information

3.10 dhcp-server default-lease

[Function Introduction]

set DHCP SERVER default lease time of lease table. **no dhcp-server default-lease** recover default value.

[no] dhcp-server default-lease *timeout*

[parameter]

timeout ,unit is minute,range from 30 minutes to 10080 minutes,integer.

[default]

default timeout value is 30 minutes.

[mode]

global configuration;priviledged user.

[guide]

use **dhcp-server default-lease** to set DHCP SERVER default lease time for lease table. When the timer is timeout,callback the assigned IP address. Use **no dhcp-server default-lease** to recover the default setting.

[Command Execution Echo]

- set DHCP server default lease timeout success.
the previous message is displayed, when it is successful;
- set DHCP server default lease timeout failure.
the previous message is displayed, when it fails;
- set DHCP server default lease timeout success.
the previous message is displayed, when it is successful;
- set DHCP server default lease timeout failure.
the previous message is displayed, when it fails;

[for example]

- set DHCP SERVER lease timeout value as 60 minutes:
Raisecom(config)# **dhcp-server default-lease 60**
- recover DHCP SERVER default lease time:
Raisecom(config)# **no dhcp-server default-lease**

[relevant commmand]

Command	Description
show dhcp-server	Show DHCP SERVER config and statistical information

3.11 dhcp-server max-lease

[Function Introduction]

set DHCP SERVER max-lease time. **no dhcp-server max-lease** recover the default value

[no] dhcp-server max-lease *timeout*

[parameter]

timeout ,unit is minute,range from 30 minutes to 10080 minutes,integer.

[default]

the default time is 10080 minutes.

[mode]

global configuration;priviledged user.

[guide]

use **dhcp-server default-lease** to set DHCP SERVER default lease time for lease table. When the timer is timeout,callback the assigned IP address. Use **no dhcp-server default-lease** to recover the default setting.

Note: max-lease time can not be less than min-lease time. if the appointed value of client is more than this value,max timeout value is applied.

[Command Execution Echo]

- set DHCP server max lease timeout success.
the previous message is displayed, when it is successful;
- set DHCP server max lease timeout failure.
the previous message is displayed, when it fails;
- DHCP server max lease timeout is less than min lease timeout.
the previous message is displayed, when DHCP server max lease timeout is less than min lease timeout

[for example]

- set DHCP SERVER max-lease time of lease table as 3600 minutes:
Raisecom(config)# **dhcp-server max-lease 3600**
- recover DHCP SERVER max-lease time:
Raisecom(config)# **no dhcp-server max-lease**

[relevant command]

Command	Description
show dhcp-server	Show DHCP SERVER config and statistical inforamtion

3.12 dhcp-server min-lease

[Function Introduction]

set DHCP SERVER min-lease time for lease table.**no dhcp-server min-lease** recover to default time value

[no] dhcp-server min-lease *timeout*

[parameter]

timeout ,unit is minute,range from 30 minutes to 10080 minutes,integer.

[default]

the default time is 30 minutes.

[mode]

global configuration;priviledge user.

[guide]

use **dhcp-server default-lease** to set DHCP SERVER default lease time for lease table. When the timer is timeout,callback the assigned IP address. Use **no dhcp-server default-lease** to recover the default setting.

[Command Execution Echo]

- set DHCP server min lease timeout success.
the previous message is displayed, when it is successful;
- set DHCP server min lease timeout failure.
the previous message is displayed, when it fails;
- DHCP server max lease timeout is less than min lease timeout.
the previous message is displayed, when DHCP server max lease timeout is less than min lease timeout.

[for example]

- set DHCP SERVER min-lease timeout value as 3600 minutes:
Raisecom(config)# **dhcp-server min-lease 3600**
- recover DHCP SERVER min-lease timeout value:
Raisecom(config)# **no dhcp-server min-lease**

[relevant command]

Command	Description
show dhcp-server	Show DHCP SERVER config and statistical information

3.13 dhcp-server ip-pool

[Function Introduction]

set DHCP SERVER ip-pool information.

dhcp-server ip-pool name *pool-name start-ip end-ip mask mask-ip vlan vlanlist* [**gateway** *gtw-address*] [**dns** *dns-address*]
no dhcp-server ip-pool name *pool-name*

[parameter]

pool-name ip-pool name, it must be exclusive name,8 characters.
start-ip ip-pool start IP address, e.g. A.B.C.D
end-ip ip-pool end IP address, format is dotted decimal, eg:A.B.C.D.
vlanlist VLAN list,format as 1,5-40,55; but the whole is less than 50 characters. This property means that some ip-pool belongs to one VLAN.
gateway-address optional, set IP address of default gateway for user, format is dotted decimal, eg:A.B.C.D.
gateway-address optional, set IP address of DNS for user, format is dotted decimal, eg:A.B.C.D.

[default]

None

[mode]

priviledged exec;priviledged user.

[guide]

use **dhcp-server ip-pool** to set DHCP SERVER ip pool information. Gateway and DNS are optional. If they are not set,the default is 0.0.0.0; note: ip-pool name is 8 characters,and it is exclusive.Start ip can not be over end ip; Tthe ip must be belong to same network segment, and the range don't exceed 4k.the number of ip address in the pool isn't over 20.

[Command Execution Echo]

- set DHCP server ip pool success.
- set DHCP server ip pool failure.
- name length must is 8 chars.
- the input address range too big ,the free is X
- the input parameters are error!
- the vlan are error!
- delete DHCP server ip pool success.
- delete DHCP server ip pool failure.
- delete DHCP server ip pool failure, name isn't exist.

[for example]

- set DHCP SERVER ip pool:

```
Raisecom(config)# dhcp-server ip-pool name abcdefgh 192.168.1.80
192.168.1.100 mask 255.255.255.0 vlan 2,20-30,48 gateway 192.168.1.1 dns
192.168.1.1
```

- delete DHCP SERVER ip pool abcdefgh:

```
Raisecom(config)# no dhcp-server ip-pool name abcdefgh
```

[relevant command]

Command	Description
show dhcp-server ip-pool	Show ip-pool config information

3.14 dhcp-server relay-ip

[Function Introduction]

set neighboring DHCP Relay address. **no dhcp-server relay-ip** delete DHCP Relay address

dhcp-server relay-ip *ip-address ip-mask*

no dhcp-server relay-ip *ip-address*

[parameter]

ip-address set neighboring DHCP Relay IP address,format is dotted decimal,eg:A.B.C.D.

ip-mask set neighboring DHCP Relay IP mask,format is dotted decimal,eg:A.B.C.D.

[default]

there is not DHCP Relay IP address,when start DHCP SERVER, it can be set with requirement.

[mode]

global configuration;priviledged user.

[guide]

use **dhcp-server relay-ip** to set neighboring DHCP Relay address.**no dhcp-server relay-ip** delete neighboring DHCP Relay address. The max number of neighboring DHCP Relay address is 8.

[Command Execution Echo]

- Set DHCP Server IP address success
the previous message is displayed, when set neighboring DHCP Server IP address success;
- Set DHCP Server IP address failure
the previous message is displayed, when set neighboring DHCP Server IP address failure, the possible reason is the address number exceeds maximal limit.
- Delete DHCP Server IP address success
the previous message is displayed, when delete neighboring DHCP Server IP address success
- Delete DHCP Server IP address failure
the previous message is displayed, when delete neighboring DHCP Server IP address failure, the the possible reason is the address is nonexistent.

[for example]

- set neighboring DHCP Relay ip address as 10.0.0.1,mask as255.0.0.0:

```
Raisecom(config)# dhcp-server relay-ip 10.0.0.1 255.0.0.0
```

- delete neighboring DHCP Relay ip address 10.0.0.1:

```
Raisecom(config)# no dhcp-server relay-ip 10.0.0.1
```

[relevant command]

Command	Description
show dhcp-server relay-ip	Show neighboring DHCP Relay address information

3.15 dir

[Function Introduction]

use **dir** to show flash file storage system.

dir

[parameter]

none

[mode]

priviledged exec;priviledged user.

[guide]

none

[Command Execution Echo]

none

[for example]

Raisecom#**dir**

The below information is displayed when **dir** is operated:

size	date	time	name
32	Dec-31-2000	00:00:14	duraBle.
32	Dec-31-2000	00:00:14	DURABLE.

[relevant commmand]

Command	Description
Write	Save the current system config
Erase	Delete the appointed file in falsh
Download	Download system config file or start-up file
Upload	Upload system config file or start-up file

3.16 disable

[Function Introduction]

use **disable** to exit priviledged exec.

disable

[parameter]

none

[mode]

priviledged exec;priviledged user.

[guide]

none

[Command Execution Echo]

none

[for example]

Raisecom#**disable**

[relevant commmand]

Command	Description
Enable	Access priviledged exec from normal exec

3.17 download

[Function Introduction]

Use **download** to download system config file or start-up file to flash file system.

download {system-boot|startup-config} {ftp}

[Parameter]

- **system-boot** boot file
- **startup-config** config file
- **ftp** ftp download

[Default]

None

[Mode]

Privileged exec and privileged user

[Guide]

Use **download** to download boot file and config file to flash file system. When it is restarted, the download file will be available automatically. This command can be realized with different file transport protocols. At present, **ftp** protocol are available. Before using these two protocols, it is guaranteed that ftp server is set properly and connected to the switch.

[Command Execution Echo]

- *Read error.*
Errors occurred when reading from the server
- *Invalid input file name*
Errors occurred when input a wrong file name
- *User name is empty!*
FTP user name is empty.
- *User password is empty!*
FTP user password is empty

[For example]

- *Raisecom# **download system-boot ftp***
Please input server IP Address:1.0.0.1
Please input FTP User name:test
Please input FTP Password:test
Please input FTP Server File Name:system_boot.Z
Use **ftp** to download boot file from ftp server

[Relevant command]

Command	Description
Upload	Upload start-up file or boot file

3.18 enable

[Function Introduction]

Use **enable** to access privileged exec.

enable

[Parameter]

None

[Mode]

Initial exec and normal user

[Guide]

Access privileged exec from normal exec.

[Command Execution Echo]

None

[For example]

*Raisecom>**enable***
Password:

[Relevant command]

Command	Description
Enable password	Modify the password of accessing privilege exec
disable	Exit privileged exec and return normal exec

3.19 enable password

[Function Introduction]

Use **enable password** to set the password of accessing privileged exec.

no enable password recover password to default value.

enable password (null|PASSWORD)

no enable password

[Parameter]

- **null** password is empty
- **PASSWORD** password string

[Default]

Default password is“123” from normal exec to privileged exec.

[Mode]

Privileged exec and privileged user

[Guide]

None

[Command Execution Echo]

None

[For example]

Raisecom#enable password 123

Modify accessing privileged mode password to“123”。

[Relevant command]

Command	Description
Enable	Access privileged mode from normal mode
disable	Exit privileged mode to normal mode

3.20 erase

[Function Introduction]

Use **erase** delete the appointed file in flash file system.

erase [FILENAME]

[Parameter]

FILENAME

[Default]

Delete the current startup_config.conf

[Mode]

Privileged exec and privileged user

[Guide]

None

[Command Execution Echo]

- Erase current specified file successfully!
Command executed successfully
- Erase current specified file Fail!
Command fails

[For example]

Raisecom#erase aaa

Delete 'aaa' file in flash file system.

[Relevant command]

Command	Description
Write	Save the current system config file

3.21 exit

[Function Introduction]

Use **exit** to return parent mode or exit login

exit

[Parameter]

None

[Mode]

Initial exec, privileged exec, global exec, VLAN exec, interface configuration exec, routing protocol configuration exec, normal user, and privileged user

[Guide]

None

[Command Execution Echo]

None

[For example]

Raisecom>**exit**

[Relevant command]

Command	Description
Quit	Return to parent mode or exit login

3.22 filter

[Function Introduction]

Set state of access control list.

filter { **ip-access-list** | **mac-access-list** | **port-access-list** } *list-number* { **enable** | **disable** }
{ **source** | **destination** }

[parameter]

- **ip-access-list** IP address access control list;
- **mac-access-list** MAC access control list;
- **port-access-list** port access control list;
- **list-number** access control list number,range from 0 to 99
- **enable** enable access control list;
- **disable** disable access control list;
- **source** source filter;
- **destination** destination filter;

[default]

There is no filter state of access control on default condition.

[mode]

global configuration mode; privileged user.

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- No this access list!
- This filter has been set!
- Can not set filter more.
- No this filter!
- SUCCESS!

[for example]

- Enable IP address access control list 5 based on source filter
Raisecom(config)# **filter ip-access-list 5 enable source**
- Disable port access control list 3 based on destination filter
Raisecom(config)# **filter port-access-list 3 disable destination**

[relevant command]

Command	Description
Show filter	Show all the filter state that has been set.

3.23 flowcontrol

[Function Introduction]

Enable or disable the flow control function at the physical port

flowcontrol { on | off }

[Parameter]

- **on** Enable flow control function
- **off** Disable flow control function

The flow control function is disabled at physical port by default.

[Mode]

Ethernet physical interface configuration exec and privileged user

[Guide]

Only privileged users whose priority is 15 can use the command.

[Command Execution Echo]

- *SUCCESS!*
Flow control is set successfully
- *This operation failed!*
Flow control setup failed

[For example]

- Enable flow control function of physical port
Raisecom(config-port)# **flowcontrol on**
- Disable flowcontrol function of physical port
Raisecom(config-port)# **flowcontrol off**

[Relevant command]

Command	Description
Show interface port	Show flow control configuration of one or all physical ports.

3.24 garp

[Function Introduction]

Set three timer value of GARP.

garp join <20-20000>

garp leave <60-20000>

garp leaveall <500-20000>

no garp join

no garp leave

no garp leaveall

[parameter]

- <20-20000> Timer value of GARP Join,unit is 10ms.
- <60-20000> Timer value of GARP Leave,unit is 10ms.
- <500-20000> Timer value of GARP LeaveAll,unit is 10ms.

[default]

- Join Default value is 20;
- Leave Default value is 60;
- LeaveAll Default value is 1000;

[mode]

Ethernet lay-2 interface configuration exec; privileged user.

[guide]

GARP agreement defined in 802.1D, third kinds of value of timer, should meet relation the following could guarantee GARP agreement work rationally.

Leave Time > 2 * (Join Time)

LeaveAll Time > Leave Time

[Command Execution Echo]

- set successfully.
- set fail.

[for example]

Set value of GARP timer is 30

Raisecom(config-aggregator)# **garp join 30**

[relevant commmand]

Command	Description
show garp timer	Show value of GARP timer

3.25 gmrp

[Function Introduction]

Enable or disable GMRP Protocol

gmrp {enable | disable}

[parameter]

- **enable** enable GMRP Protocol
- **disable** disable GMRP Protocol

[default]

GMRP Protocol is enabled on default condition.

[mode]

Global configuration mode or ethernet layer 2 interface configuration mode; privileged user.

[guide]

User can global enable or disable GMRP Protocol under global configuration mode

User can enable or disable GMRP Protocol under ethernet layer 2 interface configuration mode.

[Command Execution Echo]

- set successfully.
- set fail.

[for example]

- disable GMRP Protocol in global
Raisecom(config)# **gmrp disable**
- Disable GMRP on ethernet layer 2 interfac
Raisecom(config-aggregator)# **gmrp disable**

[relevant commmand]

Command	Description
show gmrp	Show configuration information of GMRP

3.26 gvrp

[Function Introduction]

Enable or disable GVRP Protocol

gvrp { enable | disable }

[parameter]

- **enable** enable GVRP Protocol
- **disable** disable GVRP Protocol

[default]

GVRP Protocol is enabled on default condition.

[mode]

Global configuration mode or ethernet layer 2 interface configuration mode; privileged user.

[guide]

User can global enable or disable GMRP Protocol under global configuration mode.

User can enable or disable GMRP Protocol under ethernet layer 2 interface configuration mode.

[Command Execution Echo]

- set successfully.
- set fail.

[for example]

- disable GVRP Protocol in global
Raisecom(config)# **gvrp disable**
- Disable GMRP on ethernet layer 2 interfac
Raisecom(config-aggregator)# **gvrp disable**

[relevant command]

Command	Description
show gvrp	Show configuration information of GVRP

3.27 help

[Function Introduction]

Use "help" to show the help information of system.

help

[Parameter]

None

[Mode]

Initial exec, privileged exec, global exec, VLAN exec, interface configuration exec, routing protocol configuration exec, normal user, and privileged user

[Guide]

Use this command to show using help information of command line.

[Command Execution Echo]

·ISCOMOS software provides advanced help feature. When you need help, you can press '?' in the command line at anytime.

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 me?').

[For example]

Raisecom>help

[Relevant command]

None

3.28 history

[Function Introduction]

Use this command to show history command.

history

[Parameter]

None

[Default]

The number of history command in memory is 20.

[Mode]

Initial exec, privileged exec, global exec, VLAN exec, interface configuration exec, routing protocol configuration exec, normal user, and privileged user

[Guide]

Use this command to show history command of each mode.

[Command Execution Echo]

· ter time-out 65535

enable

chin

enable

help

eng

[For example]

Raisecom>history

[Relevant command]

Command	Description
terminal history	Change the number of history command in memory.

3.29 hostname

[Function Introduction]

Use “hostname” command to set system name of current user.

Use “no hostname” command to resume default value.

hostname *HOSTNAME*

no hostname

[Parameter]

HOSTNAME: System name of new appoint to user.

[Default]

The default value of hostname is raisecom.

[Mode]

Privileged exec and privileged user

[Guide]

This command is easy to different user to use different hostname, and different host can be marked with different hostname.

[Command Execution Echo]

·Hostname length must less than 16 !

·set successfully.

[For example]

Raisecom#hostname switch

Change the hostname of the Switch to “switch”

[Relevant command]

None

3.30 ip-access-list

[Function Introduction]

Set IP address access control list,use “no”to delect this operation.

Set binding of IP address and physical port.

ip-access-list *list-number* **ip-confine-list** *list-number* **port** *port-number*

Set binding of IP address and VLAN.

ip-access-list *list-number* **ip-confine-list** *list-number* **vlan** *vlan_id*

no ip-access-list [*list-number*]

[parameter]

- **list-number** IP address access control list or confine of IP,range of 0-99.
- **ip-confine-list** IP confine list
- **port** physical port
- **port-number** the number of physical port,range from 1 to 26;
- **vlan** VLAN;
- **vlan_id** VLAN ID, range from 1 to 4094;

[default]

Not set IP address control list on default condition.

[mode]

global configuration mode; privileged user.

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- The ip-access-list X has been set.
- NO ip-confine-list X !
- IP access-list X in use ! Operation NOT accomplete!
- No IP access-list X !
- SUCCESS!

[for example]

- Set binding of IP address and physical port.
Raisecom(config)# **ip-access-list 0 ip-confine-list 2 port 5**
- Set binding of IP address and VLAN.
Raisecom(config)# **ip-access-list 1 ip-confine-list 3 vlan 3**
- Delete IP access control list 5
Raisecom(config)# **no ip-access-list 5**
- Delect all IP access control list
Raisecom(config)# **no ip-access-list**

[relevant commmand]

Command	Description
Filter ip-access-list	Set filter state of IP address access list.
show ip-access-list	Show one or all IP address access control list.
show access-list	Show all access control list.
no access-list	Delete all access control list.

3.31 ip-confine-list

[Function Introduction]

Set IP confine list,use “**no ip-confine-list** ”to delete this operation.

[**no**] **ip-confine-list** *list-number* **ip-address** *A.B.C.D* [**mask** *A.B.C.D*] { **deny** | **permit** }
no ip-confine-list *list-number*

[parameter]

- **list-number** Number of IP confine list,range from 0 to 99.
- **ip-address** IP address
- **A.B.C.D** IP address or mask,input format is dotted decimal;
- **mask** IP address mask.
- **deny** deny access
- **permit** permit access

[default]

Not set IP define list in default.

[mode]

global configuration mode; privileged user.

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- The mask is wrong!
- The ip confine list X in use! Set failure!
- Set failed! This ip address has been set!
- SUCCESS!
- NO ip confine list X!
- No this ip confine!

[for example]

- Set IP confine list,deny this IP address access
Raisecom(config)# **ip-confine-list** 0 **ip-address** 10.1.2.3 **mask** 255.0.0.0 **deny**
- Delete IP address which is in IP confine list
Raisecom(config)# **no ip-confine-list** 0 **ip-address** 10.1.2.3 **mask** 255.0.0.0 **deny**
- Delete IP confine list 2
Raisecom(config)# **no ip-confine-list** 2

[relevant commmand]

Command	Description
show ip-confine-list	Show one or all IP confine list

3.32 ip address

[Function Introduction]

Set IP address of current interface.

Use “no ip address” to delete IP address of current interface.

ip address *ip-address* [*ip-mask*] *vlan-id*

no ip address *ip-address*

[Parameter]

- *ip-address* Set IP address of current interface, format is dotted decimal, eg:A.B.C.D
- *ip-mask* Set IP mask, format is A.B.C.D
- *vlan-id* VLAN ID of corresponding layer 3 interface.

[Default]

The current interface is not assigned IP address.

[Mode]

Ethernet layer 3 interface Configuration exec and privileged user

[Guide]

This command is used to assign interface IP address. Before the configuration of the interface IP address, the interface of concerned VLAN must be configured. The IP address of interface

should be A, B or C class.

[Command Execution Echo]

- Set successfully.
- This interface already associated with VLAN 4.
Command failed when associating an VLAN-associated interface with another VLAN ID
- Invalid network mask.
Command failed when setting an invalid subnet mask
- Invalid IP address or network mask.
Command failed when setting an invalid IP address or subnet mask
- VLAN 2 already associated with interface 2 (ifIndex: 1100003).
Command failed when associating a VLAN that associated with another IP interface
- 192.168.1.4 overlaps with interface 2 (ifIndex: 1100003).
Command failed when setting an interface IP address that confronted with other interfaces

[For example]

·Set IP address of current interface is 192.168.1.2, VLAN 2 associate with it.

```
Raisecom(config-ip)# ip address 192.168.1.2 255.255.255.0 2
```

·Delete IP address of current interface.

```
Raisecom(config-ip)# no ip address 192.168.1.2
```

[Relevant command]

Command	Description
State	Active current VLAN
vlan-access	Add current interfae to VLAN
show ip route	Show VLAN information
show interface vlan	Show interface of VLAN information

3.33 ip forwarding

[Function Introduction]

Use “**ip forwarding**”to enable the ability of software transmit ip message,use “**no ip forwarding**”to stop this operation.

[**no**] **ip forwarding**

[parameter]

None

[default]

System forbid software to transmit ip message on default condition.

[mode]

(E)global configuration mode; privileged user.

[guide]

[Command Execution Echo]

set successfully.

[for example]

```
Raisecom(config)# ip forwarding
```

Enable IP transmission ability of software.

[relevant commmand]

None

3.34 ip igmp-snooping

[Function Introduction]

Use this global command to enable IGMP Snooping, use “**no ip igmp-snooping**” to disable this function.

[no] ip igmp-snooping

[Parameter]

None

[Default]

IGMP Snooping protocol is valid on default condition.

[Mode]

Global configuration exec and privileged user

[Guide]

When IGMP Snooping is enabled, All the VLAN interfaces available will enable IGMP Snooping; when the function is cancelled, all the VLAN interfaces will cancel the function.

[Command Execution Echo]

- Enable igmp snooping success
- Enable igmp snooping failure
- Disable igmp snooping success
- Disable igmp snooping failure

[For example]

- Enable IGMP Snooping
Raisecom(config)# ip igmp-snooping
- Disable IGMP Snooping
Raisecom(config)#no ip igmp-snooping

[Relevant command]

Command	Description
show ip igmp-snooping	Show IGMP Snooping configuration information.

3.35 ip igmp-snooping

[Function Introduction]

Use “**ip igmp-snooping**” to enable IGMP snooping on VLAN. Use “no ip igmp-snooping” to stop IGMP snooping function on VLAN.

[Command format]

ip igmp-snooping
[no] ip igmp-snooping

[Parameter]

None

[Default]

When IGMP Snooping is enabled, all VLAN enable IGMP Snooping on default condition.

[Mode]

VLAN configuration exec and privileged user

[Guide]

Use this command to enable IGMP snooping on VLAN. Use “**no ip igmp-snooping**” to disable IGMP snooping on VLAN.

[Command Execution Echo]

- enable igmp snooping on VLAN 1 success
- enable igmp snooping on VLAN 1 failure
- Disable igmp snooping on VLAN 1 success
- Disable igmp snooping on VLAN 1 failure

[For example]

- Enable IGMP Snooping on VLAN 1.
Raisecom(config-vlan)# ip igmp-snooping

- Disable IGMP Snooping on VLAN 1.
Raisecom(config-vlan)#no ip igmp-snooping

[Relevant command]

Command	Description
show ip igmp-snooping	Show IGMP Snooping configuration information.
show ip igmp-snooping vlan	Show IGMP Snooping configuration information of appointed VLAN.

3.36 ip igmp-snooping static mac-address port portid

[Function Introduction]

Use this command to add a layer 2 port for the member of multicast group, use no to cancel this configuration.

[no] ip igmp-snooping static mac-address port portid

[parameter]

- *mac-address* appoint MAC address of static state group, format is HHHH.HHHH.HHHH;
- *portid* appoint the configured static switch port number, range 1-26, Integer type,

[default]

None

[mode]

VLAN configuration mode, privileged user.

[guide]

Use this command to add a layer 2 port for the member of multicast group, use no to cancel this configuration.

[Command Execution Echo]

- multicast MAC address ERROR
- join port in a assigned group on assigned VLAN success
- join port in a assigned group on assigned VLAN failure
- disable join port in a assigned group on assigned VLAN success
- disable join port in a assigned group on assigned VLAN failure

[for example]

- This example explain how add port 1 to group of 0100.5e02.0203.
Raisecom (config-vlan)# ip igmp snooping static 0100.5e02.0203 port 1
- This example explain how delete port 1 from group of 0100.5e02.0203.
Raisecom (config-vlan)# no ip igmp snooping static 0100.5e02.0203 port 1

[relevant command]

Command	Description
show ip-igmp snooping mrouter	Display multicast route port information of dynamic study of manual configuration.
show mac-address-table multicast	Display the L2 group cast entity of Switch or VLAN

3.37 ip igmp-snooping timeout

[Function Introduction]

Use this command to configure time of IGMP snooping timeout. Use “no ip igmp-snooping timeout” to resume default configuration.

ip igmp-snooping timeout timeout

[no] ip igmp-snooping timeout

[Parameter]

timeout Appoint time of timeout, unit is second, range from 30 second to 3600 second-class is integer.

[Default]

Default value of timeout is 300 second.

[Mode]

Global configuration exec and privileged user

[Guide]

This command configure valid time of multicast route in IGMP Snooping, multicast route is deleted when timer is overtime.

[Command Execution Echo]

- set igmp snooping aging success
- set igmp snooping aging failure
- set igmp snooping aging default success
- set igmp snooping aging default failure

[For example]

- Set time of IGMP snooping timeout is 3000 second.
Raisecom(config)# ip igmp-snooping timeout 3000
- Set time of IGMP snooping timeout is default value.
Raisecom(config)# no ip igmp-snooping timeout

[Relevant command]

Command	Description
show ip igmp-snooping	Show configuration information of IGMP Snooping.

3.38 ip route

[Function Introduction]

Use “ip route”to add static route,use “no ip route ”to delete static route.

ip route *A.B.C.D₁ E.F.G.H₂ a.b.c.d₃*

no ip route*[A.B.C.D₁ [E.F.G.H]]*

[parameter]

- *A.B.C.D₁* network prefix
- *E.F.G.H₂* mask
- *a.b.c.d₃* next-hop IP address

[default]

If command of “no” form has no network prefix,then delete all static route.

If command of “no”form has no network mask,then delete all static route that match to the mask.

[mode]

global configuration mode; privileged user.

[guide]

Static route is configurated by network administrator,this route transmission will change with network topology,next-hop route must be direct route when use “**ip route**”to add route.

[Command Execution Echo]

- Invalid Destination IP address.
- Invalid Destination MASK.
- Invalid Next-hop IP address.
- Can not set Connected Route to Static.
- set successfully.

[for example]

- Add a route that its destination network is 10.0.0.0,through interface of local 4.0.0.1 transmit.
Raisecom(config)#**ip route** 10.0.0.0 255.0.0.0 4.0.0.1
- Delete all static route.
Raisecom(config)#**no ip route**

[relevant commmand]

Command	Description
show ip route	Show information of route

3.39 ip route age

[Function Introduction]

Use “**ip route age**”to set aging time of route in hardware.

ip route age <60-65535>

no ip route age

[parameter]

<60-65535> age time of hardware route,unit is second.

[default]

The default value of route aging time is 180 second.

[mode]

global configuration mode; privileged user.

[guide]

Route number is limited of hardware,it need to be aged periodic,this command set or resume the route age of hardware.

[Command Execution Echo]

set successfully.

[for example]

- Set aging time of route in hardware is 100 second.
Raisecom(config)# **ip route age** 100
- Resume aging time of route in hardware is 180 second.
Raisecom(config)#**no ip route age**

[relevant commmand]

Command	Description
show ip route hardware	Show ip route, which is in hardware

3.40 ip route gateway

[Function Introduction]

Use “**ip route gateway**”to set default gateway,use “ **no ip route gateway**”to delete default gateway.

ip route gateway A.B.C.D

no ip route gateway

[parameter]

A.B.C.D IP address of default gateway.

[default]

There is no default gateway in default.

[mode]

global configuration mode; privileged user.

[guide]

When a output message not find the route of destination network,use command to transmit all message to default gateway.

[Command Execution Echo]

set successfully.

[for example]

- Set default gateway is 10.0.0.1
Raisecom(config)# **ip route gateway** 10.0.0.1
- Delete default gateway
Raisecom(config)# **no ip route gateway**

[relevant command]

Command	Description
show ip route	Show route information of system

3.41 ip static-route-distance

[Function Introduction]

Use “**ip static-route-distance**”to set protocol distance of static route,use “**no ip static-route-distance**”to resume default value.

ip static-route-distance <1-200>

no ip static-route-distance

[parameter]

<1-200> Protocol distance of be set.

[default]

Default protocol distance of static route protocol is 185.

[mode]

global configuration mode; privileged user.

[guide]

Protocol distance let route appear difference that is studied by different route. Use this order to alter the distance of the agreement, while making the protocol inn transmit, to the same route, choose to be used according to different distance of protocol.

[Command Execution Echo]

set successfully.

[for example]

- Set protocol distance of static route is 100.
Raisecom(config)# **ip static-route-distance** 100
- Resume default value of static route.
Raisecom(config)# **no ip static-route-distance**

[relevant command]

Command	Description
show ip protocol	Show information of IP route protocol

3.42 interface ip

[Function Introduction]

Enter IP interface mode.

interface ip <0-15>

[Parameter]

<0-15> the number of IP interface

[Default]

All IP interface of system is not assigned address on default condition.

[Mode]

Global configuration exec and privileged user

[Guide]

Use “interface ip” to enter IP interface mode.

[For example]

Enter configuration mode of IP interface 4.

Raisecom (config)# interface ip 4

[Relevant command]

Command	Description
ip address	Set IP address of current interface.
show interface vlan	Show interface of layer 3

3.43 interface port

[Function Introduction]

Enter physical interface mode.

interface port <1-26>

[Parameter]

<1-26> Number of physical interface

[Default]

All physical interface of system is not assigned on default condition.

[Mode]

Global configuration exec and privileged user

[Guide]

Use “**interface port**” to enter configuration mode of physical interface.

[For example]

Enter configuration mode of physical interface 4.

Raisecom (config)# interface port 4

[Relevant command]

Command	Description
show interface port	Show information of physical port

3.44 interface aggregator

[Function Introduction]

Enter aggregation interface mode.

interface aggregator <1-26>

[parameter]

<1-26> Number of aggregation interface.

[default]

All aggregation interface of system is not configured on default condition.

[mode]

global configuration mode; privileged user.

[guide]

Use “**interface aggregator**” to enter configuration mode of aggregation interface.

[for example]

Enter configuration mode of aggregation interface 4.

Raisecom (config)# interface aggregator 4

[relevant command]

None

3.45 lACP

[Function Introduction]

Enable and disable Link Aggregation Control Protocol.

lACP {enable | disable}

[parameter]

- **enable** Enable Link Aggregation Control Protocol;
- **disable** Disable Link Aggregation Control Protocol;

[default]

On default condition, Link Aggregation Control Protocol of switch is disabled.

[mode]

global configuration mode; privileged user.

[guide]

Link Aggregation Control Protocol must be enabled before use relevant command of other Link Aggregation function.

[Command Execution Echo]

- set successfully.
- set fail.

[for example]

Enable Link Aggregation Control Protocol
Raisecom (config)# **lacp enable**

[relevant command]

Command	Description
lacp system-priority	Set system priority of LACP
lag loading-sharing	Set loading-sharing mode of aggregation link
lacp admin-key	Set LACP admin-key of Ethernet physical interface.
lacp priority	Set LACP priority of ethernet physical interface.
lacp mode	Set link aggregation mode of ethernet physical interface.
show lacp lag-id	Show aggregation ID information of LACP.
show lacp ports	Show aggregation and configuration information of LACP physical interface and aggregation interface.

3.46 lacp admin-key

[Function Introduction]

Set LACP admin-key of ethernet physical interface.

lacp admin-key <1-1024>

no lacp admin-key

[parameter]

<1-1024> Admin-key value that is used by LACP in aggregation negotiation process.

[default]

On default condition, the LACP admin-key value of physical interface is 1.

[mode]

Ethernet physical interface configuration mode; privileged user.

[guide]

Physical interface can be aggregated only if they have same physical interface admin-key.

[Command Execution Echo]

- set successfully.
- set fail.

[for example]

Set LACP admin-key of physical interface is 2.
Raisecom (config-port)# **lacp admin-key 2**

[relevant command]

Command	Description
Lacp	enable or disable LACP

lacp system-priority	Set system priority of LACP
lag loading-sharing	Set loading-sharing mode of LACP aggregation link
lacp admin-key	Set LACP admin-key of Ethernet physical interface.
lacp priority	Set LACP priority of ethernet physical interface.
lacp mode	Set link aggregation mode of ethernet physical interface.
show lacp lag-id	Show aggregation ID information of LACP.
show lacp ports	Show aggregation and configuration information of LACP physical interface and aggregation interface.

3.47 lag loading-sharing

[Function Introduction]

Set loading-sharing mode of aggregation link.

lag loading-sharing {1 | 2 | 3 | 4 | 5 | 6}

no lag loading-sharing

[parameter]

- 1 Loading-sharing mode 1,select transmission port according to source MAC address.
- 2 Loading-sharing mode 2, select transmission port according to destination MAC address.
- 3 Loading-sharing mode 3, select transmit port based on the result of logic xor of destination and source MAC address.
- 4 Loading-sharing mode 4, select transmission port according to source IP address.
- 5 Loading-sharing mode 5, select transmission port according to destination IP address.
- 6 Loading-sharing mode 6, select transmit port based on the result of logic xor of destination and source IP address.

[default]

Loading-sharing mode of aggregation link is 1,on default condition.

[mode]

Ethernet layer 2 interface configuration mode; privileged user.

[guide]

Users can select different loading shared mode based on LACP lag-link,such as the link is used to connect layer 3 switch,so that router is afford to access layer,loading shared mode based on source MAC address must be selected,because destination MAC address of data stream is the same by lag-link but source MAC address is not.

[Command Execution Echo]

- set successfully.
- set fail.

[for example]

Set loading-sharing mode of aggregation link is 2, select transmission port according to destination MAC address.

raisecom(config-aggregator)# **lacp loading-sharing 2**

[relevant commmand]

Command	Description
lacp	enable or disable LACP
lag system-priority	Set system priority of LACP
lacp admin-key	Set LACP admin-key of Ethernet physical interface.
lacp priority	Set LACP priority of ethernet physical interface.
lacp mode	Set link aggregation mode of ethernet physical interface.
show lacp lag-id	Show aggregation ID information of LACP.
show lacp ports	Show aggregation and configuration information of LACP physical interface and aggregation interface.

3.48 lacp mode

[Function Introduction]

Set link aggregation mode of ethernet physical interface.

lacp mode {*on* | *off* | *active* | *passive*}

no lacp mode

[parameter]

- *on* Manual link aggregation mode,which according to admin-key aggregate not negotiate with counterpart.
- *off* Disable link aggregation mode
- *active* LACP active negotiation link aggregation mode.
- *passive* LACP passive negotiation link aggregation mode.

[default]

On default condition,every link aggregation mode of physical interface is passive.

[mode]

Ethernet physical interface configuration mode; privileged user.

[guide]

- When physical interface is on mode,it happen link aggregation with other coincident physical interface of on mode not through LACP negotiation.
- When physical interface is off mode ,it will not happen link aggregation.
- When physical interface is active mode,it will negotiate with counterpart,and transmit LACP frame actively,it turn coincident port to aggregation link maximum through negotiation.
- When physical interface is passive mode,it take part in negotiation with counterpart passively,this port transmit LACP responsive frame only counterpart is active mode.

A pair of port happen link aggregation only they accord with three combination.

- on corresponding on;
- active corresponding passive;
- active corresponding active;

[Command Execution Echo]

- set successfully.
- set fail.

[for example]

Set link aggregation mode of physical interface is active.

Raisecom(config-port)# **lacp mode active**

[relevant commmand]

Command	Description
lacp	enable or disable LACP.
lacp system-priority	Set system priority of LACP
lag loading-sharing	Set loading-sharing mode of LACP aggregation link.
lacp admin-key	Set LACP admin-key of ethernet physical interface.
lacp priority	Set LACP priority of ethernet physical interface.
show lacp lag-id	Show aggregation ID information of LACP.
show lacp ports	Show aggregation and configuration information of LACP physical interface and aggregation interface.

3.49 lacp priority

[Function Introduction]

Set LACP priority of ethernet physical interface.

lacp priority <1-255>

no lacp priority

[parameter]

<1-255> The value of LACP port priority.

[default]

On default condition,the value of physical interface LACP priority is 128.

[mode]

Ethernet physical interface configuration mode; privileged user.

[guide]

LACP use physical interface priority and physical interface number to confirm physical interface ID only,port of smaller priority value take priority of happen aggregation.

[Command Execution Echo]

- set successfully.
- set fail.

[for example]

Set LACP physical interface priority of physical interface is 2.
Raisecom(config-port)# **lACP priority 2**

[relevant command]

Command	Description
lACP	enable or disable LACP
lACP system-priority	Set system priority of LACP
lag loading-sharing	Set loading-sharing mode of LACP aggregation link.
lACP admin-key	Set LACP admin-key of ethernet physical interface.
lACP mode	Set link aggregation mode of ethernet physical interface
show lACP lag-id	Show aggregation ID information of LACP.
show lACP ports	Show aggregation and configuration information of LACP physical interface and aggregation interface.

3.50 lACP system-priority

[Function Introduction]

Set system priority of Link Aggregation Control Protocol.

lACP system-priority <1-65535>

no lACP system-priority

[parameter]

<1-65535> System priority value of Link Aggregation Control Protocol.

[default]

On default condition,the system priority of Link Aggregation Control Protocol is 32768.

[mode]

global configuration mode; privileged user.

[guide]

Link Aggregation Control Protocol use system priority and system MAC address to confirm one ID of system,use it during link aggregation negotiation,the switch port of lower system ID is selected aggregation port priority.

[Command Execution Echo]

- set successfully.
- set fail.

[for example]

Set system priority of Link Aggregation Control Protocol is 10000.
Raisecom(config)# **lACP system-priority 10000**

[relevant command]

Command	Description
---------	-------------

lacp	enable or disable LACP
lag loading-sharing	Set loading-sharing mode of LACP aggregation link.
lacp admin-key	Set LACP admin-key of ethernet physical interface.
lacp priority	Set LACP priority of ethernet physical interface
lacp mode	Set link aggregation mode of ethernet physical interface
show lacp lag-id	Show aggregation ID information of LACP.
show lacp port	Show aggregation and configuration information of LACP physical interface and aggregation interface.

3.51 list

[Function Introduction]

Use this command to show all commands under the mode in the form of list.

list

[Parameter]

None

[Mode]

Initial exec, privileged configuration exec, global configuration exec, VLAN configuration exec, interface configuration exec, routing protocol configuration exec; normal user and privileged user

[Guide]

Use this command to show particular parameter of all commands under the mode.

[Command Execution Echo]

```
chinese
clear
enable
english
exit
help
history
list
quit
terminal history <1-20>
terminal time-out <0-65535>
```

[For example]

Raisecom>list

[Relevant command]

None

3.52 logging console

[Function Introduction]

Configure and start to output the log information and parameters to console, the “no” command will disable the log output direction.

logging console {<0-7> | **alerts** | **critical** | **debugging** | **emergencies** | **errors** | **informational** | **notifications** | **warnings**}

no logging console

[Parameter]

·<0-7>	log grade	
· alerts	need action immediately	(grade=1)
· critical	serious state	(grade=2)
· debugging	debug information	(grade=7)

- emergencies** system can not use (grade=0)
- errors** error condition (grade=3)
- informational** informational event (grade=6)
- notifications** normal event under critical condition (grade=5)
- warnings** warning condition (grade=4)

[Default]

The direction of console log host is open.
Output grade is informational.

[Mode]

Global configuration exec and privileged user

[Guide]

Use this command to configure output to console.

Log description of output to console.

Grade	key	Grade	Description
	word		
emergencies		0	System can not use
alerts		1	Need action immediately
critical		2	Serious event
errors		3	Error event
warnings		4	Warning event
notifications		5	Normal but critical
informational		6	Inform message
debugging		7	Debug information

[Command Execution Echo]

·set successfully!
·set fail!

[for example]

This command set record log grade of log host is alters,all message that is lower than it will output to log host.

logging console alerts

[Relevant command]

Command	Description
Logging monitor	Enable output direction of log monitor.
logging host	Enable output direction of log host.
logging file	Enable output direction of log file
logging on	Enable log function
logging time-stamp	Set time stamp of log information
logging rate	Set output speed of log
show logging	Show log information

3.53 logging file

[Function Introduction]

Configure and start to output the log information and parameters to console, the “no” command will disable the log output direction.

logging file

no logging file

[Parameter]

None

[Default]

Enable file direction output of log.
The mode of output is config.

[Mode]

Global configuration exec and privileged user

[Guide]

Use this command to configure log information output to flash file.

[Command Execution Echo]

·set successfully!

·set fail!

[For example]

Use this command to record log information output to file.

logging file

[Relevant command]

Command	Description
Logging console	Enable output direction of log console
logging monitor	Enable output direction of log monitor.
logging file	Enable output direction of log file.
logging on	Enable log function
logging time-stamp	Set time stamp of log information
logging rate	Set output speed of log
show logging	Show log information

3.54 logging host

[Function Introduction]

Configure and start to output the log information and parameters to console, the “no” command will disable the log output direction.

```
logging host A.B.C.D { local0 | local1 | local2 | local3 | local4 | local5 | local6 | local7 }  
{ <0-7> | alerts | critical | debugging | emergencies | errors | informational | notifications |  
warnings }
```

```
no logging host A.B.C.D
```

[Parameter]

local0-local7	equipment name of log host
<0-7>	log grade
·alerts	need action immediately (grade=1)
·critical	serious state (grade=2)
·debugging	debug information (grade=7)
·emergencies	system not available (grade=0)
·errors	error condition (grade=3)
·informational	informational event (grade=6)
·notifications	normal and critical event (grade=5)
·warnings	warning condition (grade=4)

[Default]

No configuration information of log host

[Mode]

Global configuration exec and privileged user

[Guide]

Use this command to configure output to host log.

Log description of output to console

Grade	Grade	Description
keywords		
emergencies	0	System not available
alerts	1	Need action immediately
critical	2	Serious event

errors	3	Error event
warnings	4	Warning event
notifications	5	Normal but critical event
informational	6	Inform message
debugging	7	Debug information

[Command Execution Echo]

- set successfully!
- set fail!

[For example]

This command set record log grade of log host is alters, all message that is lower than it will output to log host.

logging host 10.0.0.1 local7 alerts

[Relevant command]

Command	Description
Logging console	Enable output direction of log console
logging monitor	Enable output direction of log monitor
logging file	Enable output direction of log file
logging on	Enable log function
logging time-stamp	Set time stamp of log information
logging rate	Set output speed of log
show logging	Show log information

3.55 logging monitor

[Function Introduction]

Configure and start to output the log information and parameters to console, the “no” command will disable the log output direction.

logging monitor {<0-7> | **alerts** | **critical** | **debugging** | **emergencies** | **errors** | **informational** | **notifications** | **warnings**}

no logging monitor

[Parameter]

·<0-7>	log grade	
· alerts	need action immediately	(grade=1)
· critical	serious state	(grade=2)
· debugging	debug information	(grade=7)
· emergencies	system can not use	(grade=0)
· errors	error condition	(grade=3)
· informational	informational event	(grade=6)
· notifications	normal but critical event	(grade=5)
· warnings	warning condition	(grade=4)

[Default]

The direction of monitor log host is close.

[Mode]

Global configuration exec and privileged user

[Guide]

Use this command to configure output to monitor.

Log description of output to monitor

Grade	Grade	Description
emergencies	0	System not available
alerts	1	Need action immediately
critical	2	Serious event

errors	3	Error event
warnings	4	Warning event
notifications	5	Normal but critical
informational	6	Inform message
debugging	7	Debug information

[Command Execution Echo]

· *set successfully!*
 · *set fail!*

[For example]

This command set record log grade of monitor is alters, all message that is lower than it will output to monitor.

logging monitor alerts

[Relevant command]

Command	Description
Logging console	Enable output direction of log console
logging host	Enable output direction of log host
logging file	Enable output direction of log file
logging on	Enable the log function
logging time-stamp	Set time stamp of log information
logging rate	Set output speed of log
show logging	show log information

3.56 logging on

[Function Introduction]

Use “logging on” to enable log function, use “no logging on” to disable log function.

[no] logging on

[Parameter]

None

[Default]

Log function is enabled

[Mode]

Global configuration exec and privileged user

[Guide]

Enable log function

[Command Execution Echo]

· *set successfully!*
 · *set fail!*

[For example]

Enable log function

logging on

[Relevant command]

Command	Description
Logging console	enable output direction of log console
logging monitor	enable output direction of log monitor
logging file	enable output direction of log file
logging time-stamp	Set time stamp of log information
logging rate	set output speed of log
show logging	show log information

3.57 logging rate

[Function Introduction]

Set send speed of log information, use “no” to resume default setting.

logging rate <1-65535>

no logging rate

[Parameter]

<1-65535> Log number of every second send

[Default]

Not limit send speed of log

[Mode]

Global configuration exec and privileged user

[Guide]

Set send speed of log information

[Command Execution Echo]

·set successfully!

·set fail!

[For example]

Set every second to send 100 item logs most.

logging rate 100

[Relevant command]

Command	Description
Logging console	Enable output direction of log console
logging monitor	Enable output direction of log monitor
logging file	Enable output direction of log file
logging time-stamp	Set time stamp of log information
show logging	Show log information

3.58 logging time-stamp

[Function Introduction]

Set time stamp of log information, use no to resume default value.

logging time-stamp { standard | relative-start | null }

[no] logging time-stamp

[Parameter]

standard standard time

relative-start relative time of system enabled

null not add time stamp

[Default]

Use standard time

[Mode]

Global configuration exec and privileged user

[Guide]

Use this command to set time stamp information of system using.

Standard time mmm-dd-yyyy hh-mm-ss

Relative time hh-mm-ss

[Command Execution Echo]

·set successfully!

·set fail!

[For example]

Enable log relative time

logging time-stamp relative-start

[Relevant command]

Command	Description
Logging console	Enable output direction of log console
logging monitor	Enable output direction of log monitor
logging file	Enable output direction of log file
logging rate	Set output speed of log
show logging	show log information

3.59 logout

[Function Introduction]

Use “logout” to exit login state.

logout

[Parameter]

None

[Mode]

Privileged configuration exec and privileged user

[Guide]

When finished configure system, use this command to exit login state, if other user want to configure switch again in console, it need to login afresh.

[Command Execution Echo]

None

[For example]

Raisecom#logout

[Relevant command]

None

3.60 name

[Function Introduction]

Set name of static VLAN.

name WORD

[Parameter]

The name shall not be more than 80 characters

[Default]

On default condition, the name of system default VLAN(VLAN1) is “Default”, other name of static VLAN is character “VLAN” add four numerical digit VLAN ID, for example, the default name of VLAN1 is “VLAN0001”, VLAN 4094 default name is “VLAN4094”

[Mode]

Static VLAN configuration exec, privileged user

[Command Execution Echo]

- set successfully.
- set fail.

[For example]

Set name of VLAN 2 is “R&D”

Raisecom(config-vlan)# name R&D

[Relevant command]

Command	Description
vlan	Enter static VLAN configuration mode

state	Set activity state of static VLAN
shutdown	Disable/enable static VLAN configuration
pvid	Set port VLAN ID attribute of port
vlan-access	Set VLAN access attribute of port
show vlan static	Show configuration information of static VLAN
show vlan current	Show configuration information of current activity VLAN

3.61 pvid

[Function Introduction]

Set port VLAN ID of port

pvid <1-4094>

[Parameter]

<1-4094> VLAN ID

[Default]

On default condition, the port VLAN ID (PVID) of all ports is 1

[Mode]

Ethernet physical interface configuration exec; privileged user

[Guide]

When switch port receive untagged message, switch use this port PVID to fill default 802.1Q label, the VLAN ID in label use PVID of this port's can isolate network equipment of without 802.1Q function through setting port PVID, equal to port VLAN.

[Command Execution Echo]

- *VLAN VID not exist.*
VID stands for VLAN ID. This echo shows when there is no such VLAN is system
- *Port PORTID not in vlan VID.*
This echo shows when the port is not in the designated VLAN, it is not permitted to set the PVID of this port to the designated VLAN ID.
- *set successfully.*
- *set failed.*

[For example]

Set port PVID is 2

Raisecom(config-port)# pvid 2

[Relevant command]

Command	Description
vlan	Enter static VLAN configuration mode
name	Set name of static VLAN
state	Set activity state of static VLAN
shutdown vlan	Disable/enable static VLAN
vlan-access	Set VLAN access attribute of port
show vlan static	Show configuration information of static VLAN
show vlan current	Show configuration information of current activity VLAN

3.62 mac-access-list

[Function Introduction]

Set MAC access control list, use “no” command to delete the operation.

Set binding of MAC and physical port

mac-access-list *list-number* **mac-address** *HHHH.HHHH.HHHH* **port** *port-number* { **deny** | **permit** }

Set binding of MAC and VLAN.

mac-access-list *list-number* **mac-address** *HHHH.HHHH.HHHH* **vlan** *vlan_id* { **deny** | **permit** }

Set binding of MAC and IP address.

mac-access-list *list-number* **mac-address** *HHHH.HHHH.HHHH* **ip-address** *A.B.C.D*
[**mask** *A.B.C.D*] { **deny** | **permit** }
no mac-access-list [*list-number*]

[parameter]

- *list-number* The number of MAC access control list,range from 0 to 99
- *HHHH.HHHH.HHHH* MAC address,input format is hexadecimal character,dotted by every 4 characters.
- **port** physical port
- *port-number* the number of physical port,range from 1 to 26
- **vlan** VLAN;
- *vlan_id* VLAN ID,range from 1 to 4094
- **ip-address** IP address
- *A.B.C.D* IP address or mask,input format is dotted decimal;
- **mask** IP address mask;
- **deny** deny access;
- **permit** permit access

[default]

It is not configurate MAC access control list on default condition.

[mode]

global configuration mode, privileged user.

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- The mac-access-list X has been set.
- Set failed! This MAC address has been set!
- SUCCESS!
- The ip address is wrong!
- The mask is wrong!
- Set failed! This MAC address with this ip address has been set!
- MAC access-list X in use ! Operation NOT accomplete!
- No MAC access-list X !

[for example]

- Set binding of MAC address and port 5,deny access
Raisecom(config)# **mac-access-list 0 mac-address 1111.2222.3333 port 5 deny**
- Set binding of MAC address and VLAN 2,deny access
Raisecom(config)# **mac-access-list 1 mac-address 2222.3333.4444 vlan 2 deny**
- Set binding of MAC address and IP address,permit access
Raisecom(config)# **mac-access-list 2 mac-address 3333.4444.5555 ip-address 10.2.3.5 permit**
- Delete MAC access list 5
Raisecom(config)# **no mac-access-list 5**
- Delete all MAC access list
Raisecom(config)# **no mac-access-list**

[relevant command]

Command	description
filter mac-access-list <i>list-number</i> { enable disable } { source destination }	Set filter state of MAC access list
show mac-access-list [<i>list-number</i>]	Show one or all MAC access control list
show access-list	Show all access control list
no access-list	Delete all access control list

3.63 mac-address-table aging-time

[Function Introduction]

Set aging time of MAC address,use “no”command to detete this operation.

mac-address-table aging-time { 0 | *time* }

no mac-address-table aging-time

[parameter]

- **aging-time** aging time
- 0 forbid aging
- *time* aging time,unit is second,range from 10 to 1000000;

[default]

Aging time is 300 second,on default condition.

[mode]

global configuration mode, privileged user.

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- SUCCESS!
- This operation failed !

[for example]

- Set aging time of MAC address is 500 second.
Raisecom(config)# **mac-address-table aging-time 500**
- Set forbid MAC address to age
Raisecom(config)# **mac-address-table aging-time 0**
- Resume default value of MAC address aging time.
Raisecom(config)# **no mac-address-table aging-time**

[relevant commmand]

Command	Description
show aging-time	Show aging time of MAC address

3.64 mac-address-table learning

[Function Introduction]

Set enable and disable MAC address study function of physical port.

mac-address-table learning { **enable** | **disable** } **port** *port-number*

[parameter]

- **enable** enable study function
- **disable** disable study function
- **port** physical port
- *port-number* the number of port,range from 1 to 26;

[default]

On default condition,the study function of MAC address is enabled.

[mode]

global configuration mode, privileged user.

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- SUCCESS!
- This operation failed!

[for example]

- Disable MAC address study function of port 5.
Raisecom(config)# **mac-address-table learning disable port 5**
- Enable MAC address study function of port 5.
Raisecom(config)# **mac-address-table learning enable port 5**

[relevant commmand]

Command	Description
show interface port	Show one or all port state.

3.65 mac-address-table static

[Function Introduction]

Set static MAC address, use “no” to cancel this operation.

[no] mac-address-table static HHHH.HHHH.HHHH vlan vlan_id port port-number

[parameter]

- **static** static address
- **HHHH.HHHH.HHHH** MAC address, input format is hexadecimal character, dotted by every 4 characters.
- **vlan** VLAN;
- **vlan_id** VLAN ID, range from 1 to 4094;
- **port** physical port
- **port-number** the number of physical port, range from 1 to 26

[default]

Not set static MAC address on default condition.

[mode]

global configuration mode, privileged user.

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- SUCCESS!
- ERROR! Port X is not in vlan Y!
- This static mac address has been set!
- no this static mac address
- Failed! Port X is DOWN!

[for example]

- Set static MAC address that binding with VLAN 1 for port 3
Raisecom(config)# **mac-address-table static 1234.abcd.0000 vlan 1 port 3**
- Delete static MAC address that binding with VLAN 1 for port 3
Raisecom(config)# **no mac-address-table static 1234.abcd.0000 vlan 1 port 3**

[relevant command]

Command	Description
show mac-address-table static	Show one or all static address of port or VLAN.

3.66 mirror monitor_port

[Function Introduction]

Set monitor port of mirror function, use “no” to delete this operation.

mirror monitor_port port_number

no mirror monitor_port

[Parameter]

- **monitor_port** monitor port
- **port_number** the number of physical port, range from 1 to 26

[Default]

On default condition, not set monitor port.

[Mode]

Global configuration exec and privileged user

[Guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- The monitor port has been set, please clear it!

This echo shows when setting a monitoring port that has been set to monitoring port before. Please set up after deletion of previous setup.

- The port X has been set to be mirror port !
The physical port X has been set to mirroring port, and cannot be set to monitoring port. Please set up other non-mirroring port or cancel mirroring port at port X.
- SUCCESS!
Set up mirroring port successful
- No mirror-to port!
This echo shows when deleting a mirroring port before setting it

[For example]

- Set port 5 is monitor port of mirror function.
*Raisecom(config)# **mirror monitor_port** 5*
- Delete mirror port
*Raisecom(config)# **no mirror monitor***

[Relevant command]

Command	Description
mirror source_port	Set mirror port and rule
no mirror all	Delete all mirror configuration
show mirroring	Show all mirror configuration
show monitor	Show monitor port of set

3.67 mirror source_port

[Function Introduction]

Set mirror port and mirror rule of mirror function, use “no” command to perform deletion.

mirror source_port *port_number*
no mirror source_port *port_number*
no mirror all

[Parameter]

- **source_port** mirror port
- *port_number* the number of physical port, range from 1 to 26, use “,”, “-” to multi port input.
- **all** all setting of mirror

[Default]

- On default condition, not set mirror port.

[Mode]

Global configuration exec and privileged user (priority 15)

[Guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- The mirror is off, please let it on first!
The mirroring function is disabled.
- The port list wrong!
Error occurred when enter multi ports using “-“ and “,”.
- Wrong! The port X is monitor port!
The port X is already a monitoring port.
- SUCCESS!
Command successful.
- This operation failed!
Command failed.
- The port %d has not been mirror!
Error occurred when performing deletion at non-mirroring port X.

[For example]

- Set physical port of 1 to 5 is mirror port.
*Raisecom(config)# **mirror source_port** 1-5*

- Delete mirror of port 2
Raisecom(config)# **no mirror source_port 2**
- Delete all mirror setting
Raisecom(config)# **no mirror all**

[Relevant command]

Command	Description
mirror monitor_port <i>port_number</i>	Set monitor port of mirror rule
show mirroring source_port <i>port_number</i>	Show mirror setting of one port
show mirroring	Show all mirror setting

3.68 password

[Function Introduction]

Use “password” to change landing password of current user.

password

[Parameter]

None

[Default]

The default user landing password of Raisecom switch is “Raisecom”.

[Mode]

Privileged configuration exec, privileged user

[Guide]

Use this command can change landing password of current landing user.

[Command Execution Echo]

·set successfully.

·set fail!

·password not same!

[For example]

Raisecom#password

Please input password:xxxx

Please input again:xxxx

Password input does not have echo

[Relevant command]

Command	Description
user privilege	Set user privilege

3.69 port-access-list

[Function Introduction]

Set access control list of port,use “no”to delete this operation.

Set binding of physical port and protocol type.

port-access-list *list-number* **port** *port-number* { **udp** | **tcp** | **icmp** } { **deny** | **permit** }

Set binding of physical port and protocol port.

port-access-list *list-number* **port** *port-number* **protocol-port** *protocol-port-number* { **deny** | **permit** }

no port-access-list [*list-number*]

[parameter]

- *list-number* the number of port access list,range from 0 to 99
- **port** physical port
- *port-number* the number of physical port,range from 1 to 26.
- **udp** UDP protocol
- **tcp** TCP protocol
- **icmp** ICMP protocol

- **protocol-port** protocol port
- *protocol-port-number* the number of protocol port,range from 1 to 5000
- **deny** deny access
- **permit** permit access

[default]

On default condition,not set access control list of port.

[mode]

global configuration mode, privileged user.

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- The port-access-list X has been set.
- SUCCESS!
- Port access-list X in use ! Operation NOT accomplete!
- No Port access-list X !

[for example]

- Set binding of port and TCP protocol,deny access.
Raisecom(config)# **port-access-list 0 port 5 tcp deny**
- Set binding of port and protocol port 80,deny access.
Raisecom(config)# **port-access-list 2 port 7 protocol-port 80 deny**
- Delete access control list 5 of port
Raisecom(config)# **no port-access-list 5**
- Delete all access control list of port.
Raisecom(config)# **no port-access-list**

[relevant commmand]

Command	Description
filter	Set filter state of port access list
show port-access-list	Show access control list of one or all port
show access-list	Show all access control list
no access-list	Delete all access control list

3.70 qos cosq

[Function Introduction]

Set the method of cos queue scheduling,use “no”to resume default strict priority mode.

qos cosq { weight w0 w1 w2 w3 | bounded w0 w1 w2 w3 delay }

no qos cosq

[parameter]

- **weight** Weighted Round Robin scheduling mode, transmit certain amount packets of weighted scheduling policy according to each queue.
- **bounded** Bound-dela scheduling mode, set data and weight for each queue.
- *w0* the maximum transmit packet of cos queue 0,integer of <1-255>
- *w1* the maximum transmit packet of cos queue 1,integer of <1-255>
- *w2* the maximum transmit packet of cos queue 2,integer of <1-255>
- *w3* the maximum transmit packet of cos queue 3,integer of <1-255>
- *delay* Maximal delay time for data packets in each queue before sending, <1-255> integer.

[default]

In default,the scheduling mode of cos queue is strict priority.

the default value of *w0*, *w1*, *w2*, *w3* is 0.

[mode]

global configuration mode, privileged user.

[guide]

COS queue scheduling policy of system is strict priority in default, once user changes the ploicy to Weighted Round Robin mode or Bound-delay mode, the corresponding weight parameter must not be 0.

[Command Execution Echo]

- Set the scheduling mode of cos queue for weighted round robin successfully .
- Set the scheduling mode of cos queue for weighted round robin failed.
- Set the scheduling mode of cos queue for bounded-delay successfully .
- Set the scheduling mode of cos queue for bounded-delay failed.
- Set the scheduling mode of cos queue for strict priority successfully
- Set the scheduling mode of cos queue for strict priority failed.

[for example]

- Appoint queue scheduling mode is Weighted Round Robin mode, weight of 4 queue is following:
Raisecom(config)# **qos cosq weight 10 20 20 100**
- Appoint queue scheduling mode is Bound-delay mode, weight of 4 queuw and maximal delay time is following:
Raisecom(config)# **qos cosq bounded 10 30 30 200 200**
- Resume queue scheduling is strict priority mode.
Raisecom(config)# **no qos cosq**

[relevant commmand]

Command	Description
show qos cosq	Show scheduling method of queue configuratio

3.71 qos ip-cos

[Function Introduction]

Set priority control to referred port based on source or destination IP address.Use no to cancel referred compatible rule.

qos ip-cos {src | dst } destinationipaddr netmask priority on { portist | all }

no qos ip-cos {src | dst } destinationipaddr netmask on { portist | all }

[parameter]

- *sourceipaddr* source IP address, dotted decimal notatlon
- *destinationipaddr* destination IP address, dotted decimal notatlon
- *netmask* network mask, dotted decimal notatlon
- *portist* port number,use ‘,’or ‘-’ to connect continuous port number when there is a multiplicity of ports,range from 1 to 26.
- **all** all the ports
- *priority* vpt (Vlan Priority Tag) , range from 0 to 7

[mode]

global configuration mode; privileged user

[guide]

there is no control rule of priority based on IP

[Command Execution Echo]

- Invalid parameters.
- Set qos priority control based on ipaddress failed.
- On port *portnum*, based on src ip address *sourceipaddr netmask netmask* , Set qos priority *priority* failed.
- Set qos priority control based on ipaddress successfully.
- On port *portnum*, based on dst ip address *destinationipaddr netmask netmask* , Set qos priority *priority* failed.
- Set qos priority control based on ipaddress successfully.
- Delete configuration of qos priority : On port *portnum*, based on src ip address

sourceipaddr netmask netmask failed.

- Delete configuration for qos priority control based on src ip address successfully.
- Delete configuration of qos priority : On port *portnum* , based on dst ip address *destinationipaddr netmask netmask* failed.
- Delete configuration for qos priority control based on dst ip address successfully.

[for example]

- set the priority of diagram coming from IP address range from 10.0.0.1 to 255.0.0.0 4 on port 3.
Raisecom(config)# **qos ip-cos src 10.0.0.1 255.0.0.0 4 on 3**
- set the priority of diagram coming from IP address range from 10.0.0.2 to 255.0.0.0 4 7 on port 4.
Raisecom(config)# **qos ip-cos dst 10.0.0.2 255.0.0.0 7 on 4**
- delete first rule.
Raisecom(config)# **no qos ip-cos src 10.0.0.1 255.0.0.0 on 3**
- delete second rule.
Raisecom(config)# **no qos ip-cos dst 10.0.0.2 255.0.0.0 on 4**

[relevant command]

Command	Description
show qos pri-control	show priority control of current system

3.72 qos mac-cos

[Function Introduction]

Set priority control to referred port based on source or destination MAC address. Use no to cancel referred compatible rule.

qos mac-cos {src | dst } mac priority on { portist | all }

no qos mac-cos {src | dst } mac on { portist | all }

[parameter]

- *mac* MAC address, format of input is xxxx.xxxx.xxxx
- *portist* port number, use ‘,’ or ‘-’ to connect continuous port number when there is a multiplicity of ports, range from 1 to 26.
- **all** all the ports
- *priority* vpt (Van Priority Tag), range from 0 to 7.

[mode]

global configuration mode; privileged user

[guide]

There is no priority control rule of based on MAC in default.

[Command Execution Echo]

- Invalid parameters.
- Set qos priority control based on mac address failed.
- On port *portnum* , based on mac address *mac* , set qos priority *priority* failed.
- Set qos priority control based on mac address successfully.
- Delete configuration of qos priority: On port *portnum* , based on src mac *mac* , failed.
- Delete configuration of qos priority: On port *portnum* , based on dst mac *mac* , failed.
- Delete configuration for qos priority control based on mac address successfully.

[for example]

- On port 3, set qos priority 4 of message based on MAC address 002.2d34.4d5e.
Raisecom(config)# **qos mac-cos src 0023.2d34.4d5e 4 on 3**
- On port 4, set qos priority 7 of message based on MAC address 0133.8a34.4d6c.
Raisecom(config)# **qos mac-cos dst 0133.8a34.4d6c 7 on 4**
- delete first rule.
Raisecom(config)# **no qos mac-cos src 0023.2d34.4d5e on 3**
- delete second rule.

Raisecom(config)# **no qos mac-cos dst 0133.8a34.4d6c on 4**

[relevant command]

Command	Description
show qos pri-control	show the priority control configuration control of current system.

3.73 qos map priority queue

[Function Introduction]

Configure the mapping relation between vpt priority and output queue. Use “no” command to restore default mapping relation.

qos map priority *priority* **queue** *num*

no qos map priority *priority*

[Parameter]

- *priority* vpt (Vlan Priority Tag), integer range form 0 to 7.
- *num* queue number, integer range from 0 to 1

[Default]

The mapping relation between vpt priority and queue is that all priority maps queue 0.

[Mode]

Global configuration exec; privileged user

[Guide]

When user is setting priority matching to the specified queue, if different priority matches different queue, some priority should be configure specially.

[Command Execution Echo]

- Set priority matching to the specified cos queue successfully.
This echo shows when matching VPT with queue successfully.
- Set priority *priority* matching to cos queue *num* failed
This echo shows when matching vpt priority with queue num unsuccessfully. The “priority” and “num” mean priority and number of the queue. Please check the parameter format and range when fails
- Set priority matching to default cos queue 0 successfully.
This echo shows when setting the relationship between vpt and queue to default successful.
- Set priority *priority* matching to default cos queue 0 failed.
This echo shows when setting the relationship between vpt and queue to default unsuccessful. The “priority” is the designated priority. Please check the parameter format and range when fails.

[For example]

- Set priority of vpt 7 matching to queue 3.
Raisecom(config)# qos map priority 7 queue 3
- Restore priority of vpt 3 matching to queue to be default
Raisecom(config)# no qos map priority 3

[Relevant command]

Command	Description
show qos map	Show the matching relation between vpt and priority queue in current system.

3.74 qos port

[Function Introduction]

Set the priority of specified port default..Use no to restore the priority of port to be default 0.

qos port { *portist* | **all** } **default-prio** *priority*

no qos port { *portist* | **all** }

[parameter]

- *portist* port number,use ',' or '-' to connect continuous port number when there is a multiplicity of ports,range from 1 to 26.
- **all** all the ports
- *priority* vpt(Van Priority Tag),range from 0 to 7.

[default]

The default priority of port is priority 0.

[mode]

global configuration mode; privileged user

[guide]

The default priority set by using the command only affects UNTAG message input from the port and has no effect on TAG message.

[Command Execution Echo]

- Set default priority for the specified port successfully.
- On port *portnum* ,set default priority *priority* failed.
- Delete configuration about default priority for the specified port.
- On port *portnum*,set default configuration for default priority failed.

[for example]

- Configure port 3,the default priority range form 5 to 8 is 4.
Raisecom(config)# **qos port 3,5-8 default-prio 4**
- Restore all the ports default priority as default configuration.
Raisecom(config)# **no qos port all**

[relevant command]

Command	Description
show qos pri-control	show the priority control configuration information of current system.

3.75 qos tos-cos

[Function Introduction]

Specify the compatible relation between IP packet priority to COS priority.Use no to cancel the compatible rule.

qos tos-cos *tos to priority*

no qos tos-cos *tos*

[parameter]

- *tos* priority Tag in IP packet,range from 0 to 7.
- *priority* vpt(Vlan Priority Tag), range from 0 to 7.

[mode]

global configuration mode; privileged user

[guide]

There is no priority control rule of compatible relation between IP packet priority and COS priority in default.

[Command Execution Echo]

- Set the mapping rule from TOS Precedence value and qos priority failed.
- Set TOS *tos* matching to COS *priority* failed.
- Set the mapping rule from TOS Precedence value and qos priority successfully .
- Delete configuration of TOS *tos* matching to COS failed.
- Delete configuration for the mapping rule from TOS Precedence value and qos priority successfully.

[for example]

- Set the IP packet of TOS 3 vpt priority 4.
Raisecom(config)# **qos tos-cos 3 to 4**
- cancel the rule above
Raisecom(config)# **no qos tos-cos 3**

[relevant commmand]

Command	Description
show qos pri-control	Show the priority control configuration information of current system.

3.76 qos vlan-cos

[Function Introduction]

Set priority control for specified VLAN. Use no to cancel the compatible rule.

qos vlan-cos *vid* *priority*

no qos vlan-cos *vid*

[Parameter]

- *vid* Specified VLAN ID, use ',' or '-' to connect continuous VID if there is a multiplicity of VLAN, range from 1 to 4094.
- *priority* vpt (Vlan Priority Tag), range from 0 to 7.

[Mode]

Global configuration exec; privileged user

[Guide]

There is no priority control rule based on VLAN in default.

[Command Execution Echo]

- Set qos priority control based on the specific vlan failed.
Input VID parameter is invalid
- On vlan *vid*, set qos priority *priority* failed.
Set VLAN priority policy failed.
- Set qos priority control based on the specified VLAN successfully.
- Delete qos priority control configuration :based on the given VLAN *vid* failed .
- Delete configuration for qos priority control based on the specified VLAN successfully.

[For Example]

- Set VLAN 1, priority rule is 4.
Raisecom(config)# **qos vlan-cos 1 4**
- Cancel the rule above.
Raisecom(config)# **no qos vlan-cos 1**

[relevant commmand]

Command	Description
show qos pri-control	Show the priority control configuration information of current system.

3.77 quit

[Function Introduction]

Use the command to return parent mode or quit login state.

quit

[Parameter]

None

[Mode]

Initial exec, privileged configuration exec, global configuration exec, vlan configuration exec, interface configuration exec, router protocol configuration exec; common user, privileged user.

[Guide]

Use the command to quit login state on original mode.

Use the command to return parent mode on vln configuration mode, interface configuration mode or router protocol configuration mode.

[Command Execution Echo]

None

[for example]

Raisecom>**quit**

[relevant command]

Command	Description
exit	Return parent mode or quit login state.

3.78 rate-limit port

[Function Introduction]

Set the bandwidth limit of physical port, use no to cancel the operation.

rate-limit port *port-number* **input** *rate* **burst** *burst* **output** *rate* **burst** *burst*

no rate-limit port [*port-number*]

[Parameter]

- **port** physical port.
- *port-number* physical port, range from 1 to 26.
- **input** uplink direction of physical port.
- **output** downlink direction of physical port.
- *rate* rate value, range from 1 to 99 Mbps.
- **burst** peak value
- *burst* peak rate, range from 4 to 64 KBps.

[Default]

There is no rate limit of physical port in default.

[Mode]

Global configuration exec; privileged user

[Guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- SUCCESS!
- This operation failed!
- No rate limit for port X!

[For Example]

- Set the uplink rate 5Mbps, peak value 32KBps, downlink rate 10Mbps, peak value 64KBps
Raisecom(config)# **rate-limit port 5 input 5 burst 32 output 10 burst 64**
- Cancel the rate limit of port 5.
Raisecom(config)# **no rate-limit port 5**

[Relevant Command]

Command	Description
show rate-limit port [<i>port-number</i>]	Show the rate limit of specified of one or all the port.

3.79 rate-limit vlan

[Function Introduction]

Set the rate limit of vlan, use no to cancel the operation.

rate-limit vlan *vlan_id* **input** *rate* **burst** *burst* **output** *rate* **burst** *burst*

no rate-limit vlan [*vlan_id*]

[Parameter]

- **vlan** VLAN;
vlan_id VLAN ID, range from 1 to 4094.
- **input** uplink of VLAN
- **output** downlink of VLAN
- **rate** setting of rate value, range from 1 to 99.
- **burst** peak vlue.
- **burst** peak rate, range from 4 to 64 Kbps.

[default]

There is no rate limit to VLAN in default.

[mode]

Global configuration exec; privileged user

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- The uplink port X is not in VLAN Y ,please reset uplink port or VLAN!
- SUCCESS!
- SUCCESS ! Please set uplink port!
- Can not set rate-limit more!
- NO rate limit for vlan X!

[for example]

- Set the uplink rate 4Mbps to VLAN ID,peak value 32KBps,downlink rate 10Mbps,peak value 64KBps.
Raisecom(config)# **rate-limit vlan 3 input 5 burst 32 output 10 burst 64**
- Cancel the rate limit to VLAN ID 3.
Raisecom(config)#**no rate-limit vlan 3**

[relevant commmand]

Command	Description
show rate-limit vlan	Show rate limit of some or all the VLAN.
uplink-port	Set uplink-port

3.80 reboot

[Function Introduction]

Use reboot to restore switch.

reboot

[parameter]

None

[mode]

privileged configuration exec, privileged user.

[guide]

'yes'should be input to identify the operation when the command is used to reboot switch.

[Command Execution Echo]

None

[for example]

- Raisecom#**reboot**
Please input 'yes' to confirm:yes
Rebooting ...

[relevant commmand]

None

3.81 rmon alarm

[Function Introduction]

Use the command to add rmon alarm table unit, use no to delete table unit.

```
rmon alarm <1-512> MIBVAR <2-2000000> { delta | absolute } rising-threshold
<1-65535>1 [<1-65535>2] falling-threshold <1-65535>3 [<1-65535>4] owner STRING
no rmon alarm <1-512>
```

[Parameter]

- <1-512> the index of Alarm table
- *MIBVAR* remote control MIB variable
- <2-2000000> the time between checking MIB variable (unit: second)
- **delta** check between the value of MIB variable.
- **absolute** check the absolute alteration of MIB variable.
- **rising-threshold** the rising-threshold of MIB variable.
- <1-65535>₁ the rising-threshold value of MIB variable
- <1-65535>₂ index of events to rising threshold
- **falling-threshold** the falling threshold of MIB variable.
- <1-65535>₃ the falling-threshold value of MIB variable
- <1-65535>₄ index of events to falling threshold
- **owner** the owner of Alarm table
- *STRING* the string of owner

[Default]

There is no configuration of Alarm table.

[Mode]

Global configuration exec; privileged user

[Guide]

The format of *MIBVAR* must be dotted decimal notation, the variable must be right remote control MIB variable, and else it is not remote control

[Command Execution Echo]

```
·ERROR MIB Variable!
```

The MIB variable by command is wrong

```
·set successfully.
```

Command successful

```
·set fail.
```

Command failed

[For example]

```
Raisecom(config)# rmon alarm 10 1.3.6.1.2.1.2.2.1.20.1 20 delta rising-threshold 15 1
falling-threshold 1 owner jjohnson
```

The command set RMON alarm 10, inspect MIB variable 1.3.6.1.2.1.2.2.1.20.1

20 seconds once, detect the rising or falling of the variable, if it rises by 15, from 10000 to 10015 for example, alarm will be triggered.

[Relevant command]

Command	Description
rmon	Enable rmon on the interface.
show rmon alarm	Show the rmon alarm table.

3.82 rmon event

[Function Introduction]

```
rmon event <1-65535> [log] [ trap COMMUNITY ] [ description STRING ] [ owner
STRING]
```

no rmon event <1-65535>

[Parameter]

- <1-65535> index of RMON Event table
- **log** whether to log when it is triggered.
- **trap** send the community name of trap.
- *COMMUNITY* community name.
- **description** description string.
- *STRING* character string.
- **owner** owner
- *STRING* string of owner

[Default]

The default community name is public.

The default description string is null.

The default owner is config.

[Mode]

Global configuration exec; privileged user

[Guide]

Use the command to add and set the attribute of event

[Command Execution Echo]

·*Community name is too long!*

The community property string is too long.

·*Description is too long!*

The description property string is too long

·*Owner name is too long!*

The owner's name string is too long.

·*set successfully.*

Command successful

·*set fail.*

Command fails

[For example]

*Raisecom(config)#***rmon event 1 trap private**

[Relevant command]

Command	Description
Show rmon event	show RMON EVENT table.

3.83 rmon queuesize

[Function Introduction]

Use rmon queue size to set the size of rmon queue.

rmon queuesize <60-65535>

no rmon queuesize

[Parameter]

The size of rmon setting ranges from 60 to 65535

[Default]

The size of queue is 100 in default.

[Mode]

Global configuration exec; privileged user

[Guide]

Set the size of rmon queue.

[Command Execution Echo]

- *Set successfully.*

Command successful

[For example]

Set the size of RMON queue 200.

Raisecom(config)# rmon queuesize 200

[Relevant command]

None

3.84 search mac-address

[Function Introduction]

Search the state of mac-address in the switch.

search mac-address *HHHH.HHHH.HHHH*

[Parameter]

- **mac-address** MAC address
- *HHHH.HHHH.HHHH* MAC address, the format of input is dotted heximal notation string, dotted every four character.

[Default]

Don't search in default.

[Mode]

Privileged configuration exec, privileged user (priority 5)

[Guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

Information of layer 2 address in the switch:

MAC address Port number VLAN identifier Layer 2 flags

[For example]

Raisecom# search mac-address 0050.8d47.d4cc

[Relevant command]

Command	Description
show mac-address-table l2-address	Show all the MAC addresses that fit in with some condition.

3.85 show access-list

[Function Introduction]

Show all the information of access-control list.

show access-list

[parameter]

access-list list of access.

[default]

[mode]

Privileged configuration exec, privileged user.

[guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

mac access list:

List No. MAC-address BindType ID AccessType Ref

```

.....
Ip access list:
List No. ip-confine-list No. BindType ID Ref
-----
.....
Port access list:
List No. Port No. BindType protocol-port AccessType Ref
-----
.....

```

[for example]

Show all access control list.
 Raisecom# **show access-list**

[relevant command]

Command	Description
show { ip-access-list port-access-list mac-access-list ip-confine-list }	Show one or all the same type access list

3.86 show ip-access-list|port-access-list|mac-access-list|ip-confine-list

[Function Introduction]

Show some or all the same type access-list.

show { ip-access-list | port-access-list | mac-access-list | ip-confine-list } [list-number]

[parameter]

- **ip-access-list** access list of IP address.
- **port-access-list** access list of port
- **mac-access-list** access list of MAC address
- **ip-confine-list** confine list of IP address.
- *list-number* list number, range form 0 to 99

[default]

None

[mode]

Privileged configuration exec, privileged user (priority 5)

[guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

- mac access list:
 List No. MAC-address BindType ID AccessType Ref

- Ip access list:
 List No. ip-confine-list No. BindType ID Ref

- Port access list:
 List No. Port No. BindType protocol-port AccessType Ref

- list of ip confine:
 list No. IP address IP mask AccessType Ref

[for example]

- Show all the access list of IP address
 Raisecom# **show ip-access-list**
- Show all the access list of MAC address

- Raisecom# **show mac-access-list**
Show all the access list of port.
- Raisecom# **show port-access-list**
Show all the ip-confine list
- Raisecom# **show ip-confine-list**

[relevant commmand]

Command	Description
show access-list	Show all the access list

3.87 show aging-time

[Function Introduction]

Show the aging time of MAC address

show aging-time

[Parameter]

aging-time the aging time of MAC address

[Default]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

- *The age timer value is: seconds.*
- *This operation failed!*

[For example]

Show the aging time of current

Raisecom# **show aging-time**

[Relevant command]

Command	Description
mac-address-table aging-time	Set the aging time of MAC address
no mac-address-table aging-time	Restore the aging time of mac address

3.88 show arp

[Function Introduction]

Show the item of ARP mapping table

[Command Format]

show arp

[Parameter]

None

[Default]

None

[Mode]

Privileged configuration exec; privileged user

[Guide]

Use show arp to search all the item in arp address list, every item includes IP address, MAC address and the type information.

[Command Execution Echo]

- *Set sucessfully!*
Show ARP table:
- | <i>IP Address</i> | <i>MAC Address</i> | <i>Type</i> |
|-------------------|--------------------|-------------|
| ----- | | |

10.0.0.5	0050.8d4b.fd1e	static
10.0.0.6	0050.0a3c.ac2e	dynamic
10.0.0.7	0050.1c4e.15a7	dynamic

[For example]

Show ARP list
Raisecom#show arp

[Relevant command]

Command	Description
arp add	Add a static MAC address item.
clear arp	Clear all the items in ARP address table.

3.89 show clock

[Function Introduction]

Use show clock to show current system time.

show clock

[Parameter]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

Use the command to show current system time.

[Command Execution Echo]

None

[For example]

Raisecom#show clock
The switch current system Time is : Sep-30-2003 00:28:07

[Relevant command]

Command	Description
clockset	set current system time

3.90 show dhcp-server

[Function Introduction]

Show the configuration information and statistic information of DHCP server.

show dhcp-server

[parameter]

None

[default]

None

[mode]

Privileged configuration mode; privileged user.

[guide]

The command is used to show the configuration information and statistic information of DHCP server.

[Command Execution Echo]

[for example]

Show the information of adjacent DHCP server.
Raisecom#show dhcp-server
DHCP Server enabled !
the VLAN that enabled the DHCP Server include:

VLAN ID = 2

The total enabled VLAN num is 1

DHCP max lease timeout is 10080 minutes

DHCP min lease timeout is 30 minutes

DHCP default lease timeout is 30 minutes

statistics information of DHCP Server:

DHCP StartUp time: 0 hours 0 minutes 48 seconds

the Num of Bootps received: 0

the Num of Discover received: 0

the Num of Request received: 0

the Num of Release received: 0

the Num of Offer received: 0

the Num of Ack received: 0

the Num of Nack received: 0

the Num of Decline received: 0

the Num of Unknows received: 0

the total Num of Packets received: 0

[relevant command]

Command	Description
dhcp-server enable	enable dhcp-server
dhcp-server active	enable dhcp-server on VLAN

3.91 show dhcp-server ip-pool

[Function Introduction]

Show the configuration information of DHCP-server ip-pool.

show dhcp-server ip-pool

[parameter]

None

[default]

None

[mode]

Privileged configuration mode; privileged user.

[guide]

The command is used to show the configuration information of DHCP-server ip-pool.

[Command Execution Echo]

[for example]

- show the information of adjacent DHCP server.

```
Raisecom#show dhcp-server ip-pool
```

```
-----
```

```
the name of ip pool table is aaaaaaaa
```

```
the status of ip pool table is active
```

```
the ip address range from 2.0.0.200 to 2.0.0.220
```

```
the mask is 255.0.0.0
```

```
the VLAN that used the ip pool include:
```

```
VLAN ID = 2,3,4,5
```

the gateway ip address is 2.0.0.3
the dns server ip address is 2.0.0.3

the valid ip pool sum is 1
the valid ip address sum is 21
the allotted ip address sum is 1

[relevant command]

Command	Description
dhcp-server enable	enable dhcp-server
dhcp-server ip-pool name	configure dhcp-server ip-pool

3.92 show dhcp-server relay-ip

[Function Introduction]

Show the configuration information of adjacent DHCP-server relay-ip address

show dhcp-server relay-ip

[parameter]

None

[default]

None

[mode]

privileged configuration mode; privileged user.

[guide]

The command is used to show the configuration information of adjacent DHCP-server relay-ip.address.

[Command Execution Echo]

None

[for example]

- show the information of adjacent DHCP-server relay-ip address.

```
Raisecom#show dhcp-server relay-ip
index  IP address      IP Mask      Status
-----
1      2.0.0.2         255.0.0.0   active
```

[relevant command]

Command	Description
dhcp-server relay-ip	Set of delete the adjacent DHCP-server relay-ip address.

3.93 show filter

[Function Introduction]

Show all the status of filter.

show filter

[parameter]

filter the configured filter.

[default]

None

[mode]

privileged configuration mode, privileged user.

[guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

```
Filter list:
AccessListType List-number AccessType
-----
```

[for example]

Show the status of filter.
rc302(config)# **show filter**

[relevant command]

Command	Description
filter	Show the status of access-list.

3.94 show garp

[Function Introduction]

Show the value of garp timer[{ 1-26 }]

show garp timer [{ 1-26 }]

[parameter]

- **timer** the timer of garp.
- { 1-26 } port list parameter, optional, all the other second layer port GARP timer will show if there is no the parameter.

[mode]

Privileged configuration mode; privileged user.

[Command Execution Echo]

```
***Port X GARP Timer Configuration***
Join: 20
Leave: 60
LeaveAll: 1000
```

[relevant command]

Command	Description
Garp	set the value of GARP timer.

3.95 show gmrp

[Function Introduction]

Show the configuration information of GMRP.

show gmrp

[mode]

Privileged configuration mode; privileged user.

[Command Execution Echo]

```
Global GMRP Configuration:
GMRP feature is currently enabled on the switch.
Participant ports: 0-25
```

[relevant command]

Command	Description
gmrp	disable/enable GMRP protocol

3.96 show gvrp

[Function Introduction]

Show the configuration information of GVRP

show gvrp

[mode]

Privileged configuration mode; privileged user.

[Command Execution Echo]

Global GVRP Configuration:
GVRP feature is currently enabled on the switch.
Participant ports: 0-25

[relevant command]

Command	Description
gvrp	Disable/enable GVRP protocol

3.97 show ip igmp-snooping

[Function Introduction]

Show the dynamic-studying or manual configuration information of multi-router port or IGMP Snooping configuration information.

[Command Format]

show ip igmp-snooping [mrouter] [vlan vlanid]

[Parameter]

- **mrouter** Show the dynamic-studying or manual configuration information of multi-router port.
- *vlanid* VLAN ID range form 1 to 4094.

[Default]

None

[Mode]

Privileged configuration exec; privileged user

[Guide]

- Show the status of IGMP Snooping and each VLAN.
- Show the dynamic-studying or manual configuration information of multi-router port.
- Show the status of VLAN referred by vlanid.
- Show the referred VLAN multi-router port information, if it is no referred, show all the VLAN information.

[Command Execution Echo]

[For example]

- show the configuration information of IGMP Snooping.
Raisecom# show ip igmp-snooping
igmp snooping is globally Disabled
igmp snooping aging time is 300(s)
IGMP snooping isn't enabled on any Vlan.
- show all the multi-router information of VLAN
Raisecom# show ip igmp-snooping mrouter

Group Addr	Port	Vid	Age	Type
224.8.8.8	1	1	270	REPORTv2
224.8.8.9	2	2	260	REPORTv2
- show the configuration information of VLAN 1 IGMP Snooping.
Raisecom# show ip igmp-snooping vlan 1
igmp snooping is globally Disabled
igmp snooping aging time is 300(s)

IGMP snooping is disabled on this Vlan.

- show the igmp-snooping multi-router of vlan 1.

Raisecom#show ip igmp-snooping mrouter vlan 1

<i>Group Addr</i>	<i>Port</i>	<i>Vid</i>	<i>Age</i>	<i>Type</i>
224.8.8.8	1	1	270	REPORTv2

[Relevant command]

None

3.98 show ip route

[Function Introduction]

Show the router of system router list.

show ip route [{ **connected** | **ospf** | **rip** | **static** | **hardware** } |
A.B.C.D [*A.B.C.D* | **longer-prefixes**]]

[parameter]

- **connected** information of connected router.
- **ospf** information of ospf router.
- **rip** information of rip router.
- **static** information of static router.
- **hardware** information of hardware router.
- *A.B.C.D*₁ the prifix of IP network
- *A.B.C.D*₂ the mask of network
- **longer-prefixes** the prifix of longer-network

[default]

Show all the router.

[mode]

Privileged configuration mode, privileged user.

[guide]

Use the command to show the IP router information and show different protocol router information respectively,and show the prifix router information of some network,and show the router information in hardware list.

[Command Execution Echo]

None

[for example]

- Raisecom#show ip route **ospf**
Codes: C - connected, H-HardWare S - static, R - RIP, O - OSPF

O 10.0.0.0[255.0.0.0],via 8.1.0.2
O 9.0.0.0[255.0.0.0], via 8.1.0.2
- Raisecom#show ip route 10.0.0.0 **longer-prefixes**
Codes: C - connected, H-HardWare S - static, R - RIP, O - OSPF

C 8.1.0.0[255.255.0.0],is directly connected , Interface 0
C 8.2.0.0[255.255.0.0],is directly connected , Interface 1
- Raisecom#show ip route
Codes: C - connected, H-HardWare S - static, R - RIP, O - OSPF

C 8.1.0.0[255.255.0.0],is directly connected , Interface 0
C 8.2.0.0[255.255.0.0],is directly connected , Interface 1

- O 10.0.0.0[255.0.0.0],via 8.1.0.2
 - O 9.0.0.0[255.0.0.0], via 8.1.0.2
- Raisecom#show ip route hardware
Codes: C - connected, H-HardWare S - static, R - RIP, O - OSPF

Host route table

*H 10.0.0.1 Inter= 1 port=1 NextHopMAC = 00.50.8d.47.0c.fa, hit = 3

[relevant commmand]

Command	Description
show ip protocol	Show the information of IP router protocol

3.99 show interface port

[Function Introduction]

Show some or all the port status.

show interface port [*port-number*] [**statistic** | **flowcontrol**]

[Parameter]

- **interface** the interface
- **port** the physical port
- *port-number* physical port, range from 1 to 26.
- **statistic** statistic information.
- **flowcontrol** flow control function

[Default]

None

[Mode]

Privileged configuration exec, privileged user (priority 5)

[Guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

- Information of port status:
port No. Linkstatus speed-duplex flowcontrol Mac-learning

Show port status
- Statistics for the interface of switch:
port No: X

InOctets:
InUcastPkts:
InMulticastPkts:
InBroadcastPkts:
OutOctets:
OutUcastPkts:
OutMulticastPkts:
OutBroadcastPkts:
DropEvents:
CRCAlignErrors:
UndersizePkts:
OversizePkts:
Fragments:
Jabbers:
Collisions:
Show the statistic information of Port X.
- Flowcontrol of port:
port No. flowcontrol
Show the flow control status of port.

[For example]

- show the status port 5
raisecom# show interface port 5
- show the statistic information of port 5
raisecom# show interface port 5 statistic
- Show the flow control of all the port.
raisecom# show interface port flow control

[Relevant command]

Command	Description
speed {10 100} duplex {full-duplex half-duplex}	Set the rate and duplex mode of port
speed auto-negotiate	Set the rate of port auto-negotiate.
flowcontrol {on off}	Enable/disable flow control of physical port.
mac-address-table learning {enable disable} port <i>port-number</i>	Enable/disable mac-address-table learning function of physical port.

3.100 show interface vlan

[Function Introduction]

Show the status of all IP interface.

show interface vlan

[Parameter]

None

[Default]

None

[Mode]

Privileged configuration mode, privileged user (priority 5)

[Guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

ifIndex	IP Address	NetMask	Vid	Status	Desc
01100003	192.168.1.2	255.255.255.0	2	active	
01100005	2.0.0.1	255.0.0.0	4	active	

[For example]

Show the status of IP port.

Raisecom# **show interface vlan**

[Relevant command]

Command	Description
show ip route	Show the route information.
ip address	Set IP address of current interface.

3.101 show lacp lag-id

[Function Introduction]

Show lag-id of all physical interface.

show lacp lag-id

[mode]

Privileged configuration mode; privileged user.

[Command Execution Echo]

[(actor LAG ID), (partner LAG ID)]

P# A# [(Prio, actor MAC ,key ,pr,P #), (Prio, partner MAC ,key ,pr,P #)]

01

-----01

[(8000,0040.4700.0000,0001,80,0001), (8000,0050.0020.0010,0001,80,0001)]

column 1:

P#,physical interface number of ethernet

column 2:

A#,the second layer interface number of ethernet(LACP lag-port)

column 3:

show lag-id of the port,lag-id comprises of the following parts.

the priority of LACP system.

MAC address of the port.

the key used by LACP protocol negotiation

the priority of LACP port.

the port number of LACP

column 4:

show the lag-id of counter port,lag-id comprises of the following parts:

the priority of LACP system.

MAC address of partner port.

the key used by LACP negotiation.

the priority of LACP port

the port number of LACP

[relevant commmand]

Command	Description
lacp	enable/disable LACP
lacp system-priority	set LACP system-priority
lag loading-sharing	Set the lag loading-sharing mode of LACP
lacp admin-key	Set the LACP admin-key of ethernet physical interface.
lacp priority	set the LACP priority of ethernet physical interface.
lacp mode	Set the lag mode of ethernet physical interface.
show lacp port	show the lacp port and physical port configuration of LACP

3.102 show lacp port

[Function Introduction]

show the information of LACP physical interface,lag-port.

show lacp port

[mode]

privileged configuration mode; privileged user.

[Command Execution Echo]

Link aggregation port information:

```

Port  AKey  MODE    APort  Pri  TGID  RTAG  PList
-----
1     1     ACTIVE  1      128  n/a   0     Individual

```

column 1:

port number

column 2:

AKey,Admin Key;

column 3:

MODE,lag-port mode,value can be 'on','off','active','passive';

column 4:

APort,lag-port number;

column 5:

priority of port

column 6:

(lag-group ID)

column 7:

RTAG, loading-sharing mode of lag-group(distribution mode)

column 8:

PList, if the aggregation port includes more than one physical ports, port list will be displayed.

Otherwise, "Individual" or "Member" will be displayed.

[relevant command]

Command	Description
Lacp	enable/disable LACP
lacp system-priority	set the system priority of LACP
lag loading-sharing	set LACP lag-link of loading-sharing mode
lacp admin-key	set LACP admin-key of Ethernet physical port
lacp priority	set the priority of ethernet physical port.
lacp mode	set the lag-link mode of Ethernet physical port.
show lacp lag-id	show all the lag-id of Ethernet physical port

3.103 show logging

[Function Introduction]

Show logging file.

show logging [file]

[Parameter]

file show logging information stored in file.

[Default]

[Mode]

Privileged configuration exec; privileged user

[Guide]

Use the command to show the configuration information of logging file, or information stored in file.

[Command Execution Echo]

- Show logging information

Raisecom#show logging

Syslog logging: enable, 0 messages dropped, messages rate-limited 0 per sec

Console logging: enable, level=debug ,22 Messages logged

Monitor logging: disable, level=info ,0 Messages logged

Time-stamp logging messages: enable

Log host Information:

<i>Target Address</i>	<i>Level</i>	<i>Facility</i>	<i>Sent</i>	<i>Drop</i>
<i>192.168. 1. 9</i>	<i>debug</i>	<i>local7</i>	<i>11</i>	<i>11</i>
<i>192.168. 1.185</i>	<i>debug</i>	<i>local7</i>	<i>11</i>	<i>11</i>

- Show information stored in logging file.

Raisecom#show logging file

Logging information in file

DEC-31-1999 00:04:45 SYS-1-START-A: System startup
DEC-31-1999 00:16:40 SYS-1-START-A: System startup
DEC-31-1999 03:54:37 SYS-1-START-A: System startup
DEC-31-1999 05:24:22 SYS-1-WRITE-A: Write system configuration
DEC-31-1999 04:02:35 SYS-1-START-A: System startup
DEC-31-1999 05:34:36 SYS-1-WRITE-A: Write system configuration
DEC-31-1999 05:37:41 SYS-1-WRITE-A: Write system configuration

[For example]

Show logging file

show logging file

[Relevant command]

Command	Description
Logging console	Enable output direction of logging console.
logging monitor	Enable output direction of logging monitor.
logging file	Enable output direction of logging file.
logging time-stamp	Set logging time-stamp.

3.104 show mac-address-table l2-address

[Function Introduction]

Show all or some MAC address suitable to some condition

show mac-address-table l2-address [{ **port** *port-number* | **vlan** *vlan_id* }]

[Parameter]

- **mac-address-table** table of MAC address.
- **l2-address** layer 2 address
- **port** physical port.
- *port-number* physical port number, range from 1 to 26.
- **vlan** VLAN
- *vlan_id* VLAN ID, range from 1 to 4094.

[Default]

None

[Mode]

Privileged configuration exec, privileged user (priority 5)

[Guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

- Information of layer 2 address in the switch:
MAC address. Port number. VLAN identifier. layer 2 flags
- Information of layer 2 address with the port X :
MAC address. VLAN identifier. layer 2 flags
- Information of layer 2 address with the VLAN X:
MAC address. Port number. layer 2 flags

[For example]

- Show all mac-address-table
Raisecom# show mac-address-table l2-address
- show all mac-address-table of port 5
Raisecom# show mac-address-table l2-address port 5
- Show all mac-address-table of VLAN ID 4.
Raisecom# show mac-address-table l2-address vlan 4

[Relevant command]

Command	Description
search mac-address <i>HHHH.HHHH.HHHH</i>	show status of mac-address in switch

3.105 show mac-address-table multicast

[Function Introduction]

Use the command to show layer 2 multicast entity of switch or referred VLAN.

[Command Format]

show mac-address-table multicast [vlan *vlan-id*] [count]

[Parameter]

- **count** show all count.
- **vlan *vlanid*** VLAN ID(optional),range from 1 to 4094

[Default]

None

[Mode]

Privileged configuration exec; privileged user

[Guide]

show mac-address-table multicast show all VLAN layer 2 multicast router information of switch

show mac-address-table multicast vlan *vlan-id* show referred VLAN layer 2 multicast router information of switch.

show mac-address-table multicast count show all VLAN layer 2 multicast count information of switch

show mac-address-table multicast vlan *vlan-id* count show referred VLAN layer 2 multicast count information of switch.

if VLAN is not referred ,show all VLAN layer 2 multicast router information.

[Command Execution Echo]

[For example]

- Show all VLAN layer 2 multicast router information
Raisecom#show mac-address-table multicast

<i>VLAN ID</i>	<i>MAC address</i>	<i>port</i>
1	0100.5e08.0808	1,2,3
2	0100.5e08.0808	4,5,6
- Show layer 2 multicast router information of VLAN 1.
Raisecom#show mac-address-table multicast vlan 1

<i>VLAN ID</i>	<i>MAC address</i>	<i>port</i>
1	0100.5e08.0808	1,2,3
- Show all VLAN layer 2 multicast router count information.
Raisecom#show mac-address-table multicast count

<i>VLAN ID</i>	<i>MAC address</i>	<i>port</i>
1	0100.5e08.0808	1,2,3
2	0100.5e08.0808	4,5,6

Multicast Mac Entries for all vlans: 2
- Show layer 2 multicast router counter information of VLAN 2.
Raisecom#show mac-address-table multicast vlan 2 count

<i>VLAN ID</i>	<i>MAC address</i>	<i>port</i>
----------------	--------------------	-------------

```

-----
2          0100.5e08.0808    4,5,6
Multicast Mac Entries for all vlans:  1

```

[Relevant command]

Command	Description
ip igmp snooping static	Add a layer 2 port as multicast member.

3.106 show mac-address-table static

[Function Introduction]

Show all or some physical port as static MAC address.

show mac-address-table static [**port** *port-number* | **vlan** *vlan_id*]

[parameter]

- **mac-address-table** MAC address table
- **static** static address.
- **port** physical port.
- *port-number* physical port number ,range from 1 to 26.
- **vlan** VLAN;
- *vlan_id* VLAN ID,range from 1 to 4094.

[default]

None

[mode]

privileged configuration mode, privileged user (priority 5).

[guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

```

Information of static mac address in switch:
port No.   VLAN ID   static MAC Addr
-----

```

[for example]

show static MAC address.

Raisecom# **show mac-address-table static**

[relevant command]

Command	Description
mac-address-table static	Set static MAC address.use no to delete.

3.107 show mirroring

[Function Introduction]

Show part of all mirroring rule information setting.

show mirroring [**source_port** *port-number*]

[Parameter]

- **mirroring** mirroring function.
- **source_port** mirroring port.
- *port-number* mirroring port number ,range from 1 to 26.

[Default]

None

[Mode]

Privileged configuration exec, privileged user (priority 5)

[Guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

- *The port list wrong!*

- The entered port list number is wrong
- *Rule of mirror for port:*

<i>port No.</i>	<i>rule of mirror</i>

- *No monitor port!*
- *Monitor port: X*

The current monitoring port is Port X

[For example]

Show mirroring rule of port 5.

Raisecom# **show mirroring source_port 5**

[Relevant command]

Command	Description
mirror source_port	set mirroring rule
no mirror source_port	delete a mirroring rule
no mirror all	delete all mirroring setting

3.108 show monitor_port

[Function Introduction]

Show mirroring monitor-port of current setting

show monitor_port

[Parameter]

monitor_port port used to monitor.

[Default]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

Only privileged user whose priority is above or equal 5 can use the command.

[Command Execution Echo]

- No monitor port!
There is no monitoring port.
- The monitor port : X
The current monitoring port is X.

[For example]

Show monitor-port of current setting.

Raisecom# **show monitor_port**

[Relevant command]

Command	Description
mirror monitor_port	set monitor-port
no mirror monitor_port	delete monitor-port

3.109 show qos cosq

[Function Introduction]

Show mode of queue service and parameter.

show qos cosq

[Mode]

Privileged user exec, common user, privileged user

[Guide]

The command shows qos of current system priority and parameter.

[Command Execution Echo]

Output message:

- qos
- queue 0 priority;
- queue 1 priority;
- queue 2 priority;
- queue 3 priority;
- delay-time

[For example]

Show qos of current system and correlation parameter.

Raisecom# **show qos cosq**

[Relevant command]

Command	Description
qos cosq weight	Confine qos as Weighted Round Robin.
qos cosq bounded	confine qos as Bound-delay
no qos cosq	confine qos as rigor priority

3.110 show qos map

[Function Introduction]

Show the compatible relation between vpt and priority queue.

show qos map

[Mode]

Privileged user exec, common user, privileged user.

[Guide]

The command is used to show the matching relation between vpt and priority queue.

[Command Execution Echo]

Getting priority “*priority*” matching cos queue failed.

Get priority matching cos queue failed will show message above. Priority is the vpt priority, successful getting will show matching relation.

[For example]

Raisecom# **show qos map**

[Relevant command]

Command	Description
qos map priority	Configure map relation of vpt and output queue.
no qos map priority	Restore vpt priority and output queue as default.

3.111 show qos pri-control

[Function Introduction]

show qos pri-control

[mode]

privileged user mode,common user, privileged user.

[guide]

The command show priority rule based on IP address , MAC address, VLAN priority, the mapping rule between TOS Precedence value and qos priority

[Command Execution Echo]

- Show current priority control based on mac address failed.
- Show current priority control based on VLAN ID failed.
- Show current priority control based on ip address failed.
- Show the mapping rule between TOS Precedence value and qos priority failed.
- Show port default priority configuration failed.

[for example]

Raisecom# **show qos pri-control**

[relevant command]

Command	Description
qos port	configure default priority of referred port.
qos ip-cos	configure priority rule based on IP address
qos mac-cos	configure priority rule based on MAC address
qos vlan-cos	configure priority rule based on referred VLAN
qos tos-cos	configure TOS Precedence value and qos priority

3.112 show rate-limit

[Function Introduction]

Show rate limit of setting.

show rate-limit port [*port-number*] [**input** | **output**]

[Parameter]

- **rate-limit** rate limit
- **port** physical port
- *port-number* physical port number.
- **input** the upstream direction of physical port.
- **output** the downstream direction of physical port

[Default]

None

[Mode]

Privileged configuration exec, privileged user (priority 5)

[Guide]

Only privileged user whose priority is above or equal 5 can perform the command.

[Command Execution Echo]

- Information of rate limit for port:
port No. rate-limit (Mbps) burst (KBps)

Show the port bandwidth control information
- Information of rate limit for VLAN:
VLAN ID in-rate(Mbps) in-burst(KBps) out-rate(Mbps) out-burst(KBps)

Show the VLAN bandwidth control information

[For example]

- Show all physical port and bandwidth control information.
raisecom# **show rate-limit port**
- Show bandwidth control information of VLAN 5.
raisecom# **show rate-limit vlan 5**

[Relevant command]

Command	Description
rate-limit port <i>port-number</i> rate-limit <i>rate</i> burst <i>burst</i>	set rate-limit of port
rate-limit vlan <i>vlan-id</i> input <i>rate</i> burst	set rate-limit of VLAN

3.113 show rmon alarms

[Function Introduction]

Use show rmon alarms to show information rmon alarm table

show rmon alarms

[Parameter]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

[Command Execution Echo]

rmon alarms the detailed information of rmon alarms is in RFC 1757.

[For example]

```
Raisecom#show rmon alarms  
Alarm 10 is Active, Owned by jjhshen  
Monitors 1.3.6.1.2.1.2.2.1.20 every 20 seconds  
Taking delta samples, last value was 0  
Rising threshold is 15, assigned to event 1  
Falling threshold is 1, assigned to event 0  
On startup enable rising or falling alarm
```

[Relevant command]

Command	Description
show rmon event	show the information of rmon events
show rmon history	show the information of rmon history.
show rmon statistics	show information of rmon statistics table

3.114 show rmon events

[Function Introduction]

Use show rmon event to show information of rmon events table.

show rmon event

[Parameter]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

rmon alarm the detailed information of rmon alarm is in RRFC 1757.

[Command Execution Echo]

None

[For example]

```
Raisecom#show rmon event  
Event 2 is active, owned by this  
Description is eee.  
Event firing causes log and trap last send 0:0:0.
```

[Relevant command]

Command	Description
show rmon history	show the information of rmon history table.
show rmon statistics	show the information of rmon statistics table.
show rmon alarm	show the information of rmon alarm table

3.115 show rmon history

[Function Introduction]

Use show rmon history to show the information of rmon history table.

show rmon history

[Parameter]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

rmon history the detailed information of rmon history table is in RFC 1757.

[Command Execution Echo]

None

[For example]

```
Raisecom#show rmon history  
Entry 1 is active, and owned by manager1  
Monitors ifEntry.1.1 every 30 seconds  
Requested # of time intervals, ie buckets, is 5  
Granted # of time intervals, ie buckets, is 5  
Sample # 14 began measuring at 00:11:00  
Received 38346 octets, 216 packets,  
0 broadcast and 80 multicast packets,  
0 undersized and 0 oversized packets,  
0 fragments and 0 jabbers,  
0 CRC alignment errors and 0 collisions.  
# of dropped packet events is 0  
Network utilization is estimated at 10
```

[Relevant command]

Command	Description
show rmon statistics	Show information of rmon statistics table
show rmon alarms	Show information of rmon alarm table.
show rmon events	Show information of rmon events

3.116 **show rmon statistics**

[Function Introduction]

Use show rmon statistics of rmon statistics table.

show rmon statistics

[Parameter]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

rmon statistics The detailed information of rmon statistics is shown in RFC 1757

[Command Execution Echo]

None

[For example]

```
Raisecom#show rmon statistics  
Interface 2 is active, and owned by monitorEtherStats  
Monitors 1.3.6.1.2.1.2.2.1.1.17825795(ifEntry.1.17825795),which has  
Received 0 octets, 0 packets,  
0 broadcast and 0 multicast packets,  
0 undersized and 0 oversized packets,  
0 fragments and 0 jabbers,  
0 CRC alignment errors and 0 collisions.  
# of dropped packet events (due to lack of resources): 0  
# of packets received of length (in octets):  
64: 0, 65-127: 0, 128-255: 0,  
256-511: 0, 512-1023: 0, 1024-1518:0
```

[Relevant command]

Command	Description
show rmon history	Show the information of rmon history table.
show rmon events	Show the information of rmon events.
show rmon alarms	Show the information of rmon alarm table.

3.117 show running-config

[Function Introduction]

Use show running-config to show the configuration information of current system.

show running-config

[Parameter]

None

[Mode]

Privileged configuration mode, privileged user

[Guide]

Show the configuration information of current system. '?' stands for explanation. Use command write to write to flash memory.

[Command Execution Echo]

None

[For example]

```
Raisecom# show running-config
System current configuration:
!command in view_mode
terminal time-out 65535
!
!command in enable_mode
!
!command in vlan configuration mode
!
!command in port_mode
!
!command in aggregator mode
!
!command in ip interface mode
!
!command in rip_mode
!
!command in ospf_mode
!
!command in config_mode
!
```

[Relevant command]

Command	Description
show startup-config	Show the system boot configuration information
download	Download system configuration file or boot file
upload	Upload the system configuration file or boot file
write	Store the current system configuration

3.118 show service

[Function Introduction]

“Show service” is used to display the running services in the system currently

show service

[Parameter]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

“Show service” is used to display the running services in the system currently.

[Command Execution Echo]

None

[For example]

raisecom#**show service**

The switch system service information

The Qos Service ON

The Filter Service ON

The Storm control Service ON

The Authentication Service ON

The IGMP Snooping Service ON

The STP Service ON

The RIP protocol Service ON

The OSPF protocol Service ON

The PIM-DM protocol Service ON

The PIM-SM protocol Service ON

[Relevant command]

None

3.119 show snmp

[Function Introduction]

Use show snmp to show the information of sending and receiving of snmp diagram.

show snmp

[Parameter]

None

[Mode]

Privileged configuration mode, privileged user

[Guide]

Use the command to show the statistics of diagram received and sending.

[Command Execution Echo]

None

[For example]

Raisecom#show snmp

SNMP Information

SNMP packets input:36

The total number of Unsupported SNMP version SNMP PDUs: 0

The total number of Unknown SNMP community name SNMP PDUs: 0

The total number of SNMP community not allowed operation SNMP PDUs: 0

The total number of ASN.1 or BER errors SNMP PDUs: 0

The total number of too big SNMP PDUs: 0

The total number of name error SNMP PDUs: 0

The total number of bad value SNMP PDUs: 0

The total number of ReadOnly SNMP PDUs: 0

The total number of GenErrs SNMP PDUs: 0
 The total number of Get-Request and Get-Next PDU's MIB objects SNMP PDUs: 0
 The total number of Set-Request MIB objects SNMP PDUs: 0
 The total number of Get-Request MIB objects SNMP PDUs: 0
 The total number of Getnext-Request MIB objects SNMP PDUs: 0
 The total number of Set-Request MIB objects SNMP PDUs: 0
 The total number of Get-Response PDU's SNMP PDUs: 0
 The total number of Received Traps SNMP PDUs: 0
 SNMP packets output:0
 The total number of error name SNMP PDUs: 0
 The total number of too big SNMP PDUs: 0
 The total number of bad value SNMP PDUs: 0
 The total number of Gen Errs SNMP PDUs: 0
 The total number of Get request SNMP PDUs: 0
 The total number of Get-next SNMP PDUs: 0
 The total number of Set Request SNMP PDUs: 0
 The total number of Get Responses SNMP PDUs: 0
 The total number of Trap SNMP PDUs: 0

[Relevant command]

None

3.120 show snmp community

[Function Introduction]

Use show snmp community to show the community information of snmp protocol.

show snmp community

[Parameter]

None

[Mode]

Privileged configuration mode, privileged user

[Guide]

Use show snmp community to show the community information of snmp protocol.

[Command Execution Echo]

None

[For example]

Raisecom#show snmp community

SNMP community Information

<i>Index</i>	<i>Community Name</i>	<i>View Name</i>	<i>Permission</i>
<i>1</i>	<i>public</i>	<i>internet</i>	<i>rw</i>

[Relevant command]

Command	Description
snmp community	Set snmp community information.
show snmp view	show snmp view information

3.121 show snmp contact

[Function Introduction]

Use show snmp contact to show contact information

show snmp contact

[Parameter]

None

[Mode]

Privileged configuration mode, privileged user

[Guide]

Show the contact information of snmp.

[Command Execution Echo]

None

[For example]

Raisecom#show snmp contact
Contact Information: support@Raisecom.com

[Relevant command]

Command	Description
snmp-server contact	Set the contact information of snmp-server.

3.122 show snmp host

[Function Introduction]

Use show snmp host to show the information of trap server.

show snmp host

[Parameter]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

Use the command to show the ip address of trap server and the parameter setting of trap server.

[Command Execution Echo]

None

[For example]

```
Raisecom#show snmp host
IP Address Version Community Port Tags
-----
20.0.0.1 V2 public 163 snmp
20.0.0.2 V1 public 162 bridge config interface snmp rmon ospf
```

[Relevant command]

Command	Description
snmp host	Set trap server of snmp

3.123 show snmp location

[Function Introduction]

Use the command to show the location information of snmp.

show snmp location

[Parameter]

None

[Mode]

Privileged configuration mode, privileged user

[Guide]

Show the location information of SNMP

[Command Execution Echo]

None

[For example]

```
Raisecom#show snmp location  
Device location: world china raisecom
```

[Relevant command]

Command	Description
snmp location	Set the location information of snmp

3.124 show snmp view

[Function Introduction]

Use the command to show the view information of snmp.

show snmp view

[Parameter]

None

[Mode]

Privileged configuration mode, privileged user

[Guide]

Show the view information of snmp.

[Command Execution Echo]

None

[for example]

```
Raisecom#show snmp view  
SNMP View Information  
Index View Name OID Tree Type  
-----  
0 system 1.3.6.1.2.1.1 include  
1 internet 1.3.6 include
```

[Relevant command]

Command	Description
show snmp community	Show the community information of SNMP
snmp view)Set the view information of snmp

3.125 show sntp

[Function Introduction]

Show the “sntp” information

show sntp

[Parameter]

None

[Default]

None

[Mode]

Privileged configuration exec; privileged user

[Guide]

Use the history studying information of sntp

[Command Execution Echo]

Show log information

```

Raisecom#show snmp
SNTP configuration information
SNTP server address:192.168.1.169
SNTP server      Stratum      Version      Last Receive
-----

```

[For example]

Show log information of stored in file.

show snmp

[Relevant command]

Command	Description
snmp server	Learn the system time form snmp server.
snmp broadcast client	set the device as detector of snmp broadcast

3.126 show startup_config

[Function Introduction]

Use the command to show the stored startup-configuration information

[Parameter]

None

[Mode]

Privileged configuration exec; privileged user

[Guide]

Use the command to show the stored startup-configuration information, use write or download to refresh, or use erase to delete, or use upload to store.

[Command Execution Echo]

None

[For example]

```

Raisecom#show startup-config
!command in view_mode
!
!command in enable_mode
!
!command in vlan configuration mode
!
!command in port_mode
!
!command in aggregator mode
!
!command in ip interface mode
!
!command in rip_mode
!
!command in ospf_mode
!
!command in config_mode
snmp-server host 20.0.0.1 v2 public udp-port 163snmp
snmp-server host 20.0.0.2 v1 public
!
!NEVER change the NOTATION

```

!end

[Relevant command]

Command	Description
show startup-config	show system startup configuration information
download	Download system file of startup file.
upload	Upload system configuration file or startup file.
write	Store system configuration of current system.
erase	delete referred file in system

3.127 show storm_control

[Function Introduction]

show storm_control [{ **broadcast** | **multicast** | **dlf** }]

[parameter]

- **storm_control** storm-control function
- **broadcast** broadcast packet.
- **multicast** multicast packet.
- **dlf** packet failed to reach destination

[default]

None

[mode]

privileged configuration mode; privileged user (priority 5)

[guide]

Only privileged user whose priority is above 5 or equal 5 can use this command.

[Command Execution Echo]

- Status of storm control:
Bcast Mcast DLF limit(packets/s)

 - This classes of packets have NOT rate limiting
 - The rate limiting value is: X packets/s .
 - This operation failed!

[for example]

Show storm control rule of setting:

Raisecom# **show storm_control**

[relevant command]

Command	Description
storm_control	set storm-control rule
no storm_control	delete storm-control rule

3.128 show stp

[Function Introduction]

Show the active status and configuration of stp protocol.

show stp

[Mode]

Privileged configuration exec; privileged user

[Guide]

Show the active status and configuration of stp protocol.

[Command Execution Echo]

Command reactor follows, title column:

Row 1:

RootID, BridgeID show system ID of Root Bridge and self bridge

Root Cost show the cost of self-bridge to root-bridge.

Row 2:

Show whether STP is enabled and fast connecting and the top changing times detected by STP

Row 3:

Show the common information of STP, including max-age, forward-delay, and hello-time

Row 4:

Show self-bridge information of max-age, forward-delay, hello-time value

Sub-column context:

Column 1:

Port number

Column 2:

portState, Status of the STP port, including "DISABLED", "LISTENING", "LEARNING", "FORWARDING", "BLOCKING"

Column 3:

state stands for the location of port, 'D' stands for referred port, 'R' stands for root port, 'B' stands for BLOCKING port.

Column 4:

The cost of self-port

Column 5:

If Dcost is referred port, the value is the cost of self-bridge to root-bridge. If it is not referred port, it is the cost of connected network to root-bridge.

Column 6:

The priority of STP port

Column 7:

portF stands for whether port fast function is enabled

Column 8:

Protocol stands for whether STP protocol is enabled.

RootID: 8000004047000000 BridgeID: 8000004047000000 Root Cost = 0
Spanning Tree ENABLED fastUplink DISABLED Top. Change = 0
STP Domain : Max Age = 20, Forward Delay = 15, Hello Time = 2
Bridge Info : Max Age = 20, Forward Delay = 15, Hello Time = 2

port	portState	state	Pcost	Dcost	Priority	portF	Protocol
1	DISABLED	D	19	0	128	OFF	Enabled
2	DISABLED	D	19	0	128	OFF	Enabled
3	DISABLED	D	19	0	128	OFF	Enabled
4	DISABLED	D	19	0	128	OFF	Enabled
5	DISABLED	D	19	0	128	OFF	Enabled
6	DISABLED	D	19	0	128	OFF	Enabled
7	DISABLED	D	19	0	128	OFF	Enabled
8	DISABLED	D	19	0	128	OFF	Enabled
9	DISABLED	D	19	0	128	OFF	Enabled
10	DISABLED	D	19	0	128	OFF	Enabled
11	DISABLED	D	19	0	128	OFF	Enabled
12	DISABLED	D	19	0	128	OFF	Enabled
13	DISABLED	D	19	0	128	OFF	Enabled
14	DISABLED	D	19	0	128	OFF	Enabled

15	DISABLED	D	19	0	128	OFF	Enabled
16	DISABLED	D	19	0	128	OFF	Enabled
17	DISABLED	D	19	0	128	OFF	Enabled
18	DISABLED	D	19	0	128	OFF	Enabled
19	DISABLED	D	19	0	128	OFF	Enabled
20	DISABLED	D	19	0	128	OFF	Enabled
21	DISABLED	D	19	0	128	OFF	Enabled
22	DISABLED	D	19	0	128	OFF	Enabled
23	DISABLED	D	19	0	128	OFF	Enabled
24	DISABLED	D	19	0	128	OFF	Enabled
25	DISABLED	D	19	0	128	OFF	Enabled
26	DISABLED	D	19	0	128	OFF	Enabled

[Relevant command]

Command	Description
stp	enable/disable stp
stp priority	Set the system priority or port priority of stp.
stp forward-delay	Set forward-delay
stp hello-time	set hello-time
stp path-cost	Set the path cost of stp

3.129 show svl

[Function Introduction]

Show configuration information of shared VLAN function

show svl

[Parameter]

- **svl** share the function of VLAN

[Default]

None

[Mode]

Privileged configuration exec; privileged user

[Guide]

Only users whose priority is above or equal 5 can use the command.

[Command Execution Echo]

- *The ports which in svl mode: XXX*
The information shows when the Port XXX is set to SVL mode

[For example]

- show the configuration of current SVL
raisecom# show svl

[Relevant command]

Command	Description
svl { enable disable }	Enable/disable svl of shared VLAN

3.130 show terminal

[Function Introduction]

Show the terminal information of system

show terminal

[Parameter]

None

[Mode]

Privileged configuration exec; privileged user

[Guide]

Use the command to detect terminal information of system, including one console and five telnet console.

[Command Execution Echo]

None

[For example]

```
Raisecom#show terminal
      terminal      state      time-out      user
-----
      console      active      600sec      Raisecom
      telnet-1      inactive      -      -
      telnet-2      inactive      -      -
      telnet-3      inactive      -      -
      telnet-4      inactive      -      -
      telnet-5      inactive      -      -
```

[Relevant command]

None

3.131 show vlan current

[Function Introduction]

Show the configuration information of all active VLAN of current system.

show vlan current

[mode]

privileged user mode;privileged user.

[guide]

the command shows the configuration information of all active VLAN

[Command Execution Echo]

```
*** Current VLAN X Configuration ***
VLAN member ports: 0-25
VLAN untagged ports: 0-25
VLAN status: Static
VLAN creation time: 0-Days 0-Hours 0-Minutes 0-Seconds
X 代表 VLAN ID;
Row 2 shows the member port list of VLAN
Row 3 shows the untagged port list of VLAN
Row 4 shows whether VLAN is static or dynamic.
Row 5 shows how long has VLAN been created after system starting
```

[relevant commmand]

Command	Description
vlan	enter configuration mode of static VLAN
name	set the name of static VLAN
state	Set the state of static VLAN
shutdown vlan	enable/disable static vlan
pvid	Set port VLAN ID
vlan-access	Set the access priority of static VLAN
show vlan static	show the configuration information of all static VLAN

3.132 show vlan static

[Function Introduction]

Show the configuration information of static VLAN

show vlan static [{1-4094}]

[Parameter]

{1-4094} VLAN ID list

[Mode]

Privileged user exec; privileged user

[Guide]

The command shows all configuration information of static VLAN, including active and suspended ones

[Command Execution Echo]

*** Static VLAN X Configuration ***

VLAN name: Default

VLAN member ports: 0-25

VLAN untagged ports: 0-25

VLAN active state: Active

X stands for VLAN ID;

Row 2 shows the name of static VLAN

Row 3 shows member port list of static VLAN

Row 4 shows untagged port list of static VLAN

Row 5 shows current active state of static VLAN

[Relevant command]

Command	Description
vlan	Enter static VLAN configuration mode;
name	Set name of static VLAN
state	Set the active state of static VLAN
shutdown vlan	Enable/disable static VLAN
pvid	Set port VLAN
pvid-space	Set up the ID range of PVID
vlan-access	Set the access priority of static VLAN

3.133 show uplink-port

[Function Introduction]

show current uplink-port.

show uplink-port

[parameter]

uplink-port port to uplink.

[default]

None

[mode]

privileged configuration mode;privileged user.

[guide]

Only users whose priority is above or equal 5 can use the command.

[Command Execution Echo]

- No uplink port !
- The uplink port : X

[for example]

show current uplink-port

Raisecom# **show uplink-port**

[relevant command]

Command	Description
uplink-port	set uplink-port.
no uplink-port	delete uplink-port.

3.134 show user

[Function Introduction]

Use show user to show the user information stored in system.

show user

[Parameter]

None

[Mode]

Privileged configuration mode; privileged user

[Guide]

Use the command to inspect how many users can login the system. The information of users is stored in usertableconf. Users can use erase to delete the file to restore default user status.

[Command Execution Echo]

None

[For example]

Raisecom#show user

User name priority

Raisecom 15

factory 15

[Relevant command]

Command	Description
user	Set up the user information
user privilege	Set the privilege of user

3.135 show version

[Function Introduction]

Use show version to show system version.

[parameter]

None

[mode]

privileged configuration mode, privileged user.

[guide]

Use the command to show the software and system hardware version.

[Command Execution Echo]

None

[for example]

Raisecom#show version

RaiseCom Operating System Software

Copyright(c) 2001-2003 by Raisecom Science & Technology CO., LTD.

Product name: ISCOM2800

Software RaiseComOS. Version 1.3.100.20040419.(Compiled Apr 20 2004, 14:28:44)

HardWare ISCOM2800. Version Rev.A

ISCOM2800 with
64M bytes DRAM
8 M bytes Flash Memory

Switch uptime is 0 days, 0 hours, 3 minutes

[relevant command]

None

3.136 shutdown

[Function Introduction]

Close physical port, use no to open.

shutdown

no-shutdown

[Parameter]

None

[Default]

The port is open in default.

[Mode]

Ethernet physical interface configuration mode; privileged user

[Guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- *SUCCESS!*
Set up successfully
- *This operation failed!*
Set up failed

[For example]

- Shut down the physical port
Raisecom(config-port)# shutdown
- Open the physical port
Raisecom(config-port)# no-shutdown

[Relevant command]

Command	Description
show interface port	show the state of some or all interface port

3.137 shutdown vlan

[Function Introduction]

Set the active state of static VLAN

shutdown vlan <2-4094>

no shutdown vlan <2-4094>

[parameter]

<2-4094> VLAN ID.

[default]

The new VLAN is suspend in default.

[mode]

global configuration mode;privileged user.

[guide]

The command is same to command state in static VLAN configuration mode.

[Command Execution Echo]

- static vlan *VID* not exist.
- shutdown successfully.
- shutdown failed.
- activate static vlan *VID* successfully.
- activate static vlan *VID* failed.

[for example]

- shutdown static VLAN 2
Raisecom(config)# **shutdown vlan 2**
- activate static VLAN 2
Raisecom(config)# **no shutdown vlan 2**

[relevant command]

Command	Description
vlan	enter the configuration mode of static VLAN
name	set the name of static VLAN
state	set the active state of static VLAN
pvid	set the property of VLAN ID
vlan-access	set the access property of port VLAN
show vlan static	set the configuration information of static VLAN
show vlan current	show the configuration information of all active VLAN

3.138 snmp-server community

[Function Introduction]

Set community name, and the relative view and access-priority.

[Command Format]

[no] snmp-server community *community-name* [view *view-name*] { **ro** | **rw** }

[Parameter]

- *community-name* community name, string, less than 32
- view *view-name* view name, less than 32
- **ro** assign the access privilege to read-only
- **rw** assign the access privilege of community to read-write

[Default]

Community name is public; view is read-only to internet.

[Mode]

Global configuration exec; privileged user mode

[Guide]

In order to protect itself and MIB from unprivileged access, SNMP Agent affords the conception of community. SNMP Agent distributes privileged access users to community; every community has only a community name. Operation Get and Set use the name.

SNMPv1 and SNMPv2 use community name authentication, the SNMP diagrams those don't coincide with community will be discarded. Different community has read-only or read-write priority. Read-only priority can query device information, read-write priority can also configure device.

Use the command relative view of referred community can be defined, which enable community to access MIB variable in view only. If view name is not input, default view is internet.

[Command Execution Echo]

- Set successfully!
Set community name successfully
- Community name is too long(less than 32)

- The entered community name is longer than 32
 - View name is too long(less than 32)
 - The entered view name is longer than 32
 - No so many space for create community (less equal 8)
 - There are already 8 communities
 - Set fail!
- Set community name failed

[For example]

- Define community raisecom,the relative default view is internet,priority is read and write.
Raisecom(config)# **snmp-server community** raisecom **rw**
- Define community guest,the default view is mib2,read-olny priority.
Raisecom(config)# **snmp-server view** mib2 1.3.6.1.2.1 **included**
Raisecom(config)#**snmp-server community** guest **view** mib2 **ro**

[Relevant command]

Command	Description
snmp-server view	Set a view.
show snmp community	show all community
show snmp view	Show all the view

3.139 snmp-server contact

[Function Introduction]

Set up the network administrator ID and contact information.

[Command Format]

[no] snmp-server contact *sysContact*

[Parameter]

sysContact the contact information of network administrator, character string type.

[Default]

The default contact information is <mailto:support@Raisecom.com>

[Mode]

Global configuration exec; privileged user mode

[Guide]

The information includes the contact information of network administrator, so when maintain work is needs, this information can be used to contact administrator.

[Command Execution Echo]

- *Set successfully!*
Set up successfully
- *Set fail!*
Set up failed

[For example]

Set up the contact information to service@raisecom.com
Raisecom(config)# *snmp-server contact service@raisecom.com*

[Relevant command]

Command	Description
show snmp contact	Show the contact information of network administrator.

3.140 snmp-server enable traps

[Function Introduction]

Enable the trap send function of SNMP

[Command Format]

[no] snmp-server enable traps [**snmp** | **if** | **ospf** | **lACP** | **stp**]

[Parameter]

- **snmp** snmp trap
- **if** interface trap
- **ospf** ospf trap
- **lACP** lacp trap
- **stp** stp trap

[Default]

[Mode]

Global configuration exec; privileged user mode

[Guide]

Use the command to enable or disable trap diagram. When trap diagram is permitted and device has something happened, SNMP TRAP diagram will be sent to trap server.

[Command Execution Echo]

- *Set successfully!*
Set up successfully
- *Set fail!*
Set up failed

[For example]

Enable trap of ospf
Raisecom(config)# snmp-server enable traps ospf

[Relevant command]

Command	Description
snmp-server host	set server of trap

3.141 snmp-server host

[Function Introduction]

Add or delete IP address of trap host

[Command Format]

[no] snmp-server host *ip-address* [*host-name*] [udp-port *port-id*]

[Parameter]

- *ip-address* the IP address of trap host, dotted decimal notation
- *host-name* trap host name
- *port-id* the udp port to receive trap diagram.

[Default]

Destination host list is empty in default.

[Mode]

Global configuration exec; privileged user mode

[Guide]

The IP address of trap destination host must be set before trap diagram is permitted. If hostname is not given, default name is set as Notify1, Notify2....., if udp port is not given, default value is 162.

[Command Execution Echo]

- *Set successfully!*
- *Set fail!*

[For example]

Set the destination host IP address as 10.0.0.1 and hostname as receiveTrap.
Raisecom(config)# snmp-server host 10.0.0.1 name receiveTrap

[Relevant command]

Command	Description
---------	-------------

show snmp host Show all snmp host.

3.142 snmp-server location

[Function Introduction]

Add or delete IP address of trap host

[Command Format]

[no] snmp-server host *ip-address* [*host-name*] [udp-port *port-id*]

[Parameter]

- *ip-address* the IP address of trap host, dotted decimal notation
- *host-name* trap host name
- *port-id* the udp port to receive trap diagram.

[Default]

Destination host list is empty in default.

[Mode]

Global configuration exec; privileged user mode

[Guide]

The IP address of trap destination host must be set before trap diagram is permitted. If hostname is not given, default name is set as Notify1, Notify2....., if udp port is not given, default value is 162.

[Command Execution Echo]

- *Set successfully!*
- *Set fail!*

[For example]

Set the destination host IP address as 10.0.0.1 and hostname as receiveTrap.

Raisecom(config)# snmp-server host 10.0.0.1 name receiveTrap

[Relevant command]

Command	Description
show snmp host	Show all snmp host.

3.143 snmp-server view

[Function Introduction]

Add a snmp-server view.

[Command Format]

[no] snmp-server view *view-name oid-tree* {**included** | **excluded**}

[Parameter]

- *view-name* View name, length is below 32.
- *oid-tree* OID number, length is below 32.
- **included** MIB variable in OID tree.
- **excluded** MIB variable out of OID tree.

[Default]

The default view is internet, including all the MIB variables of 1.3.6 tree.

[Mode]

Global configuration exec; privileged user mode

[Guide]

SNMPv3 defines access mode based on view. Users can use the command to define a view. Use snmp-server community to set the match relation of community and view, define the access priority of referred community.

[Command Execution Echo]

- Set successfully!
- Name too long !
The view name is longer than 32 bits.
- Oid tree Name too long!
The OID is longer than 32 bits.
- Oid tree Name NOT correct!
The entered the OID is illegal.
- Create View fail
Create view failed.

[For example]

Create view mib2, including all the MIB variable of 1.3.6.1.2.1
Raisecom(config)#snmp-server view mib2 1.3.6.1.2.1 included

[Relevant command]

Command	Description
snmp-server community	Set snmp-server community.
show snmp view	show all the snmp view

3.144 **sntp broadcast client**

[Function Introduction]

Set the device as detector of sntp broadcast.

[no] sntp broadcast client

[Parameter]

None

[Default]

The function is disabled

[Mode]

Global configuration exec; privileged user

[Guide]

Use the command to configure detector of sntp diagram, when sntp is detected, set the time as system time.

[Command Execution Echo]

·set successfully!
·set fail!

[For example]

Set the client of sntp broadcast.

sntp broadcast client

[Relevant command]

Command	Description
sntp server	learn the system time of sntp server

3.145 **sntp server**

[Function Introduction]

Use the command to know the system time of sntp server.

sntp server A.B.C.D

[Parameter]

the IP address of sntp.

[Default]

the function is disabled.

[Mode]

Global configuration exec; privileged user

[Guide]

Use the command to learn system time of sntp server; when receive sntp diagram, set the time as system time

[Command Execution Echo]

·set successfully!
·set fail!

[For example]

Set studying-time of the device

sntp server 10.0.0.1

[Relevant command]

Command	Description
sntp broadcast client	Set broadcast client of sntp diagram

3.146 speed

[Function Introduction]

Use command speed to set rate and mode of physical port.

speed { 10 | 100 | 1000 } duplex { full-duplex | half-duplex }

[Parameter]

- **10** speed is 10Mbps
- **100** speed is 100Mbps
- **1000** the speed the 1000Mbps
- **duplex** duplex mode
- **full-duplex** full duplex
- **half-duplex** half duplex

[Default]

- The port speed is auto-negotiate in default.
- The duplex mode is auto-negotiate in default.

[Mode]

Ethernet interface configuration mode; privileged user

[Guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- *SUCCESS!*
- *This operation failed!*

[For example]

Set up the physical port 4 to 1000Mbps half duplex

Raisecom(config-port)# speed 10 duplex half-duplex

[Relevant command]

Command	Description
duplex auto-negotiate	Set the duplex mode of port auto-negotiate.
speed auto-negotiate	Set the speed of port auto-negotiate.
show interface port	Show the state of some or all port.

3.147 speed auto-negotiate

[Function Introduction]

Set the speed of port auto-negotiate.

speed auto-negotiate

[Parameter]

auto-negotiate

[Default]

The speed of port is auto-negotiate in default.

[Mode]

Ethernet physical interface configuration mode; privileged user

[Guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- *SUCCESS!*
- *This operation failed!*

[For example]

Set the speed of physical port 5 auto-negotiate.
Raisecom(config-port)# speed auto-negotiate

[Relevant command]

Command	Description
speed	Set the speed of port and duplex mode.
duplex auto-negotiate	set the duplex auto-negotiate.
show interface port	show the state of some or all the port.

3.148 state

[Function Introduction]

Set the active state of static VLAN

state { active | suspend }

[Parameter]

- **active** Set static VLAN active
- **suspend** Set static VLAN suspend

[Default]

The state of new static VLAN is suspended state in default.

[Mode]

The configuration exec of static VLAN; privileged user

[Guide]

All the configuration of static VLAN is enabled when VLAN is active. When static VLAN is suspend, users can configure it, such as delete/add port, set the VLAN name, system will remain the configuration. Once the VLAN is active, the configuration will work in system

[Command Execution Echo]

- *Set successfully.*
- *Set fail.*
- *Default vlan is always active.*

[For example]

Set VLAN 2 active,exit VLAN configuration mode;
Raisecom(config-vlan)# state active
Raisecom(config-vlan)# exit
Raisecom(config)#

[Relevant command]

Command	Description
vlan	enter the configuration mode of static VLAN
name	Set the name of static VLAN
shutdown	enable/disable the configuration of static VLAN
pvid	Set the priority of port VLAN ID
vlan-access	set the access priority of VLAN
show vlan static	show the configuration information of static VLAN
show vlan current	show the configuration information of current active VLAN

3.149 storm_control

[Function Introduction]

set the storm-control to broadcast,multicast and destination failed packet.Use no to cancel

storm_control { **broadcast** | **multicast** | **dlf** } **limit** *packets-number*

no storm_control [{ **broadcast** | **multicast** | **dlf** }]

[parameter]

- **enable** enable storm-control
- **disable** disable storm-control
- **broadcast** broadcast packet.
- **multicast** multicast packet.
- **dlf** destination failed packet.
- **limit** limit to storm
- *packets-number* the packet number of of storm-control.

[default]

- storm-control is enabled in default.
- storm-control to broadcast is enabled in default.
- storm-control to multicast is enabled in default.
- storm-control to dlf is enabled in default.
- limit to packet is 1024.

[mode]

global configuration mode; privileged user.

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- **SUCCESS!**
Setting storm function successfully will output the message.
- **This operation failed!**
Setting storm function fail will output the message.

[for example]

- enable storm-control function
Raisecom(config)# **storm_control enable**
- disable storm-control function
Raisecom(config)# **storm_control disable**
- Enable the broadcast storm control and the packet limit is 5000
Raisecom(config)# **storm_control broadcast limit 5000**
- disable storm-control to multicast packet.
Raisecom(config)# **no storm_control multicast**
- disable all storm-control
Raisecom(config)# **no storm_control**

[relevant command]

Command	Description
show storm_control	show storm-control to all or some packet.

3.150 stp

[Function Introduction]

Enable/disable stp

stp { **enable** | **disable** }

[Parameter]

- **enable** enable stp
- **disable** disable stp

[Default]

stp is enabled in default.

[Mode]

Global configuration exec or Ethernet layer 2 interface configuration mode; privileged user

[Guide]

stp can avoid network-loop, but will occupy CUP. Users can enable or disable stp according to reality.

[Command Execution Echo]

- Set successfully.
Enable/disable stp successfully
- Set fail.
Enable/disable stp fail

[For example]

- disable stp globally
Raisecom(config)# **stp disable**
- enable stp globally
Raisecom(config)# **stp enable**
- Only stp is used in the port in ethernet layer 2 interface configuration mode
Raisecom(config-aggregator)# **stp disable**

[Relevant command]

Command	Description
show stp	Show the active status and configuration information of stp.
stp priority	Set system priority or port priority of stp.
stp hello-time	Set hello-time.
stp forward-delay	Set forward-delay
stp max-age	Set max-age
stp path-cost	set the path cost of stp.

3.151 stp forward-delay

[Function Introduction]

Set forward-delay, it is the delay time between changes of stp bridge port state.

stp forward-delay <4-30>

no stp forward-delay

[Parameter]

<4-30> the delay time of stp bridge port change, point is second.

[Default]

Forward-delay is 15 seconds in default.

[Mode]

Global configuration mode; privileged user

[Guide]

To avoid circulation, stp wait for a while before port change, the time is controlled by forward-delay. Users can adapt the value according to reality, when the network topology changes fast, decrease the value, and otherwise increase it. Use no stp forward-delay to restore default value

[Command Execution Echo]

- *Set successfully.*
- *Set fail.*

[For example]

Set up the “forward-delay” to 10
Raisecom(config)# **stp forward-delay 10**

[Relevant command]

Command	Description
show stp	show the active status and configuration information of stp
stp	enable/disable stp
stp priority	set the system priority or port priority of stp
stp forward-delay	Set forward-delay
stp hello-time	Set hello-time.
stp path-cost	set the path cost of stp

3.152 stp hello-time

[Function Introduction]

Set hello-time, it is the time slot of configuration information.

stp hello-time <1-10>

no stp hello-time

[Parameter]

<1-10> the time slot of sending configuration information, point is second.

[Default]

Hello-time is 2 seconds in default.

[Mode]

Global configuration exec; privileged user

[Guide]

The time slot of sending BPDU is 2 seconds in default. Users will adjust according to network. When the lost rate of configuration information is high, shorter time will enhance the robust performance of stp. Increasing value will decreasing the occupation of CPU. Use no stp hello-time to restore default value.

[Command Execution Echo]

- *Set successfully.*
- *Set fail.*

[For example]

- Set the value of hello-time 3 seconds
Raisecom(config)# stp hello-time 3
- Restore the value of hello-time to 2 seconds.
Raisecom(config)# no stp hello-time

[Relevant command]

Command	Description
show stp	Show the active status and configuration information of stp.
stp	Enable/disable stp
stp priority	Set the system priority or port priority of stp.
stp forward-delay	Set parameter forward-delay.
stp max-age	Set parameter max-age.
stp path-cost	Set path cost of stp.

3.153 stp max-age

[Function Introduction]

set the parameter max-age of stp,the max living time of bridge-configuration.

stp max-age <6-40>

no stp max-age

[parameter]

<6-40> the max living time of stp bridge configuration,point is second.

[default]

the value of max-ages is 20 seconds in default.

[mode]

global configuration mode; privileged user.

[guide]

the stp bridge configuration has living time ,when the configuration is overtime,stp will calculate st again..If the time is too short,calculation is frequency,if it is too long,stp will not adapt to the change of network topo.Use no stp max-age to restore default value.

[Command Execution Echo]

- set successfully
- set fail.

[for example]

```
Set max-age of stp 30 second.  
Raisecom(config)# stp max-age 30  
Resume max-age of stp  
Raisecom(config)# no stp max-age
```

[relevant commmand]

Command	Description
show stp	Use the active status and configuration information of stp.
stp	enable/disable stp.
stp priority	set the system priority or port priority of stp.
stp forward-delay	Set parameter forward-delay of stp.
stp hello-time	set parameter hello-time of stp.
stp path-cost	set path cost of stp

3.154 stp path-cost

[Function Introduction]

Set the path cost of stp.

```
stp path-cost <1-65535>
```

```
no stp path-cost
```

[Parameter]

<1-65535> the path-cost of stp.

[Default]

The cost of port in default:

- 100 for 10Mbps
- 19 for 100Mbps
- 4 for 1000Mbps

[Mode]

Ethernet layer 2 interface configuration exec; privileged user

[Guide]

When STP calculates ST, root port and designated port must be selected, the lower cost of the port, and the more easily it is selected as root port or designated port.

[Command Execution Echo]

- *Set successfully.*
- *Set fail.*

[For example]

```
Set the cost of stp 30  
Raisecom(config-aggregator)# stp path-cost 30
```

[Relevant command]

Command	Description
---------	-------------

show stp	show the active status and configuration information of stp
stp	enable/disable stp
stp priority	set the system priority or port priority of stp
stp forward-delay	set the parameter forward-delay of stp
stp hello-time	Set the parameter hello-time of stp

3.155 stp priority

[Function Introduction]

Set the system priority or port priority in global configuration mode.

stp priority <1-65535>

no stp priority

[Parameter]

<1-65535> the priority of stp ranging from 1 to 65535

[Default]

The system priority of stp is 32768 in default.

[Mode]

Global configuration mode; privileged user

[Guide]

STP selects Root Bridge according system ID. The more minor system ID is, the more possible it is selected as Root Bridge. System ID comprises of 8 byte. The 2 highest network sequence bytes is priority of system, the next 6 bytes is MAC address. So system ID number is system priority. Use no stp priority to restore default system priority.

[Command Execution Echo]

- *Set successfully.*
- *Set fail.*

[For example]

Set the priority of stp or port 10.

Raisecom(config)# stp priority 10

[Relevant command]

Command	Description
show stp	show the active status and configuration information of stp
stp	enable/disable stp
Stp hello-time	a parameter of stp
Stp forward-delay	a parameter of stp
Stp max-age	a parameter of stp
Stp path-cost	Set the path cost of stp

3.156 stp priority

[Function Introduction]

Set the port priority of stp in ethernet layer 2 interface configuration mode.

stp priority <1-255>

no stp priority

[Parameter]

<1-255> the port priority of stp.

[Default]

The priority of stp port is 128 in default.

[Mode]

Ethernet layer 2 interface configuration exec; privileged user

[Guide]

When STP calculate ST, root port and designated port must be selected, the lower priority of the port, the more easily it is selected as root port or designated port. Users can select given port as root port or designated port by setting port priority. Users can use no stp priority to restore default value in Ethernet layer 2 interface configuration mode.

[Command Execution Echo]

- *Set successfully.*
- *Set fail.*

[For example]

Set the priority of stp port 100
Raisecom(config-aggregator)# stp priority 100

[Relevant command]

Command	Description
show stp	Show the stp active state and configuration information
stp	Enable/disable stp
stp priority	Set the system priority or port priority of stp.
stp forward-delay	Set the forward-delay of stp.
stp hello-time	Set the hello-time of stp
stp path-cost	Set the path cost of stp

3.157 svl

[Function Introduction]

Enable/disable shared VLAN mode.

svl { enable | disable }

[Parameter]

- **enable** enable SVL function
- **disable** disable SVL function

[Default]

- SVL function is “disabled” in default.

[Mode]

Physical interface configuration exec of Ethernet; privileged user (priority 5)

[Guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- *SUCCESS!*
- *This operation failed!*
- *This port has been in svl mode!*
The echo shows when set the port that is already SVL mode
- *This port has not been in svl mode!*
The echo shows when try to shutdown SVL at non-SVL port

[For example]

- Enable the SVL at Port 5
rc2126(config-port)# svl enable
- Disable the SVL at Port 5
rc2126(config-port)# svl disable

[Relevant command]

Command	Description
show svl	show the configuration information of shared VLAN function.

3.158 terminal history

[Function Introduction]

Change the history command number in memory input by console.

terminal history <1-20>

[Parameter]

- **history** configuration information of terminate history command
- <1-20> the history command number input by terminal

[Default]

The history command number input by terminal is 20

[Mode]

Initial exec; common user, privileged user

[Guide]

Use the command to change the history command number input by console, making it clearer to show history command.

[Command Execution Echo]

Set successfully.

[For example]

Raisecom>terminal history 10

[Relevant command]

Command	Description
history	show the history command of the console

3.159 terminal time-out

[Function Introduction]

Use the command to change the configuration when the console logout because of time-out.

terminal time-out <0-65535>

[Parameter]

- **time-out** the configuration information when terminal logout because of time-out.
- <0-65535> the overtime when terminal is free.(point: second)

[Default]

The overtime of the console is 600 seconds and it will logout.

[Mode]

Initial exec; common user, privileged user

[Guide]

Use the command to change the configuration information when the console logout because of time-out.

[Command Execution Echo]

Set successfully.

[For example]

Raisecom> terminal time-out 1000

[Relevant command]

Command	Description
show terminal	Show the information of terminal.

3.160 trans-eapol

[Function Introduction]

Enable or disable function to transfer EAOOL diagram.

trans-eapol port-number

no trans-eapol

[Parameter]

port-number The port number transferred by EAPOL diagram ,range from 1 to 26.

[Default]

Disable the function

[Mode]

Global configuration mode, privileged user (priority 15)

[Guide]

The port number referred by the command is uplink port.

[Command Execution Echo]

- Set transmission EAPOL packet on the specified port failed.
- Set transmission EAPOL packet on the specified port successfully.

[For example]

- Enable the function to transfer EAPOL diagram in port 3
Raisecom (config)# **trans-eapol 3**
- Disable the function to transfer EAPOL diagram.
Raisecom (config)# **no trans-eapol**

[Relevant command]

Command	Description
show running	show the running configuration information

3.161 uplink-port

[Function Introduction]

set uplink port,command no is used to delete port

uplink-port *port-number*

no uplink-port

[parameter]

port-number physical port number that ranges from 1 to 26.

[default]

there is no uplink port in default.

[mode]

global configuration mode; privileged user

[guide]

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- The uplink port %d is not in VLAN %d ,please reset uplink port or VLAN!
- SUCCESS!
- No uplink port!
- Some vlan has been set rate-limit, please delete it first!

[for example]

- set port 26 as uplink port.
Raisecom(config)# **uplink-port 26**
- delete uplink port
Raisecom(config)# **no uplink-port**

[relevant commmand]

Command	Description
show uplink-port	show the port to uplink.
rate-limit vlan	set the bandwidth of VLAN

3.162 upload

[Function Introduction]

Use the command to upload configuration file of system or system-boot file to ftp server.

upload {system-boot | startup-config} {ftp}

[Parameter]

- **system-boot** file to boot system
- **startup-config** file to configure system
- **ftp** use ftp protocol to download

[Default]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

Use the command to upload system configuration file or system boot file to ftp server as a backup file. The command can use different transfer protocols to download and support ftp protocol now. Before use the command, ftp server is sure to configure and switch system is connected to the server.

[Command Execution Echo]

- *Read error.*
Error occurred when reading from the server
- *Invalid input ftp protocol port.*
Error occurred when input invalid protocol port number
- *Invalid input file name*
Invalid file name
- *User name is empty!*
- *User password is empty!*

[For example]

- **Raisecom# upload system-boot ftp**
Please input server IP Address:1.0.0.1
Please input FTP User name:test
Please input FTP Password:test
Please input FTP Server File Name:system_boot.Z
Use ftp protocol to download startup file from ftp server.

[Relevant command]

Command	Description
download	Download configuration file or startup file of system.

3.163 user

[Function Introduction]

Add user and set the password of the user.

Use the command of “no user” to delete user.

user USERNAME password { no-encryption | md5 } PASSWORD

no user USERNAME

[Parameter]

- **USERNAME** username
- **password** password
- **no-encryption** Plain Text Password without encryption
- **md5** password with MD5 encryption
- **PASSWORD** password information.

[Default]

- The user’s hostname is Raisecom added by the command; command hostname is used to change the hostname of user.
- The priority of user added by the command is command user privilege is used to change the

priority of user.

- The user's default enable password is 123 added by the command, enable password is used to change password.

[Mode]

Privileged configuration exec, privileged user (Priority 15)

[Guide]

There is at least one user whose priority is 15 in system user database.

Only users whose priority is 15 can use the command.

[Command Execution Echo]

- *You have no enough right to change user information!*
This echo shows when privileged user whose priority is not 15 tries to create a new user. Only 15-priority users can perform this command.
- *Set successfully!*
- *Set fail!*

[For example]

- Add a user whose ID is abc and password is 123.
Raisecom# user abc password no-encrypt 123
- Delete a user whose ID is abc.
Raisecom# no user abc

[Relevant command]

Command	Description
hostname	Change hostname specified by special user.
user privilege	Change the priority of user
enable password	Change the password of user enable
password	Change the password of current user

3.164 user login

[Function Introduction]

set the authentication mode of login.

user login { local-user | radius-user | all }

[parameter]

- **local-user** use local configuration file to authenticate user.
- **radius-user** user RADIUS server to authenticate user.
- **all** use local configuration file to authenticate user,if it is not available,RADIUS server is used to authenticate user.

[default]

loacal configuration file is used in default.

[mode]

privileged configuration mode, privileged user. (priority 15).

[guide]

Based on RADIUS authentication,user is ENABLE and password is 123,hostname is Raisecom,tip is Enter keyboard in default,default priority is 15.

[Command Execution Echo]

- Set User Login Method failed.
- Set User Login Method successfulty.

[for example]

- Set all as the authentication type of login
Raisecom# user login all
- set local-user as the authentication type of login.
Raisecom# user login local-user

[relevant command]

Command	Description
radius-authserver host radius-authserver key	set the IP address of RADIUS server. Set the shared key between user and server when RADIUS authentication is used.

3.165 user privilege

[Function Introduction]

Use the command to set the priority of users.

user USERNAME privilege <1-15>

[Parameter]

- *USERNAME* user name
- *<1-15>* user priority

[Default]

The default priority of users is 15.

[Mode]

Privileged configuration exec, privileged user (Users of priority 15 can perform the command)

[Guide]

When the priority of some user is restricted, this command is used to forbidden him to execute some command. When the command of priority is below 5, the user will become common user from privileged user. In order to avoid failure of executing all the commands because of user's setting low priority, users can not change the priority of login user, and then at least one user's priority is sure to be 15.

[Command Execution Echo]

- *Set successfully.*
- *Can not change user privilege!*
- *You have no enough right to change user information!*

[For example]

Set privilege of user abc is 4
Raisecom# user abc privilege 4

[Relevant command]

Command	Description
user	Add user and set his password.
show user	Show the information of user

3.166 vlan

[Function Introduction]

Create VLAN or enter static VLAN mode.

vlan <1-4094>

no vlan {all | <2-4094>}

[Parameter]

- *<1-4094>* VLAN ID
- **all** All the static VLAN except default VLAN(VLAN ID is 1).
- *<2-4094>* VLAN ID

[Default]

In default, VLAN 1 is available in system, all the ports is available in default VLAN 1, their port VLAN ID is 1.

[Mode]

Global configuration exec; privileged user

[Guide]

The user use command VLAN to enter configuration mode of static VLAN, if referenced VLAN is not available, system will create automatically. The state of static VLAN newly created is hung up, user must activate it's configuration in configuration mode and quit configuration mode of VLAN, the referenced mode will be enabled.

[For example]

- Enter configuration mode of static VLAN 4094.

Raisecom(config)# vlan 4094

- Delete VLAN 2 form system.

Raisecom(config)#no vlan 2

[Relevant command]

Command	Description
name	The name static VLAN.
state	Set activation state of static VLAN.
shutdown	Shut down/startup configuration of static VLAN
pvid	Set the port attribute of port VLAN ID.
vlan-access	Set the port attribute of VLAN access.
show vlan static	Show configuration information of static VLAN.
show vlan current	Show all the configuration of current active VLAN.

3.167 vlan-access

[Function Introduction]

Set the access attribute of VLAN port.

vlan-access {all | {1-4094}} {tagged | untagged | forbidden}

no vlan-access {all | {1-4094}}

[Parameter]

- **all** all VLAN
- {1-4094} list of VLAN ID
- **tagged** access type of tagged vlan, VLAN frames must have tag information when it is sent from the port.
- **untagged** access type of untagged vlan, VLAN frames need not have tag information when it is sent from the port.
- **forbidden** access type of forbidden, GVRP protocol is forbidden to register and configure attribute of VLAN.

[Default]

In default, all the ports is available in default VLAN (VLAN ID is 1).

[Mode]

Ethernet physical interface configuration exec; privileged user

[Guide]

when the device of switch port connected to network can not acknowledge 802.1Q frame, access mode of untagged can be set to it's PVID, when the device of switch port connected to network can acknowledge 802.1Q frame, then access mode of tagged can be set. The user can set attribute of forbidden to disable

GVRP protocol to register VLAN attribute in the port when it is not permitted.

[Command Execution Echo]

- *Static vlan VID not exist.*
- *Set successfully.*
- *Set failed.*

[For example]

- Add port to VLAN 2 in the form of untagged.
Raisecom(config-port)# **vlan-access 2 untagged**
- Delete static VLAN attribute of all ports.
Raisecom(config-port)# **no vlan-access all**
- Delete port access attribute for VLAN 2、3、6、7、8.
Raisecom(config-port)# **no vlan-access 2,3,6-8**

[Relevant command]

Command	Description
vlan	enter the configuration mode of static VLAN
name	set the name of static VLAN
state	Set the action state of static VLAN
shutdown vlan	shutdown/startup static VLAN
pvid	set the port of port VLAN ID
show vlan static	show configuration information of static VLAN
show vlan current	show all the configuration information of current active VLAN

3.168 write

[Function Introduction]

The command is used to save configuration information of current system.

[Parameter]

None

[Mode]

Privileged configuration exec, privileged user

[Guide]

Use the command to save configuration information of current system, then the saved system command will be executed automatically after reset the system, a new configuration of the switch is not needed.

[Command Execution Echo]

- *Save current configuration successfully!*
- *Save current configuration Fail!*

[For example]

Raisecom#write

[Relevant command]

Command	Description
show startup-config	Show startup configuration of system.
download	Download configuration file or startup file of system.
upload	Upload configuration file or startup file of system.
erase	Delete referenced files in system