

Web Management Guide

(GEP-2652)



V1.0

<http://www.level1.com>

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1. Product Introduction

Before you install and use this product, please read this manual carefully for full exploiting the functions of this product.

1.1. Product Overview

This is a new generation designed for high security and high performance network the second layer Switch. Provides twenty-four 10/100/1000Mbps self-adaption RJ-45 port, and two 100/1000Mbps SFP optical ports, all ports support wire-speed forwarding, can provide you with larger network flexibility. Support VLAN ACL based on port, easily implement network monitoring, traffic regulation, priority tag and traffic control. Support traditional STP/RSTP/MSTP 2 link protection technology; greatly improve the ability of fault tolerance, redundancy backup to ensure the stable operation of the network. Support ACL control based on the time, easy control the access time accurately. Support 802.1x authentication based on the port and MAC, easily set user access. Perfect QOS strategy and plenty of VLAN function, easy to maintenance and management, meet the networking and access requirements of small and medium-sized enterprises, intelligent village, hotel, office network and campus network.

This Switch 24 ports support POE power supply function, support IEEE802.3at standard, 802.3af downward compatibility, power supply equipment for Ethernet, can automatically detect identification standard of electrical equipment, and through the cable for the power supply.

1.2. Features

- Comply with IEEE 802.3i, IEEE 802.3u, IEEE802.3x, IEEE802.3ab, IEEE802.1q, IEEE802.1p standards
- Supports IEEE802.3af, IEEE802.3at standards
- Supports PoE power up to 30W for each PoE port, all power up to 380W
- Supports manage the POE port, support POE port power on/off and port output power restriction
- Support Web interface management
- 24 x 10/100/1000Mbps Auto MDI/MDI-X Ethernet port,Support ports Auto MDI/MDIX
- 8K entry MAC address table of the Switch with auto-learning and auto-aging
- Supports IEEE802.3x flow control for Full-duplex Mode and backpressure for Half-duplex Mode
- supports QoS (quality of service), port mirror, Link aggregation protocol
- Support packet length 9216Bytes jumbo frame packet forwarding at wire speed
- LED indicators for monitoring PSE, Link / Activity/Speed

1.3. External Component Description

1.3.1. Front Panel

The front panel of the Switch consists of a series of LED indicators, 1 x Reset button, 24 x 10/100/1000Mbps RJ-45 ports, 1x Console port and two gigabit SFP ports, as shown as below.



Figure 1 - Front Panel

Reset button (Reset):

Keep the device powered on and push a paper clip into the hole. Press down the button for 5 seconds to restore the Switch to its original factory default settings.

10/100/1000Mbps RJ-45 ports (1~24):

Designed to connect to the device with a bandwidth of 10Mbps, 100Mbps or 1000Mbps. Each has a corresponding Link/Act/Speed and PoE indicator.

Console port (Console):

Designed to connect with the serial port of a computer or terminal for monitoring and configuring the Switch.

SFP ports (SFP1, SFP2):

Designed to install the SFP module and connect to the device with a bandwidth of 1000Mbps. Each has a corresponding 1000Mbps LED.

LED indicators:

The LED Indicators will allow you to monitor, diagnose and troubleshoot any potential problem with the Switch, connection or attached devices.

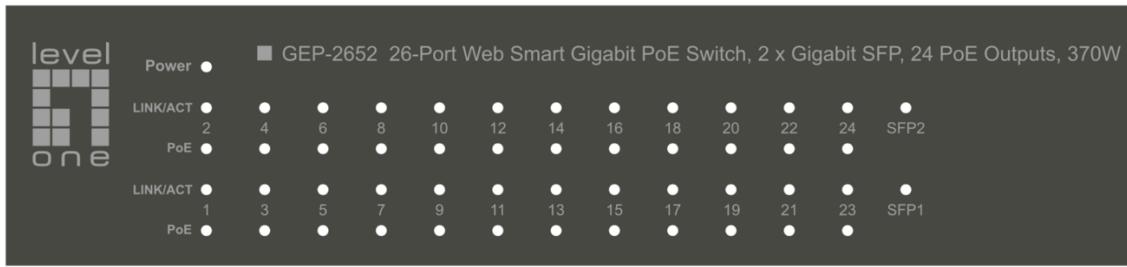


Figure 2 - LED Indicator

The following chart shows the LED indicators of the Switch along with explanation of each indicator.

LED Indicator	Faceplate Marker	Status	Indication
Power Indicator	Power	Off	Power Off
		Solid red	Power On
10/100/1000 BASE-T adaptive Ethernet port indicators (1-24)	Link/Act /Speed	Off	The port is NOT connected.
		Solid green	The port is connected at 1000Mbps.
		Solid orange	The port is connected at 100/10Mbps
		Blinking	The port is transmitting or receiving data.
SFP port indicators (SFP1-SFP2)	Link/Act	Off	The port is NOT connected.
		Solid green	The port is connected at 1000Mbps.
		Blinking	The port is transmitting or receiving data.
PoE status indicators (1-24)	PoE	Off	No PD is connected to the corresponding port, or no power is supplied according to the power limits of the port
		Solid yellow	A Powered Device is connected to the port, which supply power successfully.
		Blinking	The PoE power circuit may be in short or the power current may be overloaded

1.3.2. Rear Panel

The rear panel of the Switch contains Heat vent shown as below.



Figure 3 - Rear Panel

Grounding Terminal:

Located on the left side of the power supply connector, use wire grounding to lightning protection.

AC Power Connector:

Power is supplied through an external AC power adapter. It supports AC 100~240V, 50/60Hz.

1.4. Package Contents

Before installing the Switch, make sure that the following the "packing list" listed OK. If any part is lost and damaged, please contact your local agent immediately. In addition, make sure that you have the tools install switches and cables by your hands.

- One PoE Web Smart Ethernet Switch.
- One Installation Component
- One AC power cord.
- One User Manual.

2. Installing and Connecting the Switch

This part describes how to install your PoE Ethernet Switch and make connections to it. Please read the following topics and perform the procedures in the order being presented.

2.1. Installation

Please follow the following instructions in avoid of incorrect installation causing device damage and security threat.

- Put the Switch on stable place or desktop in case of falling damage.
- Make sure the Switch works in the proper AC input range and matches the voltage labeled on the Switch.
- To keep the Switch free from lightning, do not open the Switch's shell even in power failure.
- Make sure that there is proper heat dissipation from and adequate ventilation around the Switch.
- Make sure the cabinet to enough back up the weight of the Switch and its accessories.

2.1.1. Desktop Installation

Sometimes users are not equipped with the 19-inch standard cabinet. So when installing the Switch on a desktop, please attach these cushioning rubber feet provided on the bottom at each corner of the Switch in case of the external vibration. Allow adequate space for ventilation between the device and the objects around it.

2.1.2. Rack-mountable Installation in 19-inch Cabinet

The Switch can be mounted in an EIA standard-sized, 19-inch rack, which can be placed in a wiring closet with other equipment. To install the Switch, please follow these steps:

- A. attach the mounting brackets on the Switch's side panels (one on each side) and secure them with the screws provided.

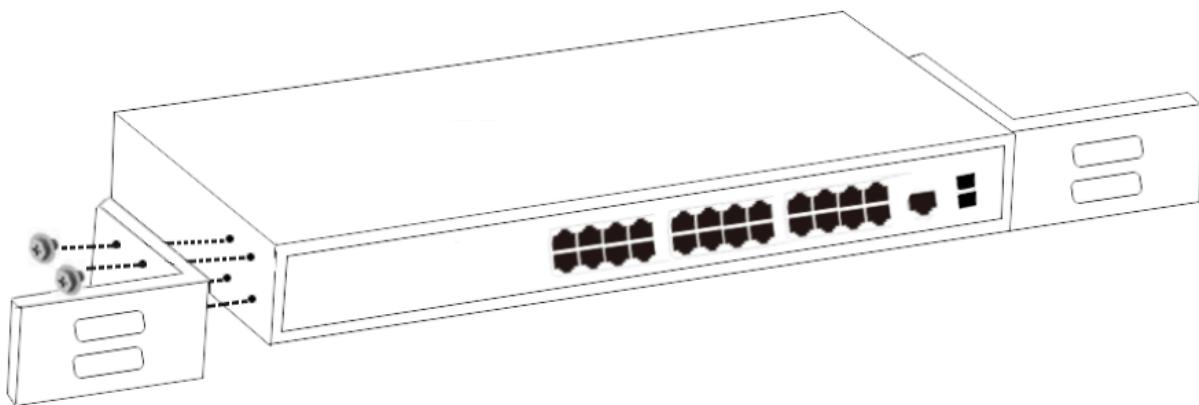


Figure 4 - Bracket Installation

B. Use the screws provided with the equipment rack to mount the Switch on the rack and tighten it.

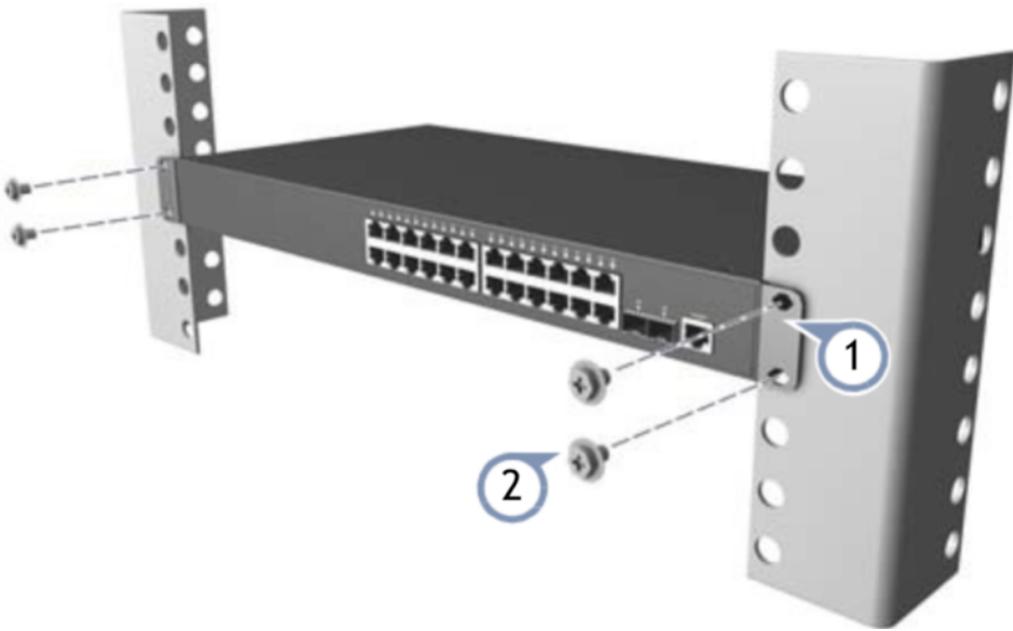


Figure 5 - Rack Installation

2.1.3. Power on the Switch

The Switch is powered on by the AC 100-240V 50/60Hz internal high-performance power supply. Please follow the next tips to connect:

AC Electrical Outlet:

It is recommended to use single-phase three-wire receptacle with neutral outlet or multifunctional computer professional receptacle. Please make sure to connect the metal ground connector to the grounding source on the outlet.

AC Power Cord Connection:

Connect the AC power connector in the back panel of the Switch to external receptacle with the included power cord, and check the power indicator is ON or not. When it is ON, it indicates the power connection is OK.

2.2. Connect Computer (NIC) to the Switch

Please insert the NIC into the computer, after installing network card driver, please connect one end of the twisted pair to RJ-45 jack of your computer, the other end will be connected to any RJ-45 port of the Switch, the distance between Switch and computer is around 100 meters. Once the connection is OK and the devices are power on normally, the LINK/ACT/Speed status indicator lights corresponding ports of the Switch.

2.3. Switch connection to the PD

1-24 ports of the Switch have PoE power supply function, the maximum output power up to 30W each port, it can make PD devices, such as internet phone, network camera, wireless access point work. You only need to connect the Switch PoE port directly connected to the PD port by network cable.

3. How to Login the Switch

3.1. Switch to End Node

Use standard Cat.5/5e Ethernet cable (UTP/STP) to connect the Switch to end nodes as described below. Switch ports will automatically adjust to the characteristics (MDI/MDI-X, speed, duplex) of the device to which is connected.



Figure 6 - Connect PC to Switch

Please refer to the LED Indicators. The LINK/ACT/Speed LEDs for each port lights on when the link is available.

3.2. How to Login the Switch

As the Switch provides Web-based management login, you can configure your computer's IP address manually to log on to the Switch. The default settings of the Switch are shown below.

Parameter	Default Value
Default IP address	192.168.1.1
Default user name	admin
Default password	admin

You can log on to the configuration window of the Switch through following steps:

1. Connect the Switch with the computer NIC interface.
2. Power on the Switch.
3. Check whether the IP address of the computer is within this network segment: 192.168.1.xxx ("xxx" ranges 2~254), for example, 192.168.1.100 , 255.255.255.0
4. Open the browser, and enter <http://192.168.1.1> and then press "Enter". The Switch login window appears, as shown below.

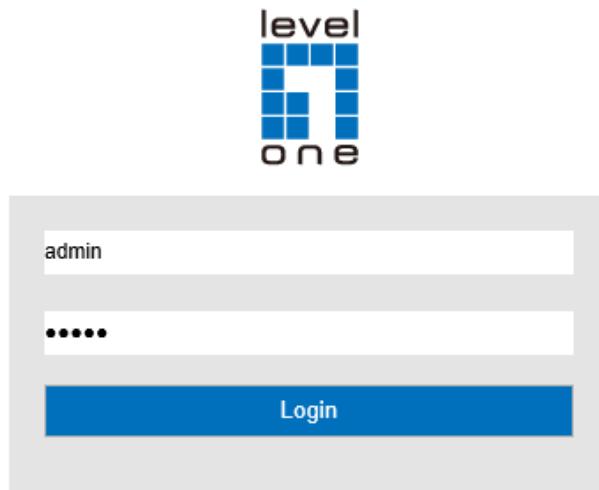


Figure 7- Login Windows

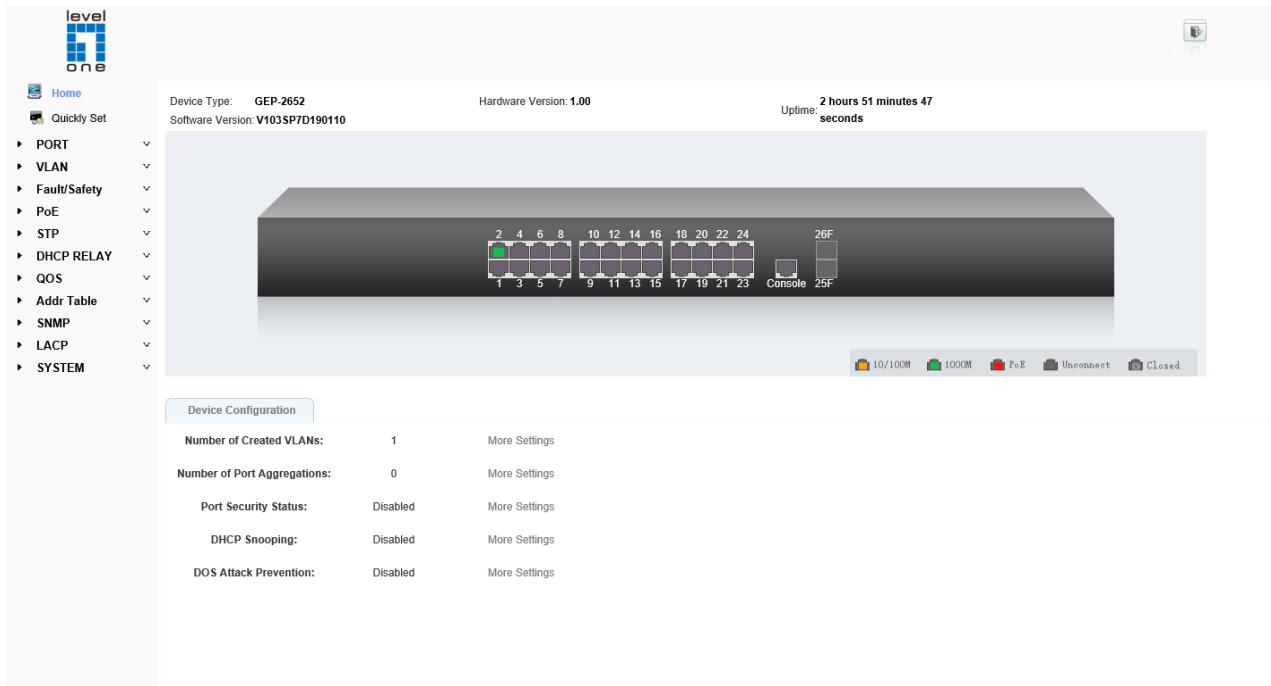
5. Switching language to English .Enter the Username and Password (The factory default Username is **admin** and Password is **admin**), and then click "**LOGIN**" to log in to the Switch configuration window

Device Configuration		
Number of Created VLANs:	1	More Settings
Number of Port Aggregations:	0	More Settings
Port Security Status:	Disabled	More Settings
DHCP Snooping:	Disabled	More Settings
DOS Attack Prevention:	Disabled	More Settings

4. Switch Configuration

The Web Smart Ethernet Switch Managed switch software provides rich layer 2 functionality for switches in your networks. This chapter describes how to use Web-based management interface(Web UI) to this switch configure managed switch software features.

In the Web UI, the left column shows the configuration menu. Above you can see the information for switch system, such as memory, software version. The middle shows the switch's current link status. Green squares indicate the port link is up, while black squares indicate the port link is down. Below the switch panel, you can find a common toolbar to provide useful functions for users. The rest of the screen area displays the configuration settings.



4.1. Quickly setting

In the navigation bar to select "**quickly setting**", can create a VLAN in this module, add the port in the VLAN, set the basic information and modify the switch login password. The following picture:

VLAN setting tab is selected. **VLAN Settings** table:

<input type="checkbox"/>	VLAN ID	VLAN Name	VLAN IP	Port	Edit / Delete
<input checked="" type="checkbox"/>	1	VLAN0001	192.168.1.1/24	1-26	

Buttons at the bottom: New VLAN, New Multiple VLAN, Delete VLAN. Navigation: First, Back [1], Next, Last [1], / 1 Page.

Trunk Settings table:

<input type="checkbox"/>	Port Name	Description	Native Vlan	Allowed Vlan	Edit / Delete
<input checked="" type="checkbox"/>					

Buttons at the bottom: New Trunk Port, Delete Trunk Port. Navigation: First, Back [1], Next, Last [1], / 1 Page.

【parameter description】

Parameter	Description
VLAN ID	VLAN number
VLAN Name	VLAN mark
VLAN IP	Manage the IP address of the VLAN
Device Name	Switch name
Management VLAN	Switch's management in use of the VLAN

【instructions】

Native VLAN: as a Trunk, the mouth will belong to a Native VLAN. The so-called Native VLAN, is refers to UNTAG send or receive a message on the interface, is considered belongs to the VLAN. Obviously, the interface of the default VLAN ID (PVID) in the IEEE 802.1 Q VLAN ID is the Native VLAN. At the same time, send belong to Native VLAN frame on the Trunk, must adopt UNTAG way.

Allowed VLAN list: a Trunk can transport the equipment support by default all the VLAN traffic (1-4094). But, also can by setting the permission VLAN Trunk at the mouth of the list to limit the flow of some VLAN can't through the Trunk.

【Configuration example】

1)VLAN setting: such as create VLAN 2 , Sets the port 8 to Trunk , Native VLAN 2.

The screenshot shows a network configuration interface with two tabs: "VLAN setting" and "Other settings". The "VLAN setting" tab is active, displaying a "VLAN Settings" section with a table of ports and their current status. Below this is a "Trunk Settings" section with a table of ports and checkboxes for "Optional", "Fixed port", "Selected", "Aggregation", "Trunk", and "IP Source Enable Port". A "New VLAN" button is located in the top right of the main panel. A modal dialog titled "New VLAN" is open, prompting for "VLAN ID(1~4094)" (set to 2) and "VLAN Name(1-32)" (set to VLAN0002). It also contains a "Select ports to add to the vlan:" section with a grid of port numbers (2-26) and checkboxes for each. A tip at the bottom of the dialog says: "Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel". At the bottom of the dialog are "Save" and "Exit" buttons, with "Save" being circled in red.

VLAN setting **Other settings**

VLAN Settings

	VLAN ID	VLAN Name	VLAN ID
<input type="checkbox"/>	1		
<input type="checkbox"/>	2		
<input checked="" type="checkbox"/> New VLAN	3		
<input checked="" type="checkbox"/> New Multiple VLAN	4		
	5		
	6		
	7		
	8		
	9		
	10		
	11		
	12		
	13		
	14		
	15		
	16		
	17		
	18		
	19		
	20		
	21		
	22		
	23		
	24		
	25		
	26		

New Trunk port

Please select port to configure:

Trunk Settings

	Port Name
<input type="checkbox"/>	

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports [Select all](#) [Select all others](#) [Cancel](#)

Native VLAN(1-4094): [i](#)

Allowing VLAN(such as 3-5,8,10): [i](#)

Save **Exit**

2) click "next step" button, into other settings, such as: manage ip address set as 192.168.2.11, device name set as switch-123, default gateway with the dns server set as 172.16.1.241.

VLAN setting **Other settings**

Basic System Information

Management VLAN: <input type="text" value="1"/>	Device Name: <input type="text" value="Switch-123"/> *
Management IP: <input type="text" value="192.168.2.11"/> *	Default Gateway: <input type="text" value="192.168.2.22"/>
Subnet Mask: <input type="text" value="255.255.255.0"/> *	DNS Server: <input type="text" value="172.16.1.241"/>

Save **Delete** **Set Management VLAN**

Use 192.168.2.11 to log in, set a new password for 1234 .

Change Administrator Password

Password type: <input checked="" type="checkbox"/> Encrypted password
Old Password: <input type="password" value="*****"/>
New Password: <input type="password" value="*****"/>
Confirm New Password: <input type="password" value="*****"/>

Back **Finish**

4.2. PORT

In the navigation bar to select "PORT", you may conduct **Basic Config, Port Aggregation, Port Mirroring , Port Limit, Storm Control, Port Isolation** and **Port Information**.

- ▶ **PORT** ▾
 - > Basic Config
 - > Port Aggregation
 - > Port Mirroring
 - > Port Limit
 - > Storm Control
 - > Port Isolation
 - > Port Information

4.2.1. Basic config

In the navigation bar to select "**PORT>Basic config**", For panel port to port description , port speed, port status, flow control, status, Duplex Mode and Cable Type Detection configuration, the following picture:

Basic settings

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports [Select all](#) [Select all others](#) [Cancel](#)

Port Description(0-64 characters): <input type="text"/>	Status: <input type="button" value="Enabled"/>
Port Speed: <input type="button" value="Auto"/>	Duplex Mode: <input type="button" value="Auto"/>
Flow Control: <input type="button" value="Off"/>	Cable Type Detection: <input type="button" value="Auto"/>

Port List

Port	Port Description	Port Status	Port Speed	Working Mode	Mega Frame	Cable Type Detection	Flow Control	Edit
Gi0/1		Enabled	Auto	Auto	1518	Auto	Off	
Gi0/2		Enabled	1000M	Full	1518	Auto	Off	
Gi0/3		Enabled	Auto	Auto	1518	Auto	Off	
Gi0/4		Enabled	Auto	Auto	1518	Auto	Off	
Gi0/5		Enabled	Auto	Auto	1518	Auto	Off	
Gi0/6		Enabled	Auto	Auto	1518	Auto	Off	
Gi0/7		Enabled	Auto	Auto	1518	Auto	Off	
Gi0/8		Enabled	Auto	Auto	1518	Auto	Off	
Gi0/9		Enabled	Auto	Auto	1518	Auto	Off	
Gi0/10		Enabled	Auto	Auto	1518	Auto	Off	

First Back [\[1\]](#) [\[2\]](#) [\[3\]](#) Next Last / 3 Page

【parameter description】

Parameter	Description
Port	Select the current configuration port number
Port Description	The port is described
Status	Choose whether to close link port
Port Speed	It Could choose the following kinds: Auto 10 M 100 M 1000 M
Duplex Mode	Can choose the following kinds: Auto Duplex Half duplex
Cable Type Detection	Can choose the following kinds: Auto MDI MDIX

【instructions】

Open flow control should be negotiated will close, negotiated close is to set port speed rate and working mode. Set the port rate more than actual rate of port, the port will be up.

【Configuration example】

Such as: The port is set to 10 M, half duplex, open flow control and Cable Type Detection and port state.

Basic settings

Tip: Click and drag cursor over ports to select multiple ports [Select all](#) [Select all others](#) [Cancel](#)

Port Description(0-64 characters):	<input type="text"/>	Status:	<input checked="" type="checkbox"/> Enabled
Port Speed:	<input checked="" type="checkbox"/> 10M	Duplex Mode:	<input checked="" type="checkbox"/> Half
Flow Control:	<input checked="" type="checkbox"/> On	Cable Type Detection:	<input checked="" type="checkbox"/> Auto

Save

4.2.2. Port aggregation

In the navigation bar to select "PORT>port aggregation", In order to expand the port bandwidth or achieve the bandwidth of the redundancy backup, the following picture:

Load Balancing
Load Balancing method: Source MAC Save

Port Aggregation
Aggregate Group Number(1-8): *

Please select the port to join the Aggregate Group:

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Save

Port Aggregation List

Aggregation Group Number	Group Members	Edit / Delete
		First Back [1] Next Last / 1 Page

【parameter description】

Parameter	Description
Aggregation Group Number	Switch can be set up 8 link trunk group, group_1 to group_8
Group Member	For each of the members of the group and add your own port, and with members of other groups

【instructions】

Open the port of the ARP check function, the port of the important device ARP, the port of the VLAN MAC function, and the monitor port in the port image can not be added!

【Configuration example】

Such as: set the port 7, 8, for aggregation port 1, lets this aggregation port 1 connected to other switch aggregation port 1 to build switch links .

Port Aggregation

Aggregate Group Number(1-8): *

Please select the port to join the Aggregate Group:

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Save

4.2.3. Port mirroring

In the navigation bar to select "PORT>port mirroring", Open port mirror feature, All packets on the source port are copied and forwarded to the destination port, Destination port is usually connected to a packet analyzer to analyze the source port, Multiple ports can be mirrored to a destination port, the following picture:

Port Mirroring

Mirror Group Number (1-4): *

Please choose the source port:(Selecting multiple source ports can affect the device performance)

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Please choose the destination port:(Can only choose one port)

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Save

Port Mirror List

Mirror Group	Source Port	Destination Port
--------------	-------------	------------------

【parameter description】

Parameter	Description
Source port	To monitor the port in and out of flow
Destination port	Set destination port, All packets on the source port are copied and forwarded to the destination port
Mirror group	Range: 1-4

【instructions】

The port of the aggregate port can not be used as a destination port and the source port, destination port and source port can not be the same.

【Configuration example】

Such as: set a mirror group for port 3 regulatory port 4, 5, 6 on and out flow conditions.

Port Mirroring

Mirror Group Number (1-4): *

Please choose the source port:(Selecting multiple source ports can affect the device performance)

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports [Select all](#) [Select all others](#) [Cancel](#)

Please choose the destination port:(Can only choose one port)

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Save

4.2.4. Port Limit

In the navigation bar to select "PORT>port Limit ", to port output, input speed limit, the following picture:

Port Speed Limit

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>												
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports [Select all](#) [Select all others](#) [Cancel](#)

Input Speed Limit(multiple of 16): * 16-1,000,000kb/s

Output Speed Limit(multiple of 16): * 16-1,000,000kb/s

Save

Port Speed Limit list

Ports	Input Speed Limit	Output Spees Limit	Edit
1	1000Mb/s	1000Mb/s	
2	1000Mb/s	1000Mb/s	
3	1000Mb/s	1000Mb/s	
4	1000Mb/s	1000Mb/s	
5	1000Mb/s	1000Mb/s	
6	1000Mb/s	1000Mb/s	
7	1000Mb/s	1000Mb/s	
8	1000Mb/s	1000Mb/s	
9	1000Mb/s	1000Mb/s	

【parameter description】

Parameter	Description
Input speed limit	Set port input speed
Output speed limit	Set port output speed

【instructions】

1 Mbit/s = 1000 Kbit/s = 1000 / 8 KB/s = 125 KB/s . That is, the theoretical rate of 1M bandwidth is 125KB/s .

【Configuration example】

Such as: the port 5 input rate is set to 6400 KB/s, the output rate is set to 3200 KB/s.

Port Speed Limit

2 4 6 8 10 12 14 16 18 20 22 24 26
1 3 5 7 9 11 13 15 17 19 21 23 25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Input Speed Limit(multiple of 16): * 0,16-1,000,000Kb/s

Output Speed Limit(multiple of 16): * 0,16-1,000,000Kb/s

Save

4.2.5. Storm control

In the navigation bar to select "PORT>Storm control", to port storm control config, the following picture:

Storm Control

Counting mode

Save

2 4 6 8 10 12 14 16 18 20 22 24 26
1 3 5 7 9 11 13 15 17 19 21 23 25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Broadcast Limit: * 0-262143

Multicast Limit: * 0-262143

Unicast Limit: * 0-262143

Save

Storm Control List

Ports	Broadcast Limit	Multicast Limit	Unicast Limit	Edit
1	0 (OFF)	0 (OFF)	0 (OFF)	
2	0 (OFF)	0 (OFF)	0 (OFF)	
3	0 (OFF)	0 (OFF)	0 (OFF)	
4	0 (OFF)	0 (OFF)	0 (OFF)	
5	0 (OFF)	0 (OFF)	0 (OFF)	
6	0 (OFF)	0 (OFF)	0 (OFF)	
7	0 (OFF)	0 (OFF)	0 (OFF)	
8	0 (OFF)	0 (OFF)	0 (OFF)	

【parameter description】

Parameter	Description
Broadcast Limit	Storm suppression value of the broadcast packets
Multicast Limit	Storm suppression value of the multicast packets
Unicast Limit	Storm suppression value of the unicast packets

【instructions】

1 Mbit/s = 1000 Kbit/s = 1000 / 8 KB/s = 125 KB/s . That is, the theoretical rate of 1M bandwidth is 125KB/s .

【Configuration example】

Such as: should be forwarded to the port 1-8 of all kinds of packet forwarding rate is 5000 KB/s .

Storm Control

Counting mode: pps

Save

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Broadcast Limit: 5000 * pps:0-262143 bps:0,16-4194288(Kbps)

Multicast Limit: 5000 * pps:0-262143 bps:0,16-4194288(Kbps)

Unicast Limit: 5000 * pps:0-262143 bps:0,16-4194288(Kbps)

Save

4.2.6. Port isolation

In the navigation bar to select "PORT>port isolation ", ports are isolated. The following picture:

Port Isolation

Please select two or more ports to configure:

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Save

Port Isolation List

Source Port	Isolate Port	Delete

First Back [1] Next Last [1] / 1 Page

【parameter description】

Parameter	Description
Source port	Choose a port, to configure the isolated port
Isolated port	Port will be isolated

【instructions】

Open port isolation function, all packets on the source port are not forwarded from the isolated port, the selected ports are isolated.

Ports that have been added to the aggregate port aren't also capable of being a destination port and source port, destination port and source port cannot be the same.

【Configuration example】

Such as: the port 3, 4, 5, and 6 ports isolated.

Port Isolation

Please select two or more ports to configure:

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Port Isolation List

Source Port	Isolate Port	Delete
3	4 5 6	
4	3 5 6	
5	3 4 6	
6	3 4 5	

First Back [1] Next Last [1] / 1 Page

Port Isolation List

Source Port	Isolate Port	Delete
3	4 5 6	
4	3 5 6	
5	3 4 6	
6	3 4 5	

First Back [1] Next Last [1] / 1 Page

4.2.7. Port Information

In the navigation bar to select "PORT>port Information ", it could view related information: Description, Input Flow, Output Flow, Port Status, Port Connection, VLAN and Trunk Port .The following picture:

Port information

Keyword Search Refresh

Port#	Description	Input Flow(bps)	Input Flow(pps)	Output Flow(bps)	Output Flow(pps)	Port Status	Port Connection	VLAN	Trunk Port
Gi 0/1		0.00K	0	0.00K	0	ON		1	No
Gi 0/2		0.00K	0	0.00K	0	ON		1	No
Gi 0/3		0.00K	0	0.00K	0	ON		1	No
Gi 0/4		0.00K	0	0.00K	0	ON		1	No
Gi 0/5		0.00K	0	0.00K	0	ON		1	No
Gi 0/6		0.00K	0	0.00K	0	ON		1	No
Gi 0/7		0.00K	0	0.00K	0	ON		1	No
Gi 0/8		0.00K	0	0.00K	0	ON		1	No
Gi 0/9		0.00K	0	0.00K	0	ON		1	No
Gi 0/10		0.00K	0	0.00K	0	ON		1	No

First Back [1] [2] [3] Next Last [1] / 3 Page

4.3. VLAN

In the navigation bar to select "VLAN", You can manage the **VLAN Settings**, **Access Port Settings**, **Trunk Port Settings** and **Hybrid Port Settings** , the following picture:

VLAN Settings	Access Port Settings	Trunk Port Settings	Hybrid Port Settings
VLAN IDs			
<input type="checkbox"/>	VLAN ID	VLAN Name	VLAN IP
	1	VLAN0001	192.168.1.1/24
⊕ New VLAN ⊕ New Multiple VLAN ⊖ Delete VLAN			

4.3.1. VLAN Settings

In the navigation bar to select "VLAN>VLAN Settings", Vlans can be created and set the port to the VLAN (port default state for the access mode) , the following picture:

VLAN Settings	Access Port Settings	Trunk Port Settings	Hybrid Port Settings
VLAN IDs			
<input type="checkbox"/>	VLAN ID	VLAN Name	VLAN IP
	1	VLAN0001	192.168.1.1/24
⊕ New VLAN ⊕ New Multiple VLAN ⊖ Delete VLAN			

【parameter description】

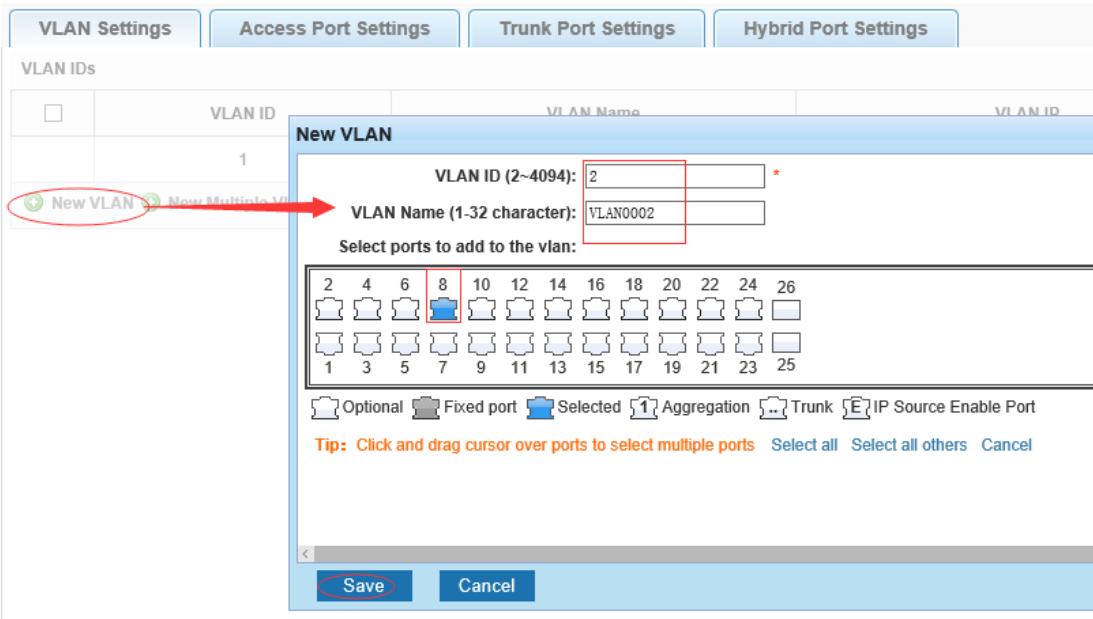
Parameter	Description
VLAN ID	VLAN number
VLAN name	VLAN mark
VLAN IP	Manage switch IP address

【instructions】

Management VLAN, the default VLAN cannot be deleted. Add ports to access port, port access mode can only be a member of the VLAN.

【Configuration example】

Such as: connect switches pc1, pc2 couldn't ping each other, will be one of the PC connection port belongs to a VLAN 2 .



4.3.2. Access port setting

In the navigation bar to select "VLAN config>Access port setting", can set port to Trunk port, the following picture:

VLAN Settings	Access Port Settings	Trunk Port Settings	Hybrid Port Settings
Access port list			
Port	Port description	Native VLAN	Operation
1		1	
2		1	
3		1	
4		1	
5		1	
6		1	
7		1	
8		2	
9		1	
10		1	
New Access port			First Back [1] [2] [3] Next Last / 3 Page

【parameter description】

Parameter	Description
Native VLAN	Only set one

【Instructions】

Native VLAN: Refers to the default Access VLAN, must be the same as the end of the VLAN Native port, otherwise it can't work.

【Configuration Example】

Such as: Port 8, Access VLAN2.

The screenshot shows the 'VLAN Settings' tab selected in the navigation bar. Below it, a table lists VLAN IDs (1 and 2) with their names, IP addresses, and ports. At the bottom left is a 'New VLAN' button. The main area shows an 'Access port list' with a modal dialog titled 'New Access port'. The dialog contains a grid of ports (1-26) where port 8 is selected. A tip at the bottom says 'Click and drag cursor over ports to select multiple ports'. Below the grid is a 'Native Vlan (1-4094)' input field containing '2', which is also highlighted with a red box. A red arrow points from the 'New Access port' button in the bottom-left of the main area to this input field. The 'Save' button in the dialog is also circled in red.

4.3.3. Trunk port setting

In the navigation bar to select "VLAN config>trunk-port setting", can set port to Trunk port, the following picture:

The screenshot shows the 'Trunk Port Settings' tab selected in the navigation bar. Below it, a table lists trunk ports with columns for Port, Port description, Native VLAN, Allowing VLAN, and Operation. At the bottom left is a 'New Trunk port' button. The 'Operation' column header is circled in red.

【parameter description】

Parameter	Description
Native VLAN	Only set one
Allowing VLAN	Can set up multiple

【instructions】

Native VLAN: as a Trunk, the mouth will belong to a Native VLAN. The so-called Native VLAN, is refers to UNTAG send or receive a message on the interface, is considered belongs to the VLAN. Obviously, the interface of the default VLAN ID (PVID) in the IEEE 802.1 Q VLAN ID is the Native VLAN. At the same time, send belong to Native VLAN frame on the Trunk, must adopt UNTAG way.

Allowed VLAN list: a Trunk can transport the equipment support by default all the VLAN traffic (1-4094). But, also can be set the permission VLAN Trunk at the mouth of the list to limit the flow of some VLAN can't pass through the Trunk.

【Configuration example】

Such as: PVID=VLAN2

PC1:192.168.2.122, port 8, access VLAN2

PC2:192.168.2.123, port 7, Trunk allowed VLAN 1-2

PC3:192.168.2.124, port 6, access VLAN1(The default port belongs to VLAN1)

Can let the PC2 PING PC1, cannot PING PC3

The screenshot shows the 'VLAN Settings' tab selected in the navigation bar. Below it, the 'Trunk Port Settings' tab is active. A red arrow points from the 'New Trunk port' button in the main list to a detailed configuration dialog box titled 'New Trunk port'. This dialog box contains a grid of ports (2-26) where port 7 is highlighted with a blue selection box. Below the grid are checkboxes for 'Optional', 'Fixed port', 'Selected', 'Aggregation', 'Trunk', and 'IP Source Enable Port'. A tip at the bottom says: 'Click and drag cursor over ports to select multiple ports Select all Select all others Cancel'. At the bottom of the dialog are 'Native Vlan (1-4094):' set to 2, 'Allowing VLAN(such as 3-5,8,10):' set to 1-2, and 'Save settings' and 'Cancel' buttons.

4.3.4. Hybrid-port setting

In the navigation bar to select "VLAN config>hybrid-port setting", Can set the port to take the tag and without the tag , the following picture:

The screenshot shows the 'Hybrid Port Settings' tab selected in the navigation bar. Below it, the 'Trunk Port Settings' tab is active. A red circle highlights the 'Hybrid Port Settings' tab. The main area displays a table for 'Hybrid Port List' with columns: Port, Port Name, Native VLAN, Tagged, Untagged, and Edit / Delete. At the bottom of the table are buttons for 'New Hybrid Port' and 'Delete Selected Hybrid Port'.

【instructions】

Hybrid port to packet:

Receives a packet, judge whether there is a VLAN information: if there is no play in port PVID, exchanged and forwarding, if have, whether the Hybrid port allows the VLAN data into: if can be forwarded, or discarded (untag on port configuration is not considered, untag configuration only work when to send it a message)

Hybrid port to send packet:

1, determine the VLAN in this port attributes (disp interface can see the port to which VLAN untag, which VLAN tag)

2, if it is untag stripping VLAN information, send again, if the tag is sent directly

【Configuration example】

Such as: create vlans 10, 20, VLAN sets the Native VLAN port 1 to 10, to tag VLAN for 10, 20, sets the Native VLAN port 2 to 20, to tag VLAN for 10, 20 .

VLAN Settings Access Port Settings Trunk Port Settings Hybrid Port Settings

VLAN IDs

	VLAN ID	VLAN Name	VLAN IP	Port	Edit / Delete
	1	VLAN0001	192.168.1.1/24	1-26	
	10	VLAN0010			
	20	VLAN0020			

New VLAN New Multiple VLAN Delete VLAN First Back [1] Next Last 1 / 1 Page

VLAN Settings Access Port Settings Trunk Port Settings Hybrid Port Settings

Hybrid Port List

	Port
New Hybrid Port	Delete S



New Hybrid Port

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Native Vlan(1-4094):

Tagged vlan(3-5,8,10):

Untagged vlan(such as 3-5,8,10):

Save Cancel

VLAN Settings		Access Port Settings		Trunk Port Settings		Hybrid Port Settings					
VLAN IDs											
<input type="checkbox"/>	VLAN ID	VLAN Name		VLAN IP		Port	Edit / Delete				
	1	VLAN0001		192.168.1.1/24		1-26					
<input type="checkbox"/>	10	VLAN0010				1-2					
<input type="checkbox"/>	20	VLAN0020				1-2					

This system e0/1 and the receive system e0/2 PC can be exchanged, but when each data taken from a VLAN is different.

Data from the pc1, by inter0/1 pvid VLAN10 encapsulation VLAN10 labeled into switches, switch found system e0/2 allows 10 data through the VLAN, so the data is forwarded to the system e0/2, because the system e0/2 VLAN is untagged 10, then switches at this time to remove packet VLAN10 tag, in the form of ordinary package sent to pc2, pc1 -> pc2 is VLAN10 walking at this time

Again to analyze pc2 gave pc1 package process, data from the pc2, by inter0/2 pvid VLAN20 encapsulation VLAN20 labeled into switch, switch found system e0/1 allows VLAN by 20 data, so the data is forwarded to the system e0/1, because the system e0/1 on the VLAN is untagged 20, then switches remove packets on VLAN20 tag at this time, in the form of ordinary package sent to pc1, pc2 at this time -> pc1 is VLAN 20 .

4.4. Fault/Safety

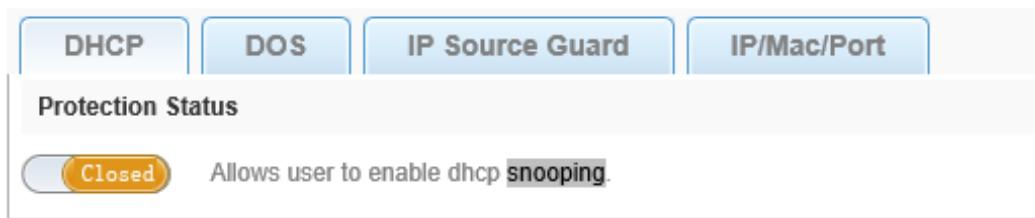
In the navigation bar to select "fault/safety", you can set Anti attack, Channel detection and ACL configuration .

- ▶ Fault/Safety ▾
- > Anti Attack
- > Channel Detection
- > ACL

4.4.1. Anti attack

4.4.1.1. DHCP

In the navigation bar to select "fault/safety>anti attack>DHCP", Open the DHCP anti-attack function, intercepting counterfeit DHCP server and address depletion attack packets ban kangaroo DHCP server, the following picture:



【instructions】

DHCP trusted port configuration, select the port as a trusted port. Prohibit DHCP for address, select the port and save, you can disable this feature for the port.

Open DHCP attack prevention function, need to set the DHCP protective vlan simultaneously, other functions to take effect.

【Configuration example】

Such as: 1. dhcp snooping open

DHCP DOS IP Source Guard IP/Mac/Port

Protection Status

Open Allows user to enable dhcp snooping.

2. Setting dhcp snooping vlan

DHCP Trusted Port DHCP Restricted Port Option82 Binding Table Other Configuration

Dhcp Snooping Vlan: *

Add

3. Set the connection router 8 ports for trust, then 6 port is set to the prohibit.

DHCP Trusted Port DHCP Restricted Port Option82 Binding Table Other Configuration

DHCP trusted port:

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
1	3	5	7	9	11	13	15	17	19	21	23	25

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Save

DHCP Trusted Port DHCP Restricted Port Option82 Binding Table Other Configuration

Prohibit DHCP port:

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
1	3	5	7	9	11	13	15	17	19	21	23	25

Tip: Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Save

4. Set option82 information

DHCP configuration

DHCP Trusted Port DHCP Restricted Port Option82 Binding Table Other Configuration

Option82 Enable:

Client Option82 Enable:

Circuit control Remote Agent IP address

Circuit Name: *

Circuit ID: *

VLAN ID: *

Add

Remote Name: *

Remote Agent ID: *

VLAN ID: *

Add

No.	Remote Agent Name	Remote Agent ID	VLAN ID

IP Address: *

VLAN ID: *

Add

No.	IP Address	VLAN ID

First Back [1] |

5.The port 7 for binding

DHCP configuration

DHCP Trusted Port	DHCP Restricted Port	Option82	Binding Table	Other Configuration

MAC Address: *

VLAN ID: *

Port Number: ✓

add

4.4.1.2. DOS

In the navigation bar to select "**fault/safety>anti attack>DOS**", Open the anti DOS attack function, intercept Land attack packets, illegal TCP packets, to ensure that the device or server to provide normal service to legitimate users, the following picture:

DHCP DOS IP Source Guard IP/Mac/Port

DoS Attack Protection

Closed

【instructions】

Open the anti DOS attack function, intercept Land attack packets, illegal TCP packets, to ensure that the device or server to provide normal service to legitimate users.

【Configuration example】

Such as: Open the anti DOS attack function

DHCP DOS IP Source Guard IP/Mac/Port

DoS Attack Protection

Open

4.4.1.3. IP source guard

In the navigation bar to select "fault/safety>anti attack>IP source guard", Through the source port security is enabled, on port forwarding the packet filter control, prevent illegal message through the port, thereby limiting the illegal use of network resources, improve the safety of the port, the following picture:

DHCP DOS IP Source Guard IP/Mac/Port

IP source protection port enable configuration

Please select a source port:

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports
If do not select the port, the configuration of the port will be removed. If do not select this option, the configuration of all the ports will be removed.

Save

Manual IP Source Protection List

Index	Source IP Address	Source MAC Address	Port	VLAN ID	Status	Delete
New Security Port						

First Back [1] Next Last [1] / 1 Page

【instructions】

Add the port that is currently being used as a IP source protection enable port, the port will not be able to use.

【Configuration example】

Such as: to open source IP protection enabled port first, then to binding.

DHCP DOS IP Source Guard IP/Mac/Port

IP source protection port enable configuration

Please select a source port:

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip: Click and drag cursor over ports to select multiple ports
If do not select the port, the configuration of the port will be removed. If do not select this option, the configuration of all the ports will be removed.

Save

4.4.1.4. IP/Mac/Port

In the navigation bar to select "fault/safety>anti attack>IP/Mac/Port", Automatically detect the port based IP address, MAC address of the mapping relationship, and then realize the function of a key binding, the following picture:

【instructions】

A bond must be bound before the binding to enable the switch to open, And if you want to access shall be binding and switch the IP address of the same network segment .

【Configuration example】

Such as: the binding to make first can open, must be a key bindings port 7 .

Test List			
Binding Enable <input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	MAC Address	IP Address	Port Number
<input checked="" type="checkbox"/>	00:0E:C6:D6:21:5C	192.168.2.100	7
First Back [1] Next Last [1] / 1 Page			

Scanning	Binding		
Application List			
<input type="checkbox"/>	MAC Address		
<input type="checkbox"/>	00:0E:C6:D6:21:5C	IP Address	Port Number
<input checked="" type="checkbox"/> Delete			
First Back [1] Next Last [1] / 1 Page			

Can check the delete option.

4.4.2. Channel detection

4.4.2.1. Ping

In the navigation bar to select "**fault/safety> channel detection>ping**", Use ping function to test internet connect and host whether to arrive. The following picture :

Ping	Tracert	Cable Test
Destination IP Address: <input type="text"/> *		
Timeout in Seconds (1-10): <input type="text" value="2"/>		
Ping Count (1-100): <input type="text" value="5"/>		
<input type="button" value="Start"/>		
Result		

【parameter description】

Parameter	Description
Destination IP address	Fill in the IP address of the need to detect
Timeout in Seconds	Range of 1 to 10
Ping Count	Testing number

【instructions】

Use ping function to test internet connect and host whether to arrive.

【Configuration example】

Such as: PING connect the IP address of the PC .

Ping **Tracert** **Cable Test**

Destination IP Address:	<input type="text" value="192.168.1.1"/> *
Timeout in Seconds (1-10):	<input type="text" value="2"/>
Ping Count (1-100):	<input type="text" value="5"/>
<input type="button" value="Start"/>	
Result <hr/> <pre>PING 192.168.1.1 (192.168.1.1): 56 data bytes 64 bytes from 192.168.1.1: icmp_seq=0 ttl=64 time=0.0 ms 64 bytes from 192.168.1.1: icmp_seq=1 ttl=64 time=0.0 ms 64 bytes from 192.168.1.1: icmp_seq=2 ttl=64 time=0.0 ms 64 bytes from 192.168.1.1: icmp_seq=3 ttl=64 time=0.0 ms 64 bytes from 192.168.1.1: icmp_seq=4 ttl=64 time=0.0 ms --- 192.168.1.1 ping statistics --- 5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 0.0/0.0/0.0 ms</pre> <hr/>	

4.4.2.2. tracert

In the navigation bar to select "**fault/safety> channel detection>tracert**", Tracert detection can detect to the destination through the .following picture :

Ping **Tracert** **Cable Test**

Destination IP Address:	<input type="text"/>
<input type="button" value="Start"/>	
Result <div style="border: 1px solid black; height: 100px; width: 100%;"></div>	

【parameter description】

Parameter	Description
Destination IP address	Fill in the IP address of the need to detect
Timeout period	Range of 1 to 10

【instruction】

the function is used to detect more is up to and reach the destination path. If a destination unreachable, diagnose problems.

【Configuration example】

Such as: Tracert connect the IP address of the PC .

Ping Tracert Cable Test

Destination IP Address: *

Result

waiting.....

4.4.2.3. Cable test

In the navigation bar to select "fault/safety> channel detection>cable test", Can detect connection device status , the following picture:

Ping Tracert Cable Test

Destination IP Address: *

Result

waiting.....

【Configuration example】

Ping Tracert Cable Test

Please select port to configure:

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional
 Fixed port
 Selected
 Aggregation
 Trunk
 IP Source Enable Port

4.4.3. ACL

In the navigation bar to select "fault/safety>ACL", Can be applied to port ACL rules and Settings to take effect in time.

The screenshot shows the 'Apply ACL' tab selected in a software interface. At the top, there are three tabs: 'Timetable', 'ACL' (which is selected), and 'Apply ACL'. Below the tabs, there are input fields: 'Time Name' (empty), 'Day Selection' (checkboxes for Monday through Sunday, with Monday, Tuesday, Wednesday, Thursday, and Friday checked), and 'Time Interval' (two date pickers showing '9:00' and '18:00' with a plus sign between them). A 'Save' button is located at the bottom left of the form area.

【instruction】

The ACL rules are sequenced, row in front of the match will be priority rule. Many, if the strategy items operating time is relatively longer.

Basic principles:

- 1, according to the order, as long as there is a meet, will not continue to find.
- 2, implied refused, if don't match, so must match the final implied refused entry, cisco default.
- 3, any only under the condition of the minimum permissions to the user can satisfy their demand.
- 4, don't forget to apply the ACL to the port.

【Configuration example】

such as: test time is every Monday to Friday 9 to 18 points, set port 1-6 cannot access the network .

steps: building ACL time - building ACL rules - is applied to the port .

The screenshot shows the 'Apply ACL' tab selected in a software interface. The configuration parameters highlighted by a red box are: 'Time Name' (Workday), 'Day Selection' (checkboxes for Monday through Friday checked, Saturday and Sunday unchecked), and 'Time Interval' (two date pickers showing '9:00' and '18:00' with a plus sign between them). A red circle highlights the 'Save' button at the bottom left of the form area.

Timetable ACL Apply ACL

Create ACL

Priority	ACL number	Protocol	Source IP / Mask	Source Port	Destination IP / Mask	Destination Port	Timetable Name	Status	Delete	
1	100	deny	10	tcp	any/any	any	80	Workday	active	X
1	100	permit	20	ip	any/any	any	any/any	any	none	X

The new ACL access rule

ACL Number: 100 * Protocol Type: TCP * Timetable Name: Workday

Permission: Deny

Any src IP Address:

Any source port:

Any dst IP Address:

Any dst Port:

Single dst Port(0-65535): 80

Save

Timetable ACL Apply ACL

Create ACL

Priority	ACL number	Permission	Index	Protocol	Source IP / Mask	Source Port	Destination IP / Mask	Destination Port	Timetable Name	Status	Delete
1	100	deny	10	tcp	any/any	any	any/any	80	Workday	active	X
1	100	permit	20	ip	any/any	any	any/any	any	none	active	X

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Timetable ACL Apply ACL

2 4 6 8 10 12 14 16 18 20 22 24 26
 1 3 5 7 9 11 13 15 17 19 21 23 25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Tip : Click and drag cursor over ports to select multiple ports

ACL Number: 100 Filtering Direction: Receive message

Save

Access Control List

ACL Number	Port	Filtering Direction
100	10	Receive message

4.5. PoE

In the navigation bar to select "**PoE**", you can set the **PoE Port Config** configuration.

- ▶ PoE
- > PoE Config
- > PoE Port Config
- > PoE Delay Config

4.5.1. PoE Config

4.5.1.1. Management

In the navigation bar to select "**POE>POE Config>Management**", You can view the following web page.

Management	Temperature Distribution
POE Status Information	
Working Status:	Online
Rated Total Power:	
Power Output:	
Alarm Power:	
Voltage Level:	
POE Alarm Configuration	
Alarm Notification:	
Alarm Notification: <input type="radio"/> Enable <input checked="" type="radio"/> Disable	
Save	

4.5.1.2. Temperature Distribution

In the navigation bar to select "**POE>POE Config>Temperature Distribution**", You can view the temperature distribution.

Management	Temperature Distribution		
Temperature Config			
Temperature Alarm Threshold:			
Save			
Chip Temperature List			
Chip Number	Current Temperature	Alarm Threshold	Edit

4.5.2. PoE port Config

In the navigation bar to select "**POE>POE Port Config**", you can set Poe Port , As follows.

POE Port List									
Port	Output Status	Power Level	Current Level	Power MAX	PD Type	POE Mode	Priority	Mode Detection	Edit
1	Disabled	-	-	0W	0	Disabled	Low	AF	
2	Disabled	-	-	0W	0	Disabled	Low	AF	
3	Disabled	-	-	0W	0	Disabled	Low	AF	
4	Disabled	-	-	0W	0	Disabled	Low	AF	
5	Disabled	-	-	0W	0	Disabled	Low	AF	
6	Disabled	-	-	0W	0	Disabled	Low	AF	
7	Disabled	-	-	0W	0	Disabled	Low	AF	
8	Disabled	-	-	0W	0	Disabled	Low	AF	

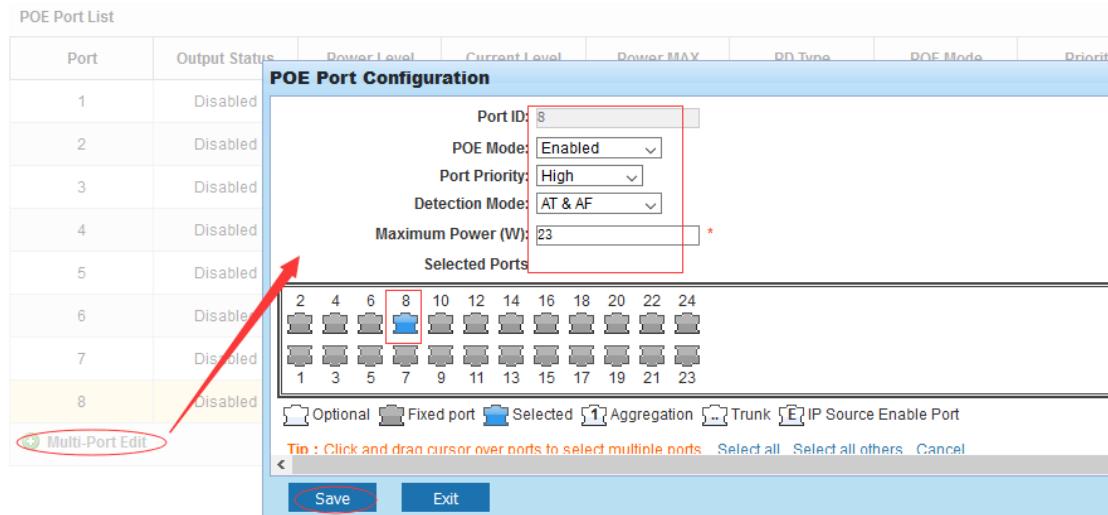
Multi-Port Edit First Back [1] [2] [3] Next Last /3 Page

【parameter description】

Parameter	Description
Output Status	Enable or disable the PoE function for the corresponding port. The port can supply power to the PD when its status is enable.
Priority	Displays the priority level for the corresponding port. When the supply power exceeds the system power limit, the switch will power off PDs on low-priority ports to ensure stable running of other PDs. Low Critical High
Power Max	Specify the maximum power the port can supply for the PoE profile.
Mode Detection	Mode Detection Type: AF AT&AF

【Configuration example】

Such as: The PoE function of port 8 can be enabled, the Power supply priority is high, the detection Mode is AT& AF and maximum power is 23W.



4.5.3. PoE Delay Config

In the navigation bar to select "POE>POE Delay Config", you can set restart time and Port Delay Time of poe port, As follows.

Port Selection Grid:

2	4	6	8	10	12	14	16	18	20	22	24
1	3	5	7	9	11	13	15	17	19	21	23

Buttons: Optional, Fixed port, Selected, Aggregation, Trunk, IP Source Enable Port

Tip : Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Current System Time: 2000-01-01 00:45:33, Saturday

Restart Weeks Selection: Monday Tuesday Wednesday Thursday Friday Saturday Sunday

Restart Time:

Port Delay Time: Seconds(0-3600) *

PoE Delay List

Ports	Port Restart Time	Port Delay Time	Operation
Gi0/1	0	0s	<input type="button" value="Edit"/>
Gi0/2	0	0s	<input type="button" value="Edit"/>
Gi0/3	0	0s	<input type="button" value="Edit"/>
Gi0/4	0	0s	<input type="button" value="Edit"/>
Gi0/5	0	0s	<input type="button" value="Edit"/>
Gi0/6	0	0s	<input type="button" value="Edit"/>
Gi0/7	0	0s	<input type="button" value="Edit"/>
Gi0/8	0	0s	<input type="button" value="Edit"/>
Gi0/9	0	0s	<input type="button" value="Edit"/>
Gi0/10	0	0s	<input type="button" value="Edit"/>

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【parameter description】

Parameter	Description
Restart Weeks Selection	Restart Weeks Selection
Restart Time	Specify Restart Time of poe port
Port Delay Time	Port Delay Time of poe port

【Configuration example】

Such as: The PoE function of port 8 can be configured, the Restart Weeks is configured as Monday, the Restart time is configured as 09:00, the Port Delay Time is configured as 120 s.

Port Selection Grid:

2	4	6	8	10	12	14	16	18	20	22	24
1	3	5	7	9	11	13	15	17	19	21	23

Buttons: Optional, Fixed port, Selected, Aggregation, Trunk, IP Source Enable Port

Tip : Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Current System Time: 2000-01-01 00:54:27, Saturday

Restart Weeks Selection: Monday Tuesday Wednesday Thursday Friday Saturday Sunday

Restart Time:

Port Delay Time: Seconds(0-3600) *

4.6. STP

In the navigation bar to select "STP", you can set to the **MSTP region** and **STP bridge** configuration.



4.6.1. MSTP region

In the navigation bar to select "**STP>MSTP region**", Can modify the domain and domain name, add instance is mapped to a VLAN. the following picture.

A screenshot of a web-based configuration interface for MSTP. At the top, there's a section for "MSTP Configuration" with fields for "Region Name" and "Revision Level", both with validation rules "(0 to 32 characters)" and "(0 to 65535, default 0)". Below this is a "Save" button. The next section is "Instance Mapping" with fields for "Instance ID" (set to 1) and "VLAN ID". A note says "For example : 1,3,5,7-10". Below this are "Save" and "Delete" buttons. The final section is "Mapping List", which contains a table with columns "Instance ID", "Mapping VLAN", and "Edit". There are three rows in the table, each with a "Save" button.

【parameter description】

Parameter	Description
Region Name	Configure the region name
Revision Level	Parameter configuration revision level
Instance ID	Select configuration instance ID
VLAN ID	Mapping of the VLAN configuration instance

【instruction】

An instance can only be mapped to a VLAN, instance and VLAN is a one-to-one relationship.

【Configuration example】

Such as: change the region to DEADBEEF0102, region name is 123, instance 4 is mapped to a VLAN 2, in the first need to create a VLAN 2.

A screenshot of the "MSTP Configuration" screen. It shows fields for "Region Name" containing "DEADBEEF0102" and "Revision Level" containing "123". Both fields have red boxes around them, indicating they are selected or highlighted. Below these fields is a "Save" button, which is also circled with a red oval.

Instance Mapping

Instance ID :	4	▼
VLAN ID :	2	* For example : 1,3,5,7-10
Save	Delete	

Mapping List

Instance ID	Mapping VLAN
0	1-4094

4.6.2. STP bridge

In the navigation bar to select "**STP>STP bridge**", Can be related to bridge, port configuration, the following picture:

STP Bridge Config

Instance Priority:	<input type="checkbox"/>				
Instance ID :	0	Priority :	32768		
Enable :	<input type="radio"/> ON <input checked="" type="radio"/> OFF	Mode :	<input type="radio"/> STP <input type="radio"/> RSTP <input checked="" type="radio"/> MSTP		
Hello Time :	2	* (1-10s)	MAX Age :	20	* (6-40s)
Forward Delay :	15	* (4-30s)	MAX Hops :	20	* (1-40)
Save	Show Bridge Info				

STP port config

Instance :	0	Priority :	128	* (0-240,step 16)
Port Fast :	<input type="radio"/> ON <input checked="" type="radio"/> OFF	Path Cost :	auto	* (auto or 1-200000000)
Auto Edge :	<input checked="" type="radio"/> ON <input type="radio"/> OFF	Point to Point :	<input type="radio"/> ON <input type="radio"/> OFF <input checked="" type="radio"/> Auto	
BPDU Guard :	<input type="radio"/> ON <input checked="" type="radio"/> OFF	Compatible :	<input checked="" type="radio"/> ON <input type="radio"/> OFF	
BPDU Filter :	<input type="radio"/> ON <input checked="" type="radio"/> OFF	Root Guard :	<input type="radio"/> Root <input checked="" type="radio"/> None	
TC Guard :	<input type="radio"/> ON <input checked="" type="radio"/> OFF	TC Ignore :	<input type="radio"/> ON <input checked="" type="radio"/> OFF	
<input type="checkbox"/> Optional <input type="checkbox"/> Fixed port <input checked="" type="checkbox"/> Selected <input type="checkbox"/> Aggregation <input type="checkbox"/> Trunk <input type="checkbox"/> IP Source Enable Port				
Save	Show Current Port			

【parameter description】

Parameter	Description
Instance Priority	Whether open instance priority setting
Instance ID	Select the created instance id is configured
Bridge Priority	Priority setting bridge example, the default instance bridge priority for 32768

Enable	Whether to open the STP bridge function
Mode	The model is divided into: the STP, RSTP, MSTP
Hello Time	Switches sends bpdu in packet interval
Max Age	Ports are not yet received a message in the time, will initiate topology changes
Forward Delay	The state of the port switch time
Port Priority	Set port instance priority, defaults to 128, you must enter multiple of 16, the range of 0-240
Path Cost	Configure port costs
Port Fast	Select configuration state
Auto Edge	Select configuration state
Point to Point	Select configuration state
BPDU Guard	Select configuration state
BPDU Filter	Select configuration state
Compatible	Select configuration state
Root Guard	Select configuration state
TC Guard	Select configuration state
TC Ignore	Select configuration state

【instruction】

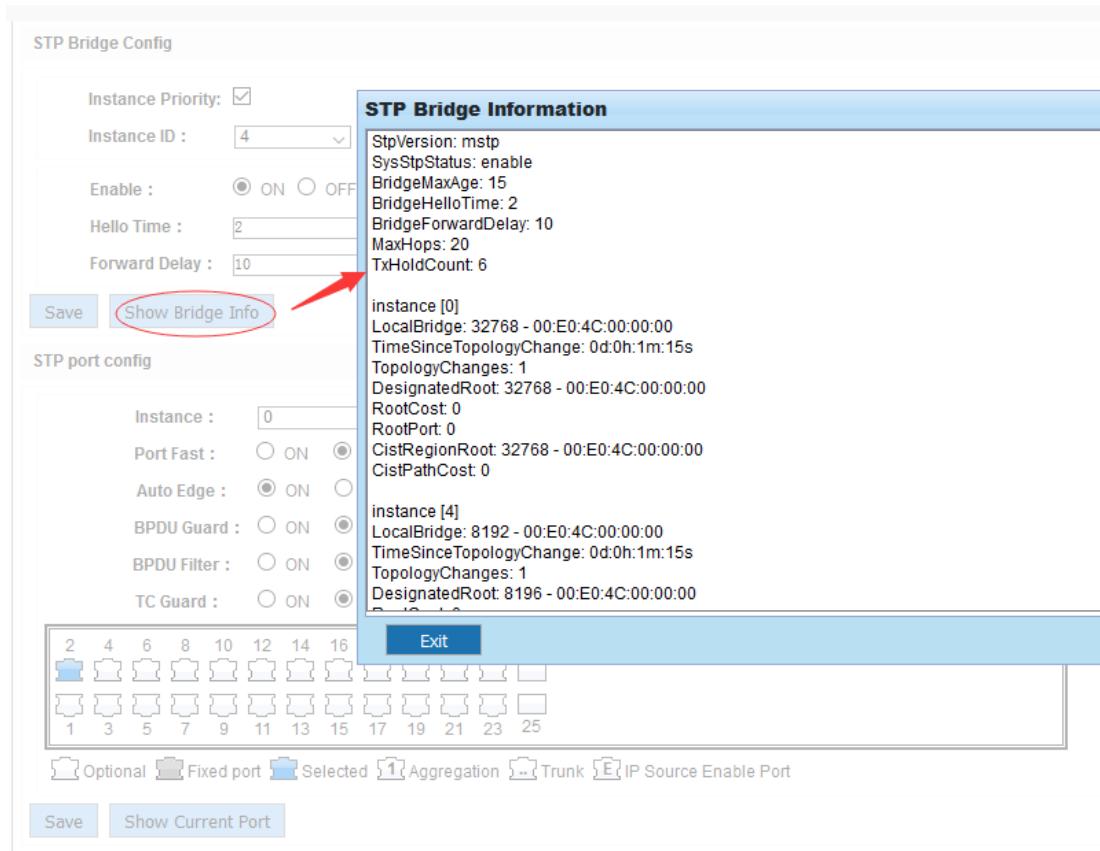
- (1) $(\text{hello_time}+1) \times 2 \leq \text{max_age} \leq (\text{f_delay}-1) \times 2$, enable the switch to set instance priority.
(2) Enable STP or switch mode would spend 2 times of the forward delay time.

【Configuration example】

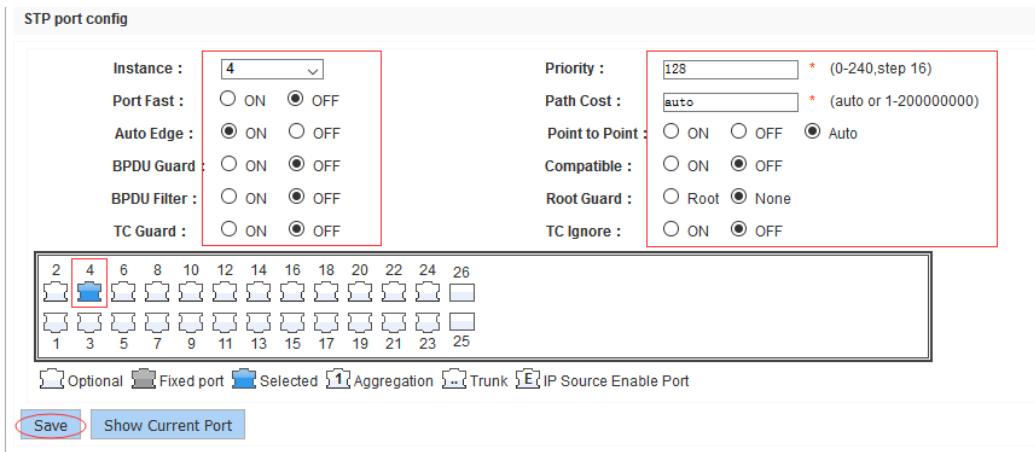
Such as:1)Open the STP, configuration has to create an instance of the priority, configuration time parameters, set the pattern to MSTP .

STP Bridge Config

<p>Instance Priority: <input checked="" type="checkbox"/></p> <p>Instance ID : <input type="text" value="4"/></p> <p>Enable : <input checked="" type="radio"/> ON <input type="radio"/> OFF</p> <p>Hello Time : <input type="text" value="2"/> * (1-10s)</p> <p>Forward Delay : <input type="text" value="10"/> * (4-30s)</p>	<p>Priority : <input type="text" value="8192"/></p> <p>Mode : <input type="radio"/> STP <input type="radio"/> RSTP <input checked="" type="radio"/> MSTP</p> <p>MAX Age : <input type="text" value="15"/> * (6-40s)</p> <p>MAX Hops : <input type="text" value="20"/> * (1-40)</p>
<input type="button" value="Save"/> <input type="button" value="Show Bridge Info"/>	



2) Set MSTP has launched port configuration, select the created instance, set priority (port configuration is not online, on-line configuration will only take effect, can click on the "view the current configuration" button to view the configured completed)



STP Bridge Config

Instance Priority:	<input type="checkbox"/>
Instance ID :	0
Enable :	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Hello Time :	2
Forward Delay :	15
<input type="button" value="Save"/> <input type="button" value="Show Bridge Info"/>	

STP port config

Instance :	0
Port Fast :	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Auto Edge :	<input checked="" type="radio"/> ON <input type="radio"/> OFF
BPDU Guard :	<input type="radio"/> ON <input checked="" type="radio"/> OFF
BPDU Filter :	<input type="radio"/> ON <input checked="" type="radio"/> OFF
TC Guard :	<input type="radio"/> ON <input checked="" type="radio"/> OFF
<input type="button" value="Save"/> <input type="button" value="Show Current Port"/>	

STP Port Information [Gi0/4]

[Gi0/4]

```

PortAdminPortFast: disable
PortOperPortFast: disable
PortAdminAutoEdge: enable
PortOperAutoEdge: disable
PortAdminLinkType: auto
PortOperLinkType: share
PortBPDUGuard: disable
PortBPDUFilter: disable
PortTCGuard: disable

```

instance[0]

```

VlanMap: 1,3-4094
PortState: down
PortPriority: 128
PortDesignatedRoot: 32768 - 00:e0:4c:00:00:00
PortDesignatedCost: 0
PortDesignatedBridge: 32768 - 00:e0:4c:00:00:00
PortDesignatedPortPriority: 0
PortDesignatedPort: 0
PortAdminPathCost: auto
PortOperPathCost: 200000000
PortRole: disabled

```

2	4	6	8	10	12	14	16
1	3	5	7	9	11	13	15
17	19	21	23	25			

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

4.7. DHCP relay

In the navigation bar to select "DHCP relay", you can set to the **DHCP relay** and **option82**.

- ▶ **DHCP RELAY** ▾
- > Dhcp Relay
- > option82

4.7.1. DHCP relay

In the navigation bar to select "**DHCP relay>DHCP relay**", Open the DHCP relay function, set up and view the relay server IP address and its status. the following picture.

DHCP Relay Enable

DHCP Relay Enable:	<input type="checkbox"/>
DHCP Option Trust Field Enable:	<input checked="" type="checkbox"/>

【parameter description】

Parameter	Description
IP address	DHCP server address
status	Invalid and valid

【instruction】

If open the function of relay agent, then receives the broadcast DHCP message, to be delivered in the form of unicast to configure on the server. The DHCP server to IP and switches in the same network segment will only take effect.

【Configuration example】

Such as: setting DHCP server ip for 192.168.2.22

4.7.2. Option82

In the navigation bar to select "DHCP relay>option82", can set to OPTION82 circuit control, proxy remote , ip address. the following picture:

【parameter description】

Parameter	Description
VLAN ID	the DHCP request message in the VLAN, value range is 1 ~ 4094
Circuit Control	Circuit ID to populate the user custom content, scope of string length is 3 ~ 63
Proxy Remote	Configuration ASCII remote id string value, the length of the range of 1 ~ 63
IP Address	Decimal IP address

【instruction】

Switches, relay information to the DHCP server will take option82, VLAN ID must be configured to DHCP message taken VLAN can bring option82 information.

【Configuration example】

Such as: add circuit control, proxy remote, ip address information.

Option82 Config

Circuit Control	Proxy Remote	IP Address
Circuit Control: <input type="text" value="123"/> *		
Circuit ID : <input type="text" value="1"/> *		
VLAN ID : <input type="text" value="1"/> *		
<input type="button" value="Save"/>		

Number	Circuit Name	Circuit ID	VLAN ID

First Back

Option82 Config

Circuit Control	Proxy Remote	IP Address
	Proxy Remote: <input type="text" value="Sweet"/> *	
	Proxy Remote ID: <input type="text" value="2"/> *	
	VLAN ID : <input type="text" value="1"/> *	
<input type="button" value="Save"/>		

Number	Proxy Remote Name	Proxy Remote ID

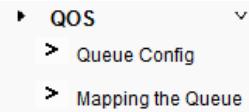
Option82 Config

Circuit Control	Proxy Remote	IP Address
		IP Address: <input type="text" value="192.168.1.35"/> *
		VLAN ID : <input type="text" value="1"/> *
<input type="button" value="Save"/>		

Number	IP Address

4.8. QoS

In the navigation bar to select "QoS", you can set to the **queue config** and **mapping the queue**.



4.8.1. Queue config

In the navigation bar to select "QoS>queue config", Can be set up queue scheduling policy .the following picture:

A screenshot of a "Queue setting" configuration interface. It shows a dropdown menu for "Queue mode" set to "WFQ". Below it is a row of eight input boxes labeled "Byte weight(0~127)" with values 1 through 8 respectively. A blue "Apply" button is at the bottom left.

【parameter description】

Parameter	Description
Scheduling strategy	Can choose four kinds of modes: RR round-robin scheduling SP absolute priority scheduling WRR weighted round-robin scheduling WFQ weighted fair scheduling
WRR-weights	Set the weights of each queue, they will be in proportion to occupy the bandwidth to send data

【instruction】

Queue 7 can not for 0.

【Configuration example】

Such as: set the scheduling strategy for WRR, weight value respectively, 10, 11, 12, 13, 14, 15, 16, 17.

A screenshot of a "Queue setting" configuration interface. It shows a dropdown menu for "Queue mode" set to "WRR". Below it is a row of eight input boxes labeled "Byte weight(0~127)" with values 10 through 17. The "Apply" button at the bottom left is highlighted with a red oval.

4.8.2. Mapping the queue

4.8.2.1. COS Queue Map

In the navigation bar to select "QoS>mapping the queue>COS Queue Map", Service category can be mapped to the corresponding queue. the following picture.

COS Queue Map								
DSCP COS Map								
Port COS Map								
Mapping Queue Status Information								
Server ID	0	1	2	3	4	5	6	7
Queue ID	0 ▾	1 ▾	2 ▾	3 ▾	4 ▾	5 ▾	6 ▾	7 ▾
<input type="button" value="Save"/>								

【parameter description】

Parameter	Description
Server ID	COS the VLAN priority fields (0 to 7)
Queue ID	Set each cosine value mapping queue number (0 to 7)

【Configuration example】

Such as: cos 3 mapping to the queue 7, set the queue weight 7 to 10.

COS Queue Map								
DSCP COS Map								
Port COS Map								
Mapping Queue Status Information								
Server ID	0	1	2	3	4	5	6	7
Queue ID	0 ▾	1 ▾	2 ▾	3 ▾	4 ▾	5 ▾	6 ▾	7 ▾
<input type="button" value="Save"/>								

Queue setting								
Queue mode:	WRR							
Byte weight(0~127):	0	0	0	0	0	0	0	10
<input type="button" value="Apply"/>								

4.8.2.2. DSCP COS Map

In the navigation bar to select "QoS>mapping the queue>DSCP Cos Map", Differential service can be mapped to the corresponding service categories. the following picture:

COS Queue Map		DSCP COS Map		Port COS Map														
Differential service code point mapping team list																		
Server ID	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Server List 1	0 ▼	0 ▼	0 ▼	0 ▼	0 ▼	0 ▼	0 ▼	0 ▼	1 ▼	1 ▼	1 ▼	1 ▼	1 ▼	1 ▼	1 ▼	1 ▼		
Server ID	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Server List 2	2 ▼	2 ▼	2 ▼	2 ▼	2 ▼	2 ▼	2 ▼	2 ▼	3 ▼	3 ▼	3 ▼	3 ▼	3 ▼	3 ▼	3 ▼	3 ▼		
Server ID	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47		
Server List 3	4 ▼	4 ▼	4 ▼	4 ▼	4 ▼	4 ▼	4 ▼	4 ▼	5 ▼	5 ▼	5 ▼	5 ▼	5 ▼	5 ▼	5 ▼	5 ▼		
Server ID	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63		
Server List 4	6 ▼	6 ▼	6 ▼	6 ▼	6 ▼	6 ▼	6 ▼	6 ▼	7 ▼	7 ▼	7 ▼	7 ▼	7 ▼	7 ▼	7 ▼	7 ▼		
<input type="button" value="Save"/>																		

【parameter description】

Parameter	Description
Server list	DSCP field has seven (0-63) is divided into four tables
Queue ID	Map the DSCP to COS fields (0 to 7), based on the cosine is mapped to a queue

【instruction】

Cos priority is greater than the DSCP, DSCP priority is greater than the port.

【Configuration example】

Such as: the DSCP value of 3, 13, 40 mapping to cos 5 .

COS Queue Map		DSCP COS Map		Port COS Map														
Differential service code point mapping team list																		
Server ID	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Server List 1	0 ▼	0 ▼	0 ▼	5 ▼	0 ▼	0 ▼	0 ▼	1 ▼	1 ▼	1 ▼	1 ▼	1 ▼	1 ▼	5 ▼	1 ▼	1 ▼		
Server ID	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Server List 2	2 ▼	2 ▼	2 ▼	2 ▼	2 ▼	2 ▼	2 ▼	3 ▼	3 ▼	3 ▼	3 ▼	3 ▼	3 ▼	3 ▼	3 ▼	3 ▼		
Server ID	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47		
Server List 3	4 ▼	4 ▼	4 ▼	4 ▼	4 ▼	4 ▼	4 ▼	4 ▼	5 ▼	5 ▼	5 ▼	5 ▼	5 ▼	5 ▼	5 ▼	5 ▼		
Server ID	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63		
Server List 4	6 ▼	6 ▼	6 ▼	6 ▼	6 ▼	6 ▼	6 ▼	6 ▼	7 ▼	7 ▼	7 ▼	7 ▼	7 ▼	7 ▼	7 ▼	7 ▼		
<input type="button" value="Save"/>																		

4.8.2.3. Port COS Map

In the navigation bar to select "QoS>mapping the queue>Port COS Map", Port can be mapped to the corresponding service categories. the following picture:

Port	Server ID								Trust Mode
	0	1	2	3	4	5	6	7	
1	T								
2	T								
3	T								
4	T								
5	T								
6	T								
7	T								
8	T								

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【parameter description】

Parameter	Description
Port	Select the port number (1-28)
Service ID	Mapped to the service ID, and then according to the service ID into the queue

【instruction】

Cos priority is greater than the DSCP, DSCP priority is greater than the port.

【Configuration example】

Such as: port 4,5,6 respectively cos4,cos5,cos6.

Port CoS mapping

Port: 4
Server ID: 4
Trust Mode: cos

Apply

Port CoS mapping

Port: 5
Server ID: 5
Trust Mode: cos

Apply

Port CoS mapping

Port:	6
Server ID:	6
Trust Mode:	COS

Apply

Control list

Port	0	1	2	3	4	5	6	7	Trust Mode
1	T								
2	T								
3	T								
4					T				COS
5						T			COS
6							T		COS
7	T								
8	T								

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4.9. Address table

In the navigation bar to select "**Address table**", you can set to **MAC Management**, **MAC Learning and aging** and **MAC Filter**.

Address Table Config

- MAC Management** (selected)
- MAC Learning and Aging**
- MAC Filter**

Clear MAC:	Clear appoint MAC ; ▾	
VLAN:	1	Valid Range (1 to 4094)
MAC Address :		

Save

4.9.1. MAC Management

In the navigation bar to select "**Address table>MAC Management**", You can add static Mac and delete Mac and view to the current of the Mac address table. The following picture:

Address Table Config

- [MAC Management](#)
- [MAC Learning and Aging](#)
- [MAC Filter](#)

Clear MAC:

VLAN: Valid Range (1 to 4094)

MAC Address:

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

VLAN: Valid Range (1 to 4094)

MAC Address:

MAC Address List:

Number	MAC Address	VLAN ID	Address Type	Port
1	00:0E:C6:D6:21:5C	1	dynamic	10

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【parameter description】

Parameter	Description
Clear Mac	Can choose to clear the multicast Mac address, clear dynamic unicast Mac address, clear static unicast Mac address, clear the specified Mac address, Mac address table
VLAN	Fill in the need to add or delete VLAN id, not create VLAN to create can only take effect

【instruction】

According to different conditions to clear Mac address, view/add/learn the Mac address, Mac address filtering.

【Configuration example】

Such as: 1) the port 6 Mac set to static Mac.

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
1	3	5	7	9	11	13	15	17	19	21	23	25

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

VLAN: Valid Range (1 to 4094)

MAC Address:

2)clear port 6 static Mac addresses.

The screenshot shows the 'Address Table Config' interface with the 'MAC Management' tab selected. Under 'Clear MAC', the 'Clear appoint MAC' dropdown is set to 'Clear appoint MAC'. The 'VLAN' field contains '1' and the 'MAC Address' field contains '3C:97:0E:4F:57:F2'. A red circle highlights the 'Save' button at the bottom left.

4.9.2. MAC Learning and Aging

In the navigation bar to select "address table>MAC Learning and Aging", Can be set up port Mac address study limit and Mac address aging time . the following picture:

The screenshot shows the 'Address Table Config' interface with the 'MAC Learning and Aging' tab selected. It displays a grid of ports (2-26) with checkboxes below them. Port 2 has a blue checked box, while others are white. Below the grid are several configuration options: 'Optional', 'Fixed port', 'Selected' (which is checked for port 2), 'Aggregation', 'Trunk', 'IP Source Enable Port', 'MAC Learning Limit: 8191' (with a note '(Learning Range 0-8191)'), and 'MAC Address Aging Time: 300' (with a note '(0 indicates no aging,10-1000000 second)'). A red circle highlights the 'Selected' checkbox for port 2.

【parameter description】

Parameter	Description
MAC Learning	Range 0-8191,default 8191
MAC Address Aging Time	Default 300

【Configuration example】

Such as: 1) setting port 2address study limit for 2000 .

The screenshot shows the 'Address Table Config' interface with the 'MAC Learning and Aging' tab selected. The port selection grid shows port 2 with a blue checked 'Selected' box. Below the grid, the 'MAC Learning Limit' field is set to '2000' (with a red box around it). A red circle highlights both the 'Selected' checkbox for port 2 and the 'Save' button at the bottom left.

2) will be dropped or learn the Mac address of the port equipment after 2 minutes disappear automatically from the Mac address table

MAC Address Aging Time: (0 indicates no aging, 10-1000000 second)

4.9.3. MAC Filter

In the navigation bar to select "Address table>MAC Filter", Can be filtered according to the condition does not need the Mac address. the following picture:

MAC Address	VLAN ID	Address Type	Delete

first page prev page [1] next page last page /1 page

【parameter description】

Parameter	Description
MAC address	Can't add multicast Mac address
VLAN	VLAN number

【Configuration example】

Such as: the Mac address for 00:20:15:09:12:12 added to the filter in the table.

Address Table Config

MAC Management MAC Learning and Aging **MAC Filter**

MAC Address: VLAN: Valid Range (1 to 4094)

MAC Address	VLAN ID

4.10. SNMP

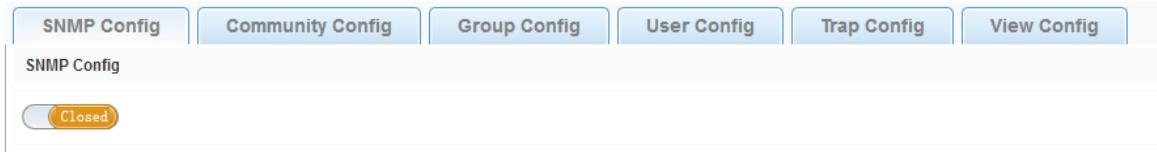
In the navigation bar to select "SNMP", you can set to the **Snmp config** and **Rmon config**.

- ▶ **SNMP** ▼
 - > Snmp Config
 - > Rmon Config

4.10.1. Snmp config

4.10.1.1. Snmp config

In the navigation bar to select "**Snmp >Snmp config**", you can Snmp function enable. The following picture:

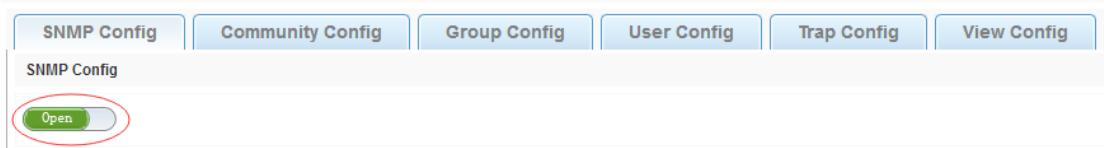


【instruction】

The SNMP function must be turned on in the configuration RMON, otherwise it will be configured to fail.

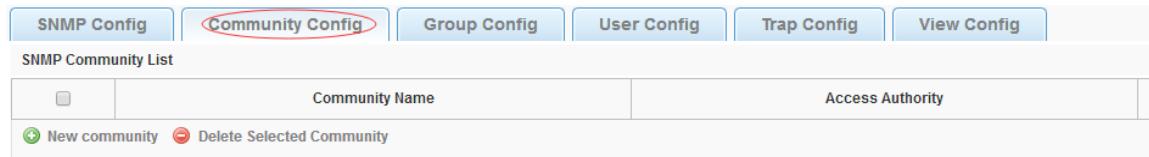
【Configuration example】

Such as: open Snmp.



4.10.1.2. Community config

In the navigation bar to select "**Snmp >Snmp config>community config**", Can specify group access. the following picture.



【parameter description】

Parameter	Description
Community	Community string, is equal to the NMS and Snmp agent communication between the password
Access authority	Read-only: specify the NMS (Snmp host) of MIB variables can only be read, cannot be modified Read-only can write: specify the NMS (Snmp host) of MIB variables can only read, can also be modified

【instruction】

The upper limit of the number of groups is 8.

【Configuration example】

Such as: add a read-write group called public...



4.10.1.3. View config

In the navigation bar to select "**Snmp >Snmp config>view config**", Set the view the rules to allow or disable access to some of the MIB object. the following picture.



【parameter description】

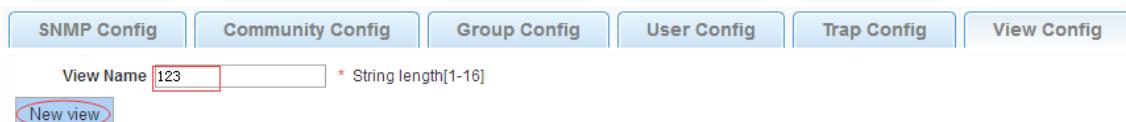
Parameter	Description
View name	View name
include	Indicate the MIB object number contained within the view
exclude	Indicate the MIB object son number was left out of view
MIB Subtree OID	View the associated MIB object, is a number of MIB
Subtree mask	MIB OID mask

【instruction】

Each view is best to configure a view rule, otherwise it will affect the SNMP function.

【Configuration example】

such as: establish a view 123 , MIB subtree oid .1.3.6.1 contain among them.





4.10.1.4. Group config

In the navigation bar to select "**Snmp>Snmp config>group config**", setting Snmp group. The following picture.



【parameter description】

Parameter	Description
Group name	Group name
Security level	Attestation not only encryption: this group of users transmission of the message need to verify the data don't need to be confidential No authentication encryption: this group of users' messages don't need to verify data transmission also does not need to be kept secret Both authentication and encryption: this group of users need to verify the news of transmission and transmission of data need to be kept secret
Read view, read and write view ,study view	The associated view name

【instruction】

Before the cap on the number set of configuration of 8, the new group needs a new view to create a group.

【Configuration example】

Such as: firstly, new view 123, then new group of group1.

The screenshot shows a configuration interface with several tabs at the top: SNMP Config, Community Config, Group Config, User Config (which is selected), Trap Config, and View Config. Below these tabs, there are two main sections: 'View rule list' and 'SNMP Group'. In the 'View rule list' section, there is a table with columns: rule, MIB subtree OID, subtree mask, and operation. A new rule is being added with the value '123' in the 'rule' field and '.13.6.1' in the 'MIB subtree OID' field. In the 'SNMP Group' section, a modal window titled 'New group' is open. It contains fields for 'Group Name' (set to 'group1'), 'Security Level' (set to 'Authentication and r'), 'Read View' (set to '123'), 'Write View' (set to '123'), and 'Notify View' (set to '123'). The 'Save' button is highlighted with a red circle and arrow. The 'User Config' tab is also circled in red.

4.10.1.5. User config

In the navigation bar to select "Snmp>Snmp config>user config", setting Snmp user. The following picture:

The screenshot shows the 'User Config' tab selected in the navigation bar. Below it, a table lists 'SNMP User' settings with columns: User Name, Security Level, Group Name, Authentication Mode, Authentication Password, Encrypt Mode, Encrypt password, and Edit / Delete. A new user is being created with 'User Name' set to '123'. The 'Edit / Delete' column for this row is circled in red. The 'User Config' tab is also circled in red.

【parameter description】

Parameter	Description
User Name	User name, range 1-16
Security Level	Attestation not only encryption: this group of users transmission of the message need to verify the data don't need to be confidential No authentication encryption: this group of users' messages don't need to verify data transmission also does not need to be kept secret Both authentication and encryption: this group of users need to verify the news of transmission and transmission of data need to be kept secret
Authentication Mode	Specified use MD5 authentication protocol or SHA authentication protocol
Authentication Password	Range 8-10

Encrypt Mode	Specified using AES encryption protocol or DES encryption protocol
Group Name	A user group name
Encrypt Password	Range 8-60

【instruction】

Cap on the number configuration of 8, users need a new view and group to use, the user's security level must be consistent with the group level of security. Add a user authentication and encryption, and configure belong to groups of users, the user will be used for Snmpv3 connection.

【Configuration example】

Such as: new view 123, the newly built group group1, new user1 .

SNMP User					
	User Name	Security Level	Group Name	Authentication Mode	Authentication Password
<input type="checkbox"/>	<input type="text"/> user1	<input type="text"/> MD5	<input type="text"/> group1	<input type="text"/> 12345678	<input type="text"/> DES
<input type="button" value="Save"/> <input type="button" value="Exit"/>					

4.10.1.6. Trap

In the navigation bar to select "**Snmp>Snmp config>Trap**", Can specify sent the trap messages to Snmp host (NMS). the following picture:

Trap Destination Host				
	Destination IP Address	Security Name	UDP Port Number	Security Mode
<input type="checkbox"/>	<input type="text"/> 192.168.1.1	<input type="text"/> group1	<input type="text"/> 162	<input type="text"/> MD5
<input type="button" value="New Trap"/> <input type="button" value="Delete Selected Trap"/> <input type="button" value="First"/> <input type="button" value="Back [1]"/>				

【parameter description】

Parameter	Description
Destination IP address	Snmp host ipv4 address
Security name	Snmp user name
version	V1,V2,V3
Security mode	Specified using AES encryption protocol or DES encryption protocol
Group name	User group name

【instruction】

The Trap cap on the number configuration of 8, you can configure a number of different Snmp Trap host used to receive messages. Trigger the trap message time: port Linkup/LinkDown, equipment of cold - start (restart when power supply drop)/warm - start (a warm restart), and Rmon set port statistical fluctuation threshold.

【Configuration example】

Such as: setting host 192.168.2.30 receive trap information.

The screenshot shows the 'Trap Config' interface with the 'Trap Destination Host' section selected. A 'New Trap' dialog box is open, containing fields for Destination IP Address (192.168.1.30), Security Name (user1), UDP Port Number (162), and Security Mode (v1). The 'Save' button at the bottom of the dialog is highlighted with a red circle. A red arrow points from the 'New Trap' button in the main list to the 'Save' button in the dialog.

4.10.2. Rmon config

4.10.2.1. Statistics group

In the navigation bar to select "**Snmp>Rmon config>statistics group**", Set an Ethernet interface statistics .the following picture:

The screenshot shows the 'Statistics Group' configuration page. The 'Statistics Group' tab is selected. Below the tabs is a table titled 'Statistics Group List' with columns: Index, Interface Name, Owner, and Edit / Delete. A red circle highlights the 'Statistics Group' tab. A red arrow points from the 'New Count Group' button at the bottom left to the 'Edit / Delete' button at the bottom right.

【parameter description】

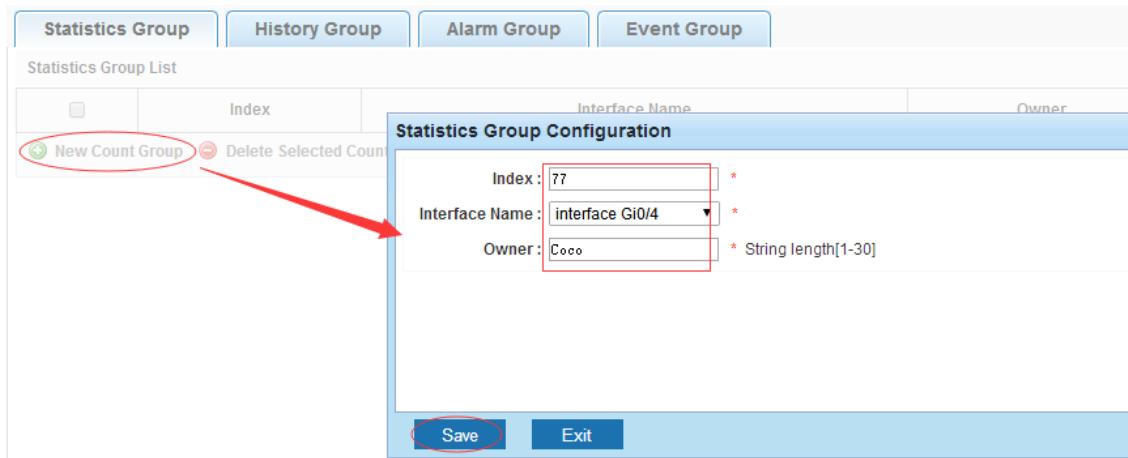
Parameter	Description
Index	The index number, the value range of statistical information table is 1 ~ 65535
Interface Name	To monitor the source port
owner	Set the table creator, range: 1 ~ 30 characters of a string

【instruction】

At the time of configuration Rmon Snmp functions must be open, otherwise the prompt dialog box will appear.

【Configuration example】

Such as: set up monitoring Ethernet port after 4 to check the data.



4.10.2.2. History group

In the navigation bar to select "**Snmp>Rmon config>history group**", Record the history of an Ethernet interface information. the following picture.



【parameter description】

Parameter	Description
Index	Historical control table item index number, value range is 1 ~ 65535
Interface Name	To record the Ethernet interface
Maximum Number of Samples	Set the history control table item of the corresponding table capacity, namely the Max for number of records the history table, value range is 1 ~ 65535
Sample Period	Set up the statistical period, scope for 5 ~ 3600, the unit is in seconds
Owner	Set the table creator, range: 1 ~ 30 characters of a string

【instruction】

At the time of configuration Rmon Snmp functions must be open, otherwise the prompt dialog box will appear.

【Configuration example】

Such as: monitor Ethernet port 4 historical information.

History Group List		Index	Interface Name	Maximum Number of Samples	Sample Period
<input type="checkbox"/>	New History Group				
History Group Configuration Index: <input type="text" value="222"/> * Interface Name: <input type="text" value="Interface Gi0/4"/> * Maximum Number of Samples: <input type="text" value="22222"/> Sample Period : <input type="text" value="23"/> * Second[5-3600] Owner: <input type="text" value="a"/> * String Length[1-30] <input type="button" value="Save"/> <input type="button" value="Exit"/>					

4.10.2.3. Event group

In the navigation bar to select "**Snmp >Rmon config>event group**", The way in which define events trigger and record them. the following picture.

Event Group List						
<input type="checkbox"/>	Index	Description	Owner	Action	Status	Edit / Delete
<input type="checkbox"/>	New Event Group					
						First Back [1] Next Last [] / 1 Page

【parameter description】

Parameter	Description
Index	The index number, the value range of the event table is 1 ~ 65535
Description	The Trap events, when the event is triggered, the system will send the Trap message, Log events, when the event is triggered, the system will log
Owner	Set the table creator, ownername for 1 ~ 30 characters of a string

【instruction】

At the time of configuration Rmon Snmp functions must be open, otherwise the prompt dialog box will appear.

【Configuration example】

Such as: create an event to trigger 345, the system sends the trap message and log .

Statistics Group	History Group	Alarm Group	Event Group												
Event Group List															
<input type="checkbox"/>	Index	Description	Owner												
New Event Group Delete Selected Event		Event Group Configuration <table border="1"> <tr> <td>Index:</td> <td>345</td> <td>*</td> </tr> <tr> <td>Description:</td> <td>212</td> <td>* String length[1-30]</td> </tr> <tr> <td>Owner:</td> <td>Coco</td> <td>* String length[1-30]</td> </tr> <tr> <td>Action:</td> <td colspan="2"> <input checked="" type="checkbox"/> Log <input checked="" type="checkbox"/> Trap </td> </tr> </table>		Index:	345	*	Description:	212	* String length[1-30]	Owner:	Coco	* String length[1-30]	Action:	<input checked="" type="checkbox"/> Log <input checked="" type="checkbox"/> Trap	
Index:	345	*													
Description:	212	* String length[1-30]													
Owner:	Coco	* String length[1-30]													
Action:	<input checked="" type="checkbox"/> Log <input checked="" type="checkbox"/> Trap														
<input type="button" value="Save"/> <input type="button" value="Exit"/>															

4.10.2.4. Alarm group

In the navigation bar to select" **Snmp>Rmon config>alarm group**", define alarm group. The following picture.

Statistics Group	History Group	Alarm Group	Event Group
Alarm Group List			
<input type="checkbox"/>	Index	Statistical Event	Statistical Group Index
<input type="checkbox"/>	123	DropEvents	77
<input type="checkbox"/>	Absolute	Sampling Time Interval	Sample Type
<input type="checkbox"/>	0	Last Sample Count	
<input type="checkbox"/>	12	Upper Alarm Threshold Limit	
<input type="checkbox"/>	345	Upper Alarm Threshold Limit Events	
<input type="checkbox"/>	3	Lower Alarm Threshold Limit	
<input type="checkbox"/>	345	Lower Alarm Threshold Limit Events	
<input type="checkbox"/>	Coco	Owner	Status
<input type="button" value="Edit / Delete"/>			
New Alarm Group Delete Selected Alarm Group			
First Back [1] Next Last [1] / 1 Page			

【parameter description】

Parameter	Description
Index	The alarm list items index number, value range is 1 ~ 65535
Static Event	Statistical type values :3:DropEvents. 4:Octets. 5:Pkts. 6:BroadcastPkts. 7:MulticastPkts. 8:CRCAutoAlignErrors. 9:UndersizePkts. 10:OversizePkts. 11:Fragments. 12:Jabbers. 13:Collisions. 14:Pkts64Octets. 15:Pkts65to127Octets. 16:Pkts128to255Octets. 17:Pkts256to511Octets. 18:Pkts512to1023Octets. 19:Pkts1024to1518Octets
Statistical Group Index	Set up the corresponding statistics statistical index number, decided to statistics to monitor the port number
Sampling Time Interval	Sampling time interval, the scope for 5 ~ 65535, the unit for seconds
Sampling Type	Sample types for the absolute value of sampling, the sampling time arrived directly extracting the value of a variable
Last Sample Count	Sampling type for change value sampling, extraction of the arrival of the sampling time is variable in the change of the sampling interval value
Upper Alarm threshold Limit	Set the upper limit the Parameter values
Lower Alarm threshold Limit	Set the lower limit Parameter values
Upper Alarm/Lower Alarm threshold Limit Events	Upper/lower limit reached, for each event
Owner	Set the table creator, ownername for 1 ~ 30 characters of a string

【instruction】

At the time of configuration Rmon Snmp functions must be open, otherwise the prompt dialog box will appear. This configuration need to configure statistics groups and events.

【Configuration example】

Such as: new statistics group of 77 and the event group 345, set up more than 12 and below the lower limit 3 , Beyond the scope of alarm .

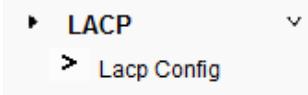
The screenshot shows the 'Alarm Group Configuration' page. At the top, there are tabs for Statistics Group, History Group, Alarm Group, and Event Group. Below the tabs is a table with columns: Index, Statistical Event, Statistical Group Index, Sampling Time, Sample, Last Sample, Upper Alarm, Upper Alarm Threshold, Lower Alarm, and Lower Alarm. A red circle highlights the 'New Alarm Group' button in the top-left corner of the table. A red arrow points from this button to the configuration fields in the main body of the page. The configuration fields include:

- Index: 123 [1-65535]
- Statistical Event: DropEvents
- Statistical Group Index: 77
- Sampling Time Interval: 123 [Second(s)] [5-65535]
- Sample Type: Absolute
- Owner: Coco
- Upper Alarm Threshold Limit: 12 [String length[1-30]] [0-2147483647]
- Upper Alarm Threshold Limit Events: 345
- Lower Alarm Threshold Limit: 3 [0-2147483647]
- Lower Alarm Threshold Limit Events: 345

At the bottom are 'Save' and 'Exit' buttons.

4.11. LACP

In the navigation bar to select "LACP", you can set to the lacp config.



4.11.1. Lacp config

In the navigation bar to select "LACP>Lacp config" the following picture:

The screenshot shows the 'LACP Setting' configuration page. It includes sections for LACP status, LACP public parameter settings, and LACP activation port parameter settings.

LACP status: Open LACP : Apply

LACP public parameter settings: System priority: 1 (1-65535) Apply

LACP activation port parameter settings: choose port to set up:

2	4	6	8	10	12	14	16	18	20	22	24	26
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	3	5	7	9	11	13	15	17	19	21	23	25
<input type="checkbox"/> Optional	<input type="checkbox"/> Fixed port	<input checked="" type="checkbox"/> Selected	<input type="checkbox"/> Aggregation	<input type="checkbox"/> Trunk	<input type="checkbox"/> IP Source Enable Port							

Tip : Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Port priority: 1 (0-65535)
Aggregate port number: 1
Aggregate model: active

Apply

4.11.1.1. LACP Setting

In the navigation bar to select "LACP>Lacp config>LACP settings" the following picture:

LACP Setting LACP Display

LACP status

Open LACP :

Apply

LACP public parameter settings

System priority 1 (1-65535)

Apply

LACP activation port parameter settings

choose port to set up:

2	4	6	8	10	12	14	16	18	20	22	24	26
1	3	5	7	9	11	13	15	17	19	21	23	25

Tip : Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Port priority: 1 (0-65535)

Aggregate port number: 1

Aggregate model: active

Apply

LACP status

LACP status

Open LACP :

Apply

Open or close LACP.

LACP public parameter settings

LACP public parameter settings

System priority 1 (1-65535)

Apply

You can set to System settings, range 1-65535.

LACP activation port parameter settings

LACP activation port parameter settings

choose port to set up:

2	4	6	8	10	12	14	16	18	20	22	24	26
<input checked="" type="checkbox"/>	<input type="checkbox"/>											
1	3	5	7	9	11	13	15	17	19	21	23	25

Tip : Click and drag cursor over ports to select multiple ports Select all Select all others Cancel

Port priority: 1 (0-65535)

Aggregate port number: 1

Aggregate model: active

Apply

Port priority: You can set to Port priority. Range 1-65535

Aggregate port number: You can select the Aggregate port number.

Aggregate model: You can select the Aggregate port number. Include active and passive.

4.11.1.2. LACP Display

In the navigation bar to select "LACP>Lacp config>LACP Display", You can see the table of lacp . the following picture:

LACP list							
Aggregate ID	Port ID	Port status flag	Port state	Priority	Port operation key	Port number	Operation

First Back [1] Next Last / 1 Page

4.12. SYSTEM

In the navigation bar to select "SYSTEM", you can set to the **system config**, **system update**, **config management**, **config save**, **administor privileges** and **info collect**.

- ▶ **SYSTEM** ▾
 - > System Config
 - > System Update
 - > Config Managem...
 - > Config Save
 - > Administrator Pri...
 - > Info Collect

4.12.1. System config

4.12.1.1. System settings

In the navigation bar to select "SYSTEM>system config>System settings", Basic information set switch. the following picture:

The screenshot shows the 'System Settings' page with the following fields:

Management VLAN:	1	Device MAC:	00:E0:4C:00:00:00
Management IP:	192.168.1.1	Ipv6 Address :	
Subnet Mask:	255.255.255.0	Device Name:	Console
Default Gateway:	0.0.0.0	Device Location:	
Jumbo Frame :	1518 (1518-9216)	Contacts(include mailbox):	
DNS Server:	0.0.0.0		

Login section:

Timeout(Minutes):	30
-------------------	----

Buttons: Save, Delete, Set Management VLAN.

System Time section:

Current System Time:	2000-01-01 02:24:16
Set Time:	<input type="text"/>
<input type="checkbox"/> NTP Server	

Buttons: Save.

【parameter description】

Parameter	Description
Device Name	Switch name
Management VLAN	Switches use VLAN management
Management IP	Switch IP address management
Timeout	Don't use more than login timeout after login to log in again

【Configuration example】

Such as: 1) set up the VLAN 2 is management VLAN, should first created vlan 2 the VLAN Settings, and set a free port in the VLAN 2.

The screenshot shows the 'VLAN Settings' page with the following table:

VLAN ID	VLAN Name	VLAN IP	Port	Edit / Delete
1	VLAN0001	192.168.1.1/24	1-8,11-26	
2	VLAN0002		9-10	

Buttons: New VLAN, New Multiple VLAN, Delete VLAN.

Pagination: First Back [1] Next Last [] / 1 Page

Basic System Information

Management VLAN:	1	*
Management IP:	192.168.1.1	*
Subnet Mask:	255.255.255.0	*
Default Gateway:	0.0.0.0	
Jumbo Frame :	1518	(1518-9216)
DNS Server:	0.0.0.0	

Login

Timeout(Minutes):	30
-------------------	----

Buttons: Save, Delete, Set Management VLAN

Basic System Information

Management VLAN:	2	*	Device MAC:	00:E0:4C:00:00:00
Management IP:	192.168.1.1	*	Ipv6 Address :	
Subnet Mask:	255.255.255.0	*	Device Name:	Console
Default Gateway:	0.0.0.0		Device Location:	
Jumbo Frame :	1518	(1518-9216)	Contacts(include mailbox):	
DNS Server:				

Login

Timeout(Minutes):	30
-------------------	----

Buttons: Save, Cancel settings

2) insert the PC interface 9 or 10 ports, set up the management IP for 192.168.1.12, device name is yoyo,

Basic System Information

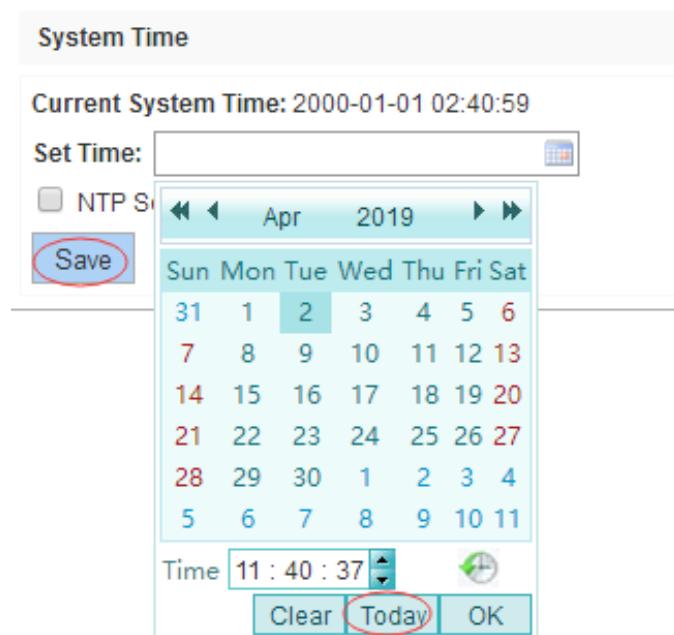
Management VLAN:	2	*	Device MAC:	00:E0:4C:00:00:00
Management IP:	192.168.1.12	*	Ipv6 Address :	
Subnet Mask:	255.255.255.0	*	Device Name:	yoyo
Default Gateway:	0.0.0.0		Device Location:	
Jumbo Frame :	1518	(1518-9216)	Contacts(include mailbox):	
DNS Server:				

Login

Timeout(Minutes):	30
-------------------	----

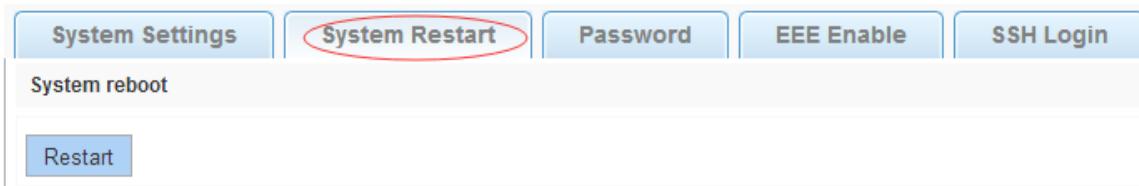
Buttons: Save, Cancel settings

3) use 192.168.1.12 logging in, sets the system time .



4.12.1.2. System restart

In the navigation bar to select "SYSTEM>system config>system restart", equipment can be restarted. the following picture:

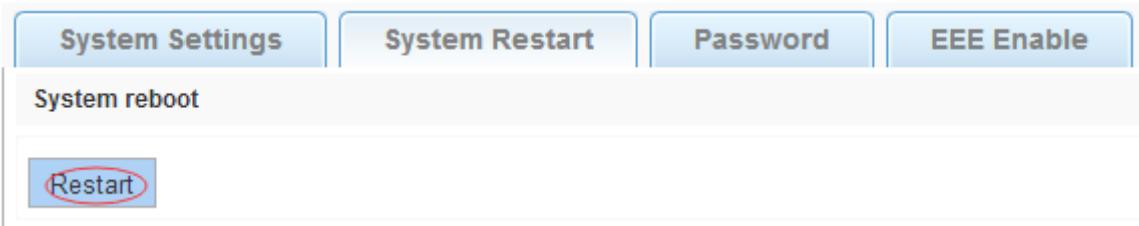


【instruction】

Click the button to restart the switch. The restart process may take 1 minute. Please wait patiently. The page will be refreshed automatically after device restart.

【Configuration example】

Such as: click "restart" button.



4.12.1.3. Password change

In the navigation bar to select "**SYSTEM>system config>password change**", The password change to equipment. the following picture:

The screenshot shows a web-based configuration interface for a network device. At the top, there is a horizontal navigation bar with several tabs: "System Settings", "System Restart", "Password" (which is highlighted with a red oval), "EEE Enable", "SSH Login", "Telnet Login", and "System Log". Below the navigation bar, the main content area is titled "Change Administrator Password". It contains the following fields:

- "Password type:" dropdown menu set to "Encrypted password".
- "Old Password:" input field.
- "New Password:" input field.
- "Confirm New Password:" input field.

At the bottom of the form are two buttons: "Save" and "Clear".

【instruction】

1. If you set a new Web login password, then log in again after setting the new password.
2. Password can not contain Chinese, full-width characters, question marks and spaces.
3. If forget the password reset, can be reset in the console.

```
switch(config)# password admin
```

New Password:3456

Confirm Password:3456

【Configuration example】

Such as: amend the password to 1234.

This screenshot is identical to the one above, showing the "Change Administrator Password" page. The "Save" button at the bottom left is highlighted with a red oval.

4.12.1.4. SSH login

In the navigation bar to select "**SYSTEM>system config>ssh login**", SSH open. the following picture:

The screenshot shows a web-based configuration interface for a network device. At the top, there is a horizontal navigation bar with several tabs: "System Settings", "System Restart", "Password", "EEE Enable", "SSH Login" (which is highlighted with a red oval), "Telnet Login", and "System Log". Below the navigation bar, the main content area is titled "SSH Config". It contains the following fields:

- "Open" button.
- "SSH Timeout:" input field set to "5".

At the bottom of the form are two buttons: "Save" and "Clear".

【instruction】

Configure the user to be able to switch through the SSH login device.

【Configuration example】

Such as: SSH open, you can CRT to log in.

The screenshot shows a navigation bar with tabs: System Settings, System Restart, Password, EEE Enable, SSH Login, and SSH Config. The SSH Config tab is active. Below it, there is a section titled 'SSH Config' with a green 'Open' button and a 'Save' button. A red circle highlights the 'Open' button. Below the button is a field labeled 'SSH Timeout: 5' with an asterisk. The entire interface is light blue and white.

4.12.1.5. Telnet login

In the navigation bar to select "SYSTEM>system config>Telnet login", Telnet open. The following picture:

The screenshot shows a navigation bar with tabs: System Settings, System Restart, Password, EEE Enable, SSH Login, Telnet Login (highlighted with a red circle), and System Log. The Telnet Config tab is active. Below it, there is a section titled 'Telnet Config' with a green 'Open' button and a 'Save' button. A red circle highlights the 'Telnet Login' tab. Below the button is a field labeled 'Telnet Timeout: 5' with an asterisk. The entire interface is light blue and white.

【instruction】

Configure the user to be able to switch through the Telnet login device.

【Configuration example】

Such as: Telnet open, PC Telnet function open, you can log in .

The screenshot shows a 'Telnet Config' page with a green 'Open' button and a 'Save' button. A red circle highlights the 'Open' button. Below the button is a field labeled 'Telnet Timeout: 5' with an asterisk. The entire interface is light blue and white.

4.12.1.6. System log

In the navigation bar to select "SYSTEM>password change>system log", to view the log and set up the log server. the following picture:

【parameter description】

Parameter	Description
Log switch	Open and close
Server IP	Appoint to server address
Send Log Level	0-7
Keyword	Enter the required query of characters

【instruction】

Open log switch, set up the syslog server, system log will automatically be pushed to the server.

【Configuration example】

Such as: 1) the error log information in 192.168.1.1 pushed to the server

2)input the Mac keywords , click "query "button, click on the "clear log" button, can clear the log .

Current Log Information

Keyword <input type="text" value="mac"/>	<input style="border: 1px solid red; border-radius: 50%; width: 20px; height: 20px;" type="button" value="Search"/>	<input type="button" value="Clear Syslog"/>
--	---	---

```
Syslog logging: enabled
Console logging: level informational, 2 messages logged
Monitor logging: level informational, 0 messages logged
Buffer logging: level informational, 2 messages logged
Timestamp debug messages: datetime
Timestamp log messages: datetime
Sequence-number log messages: disable
Trap logging: disable
Log Buffer (Total 16384 Bytes):
Jan 01 00:00:47 %PORTMANAGE-Notifications-UPDOWN: interface gigabitethernet 12, changed state to up
Jan 01 00:00:57 %COMMON-Informational-SYSTEM-REBOOT: system cold reboot
```

4.12.2. System upgrade

In the navigation bar to select "**SYSTEM>system upgrade**", Optional upgrade file to upgrade. the following picture.



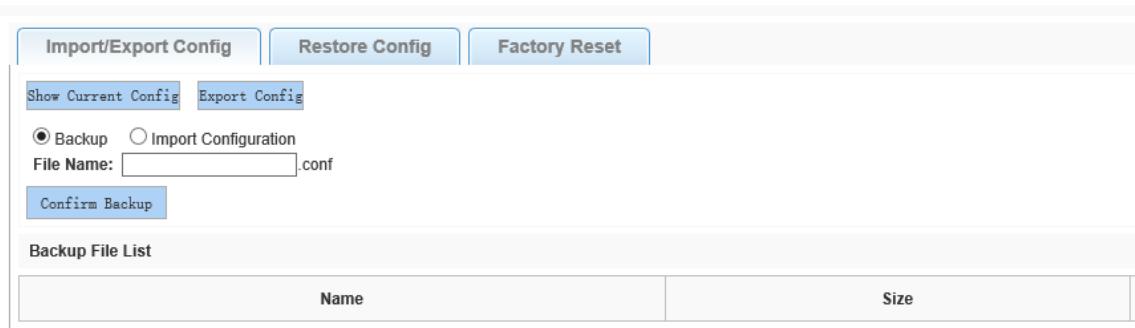
【instruction】

- 1 please confirm that the upgraded version of the same model and the same model.
- 2 in the upgrade process, you may encounter flash to make the page is temporarily unable to respond to the page, this time can not power off or restart the device, until prompted to upgrade successfully!

4.12.3. Config management

4.12.3.1. Current configuration

In the navigation bar to select "**SYSTEM>config management>current configuration**", can import and export configuration files, the backup file. the following picture:



【instruction】

Import process can not be closed or refresh the page, or import will fail!

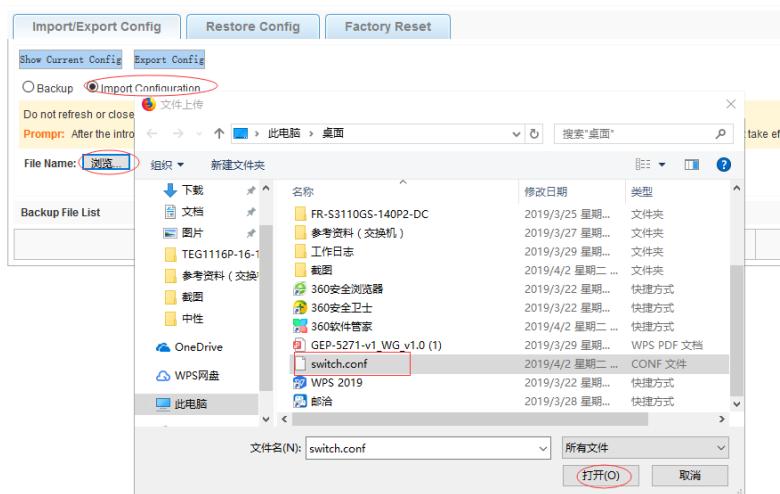
After the introduction of configuration, to enable the new configuration, please in this page Restart device
Otherwise configuration does not take effect.

【Configuration example】

Such as: 1) in the configuration first save the page, click save configuration to save the current configuration, then export the configuration.



2) import configuration.



Import/Export Config	Restore Config	Factory Reset
Show Current Config	Export Config	
<input type="radio"/> Backup <input checked="" type="radio"/> Import Configuration Do not refresh or close the page during the import Prompt: After the introduction of configuration, to enable the new configuration, please in this page Restart device . Otherwise configuration does not take effect		
File Name: 浏览... switch.conf	Import configuration	

3)backup.

Import/Export Config	Restore Config	Factory Reset				
Show Current Config	Export Config					
<input checked="" type="radio"/> Backup <input type="radio"/> Import Configuration File Name: <input type="text" value="123457"/> .conf Confirm Backup						
Backup File List <table border="1"> <thead> <tr> <th>Name</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>			Name	Size		
Name	Size					

4.12.3.2. Configuration backup

In the navigation bar to select "SYSTEM>config management>configuration backup", you can configure backup file. The following picture:

Import/Export Config	Restore Config	Factory Reset						
<table border="1"> <thead> <tr> <th>Name</th> <th>Size</th> <th>Time Stamp</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Name	Size	Time Stamp			
Name	Size	Time Stamp						
<input checked="" type="radio"/> Restore Backup <input type="radio"/> Delete Backup <input type="radio"/> Save Backup <input type="radio"/> Rename Backup Confirm Recovery								

【instruction】

Operating this page should be in the current configuration page first, the backup file.

【Configuration example】

Such as: restore backup.

Import/Export Config	Restore Config	Factory Reset									
<table border="1"> <thead> <tr> <th>Name</th> <th>Size</th> <th>Time Stamp</th> </tr> </thead> <tbody> <tr> <td>12357.conf</td> <td>4.00K</td> <td>07:19:00 2000-01-01</td> </tr> <tr> <td>1234.conf</td> <td>3.49K</td> <td>02:47:46 2000-01-01</td> </tr> </tbody> </table>			Name	Size	Time Stamp	12357.conf	4.00K	07:19:00 2000-01-01	1234.conf	3.49K	02:47:46 2000-01-01
Name	Size	Time Stamp									
12357.conf	4.00K	07:19:00 2000-01-01									
1234.conf	3.49K	02:47:46 2000-01-01									
<input type="radio"/> Restore Backup <input type="radio"/> Delete Backup <input type="radio"/> Save Backup <input checked="" type="radio"/> Rename Backup Rename: <input type="text" value="swrt"/> .conf Confirm Rename											

4.12.3.3. Restore factory configuration

In the navigation bar to select "**SYSTEM>config management>restore factory configuration**", Can export the current configuration and restore factory configuration .the following picture:

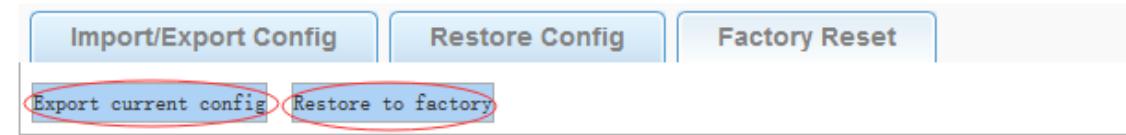


【instruction】

Restore the factory configuration, will delete all the current configuration. If you have any useful configuration, the current system can lead the factory configuration again after the current configuration.

【Configuration example】

Such as: restore configuration can be the guide before they leave the current configuration .



4.12.4. Config save

In the navigation bar to select "**SYSTEM>config save**", you can save current configuration. The following picture.



【instruction】

Save settings will delete all default configurations. If there are useful configurations, click backup Configurations before save the settings.

【Configuration example】

Such as: click "save settings" button.



4.12.5. Administrator privileges

In the navigation bar to select "**SYSTEM>administrator privileges**", Configurable ordinary users. the following picture.

The screenshot shows the "Administrator Settings" page. At the top, there is a form for adding a new user with fields for Password type (set to "Encrypted password"), User Name (1234), New Password (four blacked-out dots), and Confirm Password (four blacked-out dots). Below this is a table titled "User List" containing two entries: "user" and "admin". Each entry has "Edit / Delete" links next to it. At the bottom right of the page are navigation links: First, Back [1], Next, Last, and a page number field set to "1 Page".

【instruction】

Only the admin of the super administrator can access this page is used to manage users and visitors. The user can log in the Web management system of equipment for routine maintenance. In addition to the admin and user, can add up to five users. Ordinary users can only access information system home page.

【Configuration example】

Such as:

The screenshot shows the "Administrator Settings" page again. The "Add User" button at the bottom left is highlighted with a red oval. The rest of the page is identical to the one above, showing the user configuration form and the "User List" table.

4.12.6. Info collect

In the navigation bar to select "**SYSTEM>info collect**", you can collect to the system debug information. The following picture.



【instruction】

collect useful infomation, it may take a few moment .

【Configuration example】

Such as: click on "collect" button .

