

# 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.

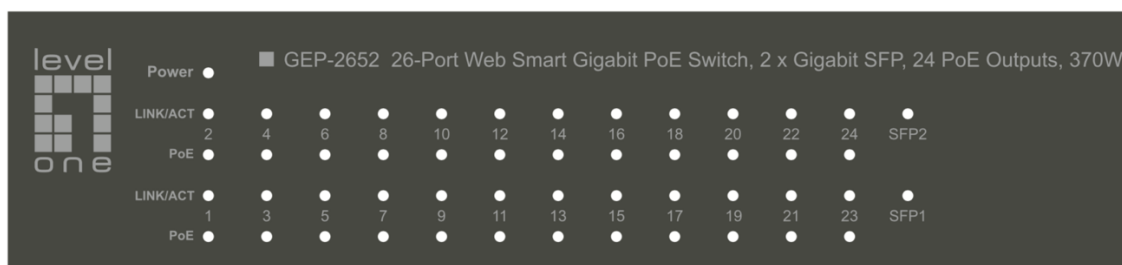


Figure 2 - LED Indicator

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.

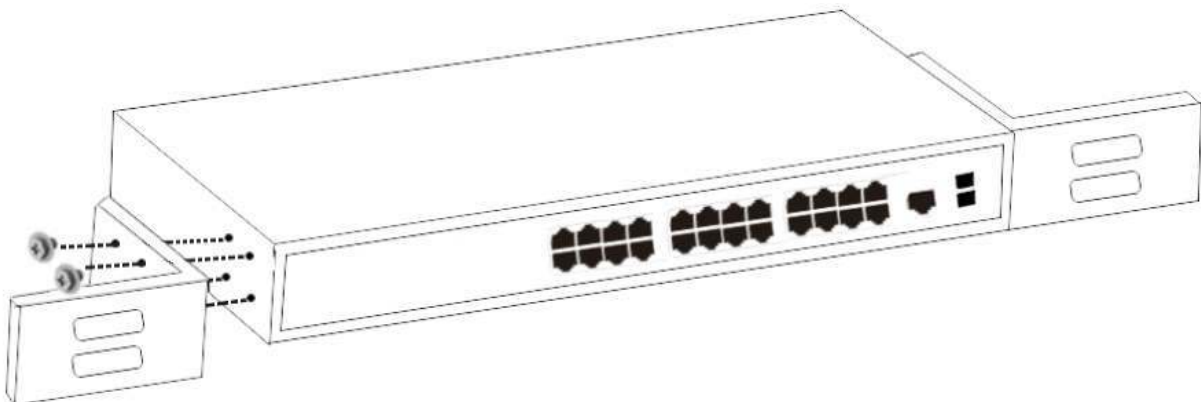


Figure 4 - Bracket Installation

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

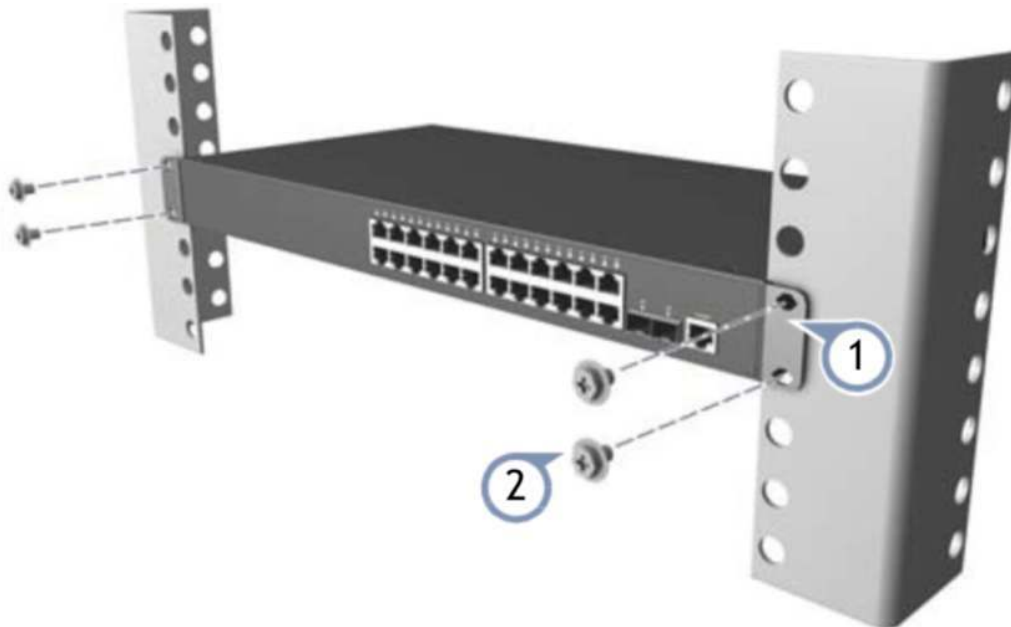


Figure 5 - Rack Installation

### 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.



A login window for the level one switch. It features a text input field containing the username "admin", a password input field with six dots, and a blue "Login" button at the bottom.

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

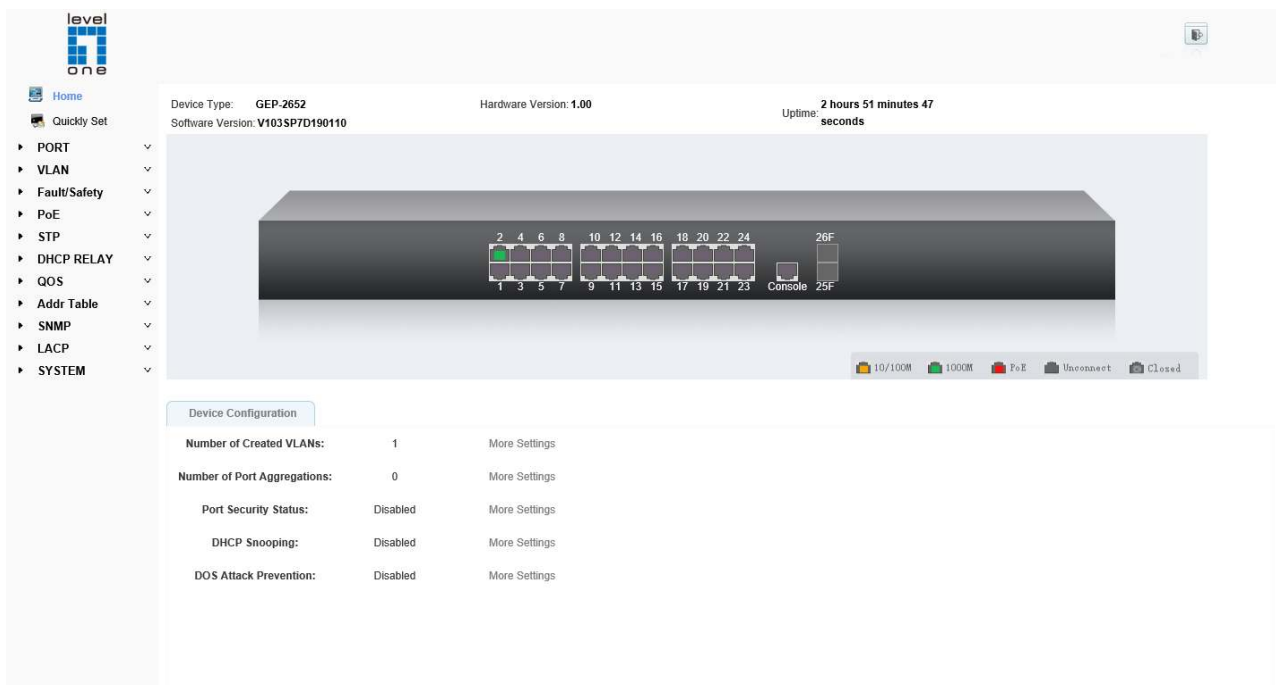
The switch configuration window displays the level one logo and a sidebar menu with options: Home, Quickly Set, PORT, VLAN, Fault/Safety, PoE, STP, DHCP RELAY, QOS, Addr Table, SNMP, LACP, and SYSTEM. The main area shows device information: Device Type: GEP-2652, Hardware Version: 1.00, Software Version: V103SP7D190110, and Uptime: 2 hours 51 minutes 47 seconds. Below this is a 3D model of the switch with port labels 1 through 24, Console, 25F, and 26F. At the bottom, there is a "Device Configuration" section with a table of settings.

| Device Configuration         |          |                               |
|------------------------------|----------|-------------------------------|
| Number of Created VLANs:     | 1        | <a href="#">More Settings</a> |
| Number of Port Aggregations: | 0        | <a href="#">More Settings</a> |
| Port Security Status:        | Disabled | <a href="#">More Settings</a> |
| DHCP Snooping:               | Disabled | <a href="#">More Settings</a> |
| DOS Attack Prevention:       | Disabled | <a href="#">More Settings</a> |

# 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 settingOther settings

VLAN Settings

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

New VLAN New Multiple VLAN Delete VLAN

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

Trunk Settings

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

New Trunk Port Delete Trunk Port

First Back **[1]** Next Last  / 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 displays a network configuration interface. In the foreground, a 'New VLAN' dialog box is open. It contains two input fields: 'VLAN ID(1~4094):' with the value '2' and 'VLAN Name(1-32):' with the value 'VLAN0002'. Below these fields is a section titled 'Select ports to add to the vlan:' which features a grid of 26 ports, numbered 2 through 26. Port 8 is highlighted with a blue icon, indicating it is selected. At the bottom of the dialog, there are two buttons: 'Save' and 'Exit'. A red arrow points from the 'New VLAN' button in the background interface to the 'New VLAN' dialog box. The background interface shows a 'VLAN setting' tab and an 'Other settings' tab. Under 'VLAN setting', there is a 'New VLAN' button. Under 'Other settings', there is a 'New Trunk Port' button. The 'Trunk Settings' section is also visible, showing a 'New Trunk Port' button and a 'Port' dropdown menu.

**New Trunk port**

Please select port 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](#)

Native VLAN(1-4094):

Allowing VLAN(such as 3-5,8,10):

[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.

**Basic System Information**

Management VLAN:

Management IP:

Subnet Mask:

Device Name:

Default Gateway:

DNS Server:

[Save](#)    [Delete](#)    [Set Management VLAN](#)

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

**Change Administrator Password**

Password type:

Old Password:

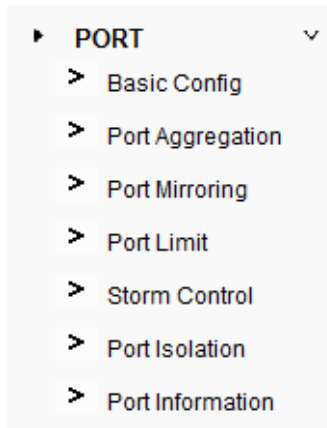
New Password:

Confirm New Password:

[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**.



### 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):

Status: 

Enabled

Port Speed: 

Auto

Duplex Mode: 

Auto

Flow Control: 

Off

Cable Type Detection: 

Auto

Save

**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          |      |

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## 【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:<br>Auto<br>10 M<br>100 M<br>1000 M |
| Duplex Mode          | Can choose the following kinds:<br>Auto<br>Duplex<br>Half duplex        |
| Cable Type Detection | Can choose the following kinds:<br>Auto<br>MDI<br>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

1 3 5 7 9 11 13 15 17 19 21 23 25

2

4 6 8 10 12 14 16 18 20 22 24 26

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):

Status: Enabled

Port Speed: 10M

Duplex Mode: Half

Flow Control: On

Cable Type Detection: 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): 1 \*

Please select the port to join the Aggregate Group:

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 |
|--------------------------|---------------|---------------|
|--------------------------|---------------|---------------|

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#### 【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): 1 \*

Please select the port to join the Aggregate Group:

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                       |
| <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"/> | <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"/> |

☐ 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 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"/> | <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"/> |

☐ 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

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

## 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

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):

6400

\* 0,16-1,000,000Kb/s

Output Speed Limit(multiple of 16):

3200

\* 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 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:

\* 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 |
|-------------|--------------|--------|
|             |              |        |

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## 【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

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 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        | ✖      |

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## 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 <input type="text" value="Input port number or port description"/> |             | Search          |                 | <input checked="" type="checkbox"/> 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          | ✖ Disconnect ed | 1    | No         |
| Gi 0/2                                                                     |             | 0.00K           | 0               | 0.00K                                       | 0                | ON          | 💡 Connected     | 1    | No         |
| Gi 0/3                                                                     |             | 0.00K           | 0               | 0.00K                                       | 0                | ON          | ✖ Disconnect ed | 1    | No         |
| Gi 0/4                                                                     |             | 0.00K           | 0               | 0.00K                                       | 0                | ON          | ✖ Disconnect ed | 1    | No         |
| Gi 0/5                                                                     |             | 0.00K           | 0               | 0.00K                                       | 0                | ON          | ✖ Disconnect ed | 1    | No         |
| Gi 0/6                                                                     |             | 0.00K           | 0               | 0.00K                                       | 0                | ON          | ✖ Disconnect ed | 1    | No         |
| Gi 0/7                                                                     |             | 0.00K           | 0               | 0.00K                                       | 0                | ON          | ✖ Disconnect ed | 1    | No         |
| Gi 0/8                                                                     |             | 0.00K           | 0               | 0.00K                                       | 0                | ON          | ✖ Disconnect ed | 1    | No         |
| Gi 0/9                                                                     |             | 0.00K           | 0               | 0.00K                                       | 0                | ON          | ✖ Disconnect ed | 1    | No         |
| Gi 0/10                                                                    |             | 0.00K           | 0               | 0.00K                                       | 0                | ON          | ✖ Disconnect ed | 1    | No         |

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## 4.3. VLAN

In the navigation bar to select "**VLAN**", You can manage the **VLAN Settings**, **Access Port Settings**, **Trunk Settings** and **Hybrid 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                   |                      |
| <div>  New Access port         </div> <div>           First Back <b>1</b> [2] [3] Next Last 1 / 3 Page         </div> |                      |                     |                      |

#### 【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 with a table of VLAN IDs. Below it, the 'Access port list' is visible. A 'New Access port' dialog box is open, prompting the user to select a port. The dialog shows a grid of ports from 1 to 26, with port 8 selected. Below the grid, there are options for 'Optional', 'Fixed port', 'Selected', 'Aggregation', 'Trunk', and 'IP Source Enable Port'. A tip suggests clicking and dragging to select multiple ports. The 'Native Vlan (1-4094)' field is set to 2. At the bottom of the dialog are 'Save' and 'Cancel' buttons. A red arrow points from the 'New Access port' button in the bottom left of the main interface to the dialog box.

### 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, the 'Trunk port list' is visible, showing a table with columns for Port, Port description, Native VLAN, Allowing VLAN, and Operation. The table is currently empty. At the bottom, there are buttons for 'New Trunk port' and 'Delete selected Trunk port'. The navigation bar at the top shows 'VLAN Settings', 'Access Port Settings', 'Trunk Port Settings' (highlighted), and 'Hybrid Port Settings'.

## 【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 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】

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 with a table of VLANs:

| VLAN ID | VLAN Name | VLAN IP        | Port     | Edit / Delete   |
|---------|-----------|----------------|----------|-----------------|
| 1       | VLAN0001  | 192.168.1.1/24 | 1-7,9-26 | [Edit] [Delete] |
| 2       | VLAN0002  |                | 8        | [Edit] [Delete] |

Below the table are buttons: 'New VLAN', 'New Multiple VLAN', and 'Delete VLAN'. A 'New Trunk port' dialog box is open, showing a grid of ports (1-26) with port 7 selected. The dialog includes fields for 'Native Vlan (1-4094):' (set to 2) and 'Allowing VLAN(such as 3-5,8,10):' (set to 1-2). Buttons for 'Save settings' and 'Cancel' are at the bottom.

### 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 with a table of hybrid ports:

| Port              | Port Name | Native VLAN | Tagged | Untagged | Edit / Delete |
|-------------------|-----------|-------------|--------|----------|---------------|
| [New Hybrid Port] |           |             |        |          |               |

Buttons for 'New Hybrid Port' and 'Delete Selected Hybrid Port' are at the bottom left. Navigation links 'First', 'Back', 'Next', 'Last' and a page indicator '1 / 1 Page' are at the bottom right.

## 【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 .

The screenshot displays a network configuration interface with four tabs: VLAN Settings, Access Port Settings, Trunk Port Settings, and Hybrid Port Settings. The 'VLAN Settings' tab is active, showing a table of VLAN IDs.

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

Below the table are buttons for 'New VLAN', 'New Multiple VLAN', and 'Delete VLAN'. Navigation links 'First', 'Back', 'Next', 'Last', and 'Page' are also present.

The 'Hybrid Port List' section shows a grid of ports (1-26) with a 'New Hybrid Port' dialog box open. A red arrow points from the 'New Hybrid Port' button in the list to the dialog box.

**New Hybrid Port**

Ports 1-26 are shown in a grid. Port 1 is selected (blue). Below the grid, there are radio buttons for 'Optional', 'Fixed port', and 'Selected' (selected). There is also a checkbox for 'Aggregation' and a checkbox for 'Trunk'. A tip says: 'Tip: Click and drag cursor over ports to select multiple ports'. There are buttons for 'Select all', 'Select all others', and 'Cancel'.

Native Vlan(1-4094): 10

Tagged vlan(3-5,8,10): 1

Untagged vlan(such as 3-5,8,10): 10, 20

Buttons: Save, Cancel

The 'VLAN Settings' tab is active again, showing the same table as before, but with the 'Port' column updated: Port 1 is 1-26, Port 10 is 1-2, and Port 20 is 1-2.

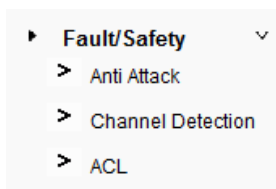
This system e0/1 and the receive system e0/2 PC can be exchanged, but when each data taken from a VLAN is different.

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 .



### 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.

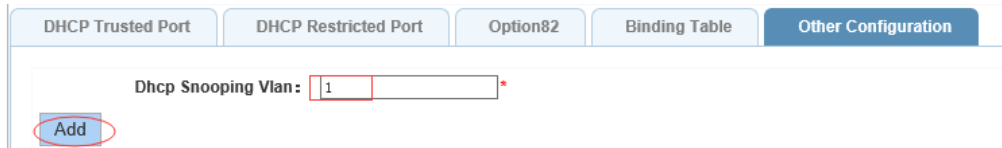
## 【Configuration example】

Such as: 1. dhcp snooping open



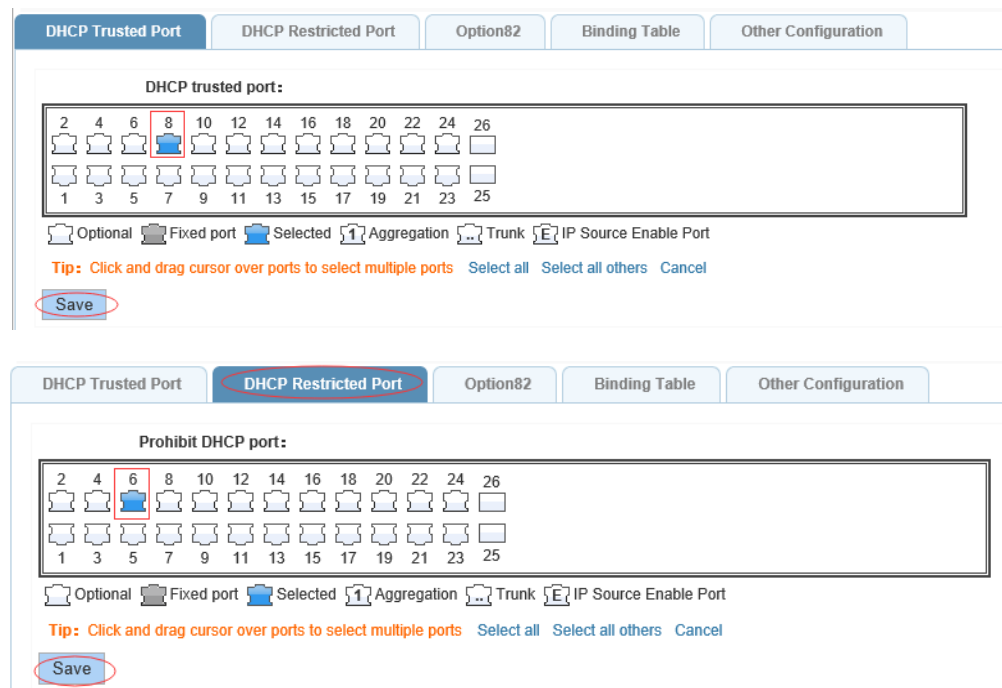
The interface shows four tabs: DHCP, DOS, IP Source Guard, and IP/Mac/Port. The DHCP tab is active. Under the 'Protection Status' section, there is a green 'Open' button circled in red, with the text 'Allows user to enable dhcp snooping.' to its right.

2. Setting dhcp snooping vlan



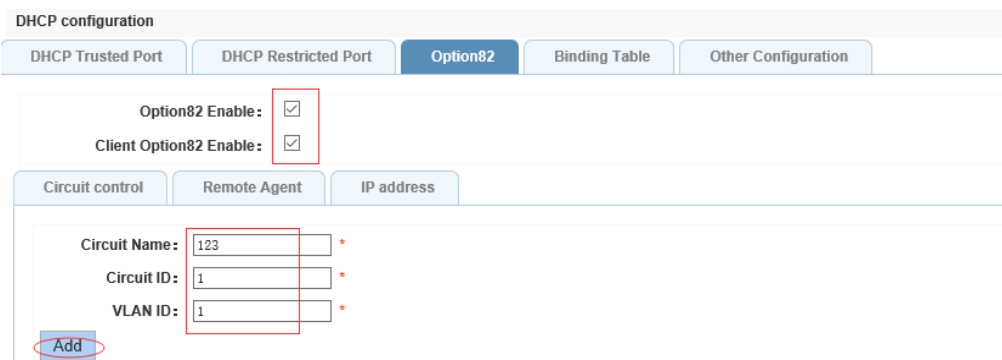
The interface has tabs for DHCP Trusted Port, DHCP Restricted Port, Option82, Binding Table, and Other Configuration. The DHCP Trusted Port tab is active. It shows a text field 'Dhcp Snooping Vlan:' with the value '1' entered. Below the field is a blue 'Add' button circled in red.

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



Two screenshots of the DHCP configuration interface. The first screenshot shows the 'DHCP Trusted Port' tab with a grid of 26 port icons. Port 8 is selected (blue icon). Below the grid are icons for 'Optional', 'Fixed port', 'Selected', 'Aggregation', 'Trunk', and 'IP Source Enable Port'. A tip says 'Click and drag cursor over ports to select multiple ports'. A blue 'Save' button is circled in red. The second screenshot shows the 'DHCP Restricted Port' tab with the same grid. Port 6 is selected (blue icon). The same icons and tip are present. A blue 'Save' button is circled in red.

4. Set option82 information



The interface has tabs for DHCP Trusted Port, DHCP Restricted Port, Option82, Binding Table, and Other Configuration. The Option82 tab is active. It shows 'Option82 Enable:' and 'Client Option82 Enable:' both with checked checkboxes, circled in red. Below are tabs for 'Circuit control', 'Remote Agent', and 'IP address'. The 'Circuit control' tab is active, showing fields for 'Circuit Name:' (123), 'Circuit ID:' (1), and 'VLAN ID:' (1), all circled in red. A blue 'Add' button is circled in red at the bottom left.

Circuit control Remote Agent IP address

Remote Name: wezy \*

Remote Agent ID: 1 \*

VLAN ID: 1 \*

Add

| No. | Remote Agent Name | Remote Agent ID | VLAN ID |
|-----|-------------------|-----------------|---------|
|-----|-------------------|-----------------|---------|

Circuit control Remote Agent IP address

IP Address: 192.168.1.30 \*

VLAN ID: 1 \*

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: 00:01:15:09:37:35 \*

VLAN ID: 1 \*

Port Number: 7 ✓

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:

IP source protection port enable configuration

Please select a source port:

|                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 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"/> | <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"/> |

☐ 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 |
|-------|-------------------|--------------------|------|---------|--------|--------|
|       |                   |                    |      |         |        |        |

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.

IP source protection port enable configuration

Please select a source port:

|                          |                                     |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |
|--------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 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"/> | <input checked="" 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"/> |

☐ 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 |
|-------|-------------------|--------------------|------|---------|--------|--------|
|-------|-------------------|--------------------|------|---------|--------|--------|

IP source protection port enable configuration

Please select a source port

|                          |                          |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 2                        | 4                        | 6                        | 8                        | 10                       | 12                       | 14                       |
| <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                       |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Optional Fixed port Selected

Tip: Click and drag cursor over port  
If do not select the port, the c

Save

Manual IP Source Protection List

Index

New Security Port

VLAN ID: 1

Source IP Address: 192.168.1.30

Source MAC Address: 00:01:16:09:35:37

|                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 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"/> | <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"/> |

Optional Fixed port Selected Aggregation Trunk IP Source Enable Port

Save Exit

#### 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:

Test List

Binding Enable ☐

|                          | MAC Address | IP Address | Port Number |
|--------------------------|-------------|------------|-------------|
| <input type="checkbox"/> |             |            |             |

First Back [1] Next Last 1 / 1 Page

Scanning Binding

Application List

|                          | MAC Address | IP Address | Port Number |
|--------------------------|-------------|------------|-------------|
| <input type="checkbox"/> |             |            |             |

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

#### 【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 type="checkbox"/> |  |  |  |
|--------------------------|--|--|--|

Scanning Binding

**Test List**  
Binding Enable ☒

|                                     | 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 Page

Scanning **Binding**

**Application List**

|                          | MAC Address       | IP Address    | Port Number |
|--------------------------|-------------------|---------------|-------------|
| <input type="checkbox"/> | 00:0E:C6:D6:21:5C | 192.168.2.100 | 7           |

Delete First Back [1] Next Last [ ] / 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:  \*

Timeout in Seconds (1-10):

Ping Count (1-100):

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: 192.168.1.1 \*
  
Timeout in Seconds (1-10): 2
  
Ping Count (1-100): 5
  

Start

Result
  
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

#### 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: 
  

Start

Result

#### 【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:
192.168.1.100

Start

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:
192.168.1.100

Start

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 |
|   |   |   |   |    |    |    |    |    |    |    |    |    |
| 1 | 3 | 5 | 7 | 9  | 11 | 13 | 15 | 17 | 19 | 21 | 23 | 25 |
|   |   |   |   |    |    |    |    |    |    |    |    |    |

Optional
 Fixed port
 Selected
 Aggregation
 Trunk
 IP Source Enable Port

Start

### 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.

Time Name:

Day Selection: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday

Time Interval:  -  +

Save

| Time Name | Day | Time Interval |
|-----------|-----|---------------|
|-----------|-----|---------------|

#### 【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 .

Time Name:

Day Selection: ☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday ☐ Saturday ☐ Sunday

Time Interval:  -  +

Save

| Time Name | Day | Time Interval |
|-----------|-----|---------------|
|-----------|-----|---------------|

Timetable ACL Apply ACL

Create ACL

The new ACL access rule

ACL Number: 100 \* Protocol Type: TCP  
 Permission: Deny Timetable Name: Workday

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 | ✖      |
| 1        | 100        | permit     | 20    | ip       | any/any          | any         | any/any               | any              | none           | active | ✖      |

First Back (1) Next Last / 1 Page

Timetable ACL Apply ACL

Optional Fixed port Selected 1 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 |
|------------|------|---------------------|
|------------|------|---------------------|

## 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: ☐ Enable ☒ 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

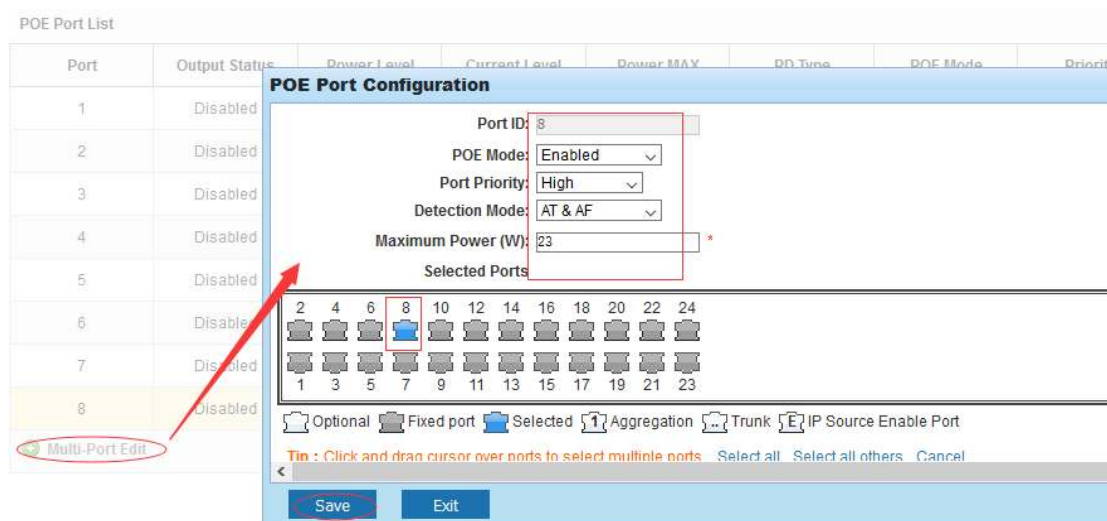
First Back **[1]** [2] [3] Next Last  / 3 Page

## 【parameter description】

| Parameter      | Description                                                                                                                                                                                                                             |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output Status  | Enable or disable the PoE function for the corresponding port.<br>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.<br><br>Low<br>Critical<br>High |
| Power Max      | Specify the maximum power the port can supply for the PoE profile.                                                                                                                                                                      |
| Mode Detection | Mode Detection Type:<br>AF<br>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.

Optional Fixed port Selected 1 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) \*

Save

| Ports  | Port Restart Time | Port Delay Time | Operation |
|--------|-------------------|-----------------|-----------|
| Gi0/1  | 0                 | 0s              |           |
| Gi0/2  | 0                 | 0s              |           |
| Gi0/3  | 0                 | 0s              |           |
| Gi0/4  | 0                 | 0s              |           |
| Gi0/5  | 0                 | 0s              |           |
| Gi0/6  | 0                 | 0s              |           |
| Gi0/7  | 0                 | 0s              |           |
| Gi0/8  | 0                 | 0s              |           |
| Gi0/9  | 0                 | 0s              |           |
| Gi0/10 | 0                 | 0s              |           |

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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 is 09:00, the Port Delay Time is configured as 120 s.

Optional Fixed port Selected 1 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

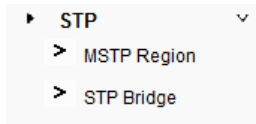
Restart Time: 09:00:30

Port Delay Time: 120  Seconds(0-3600) \*

Save

## 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.

The screenshot shows the 'MSTP Configuration' interface. It has two main sections: 'Region Configuration' and 'Instance Mapping'. In the 'Region Configuration' section, there are input fields for 'Region Name' (with a note '(0 to 32 characters)') and 'Revision Level' (with a note '(0 to 65535, default 0)'). A 'Save' button is below these fields. The 'Instance Mapping' section has a dropdown for 'Instance ID' (set to '1') and an input field for 'VLAN ID' (with a note 'For example : 1,3,5,7-10'). There are 'Save' and 'Delete' buttons below. At the bottom, there is a 'Mapping List' table with columns 'Instance ID', 'Mapping VLAN', and 'Edit'.

#### 【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.

This screenshot shows the 'MSTP Configuration' interface with example values entered. The 'Region Name' field contains 'DEADBEEF0102' and the 'Revision Level' field contains '123'. Both fields are highlighted with a red box. The 'Save' button is circled in red. The 'Instance Mapping' section and 'Mapping List' table are not visible in this view.

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: ☐

Instance ID : 0

Priority : 32768

Enable : ☐ ON ☒ OFF

Mode : ☐ STP ☐ RSTP ☒ 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 : ☐ ON ☒ OFF

Path Cost : auto (auto or 1-200000000)

Auto Edge : ☒ ON ☐ OFF

Point to Point : ☐ ON ☐ OFF ☒ Auto

BPDU Guard : ☐ ON ☒ OFF

Compatible : ☒ ON ☐ OFF

BPDU Filter : ☐ ON ☒ OFF

Root Guard : ☐ Root ☒ None

TC Guard : ☐ ON ☒ OFF

TC Ignore : ☐ ON ☒ OFF

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

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】

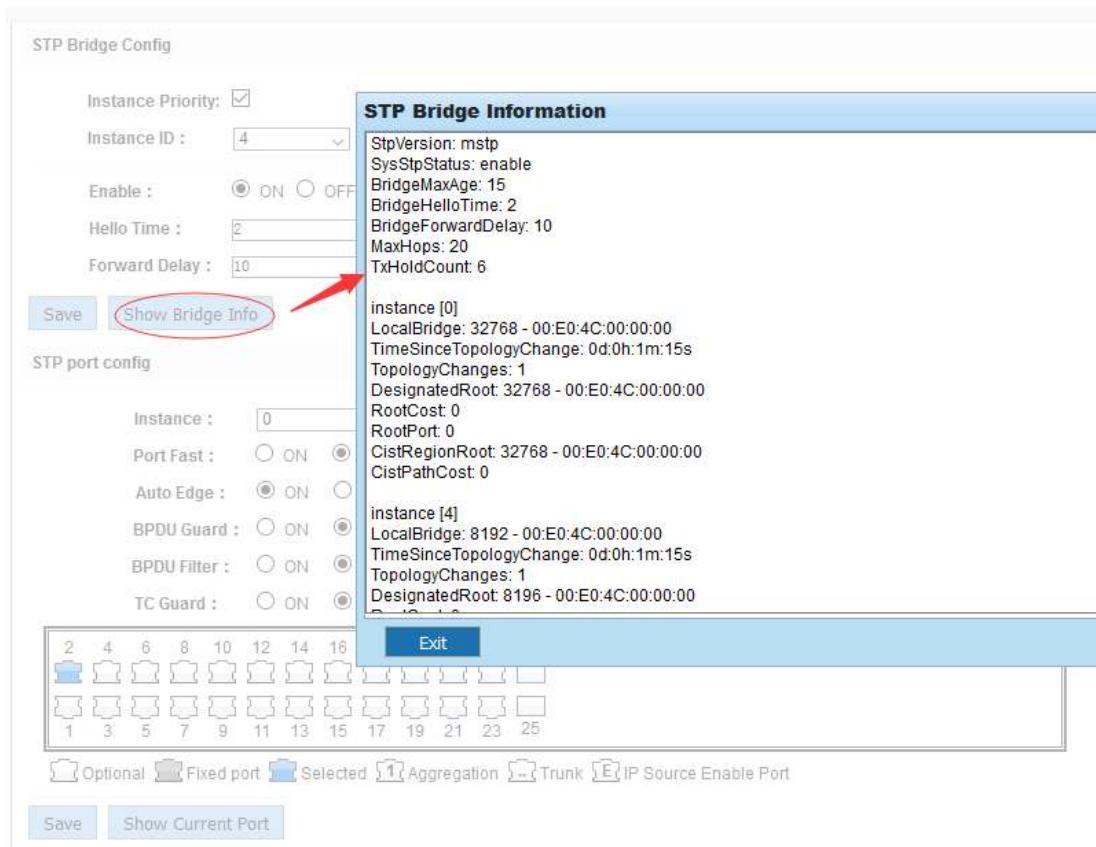
- (1)  $(\text{hello\_time}+1) \times 2 \leq \text{max\_age} \leq (\text{f\_delay}-1) \times 2$  , enable the switch to set instance priority.  
(2) Enable STP or switch mode would spend 2 times of the forward delay time.

### 【Configuration example】

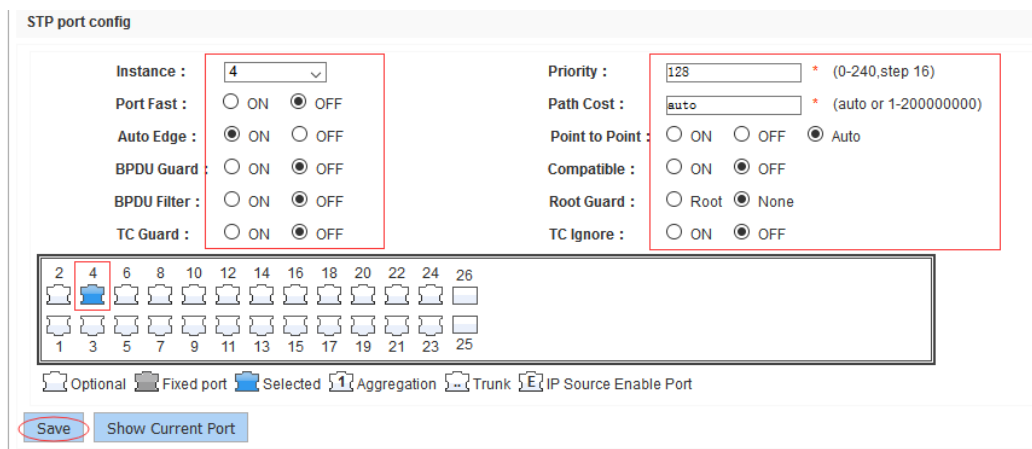
Such as: 1) Open the STP, configuration has to create an instance of the priority, configuration time parameters, set the pattern to MSTP .

**STP Bridge Config**

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



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: ☐

Instance ID : 0

Enable : ☐ ON ☒ OFF

Hello Time : 2

Forward Delay : 15

Save Show Bridge Info

STP port config

Instance : 0

Port Fast : ☐ ON ☒ OFF

Auto Edge : ☒ ON ☐ OFF

BPDU Guard : ☐ ON ☒ OFF

BPDU Filter : ☐ ON ☒ OFF

TC Guard : ☐ ON ☒ OFF

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

1 3 5 7 9 11 13 15 17 19 21 23 25

Optional Fixed port Selected 1 Aggregation Trunk E IP Source Enable Port

Save Show Current Port

**STP Port Information [ Gi0/4 ]**

[Gi0/4]

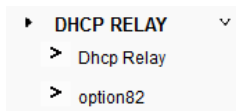
PortAdminPortFast: disable  
 PortOperPortFast: disable  
 PortAdminAutoEdge: enable  
 PortOperAutoEdge: disable  
 PortAdminLinkType: auto  
 PortOperLinkType: share  
 PortBPDUGuard: disable  
 PortBPDUFILTER: disable  
 PortTCGuard: disable

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

Exit

## 4.7. DHCP relay

In the navigation bar to select "DHCP relay", you can set to the DHCP relay and 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: ☐

DHCP Option Trust Field Enable: ☒

## 【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 OPTION82circuit 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:

123

\*

Circuit ID :

1

\*

VLAN ID :

1

\*

Save

| Number | Circuit Name | Circuit ID | VLAN ID |
|--------|--------------|------------|---------|
|--------|--------------|------------|---------|

First Back

Option82 Config

Circuit Control

Proxy Remote

IP Address

Proxy Remote:

Sweet

\*

Proxy Remote ID:

2

\*

VLAN ID :

1

\*

Save

| Number | Proxy Remote Name | Proxy Remote ID |
|--------|-------------------|-----------------|
|--------|-------------------|-----------------|

Option82 Config

Circuit Control

Proxy Remote

IP Address

IP Address:

192.168.1.35

\*

VLAN ID :

1

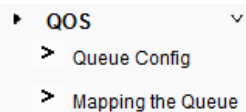
\*

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' form. It has a title bar 'Queue setting'. Below it, 'Queue mode:' is followed by a dropdown menu showing 'WFQ'. Below that, 'Byte weight(0~127):' is followed by eight input boxes numbered 1 to 8. At the bottom left is a blue 'Apply' button.

#### 【parameter description】

| Parameter           | Description                                                                                                                                                            |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scheduling strategy | Can choose four kinds of modes:<br>RR round-robin scheduling<br>SP absolute priority scheduling<br>WRR weighted round-robin scheduling<br>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' form, similar to the one above. 'Queue mode:' is set to 'WRR'. 'Byte weight(0~127):' has eight input boxes with values 10, 11, 12, 13, 14, 15, 16, and 17. A red rectangle highlights the 'Queue mode' dropdown and the weight input boxes. A red oval highlights the 'Apply' button.

## 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.

| Server ID | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Queue ID  | 0 ▼ | 1 ▼ | 2 ▼ | 3 ▼ | 4 ▼ | 5 ▼ | 6 ▼ | 7 ▼ |

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.

| Server ID | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Queue ID  | 0 ▼ | 1 ▼ | 2 ▼ | 7 ▼ | 4 ▼ | 5 ▼ | 6 ▼ | 7 ▼ |

Save

Queue setting

Queue mode: WRR ▼

Byte weight(0~127): 0 0 0 0 0 0 0 10

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  |

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  | 0  | 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  | 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  |

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         |   |   |   |   |   |   |   |            |

#### 【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 | Server ID |   |   |   |   |   |   |   | Trust Mode |
|------|-----------|---|---|---|---|---|---|---|------------|
|      | 0         | 1 | 2 | 3 | 4 | 5 | 6 | 7 |            |
| 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
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

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   |

first page prev page **1** next page last page 1 / 1 page

### 【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

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.

Address Table Config

MAC Management | MAC Learning and Aging | MAC Filter

Clear MAC: Clear appoint MAC ▼

VLAN: 1 Valid Range (1 to 4094)

MAC Address: 3C:97:0E:4F:57:F2

Save

#### 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:

Address Table Config

MAC Management | MAC Learning and Aging | MAC Filter

Port selection grid (ports 1-26) with icons for Optional, Fixed port, Selected, Aggregation, Trunk, and IP Source Enable Port.

MAC Learning Limit: 8191 (Learning Range 0-8191)

MAC Address Aging Time: 300 (0 indicates no aging, 10-1000000 second)

Save

#### 【parameter description】

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

#### 【Configuration example】

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

Address Table Config

MAC Management | MAC Learning and Aging | MAC Filter

Port selection grid (ports 1-26) with icons for Optional, Fixed port, Selected, Aggregation, Trunk, and IP Source Enable Port.

MAC Learning Limit: 2000 (Learning Range 0-8191)

Save

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

### 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:

#### 【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.

## 4.10. SNMP

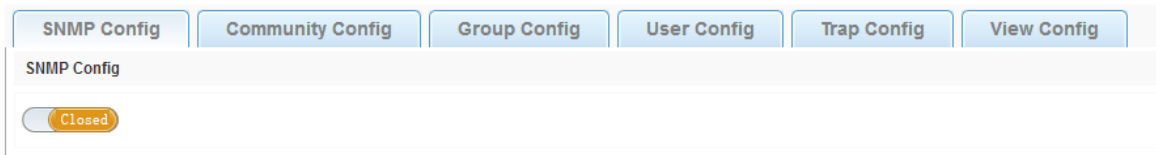
In the navigation bar to select "**SNMP**", you can set to the **Snmp config** and **Rmon config**.



#### 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:

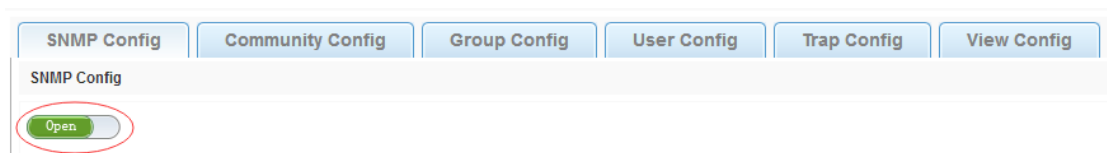


#### 【instruction】

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

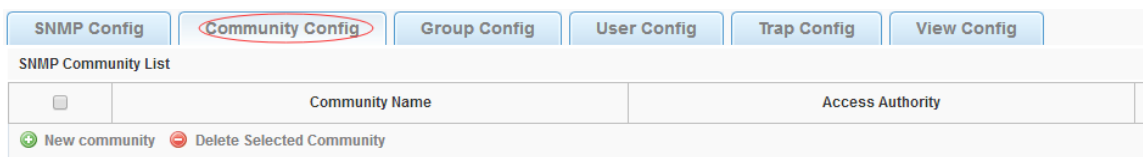
#### 【Configuration example】

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】

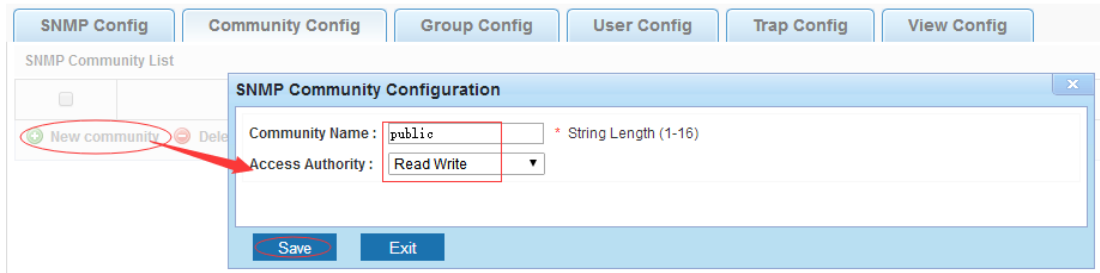
| Parameter        | Description                                                                                                                                                                                        |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.

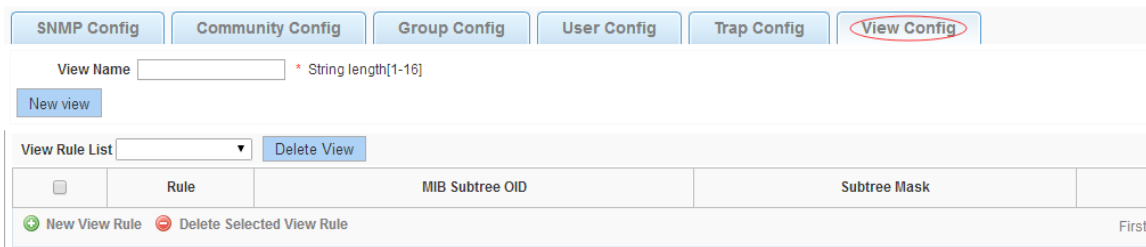
### 【Configuration example】

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

The image shows the 'SNMP Community Configuration' dialog box. It has a title bar with a close button. Inside, there are two input fields: 'Community Name' with the value 'public' and a note '\* String Length (1-16)', and 'Access Authority' with a dropdown menu set to 'Read Write'. At the bottom, there are 'Save' and 'Exit' buttons. A red circle highlights the 'New community' button in the background 'SNMP Community List' panel, with a red arrow pointing to the 'Community Name' field.

#### 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.

The image shows the 'View Config' interface. It has a navigation bar with tabs: 'SNMP Config', 'Community Config', 'Group Config', 'User Config', 'Trap Config', and 'View Config' (which is selected and circled in red). Below the tabs, there is a 'View Name' input field with a note '\* String length[1-16]' and a 'New view' button. Below that is a 'View Rule List' section with a dropdown menu and a 'Delete View' button. The main area contains a table with columns: 'Rule', 'MIB Subtree OID', and 'Subtree Mask'. At the bottom, there are buttons for 'New View Rule' and 'Delete Selected View Rule', and a 'First' button on the right.

### 【parameter description】

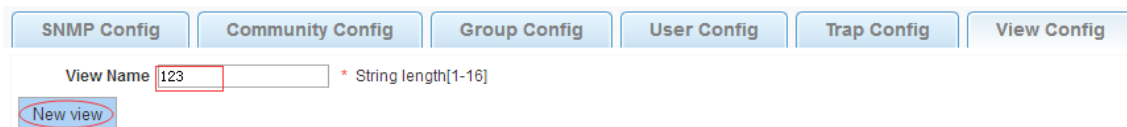
| Parameter       | Description                                              |
|-----------------|----------------------------------------------------------|
| View name       | View name                                                |
| include         | Indicate the MIB object number contained within 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                                             |

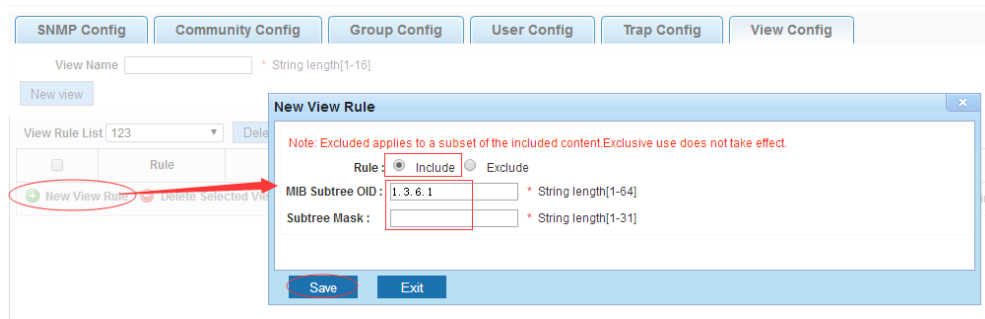
### 【instruction】

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

### 【Configuration example】

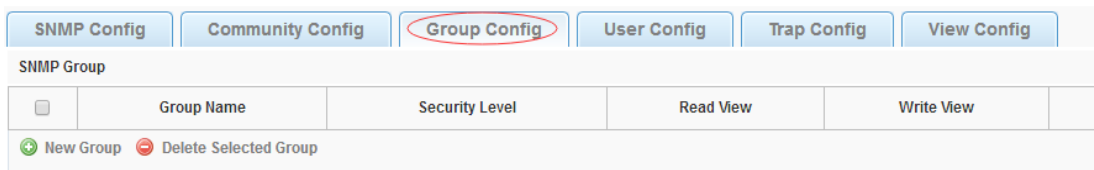
such as: establish a view 123 , MIB subtree oid .1.3.6.1 contain among them.

The image shows the 'View Config' interface with the 'View Name' input field containing the value '123'. The 'New view' button is circled in red.



#### 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                             | <p>Attestation not only encryption: this group of users transmission of the message need to verify the data don't need to confidential</p> <p>No authentication encryption: this group of users' messages don't need to verify data transmission also does not need to be kept secret</p> <p>Both authentication and encryption: this group of users need to verify the news of transmission and transmission of data need to be kept secret</p> |
| 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 the 'SNMP Group' configuration page. At the top, there's a 'View rule list' dropdown set to '123' and a 'delete view' button. Below is a table with columns: rule, MIB subtree OID, subtree mask, and operation. The table contains one row with 'included' rule, MIB subtree OID '.1.3.6.1', and an operation icon. Below the table are buttons for 'New view rule' and 'Delete select View rule'. At the bottom, there's a navigation bar with buttons: 'SNMP Config', 'Community Config', 'Group Config', 'User Config', 'Trap Config', and 'View Config'. Below the navigation bar is the 'SNMP Group' section with a table. The table has columns: Group Name, Security Level, Read View, Write View, and Notify View. The 'New Group' button is circled in red, and a red arrow points from it to the 'New group' dialog box. The 'New group' dialog box has fields for Group Name (group1), Security Level (Authentication and encryption), Read View (123), Write View (123), and Notify View (123). At the bottom of the dialog are 'Save' and 'Exit' buttons.

### 4.10.1.5. User config

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

The screenshot shows the 'SNMP User' configuration page. At the top, there's a navigation bar with buttons: 'SNMP Config', 'Community Config', 'Group Config', 'User Config', 'Trap Config', and 'View Config'. The 'User Config' button is circled in red. Below the navigation bar is the 'SNMP User' section with a table. The table has columns: User Name, Security Level, Group Name, Authentication Mode, Authentication Password, Encrypt Mode, Encrypt password, and Edit / Delete. The 'New User' button is circled in green. At the bottom right, there's a pagination bar with 'First', 'Back', 'Next', 'Last', and '1 / 1 Page'.

## 【parameter description】

| Parameter               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| User Name               | User name, range 1-16                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Security Level          | <p>Attestation not only encryption: this group of users transmission of the message need to verify the data don't need to confidential</p> <p>No authentication encryption: this group of users' messages don't need to verify data transmission also does not need to be kept secret</p> <p>Both authentication and encryption: this group of users need to verify the news of transmission and transmission of data need to be kept secret</p> |
| 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 .

The screenshot shows the 'New SNMP user' configuration window. The 'User Name' field is set to 'user1', 'Security Level' is 'Authentication and r', 'Group Name' is 'group1', 'Authentication Mode' is 'MD5', 'Authentication Password' is '12345678', 'Confirm Authentication Password' is '12345678', 'Encrypt Mode' is 'DES', and 'Encrypted Password' and 'Confirm Encrypted Password' are empty. The 'New User' button in the background is circled in red, and a red arrow points from it to the 'New SNMP user' dialog.

### 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:

The screenshot shows the 'Trap Destination Host' configuration page. The 'Trap Config' button in the navigation bar is circled in red. The page shows a table for 'Trap Destination Host' with columns: Destination IP Address, Security Name, UDP Port Number, and Security Mode. There are buttons for 'New Trap' and 'Delete Selected Trap'.

### 【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 hoset 192.168.2.30 receive trap information.

The screenshot shows the 'SNMP Config' interface with the 'Trap Config' tab active. A 'New Trap' dialog box is open, allowing configuration of a new trap destination. The fields are: Destination IP Address (192.168.1.30), Security Name (user1), UDP Port Number (162), and Security Mode (v1). A red arrow points from the 'New Trap' button in the background to the dialog box. The 'Save' button is highlighted in the dialog box.

## 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 'Rmon Statistics Group' configuration interface. The 'Statistics Group' tab is selected. A table titled 'Statistics Group List' is shown with columns: Index, Interface Name, Owner, and Edit / Delete. The table contains one row: 'New Count Group'. Below the table are buttons for 'New Count Group' and 'Delete Selected Count Group'. The 'First Back' button is highlighted.

## 【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.

The screenshot shows the 'Statistics Group Configuration' dialog box. It has three tabs: 'Statistics Group', 'History Group', and 'Event Group'. The 'Statistics Group' tab is active. Below the tabs is a 'Statistics Group List' table with columns: Index, Interface Name, and Owner. A red circle highlights the 'New Count Group' button in the list. A red arrow points from this button to the 'Index' field in the configuration form. The configuration form has three fields: 'Index' (value: 77), 'Interface Name' (value: interface Gi0/4), and 'Owner' (value: Coco). The 'Owner' field has a note '\* String length[1-30]'. At the bottom of the dialog are 'Save' and 'Exit' buttons. The 'Save' button is circled in red.

### 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.

The screenshot shows the 'History Group List' table. Above the table are four tabs: 'Statistics Group', 'History Group', 'Alarm Group', and 'Event Group'. The 'History Group' tab is circled in red. Below the tabs is a 'History Group List' table with columns: Index, Interface Name, Maximum Number of Samples, Sample Period, Owner, Status, and Edit / Delete. A red circle highlights the 'New History Group' button in the list. The table is currently empty. At the bottom right of the table is a pagination bar: 'First Back [1] Next Last 1 / 1 Page'.

## 【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.

The screenshot shows the 'History Group Configuration' dialog box. The 'Index' field is set to 222, 'Interface Name' is 'interface Gi0/4', 'Maximum Number of Samples' is 22222, 'Sample Period' is 23, and 'Owner' is 'a'. The 'Save' button is highlighted with a blue circle. In the background, the 'New History Group' button is circled in red, and a red arrow points from it to the dialog box.

### 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.

The screenshot shows the 'Event Group List' interface. The 'Event Group' tab is selected in the navigation bar. The interface shows a table with columns: Index, Description, Owner, Action, Status, and Edit / Delete. There are buttons for 'New Event Group' and 'Delete Selected Event Group'. A pagination bar at the bottom shows 'First Back [1] Next Last 1 / 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 .

The screenshot shows the 'Event Group Configuration' dialog box. It contains the following fields and values:

- Index: 345
- Description: 212
- Owner: Coco
- Action: ☒ Log, ☒ Trap

At the bottom of the dialog are 'Save' and 'Exit' buttons. In the background, the 'Event Group List' table is visible with a 'New Event Group' button circled in red and a red arrow pointing to the 'Index' field in the dialog.

### 4.10.2.4. Alarm group

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

The screenshot shows the 'Alarm Group List' table with the following data:

|                          | Index | Statistical Event | Statistical Group Index | Sampling Time Interval | Sample Type | Last Sample Count | Upper Alarm Threshold Limit | Upper Alarm Threshold Limit Events | Lower Alarm Threshold Limit | Lower Alarm Threshold Limit Events | Owner | Status | Edit / Delete |
|--------------------------|-------|-------------------|-------------------------|------------------------|-------------|-------------------|-----------------------------|------------------------------------|-----------------------------|------------------------------------|-------|--------|---------------|
| <input type="checkbox"/> | 123   | DropEvents        | 77                      | 123                    | Absolute    | 0                 | 12                          | 345                                | 3                           | 345                                | Coco  | active |               |

At the bottom of the table are buttons for 'New Alarm Group' and 'Delete Selected Alarm Group'. The 'Alarm Group' tab is selected in the navigation bar.

## 【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:CRCAAlignErrors. 9:UndersizePkts. 10:OversizePkts. 11:Fragments. 12:Jabbers. 12: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 .

Alarm Group Configuration

Index: 123 \* [1-65535]

Statistical Event: DropEvents

Statistical Group Index: 77

Sampling Time Interval: 123 \* Second(s)[5-65535]

Sample Type: Absolute

Owner: Coco \* String length[1-30]

Upper Alarm Threshold Limit: 12 \* [0-2147483647]

Upper Alarm Threshold Limit Events: 345

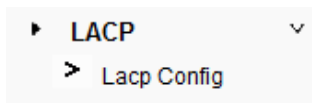
Lower Alarm Threshold Limit: 3 \* [0-2147483647]

Lower Alarm Threshold Limit Events: 345

Save Exit

## 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:

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

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 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                       |
| <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 checked="" 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"/> |

☐ 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 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

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 priority: 1 (0-65535)

Aggregate port number: 1

Aggregate model: active

Apply

**Port priority:** You can set to Port priority. Rang 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 Setting LACP Display

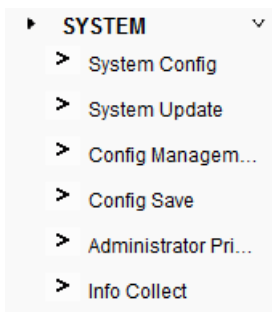
LACP list

| 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**.



## 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:

**System Settings** System Restart Password EEE Enable SSH Login Telnet Login

**Basic System Information**

Management VLAN: 1 \* Device MAC: 00:80:4C: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

Timeout(Minutes): 30

Save Delete Set Management VLAN

**System Time**

Current System Time: 2000-01-01 02:24:16

Set Time: [Time Picker]

☐ NTP Server

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.

Home Quickly Set

PORT VLAN Fault/Safety PoE STP

VLAN Settings Access Port Settings Trunk Port Settings Hybrid Port Settings

VLAN IDs

| VLAN ID | VLAN Name | VLAN IP        | Port      | Edit / Delete |
|---------|-----------|----------------|-----------|---------------|
| 1       | VLAN001   | 192.168.1.1/24 | 1-8,11-28 |               |
| 2       | VLAN002   |                | 9-10      |               |

New VLAN New Multiple VLAN Delete VLAN

First Back Next Last 1 / 1 Page

**Basic System Information**

Management VLAN:  \*

Management IP:  \*

Subnet Mask:  \*

Default Gateway:

Jumbo Frame :  (1518-9216)

DNS Server:

**Login**

Timeout(Minutes):

**Basic System Information**

Management VLAN:  \*

Management IP:  \*

Subnet Mask:  \*

Default Gateway:

Jumbo Frame :  (1518-9216)

DNS Server:

**Login**

Timeout(Minutes):

Device MAC:

Ipv6 Address :

Device Name:

Device Location:

Contacts(include mailbox):

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:  \*

Management IP:  \*

Subnet Mask:  \*

Default Gateway:

Jumbo Frame :  (1518-9216)

DNS Server:

**Login**

Timeout(Minutes):

Device MAC:

Ipv6 Address :

Device Name:

Device Location:

Contacts(include mailbox):

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

**System Time**

Current System Time: 2000-01-01 02:40:59

Set Time:

☐ NTP S

**Save**

Calendar: Apr 2019

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-----|-----|-----|-----|-----|-----|
| 31  | 1   | 2   | 3   | 4   | 5   | 6   |
| 7   | 8   | 9   | 10  | 11  | 12  | 13  |
| 14  | 15  | 16  | 17  | 18  | 19  | 20  |
| 21  | 22  | 23  | 24  | 25  | 26  | 27  |
| 28  | 29  | 30  | 1   | 2   | 3   | 4   |
| 5   | 6   | 7   | 8   | 9   | 10  | 11  |

Time: 11:40:37

**Clear Today OK**

#### 4.12.1.2. System restart

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

**System Settings System Restart Password EEE Enable SSH Login**

**System reboot**

**Restart**

#### 【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.

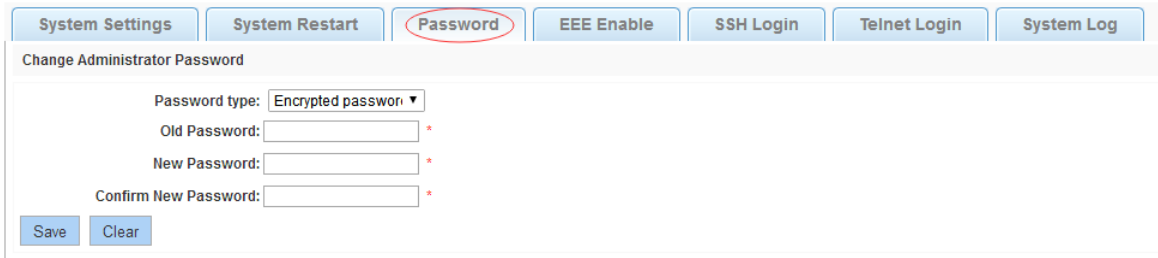
**System Settings System Restart Password EEE Enable**

**System reboot**

**Restart**

#### 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:



##### 【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.

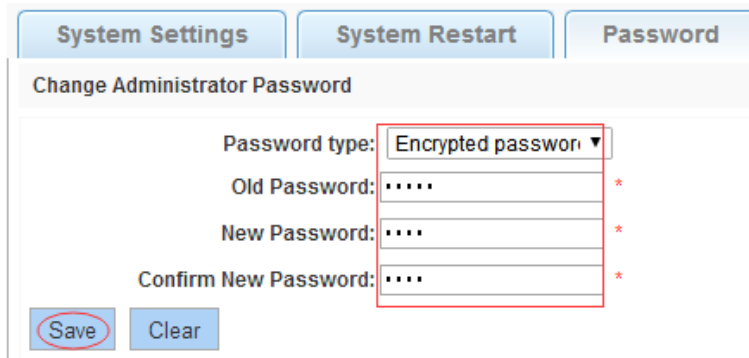
switch(config)# password admin

New Password:3456

Confirm Password:3456

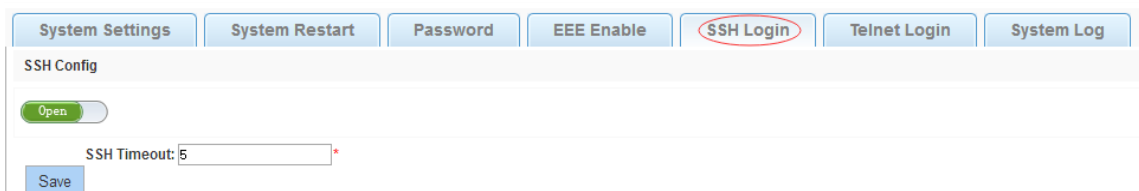
##### 【Configuration example】

Such as: amend the password to 1234.



#### 4.12.1.4. SSH login

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

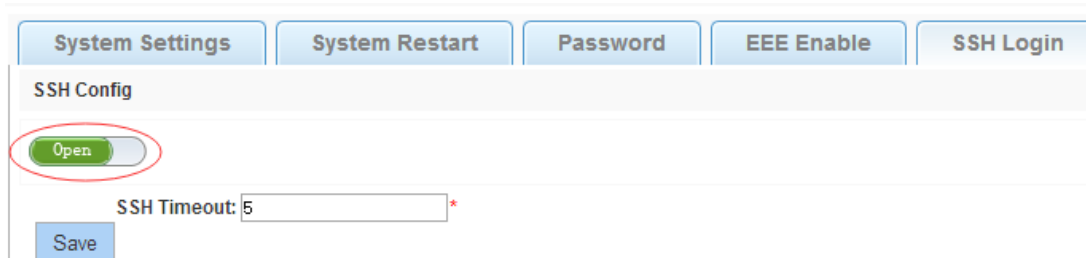


### 【instruction】

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

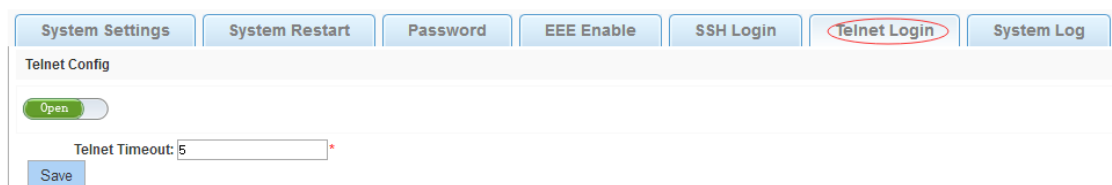
### 【Configuration example】

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



#### 4.12.1.5. Telnet login

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

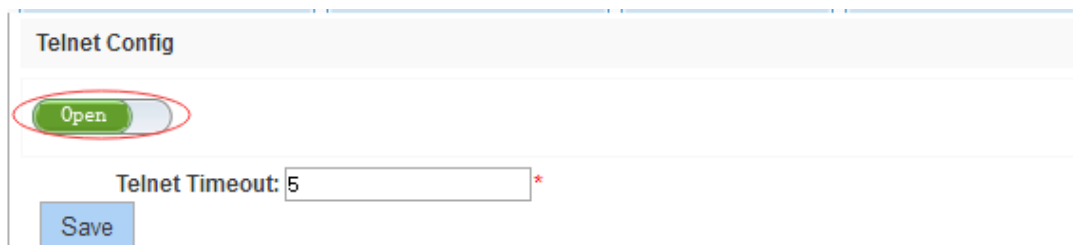


### 【instruction】

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 .



#### 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

mac

Search

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.

System Upgrade

Current Software Version: V103SP7D190110

File Name:

浏览...

Start Upgrade

#### 【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:



Import/Export Config
Restore Config
Factory Reset

Show Current Config
Export Config

☐ Backup
☒ 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:  switch.conf

3)backup.

Import/Export Config
Restore Config
Factory Reset

Show Current Config
Export Config

☒ Backup
☐ Import Configuration

File Name: .conf

Backup File List

| 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

| Name | Size | Time Stamp |
|------|------|------------|
|      |      |            |

☒ Restore Backup
☐ Delete Backup
☐ Save Backup
☐ Rename Backup

#### 【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

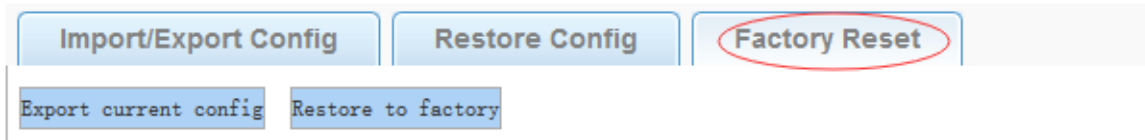
| Name                                        | Size  | Time Stamp          |
|---------------------------------------------|-------|---------------------|
| <input checked="" type="radio"/> 12357.conf | 4.00K | 07:19:00 2000-01-01 |
| <input type="radio"/> 1234.conf             | 3.49K | 02:47:46 2000-01-01 |

☐ Restore Backup
☐ Delete Backup
☐ Save Backup
☒ Rename Backup

Rename: .conf

#### 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 to add a new user. It includes a 'Password type' dropdown set to 'Encrypted password', and three input fields for 'User Name', 'New Password', and 'Confirm Password', each with a red asterisk and a range '(1 - 20)', '(4 - 20)', and '(4 - 20)' respectively. Below the form is a blue 'Add User' button. Underneath the form is a 'User List' table. The table has two columns: 'User Name' and 'Edit / Delete'. It lists two users: 'user' and 'admin'. The 'Edit / Delete' column contains icons for editing (a pencil) and deleting (a trash can). At the bottom right of the table, there is a pagination control showing 'First Back [1] Next Last 1 / 1 Page'.

| User Name | Edit / Delete |
|-----------|---------------|
| user      |               |
| admin     |               |

#### 【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:

This screenshot is similar to the previous one but includes red annotations. A red rectangle highlights the 'Password type' dropdown (set to 'Encrypted password'), the 'User Name' input field (containing '1234'), the 'New Password' input field (containing four black dots), and the 'Confirm Password' input field (containing four black dots). A red oval highlights the 'Add User' button.

#### 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 information, it may take a few moment .

##### 【Configuration example】

Such as: click on "collect" button .

