

User Guide

Network Management switch

24GE+4G SFP

NEXT-3028GL2-SFP

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Item Listing

Check the following contents of your package:

- Switch x 1
- User's Manual x 1
- Power Cord x 1
- Accessories(Rack Mount Accessory Kit x2, Rubber Feet x4, Screwx8)

If any part is lost and damaged, please contact your local agent immediately.

CHAPTER 1、 Product description

Thank you for purchasing this managed Switch.

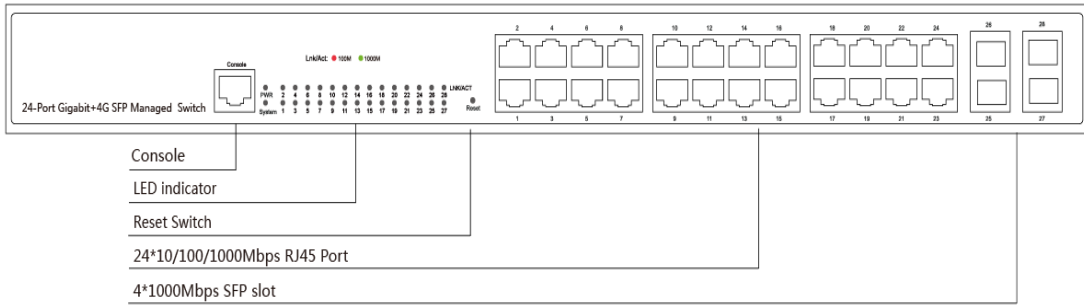
It is composed of excellent design and in general the development of switches.

It provides rich of two layer management function, has excellent of performance and friendly of management interface, can full meet user of need, including system configuration, and port configuration, and MAC bound, and MAC filter, and VLAN configuration, and SNMP configuration, and ACL configuration, and QOS configuration, and IP basic configuration, and AAA configuration, and MSTP configuration, and IGMP SNOOPING configuration, and GVRP configuration, and EAPS configuration, and RMON configuration, and cluster management, and ERPS configuration, and log management.

CHAPTER 2、 Appearance description

1 、 The front panel

Switch front panel:

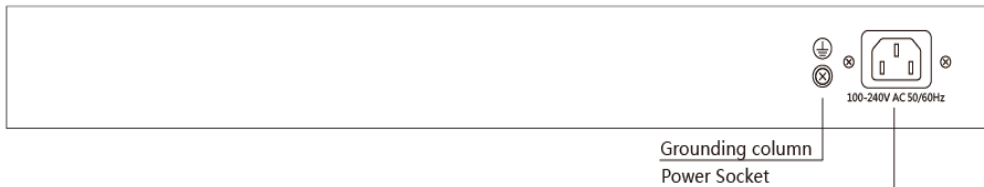


LED indicator light

LED	Color	Description
PWR	Green	Death: switch does not power on Permanent: the switch is powered on
System	Green	Blinking: the system works Out: the system is starting or has no power
LNK/ACT	Green Orange	Death: not connected to the network equipment Orange light: connected to 10/100Mbps devices Green light: connected to 1000Mbps devices Blinking: connected devices are data transmission

2、 Back panel

Back panel: AC power connector, AC input range 100-240V, 50/60HZ, a grounding screw holes.



Power socket

Connect the female connector of the power cord here, and the male connector to the AC(Alternating Current) power outlet. Please make sure the voltage of the power supply meets therequirement of the input voltage.

Grounding column

The switch already comes with lightning protection mechanism. You can also ground the switchthrough the PE (Protecting Earth) cable of AC cord or with Ground Cable.

CHAPTER 3、 Installation of equipment

Announcements

To prevent equipment damage and personal injury caused by improper use, please observe the following precautions:

Before cleaning switch should switch power supply plug pulled out. Do not use wet cloth to wipe the switch, do not use liquid to clean the switch;

Do not switch on the water or wet places, and prevent water or moisture from entering the switch chassis;

Do not place the switch box in unstable or table, in case of fall, will cause serious damage to the switch;

Should maintain good indoor ventilation and keep the ventilation holes of the switch open;

Switch to the proper voltage to work properly, make sure the switch working voltage matches the voltage indicated;

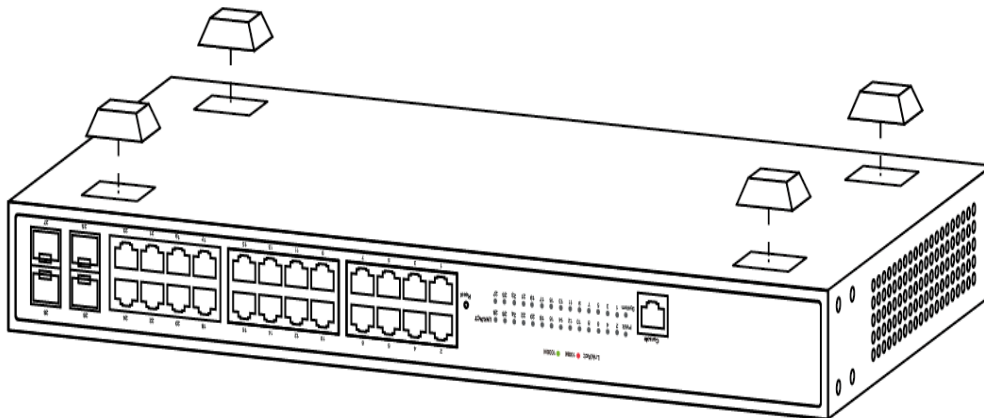
To reduce the risk of electric shocks, switches, do not open the enclosure, even in neutral situations or don't turn on the switch chassis.

1、 Desktop installation

Placed the bottom of the switch on large enough and stable desktop;

Tear off pad surface of the paste that comes with random paper, paste the pad to switch the Groove at the bottom of the housing to prevent external vibrations;

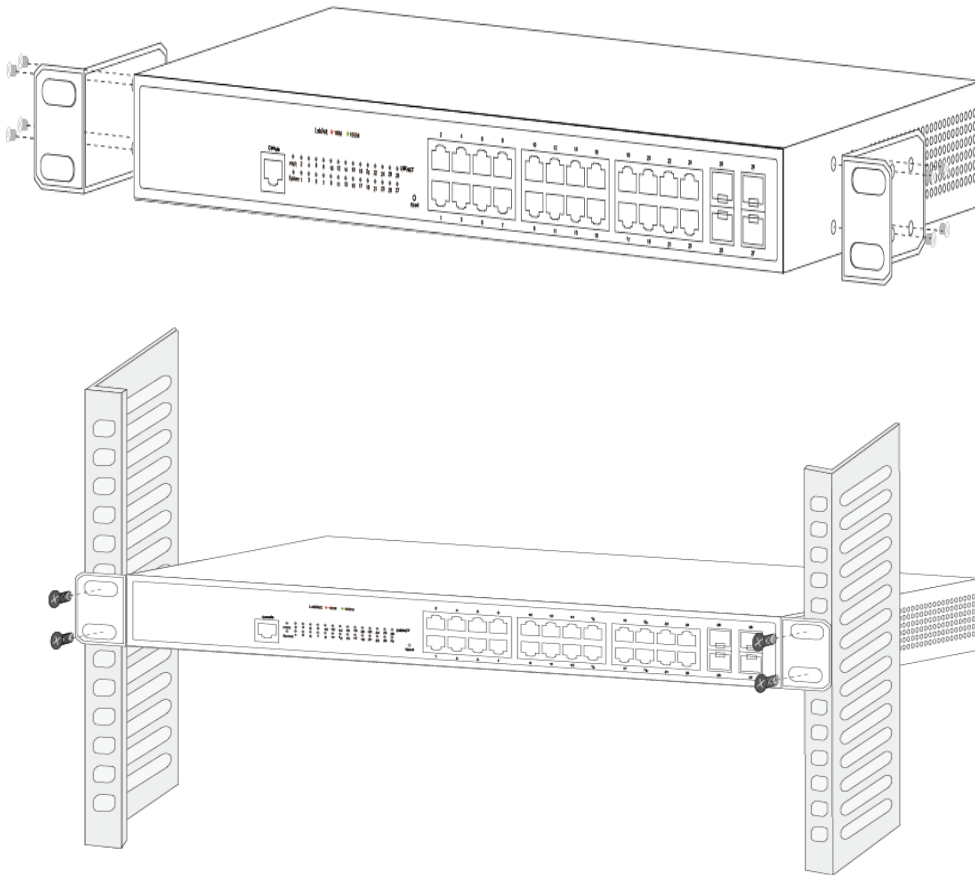
Resetting the switch on the Workbench cautiously.



2、 Rack Installation

Check EIA-19inch machine Cabinet of grounding and stability, first, with screws will installation hanging ear fixed in switch front Panel sides will switch placed in machine Cabinet of a bracket, along machine Cabinet guide slot Mobile switch to right location, then, with screws will installation hanging ear fixed in machine Cabinet ends of fixed guide slot, ensure switch stable to installation in machine Cabinet slot bit of bracket. Equipment mounting brackets are not used for load-bearing, it only plays the regular role. When

installing the equipment cabinet, box bottom bracket (fixed on the Cabinet) to support the device.



3、 Turn on switch

Please connect the AC power cord into the rear of the switch and to an electrical outlet (preferably one that is grounded). When the switch is power on, the LED indicators flash momentarily for one second, which represents a resetting of the system.The Power LED indicator turns on green.

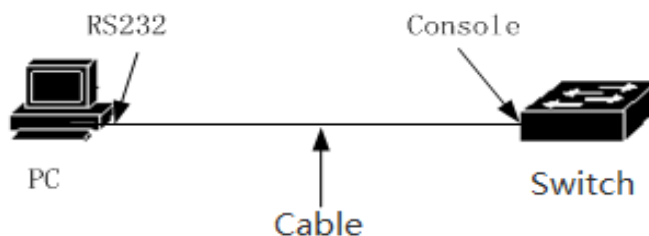
Note: Please confirm the voltage is correct before power on, otherwise the switch will be damaged.

(The power input is:100V-240Vac, 50/60Hz.)

4、 Connection Interface

3.4.1 Connection The monitor port has a monitor port (Console port), this section describes the characteristics of this monitoring port and how to use it.

First step: Rate 1200bps-115200bps, standard RJ45 plug. Use a dedicated monitoring cable to lead the port to the PC serial port connection, as follows:



The second step to start the terminal emulation software on the PC (such as: Windows HyperTerminal) can be configured for the switch, monitoring and other operations. The cable is supplied with the host. The terminal serial port communication parameters can be set as right: rate -115200bps, eight bits data bit, one stop bit, no parity bit, no flow control. The communication parameters of HyperTerminal are configured as follows:

The port may be manually entered or selected from the list.

Port: COM5 USB Serial Port

Baud rate: 115200

Data bits: 8

Parity: None

Stop bits: 1

Name of pipe:

Flow control

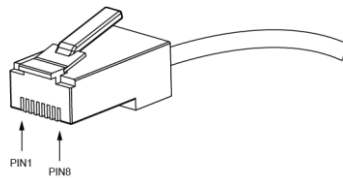
DTR/DSR

RTS/CTS

XON/XOFF

Serial break length: 100 milliseconds

the RJ45 connector used by the Console port is shown in the figure below, and the RJ45 plug corresponds to the RJ45 socket, from left to right numbered from 1 to 8.



Console Port PIN Definition:

Pin number	English name	Jane note
One	CD	No connect
Two	RXD	Input
Three	DSR	No connect
Four	TXD	Output
Five	RTS	No connect
Six	CTS	No connect
Seven	DTR	No connect
Eight	SG	GND

NOTE: The switch console port does not support the flow control function, so when the switch is configured with HyperTerminal, the data flow control should be set to "none", otherwise the problem of HyperTerminal single pass will occur. This cable is used to connect the console port of the switch to the external monitoring terminal. One end of the RJ45 eight-pin plug, the other end is a 25-hole plug (DB25) and 9-hole plug (DB9), RJ45 head into

the switch's console port socket, DB25 and DB9 can be used according to the requirements of the terminal serial port, the cable internal connection schematic as follows:

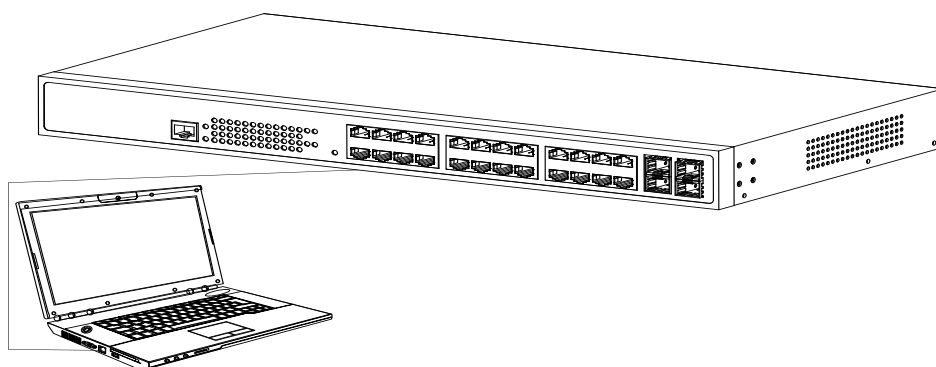


NOTE:

Enter "?" in the console Port command line interface Command action tips to see what features are available in pre-mode

CHAPTER 4、 LOGIN WEB

- 1、 Connect the power of the switch and connect the control host (PC) to the switch with a network cable.



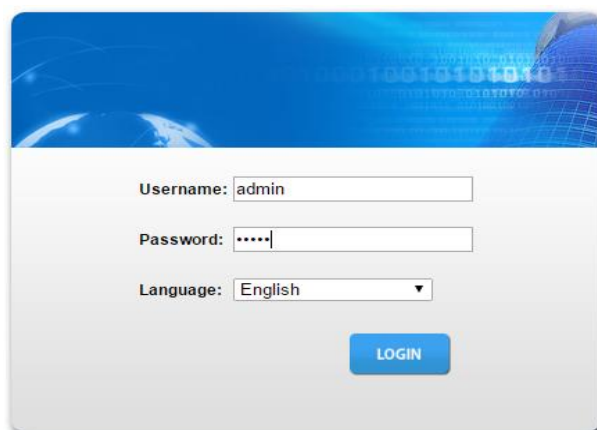
- 2、 This switch provides web login management. The default login information is as follows:

Type	Default parameter
IP address	192.168.2.1
Username	admin
Password	admin

3. Open the browser, enter `http://192.168.2.1` in the address bar, press the Enter key to open the web login interface. (Please make sure the browser version is up to date)



In the web login interface of the switch, enter the login user name, login password, and click login to enter the switch web control interface. The language column English and Simplified Chinese is available for users to choose.

A screenshot of a web login interface. The interface has a blue header with a globe and binary code. Below the header, there are three input fields: 'Username: admin', 'Password:', and 'Language: English'. Below these fields is a blue button labeled 'LOGIN'.

After logging in, you can see the switch web control interface.

Information Name	Information Value	Edit
System Hostname	Switch	Edit
System Location		Edit
System Contact		Edit
MAC Address	00-E0-4C-23-08-07	
Serial Number	G1GB0US007211	
IP Address	192.168.5.15	
Subnet Mask	255.255.255.0	
Gateway	0.0.0.0	
Device Type	switch	
Hardware Version	1.00	
Software Version	V103SP7D190920	
Firmware Compile Date	Fri_Sep_20_17:16:17_2019	
System Running Time	1 hour 30 minutes 57 seconds	

CHAPTER 5、 Switch management configuration

1、 System Status

1.1、 system information

The system basic information provides information about the device name, device location, contact information, MAC address, serial number, IP address, subnet mask, gateway, device model, hardware version, software version, firmware compilation, and system runningtime.

System Basic Information			
System Basic Information			
Information Name	Information Value	Edit	
System Hostname	switch-123	Edit	
System Location	china	Edit	
System Contact	07234343120	Edit	
MAC Address	10-F0:13:F1:53:42		
Serial Number	G1GB0US007211		
IP Address	182.168.2.39		
Subnet Mask	255.255.255.0		
Gateway	0.0.0.0		
Device Type	switch		
Hardware Version	1.00		
Software Version	V103SP7D190808		
Firmware Compile Date	Thu_Aug_08_11:01:14_2019		
System Running Time	3 hours 16 minutes 49 seconds		

The web interface provides editing of three pieces of information such as device name, device location, and contact information.

- System hostname: Click the Edit button, the following pop-up window appears, enter the device name you want to set in the box, click Save to complete the configuration.

System Setting ✕

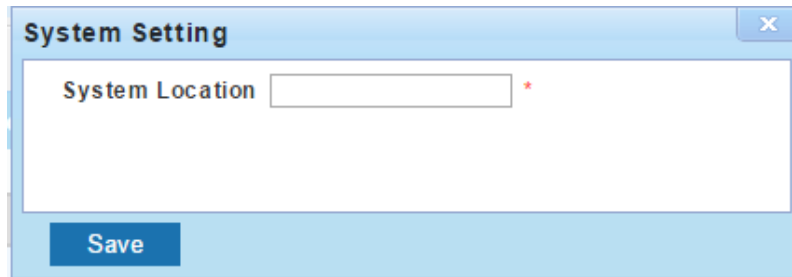
System Hostname *

Save

To save, click the Save button in the upper left menu bar. (All configuration saves need to click the save button, and will not be described later)

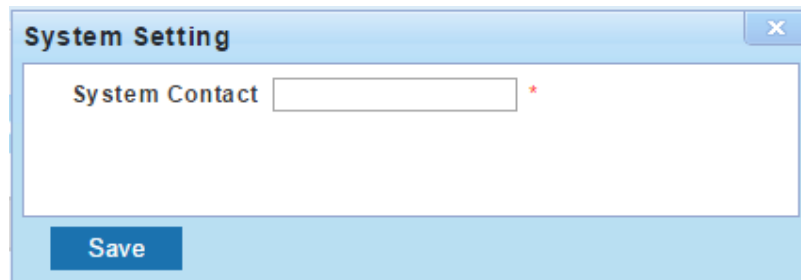
- System location: Click the Edit button, the following pop-up

window appears, enter the device location you want to set in the box, click Save to complete the configuration.



The screenshot shows a dialog box titled "System Setting" with a close button (X) in the top right corner. Inside the dialog, there is a text input field labeled "System Location" with a red asterisk to its right, indicating a required field. Below the input field is a blue "Save" button.

- System Contact: Click the Edit button, the following pop-up window appears, enter the contact information you want to set in the box, click Save to complete the configuration.



The screenshot shows a dialog box titled "System Setting" with a close button (X) in the top right corner. Inside the dialog, there is a text input field labeled "System Contact" with a red asterisk to its right, indicating a required field. Below the input field is a blue "Save" button.

1.2、 IP configuration

IP configuration function allows users to configure the IP address of the target VLAN. First, you need to create a VLAN in the VLAN function module, and then configure and manage the IP of the corresponding VLAN in the IP configuration function module. The system creates VLAN1 by default.

IP Config

Management VLAN

Mode Static DHCP

IP Address

Subnet Mask

Gateway

VLAN_ID	DHCP State	IP Address	Subnet Mask	Gateway
3	static	192.168.2.39	255.255.255.0	0.0.0.0
1	static	192.168.5.13	255.255.255.0	0.0.0.0

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- Save : Change the configuration of the VLAN with the configured IP address under the IP configuration function. Click save when the change is complete.
- Delete: For the VLAN with the configured IP address, click the Delete button to clear the IP configuration information of the current VLAN.
- Set Management VLAN: Click Set Management VLAN to configure IP for the created VLAN. Enter the VLAN ID to be configured in the Management VLAN box. Optional DHCP or static acquisition. DHCP does not need to fill in the IP address and other information. The static IP address and subnet mask must be filled in for static access. The gateway allows not to fill. After the configuration information is filled out, if it is determined that the configuration , click save to save configuration, or click cancel to abandon.

1.3、 system time

System time, which mainly displays the current system time,

system time settings, and SNTP server settings.

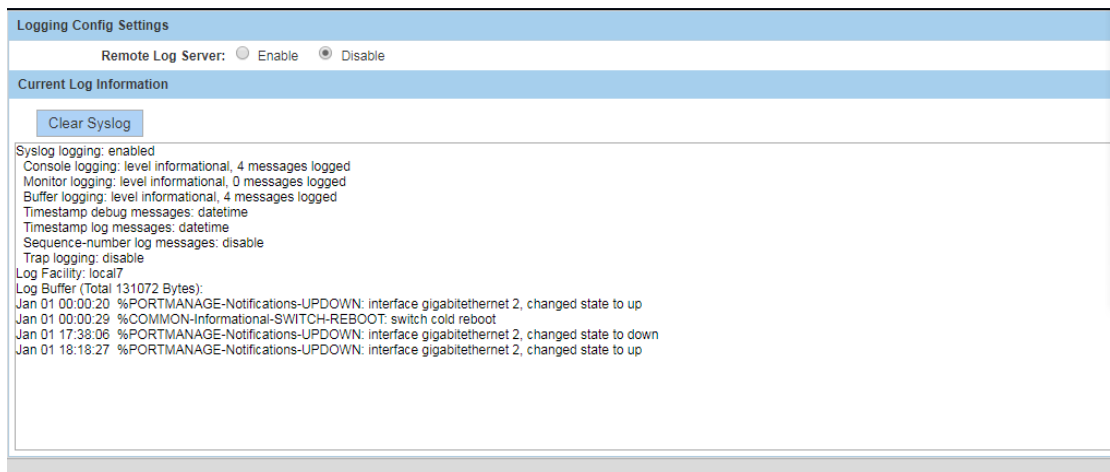


The screenshot shows the 'System Time' configuration page. It displays the 'Current System Time' as 2000/1/1 21:23:23. Below this, there is a 'System Time Setting' field which is currently empty. A checkbox labeled 'SNTP Server' is present and is unchecked. At the bottom left of the configuration area, there is a blue 'Save' button.

- SNTP server: Select the SNTP server IP, management VLAN, daylight saving time, time zone
- Save: For the configured system time, click the save button to save the current system time.

1.4、 system logging

System log, including log configuration and current log information.



The screenshot shows the 'Logging Config Settings' page. At the top, there is a section for 'Remote Log Server' with radio buttons for 'Enable' and 'Disable', where 'Disable' is selected. Below this is the 'Current Log Information' section, which contains a 'Clear Syslog' button. The log information is displayed as follows:

```
Syslog logging: enabled
Console logging: level informational, 4 messages logged
Monitor logging: level informational, 0 messages logged
Buffer logging: level informational, 4 messages logged
Timestamp debug messages: datetime
Timestamp log messages: datetime
Sequence-number log messages: disable
Trap logging: disable
Log Facility: local7
Log Buffer (Total 131072 Bytes):
Jan 01 00:00:20 %PORTMANAGE-Notifications-UPDOWN: interface gigabitethernet 2, changed state to up
Jan 01 00:00:29 %COMMON-Informational-SWITCH-REBOOT: switch cold reboot
Jan 01 17:38:06 %PORTMANAGE-Notifications-UPDOWN: interface gigabitethernet 2, changed state to down
Jan 01 18:18:27 %PORTMANAGE-Notifications-UPDOWN: interface gigabitethernet 2, changed state to up
```

- Remote log server: The user selects whether to enable or disable the remote log server. You need to configure the server IP, send the log level, and click Save Settings to complete the configuration.

Logging Config Settings

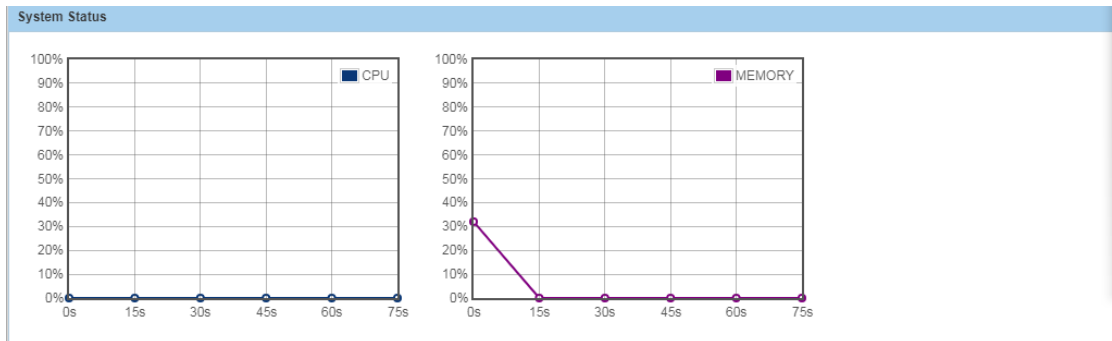
Remote Log Server: Enable Disable

Server IP:

Send Log Level:

1.5、 system status

System status, including status of CPU and MEMORY.



2、 Port configuration

2.1、 basic setting

Basic configuration of the port, including Port select, port enable, port description, speed, duplex, MDIX, and flow control.

Port Basic Setting

Port Select: Enable Disable

Port Description:

Speed: Duplex: MDIX: Flow Control: Disable

Port	Port Description	Enable State	Link Status	Set Speed	Act Speed	Set Duplex	Act Duplex	MDIX	Set Flowcontrol	Act Flowcontrol
Gi1		Enable	DOWN	auto	auto	auto	auto	auto	OFF	OFF
Gi2		Enable	UP	auto	100Mbps	auto	full	auto	OFF	OFF
Gi3		Enable	DOWN	auto	auto	auto	auto	auto	OFF	OFF
Gi4		Enable	DOWN	auto	auto	auto	auto	auto	OFF	OFF
Gi5		Enable	DOWN	auto	auto	auto	auto	auto	OFF	OFF
Gi6		Enable	UP	auto	100Mbps	auto	full	auto	OFF	OFF
Gi7		Enable	DOWN	auto	auto	auto	auto	auto	OFF	OFF
Gi8		Enable	DOWN	auto	auto	auto	auto	auto	OFF	OFF

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- Port select: Select the destination port to configure the port. Click the drop-down menu of the selected port and select the corresponding port to perform subsequent configuration on the port.
- Port enable: Enable or disable this port, the default state is enabled.
- Port description: The user can add a description to the port so that the user can mark the port accordingly.
- Speed: Click the drop-down menu in the box below the speed, there are 10Mbps, 100Mbps, 1000Mbps, auto-negotiation port rate to choose from, the default state is auto-negotiation.
- Duplex: Click the drop-down menu to select the port duplex mode. There are duplex, half-duplex, and auto-negotiation to choose from. The default state is auto-negotiation.
- MDIX: Click the drop-down menu to select the port MDIX mode. There are MDI, MDIX, and auto-negotiation to choose from.
- Flow control: You can choose to enable or disable flow control, the default state is disabled.

Note: The port information table below the configuration area displays 8 ports of information on each page. When there are multiple pages, you can click the next to view the port information in the remaining tables.

2.2、 Port mirroring

The port mirroring function module allows the user to configure one port as a mirror of one or more other ports. On the port mirroring configuration page, fill in the mirroring group number (1-4), select one or more source ports, and select the destination port (only one destination port can be selected in one configuration). Click save to complete the configuration of the mirrored port group.

The screenshot shows the 'Port Mirroring' configuration page. At the top, there is a 'Mirror Group Number (1-4)' input field. Below it, a message states: 'Please choose the source port: (Selecting multiple source ports can affect the device performance)'. This is followed by a grid of 28 port icons (numbered 1-28) with checkboxes. Below the grid are radio buttons for 'Enable', 'Disable', and 'Selected'. A 'Select All' button is also present. The next section is 'Please choose the destination port: (Can only choose one port)', with another grid of 28 port icons and radio buttons for 'Enable', 'Disable', and 'Selected'. A 'Save' button is located at the bottom left of the form area. Below the form is a table with the following structure:

Mirror Group	Source Port	Destination Port	Operating

- Mirror Group Number: Must be filled in and needs to be in the range of 1-4.
- Source Port: The source port of the mirroring group, can select one or more as the source port of the mirroring group. Although multiple ports can be selected as the source port, too many source ports can affect device performance. The port selected as the source port is not selectable in the destination port selection.

- Destination Port: The mirroring group destination port is the mirroring of the source port. Only one port can be selected as the destination port, and ports that are already the source port in any mirror group cannot be selected.
- Save: to save the mirroring group configuration.

Note: The mirroring group information table below the configuration area can view the information of the currently configured mirroring group and mirroring group port.

2.3、Port limit

Port speed limit function module, which can configure the input rate limit and output rate limit of each port. Select one or more ports in the configuration area, fill in the input rate limit, output rate limit, and click save to complete the current port rate limit configuration. (The rate range is 64-1000000Kbps)

Port Speed Limit

Select port to config speed limit:

2 4 6 8 10 12 14 16 18 20 22 24 26 28

1 3 5 7 9 11 13 15 17 19 21 23 25 27

Enable
 Disable
 Selected


Select All Select Invert Cancel

Input Speed Limit(must be multiple of 16)

Output Speed Limit(must be multiple of 16)

Port	Input Speed Limit	Output Speed Limit	Edit
Gi1	1000Mb/s	1000Mb/s	
Gi2	1000Mb/s	1000Mb/s	
Gi3	1000Mb/s	1000Mb/s	
Gi4	1000Mb/s	1000Mb/s	
Gi5	1000Mb/s	1000Mb/s	
Gi6	1000Mb/s	1000Mb/s	
Gi7	1000Mb/s	1000Mb/s	
Gi8	1000Mb/s	1000Mb/s	

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- Select port to config speed limit: Select the port for which you want to configure the rate limit. You can select one or more ports for configuration.
- Input speed limit: Configure the input rate limit upper limit, and the port input rate is limited to this rate.
- Output speed limit: Configure the output rate limit upper limit, and the port output rate is limited to this rate.
- Port speed limit configuration table: Below the configuration area is a port rate limit configuration information table, each page can display 8 port rate limit information, click the next page to view the next page port rate limit configuration information. When the rate limit is not configured, the default input and output rate of each port is limited to 1000 Mb/s. Click the icon () to edit and modify individual configured port configuration information.

2.4、 Storm control

Storm control module, where the user configures broadcast, multicast, and unicast storm restrictions. Configure storm control to respond when the packet rate reaches the upper limit of the configuration. This prevents port storms.

Storm Control

pps config bps config
 select port to storm control:

2 4 6 8 10 12 14 16 18 20 22 24 26 28
 1 3 5 7 9 11 13 15 17 19 21 23 25 27

Enable Disable Selected

Broadcast Limit:
 Multicast Limit:
 Unicast Limit:

Port	Broadcast Limit	Multicast Limit	Unicast Limit	Edit
Gi1	-	-	-	
Gi2	-	-	-	
Gi3	-	-	-	
Gi4	-	-	-	
Gi5	-	-	-	
Gi6	-	-	-	
Gi7	-	-	-	
Gi8	-	-	-	

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- Mode-based selection: Rate limiting provides two options for configuration. The pps-based configuration is based on the rate of packets sent per second. The bps-based configuration is based on the rate of bit sent per second.
- Select port: You can select one or more ports to configure as required.
- Limit packet type: You can select broadcast, multicast, or unknown unicast type packets at the same time or separately. Each type rate is 0-262143pps based on pps configuration. Each type is 0 or 16-4194288Kbps based on bps configuration. Where 0 means off. When the system reaches the rate limit by default, the corresponding port is downed.
- Save: save the current configuration and take effect. After the

configuration is complete, the configuration information table below the configuration area can view the configuration information of the configured ports.

Note: When configuring multiple groups, you need to choose the same rate unit calculation method.



2.5、Port isolate

Port isolate module, where the user configures port isolation. Each port isolation group allows one source port and one or more destination ports to be configured. The purpose is to prevent the source port from forwarding information to the destination port. Each isolation group simply isolates the source port from the destination port, also known as unidirectional isolation. If you need to form a two-way isolation, you need to configure an isolation group with the source port and destination port interchangeable.

Source Port	Destination Port	Operating
-------------	------------------	-----------

- **Select Port:** Allows you to select one port as the source port and one or more ports as the destination port. After selecting the port,

click Submit to complete the configuration of an isolation group.

- Port isolation configuration information table: After the configuration is complete, you can view the configured isolation group information in the table below the configuration area. Click the Edit button () to change the configuration of the isolation group in the configuration area. Click the Delete button () to delete the corresponding isolation group configuration.

2.6、 Port statistics

Port statistics module, where the user enables or disables port statistics. After the port statistics are configured, you can view the port input/output rate of the configured port in the current module. The port statistics table calculates the port rate in pps and bps and displays it to the user.

Select port to modify status:

2	4	6	8	10	12	14	16	18	20	22	24	26	28
1	3	5	7	9	11	13	15	17	19	21	23	25	27

Enable Disable Selected


Select All Select Invert Cancel

Please select a status:

Save

Port	Status	Interval	Input Rate(pps)	Input Rate(bps)	Output Rate(pps)	Output Rate(bps)	Operating
Gi1	Disable	300	NA	NA	NA	NA	
Gi2	Disable	300	NA	NA	NA	NA	
Gi3	Disable	300	NA	NA	NA	NA	
Gi4	Disable	300	NA	NA	NA	NA	
Gi5	Disable	300	NA	NA	NA	NA	
Gi6	Disable	300	NA	NA	NA	NA	
Gi7	Disable	300	NA	NA	NA	NA	
Gi8	Disable	300	NA	NA	NA	NA	
Gi9	Disable	300	NA	NA	NA	NA	
Gi10	Disable	300	NA	NA	NA	NA	

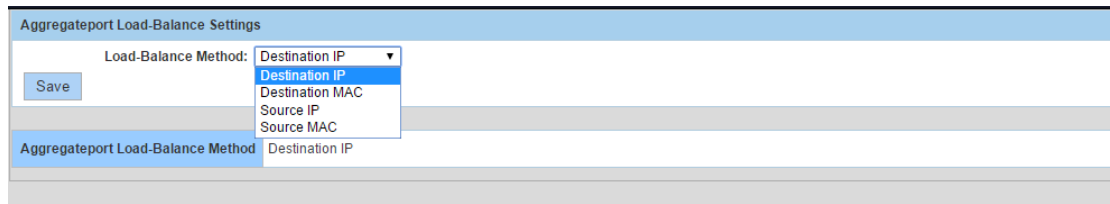
First Back [1] [2] [3] Next Last [1] / 3 Page

- Port select: Select the corresponding port and choose whether to enable port statistics configuration.
- Select status: After selecting the port, In the drop-down menu after selecting the status prompt, select whether to enable the port statistics status of the corresponding port, and click save to complete the configuration. The default state of each port is to disable port statistics.
- Port information statistics table: The port information statistics table below the configuration area shows the port statistics status, statistics interval, input rate (pps), input rate (bps), output rate (pps), and output rate (bps) of each port. Click the edit button () after each port information to edit and modify the port statistics enable status of the port.

3、 Link Aggregation

3.1、 load-balance setting

The load balancing mode is configured on the aggregation port, including static aggregation and LACP.

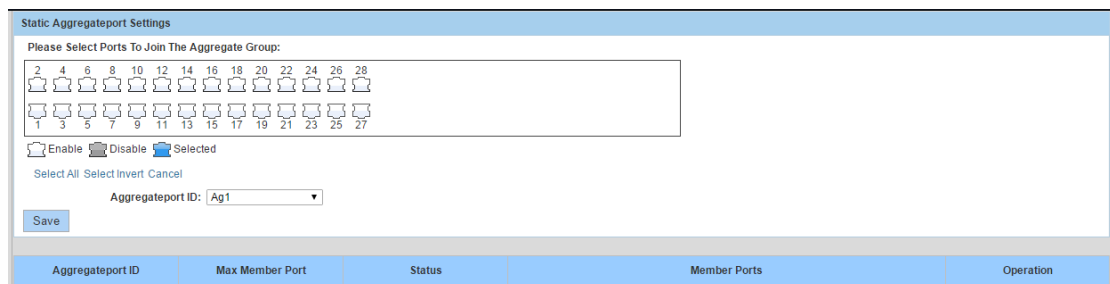


- Load-balance method: In the drop-down menu of the box, there are destination IP, destination MAC, source IP, and source MAC load balancing modes to choose from. Users can select the corresponding mode according to their needs. After selected, click Save to complete the configuration.

Note: There is a load balancing mode currently in use under the configuration area. After the configuration is complete, you can check whether the configuration takes effect in the table.


3.2、 static setting

Static aggregation function module, where users can manually configure static aggregation ports. Select one or more ports to be added to the aggregation group, select the aggregation port number, and click Save to complete the configuration of a static aggregation port.



- Select Ports join the aggregate: Add the corresponding ports to the

aggregation group. The ports in each aggregation group are logically aggregated into one port, that is, the aggregation port.

- **Aggregate Port ID:** Select the aggregation port number of the aggregation port from the drop-down menu. Note that the port and aggregation port number that have been used cannot be selected.
- **Link aggregation information table:** Below the configuration area, you can view the configured aggregation port information. Click the button () to delete the corresponding aggregation port configuration.

3.3、 LACP

3.3.1、 LACP global setting


This is LACP Global Setting function module. The user can enable or disable the LACP global state, and configure the LACP system priority and LACP interval. After the configuration is completed, click Save to complete the configuration.

- LACP global status: You can enable or disable LACP here. After you enable the LACP port configuration, you can complete LACP configuration.
- LACP system priority: Fill in the LACP system priority in the box, the data range is 1-65535.
- LACP tick interval time: Fill in the LACP interval in the box, the data range is 50-5000.

3.3.2、LACP Port setting

The LACP port setting module allows the user to add ports to the aggregation port group and set the port priority and set port mode of the aggregation port. The configured aggregate port information can be viewed under the configuration area.

Aggregate Port ID	Member Port ID	Port Status Flag	Port State	Port Priority	Port Operation Key	Operation
-------------------	----------------	------------------	------------	---------------	--------------------	-----------

- Select Ports to join the aggregate: Add the corresponding ports to the aggregation group. The ports in each aggregation group are logically aggregated into one port, that is, the aggregation port. Note that you cannot select a port that has joined an aggregation group.
- Aggregate Port ID : Select the port number of the current aggregation port from the drop-down menu. Note that you cannot select a port number that has already been used.
- LACP Port Priority: Configure the port priority of the aggregation port. The data range is 0-65535.
- Aggregate Port Mode: The drop-down menu selects the mode of the port and has an active or passive state to choose from.
- Link aggregation information table: Displays information about the configured aggregation port, including the member port ID, port status flag, port state, port priority, and port operation key. Click the button () to delete a member port in the aggregation port.

4、 VLAN configuration

4.1、 VLAN setting

The VLAN configuration function module allows users to add or delete VLANs and manage port configurations in a VLAN.

VLAN Settings					
<input type="checkbox"/>	VLAN ID	VLAN Name	IP Address	Port	Operation
<input type="checkbox"/>	1	VLAN0001	192.168.5.13/24	2-3,7-12	
<input type="checkbox"/>	3	VLAN0003	182.168.2.39/24	1-6	
<input type="checkbox"/>	5	VLAN0005			

First Back (1) Next Last 1 / 1 Page

- **Create New VLAN:** to Create a new VLAN , click to enter the creation of the new VLAN. Note that the VLAN ID (2-4094) must be filled in. By default, the VLAN name defaults to the VLAN ID. You can choose the ports to add to the VLAN. When creating a VLAN, only the VLAN ID must be filled in, and the name and port can be defaulted. Click the Cancel button to abandon this configuration.

Create New VLAN

VLAN ID(2-4094):

VLAN Name(1-32 characters):

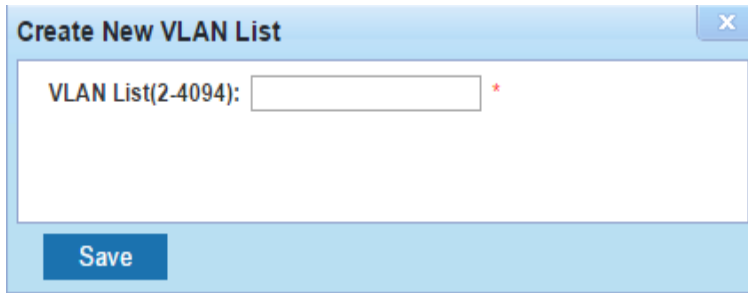
Select ports add to the VLAN:



<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	4	6	8	10	12	14	16	18	20	22	24	26	28		
<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	3	5	7	9	11	13	15	17	19	21	23	25	27		

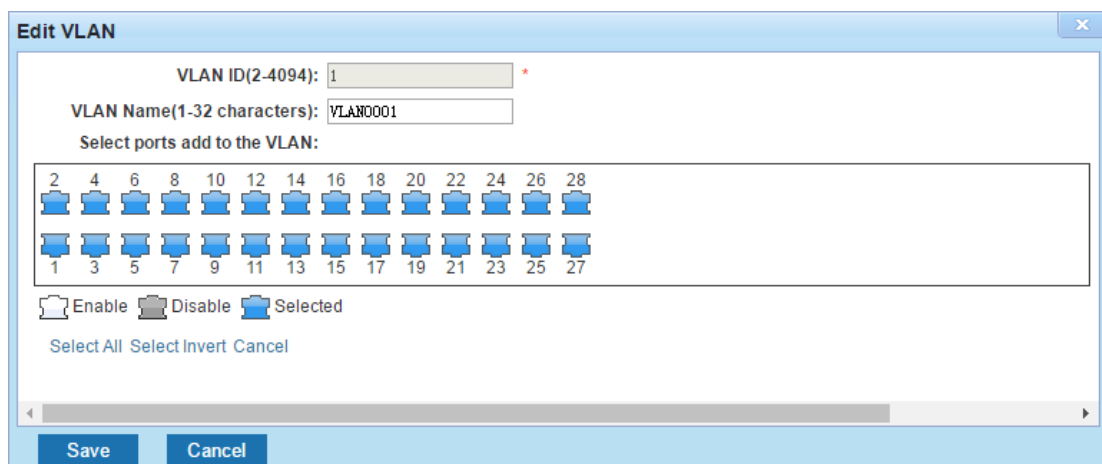
Enable Disable Selected

Select All Select Invert Cancel

- **New multiple VLAN:** Create new VLANs in batches.



- Delete VLAN: In the VLAN configuration information table, select the VLAN to be deleted. Click this to delete the VLAN option to complete the batch deletion of the VLAN.
- VLAN configuration information table : The table shows the information of the created VLAN , such as VLAN ID, name, IP address, port . Click the Edit button () to edit and modify the VLAN name and VLAN port member of the currently configured VLAN. Click button () on each VLAN to delete this VLAN information. (VLAN 1 is the default VLAN and no deletion option is provided).



4.2、 interface setting

4.2.1、 access Port settings


Access port settings module, where the user configures the port as an access port. The default port mode of the system is the access port.

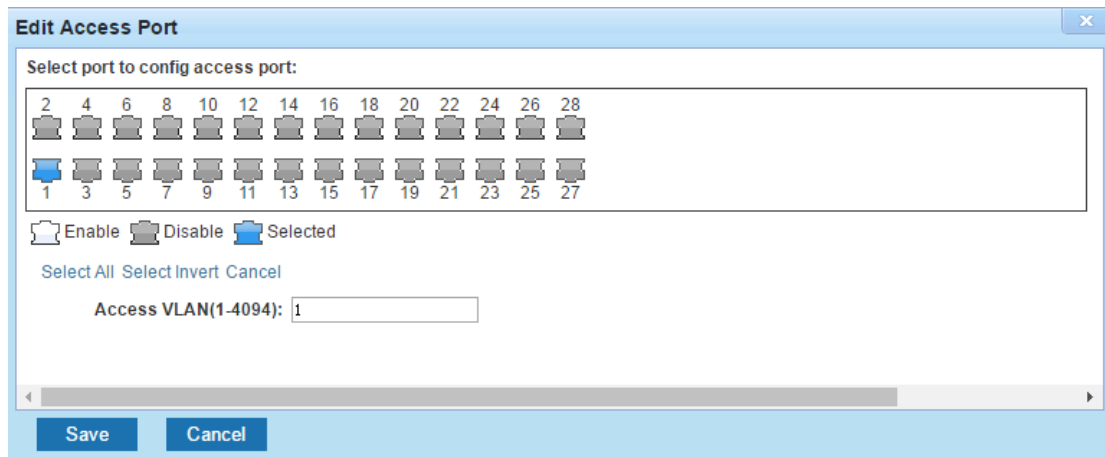


The screenshot shows a web-based network management interface. At the top, there are navigation links: Save, Logout, Reboot, and Refresh. Below this is a sidebar menu with categories like System Status, Port Configuration, VLAN Configuration, Interfaces Setting, MAC Address Table, Spanning Tree, ACL, QoS, Security, PoE Configuration, SNMP, and System Tool. The main content area is titled 'Access Port Settings' and contains a table with the following data:

Access Port ID	Port Description	Access VLAN	Operation
GI1		1	
GI2		1	
GI3		1	
GI4		1	
GI5		1	
GI6		1	
GI7		1	
GI8		1	

At the bottom of the table, there is a link 'Add Access Port' and a pagination control showing 'First Back [1] [2] [3] [4] Next Last [1] / 4 Page'.

- Add access Port: If the port is configured as a port of another type, you can select the port to add the access port and configure the port as the access port mode.
- Access Port settings information table: View the port information currently configured as the access port mode. The information includes the access port ID, port description, and access VLAN. Edit the port configuration by clicking the Edit button () after the corresponding port information.



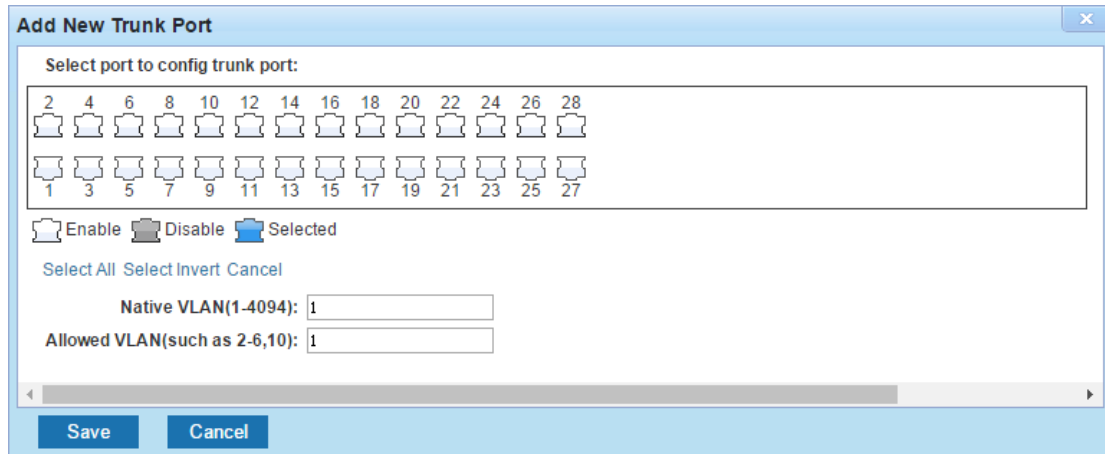
4.2.2、 Trunk Port settings



Trunk port configuration module. The user manages and configures the trunk port in this module.

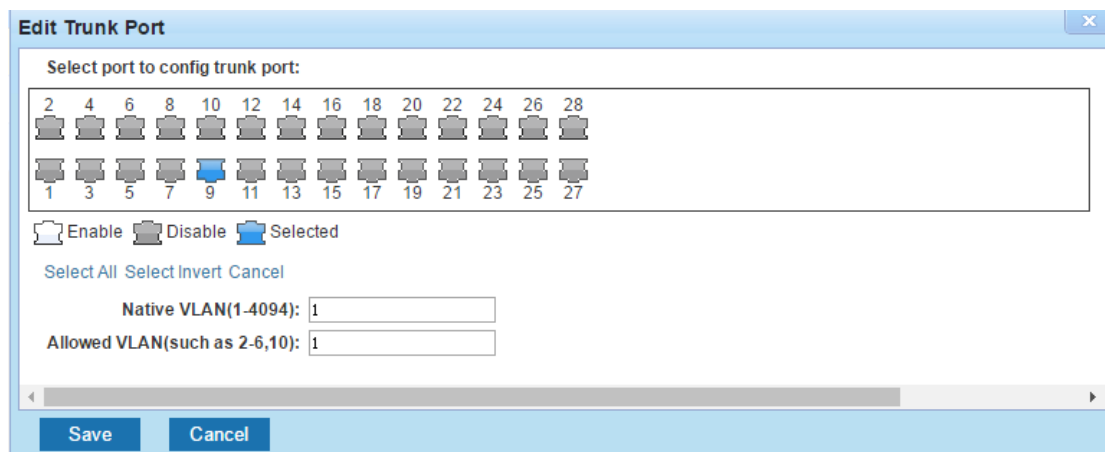
Access Port Settings		Trunk Port Settings		Hybrid Port Settings	
<input type="checkbox"/>	Trunk Port ID	Port Description	Native VLAN	Port Allowed VLAN	Operation
<input type="checkbox"/>	Gi7		1	1,3	
<input type="checkbox"/>	Gi8		1	1,3	

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- **Add Trunk Port:** Add one or more trunk ports, select the port to be configured as a trunk, fill in the Native VLAN (1-4094), fill in the allowed VLANs, and click Save to complete the addition of the new trunk port. Click Cancel to abandon this new trunk port to add configuration. (The VLAN used in the configuration must be the created VLAN)



- Delete selected Trunk Port: Delete the trunk port in batches. After checking the corresponding port in the Trunk port configuration information table, click Delete the selected Trunk port to complete the batch deletion of the Trunk port.
- Trunk Port configuration information table: The configured trunk port includes the trunk port number, port description, native VLAN, and port allowed VLAN information. Click the edit button () after each trunk information to edit the current trunk port. Click the Delete button () to delete the trunk port.



4.2.3、 Hybrid Port settings

Hybrid port configuration module. The user configures and manages Hybrid type ports in this module.

Access Port Settings	Trunk Port Settings	Hybrid Port Settings			
Hybrid Port ID	Port Description	Native VLAN	Untag VLAN	Tag VLAN	Operation
<input type="checkbox"/>	Gi2	1	1,3		
<input type="checkbox"/>	Gi3	1	1,3		

First Back [1] Next Last 1 / 1 Page

- Add new Hybrid Port: Add one or more Hybrid ports, select the port to be configured as Hybrid, fill in the Native VLAN (1-4094), fill in the Untag VLAN, Tag VLAN, and click Save to complete the addition of the new Hybrid port. Click Cancel to abandon this new Hybrid port add configuration. (The VLAN used in the configuration must be the created VLAN)

Add New Hybrid Port

Select port to config hybrid port:

2	4	6	8	10	12	14	16	18	20	22	24	26	28
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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"/>
1	3	5	7	9	11	13	15	17	19	21	23	25	27
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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"/>

Enable Disable Selected

Select All Select Invert Cancel



Native VLAN(1-4094):

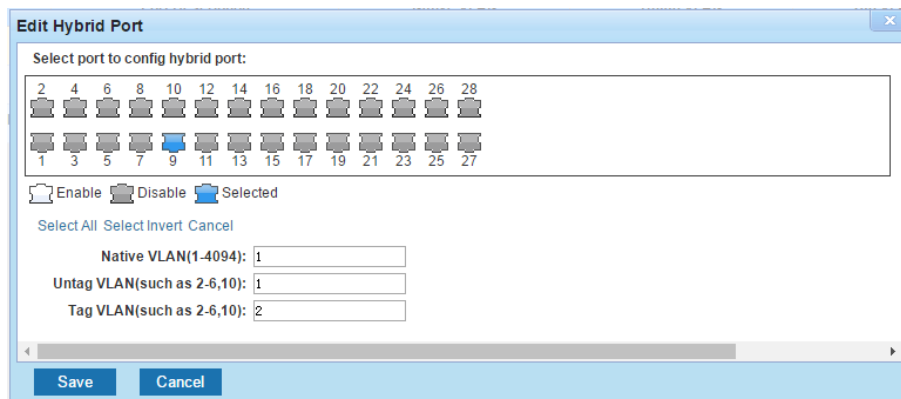
Untag VLAN(such as 2-6,10):

Tag VLAN(such as 2-6,10):

- Delete selected Hybrid Port: Delete the hybrid port of the Hybrid port in batches. In the Hybrid configuration table, select the port to be deleted. Click to delete the selected hybrid port to delete the

hybrid port.

- Hybrid configuration information table: The port number, port description, native VLAN, untagged VLAN, and tag VLAN information of the Hybrid port are configured. Click the Edit button () to edit and modify the corresponding configured Hybrid port. Click the Delete button () to delete the configured single Hybrid port.



5、MAC address table

5.1、MAC management

5.1.1、static MAC settings

Static MAC address configuration module. You can configure a static MAC address for a port in this module.

Static MAC Settings MAC Learning MAC Ageing

Select port to add static MAC:

2 4 6 8 10 12 14 16 18 20 22 24 26 28
 1 3 5 7 9 11 13 15 17 19 21 23 25 27

Enable Disable Selected

VLAN(1-4094):

MAC Address:

Select MAC address table type: All

Number	MAC Address	Port	VLAN	Type	Operation
1	4C:BD:8F:38:7E:B4	2	1	DYNAMIC	
2	00:0E:C6:BF:AD:8E	6	1	DYNAMIC	

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

- Select the port to which the static MAC address is added, fill in the VLAN ID (1-4094), MAC address, and click Save to complete the configuration of a static MAC address. After the configuration is complete, in the MAC address information table below the configuration area, you can choose to view all, static or dynamic (select the MAC address table in the drop-down menu after selecting the type of MAC address table). Click the Delete button () to delete the corresponding MAC address information.

5.1.2、MAC learning

The MAC learning module allows the user to configure the MAC learning limit of the corresponding port in the module.

Static MAC Settings MAC Learning MAC Ageing

Select port to config MAC learning:









2 4 6 8 10 12 14 16 18 20 22 24 26 28
 1 3 5 7 9 11 13 15 17 19 21 23 25 27

Enable Disable Selected



Select All Select Invert Cancel

MAC Learning Limit(0-8192):

Save

Port	MAC Learning Limit	Operation
Gi1	8192	
Gi2	8192	
Gi3	8192	
Gi4	8192	
Gi5	8192	
Gi6	8192	
Gi7	8192	
Gi8	8192	

First Back [1] [2] [3] [4] Next Last1 / 4 Page

- Select the port (one or more) to be configured, fill in the number of MAC learning restrictions (0-8192), and click Save to complete the MAC learning limit configuration. The configured MAC learning information table at the bottom of the configuration area to view the MAC learning limit information of all ports. Click the Edit button () after the corresponding port to configure the MAC learning limit for the corresponding port. When the edit button () appears in the blue box, change the MAC learning limit value in the configuration area and click Save.

5.1.3、MAC ageing

MAC ageing module , You can configure dynamic MAC address learning aging time in this module. The setting range is 0,10-1000000. Where 0 means no aging.

Static MAC Settings MAC Learning **MAC Ageing**

MAC Ageing Time(0,<10-1000000>:0 means no aging):

- Fill in the correct aging time in the check box after MAC aging time, and click Save to complete the aging MAC time configuration.


5.2、MAC filter

MAC filter module, Users can configure MAC filtering in this module to filter the configured MAC address in the corresponding VLAN.


MAC Filter Config

MAC Address:

MAC VLAN(1-4094):

Number	VLAN	MAC Address:	Type	Operation
1	5	00:0E:C6:BF:AD:8E	FILTER	

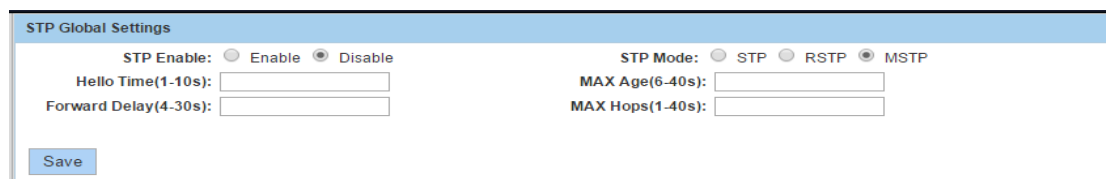
First Back [1](#) Next Last / 1 Page

- Fill in the correct MAC address in the MAC address box, fill in the VLAN ID (1-4094) in the MAC VLAN check box, and click Save to complete the MAC filtering configuration. (Note that the VLAN ID must be the VLAN that has been created)
- MAC filter configuration information table: After the configuration is complete. There is a configured MAC filtering information table below the configuration area. Click the Delete button () after the corresponding filtering information to delete the corresponding MAC filtering information.

6、spanning tree

6.1、 STP Global Setting

STP Global Setting module, The user performs the global configuration of the STP function here.



The screenshot shows the 'STP Global Settings' configuration window. It features a blue header bar with the title 'STP Global Settings'. Below the header, there are two columns of settings. The left column includes 'STP Enable' with radio buttons for 'Enable' and 'Disable' (where 'Disable' is selected), 'Hello Time(1-10s):' with an input field, and 'Forward Delay(4-30s):' with an input field. The right column includes 'STP Mode' with radio buttons for 'STP', 'RSTP', and 'MSTP' (where 'MSTP' is selected), 'MAX Age(6-40s):' with an input field, and 'MAX Hops(1-40s):' with an input field. A 'Save' button is located at the bottom left of the configuration area.

- STP Enable: The user can select enable or disable and decide whether to enable the STP function.
- STP Mode: The mode provides three options: STP, RSTP, and MSTP.
- Hello Time: The user enters the value in the specified range and configures the interval at which the switch sends BPDUs.
- MAX age: The user inputs the value within the specified range and configures the time. The port does not receive a packet within this event and initiates a topology change.
- Forward delay: The user inputs the value within the specified range and configures the state switching time of the port.

- MAX Hops: You can enter the maximum number of hops in the current MSTPregion to control the network size of the spanning tree. The maximum number of hops supported by the MSTP protocol is 40.
- Click the Save button to save the corresponding configuration.

Note: 1. $2 * (\text{hello time} + 1) \leq \text{maximum aging time} \leq 2 * (\text{forward delay} - 1)$.

2. When STP is enabled, the web page will wait 2 times for the forwarding delay time.

6.2、STP port setting

STP port setting module, Users can configure the STP port in this module.

The screenshot shows the 'STP Port Settings' configuration page. It features several configuration sections:

- Instance:** A dropdown menu.
- Portfast:** Radio buttons for Enable and Disable.
- Auto Edge:** Radio buttons for Enable and Disable.
- Bpdu Guard:** Radio buttons for Enable and Disable.
- Bpdu Filter:** Radio buttons for Enable and Disable.
- TC Guard:** Radio buttons for Enable and Disable.
- Priority (0-240, Multiple of 16):** A text input field.
- Path Cost (auto or 1-2000000000):** A text input field.
- Point To Point:** Radio buttons for Enable, Disable, and Auto.
- Compatible:** Radio buttons for Enable and Disable.
- Root Guard:** Radio buttons for Root and None.
- TC Ignore:** Radio buttons for Enable and Disable.

Below these settings is a grid of 28 ports, numbered 1 through 28. Port 1 is highlighted with a blue icon, indicating it is selected. A legend below the grid shows: Enable, Disable, and Selected.

At the bottom of the interface are two buttons: 'Save' and 'View STP Portinfo'.

- Instance ID: The user selects the created instance ID for configuration.
- Priority: The user sets the port instance priority here. The default is 128. You must enter a multiple of 16, ranging from 0 to 240.
- Port fast: Here, the user selects whether to enable the fast port

function. The fast port function enables the Layer 2 access port to immediately enter the forwarding state.

- Path Cost: The user selects auto or enters a specific value within the specified range to determine the path cost of each port to the root.
- Auto Edge: Automatic identification of edge ports. An edge port is a port that is not directly connected to any switch or indirectly connected to any switch through the network to which the port is connected.
- Point to point : The user can choose to enable, disable, or auto-configure whether the connection type of the interface is "point-to-point connection."
- Bpdu Guard: Enable this function to prevent an attacker from sending Bpdu on the port of the directly connected terminal to cause network flapping.
- Bpdu filter: If the Bpdu filtering function is enabled, the port does not participate in the spanning tree calculation. The port does not receive or send Bpdu packets.
- Compatible : The MSTI information is selectively transmitted according to the interface attribute information of the current port

to implement interconnection with other manufacturers.

- Root Guard: Enable the root protection function to prevent the status of the current root bridge from changing due to incorrect configuration or illegal packet attacks.
- TC Guard: Enable TC protection to prevent the spread of TC packets.
- TC ignore: TC filtering is enabled. The TC packets received on the port will not be processed.
- Click the Save button to submit the configuration. After completing this configuration, click the View STP Port Info button to view the configuration information.

6.3、MSTP setting

6.3.1、MSTP Instance Setting

MSTP instance setting module, Users can configure the MSTP instance in this module.

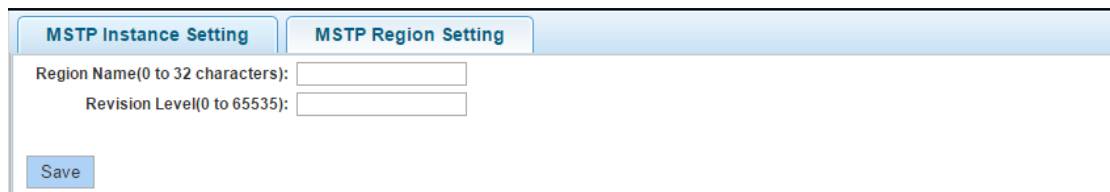
Instance ID	Mapping VLAN	Priority	Operation
0	1-4094	32768	

- Instance ID: The user selects the value from the drop-down menu and selects the configuration instance ID number.
- VLAN ID: The user enters the created VLAN ID and configures the VLAN for the instance mapping.
- Priority: The user selects a value from the drop-down menu and sets the instance priority.

Note: An instance can only be mapped to one VLAN. The instance and VLAN are one-to-one correspondence.

6.3.2、 MSTP Region Setting

MSTP Region setting module, Users can configure the MSTP Region in this module.





The screenshot shows a web-based configuration interface for MSTP Region Setting. It features two tabs: 'MSTP Instance Setting' and 'MSTP Region Setting', with the latter being the active tab. Below the tabs, there are two input fields: 'Region Name(0 to 32 characters):' and 'Revision Level(0 to 65535):'. A 'Save' button is located at the bottom left of the form area.




- Region Name: The user enters the number of characters in the specified range and configures the name of the region. (0~32 characters)
- Revision Level: The user enters a value within the specified range and configures the revision level parameter. (0~65535)

7、ACL

7.1、ACL time schedule

ACL time schedule module, Users can configure ACL schedules in this module.

Time Schedule Name	Period Weeks	Time Interval	Operation
test111	Monday	14:30-16:00	 

- ACL time schedule configuration: Fill in the correct ACL name with only numbers and letters after the time schedule name, select the weeks period, select the time interval, and click Save to complete the configuration of an ACL schedule.
- The Configured ACL time schedule information table: After the ACL time schedule is configured, the configured ACL time schedule is displayed at the bottom of the configuration area. Click the Edit button () after the corresponding timetable. When the blue box () appears, you can modify the corresponding schedule configuration in the configuration area. Click the Delete button () to delete the corresponding schedule configuration.

7.2、 ACL settings

7.2.1、 ACL settings

ACL settings module, The user configures an ACL in this module to add new or delete configured ACLs.

Priority	ACL Number	Permission	Index	Protocol	Source IP/Mask	Src Port	Destination IP/Mask	Dst Port	Time Name	Status	Operation
1	100	permit	10	ip	any/any	any	any/any	any	test111	inactive	✖

[Add New ACL](#) First Back [1] Next Last [] / 1 Page

- Add new ACL: Click to add a new ACL, select the ACL serial number, protocol number, permission, ACL time schedulename and other information, click Save to complete the configuration. Click Cancel to abandon this configuration. When the protocol number is IP, remove any source IP or any destination IP. You can select the source IP (or destination IP) type and fill in the corresponding source IP (or destination IP).

Add New ACL Entry

ACL Number: * Protocol:

Permission: Time Schedule Name:

Any Source IP:

Select Config IP Type:

Source IP:

Any Dst IP:

Select Dst IP Type:


Dst IP: Mask:

When the protocol number is UDP or TCP, the source (or destination) port number information allows to edit.

The screenshot shows a configuration window titled "Add New ACL Entry". The fields are as follows:

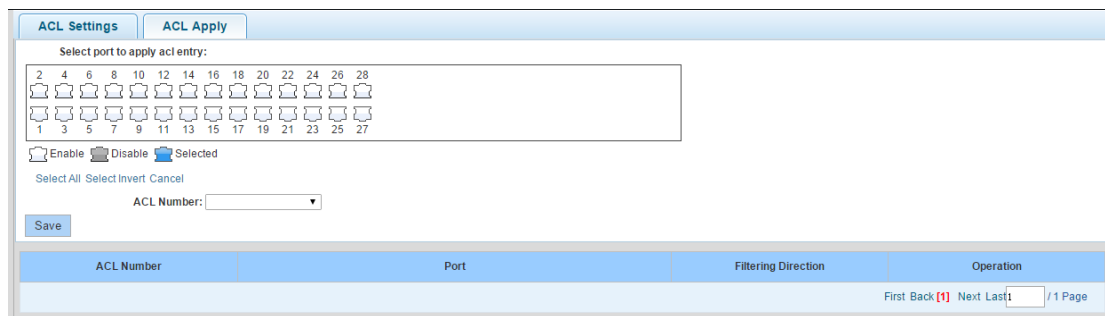
- ACL Number: 100
- Protocol: UDP
- Permission: Permit
- Time Schedule Name: test111
- Any Source IP:
- Select Config IP Type: Single IP
- Source IP:
- Any Source Port:
- Source Port(0-65535):
- Any Dst IP:
- Select Dst IP Type: IP/Mask Settings
- Dst IP:
- Mask:
- Any Dst Port:
- Dst Port(0-65535):




Buttons: Save, Cancel

- ACL settings information table: After the configuration is complete, you can view the configured ACL configuration table on the current page, including the priority, ACL number, permission, index, protocol , source IP/Mask, source port, destination IP/Mask, destination port, time name, status. Click deletion button () to delete the corresponding ACL configuration.

7.2.2、 ACL apply

ACL apply module, The user selects the corresponding port in the module to apply the ACL configuration.



- Select the port to apply the ACL rule, select the ACL number in the drop-down menu of the ACL number, and click Save to complete the configuration of the corresponding port ACL settings.
- ACL apply information table: The configuration information of the ACL application can be queried in the table. The information includes the ACL number, port, filtering direction. Click the corresponding Edit button () . When the blue box () appears, you can modify the configuration information of the ACL application in the configuration area. Click the Delete button () to delete the corresponding configuration information.

8、QoS

8.1、Queue basic setting

Queue basic setting module, The user configures the queue in this module.

QoS Basic Settings

QoS Queue Algorithm:

WFQ Weight(0-127):

- Qos Queue Algorithm: The user selects the desired configured queue algorithm from the drop-down menu as needed. When you need to configure weights, you need to configure the weight values. (4 modes are available: RR cyclic scheduling, SP absolute priority scheduling, WRR weighted cyclic scheduling, WFQ weighted fair scheduling)
- Save: Click the Save button to save the configuration content and complete the configuration to make it effective.

Note: Queue 7 cannot be 0.

8.2、QosQueueMapping

8.2.1、COS Queue Mapping

COS Queue Mapping module. Service categories can be mapped to the appropriate queues. The Users configure service category to queue mapping in this module.

Cos Queue Mapping Dscp Cos Mapping Port Cos Mapping

Please configure cos value mapping to queue:

Cos Value	Cos0	Cos1	Cos2	Cos3	Cos4	Cos5	Cos6	Cos7
Queue ID	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="5"/>	<input type="text" value="6"/>	<input type="text" value="7"/>

- Cos Value: That is, the priority cos field of the VLAN (0~7).
- Queue ID: Set the queue number (0~7) for each cos value mapping. Map the corresponding service to the destination queue. If you need to configure the queue weight, you can go to the queue to set the queue weight.
- Save: Click the Save button to save the current configuration and make it effective. Complete this configuration.

8.2.2、 DSCP COS Mapping

DSCP COS Mapping module that maps DSCP value to the COS value. The Users configure DSCP service mapping to COS in this module.

Please configure dscp value mapping to cos:

Dscp Value:	Dscp0	Dscp1	Dscp2	Dscp3	Dscp4	Dscp5	Dscp6	Dscp7	Dscp8	Dscp9	Dscp10	Dscp11	Dscp12	Dscp13	Dscp14	Dscp15
Cos Value:	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
Dscp Value:	Dscp16	Dscp17	Dscp18	Dscp19	Dscp20	Dscp21	Dscp22	Dscp23	Dscp24	Dscp25	Dscp26	Dscp27	Dscp28	Dscp29	Dscp30	Dscp31
Cos Value:	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
Dscp Value:	Dscp32	Dscp33	Dscp34	Dscp35	Dscp36	Dscp37	Dscp38	Dscp39	Dscp40	Dscp41	Dscp42	Dscp43	Dscp44	Dscp45	Dscp46	Dscp47
Cos Value:	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5
Dscp Value:	Dscp48	Dscp49	Dscp50	Dscp51	Dscp52	Dscp53	Dscp54	Dscp55	Dscp56	Dscp57	Dscp58	Dscp59	Dscp60	Dscp61	Dscp62	Dscp63
Cos Value:	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7

Save

- DSCP Value: The dscp field has 7 bits (0~63) divided into 4 tables.
- COS Value: Map dscp to the cos field (0~7) and map to the queue according to the mapping cos.
- Save : Click the Save button to save the current configuration and

make it effective. Complete this configuration.

Note: The cos priority is greater than dscp and the dscp priority is greater than the port.

8.2.3、 Port COS Mapping

Port COS Mapping module, Ports can be mapped to the appropriate service category. The user performs port-to-service class configuration on this module.

Please Select port to config qos mapping:

Port Number	Cos0	Cos1	Cos2	Cos3	Cos4	Cos5	Cos6	Cos7	Trust Mode
1	True								
2	True								
3	True								
4	True								
5	True								
6	True								
7	True								
8	True								

- Port: Select the port number to map the port to the appropriate service category.
- Cos value: Map to the cos value and then enter the queue based on the cos value.
- QoS Port Trust Mode: There are three modes of cos, dscp and none for users to choose.

- Save: Click the Save button to save the current configuration and make it effective. Complete this configuration.

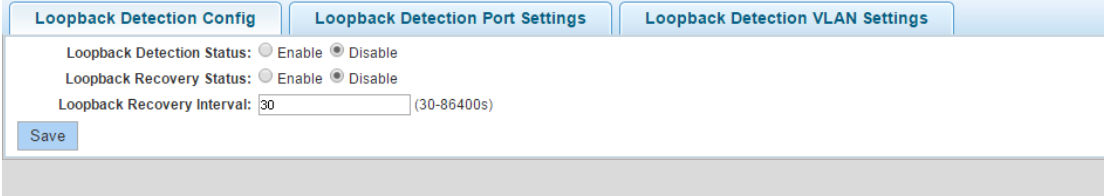
Note: The cos priority is greater than dscp and the dscp priority is greater than the port.

9、 security

9.1、 loopback detection

9.1.1、 loopback detection config

Loopback detection config module, In this module, the user selects the enable or disable of the loopback detection status, selects the enable or disable of loopback recovery status, and the setting of the loopback recovery interval.



The screenshot shows a configuration interface with three tabs: "Loopback Detection Config", "Loopback Detection Port Settings", and "Loopback Detection VLAN Settings". The "Loopback Detection Config" tab is active. It contains the following settings:

- Loopback Detection Status: Enable Disable
- Loopback Recovery Status: Enable Disable
- Loopback Recovery Interval: (30-86400s)

A "Save" button is located at the bottom left of the configuration area.

- loopback detection status : Global enable or disable loopback detection.
- loopback detection status : Enable or disable the automatic recovery status of the loopback detection link.



- Loopback recovery interval: Set the interval for loopback detection link recovery detection. The time interval ranges from 30 to 86400S.
- Save: saving the loopback detection configuration.

9.1.2、 loopback detection Port settings

The loopback detection port settings module allows the user to enable or disable loopback detection on the corresponding port and configure the loopback detection interval.

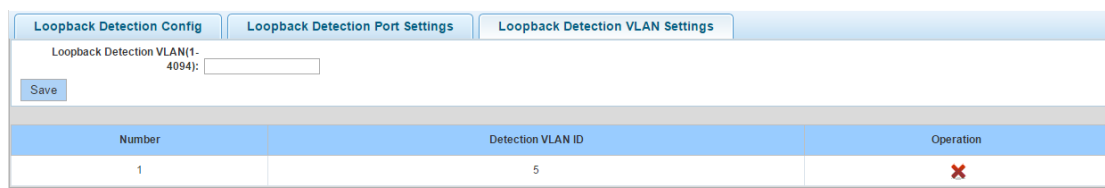
Interface	Detection Status	Detection Interval	Interface Status	Operation
Gi1	disable	30	Normal	
Gi2	disable	30	Normal	
Gi3	disable	30	Normal	
Gi4	disable	30	Normal	
Gi5	disable	30	Normal	
Gi6	disable	30	Normal	
Gi7	disable	30	Normal	
Gi8	disable	30	Normal	


- Loopback detection Port settings: Select the port to be configured for loopback detection, select Enable Loopback Detection Status (enabled or disabled, the default is enabled), set the detection interval (5-300S), and click Save to complete the configuration.
- Loopback detection Port setting information table: You can view

the loopback detection settings information of each port on the switch, including interface, detection status, detection interval, and interface status. Each page displays the loopback detection configuration information for eight ports. Click on the next to view subsequent content. Click the Edit button () of the corresponding port configuration information. When the blue box () appears, you can modify the configuration information of the corresponding port loopback configuration on the configuration area.


9.1.3、 loopback detection VLAN settings

Loopback detection VLAN settings module, The user configures the VLAN for loopback detection in this module.



Number	Detection VLAN ID	Operation
1	5	

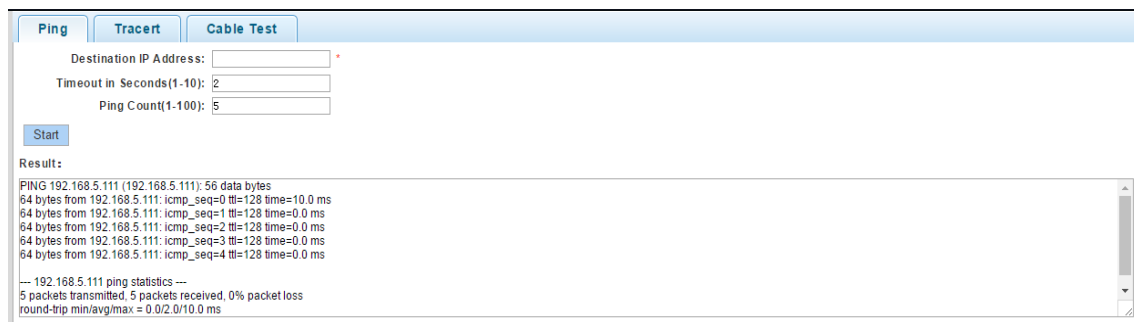
- Loopback detection VLAN settings: In the loopback detection VLAN check box, fill in the VLAN ID of the loopback detection VLAN (1-4094), and click Save to complete the configuration. Note that the VLAN must have been created.
- Loopback detection VLAN settings information table: Displays the

configured loopback detection VLAN information, including number and detection VLAN ID. Click the Delete button () after the corresponding loopback detection VLAN configuration information to delete the corresponding configuration information.

9.2、 Network Tool

9.2.1、 ping

The ping module, where the user pings, uses the PING function to detect network connectivity and clarify network connectivity.

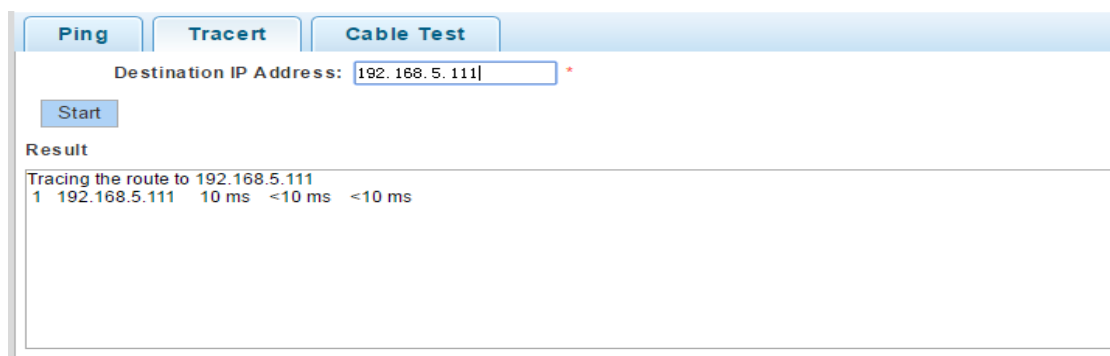


- Destination IP Address: The user inputs the destination IP address to be detected, and detects the network connectivity between the system and the target device.
- Timeout in seconds: User input timeout must be within the valid range (1~10) .
- Ping count: Configure the number of detections that need to be repeated, and need to be within the valid range (1~100) .

- Result: Showing the results of this test, the user judges network connectivity based on the information.

9.2.2、 Tracert

Tracert module, where Use the ICMP protocol to locate all routers between your device and the target computer.



- The user inputs the destination IP address to be traced, and then clicks the start button, and waits for the result of traceroute to be viewed in the result display area.

9.2.3、 Cable Test

The cable detection module allows the user to perform cable detection on the module to detect the cable connection status of the port.

- Select the appropriate port and start testing. After the test is completed, the system will display the test information in a table for the user to view.

10、SNMP

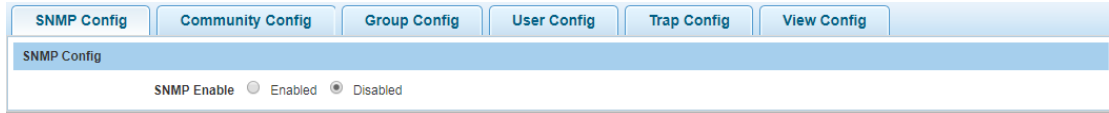
10.1、SNMP setting

10.1.1、SNMP setting

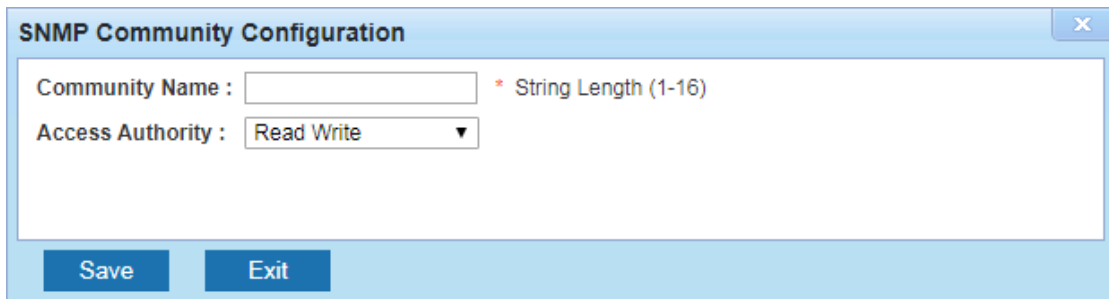
SNMP configuration enable module. The user selects whether to enable or disable SNMP configuration in this module, and clicks the submit button to complete the configuration. SNMP stands for Simple Network Management Protocol. When this option is enabled, it is mainly used for network device management.


10.1.2、 Community setting

Community configuration module. Users configure and manage snmp communities under this module.



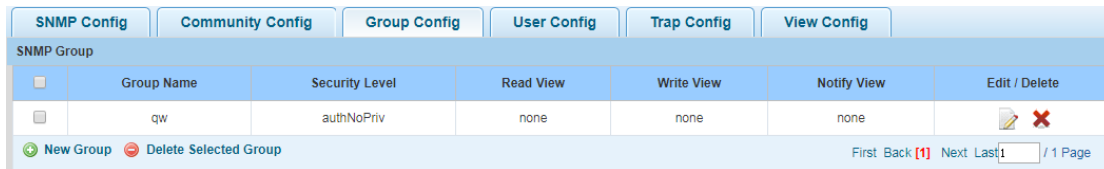
- New community: Add an SNMP community, fill in the community name, select the corresponding access right, and click Save Settings to complete the new community. Click Exit to discard the addition of the new community configuration.



The image shows a dialog box titled 'SNMP Community Configuration'. It contains two input fields: 'Community Name' with a text box and a red asterisk followed by the text '* String Length (1-16)', and 'Access Authority' with a dropdown menu currently showing 'Read Write'. At the bottom of the dialog, there are two buttons: 'Save' and 'Exit'.

- Delete selected communities: delete the configured communities in batches. Select the groups to be deleted in the SNMP community list, and then click Delete selected communities to complete the batch deletion of communities.
- SNMP community list: It displays the configured SNMP community including the community name and access rights. Click  the delete button to delete the community.

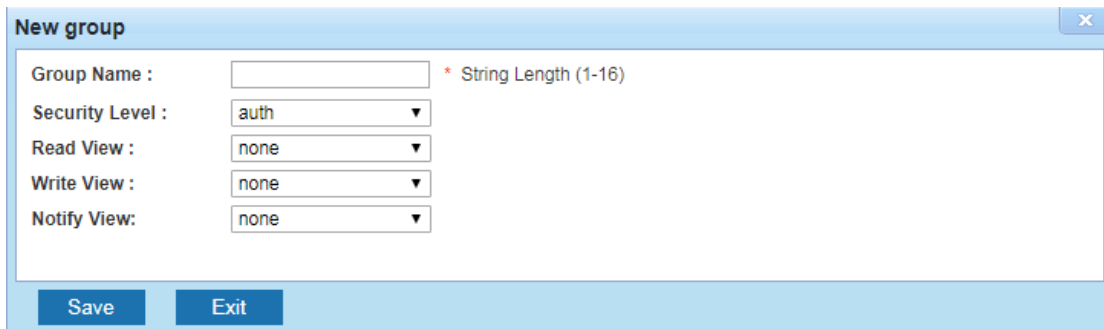
10.1.3、 Group setting

Group configuration module. Users can configure and manage snmp groups in this mode.



	Group Name	Security Level	Read View	Write View	Notify View	Edit / Delete
<input type="checkbox"/>	qw	authNoPriv	none	none	none	 

- New group: Add an SNMP group, fill in the new group name, security level, read-only view, write-only view, notification view, and click save settings to complete the new group setting. Click Exit to discard the addition of the new group configuration.



New group



Group Name : * String Length (1-16)

Security Level :

Read View :

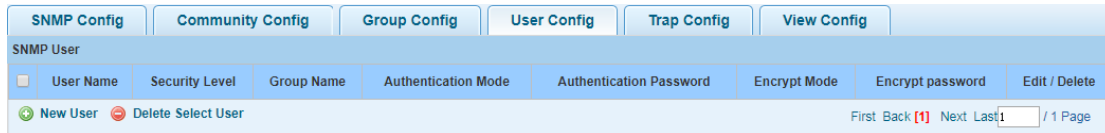
Write View :

Notify View:

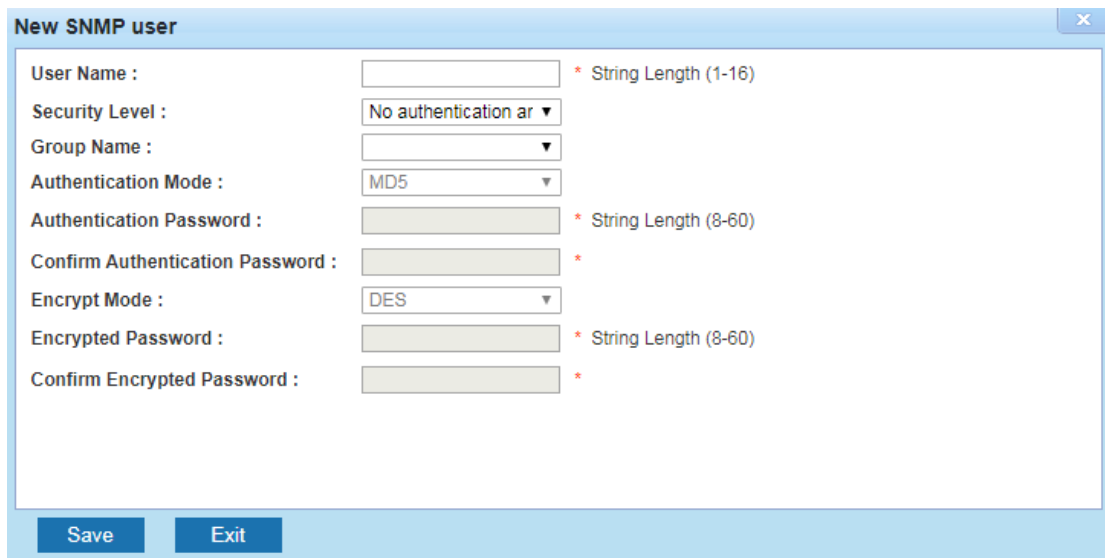
- Delete selected groups: delete the configured groups in batches, select the groups to be deleted in the SNMP group list, and click Delete Selected Groups to complete the batch deletion of the groups.
- SNMP group configuration information table: display the configured SNMP group including group name, security level, read-only view, write-only view, notification view, click  the edit button after each group information to edit the current group, click  the delete button to delete The group.

10.1.4、 User setting



User configuration module. Users configure and manage snmp users under this module.



- New user: Add SNMP user, fill in the new SNMP user name, security level, group name, authentication mode, authentication password, confirm authentication password, encryption mode, encryption password, confirm encryption password, and click save settings to complete the new user settings . Click Exit to discard this addition of new user configuration.

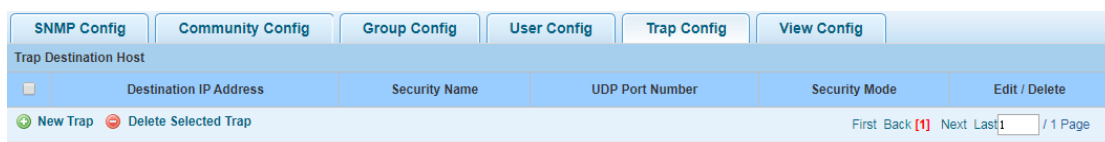


- Delete selected users: Delete the configured users in batches. Select the users to be deleted in the SNMP group list and click Delete Selected Groups to complete the batch deletion of users.
- SNMP user configuration information table: display the configured

SNMP group including user name, security level, group name, authentication mode, authentication password, encryption mode, encryption password, click  the edit button after each user information to edit the current user Click  the delete button to delete the user.

10.1.5、 Trap setting



Trap configuration module. Users configure and manage snmp users under this module.



- New Trap: Add Trap target host, fill in the new destination IP address, security name, UDP port number, security mode, and click Save Settings to complete the new user settings. Click Exit to discard this addition of new user configuration.

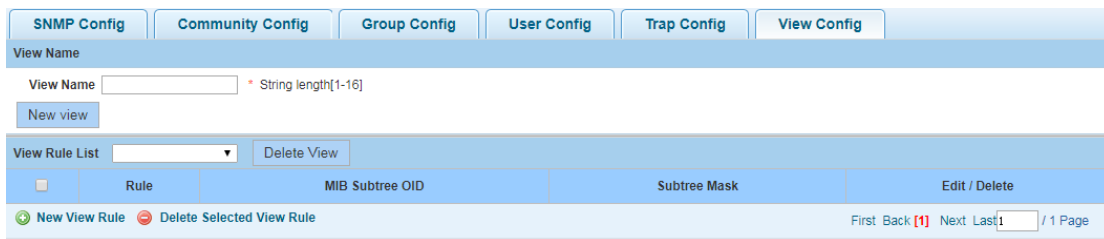
- Delete and select Trap: Delete the configured Trap target hosts in batches. Select the Trap target hosts to be deleted from the Trap

target host list and click Delete selected Trap target hosts to complete the batch deletion of Trap target hosts.

- Trap information table: It displays the configured Trap target host, destination IP address, security name, UDP port number, and security mode. Click  the edit button after each user information to edit the current user, and click  the delete button to delete the user.

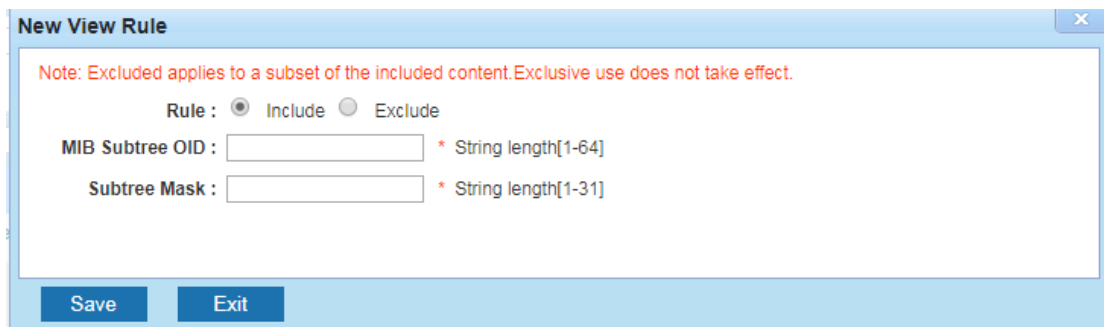
10.1.6、View setting

View configuration module. Users configure and manage snmp users under this module.



The screenshot shows the 'View Config' module interface. At the top, there are navigation tabs: SNMP Config, Community Config, Group Config, User Config, Trap Config, and View Config. Below the tabs, there is a 'View Name' section with a text input field and a 'New view' button. Underneath, there is a 'View Rule List' section with a dropdown menu and a 'Delete View' button. A table with columns 'Rule', 'MIB Subtree OID', 'Subtree Mask', and 'Edit / Delete' is visible. At the bottom, there are buttons for 'New View Rule' and 'Delete Selected View Rule', and a pagination indicator 'First Back [1] Next Last 1 / 1 Page'.

- New view: add a view name
- New view regulation: Select the view regulation, fill in the MIB subtree OID, subtree mask, and click Save Settings to complete the new user settings. Click Exit to discard this addition of new user configuration.



The screenshot shows the 'New View Rule' dialog box. It contains a note: 'Note: Excluded applies to a subset of the included content. Exclusive use does not take effect.' Below the note, there is a 'Rule' section with radio buttons for 'Include' (selected) and 'Exclude'. There are two text input fields: 'MIB Subtree OID' with a note '* String length[1-64]' and 'Subtree Mask' with a note '* String length[1-31]'. At the bottom, there are 'Save' and 'Exit' buttons.

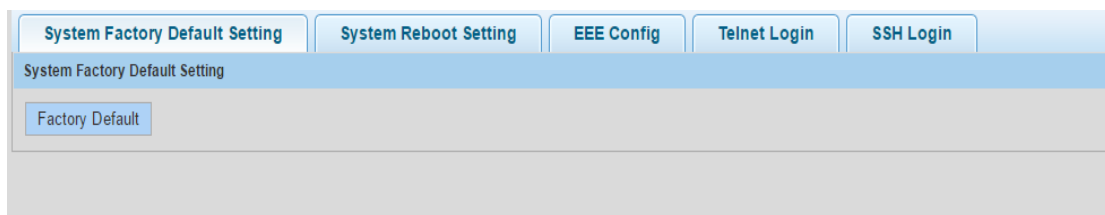
- Delete selected view regulations: delete the configured view regulations in batches, select the view regulations to be deleted in the view regulations list, and click delete selected view regulations to complete the batch deletion of view regulations.

11、 system tool

11.1、 system setting

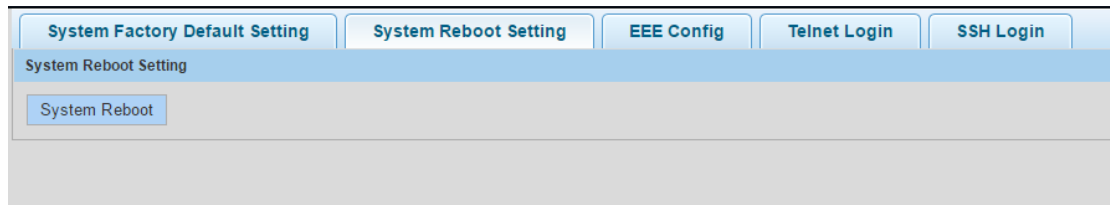
11.1.1、 System Factory Default Setting

System Factory Default Setting module , Click the Factory default button, the user can clear the configuration saved by the user , and the switch configuration is restored to the factory default configuration state.



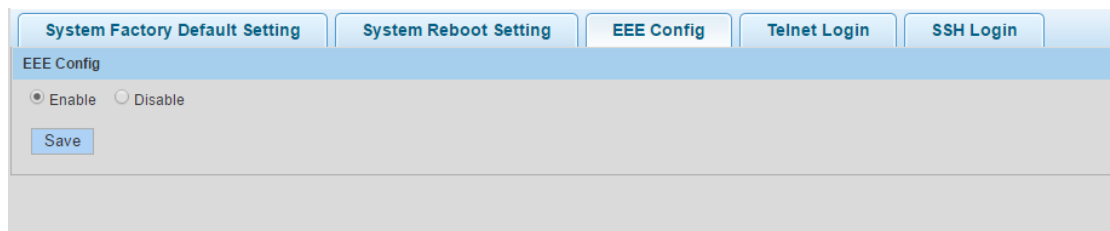
11.1.2、 System Reboot Setting

System Reboot Setting module, Click the system Reboot button , the user restarts the switch from the web interface.



11.1.3、EEE config

EEE config module, The user selects the enable or disable of the EEE configuration in the module, and clicks the save button to complete the configuration. EEE is Energy-efficient Ethernet. When this item is enabled, the switch will automatically turn off some idle circuits to effectively reduce power consumption and save energy.



11.1.4、Telnet login

Telnet login module, The user configures the Telnet server on this module. When you need to configure the Telnet server, select Enable, fill in the Telnet port, Telnet timeout, max-connection information, and click save to complete the configuration. When you need to turn off the Telnet server, select Disable and click save. By default, it is enabled, Telnet port 23, Telnet timeout 5, max-connection 10.

System Factory Default Setting	System Reboot Setting	EEE Config	Telnet Login	SSH Login
Telnet Config				
Telnet Server <input checked="" type="radio"/> Enable <input type="radio"/> Disable				
Telnet Port: <input type="text" value="23"/>				
Telnet Timeout: <input type="text" value="5"/>				
Max-connection: <input type="text" value="10"/>				
<input type="button" value="Save"/>				

11.1.5、SSH login

SSH login module, The user configures the SSH server on this module. When you need to configure the SSH server, select Enable, fill in the SSH port, SSH timeout, max-connection information, and click save to complete the configuration. When you need to turn off the SSH server, select Disable and click save. By default, it is enabled, SSH port 22,SSH timeout5, max-connection 10.

System Factory Default Setting	System Reboot Setting	EEE Config	Telnet Login	SSH Login
SSH Config				
SSH Server <input checked="" type="radio"/> Enable <input type="radio"/> Disable				
SSH Port: <input type="text" value="22"/>				
SSH Timeout: <input type="text" value="5"/>				
Max-connection: <input type="text" value="10"/>				
<input type="button" value="Save"/>				

11.1.6、Timeout Login

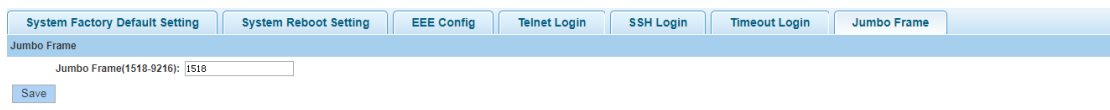
System login timeout module, users configure login timeout service in this module. You can configure the login timeout setting time.

System Factory Default Setting	System Reboot Setting	EEE Config	Telnet Login	SSH Login	Timeout Login	Jumbo Frame
Timeout						
Login Timeout(Minutes): <input type="text" value="30"/>						
<input type="button" value="Save"/>						

- Save: Save the loopback detection configuration and make the configuration take effect.

11.1.7、Jumbo Frame

Jumbo frame module, users can configure jumbo frames in this module, and can configure jumbo frames.

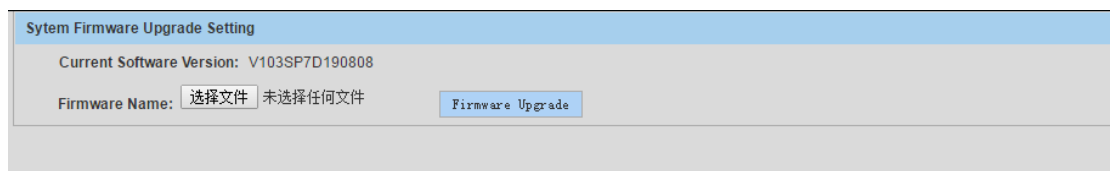


- Save: Save the loopback detection configuration and make the configuration take effect.

11.2、system upgrade

11.2.1、system upgrade

System upgrade module, The user upgrades the software version through the web interface in the module. Click the button behind the firmware name to select the upgrade file, click firmware upgrade button to upgrade.



After selecting the upgrade file (file format is .bix), click Open, automatically return to the upgrade interface, click the firmware

upgrade button, and confirm that the firmware is to be upgraded. Click OK. Then wait for the upgrade file to upload, the system erase and write the Flash, and the system automatically restarts to complete the software upgrade.

11.2.2、 Bootm Partition Setting

Configure the boot partition module. In this module, the user selects the image when the system starts.

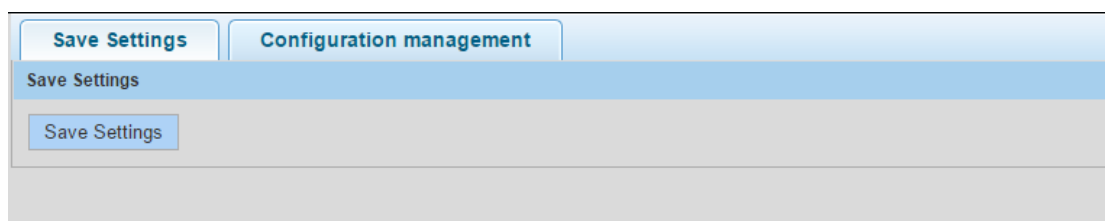


- Save: Save the loopback detection configuration and make the configuration take effect.

11.3、 configuration menu

11.3.1、 save settings

Save settings module, The user clicks the Save Configuration button in this module to save the current configuration of the system.



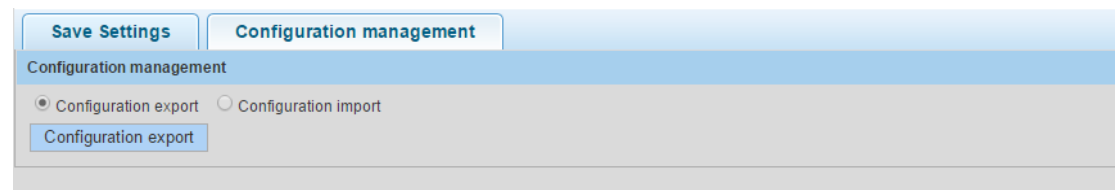
In addition, if you need to save the system configuration, you can also click the shortcut button "Save" in the web interface to save the

current configuration of the system.

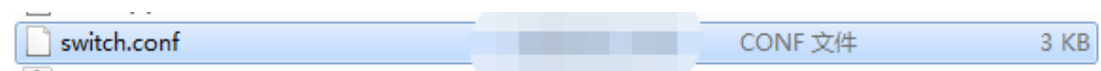


11.3.2、 configuration management

Configuration management module, The user performs the export of the current configuration and the import of the configuration file in the module.



- Click the Configuration Export button and pop up the prompt pop-up window according to the browser download settings. In the browser download manager, you can view the switch.conf file, which is the file exported by the current switch configuration.



- Select Configuration Import, click the button behind file name to select the file, select the switch.conf file and click Open. After returning to the configuration management interface automatically, click Configuration Import, pop-up prompts the import is successful, click OK. After that, the pop-up window prompts the

configuration file imported after the restart to take effect. If it needs to take effect immediately, click OK.



11.4、 administrator

Administrator module, The administrator manages the users in the module, that is, adding users or removing existing users.

The screenshot shows a web interface for user management. The top section is titled "Administrator Settings" and contains a form with the following fields: "Password type:" with a dropdown menu set to "Encrypted password", "User Name:" with a text input field and a red asterisk and "(1 - 20)" indicating a character limit, "New Password:" with a text input field and a red asterisk and "(4 - 20)", and "Confirm Password:" with a text input field and a red asterisk and "(4 - 20)". Below the form is a blue "Add User" button. The bottom section is titled "User List" and contains a table with two columns: "User Name" and "Edit / Delete". The table lists two users: "user" and "admin", each with a corresponding edit/delete icon. At the bottom right of the table, there is a pagination control showing "First Back (1) Next Last 1 / 1 Page".

- Password type: This system provides two password types: plaintext password and ciphertext password. Different information can be viewed in the background depending on the type of password selected. The plaintext password is stored in plain text in the background, and the ciphertext password is encrypted in the background.
- User name: It is allowed to use 1-20 characters as the user name. When the limit is exceeded, there is an error message and the submission cannot be successful.
- New password、 confirm password : Set the password of the

configured user and confirm the password to ensure the password is set correctly. The password allows characters to be entered in the range of 4-20 characters.

- Add user: Save the current configuration information and take effect, complete the addition of new users.
- User list: View current configured user information and provide editing and deletion capabilities. Click the Edit button () to edit and modify the corresponding user information, and click the Delete button () to delete the corresponding user configuration information.

Administrator Settings

Password type:

User Name: *(1 - 20)

New Password: *(4 - 20)

Confirm Password: *(4 - 20)