



# Layer 2 Industrial Switch



## Web configuration manual

DN-651154, DN-651155

DN-651156, DN-651157

DN-651158, DN-651159

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# 1. Log into the Switch Web Interface

The default management address of the switch is 192.168.10.12/24, when logging into the web management page of the switch, you need to set the IP address of the local network card and the IP address of the switch are in the same segment, as shown in the following screen: the IP address of the local network card is set to 192.168.10.222/24.

Obtain an IP address automatically

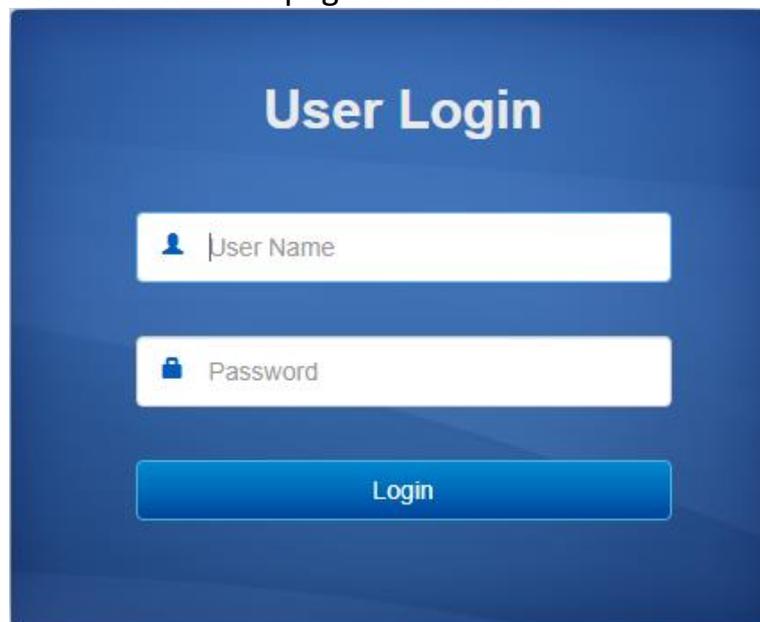
Use the following IP address:

IP address:	192 . 168 . 10 . 222
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	. . .

Enter the management address of the switch in the search bar of the browser, screen as below:



Confirm to enter the web verification page of the switch.



User Name: admin

Password: admin.

Click login to login to the web interface of the switch.

## 2. Switch Information

This module is used to view the internal data of the switch when it is running, including the flow rate of the port, the working mode, and the log information of the switch.

### 2.1 Global Information

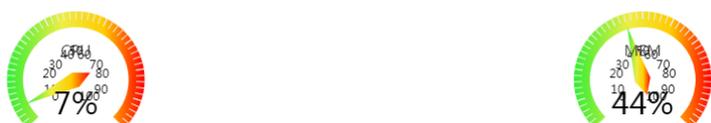
**Ports Status**



**Global Info**

Product Model	S2100_8GP_2F
Serial Number	SN00000000
MAC Address	00:11:22:33:44:55
Firmware Version	V1.0.1.1-g012940b
Uptime	0 Day 0 Hours 14 Minutes
System Time	1970-01-01 12:57:26 <a href="#">Synchronise system time</a>

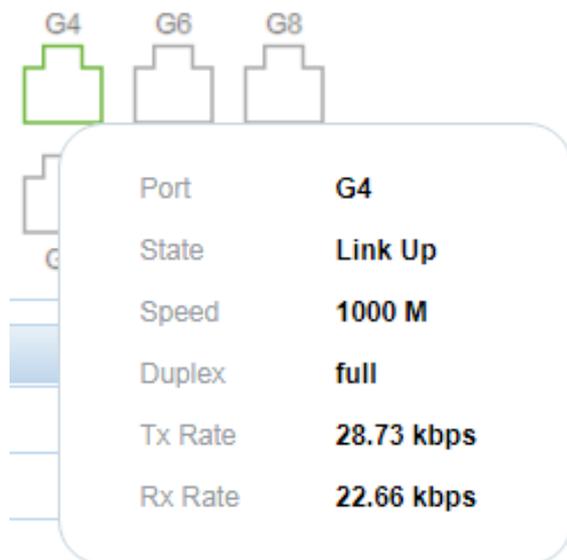
**System load**



The following functions are included:

① View the current port status, port working mode and port speed of the switch.

Move the mouse to the  icon and the port name, status, bandwidth, duplex mode, and rate will be displayed.



Port	<b>G4</b>
State	<b>Link Up</b>
Speed	<b>1000 M</b>
Duplex	<b>full</b>
Tx Rate	<b>28.73 kbps</b>
Rx Rate	<b>22.66 kbps</b>



Indicates that the port has been enabled and the connection has been established,  indicates that the port is not enabled, and  indicates the optical port.

View the switch property information, click [Synchronise system time](#) in the page to synchronize the local computer time with the system time of the switch.

Global Info	
Product Model	S2100_8GP_2F
Serial Number	SN00000000
MAC Address	00:11:22:33:44:55
Firmware Version	V1.0.1.1-g012940b
Uptime	0 Day 0 Hours 16 Minutes
System Time	1970-01-01 12:59:26 <a href="#">Synchronise system time</a>

To check the CPU and memory usage of the switch.



## 2.2 Statistical Information

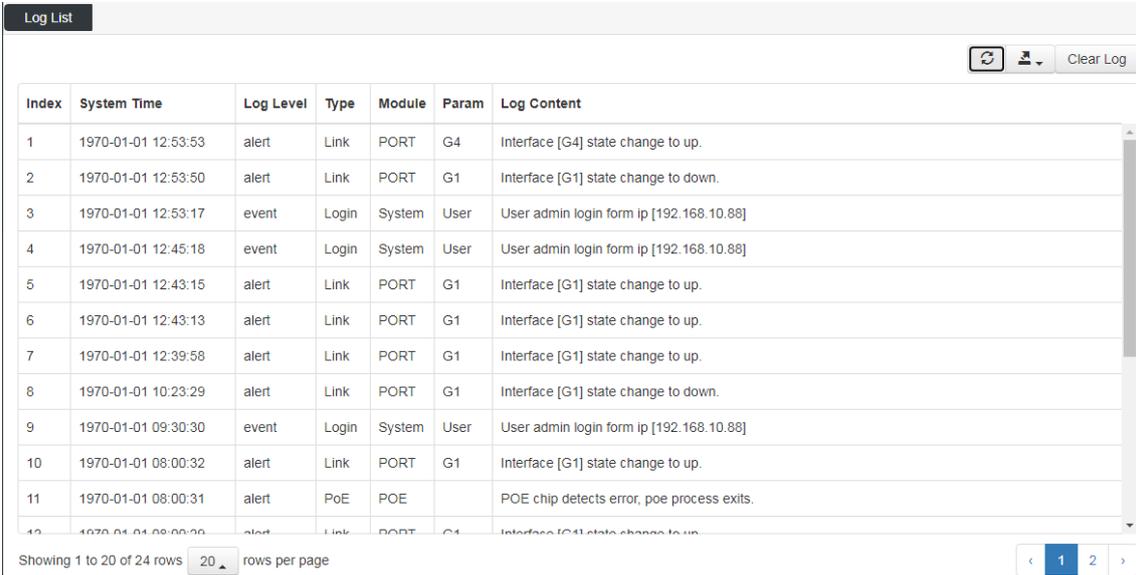
To check the message data received and sent by various ports, including Basic Packet Statistics, Detailed Packet Statistics, MAC Frame Length Statistics and MAC Frame Error Statistics.

Port	Rx Bytes	Rx Packets	Rx Dropped	Rx Errors	Tx Bytes	Tx Packets	Tx Dropped	Tx Errors
G1	1132475	6486	232	0	1703815	6079	0	0
G2	0	0	0	0	0	0	0	0
G3	0	0	0	0	0	0	0	0
G4	752996	4382	169	0	1007070	4049	0	0
G5	0	0	0	0	0	0	0	0
G6	0	0	0	0	0	0	0	0
G7	0	0	0	0	0	0	0	0
G8	0	0	0	0	0	0	0	0
G9	0	0	0	0	0	0	0	0
G10	0	0	0	0	0	0	0	0

[Clear](#)

## 2.3 Log Information

Log is used to view simple switch log, and can view switch startup and port startup data, screen as blew:



Log List

Refresh Download Clear Log

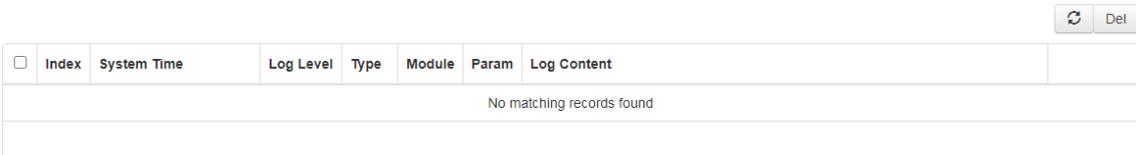
Index	System Time	Log Level	Type	Module	Param	Log Content
1	1970-01-01 12:53:53	alert	Link	PORT	G4	Interface [G4] state change to up.
2	1970-01-01 12:53:50	alert	Link	PORT	G1	Interface [G1] state change to down.
3	1970-01-01 12:53:17	event	Login	System	User	User admin login form ip [192.168.10.88]
4	1970-01-01 12:45:18	event	Login	System	User	User admin login form ip [192.168.10.88]
5	1970-01-01 12:43:15	alert	Link	PORT	G1	Interface [G1] state change to up.
6	1970-01-01 12:43:13	alert	Link	PORT	G1	Interface [G1] state change to up.
7	1970-01-01 12:39:58	alert	Link	PORT	G1	Interface [G1] state change to up.
8	1970-01-01 10:23:29	alert	Link	PORT	G1	Interface [G1] state change to down.
9	1970-01-01 09:30:30	event	Login	System	User	User admin login form ip [192.168.10.88]
10	1970-01-01 08:00:32	alert	Link	PORT	G1	Interface [G1] state change to up.
11	1970-01-01 08:00:31	alert	PoE	POE		POE chip detects error, poe process exits.
12	1970-01-01 08:00:30	alert	Link	PORT	G1	Interface [G1] state change to up.

Showing 1 to 20 of 24 rows 20 rows per page

< 1 2 >

## 2.4 Alarm List

This page is used to view the alarm information of the switch;



Refresh Del

<input type="checkbox"/>	Index	System Time	Log Level	Type	Module	Param	Log Content
No matching records found							

# 3. Port Management

## 3.1 Port Configuration

In this page, you can set the port rate, duplex mode, the max frame length (the value range is 1518-10240), flow control and switch port.

In the link status,  indicates that the port is not connected, or the port has been manually down. When the link status is  or , it indicates that the port is working normally, the color is the port working mode (green is Gigabit, yellow is 100MB).

On this page, you can not only view the port link status and port working mode, but also set the port working mode, such as "100MB full / half duplex", "Gigabit full / half duplex" and "adaptive". You can also close the specified port through this page, which is the same as the command "shut down".

For the frame size setting, the default is basic frame 1522, which can be modified to super long frame 9600. The value range of this item is 1518-10240.

Name	State	Medium	Speed	Duplex	Flowctl State	Speed Config	Max Frame	Flowctl	Enable
<b>Select All</b>						Auto	<input type="text"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G1		COPPER	1000M	Half		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G2		COPPER	1000M	Full		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G3		COPPER	1000M	Full		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G4		COPPER	1000M	Full		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G5		COPPER	1000M	Full		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G6		COPPER	1000M	Full		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G7		COPPER	1000M	Full		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G8		COPPER	1000M	Full		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G9		FIBER	1000M	Full		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
G10		FIBER	1000M	Full		Auto	1518	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Apply

## 3.2 Port Isolation

This page is used to configure the port isolated. The isolated ports cannot communicate with each other, and the isolated ports can communicate with other non-isolated ports.

<b>Select All</b>		All Not Isolatio	
Name	Port Isolate	Name	Port Isolate
G1	<input type="checkbox"/> <input type="checkbox"/>	G2	<input type="checkbox"/> <input type="checkbox"/>
G3	<input type="checkbox"/> <input type="checkbox"/>	G4	<input type="checkbox"/> <input type="checkbox"/>
G5	<input type="checkbox"/> <input type="checkbox"/>	G6	<input type="checkbox"/> <input type="checkbox"/>
G7	<input type="checkbox"/> <input type="checkbox"/>	G8	<input type="checkbox"/> <input type="checkbox"/>
G9	<input type="checkbox"/> <input type="checkbox"/>	G10	<input type="checkbox"/> <input type="checkbox"/>

Tip: Unable to communicate between isolated ports  
 Tip: Isolated ports can communicate with other devices

Apply

### 3.3 Mirroring Port

This page is used to configure the mirror port, Mirror Destination Port None Mirror ▾ is used to configure to accept mirror data; Mirror Destination Port None Mirror ▾ is used to configure all port mirroring properties in one step. The configuration representative in the following page mirrors the sent message data of port 4 to port 1, screen as blew:

<span style="border: 1px solid #ccc; padding: 2px;">Mirror Destination Port <span style="float: right;">G1 ▾</span></span>		<span style="border: 1px solid #ccc; padding: 2px;">Port Config <span style="float: right;">None Mirror ▾</span></span>	
Port	Mirror Direction	Port	Mirror Direction
G1	<span style="border: 1px solid #ccc; padding: 2px;">None Mirror ▾</span>	G2	<span style="border: 1px solid #ccc; padding: 2px;">None Mirror ▾</span>
G3	<span style="border: 1px solid #ccc; padding: 2px;">None Mirror ▾</span>	G4	<span style="border: 1px solid #ccc; padding: 2px;">Tx Mirror ▾</span>
G5	<span style="border: 1px solid #ccc; padding: 2px;">None Mirror ▾</span>	G6	<span style="border: 1px solid #ccc; padding: 2px;">None Mirror ▾</span>
G7	<span style="border: 1px solid #ccc; padding: 2px;">None Mirror ▾</span>	G8	<span style="border: 1px solid #ccc; padding: 2px;">None Mirror ▾</span>
G9	<span style="border: 1px solid #ccc; padding: 2px;">None Mirror ▾</span>	G10	<span style="border: 1px solid #ccc; padding: 2px;">None Mirror ▾</span>

Apply

### 3.4 Rate Limited

This page is used to limit the upper limit of port rate;

Port	Ingress Rate(kbps)	Ingress Burst Size ( Kbits )	Egress Rate(kbps)	Egress Burst Size ( Kbits )
*	<span style="border: 1px solid #ccc; padding: 2px;">Global Config</span>	<span style="border: 1px solid #ccc; padding: 2px;">Global Config</span>	<span style="border: 1px solid #ccc; padding: 2px;">Global Config</span>	<span style="border: 1px solid #ccc; padding: 2px;">Global Config</span>
G1	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>
G2	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>
G3	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>
G4	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>
G5	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>
G6	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>
G7	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>
G8	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>
G9	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>
G10	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>	<input style="width: 50px;" type="text" value="0"/>	<input style="width: 50px;" type="text" value="2048"/>

Cancel
Apply

### 3.5 Storm Control

This page is used to limit the packet rate of port broadcast, multicast and unicast,

Port	Broadcast(pps)	Multicast(pps)	Unknown Unicast(pps)
*	<input type="text" value="Global Config"/>	<input type="text" value="Global Config"/>	<input type="text" value="Global Config"/>
G1	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G2	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G3	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G4	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G5	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G6	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G7	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G8	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G9	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G10	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

### 3.6 Port Energy Saving

This function is used to open the energy saving mode of switch port, screen as blew:

Select All <input type="checkbox"/>			
Name	EEE	Name	EEE
G1	<input type="checkbox"/>	G2	<input type="checkbox"/>
G3	<input type="checkbox"/>	G4	<input type="checkbox"/>
G5	<input type="checkbox"/>	G6	<input type="checkbox"/>
G7	<input type="checkbox"/>	G8	<input type="checkbox"/>

# 4. PoE

## 4.1 PoE Port Configuration

You can view the working status of the port PoE and the current voltage and current data provided, screen as blew:

Port	linkState	Power Supply State	Voltage(V)	Current(mA)	Power(w)	Priority	Enable
Select All						low	<input type="checkbox"/>
G1			0	0	0	middle	<input type="checkbox"/>
G2			0	0	0	middle	<input type="checkbox"/>
G3			0	0	0	middle	<input type="checkbox"/>
G4			0	0	0	middle	<input type="checkbox"/>
G5			0	0	0	middle	<input type="checkbox"/>
G6			0	0	0	middle	<input type="checkbox"/>
G7			0	0	0	middle	<input type="checkbox"/>
G8			0	0	0	middle	<input type="checkbox"/>

In the link column of the page, indicates that the port has no data transmission, indicates that the port is in forwarding state, in the power supply status column indicates that the port is not PoE powered, and indicates that the port is in PoE power supply state. The voltage, current, and power columns respectively display the voltage, current and power provided by the POE power supply port. The priority column is used to change the PoE power supply priority of the switch port. When the overall power is insufficient, the port with higher priority will give priority to power supply. The startup bar is used to enable the port PoE function.

## 4.2 Devices Power Supply

This page is used to set the total output power of the switch, with a value range of 60 ~ 300W. It can also be used to view the total output power and chip temperature of the current switch.

Max Total Power	<input type="text" value="240"/>	range : 60-300W	<input type="button" value="Set"/>
Total Power: 0 (W)			
Chip	Temperature(°C)	Voltage(V)	Power(w)
1	48.3	47.5	0

### 4.3 Timing Power Supply Configuration

Configure the periodic outage period or specific outage time of the switch.

Time Range Config
Timing Supply Config

**ADD Time Range**

Name  Add

**Config the time**

Time-Range Name  Del

Absolute  Periodic

Start Time

End Time

Time  -

Week  Sun  Mon  Tue  Wed  Thu  Fri  Sat

Add

Name	State	Time	
No matching records found			

Apply the set power-off time to the port, and turn on this function by default for all ports.

Time Range Config
Timing Supply Config

Port	linkState	Power Supply State	Voltage(V)	Current(mA)	Power-off Time Range	Timing Power Sup
<b>Select All</b>					<input style="width: 50px;" type="text"/>	<input type="checkbox"/>
G1			0	0	<input style="width: 50px;" type="text"/>	<input checked="" type="checkbox"/>
G2			0	0	<input style="width: 50px;" type="text"/>	<input checked="" type="checkbox"/>
G3			0	0	<input style="width: 50px;" type="text"/>	<input checked="" type="checkbox"/>
G4			0	0	<input style="width: 50px;" type="text"/>	<input checked="" type="checkbox"/>
G5			0	0	<input style="width: 50px;" type="text"/>	<input checked="" type="checkbox"/>
G6			0	0	<input style="width: 50px;" type="text"/>	<input checked="" type="checkbox"/>
G7			0	0	<input style="width: 50px;" type="text"/>	<input checked="" type="checkbox"/>
G8			0	0	<input style="width: 50px;" type="text"/>	<input checked="" type="checkbox"/>

Apply

## 4.4 Intelligent Power Supply Configuration

Set PoE port to automatically disconnect power supply when there is no data transmission within a certain period of time. The default value is that when there is no data transmission in 120 seconds, the POE port will disconnect the power supply, and the value range is 60 ~ 600 seconds.

PoE AI config | AI Port config

PoE AI  Notice: OneKey PoE AI enabled automatically.

Zero Flow Interval  Range: 60-600 (S)

Notice: Port's zero flow automatic detection, if more than the zero flow interval, then interrupt the port's PoE power supply, 10 seconds later restart it's power supply again.

Apply

Open the port intelligent power supply function, which is all on by default.

PoE AI config | AI Port config

Port	AI Port
Select All	<input checked="" type="checkbox"/>
G1	<input checked="" type="checkbox"/>
G2	<input checked="" type="checkbox"/>
G3	<input checked="" type="checkbox"/>
G4	<input checked="" type="checkbox"/>
G5	<input checked="" type="checkbox"/>
G6	<input checked="" type="checkbox"/>
G7	<input checked="" type="checkbox"/>
G8	<input checked="" type="checkbox"/>

Apply

# 5. L2 Management

## 5.1 MAC address table

Check the MAC address of the device mounted on the switch

Add Del Expired Time(s):  Set

<input type="checkbox"/>	Index	MAC Address	vlan	Port	Type
<input type="checkbox"/>	1	00-26-9e-f6-93-f5	1	G4	dynamic <input type="button" value="Bind"/>

Total 1 records Total 1 pages Current 1 page First < Previous Next > Last

## 5.2 VLAN Configuration

This page includes viewing VLAN State, VLAN Configuration, Voice VLAN Configuration, MAC VLAN configuration and IP VLAN configuration.

Screen as blew:

Vlan State	Vlan Config	Voice VLAN Config	MAC VLAN Config	IP VLAN Config						
Vlan	Port									
	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
1	<input type="radio"/>									

Excluded  Tagged  Untagged

The screen below shows the configuration of port VLAN;

Vlan State	Vlan Config	Voice VLAN Config	MAC VLAN Config	IP VLAN Config
Port	Vlan Mode	PVID	vlan untag	vlan tag
Select All	hybrid	<input type="text"/>	<input type="text"/>	<input type="text"/>
G1	access	1	1	<input type="text"/>
G2	access	1	1	<input type="text"/>
G3	access	1	1	<input type="text"/>
G4	access	1	1	<input type="text"/>
G5	access	1	1	<input type="text"/>
G6	access	1	1	<input type="text"/>
G7	access	1	1	<input type="text"/>
G8	access	1	1	<input type="text"/>
G9	access	1	1	<input type="text"/>
G10	access	1	1	<input type="text"/>

Port properties that can be set:

### Access:

Access ports are normally used to connect to end stations. Dynamic features like voice VLAN may add the port to more VLANs behind the scenes. Access ports have the following characteristics:

- Member of exactly one VLAN, the Port VLAN (Access VLAN), which by default is 1.
- Accepts untagged and C-tagged frames.
- Discards all frames that are not classified to the Access VLAN
- On egress all frames classified to the Access VLAN are transmitted untagged.
- The access port is usually used to connect to the terminal station. For example,

the dynamic characteristics of voice VLAN can add ports to multiple VLANs behind the scenes. The access port has the following characteristics:

- There is only one VLAN, port VLAN (also known as access VLAN), which is a member of 1 by default.
- accept unlabeled frames and C-labeled frames,
- Drop all frames in unclassified access VLAN,
- All frames to the exit are sent unmarked.

### **Trunk:**

The trunk port can traffic multiple VLANs at the same time and is usually used to connect to other switches. The trunk port has the following features:

- By default, the trunk port is a member of all existing VLANs. This can be achieved by using a limited number of VLANs.
- Unless enabled on the port of VLAN relay, divided into different VLANs, and the frame of that the port is not a member will be discarded.
- By default, all frames, but VLAN (also known as local VLAN) frame tags classified into ports get about exits. The frames classified to the port VLAN do not get the exit of c-tag,
- The exit marker can change all frames of the marker, in which case only the entry of the marked frame is accepted,
- VLAN trunking may be enabled.

### **Hybrid:**

The hybrid port is similar to the trunk port in many ways, but adds additional port configuration capabilities. In addition to the characteristics described for the relay port, the hybrid port also has the following capabilities:

- It can be configured as VLAN tag or unknown, C-tag all, S tag all, or S-custom tag all.
- The inlet filtration can be controlled.
- The exit annotation and configuration of the access frame can be configured independently.

**Port VLAN:** Determine the VLAN ID (also known as PVID) of the port. The allowable VLAN range is 1 to 4095, and the default is 1.

Voice VLAN configuration's screen as blew:

Vlan State | Vlan Config | **Voice VLAN Config** | MAC VLAN Config | IP VLAN Config

The corresponding port untagged belongs to the vian function to take effect; port receives the message, match the conditions set will enter the corresponding VLAN

Enable voice vian

Vlan id  range: 1-4094

cos  range: 0-7

dscp  range: 0-63

**Voice vian MAC**

MAC  For Example: 00-01-02-03-04-05

MAC mask  For Example: fc-ff-ff-00-00-00

No	MAC	MAC mask
----	-----	----------

Enable Voice VLAN, the Access port will carry the IP voice traffic from the IP phone. When the switch is connected to Cisco IP phone (such as Cisco 7960 IP phone), the voice traffic sent by IP phone has three layers of IP priority and two layers of CoS value, which are set to 5 by default. For IEEE 802.1Q or IEEE 802.1p tagged traffic, the default cos value is untrusted.

Configure VLAN based on MAC address, screen as blew:

Vlan State | Vlan Config | Voice VLAN Config | **MAC VLAN Config** | IP VLAN Config

Vlan id  range: 1-4094

MAC  For Example: 00-01-02-03-04-05

No	VID	MAC
No matching records found		

Configure VLAN based on IP, screen as blew:

Vlan State | Vlan Config | Voice VLAN Config | MAC VLAN Config | **IP VLAN Config**

Vlan id  range: 1-4094

IP  For Example: 10.1.1.0/24

No	VID	IP
No matching records found		

## 5.3 GVRP

Enable the GVRP function, screen as blew:

The screenshot shows the 'GVRP Statistics' tab in the configuration interface. It features two radio button options: 'Enable GVRP' and 'Create Dynamic VLAN'. Both options are currently unselected. An 'Apply' button is located at the bottom right of the configuration area.

The enabled GVRP function is applied to the designated port and configure its timer.

The screenshot shows the 'GVRP Statistics' tab with a table for configuring GVRP on various ports. The table has the following columns: Port, Enable GVRP, Registration Mode, Applicant State, Join Timer(cs), Leave Timer(cs), and LeaveAll Timer(cs). The 'Select All' row has 'normal' selected for both Registration Mode and Applicant State. Ports G1 through G10 are listed, each with 'normal' selected for both modes and timer values of 20, 60, and 1000.

Port	Enable GVRP	Registration Mode	Applicant State	Join Timer(cs)	Leave Timer(cs)	LeaveAll Timer(cs)
Select All	<input type="radio"/>	normal	normal			
G1	<input type="radio"/>	normal	normal	20	60	1000
G2	<input type="radio"/>	normal	normal	20	60	1000
G3	<input type="radio"/>	normal	normal	20	60	1000
G4	<input type="radio"/>	normal	normal	20	60	1000
G5	<input type="radio"/>	normal	normal	20	60	1000
G6	<input type="radio"/>	normal	normal	20	60	1000
G7	<input type="radio"/>	normal	normal	20	60	1000
G8	<input type="radio"/>	normal	normal	20	60	1000
G9	<input type="radio"/>	normal	normal	20	60	1000
G10	<input type="radio"/>	normal	normal	20	60	1000

Used to view the operation information of GVRP.

The screenshot shows the 'GVRP Statistics' tab with a table for viewing operation information. The table has the following columns: Port, JoinEmpty Rx, JoinIn Rx, LeaveEmpty Rx, LeaveIn Rx, Empty Rx, JoinEmpty Tx, JoinIn Tx, LeaveEmpty Tx, LeaveIn Tx, and Empty Tx. The table is currently empty, displaying 'No matching records found'.

## 5.4 Link Aggregation

On this page, you can configure static aggregation groups, dynamic aggregation groups, and view link aggregation information;

Static aggregation configuration: click create static aggregation group TID value range is (1-4), that is, up to 4 static aggregation groups can be created.

Port Member: Port join aggregation must be the same speed and full duplex

This switch supports 32 groups of aggregation, each group supports up to 8 ports. To configure an aggregation group, just select the convergence port to the same line

group number, as shown in Figure 21: 1-2 ports converge in a group; 3-4 ports in a group. Please keep configuration consistency for the ports of aggregation group members, such as port rate mode, VLAN information, etc.

Link aggregation load balancing mode supports:

"Source MAC address" (load balancing calculation based on source MAC address of message)

"Destination MAC address" (load balancing calculation based on the destination MAC address of the message),"

"IP address" (the source IP address and the destination IP address of the message are XOR, and then the load balancing calculation is performed)

"TCP / UDP port number" (load balancing calculation is based on the TCP / UDP port number of the message).

Four modes can be selected and combined. The assignment of equalization algorithm is global.

If LACP dynamic aggregation protocol is enabled on some ports, static aggregation cannot be configured manually.

Note:

Static aggregation on the same port cannot be configured simultaneously with dynamic LACP aggregation.

The screenshot shows a network configuration interface with three tabs: "Static aggregation config" (selected), "Dynamic aggregation config", and "Link Aggregation Information".

Under "Static aggregation config", there are "Establish" and "Del" buttons. A dropdown menu for "Load balancing model" is set to "SRC&DST MAC".

		Port									
		G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
<input type="checkbox"/>	Trunk										
	NOT Trunk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Below the table, it says "No matching records found".

An "Apply" button is visible below the table.

A dialog box titled "Establish Tid" is open, showing a text input field for "Tid:" with the value "1-4". At the bottom of the dialog are "Cancel" and "Establish" buttons.

## Configure dynamic aggregation port as blew:

Static aggregation config | **Dynamic aggregation config** | Link Aggregation Information

System ID: 00-11-22-33-44-55 | System Priority: 32768 | Set

Name	Activity Mode	Send Mode	Port Priority	Key Value	Enabled
Select All	--	--	1-65535	0-65535	<input type="checkbox"/>
G1	--	--	32768	0	<input type="checkbox"/>
G2	--	--	32768	0	<input type="checkbox"/>
G3	--	--	32768	0	<input type="checkbox"/>
G4	--	--	32768	0	<input type="checkbox"/>
G5	--	--	32768	0	<input type="checkbox"/>
G6	--	--	32768	0	<input type="checkbox"/>
G7	--	--	32768	0	<input type="checkbox"/>
G8	--	--	32768	0	<input type="checkbox"/>
G9	--	--	32768	0	<input type="checkbox"/>
G10	--	--	32768	0	<input type="checkbox"/>

Apply

Link aggregation information: view switch aggregation port information.

The switch supports port dynamic aggregation. After enable the dynamic protocol of the port, the devices on both sides of the convergence exchange information through the protocol. According to the parameters and status of both sides, the matching links are automatically gathered together to send and receive data. After the convergence is formed, the switching equipment maintains the convergence link state, and automatically adjusts or disbands the aggregation link when the configuration of both sides changes.

The configuration parameters of dynamic protocol include protocol switch state, key negotiation and active / passive mode selection. Only when the dynamic protocol is turned on can the dynamic negotiation be carried out, which may lead to the formation of aggregation links. The key is the basis of negotiation. Only the ports with the same key can negotiate to form an aggregation link. The negotiation mode is "active | passive". When "active" is selected, the device will actively initiate aggregation negotiation; when "passive" is selected, the device will passively accept the aggregation negotiation initiated by other devices. If some ports have been converged statically, the dynamic convergence of LACP cannot be realized.

Note: dynamic LACP aggregation and static convergence on the same port cannot be configured at the same time

Static aggregation config | Dynamic aggregation config | **Link Aggregation Information**

Trunk	Mode	Number Ports	Port List	Load Balancing

Local								Peer						
Trunk	Name	State	The Port Number	Priority	Key Value	Sign	Connection	The Port Number	Priority	Key Value	Sign	System ID	System Priority	

Flags: A -- LACP\_Activity, B -- LACP\_timeout, C -- Aggregation, D -- Synchronization, E -- Collecting, F -- Distributing, G -- Defaulted, H -- Expired

## 5.5 MSTP Configuration

Global configuration: select the spanning tree protocol version (STP / RSTP / MSTP is optional), MSTP protocol is selected by default.

Global Config Instance Config Interface Instance Config Interface Config

Enable Spanning-tree

Protocol Version  stp  rstp  mstp

Max Age  range : 6-40

Hello Time  range : 1-10

Forward Delay  range : 4-60

Max Hops  range : 1-40

Revision Level  range : 0-65535

Configuration Name  Less than 32 Bytes

Apply

An example of configuring MSTP:

Set the mapping VLAN of multi spanning tree.

Configuration name: identifies the name of the VLAN to MSTI mapping, the bridge must share the name and revision (see below), and the VLAN-to-MSTI mapping configuration in order to share the MSTI spanning tree. (Within region) the name is up to 32 characters.

Configuration version: revision of MSTI configuration above. It must be an integer between 0 and 65535.

Mapped VLANs: a list of VLANs mapped to MSTI. VLANs must be separated by commas and / or spaces. VLAN can only be mapped to one MSTI. An unused MSTI should remain empty. (That is, no VLAN is mapped to it).

Global Config Instance Config Interface Instance Config Interface Config

MSTI ID

Priority  For example: 0-61440, the default 32768, step 4096

Vlan Mapped  Separated by a space, with '-' said range. Such as: 2 4-7 9 10-15

Add

Designated Root  Root Port  Root Path Cost

No	MSTI ID	Priority	Vlan Mapped	Bridge ID	Regional Root	Internal Path Cost	Time Since Topo-change	Topo-change Count
1	0	<input type="text" value="32768"/>	1-4094	8.000.00:11:22:33:44:55	8.000.00:11:22:33:44:55	0	0	0

Set

Interface instance configuration: configure the enable of the instance on the port.  
Screen as blew:

Global Config Instance Config **Interface Instance Config** Interface Config

MSTI ID: 0

Interface	Ports List	Enable	MSTI ID	Priority	Admin Cost	Oper Cost	Role	State
<b>Select All</b>				<input type="text" value="128"/>	<input type="text" value="0"/>			
G1	G1	<input type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	20000	Disabled	forwarding
G2	G2	<input type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	200000000	Disabled	forwarding
G3	G3	<input type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	200000000	Disabled	forwarding
G4	G4	<input checked="" type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	20000	Disabled	forwarding
G5	G5	<input type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	200000000	Disabled	forwarding
G6	G6	<input type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	200000000	Disabled	forwarding
G7	G7	<input type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	200000000	Disabled	forwarding
G8	G8	<input type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	200000000	Disabled	forwarding
G9	G9	<input type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	200000000	Disabled	forwarding
G10	G10	<input type="checkbox"/>	0	<input type="text" value="128"/>	<input type="text" value="0"/>	200000000	Disabled	forwarding

**Apply**

Interface configuration: configure the enabled port of spanning tree protocol and the enabled port of BPDU message. Screen as blew:

Global Config Instance Config **Interface Instance Config** Interface Config

Interface	Ports List	BPDU Guard	Admin Edge	Oper Edge	Admin Point-to-Point	Oper Point-to-Point
<b>Select All</b>		<input type="checkbox"/>	Auto		Auto	
G1	G1	<input type="checkbox"/>	Auto	NO	Auto	Yes
G2	G2	<input type="checkbox"/>	Auto	NO	Auto	NO
G3	G3	<input type="checkbox"/>	Auto	NO	Auto	NO
G4	G4	<input type="checkbox"/>	Auto	NO	Auto	Yes
G5	G5	<input type="checkbox"/>	Auto	NO	Auto	NO
G6	G6	<input type="checkbox"/>	Auto	NO	Auto	NO
G7	G7	<input type="checkbox"/>	Auto	NO	Auto	NO
G8	G8	<input type="checkbox"/>	Auto	NO	Auto	NO
G9	G9	<input type="checkbox"/>	Auto	NO	Auto	NO
G10	G10	<input type="checkbox"/>	Auto	NO	Auto	NO

**Apply**

## 5.6 Loop Protection

Global Configuration: enable and set loop protection, screen as blew:

Global Config **Port Config**

Enable

Tx Interval  range : 1-10 s

Port Auto-Recover Time  s. Blocked port will recover if not received PDU while timer expires.

**Apply**

Port Configuration: enable the loop protection function on the port.  
The loop protection includes double fiber ring protection and four fiber ring protection.

The unidirectional ring is usually composed of two optical fibers, one of which is the working fiber, represented by S; the other is the protective fiber, represented by P. Protection switching is accomplished by a reverse switch.

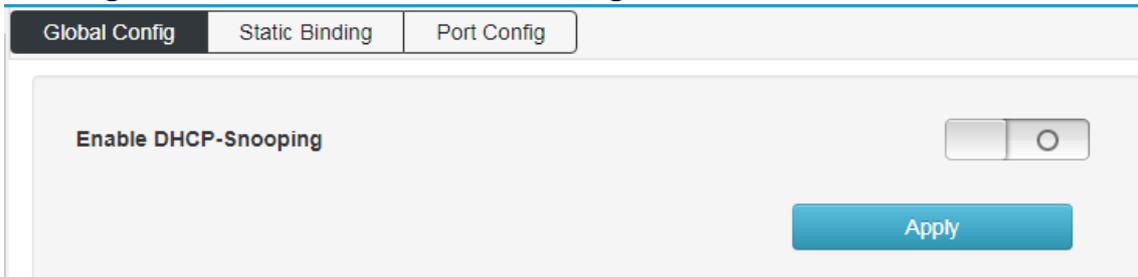
In addition to the unidirectional switching ring, there are also bidirectional multiplexer switching double fiber ring and bidirectional multiplexing segment switching four fiber ring. But the analysis shows that the unidirectional path switching double fiber ring is the best considering the node cost, system complexity and product compatibility.

The working mode is divided into recovery mode and non-recovery mode. In the recovery mode, when the working section has recovered from the failure state, the working path automatically switches back to the working section. In the non-recovery mode, even if the working section has been restored to normal, the working path is still unchanged in the protection section. Generally, 1 + 1 protection can work in both recovery mode and non-recovery mode, while 1: N protection can only work in recovery mode.

Port	Enabled	tx	State	Loop
Select All	<input type="checkbox"/>	<input type="checkbox"/>		
G1	<input type="checkbox"/>	<input type="checkbox"/>	Down	
G2	<input type="checkbox"/>	<input type="checkbox"/>	Down	
G3	<input type="checkbox"/>	<input type="checkbox"/>	Down	
G4	<input type="checkbox"/>	<input type="checkbox"/>	Forwarding	
G5	<input type="checkbox"/>	<input type="checkbox"/>	Down	
G6	<input type="checkbox"/>	<input type="checkbox"/>	Down	
G7	<input type="checkbox"/>	<input type="checkbox"/>	Down	
G8	<input type="checkbox"/>	<input type="checkbox"/>	Down	
G9	<input type="checkbox"/>	<input type="checkbox"/>	Down	
G10	<input type="checkbox"/>	<input type="checkbox"/>	Down	

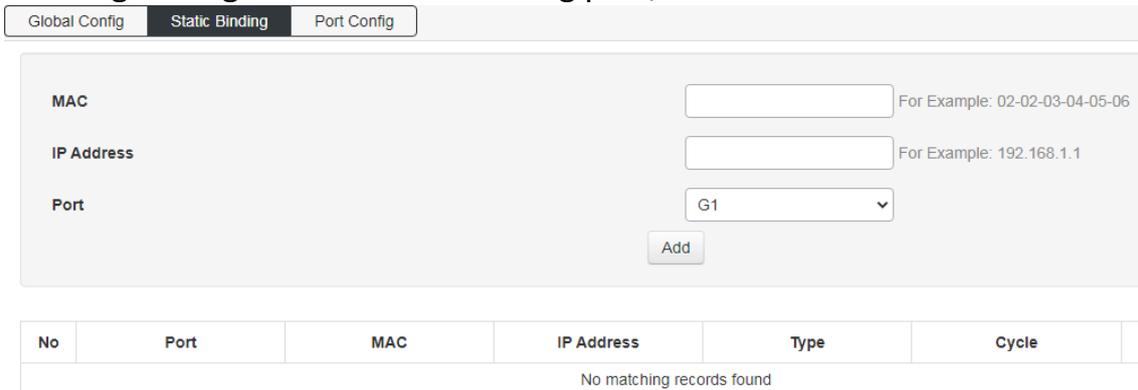
## 5.7 DHCP-snooping

Global configuration: enable DHCP monitoring function, screen as blew:



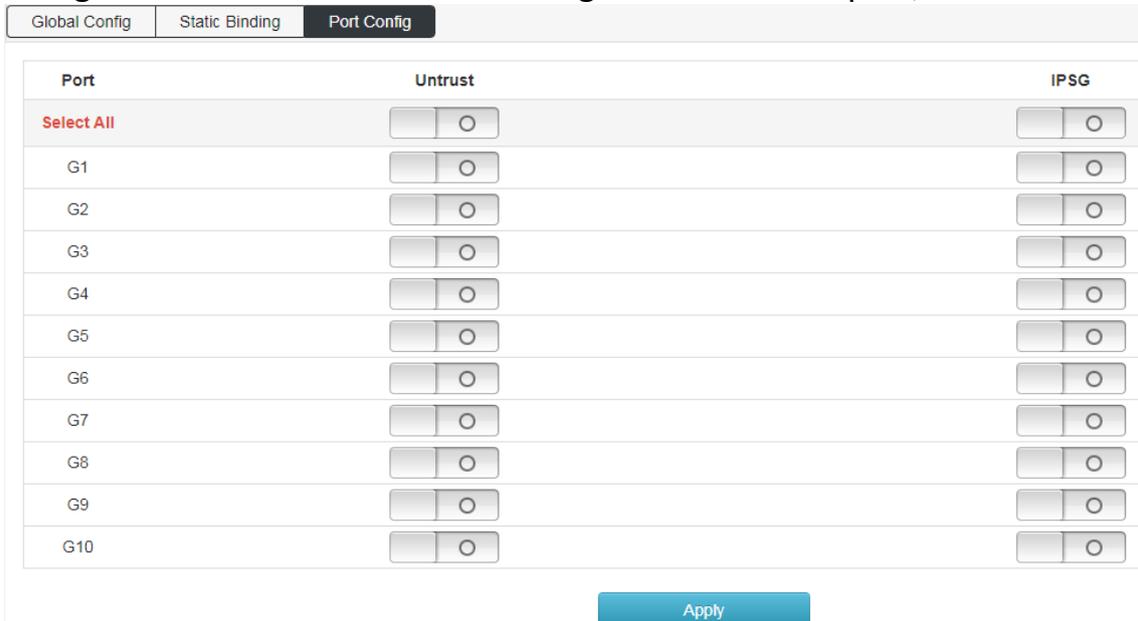
The screenshot shows the 'Global Config' tab selected. It features a toggle switch for 'Enable DHCP-Snooping' which is currently turned off. An 'Apply' button is located at the bottom right.

Static Binding: configure the static listening port, screen as blew:



The screenshot shows the 'Static Binding' tab. It contains input fields for 'MAC' (with example '02-02-03-04-05-06'), 'IP Address' (with example '192.168.1.1'), and a dropdown menu for 'Port' (currently set to 'G1'). An 'Add' button is below these fields. Below the form is a table with columns: No, Port, MAC, IP Address, Type, Cycle. The table is currently empty with the text 'No matching records found' centered below it.

Port Configuration: enable DHCP monitoring function on the port, screen as blew:



The screenshot shows the 'Port Config' tab. It displays a table with columns: Port, Untrust, and IPSG. The 'Port' column lists 'Select All' and ports G1 through G10. Each row has two toggle switches under 'Untrust' and 'IPSG'. An 'Apply' button is at the bottom.

Port	Untrust	IPSG
Select All	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G1	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G2	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G3	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G4	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G5	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G6	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G7	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G8	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G9	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>
G10	<input type="checkbox"/> <input type="radio"/>	<input type="checkbox"/> <input type="radio"/>

## 5.8 IGMP Snooping

IGMP snooping global configuration: configure IGMP monitoring enable and IGMP function attributes, screen as blew:

IGMP Snooping Global Config | IGMP Snooping VLAN Config | IPv4 Static Multicast

Enable

Member Port Aging Time  range: 200-1000(Default: 300)

Router Port Aging time  Unit: seconds Range: 1-1000 (Default: 105)

Index	Vlan Id	Multicast Source	Multicast Address	Static Member Ports	Dynamic Member Ports(Aging time)
No matching records found					

IGMP snooping VLAN configuration: configure static multicast VLAN, screen as blew:

IGMP Snooping Global Config | IGMP Snooping VLAN Config | IPv4 Static Multicast

Vlan Id

Port Fast Leave

Query Source Address  For Example: 192.168.1.254

Query Interval  Unit: seconds Range: 2-300

Max Response Time  Unit: seconds Range: 1-25 (default: 10)

Last-Member Query Interval  Unit: seconds Range: 1-5 (default: 1)

Index	Vlan Id	Port Fast Leave	Query Source Address	Query Interval	Max Response Time	Last-Member Query Interval
No matching records found						

IPv4 Static Multicast: configure static multicast function and enable port static multicast function, screen as blew:

IGMP Snooping Global Config | IGMP Snooping VLAN Config | IPv4 Static Multicast

Vlan Id

Multicast Source  For Example: 192.168.1.1

Multicast Address  For Example: 225.1.2.3

Port List  Select All

G2  G4  G6  G8  
 G9  G10  G1  G3  G5  G7

Index	Vlan Id	Multicast Source	Multicast Address	Static Member Ports
No matching records found				

## 5.8 802.1x authentication

Global configuration: enable 802.1x authentication function.

Radius client address: configure radius authentication client address.

Radius server shared secret key: a secret of up to 29 characters is shared between the server and the switch.

Radius server timeout: (can be set to a number between 3 and 3600 seconds) It is the maximum time to wait for a response from the server. If the server does not respond within this time frame, we will consider it dead and continue to use the next enabled server (if any); the RADIUS server uses the UDP protocol, which is not reliable by design. In order to deal with the lost frames, the super interval is divided into three sub intervals, each of which has the same length. If no response is received within the subinterval, the request is transmitted again. This algorithm will cause radius server to be queried up to three times before it is considered as dead server.

The screenshot shows the '802.1X Settings' configuration page. At the top, there are four tabs: 'Global Config', 'RADIUS Server Config', 'Port-based Authentication', and 'Authentication Host'. The 'RADIUS Server Config' tab is active. Below the tabs, the '802.1X Settings' section contains the following fields:

Setting	Value	Range / Default
Enable 802.1X	<input type="checkbox"/>	
Auth Method	Port-Auth	
RADIUS Client Address	<input type="text"/>	For Example : 192.168.200.1
RADIUS Client Port	1812	range : 0-65535 , Defaults 1812
RADIUS Server Key	<input type="text"/>	range : less than 64 characters
RADIUS Server Retransmit	3	range : 1-100 , Defaults 3
RADIUS Server Timeout	5	range : 1-1000 , Defaults 5
RADIUS Server Deadtime	0	range : 0-1440 , Defaults 0

An 'Apply' button is located at the bottom right of the settings area.

Radius server settings: set radius server attributes.

Radius server address: configure the radius server address.

Radius server port number: configure the radius server port number.

Radius server shared password: a secret of up to 29 characters is shared between the server and the switch.

Radius server retransmission times: configure the radius service death retransmission times.

Radius server timeout: (can be set to a number between 3 and 3600 seconds) is the maximum time to wait for a response from the server. If the server does not respond within this time frame, we will consider it dead and continue to use the next enabled server (if any). The RADIUS server uses the UDP protocol, which is not reliable by

design. In order to deal with the lost frames, the super interval is divided into three sub intervals, each of which has the same length. If no response is received within the subinterval, the request is transmitted again. The server will be considered dead before the server is killed at most 3 times.

Global Config | **RADIUS Server Config** | Port-based Authentication | Authentication Host

[Add RADIUS Server](#)

IP Address	The Port Number	Server Key	Retransmit	Timeout
No matching records found				

**Add RADIUS Server** ✕

**RADIUS Server Address**  For Example : 192.168.200.1

**RADIUS Server Port**  range : 0-65535 , Defaults 1812

**RADIUS Server Key**  range : less than 64 characters

**RADIUS Server Retransmit**  range : 1-100 , Defaults 3

**RADIUS Server Timeout**  range : 1-1000 , Defaults 5

[Add](#)

### Port-based Authentication: Configure 802.1x authentication port.

Global Config | RADIUS Server Config | **Port-based Authentication** | Authentication Host

Port Name	Port Auth Enable	Port Auth Mode	Ctrl Direction	Version	Auth Status	Quiet Period	Reauth Max	EAP Tx Period	Reauth Period	Reauthentic
Select All	<input type="checkbox"/>	Force Unauthorized	Both-dir	1						
G1	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	
G2	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	
G3	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	
G4	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	
G5	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	
G6	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	
G7	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	
G8	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	
G9	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	
G10	<input type="checkbox"/>	Auto	In-dir	2	Uncontrolled	60	2	30	3600	

[Apply](#)

### Authentication Host: View 802.1x authentication host properties.

Global Config | RADIUS Server Config | Port-based Authentication | **Authentication Host**

Port-Auth Information

User Name	Port	Session Time(s)	Authentication Method	MAC Address	Session State and Reason
No matching records found					

# 6. Senior Management

## 6.1 QoS Configuration

Global Configuration: Enable QoS function and configure QoS function properties.

Global Config
Port Config

Set the Scheduling Policy, while policy is WRR/WFQ/DRR set Queue Weights(Range 1-127, If set 0, means SP+WRR/WFQ/DRR).

**Policy**  SP  WRR  WFQ

**Weight**

W0:  W1:  W2:  W3:

W4:  W5:  W6:  W7:

Maps to different queues based on the CoS(0-7) in packet. If the packet doesn't carry VLAN TAG(802.1p), port default CoS is used.

**CoS-Queue Map** CoS  -> Queue

**Current Map** 0->0   1->1   2->2   3->3   4->4   5->5   6->6   7->7

Maps to new DSCP & CoS based on the DSCP in packet IP header. By default, DSCP & CoS Mapping are not changed.

**DSCP-CoS Map** DSCP  -> New DSCP  -> CoS

0->0->0   1->1->0   2->2->0   3->3->0   4->4->0   5->5->0   6->6->0   7->7->0

8->8->1   9->9->1   10->10->1   11->11->1   12->12->1   13->13->1   14->14->1   15->15->1

Port Configuration: Configure the QoS function properties on the port.

Global Config
Port Config

Port	Default CoS	Trust Mode
<b>Select All</b>	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G1	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G2	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G3	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G4	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G5	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G6	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G7	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G8	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G9	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼
G10	<input type="text" value="0"/> ▼	<input type="text" value="Trust CoS"/> ▼

## 6.2 ACL Configuration

MAC ACL configuration: Configure MAC based ACL access list.

MAC ACL CONFIG IP ACL CONFIG TIME RANGE CONFIG ACL GROUP CONFIG

Entry ID  range : 0-31

Rule ID  range : 0-7

Action

Source MAC  For example: 02-02-03-04-05-06, do not fill, that "any"

Source MAC MASK  For example: fc-ff-ff-00-00-00, do not fill, that "any"

Destination MAC  For example: 02-02-03-04-05-06, do not fill, that "any"

Destination MAC Mask  For example: fc-ff-ff-00-00-00, do not fill, that "any"

Time-Range Name  It is empty, indicating that it is effective anytime

Add

Entry ID	Rule ID	Action	Source MAC	Destination MAC	Time-Range
No matching records found					

IP ACL Configuration: Configure IP based ACL access control list.

MAC ACL CONFIG IP ACL CONFIG TIME RANGE CONFIG ACL GROUP CONFIG

Entry ID  range : 0-31

Rule ID  range : 0-7

Action

Protocol

Source IP  For example: xxx.xxx.xxx.xxx, do not fill, that "any"

Source mask  For example: xxx.xxx.xxx.xxx, do not fill, that "any"

Source Port  Range: 0-65535, is empty, meaning any port

Destination IP  For example: xxx.xxx.xxx.xxx, do not fill, that "any"

Purpose mask  For example: xxx.xxx.xxx.xxx, do not fill, that "any"

Destination Port  Range: 0-65535, is empty, meaning any port

Time-Range Name  It is empty, indicating that it is effective anytime

Add

## TIME RANGE Configuration: ACL time range setting.

MAC ACL CONFIG
IP ACL CONFIG
TIME RANGE CONFIG
ACL GROUP CONFIG

**ADD Time Range**

Name  Add

**Config the time**

Time-Range Name  Del

Absolute  Periodic

Start Time

End Time

Time  -

Week  Sun  Mon  Tue  Wed  Thu  Fri  Sat

Add

Name	State	Time
No matching records found		

## ACL GROUP Configuration: Configure ACL access control list port group.

MAC ACL CONFIG
IP ACL CONFIG
TIME RANGE CONFIG
ACL GROUP CONFIG

Port  -

MAC ACL  Is blank, indicating that the rules applied to delete the port (if any exist)

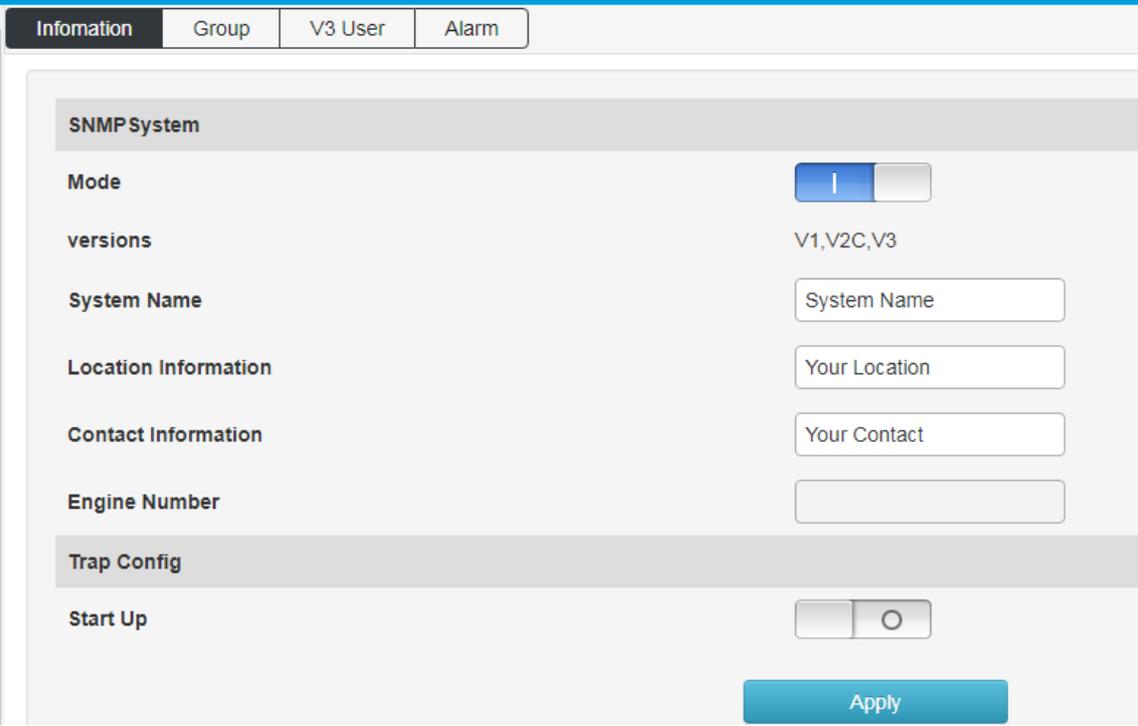
IP ACL  Is blank, indicating that the rules applied to delete the port (if any exist)

Set

Port	MAC access list ID	IP access list ID	
G1			
G2			
G3			
G4			
G5			
G6			
G7			
G8			
G9			

## 6.3 SNMP Configuration

System Information: Enable all SNMP protocol versions, configure SNMP protocol system properties and enable trap function.

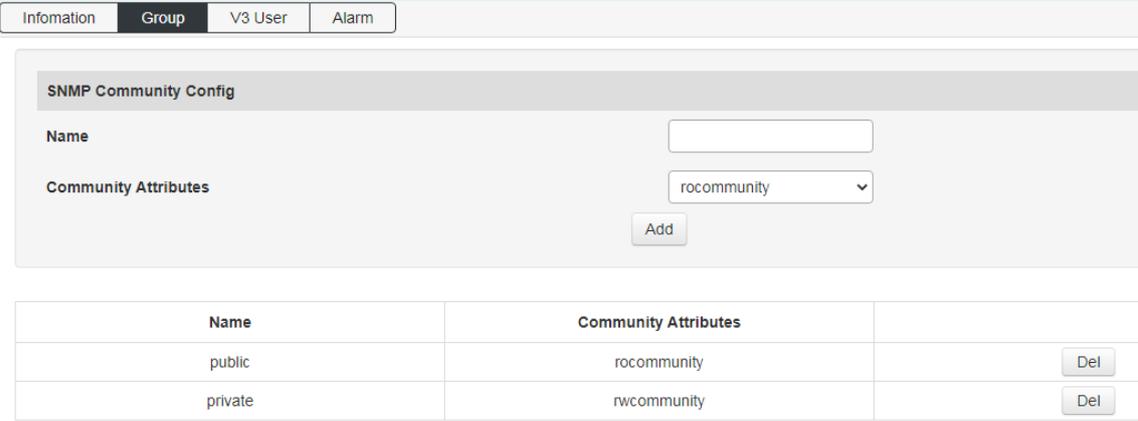


The interface shows the 'SNMP System' configuration page. It has tabs for 'Information', 'Group', 'V3 User', and 'Alarm'. The 'Information' tab is active. The configuration includes:

- Mode:** A toggle switch that is currently turned on.
- versions:** A text field containing 'V1,V2C,V3'.
- System Name:** A text input field with the placeholder 'System Name'.
- Location Information:** A text input field with the placeholder 'Your Location'.
- Contact Information:** A text input field with the placeholder 'Your Contact'.
- Engine Number:** An empty text input field.
- Trap Config:** A section header.
- Start Up:** A toggle switch that is currently turned off.

An 'Apply' button is located at the bottom right of the configuration area.

Group: Configure SNMP community properties.



The interface shows the 'SNMP Community Config' page. It has tabs for 'Information', 'Group', 'V3 User', and 'Alarm'. The 'Group' tab is active. The configuration includes:

- Name:** An empty text input field.
- Community Attributes:** A dropdown menu currently showing 'rocommunity'.
- Add:** A button to add a new community.

Below the configuration area is a table listing existing communities:

Name	Community Attributes	
public	rocommunity	Del
private	rwcommunity	Del

### V3: configure the member attribute of SNMP V3 protocol version.

Information Group **V3 User** Alarm

**V3 User Config**

Name

User Attribute

Certification Information

Encrypt information

Add

Index	Name	User Attribute	Authentication Mode	Authentication password	Encryption mode	Encryption password
1	admin	rouser				
2	admin	rwuser				

### Trap: configure trap receiving address and corresponding SNMP protocol version.

Information Group V3 User **Alarm**

**Trap Config**

Address

versions

Add

Address	versions
0.0.0.0	V1
0.0.0.0	V2C

## 6.4 RMON

### Event group: query and add event groups monitored remotely.

**Event Group** Statistics Group History Group Alarm Group

Index  Event group number: 0-1024 (delete, just fill in this item)

Description

Action

Add

Index	Description	Action	Recent Time
No matching records found			

Statistics group: query the statistical information of specific events after the event is broken.

Event Group   **Statistics Group**   History Group   Alarm Group

Index  Event group number: 0-1024 (delete, just fill in this item)

Port

Add

Index	Name
No matching records found	

History group: add and query the history of a specific event at the port.

Event Group   Statistics Group   **History Group**   Alarm Group

Index  Event group number: 0-1024 (delete, just fill in this item)

Sample Port

sampling Interval  range : 5-65535(Seconds)

Max Sample Number  Max Sample Number : 0-100

Add

Index	Sample Port	sampling Interval	Number Samples
No matching records found			

Alarm group: add the attribute of alarm event query on the port.

Event Group   Statistics Group   History Group   **Alarm Group**

Index  Event group number: 0-1024 (delete, just fill in this item)

Sample Port

Alarm Parameters

sampling Interval  range : 5-65535(Seconds)

Sampling Type

Rising Edge Threshold  range : 0-4294967295

Falling Edge Threshold  range : 0-4294967295

Rising Edge Event   
Event group index, when the alarm is triggered, the corresponding event of the event group will be activated, Range: 0-1024

Falling Event   
Event group index, when the alarm is triggered, the corresponding event of the event group will be activated, Range: 0-1024

Add

## 6.5 LLDP Configuration

Global configuration: turn on and configure LLDP function attributes.

Global Config Port Config LLDP Neighbor

LLDP

Tx Interval  range: 5-32768 Seconds

Tx Delay  range: 1-8192 Seconds

Tx Hold Times  range: 2-10

Port Reinit Delay  range: 2-5 Seconds

Manage Address  For Example:192.168.1.1

TLV optional to send

Manage Address TLV

Port Description TLV

System Capability TLV

System Description TLV

System Name TLV

fig.html

Port configuration: configure port LLDP function attributes.

Global Config Port Config LLDP Neighbor

Port	tx	rx
Select All	<input type="checkbox"/>	<input type="checkbox"/>
G1	<input type="checkbox"/>	<input type="checkbox"/>
G2	<input type="checkbox"/>	<input type="checkbox"/>
G3	<input type="checkbox"/>	<input type="checkbox"/>
G4	<input type="checkbox"/>	<input type="checkbox"/>
G5	<input type="checkbox"/>	<input type="checkbox"/>
G6	<input type="checkbox"/>	<input type="checkbox"/>
G7	<input type="checkbox"/>	<input type="checkbox"/>
G8	<input type="checkbox"/>	<input type="checkbox"/>
G9	<input type="checkbox"/>	<input type="checkbox"/>
G10	<input type="checkbox"/>	<input type="checkbox"/>

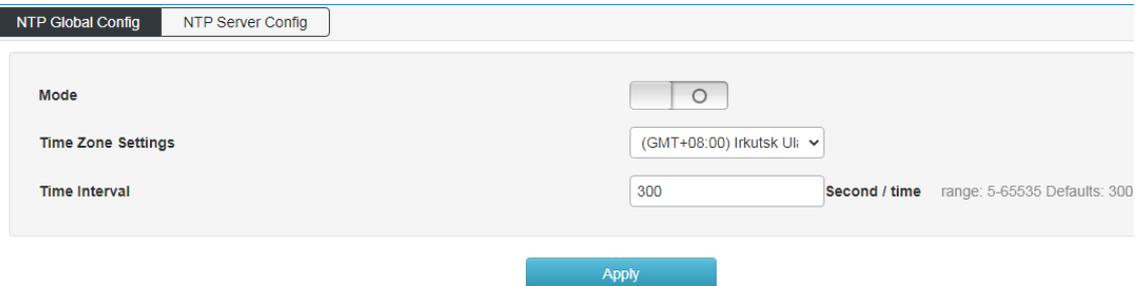
LLDP 邻居： 查询 LLDP 邻居信息；

Global Config Port Config LLDP Neighbor

Index	Chassis-ID	PortID	Holdtime	Port Description	System Name	System Description	System Capability	Manage Address	Local Port	vlan id
No matching records found										

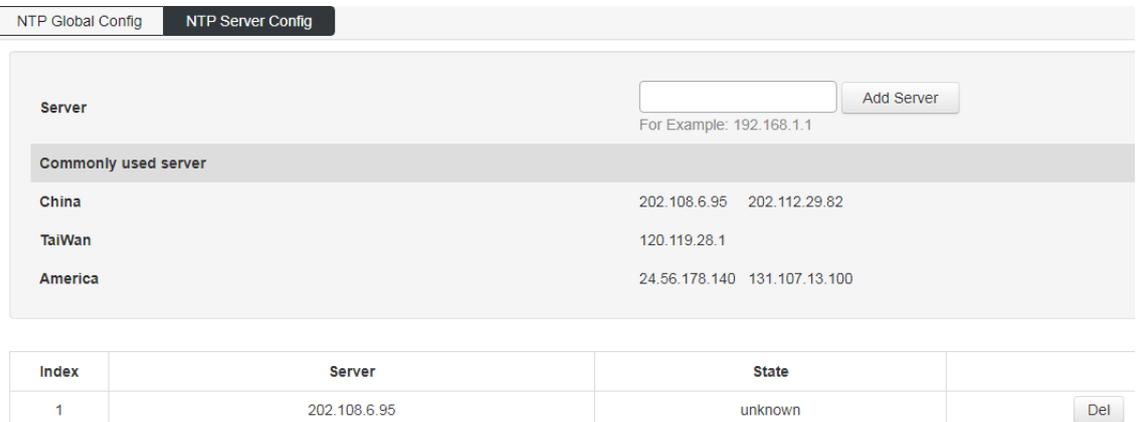
## 6.6 NTP Configuration

Global configuration: configure NTP function enable, time zone selection and check the modification of time interval.



The screenshot shows the 'NTP Global Config' tab. It features three main settings: 'Mode' with a radio button set to 'On', 'Time Zone Settings' with a dropdown menu showing '(GMT+08:00) Irkutsk Ul:', and 'Time Interval' with a text input field containing '300'. Below the input field, it says 'Second / time range: 5-65535 Defaults: 300'. An 'Apply' button is located at the bottom center.

NTP server configuration: configure the NTP server address and view the NTP server status.

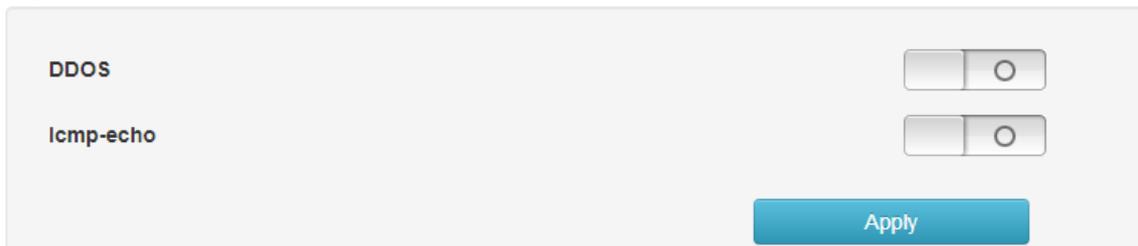


The screenshot shows the 'NTP Server Config' tab. At the top, there is a text input field for the server address and an 'Add Server' button. Below this, a section titled 'Commonly used server' lists three entries: 'China' with IP addresses 202.108.6.95 and 202.112.29.82, 'TaiWan' with 120.119.28.1, and 'America' with 24.56.178.140 and 131.107.13.100. At the bottom, a table displays the current server configuration.

Index	Server	State	
1	202.108.6.95	unknown	Del

## 6.7 Anti Attack

It can open DDoS and ICMP echo;



The screenshot shows the 'Anti Attack' configuration interface. It has two settings: 'DDOS' and 'Icmp-echo', each with a radio button set to 'On'. An 'Apply' button is located at the bottom right.

# 7. System Management

## 7.1 User Settings

Modify the user login password, the account name cannot be changed or added users.

Administrator	<input type="text" value="admin"/>
New Password	<input type="password"/> 16 characters at most
Retype Password	<input type="password"/> 16 characters at most
<input type="button" value="Apply"/>	

## 7.2 Network Settings

IPv4 configuration: modify the IPv4 address of the switch, cannot add IP address.

<input type="button" value="IPv4 Config"/> <input type="button" value="IPv6 Config"/>	
Manage Interface	<input type="text" value="eth0"/>
IPv4 Address	<input type="text" value="192.168.10.12/24"/> For Example : 10.0.0.2/24
Default Gateway	<input type="text"/> For Example : 10.0.0.1
Preferred DNS Server	<input type="text"/> For Example : 10.0.0.1
Alternative DNS Server	<input type="text"/> For Example : 10.0.0.1
<input type="button" value="Apply"/>	

IPv6 configuration: modify the IPv6 address of the switch, cannot add IP address.

<input type="button" value="IPv4 Config"/> <input type="button" value="IPv6 Config"/>	
Manage Interface	<input type="text" value="eth0"/>
IPv6 Address	<input type="text" value="fe80::fe01/64"/> For Example : fe80::01/64
Default Gateway	<input type="text"/> For Example : fe80::01
<input type="button" value="Apply"/>	

### 7.3 Alarm Configuration

Configure switch alarm function to enable.

Alarms

Config Alarm Conditions

Select All  PMU Alarm  Port Link Alarm  PoE Alarm  Loop Alarm

Apply

### 7.4 Service Configuration

Configure switch Telnet, SSH, HTTP version protocol and service port.

Telnet Service

TELNET Port 23

SSH Service

SSH Port 22

HTTP Service HTTP

HTTP Port 80

Apply

### 7.5 Configuration Management

For reset, upload and download switch configuration.

Restore factory settings

Upload Config  未选择任何文件

Download Config

## 7.6 Firmware Update

It is used to upgrade the software version of the switch.

Product Model	<input type="text" value="S2100_8GP_2F"/>
Hardware Version	<input type="text" value="V1"/>
Firmware Version	<input type="text" value="V1.0.1.1-g012940b"/>
Compile Time	<input type="text" value="Nov 30 2019 09:51:27"/>
New Firmware File	<input type="button" value="选择文件"/> 未选择任何文件

## 7.8 Diagnostic Testing

Ping detection: use the ping function of the switch to detect whether the link between the switch itself and other IP devices is smooth.

Ping Detection   Tracert Detection   Cable Detection

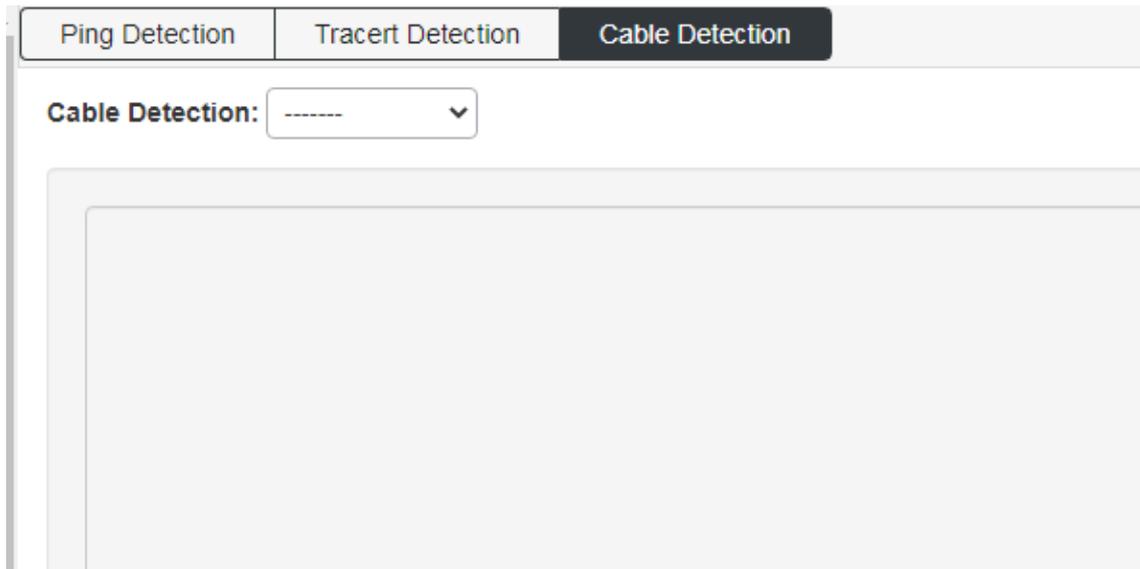
IP Address

Tracert detection: Traceroute.

Ping Detection   **Tracert Detection**   Cable Detection

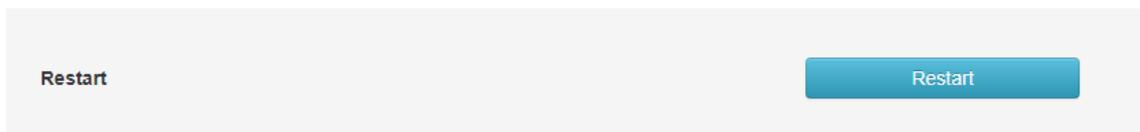
IP Address

Network line detection: detect the network line attribute of all network ports of the switch.



## 7.9 Reboot Device

Restart the switch.



This is a Class A product. In home environment, this product may cause radio interference. In this case, the user may be required to take appropriate measures.

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