Wi-Tek Cloud Easy Smart PoE Switch

WEB User Manual

www.wireless-tek.com

This manual applies to the following switch models

model	Interface
WI-PCES352GF	48-port Gigabit PoE+, 4-port Gigabit SFP

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Disclaimers

Preface

Reader object

This document is suitable for the following people

- Network Engineer
- Technical Promotion Personnel
- Network Administrator

Technical Support

- Website: https://www.wireless-tek.com/support.php

Agreement in this book

1. Command line format Convention

The meaning of the command line format is as follows:

Bold: the command line keywords (the parts that must be input as they remain unchanged in the command) are expressed in bold font.

Italics: command line parameters (parts of the command that must be replaced by actual values) are expressed in italics.

[]: indicates the part enclosed by [], which is optional during command configuration.

{ x | y | ... }: Indicates that one of two or more options is selected.

[x | y | ...]: Indicates to select one or none of two or more options.

//: a line starting with a double slash is represented as a comment line.

2. Description

- Some port types illustrated in this manual may be inconsistent with the actual situation. In actual operation, it is necessary to configure according to the port types supported by each product.
- The display information illustrated in this manual may contain the contents of other product series (such as product model, description, etc.), and the specific display information shall be subject to the actual equipment information.

Directory

Getting Start

This section provides an introduction to the web-based configuration utility, and covers the following topics:

- Powering on the device
- Connecting to the network
- Starting the web-based configuration utility

● Power

Connecting to Power

Power down and disconnect the power cord before servicing or wiring a switch.

Do not disconnect modules or cabling unless the power is first switched off. The device only supports the voltage outlined in the type plate. Do not use any other power components except those specifically designated for the switch.

Disconnect the power cord before installation or cable wiring.

The switch is powered by the AC 100-240 V 50/60Hz internal high-performance power supply. It is recommended to connect the switch with a single-phase three-wire power source with a neutral outlet, or a multifunctional computer professional source.

Connect the AC power connector on the back panel of the switch to the external power source with the included power cord, and check the power LED is on.

Rear View AC Power Socket

● Connecting to the Network

To connect the switch to the network:

1. Connect an Ethernet cable to the Ethernet port of a computer
2. Connect the other end of the Ethernet cable to one of the numbered Ethernet ports of the switch. The LED of the port lights if the device connected is active.
3. Repeat Step 1 and Step 2 for each device to connect to the switch.

We strongly recommend using CAT-5E or better cable to connect network devices. When connecting network devices, do not exceed the maximum cabling distance of 100 meters (328 feet). It can take up to one minute for attached devices or the LAN to be operational after it is connected. This is normal behavior.

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

● Starting the Web-based Configuration Utility

This section describes how to navigate the web-based switch configuration utility. Be sure to disable any pop-up blocker.

Browser Restrictions

- If you are using older versions of Internet Explorer, you cannot directly use an IPv6 address to access the device. You can, however, use the DNS (Domain Name System) server to create a domain name that contains the IPv6 address, and then use that domain name in the address bar in place of the IPv6 address.
- If you have multiple IPv6 interfaces on your management station, use the IPv6 global address instead of the IPv6 link local address to access the device from your browser.

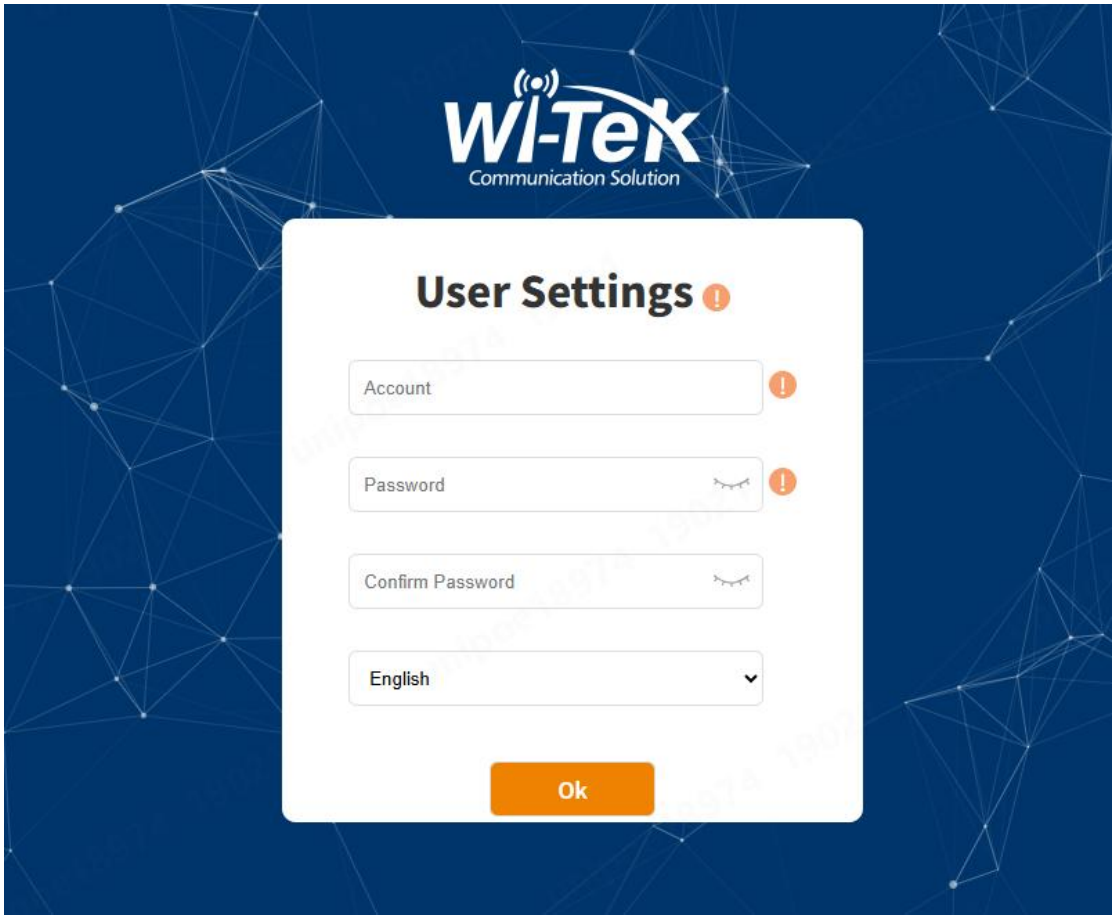
Launching the Configuration Utility
To open the web-based configuration utility:

1. Open a Web browser.
2. Enter the IP address of the device you are configuring in the address bar on the browser (factory default IP address is 192.168.0.1) and then press Enter.

When the device is using the factory default IP address, its power LED flashes continuously. When the device is using a DHCP assigned IP address or an administrator-configured static IP address, the power LED is lit a solid color. Your computer’s IP address must be in the same subnet as the switch.

For example, if the switch is using the factory default IP address, your computer's IP address can be in the following range: 192.168.0.x (whereas x is a number from 2 to 254).

After a successful connection, the login window displays.



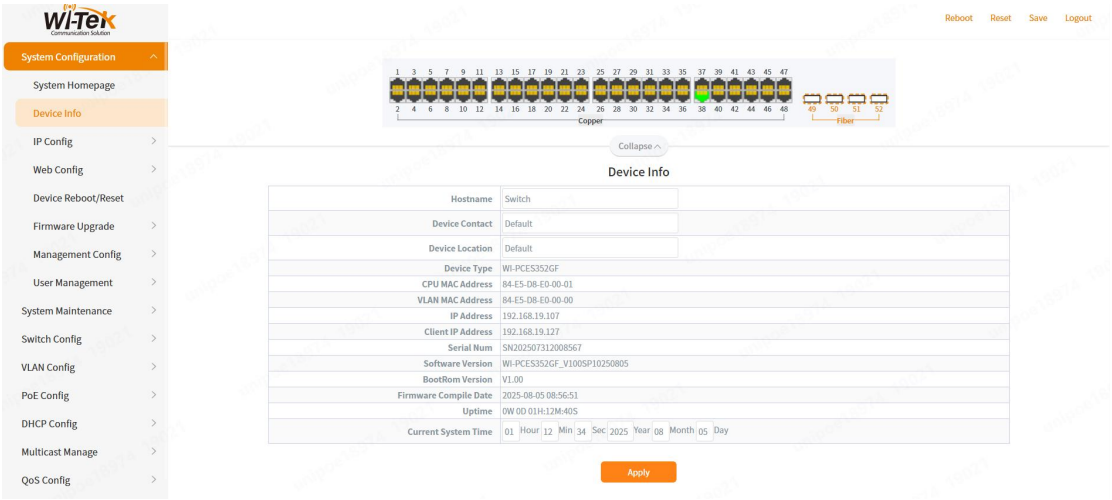
Login Window

● Logging In

When using it for the first time, you need to configure your username and password according to the password rules to log in

User name rule:
The Account consists of letters, numbers, and underscores, and must be between 5-16 characters.

Password rule:
1.The Password length must be between 6-16 characters.
2.Password requirements include at least three types: uppercase letters, lowercase letters, numbers, and special characters.
3.Characters can be <=>[]!@#$*().
4.Common passwords (such as admin, password) and four or more identical letters and numbers are not allowed.



System Information

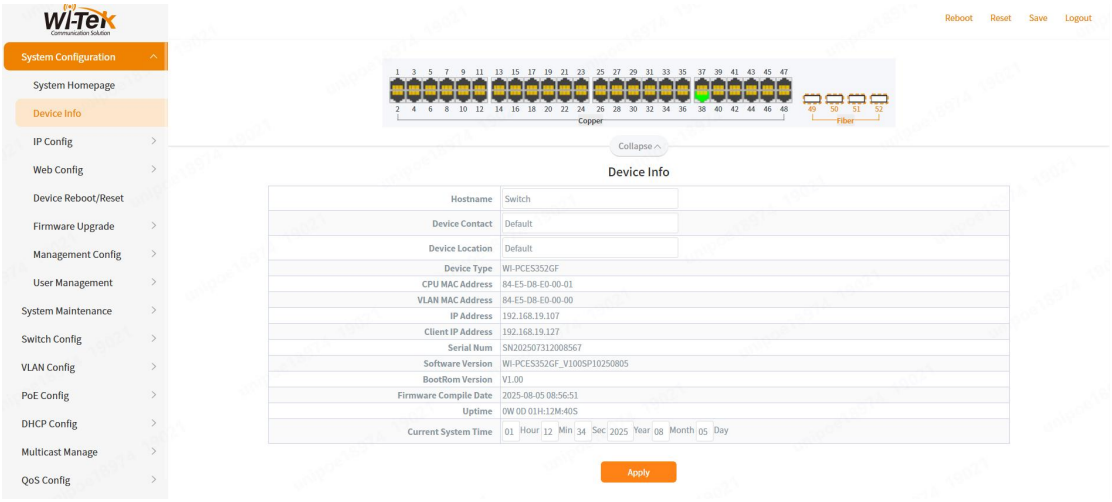
If you entered an incorrect username or password, an error message appears and the Login page remains displayed on the window. If you are having problems logging in, please see the Launching the Configuration Utility section in the Administration Guide for additional information.

- Logging Out

By default, the application logs out after ten minutes of inactivity.
To logout, click Logout in the top right corner of any page. The system logs out of the device.
When a timeout occurs or you intentionally log out of the system, a message appears and the Login page appears, with a message indicating the logged-out state. After you log in, the application returns to the initial page.

Web-based Switch Configuration

The smart switch software provides rich functionality for switches in your networks. This chapter describes how to use the web-based management interface (Web UI) to configure the switch's features.
For the purposes of this manual, the user interface is separated into four sections, as shown in the following figure:



1. System Configuration

1.1. System Homepage

The system homepage contains **Port Status**

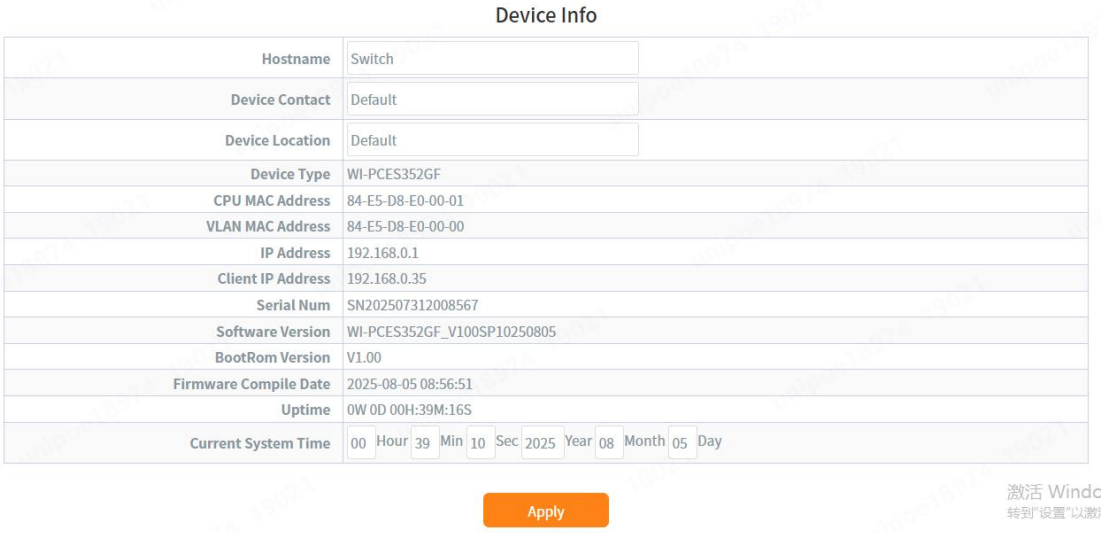
Port Status

Port	Admin Status	Speed/Duplex		Flow Control	MDI
		Config	Actual		
Ethernet1/0/1	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/2	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/3	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/4	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/5	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/6	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/7	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/8	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/9	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/10	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/11	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/12	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/13	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/14	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/15	Enabled	Auto/Auto	Link Down	Disabled	Auto
Ethernet1/0/16	Enabled	Auto/Auto	Link Down	Disabled	Auto

Click on **Port Status** to enter the corresponding page.

1.2. Device Info

The Device Info page allows you to view device information and also set the Hostname, Device Contact, Device Location of the device and the Current System Time.



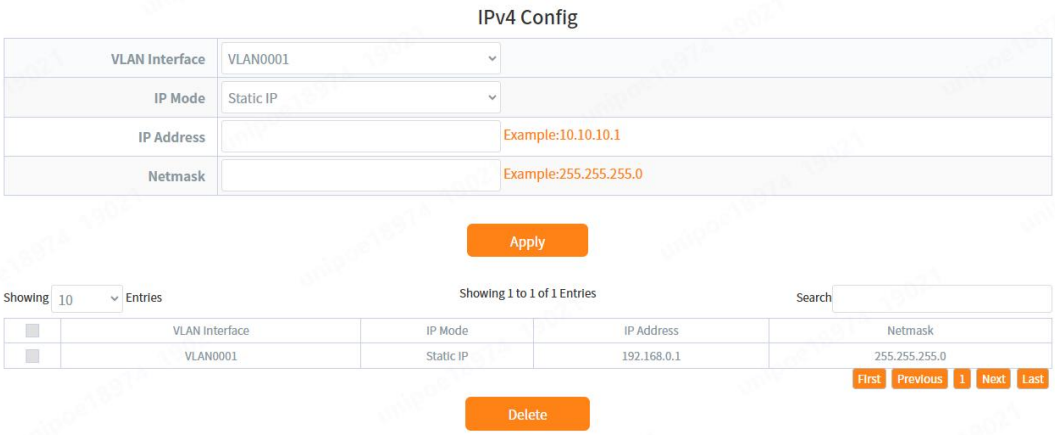
Hostname	Fill in the new **Hostname** of the switch to be changed, The device name can contain up to 16 characters and cannot be a special character(!%#$&< >+"?')
Device Contact	Fill in the new **Device Contact** of the switch to be changed, The device contact person can only co ntain up to 32 characters and cannot be a special character(!%#$&< >+"?')
Device Location	Fill in the new **Device Location** of the switch to be changed, The location contact person can only contain up to 32 characters and cannot be a special character(!%#$&< >+"?')
Current System Time	Manually changing the current system time, When the switch restart will invalidate.

1.3. IP Config

1.3.1. IPv4 Config

The page can be used to configure IP address and subnet mask for the VLAN interface.

To display the "IPv4 Config" page, click System Config ->IP Config->IPv4 Config, click "Apply" to configure.

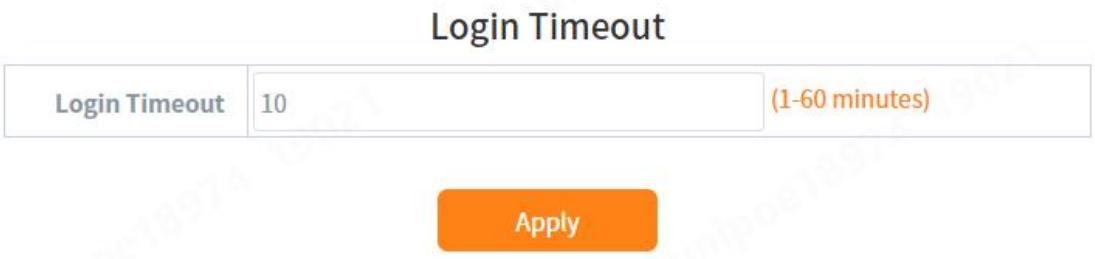


VLAN Interface	VLAN ID of layer 3 interface created
IP Mode	Static IP : User self configuration Dynamic: dhcp-client Automatic acquisition
IP Address	IP Address, e.g. A.B.C.D
Netmask	Netmask:for example :255.255.255.0
Operation	Action: Apply/Delete

1.4.Web Config

1.4.1.Web Timeout

The page can be used to configure Web Login Timeout time.



Web Login Timeout	Web Login Timeout: 1-60 minutes,default 10 minutes

1.5. Device Reboot/Reset

Device Reboot/Reset module, the user can restart the switch by **Reboot** button. can also leave the factory initial settings restart by **Reset** button, but also can save the current set configuration by **Save** button.

1.6. Firmware Upgrade

1.6.1. HTTP Upgrade

HTTP Upgrade module, the user can select file by HTTP way, and can upgrade the firmware of the switch by this method.

1.6.2. TFTP Service

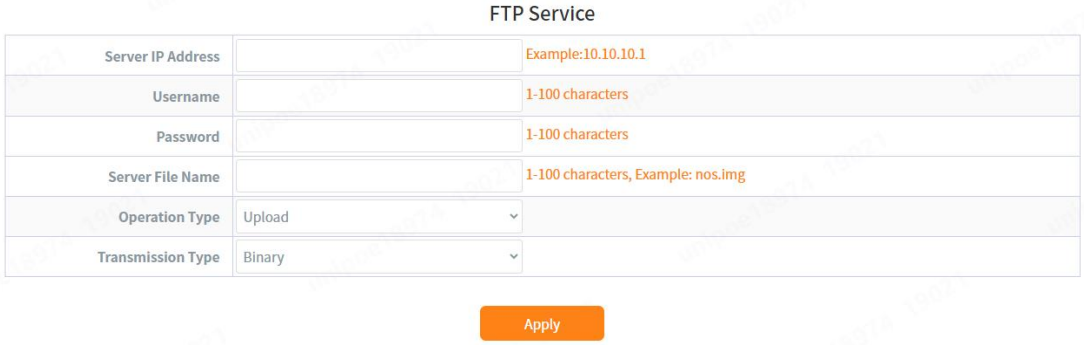
TFTP client service module, the user can upload or download files by TFTP way, and can upgrade the firmware of the switch by this method.

Server IP address	TFTP address IP peer server, point decimal	
Server File name	Source name to upload or download ,1-100 characters	
Operation type	Upload	Upload upgrade files from the switch to the TFTP server
	Download	Download upgrade files from TFTP server to

		switch
Transmission type	binary	Transfer files in binary format (default)
	ascii	Transfer files in ascii format

1.6.3.FTP Service

FTP client service module, the user can upload or download files by FTP way, and can upgrade the firmware of the switch by this method.

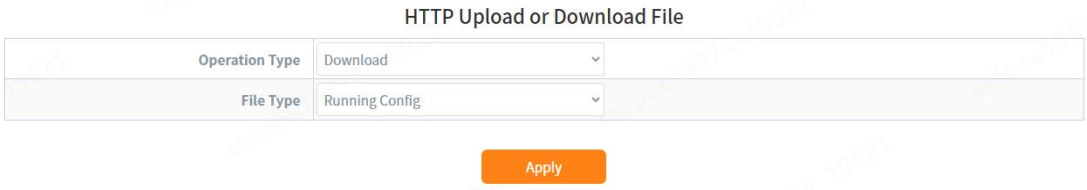


Server IP Address	FTP address IP peer server, point decimal	
Username	FTP server-to-server username ,1-100 characters	
Password	FTP server-side user password 1-100 characters	
Server File Name	Source name to upload or download ,1-100 characters	
Operation Type	Upload	Upload upgrade files from the switch to the TFTP server
	Download	Download upgrade files from TFTP server to switch
Transmission Type	binary	Transfer files in binary format (default)
	ascii	Transfer files in ascii format

1.7.Management Config

1.7.2.HTTP

HTTP module, the user can **Download** or **Upload** switch **Running Configuration** or **Startup Configuration** by http.

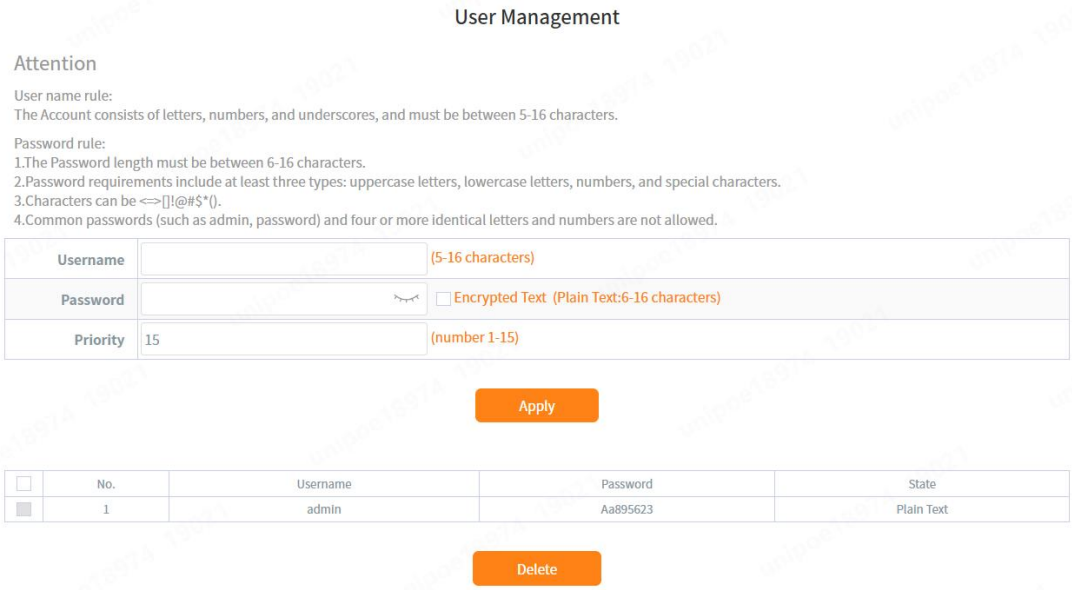


Operation Type	Download	To download files
	Upload	To upload files

File Type	Running Configuration	Switch running configuration
	Startup Configuration	Switch startup configuration

1.8.User Management

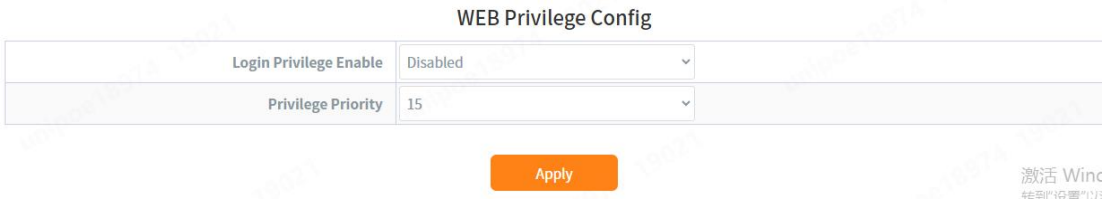
1.8.1.User Management



User Management module, users in this module can add or delete user operations.

Username	The Account consists of letters, numbers, and underscores, and must be between 5-16 characters.
Password	1. The Password length must be between 6-16 characters. 2. Password requirements include at least three types: uppercase letters, lowercase letters, numbers, and special characters. 3. Characters can be <=>[]!@#$*(). 4. Common passwords (such as admin, password) and four or more identical letters and numbers are not allowed.
Priority	Used to specify permission level.

WEB Privilege Config module, users can configure permissions for user accounts to login in the web.

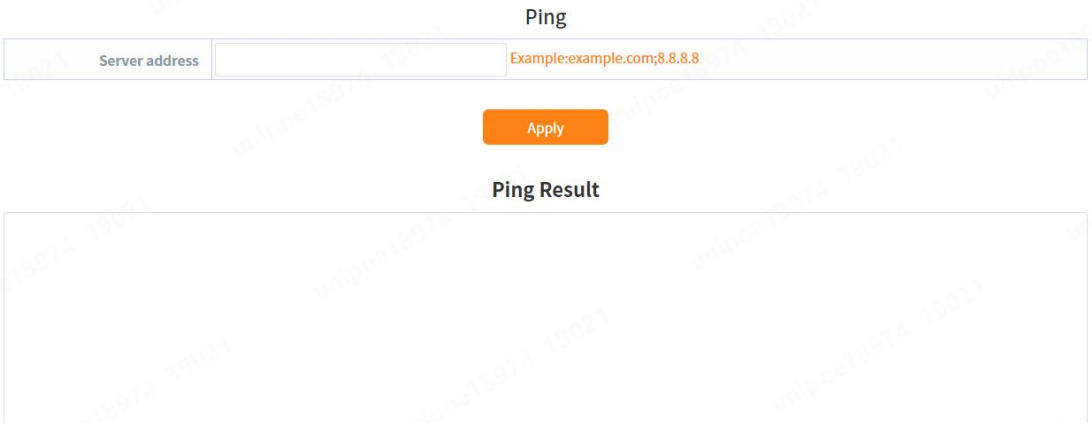


Login Privilege Enable	Change the way users log in to web pages with permissions, When the user priority is lower than the privilege priority, it changes from being unable to log in to being able to log in to the web page but not configure information, and can only view the configuration. Default is disable.
Privilege Priority	Used to specify permission level, default level 15, only the user with the level that is equal to or higher than it can login in the switch by web.

2. Monitor Management

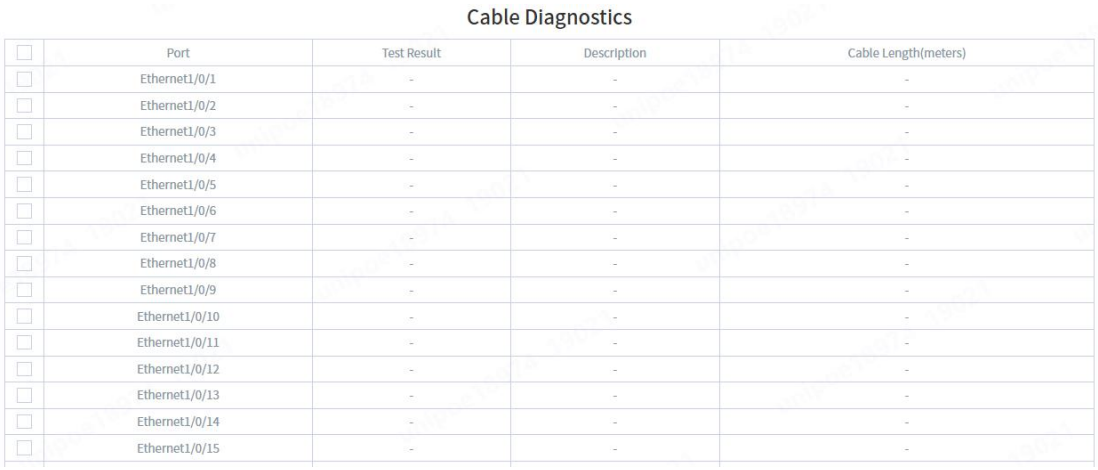
2.1. Ping

The user can run ping command.



2.2.Cable Diagnostics

This chapter can be used to detect port link lines.
To display the “Cable Diagnostics” page,click Monitor Management ->Cable Diagnostics, click "Apply" to configure.


Cable Diagnostics

Port	Test Result	Description	Cable Length(meters)
Ethernet1/0/1	-	-	-
Ethernet1/0/2	-	-	-
Ethernet1/0/3	-	-	-
Ethernet1/0/4	-	-	-
Ethernet1/0/5	-	-	-
Ethernet1/0/6	-	-	-
Ethernet1/0/7	-	-	-
Ethernet1/0/8	-	-	-
Ethernet1/0/9	-	-	-
Ethernet1/0/10	-	-	-
Ethernet1/0/11	-	-	-
Ethernet1/0/12	-	-	-
Ethernet1/0/13	-	-	-
Ethernet1/0/14	-	-	-
Ethernet1/0/15	-	-	-

3.Switch Config

3.1.Port Statistics

This page displays port statistics information.

Port Statistics

PORT	Link Status	Rate(Bps) (R/T)	Rate(pps) (R/T)	unicast packets (R/T)	multicast packets (R/T)	broadcast packets (R/T)	input errors	output errors	CRC (R)	frame alignment (R)	overrun (R)	ignored (R)	abort (R)	length error (R)	undersize (R)	jabber (R)	fragments (R)	collisions (T)	late collisio (T)
Ethernet1/0/1	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/2	Connected	0/1884	0/2	148.0/367.0	2.0/194678.0	0.0/16824.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/3	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/4	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/5	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/6	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/7	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/8	Disconnect	941/91	1/0	0.0/0.0	172.0/29.0	88.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/9	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/10	Connected	528/204	1/0	5661.0/7712.0	5416.0/58820.0	8814.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/11	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/12	Disconnect	0/0	0/0	0.0/0.0	167.0/11.0	80.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/13	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/14	Disconnect	0/0	0/0	48061.0/55055.0	3887.0/57351.0	7883.0/3.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/15	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/16	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/17	Connected	1555/1592	2/2	115164.0/117485.0	116460.0/114824.0	350.0/5272.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/18	Connected	846/1024	1/1	300.0/222.0	115873.0/112437.0	4.0/1380.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/19	Connected	824/890	1/1	2225.0/217.0	116522.0/116130.0	34.0/10116.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/20	Disconnect	0/0	0/0	41.0/77.0	38934.0/37839.0	0.0/57.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/21	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/22	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/23	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/24	Connected	28/495	0/1	3204.0/3408.0	62.0/33362.0	125.0/65.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/25	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/26	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/27	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethernet1/0/28	Disconnect	0/0	0/0	0.0/0.0	0.0/0.0	0.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Port-Channel1	Connected	3225/3506	4/5	235460.0/236002.0	775578.0/762460.0	776.0/33650.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Port-Channel2	Connected	528/204	1/0	5661.0/7712.0	5416.0/58820.0	8814.0/0.0	0	0	0	0	0	0	0	0	0	0	0	0	0

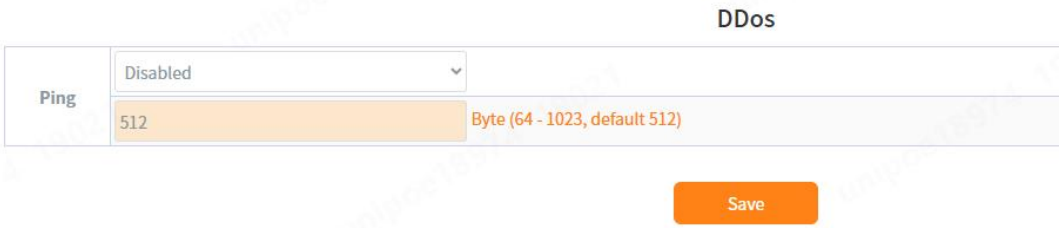
Refresh Delete

Port	physical ports
Link Status	Link Status: Connected; Disconnect
Rate(bps) (R/T)	Rate(bps): Received/Transmit;
Rate(pps) (R/T)	Rate(pps): Received/Transmit;
Unicast packets(R/T)	Unicast packets: Received/Transmit;
multicast packets(R/T)	multicast packets: Received/Transmit;
brocast packets(R/T)	brocast packets: Received/Transmit;
Input errors	Input erros
output errors	Output erros
CRC(R)	CRC(Cyclic Redundancy Check) Received;
frame alignment (R)	Frame Alignment Received;
overrun (R)	Overrun Received;
ignored (R)	Ignored Received;
abort (R)	Abort Received;

length error (R)	Length error Received;
undersize (R)	Undersize Received;
jabber (R)	Jabber Received;
fragments (R)	Fragments Received;
collisions (T)	Collisions Transmit;
late collisions (T)	Late Collisions Transmit;
pause frame (R/T)	Pause Frame Received/Transmit;
Refresh	Refresh Port Statistics
Delete	Select the port and click delete to clear Port Statistics

3.2 DDos

The configuration of the page is used to set the ping byte.
select 'Enabled' to configure.



Ping	Enabled	Turn on the global switch of DDos on the switch
	Disabled	Turn off the global switch of DDos on the switch
	Configure Ping Byte	

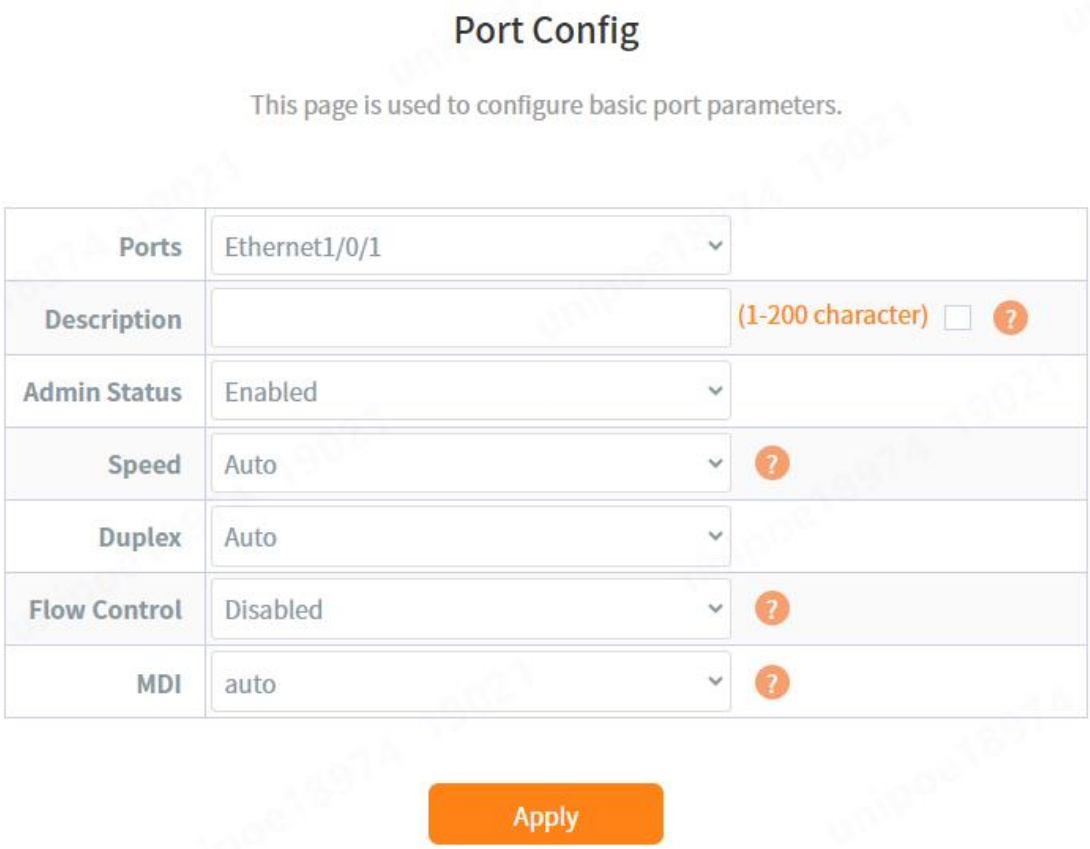
Display current configuration information

3.3.Port Config

3.3.1.Port Config

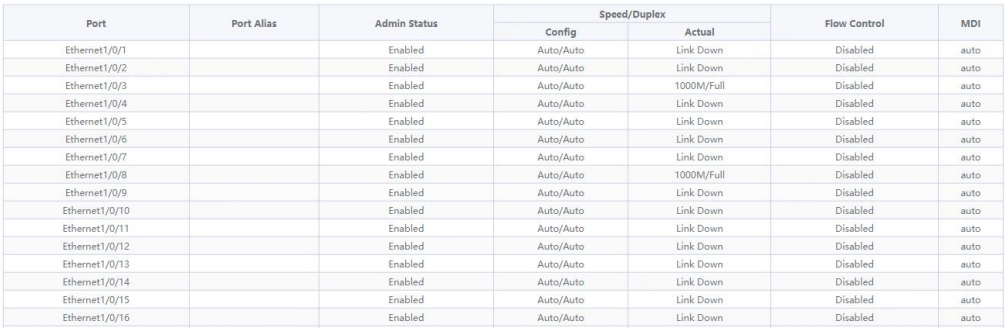
This page is mainly used to configure the basic of physical ports.

To display the "Port Config" page, click Switch Config->Port Config->Port Config, click "Apply" to configure.



Ports	Select physical ports
Port Alias	Set port alias name, value 1-200
Admin status	Port status: Enabled Disabled

Speed	Port Speed: Auto,10M,100M,1000M
Duplex	Port Duplex: Auto, Half, Full
Flow Control	Port Flow Control: Disabled, Enabled
Mdi	Mdi: auto, across, normal, default is auto.



Port	Port Alias	Admin Status	Speed/Duplex		Flow Control	MDI
			Config	Actual		
Ethernet1/0/1		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/2		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/3		Enabled	Auto/Auto	1000M/Full	Disabled	auto
Ethernet1/0/4		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/5		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/6		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/7		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/8		Enabled	Auto/Auto	1000M/Full	Disabled	auto
Ethernet1/0/9		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/10		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/11		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/12		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/13		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/14		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/15		Enabled	Auto/Auto	Link Down	Disabled	auto
Ethernet1/0/16		Enabled	Auto/Auto	Link Down	Disabled	auto

Port	physical ports
Port Alias	Port alias description
Admin status	Port status: Enabled Disabled
Speed	Port rate: 10: 10M 100: 100M 1000: 1000M Auto: Automatic negotiation rate
Duplex	Duplex: Auto: Automatic negotiation mode Half: Half duplex mode Full: Full duplex mode
Flow control	Port Flow Control Status:
Mdi	Mdi: auto, across, normal, default is auto.

3.4.Loopback Detection

3.4.1.Global Config

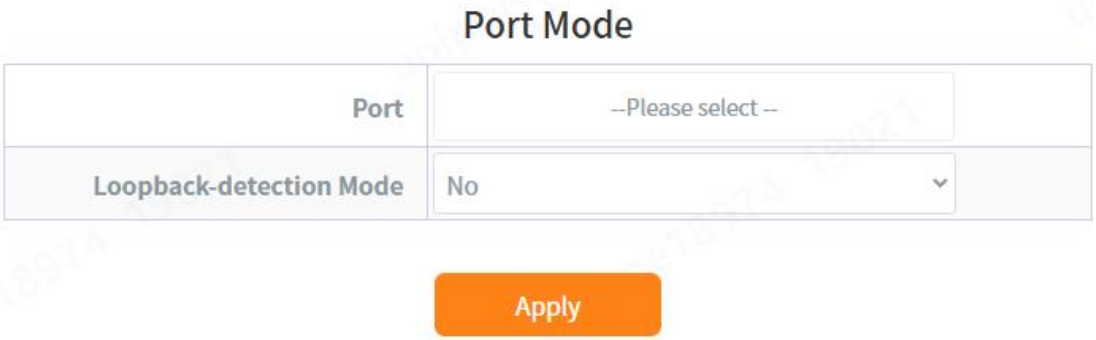
The configuration of the page is used to set the loop detection control

method.
click on 'Enabled' to configure.

3.4.2.Port Mode

The configuration of the page is used to set the loop detection control method.

To display the "Port Mode" page, click Monitor Management ->Loopback Detection->Port Mode, click "Apply" to configure.



Port	Ethernet port name
Loopback-detection mode	Operation in case of loop: No: no control mode Shutdown: Disable port block : Block port
Operation	Operation of loop detection function: Apply: Configure control mode

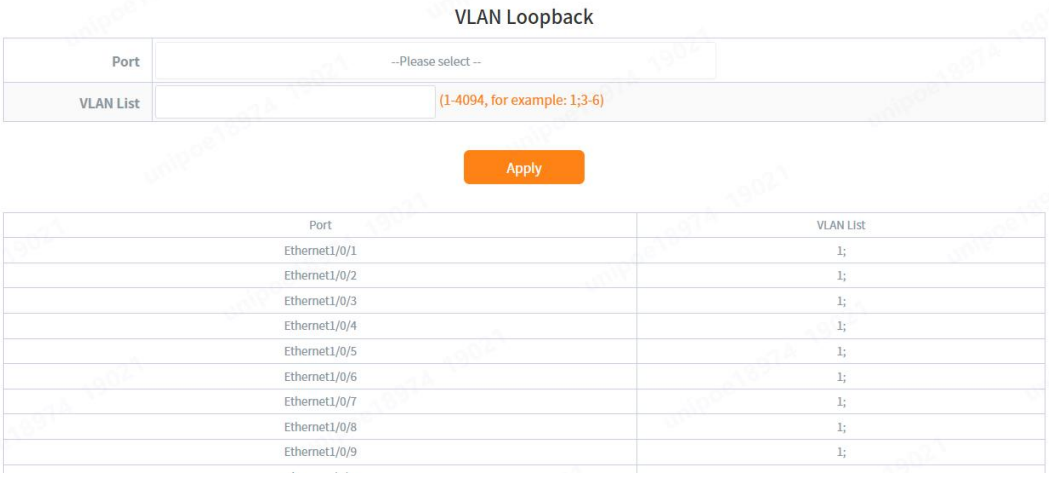
Port	Loopback-detection Mode
Ethernet1/0/1	Block
Ethernet1/0/2	Block
Ethernet1/0/3	Block
Ethernet1/0/4	Block
Ethernet1/0/5	Block
Ethernet1/0/6	Block
Ethernet1/0/7	Block
Ethernet1/0/8	Block
Ethernet1/0/9	Block
Ethernet1/0/10	Block
Ethernet1/0/11	Block

Port	Ethernet port name
Loopback-detection mode	Shutdown: Disable port block : Block port No:Disable port loop detection

3.4.2.VLAN Loopback

This page can be used to configure VLAN loop detection function enabled or disabled.

To display the "VLAN Loopback" page, click Monitor Management ->Loopback Detection->VLAN Loopback, click "Apply" to configure.



Port	Ethernet port name
VLAN ID	VLAN ID, range 1-4094
Operation	Apply: Set VLAN loop detection

3.4.3. Interval Time

This page can be used to configure the loop detection interval.

To display the "Interval Time" page, click Monitor Management ->Loopback Detection-> Interval Time, click "Apply" to configure.

Loopback-detection interval time	Interval time between loops, size 5-300 seconds, default is 5.
No Loopback-detection interval time	No loop interval, size 1-30 seconds, default is 3.
Operation	Configuration: Set the test time by yourself. Default : Restore the default configuration, there is a loop detection interval of 35 seconds, there is no loop detection

	interval of 15 seconds.

3.4.4. Recovery Timeout

This page is used to configure loop detection to automatically return to an uncontrolled state.

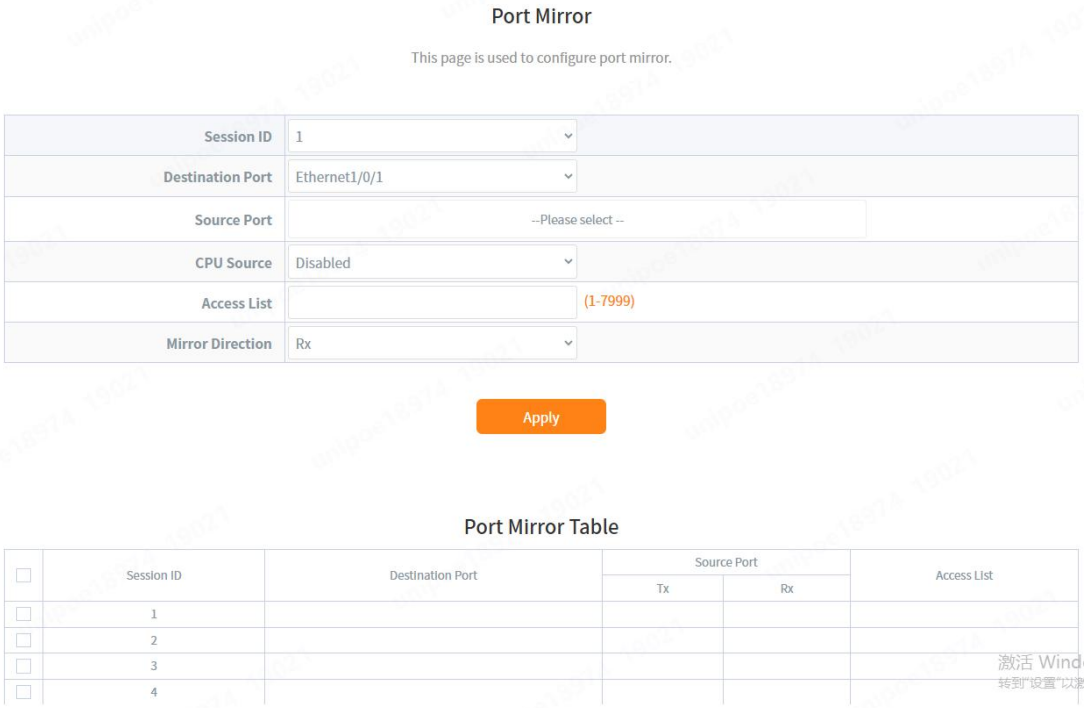
To display the “Recovery Timeout” page, click Monitor Management ->Loopback Detection-> Recovery Timeout, click "Apply" to configure.

Recovery switch timeout	When a port is disabled or blocked due to a loop, it automatically recovers to an uncontrolled time, the size range is 0-3600 seconds. When it is configured as 0, the auto recovery function is disabled. Default is 600

3.5. Port Mirror

This section can be used for port mirroring function configuration.

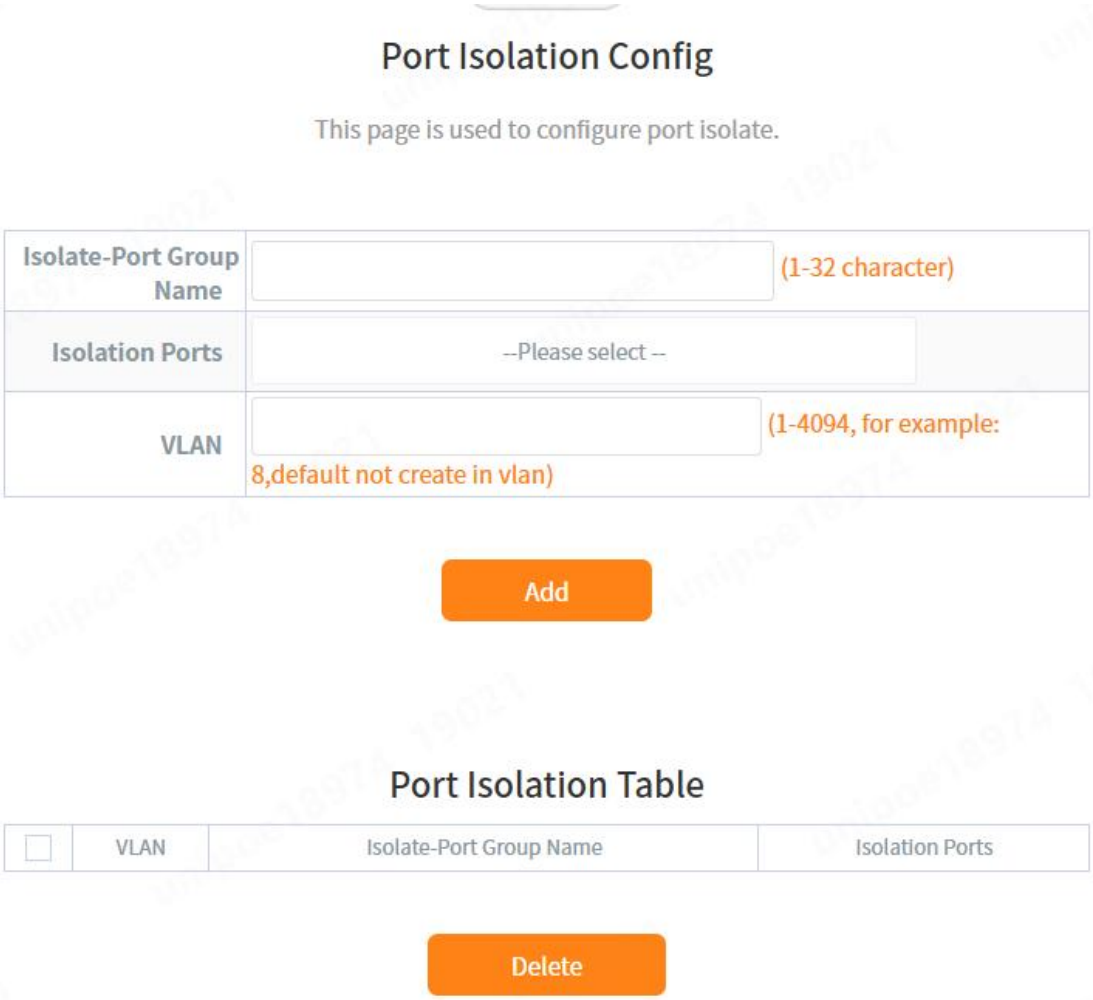
To display the “Port Mirror” page, click Switch Config ->Port Mirror, click "Apply" to configure.



Session	Mirror Session
Destination port	Mirror destination port
Source port	Mirror Source Port
CPU Source	CPU Source: Disabled Enabled
Access list	The access control list set for the mirror source port
Mirror direction	What kind of data is needed to filter to the destination port: Both: Sending and receiving Rx: receive Tx: send

3.6.Port Isolate

This page is mainly used to configure the port isolation.



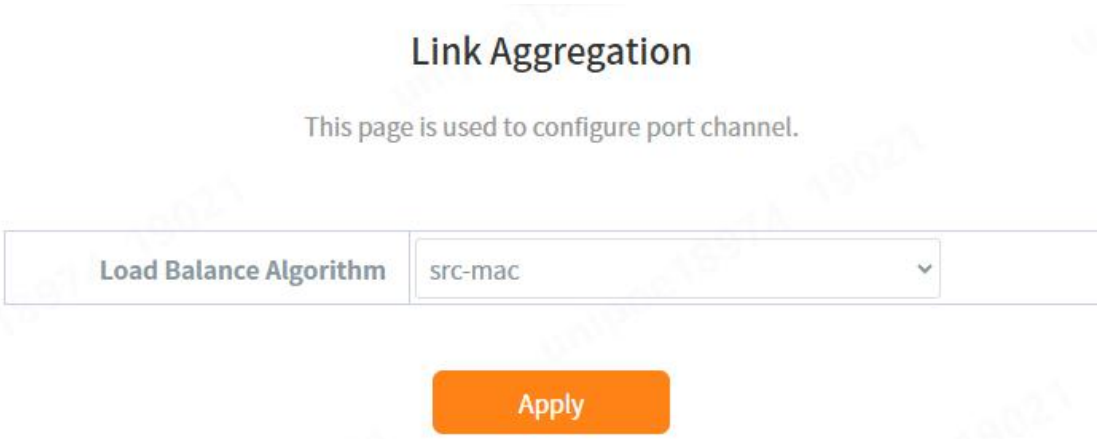
Isolate-Port Group Name	The name of isolate-port Group, value 1-32 character
Isolation Ports	Select isolation ports to add isolate group

3.7. Link Aggregation

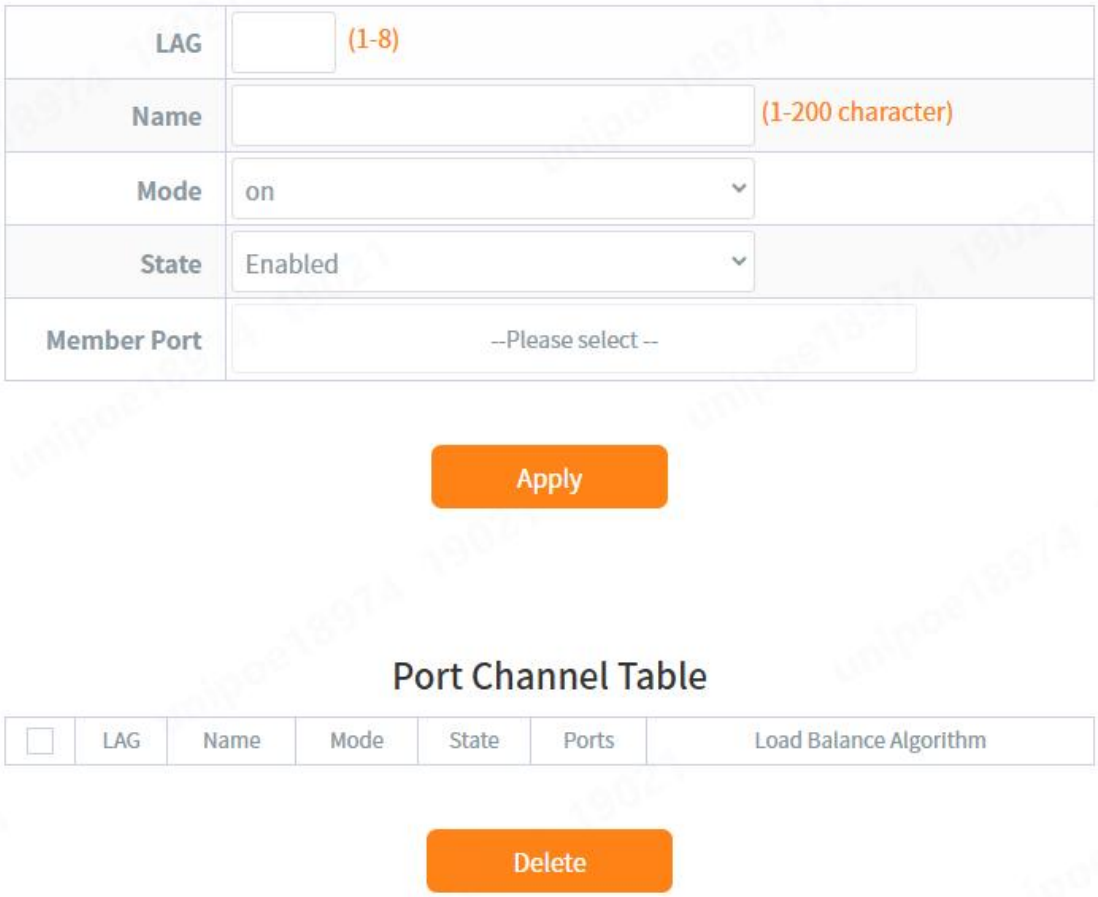
3.7.1. Link Aggregation Group

This section can be used to create convergent groups.

To display the "Port Channel Group" page, click Port channel -> Port Channel Group, click "Apply" to configure.



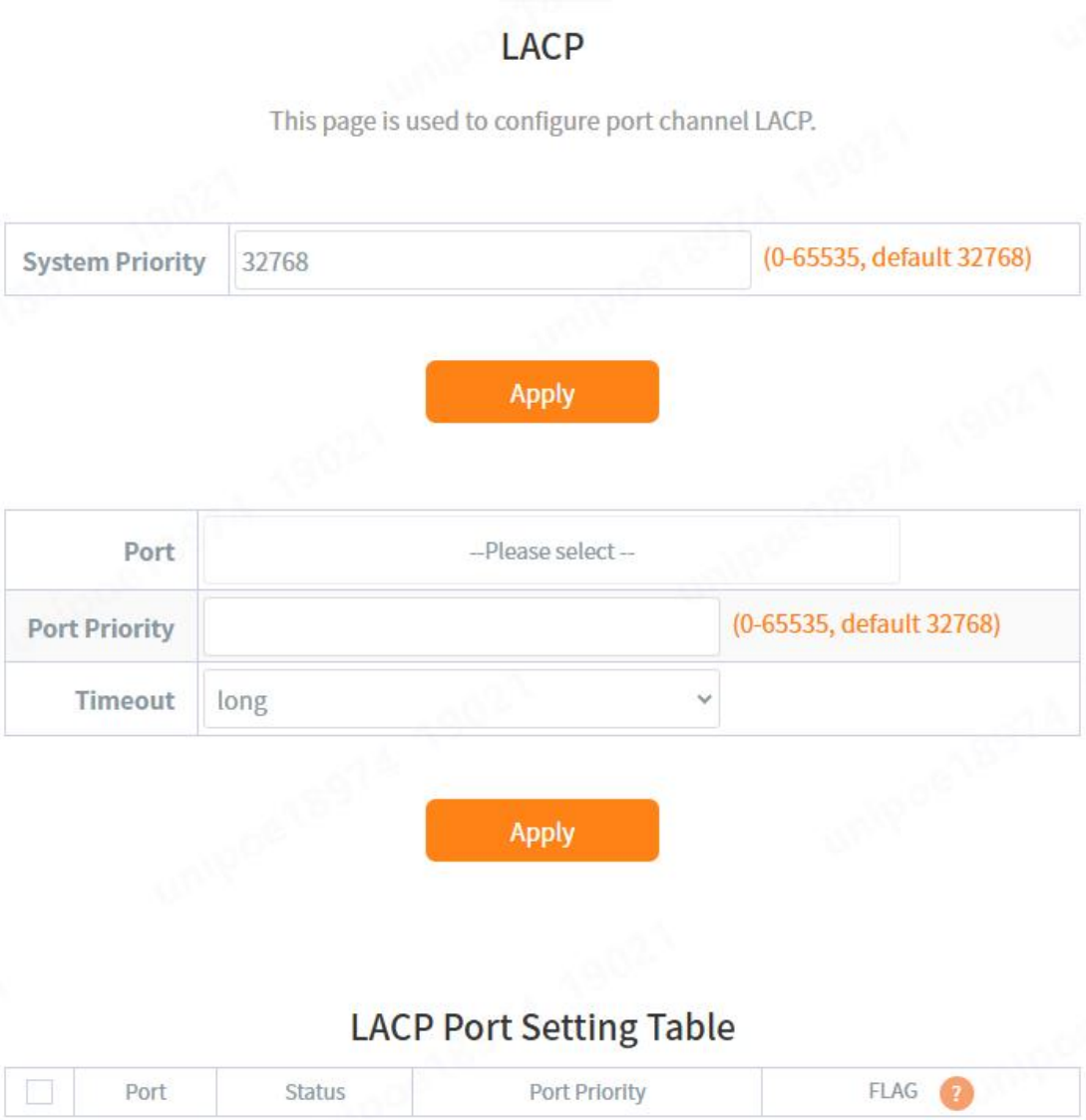
Load balance mode	**src-mac**: Execute load balancing according to source MAC **dst-mac**: Execute load balancing according to target MAC **src-dst-mac** : Execute load balancing based on source and target MAC **src-ip**: Execute load balancing according to source IP **dst-ip**: Execute load balancing according to target IP **dst-src-ip** : Execute load balancing according to target IP source **dst-src-mac-ip** : Perform load balancing based on target and source Mac and source IP **ingress-port** : ingress port.



LAG	To create a convergent group number, value 1-8.
Name	The name of LAG group, value 1-32 character
mode	On：force port to join port channel without LACP. enabled Active：Enable the LACP on the port and set it to Active mode; Passive：Enable LACP on the port and set it to passive mode
State	Enabled Disabled
Member Port	Ethernet port name

3.7.2. LACP

This page is available with setting system priority and port priority. To display the “LACP” page, click Switch Config -> Port channel->LACP,



LACP system priority	Range :0-65535
Port list	Ethernet port name added to convergence group
LACP port priority	Range :0-65535
Timeout	long

	short

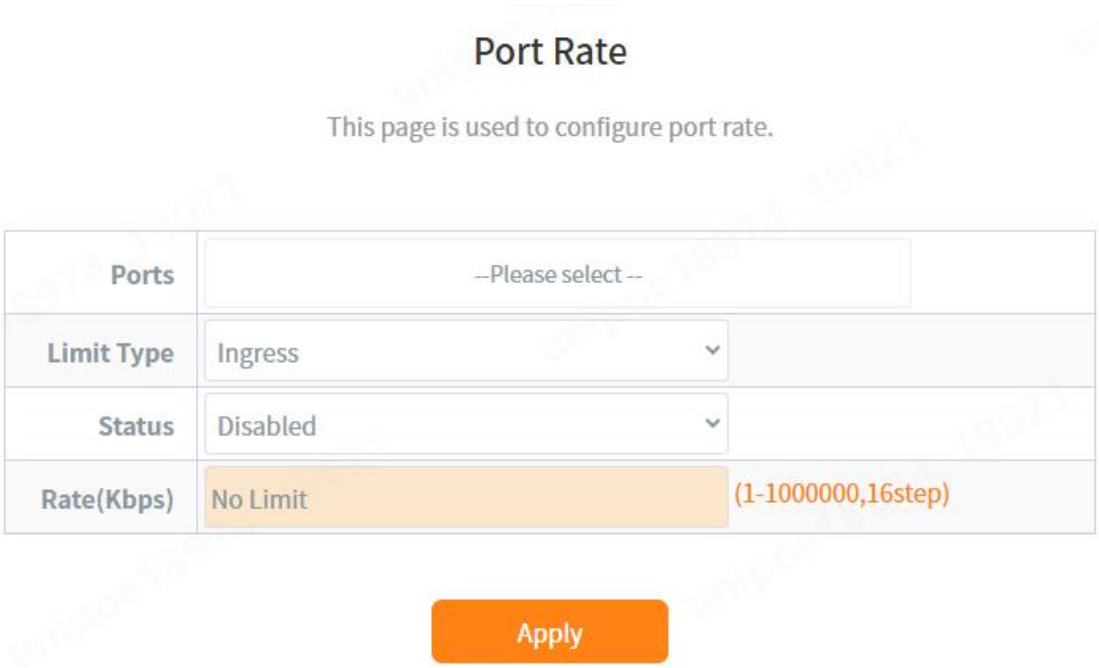
3.8. Jumbo Frame

This page is used to configure Jumbo Frame.

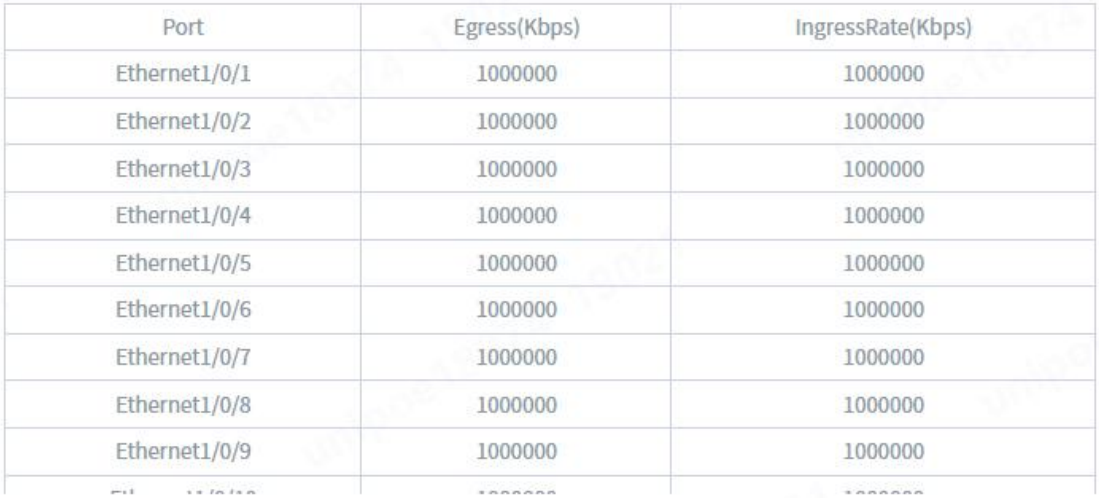
Status	Disabled(default) Enabled
Jumbo Frame Size(Unit: Bytes)	Size 1500-12270, default is 1500.

3.9. Port Rate

The page is configured for Port Rate.
To display the “Port Rate” page, click Switch Config -> Port Rate, click "Apply" to configure.



Ports	Ethernet port name
Limit Type	Limit type: Egress: send Ingress : receive All: send and receive
Status	Disabled Enabled
Rate	Bandwidth control rate in the range of Kbps 1-1000000



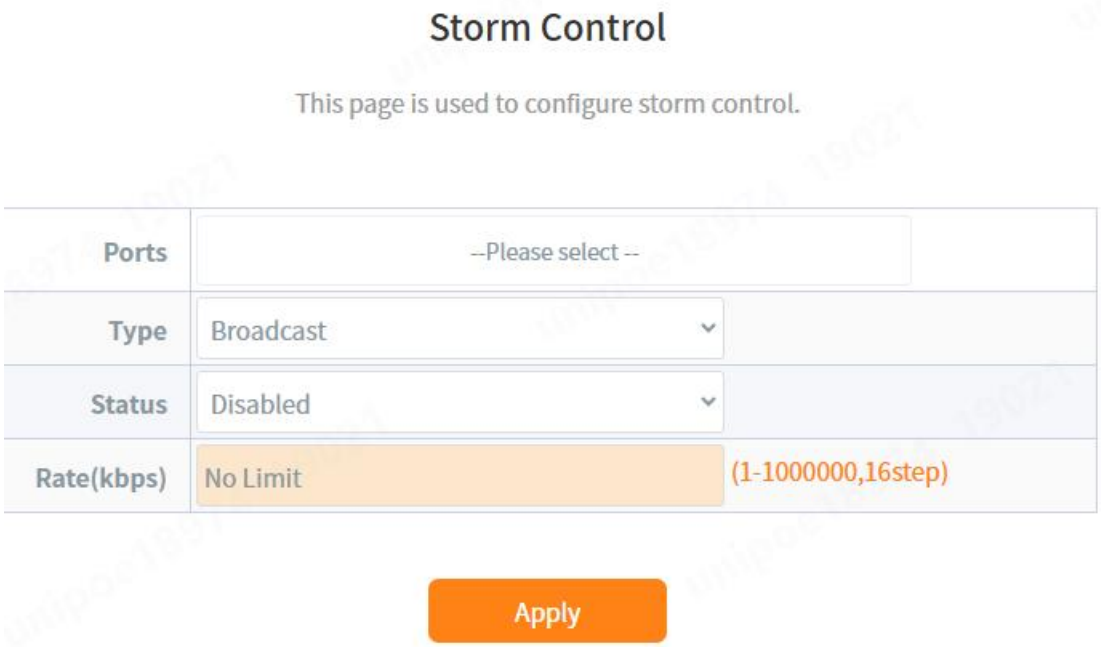
Port	Egress(Kbps)	IngressRate(Kbps)
Ethernet1/0/1	1000000	1000000
Ethernet1/0/2	1000000	1000000
Ethernet1/0/3	1000000	1000000
Ethernet1/0/4	1000000	1000000
Ethernet1/0/5	1000000	1000000
Ethernet1/0/6	1000000	1000000
Ethernet1/0/7	1000000	1000000
Ethernet1/0/8	1000000	1000000
Ethernet1/0/9	1000000	1000000

Port	Ethernet port name
Ingress bandwidth threshold(Kb)	Displays the current received

	data bandwidth limit in the range of Kbps 1-1000000
Engress bandwidth threshold(Kb)	Displays the bandwidth limit of the current sending data, ranging from 1-1000000kbps

3.10. Storm Control

This page can be configured for the storm control function of the port. To display the "Storm Control" page, click Switch Config -> Storm Control, click "Apply" to configure.



Port	Ethernet port name
Type	Broadcast/Multicast/Unicast
Status	Disabled: Disable Storm Control Enabled: Turn on the storm control function and configure the speed limit
Rate	storm control rate, ranging from 1-1000000 kbps or pps 1-1488095

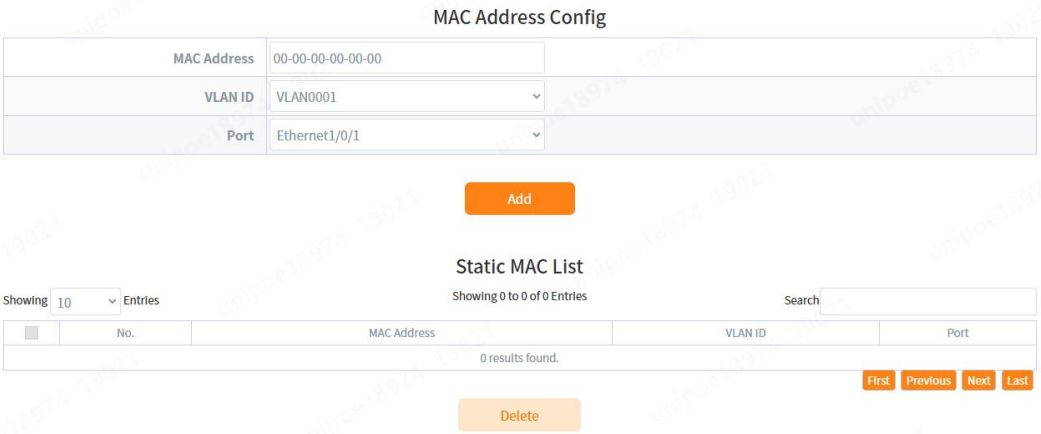
Port	Broadcast	Unknown Multicast	Unknown Unicast
Ethernet1/0/1	Disabled	Disabled	Disabled
Ethernet1/0/2	Disabled	Disabled	Disabled
Ethernet1/0/3	Disabled	Disabled	Disabled
Ethernet1/0/4	Disabled	Disabled	Disabled
Ethernet1/0/5	Disabled	Disabled	Disabled
Ethernet1/0/6	Disabled	Disabled	Disabled
Ethernet1/0/7	Disabled	Disabled	Disabled
Ethernet1/0/8	Disabled	Disabled	Disabled
Ethernet1/0/9	Disabled	Disabled	Disabled

Port	Ethernet port name
storm-control type	Broadcast/Multicast/Unicast

3.11.MAC Address Config

3.11.1.Static MAC

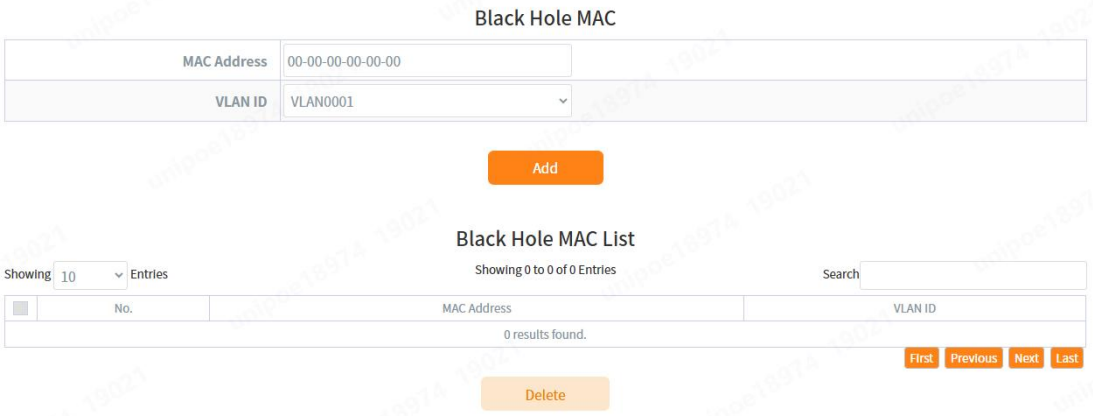
Configure Static MAC addresses, and establish the mapping relationship between MAC addresses and ports and VLANs.



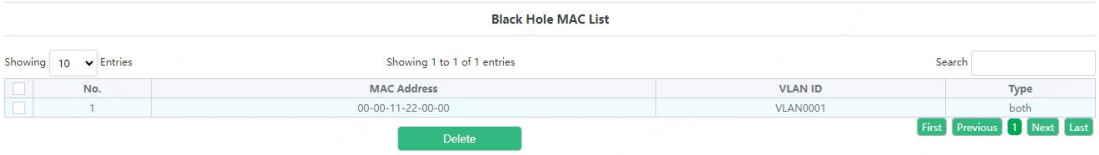
MAC address	Hexadecimal MAC address, the format is xx-xx-xx-xx-xx-xx	
VLAN ID	Created VLAN ID	
Port	Mapped port	
Operation	Add	The mapping relationship between MAC address and port and VLAN will be added
	Remove	Delete the mapping relationship of the specified MAC address, VLAN, and port

3.11.2.Black Hole MAC

Configure Blackhole MAC addresses, and establish the mapping relationship between MAC addresses and ports and VLANs.



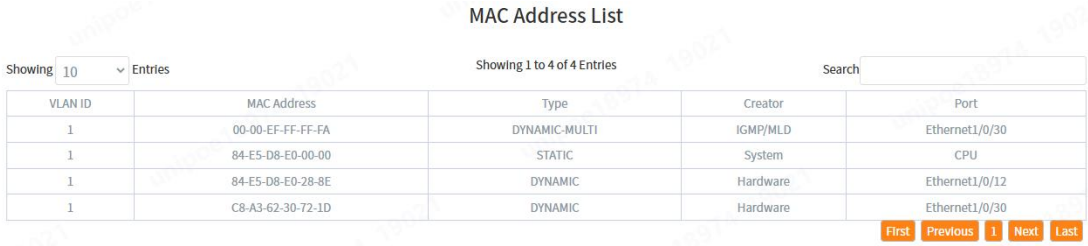
MAC address	Hexadecimal MAC address, the format is xx-xx-xx-xx-xx-xx, packets with this address will be discarded and will not be forwarded to the network by the switch	
VLAN ID	Created VLAN ID	
Blackhole based type	source	Source based on source address filter
	destination	Target based on target address filter
	both	Both are based on source address and destination address filters, the default value is both
Operation	Add	The mapping relationship between MAC address and port and VLAN will be added
	Delete	Delete the mapping relationship of the specified MAC address, VLAN, and port



Display current existing MAC address, port, VALN mapping relationship

3.11.3.MAC Address List

Quickly query the MAC address in the switch.



VLAN ID	The created VLAN ID, showing the address in the VLAN
MAC Address	Hexadecimal MAC address, the format is xx-xx-xx-xx-xx-xx
Type	MAC address type
Creator	MAC address creator
Port	Find the MAC address by port

Note: Check the small box at the back to make the condition take effect. By default, there is no condition. When there is no condition, all MAC address information will be displayed.

3.12.Onvif Config

3.12.1.Detect Config

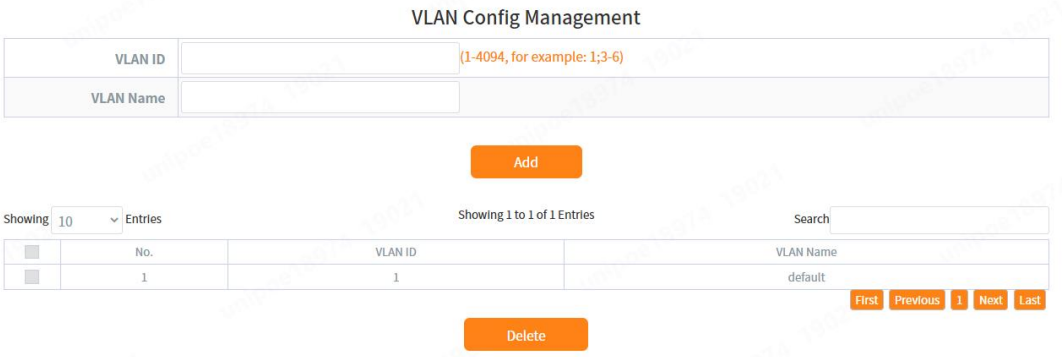
Onvif detect config module, Click the **Send** button to send an Onvif detection packet to discover the device.

4. VLAN Config

4.1. VLAN Config

4.1.1. VLAN ID

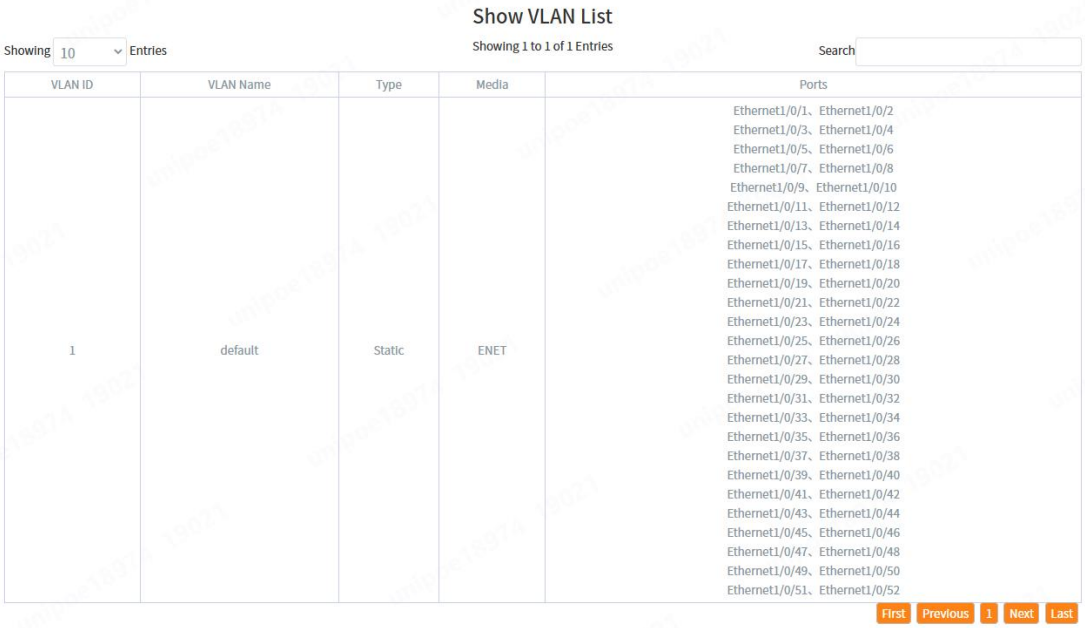
VLAN configuration function module, users add or delete VLANs in this module。



VLAN ID	The serial number of the VLAN, range: 2-4094	
VLAN name	By default, the default is VLAN plus four-digit serial number, range: 1-64 characters.	
Operation	Add	Add VLAN
	Delete	Remove VLAN

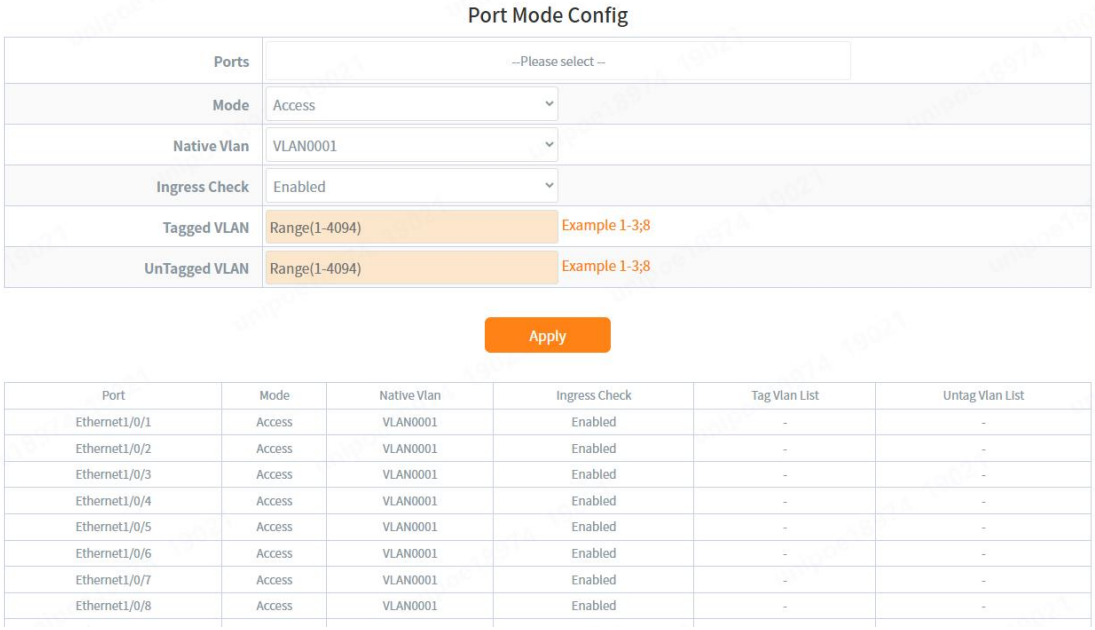
4.1.2. Show VLAN

Show VLAN function module, display VLANs in this module。



4.1.3. Port Config

Switch port type setting, the user can change the switch port type in this module.



Port	Port name	
Mode	Access	
	Trunk	
	Hybrid	
Native Vlan	Port PVID	
Ingress	Enabled	When a data packet enters the switch, the VLAN

Check		ingress filter checks whether the ingress port of the data packet belongs to the given (forwarded) VLAN
	Disabled	When a data packet enters the switch, the VLAN ingress filter does not check whether the ingress port of the data packet belongs to the given (forwarded) VLAN
Tagged VLAN	Tag VLAN range 1-4094,example 1-3;8	
UnTagged VLAN	Untag VLAN range 1-4094,example 1-3;8	

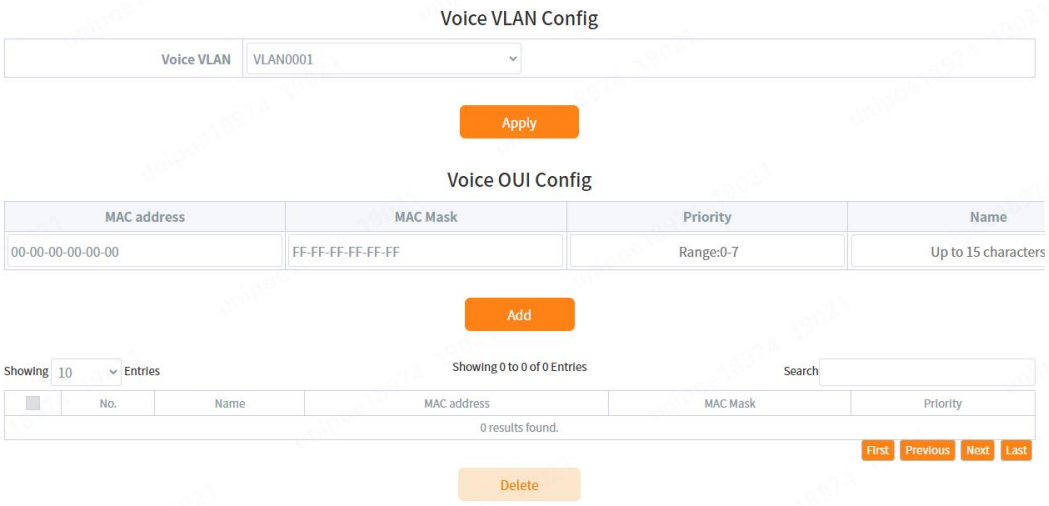
4.5.Voice VLAN

4.5.1.VLAN Config

The voice vlan configure module, and the user can select vlan to enable voice vlan

Voice VLAN	Select vlan to enable voice vlan

The voice oui configure module, and the user can set voice oui

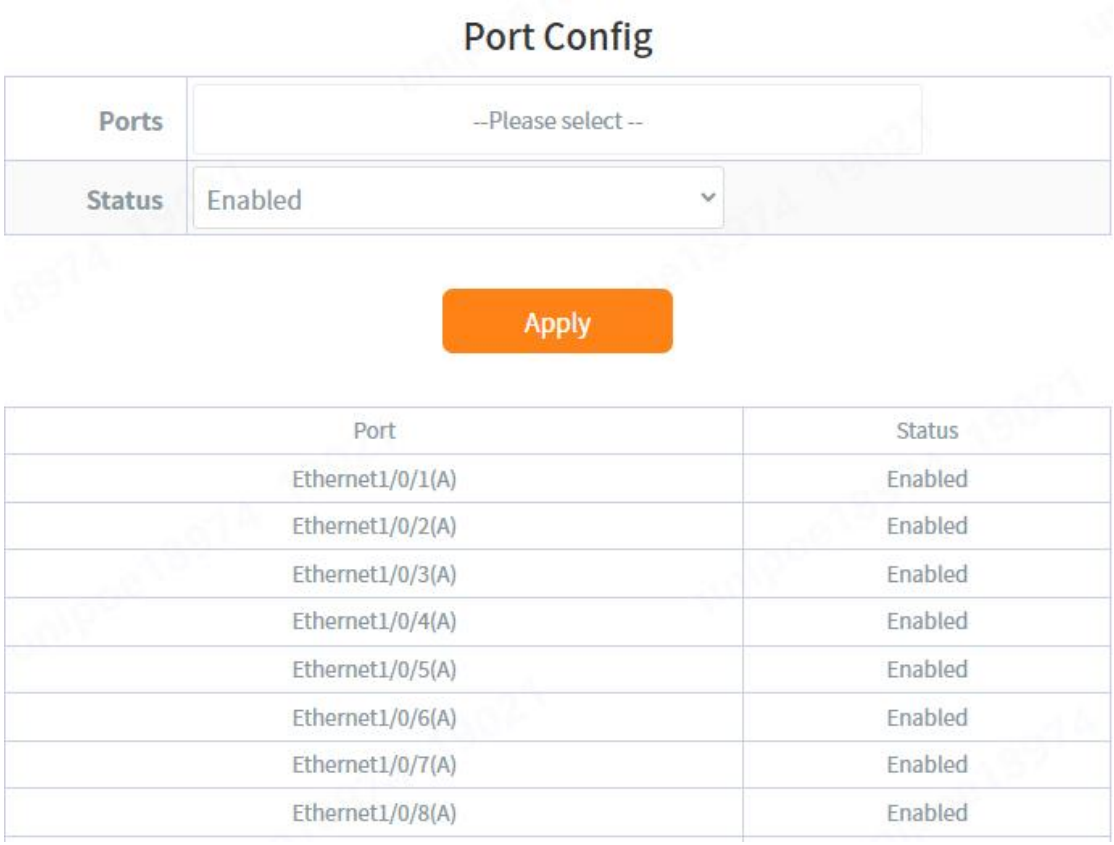


MAC address	The voice equipment MAC address, shown in xx-xx-xx-xx-xx-xx format.

MAC Mask	The last eight digit of the mask code of the MAC address, the valid values are: 0xff, 0xfe, 0xfc, 0xf8, 0xf0, 0xe0, 0xc0, 0x80, 0x0
Priority	The priority of the voice traffic, the valid range is 0 - 7
Name	The voice-name is the name of the voice equipment, which is to facilitate the equipment management

4.5.2. Port Config

The voice vlan port config module, and the user can select port to enable voice vlan

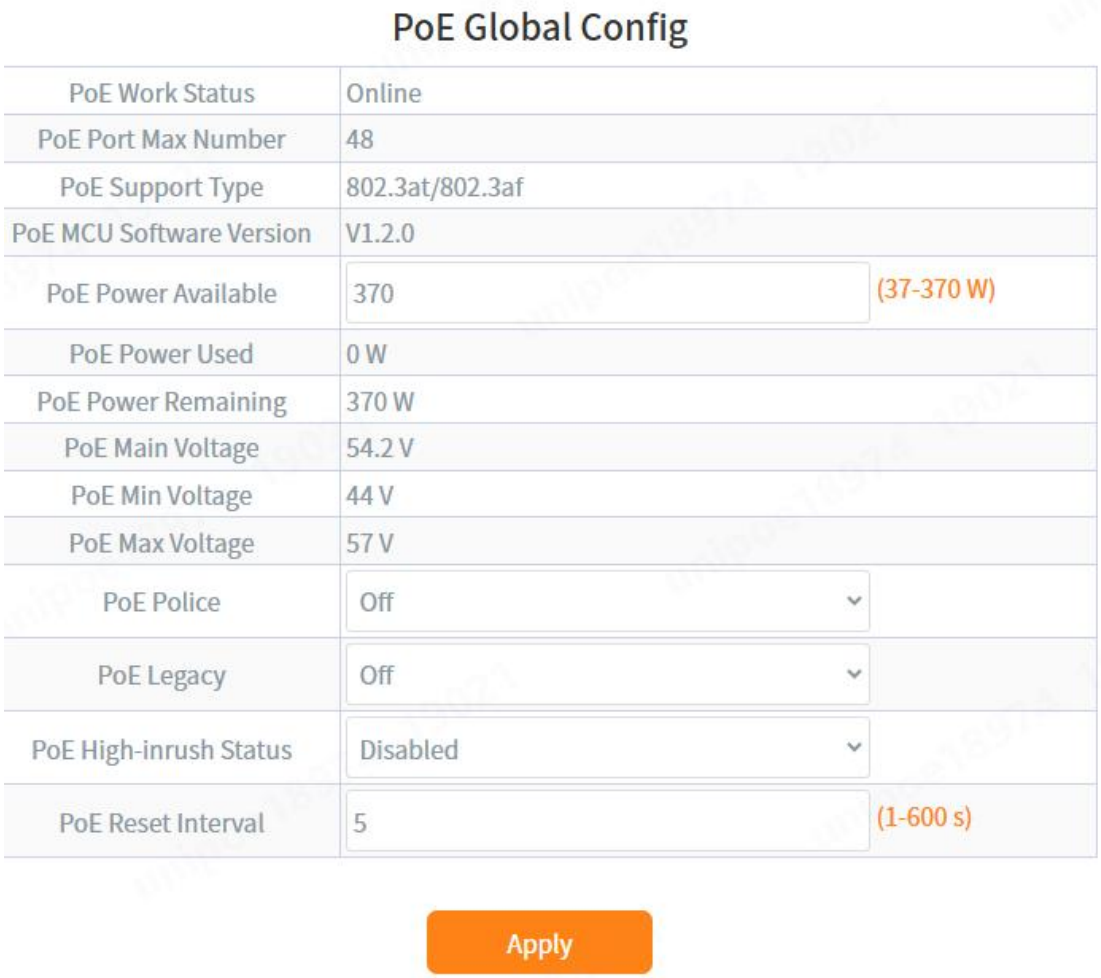


Port	Port name	
Status	Enable	Enable voice vlan
	Disable	Disable voice vlan

5. PoE Config

5.1. PoE Global Config

This page can be used to globally configure poe properties and view poe global property information.
To display the “PoE Global Config” page, click PoE Config ->PoE Global Config, click "Apply" to configure.

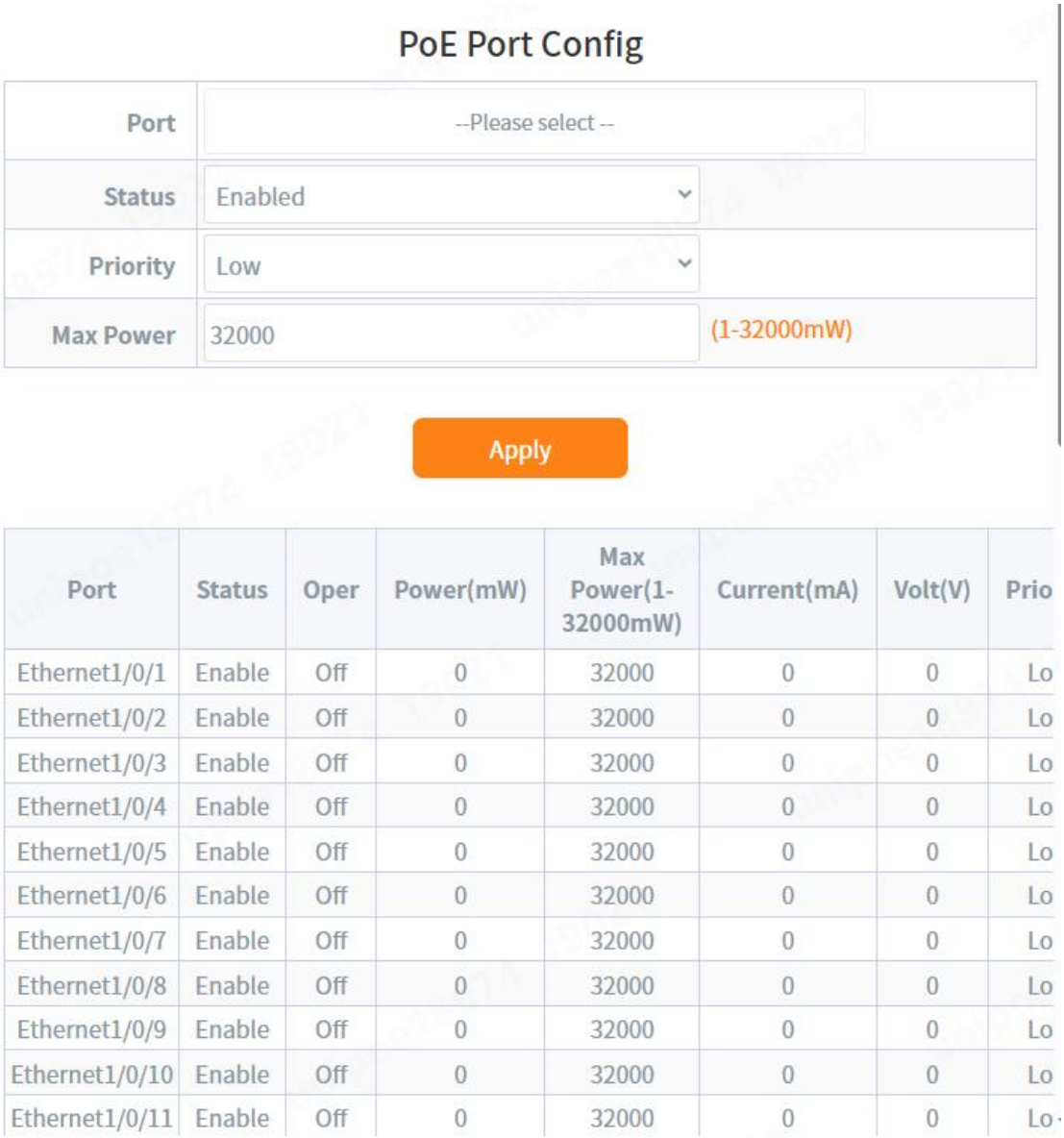


PoE Power Available	Maximum power supported by current switches
PoE Police	Enable status of priority power supply policy: Off: disable On: enable
PoE Legacy	Current status of standard PD detection function:

	Off：disable On：enable
PoE High-inrush Status	Enable/Disable
PoE Reset Interval	Port reset time range :1-600 per second

5.2.PoE Port Config

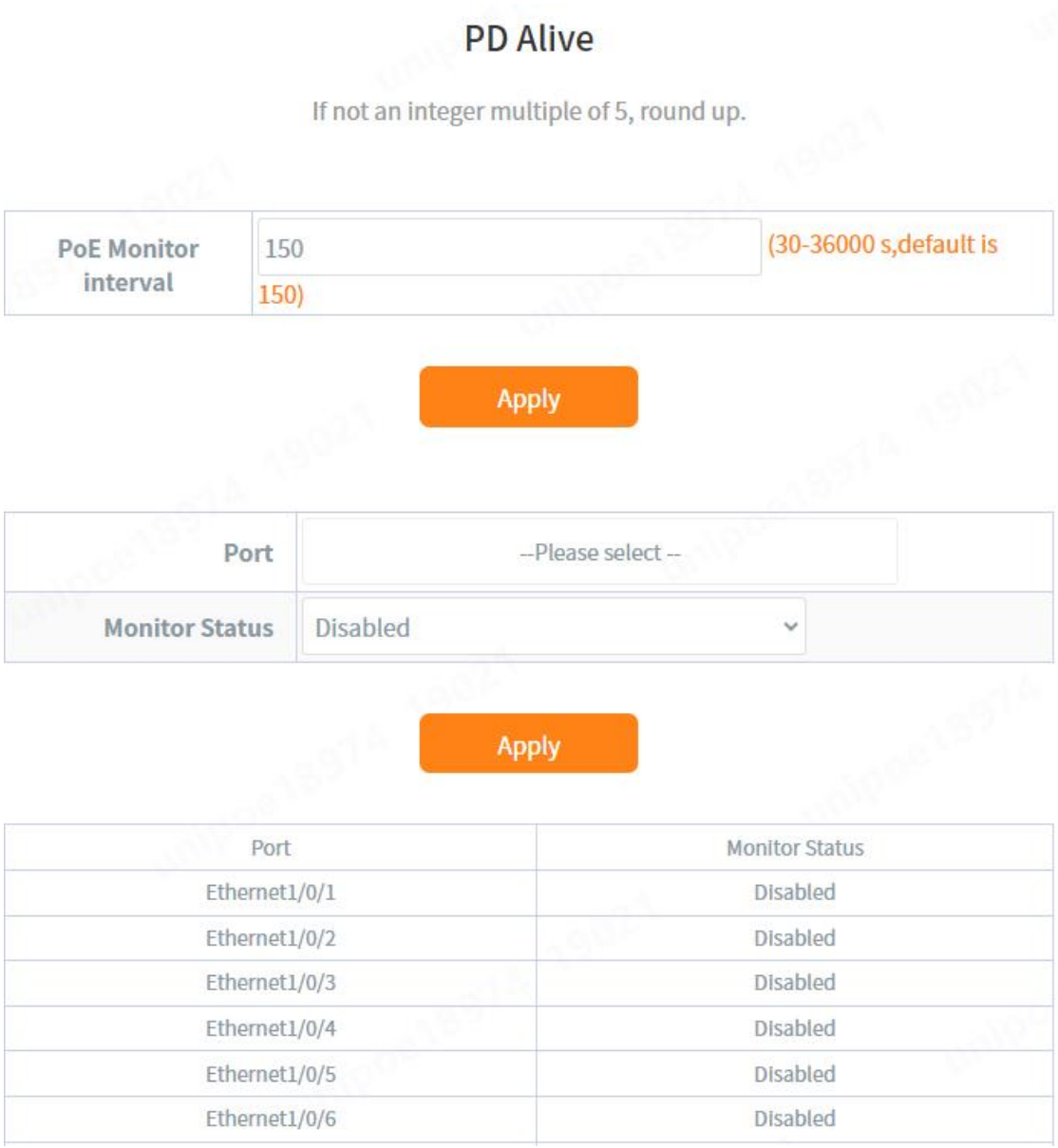
This page can be used to configure poe properties under ports.
To display the “PoE Port Config” page, click PoE Config ->PoE Port Config, click "Apply" to configure.



Port	Current configured Ethernet ports
Status	Enable：Normal power supply Force：Forced power supply Disable：No power supply
Priority	Low：low priority High：high priority Critical：highest priority
Max Power	Sets the maximum output power supported by the current port, size range :1-32000, unit mW;For example: 100、200、3000

5.3.PD Alive

This page can be used to configure poe pd alive under ports.



Interface	Current configured Ethernet ports
PoE Monitor Interval	Check whether the PD connected to the current port is in the detection interval of normal communication, range: 30-36000 seconds
PoE Monitor Status	Disabled: disable port monitoring Enabled: Enable port monitoring

6. DHCP Config

6.1. DHCP Snooping

6.1.1. Global Config

With the enabling and disabling of the DHCP Snooping module, users can view and operate the status of DHCP Snooping.

DHCP Snooping status	Off	Disable DHCP Snooping
	On	Enable DHCP Snooping

Display the current DHCP Snooping status

DHCP Snooping defense action number configuration, if the number of alarm messages is greater than the set number, it will force the restoration of the earliest defense measures to send new defense measures.

DHCP Snooping packet receiving rate limit sets the number of DHCP messages sent per second.

DHCP Snooping action Num	Set the maximum number of defense actions to avoid exhaustion of switch resources caused by attacks.	
Limit Rate(Packet per second)	Range: 0-100	
Operation	Apply	Configure the number of defense actions filled in above, default is 10,

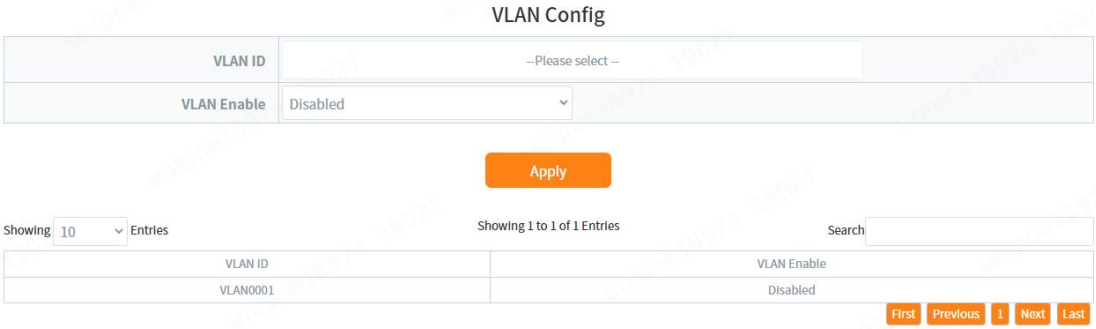
		Configure the number of packets per second

Display the current number of DHCP Snooping defense actions

Display the number of packets per second configured for the current DHCP Snooping.

6.1.2. VLAN Config

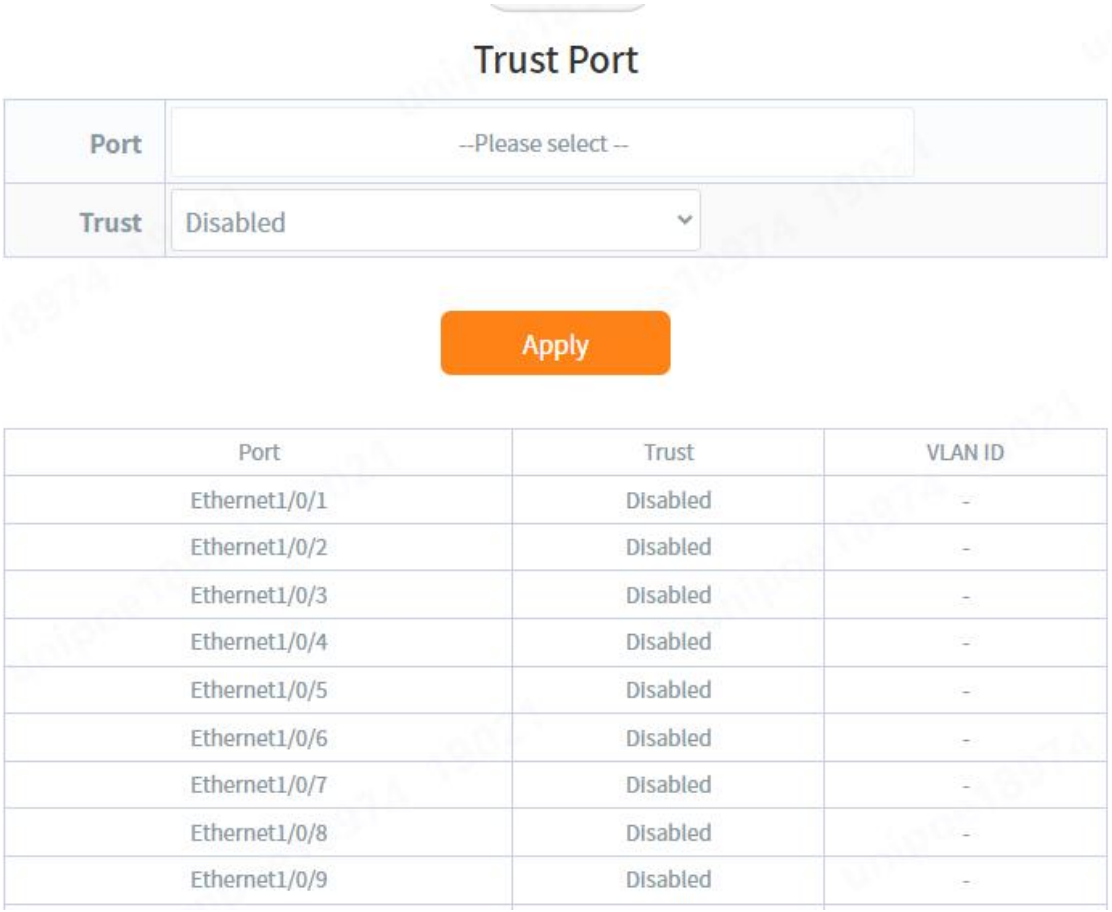
With the enabling and disabling of the DHCP Snooping VLAN module, users can view and operate the status of DHCP Snooping VLAN.



Port	Port name	
VLAN Enable	Enable	Enable DHCP Snooping VLAN
	Disable	Disable DHCP Snooping VLAN

6.1.3. Trust Port

When a port changes from an untrusted port to a trusted port, the original defense action of the port will be automatically deleted; all security history records will be cleared.



Port	Port name	
DHCP Snooping binding trust status	Enable	Enable DHCP Snooping port trust attribute status
	Disable	Disable the trust attribute status of the DHCP Snooping port

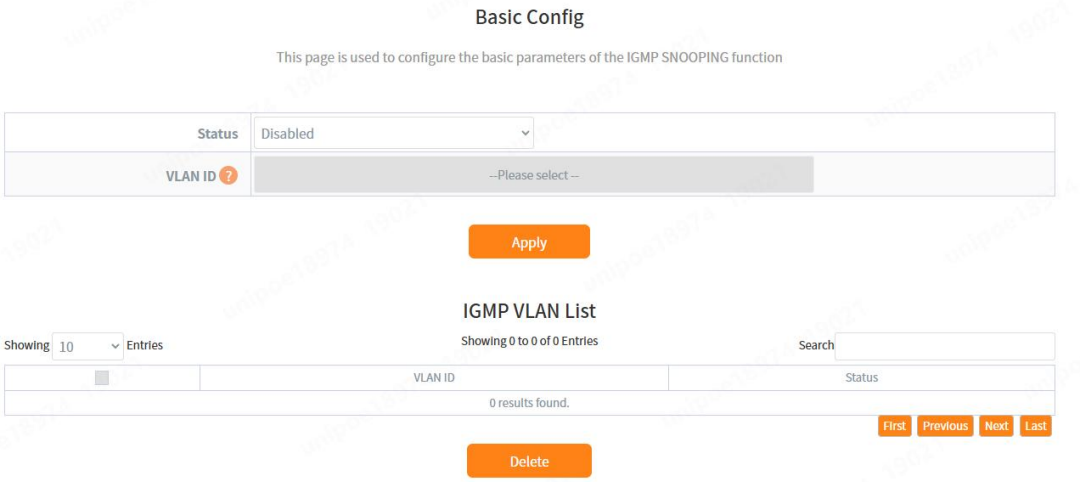
Display the trust attribute status of each DHCP Snooping port of the switch

7. Multicast Manage

7.1. IGMP Snooping Config

7.1.1. Basic Config

Switch IGMP Snooping global switch, snooping IGMP messages

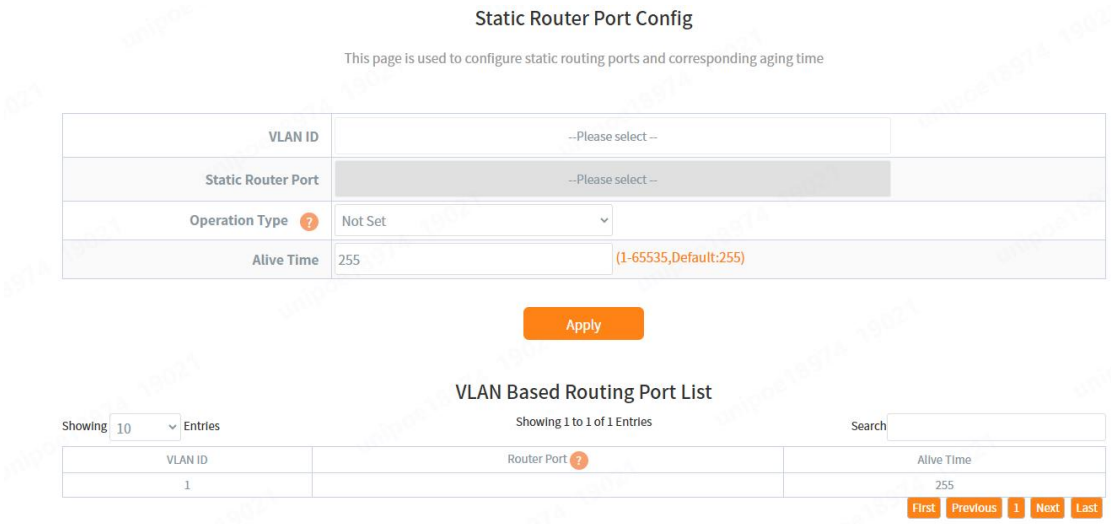


Switch on-off IGMP Snooping	Enable	Turn on the global switch of IGMP Snooping on the switch
	Disable	Turn off the global switch of IGMP Snooping on the switch
VLAN ID	Created VLAN ID	

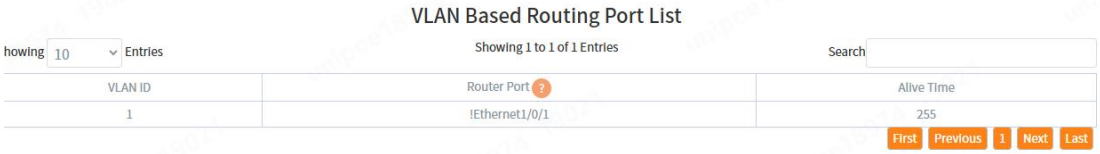
Display the current existing VLAN interface and the running status of IGMP Snooping under the VLAN interface

7.1.2. Static Router Port

IGMP Snooping mrouter port parameter configuration.



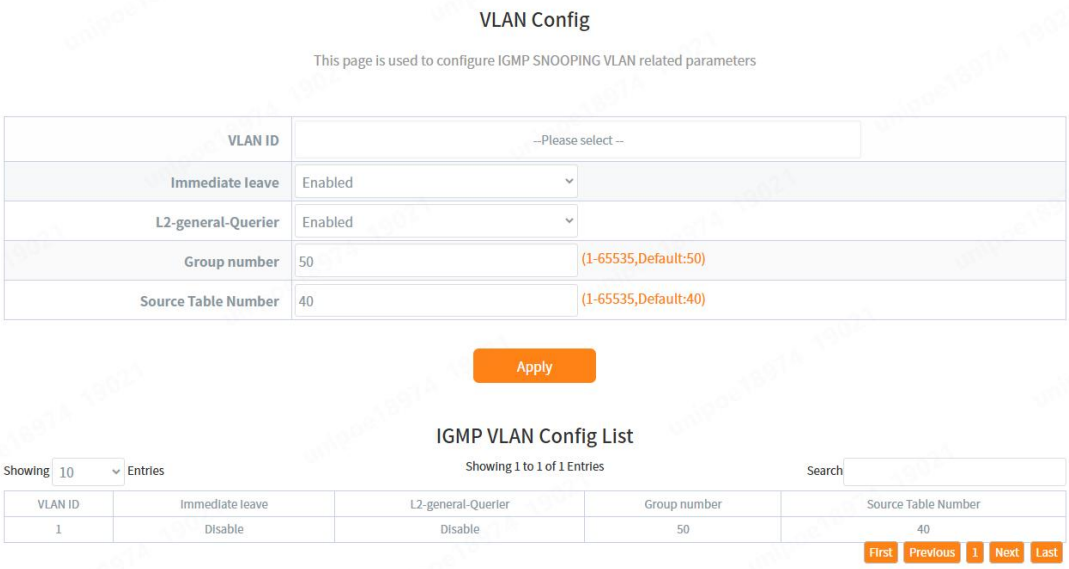
VLAN ID	Created VLAN ID	
Mrouter port	Port name	
Mrouter port alive time	Time to live of the port, range: 1-65535	
Operation type	Apply	Add the mrouter port parameter configuration checked under the selected VLAN



Display current configuration information

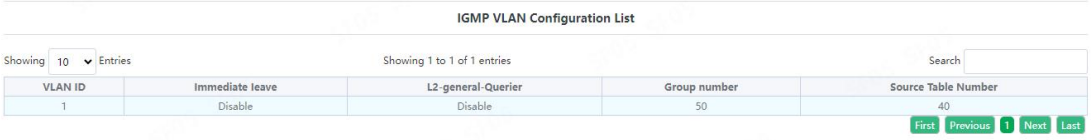
7.1.3.VLAN Config

Configure IGMP Snooping based on VLAN interface.



VLAN ID	Created VLAN ID	
Immediate leave configuration	IGMP fast leave function in VLAN	
L2-general-querier configuration	Used to send regular queries regularly to help switches in this network segment learn the mrouter port	
Group number	The upper limit of the total number of groups. When the number of joined groups reaches the limit, the newly joined groups will be rejected to prevent hostile attacks. The default is 50, and the range: 1-65535.	
Source table number	The maximum number of source entries in each group, including include sources and exclude sources. The default is 40, and the range: 1-65535.	
Operation	Configuration	Configure the checked parameters into the selected VLAN

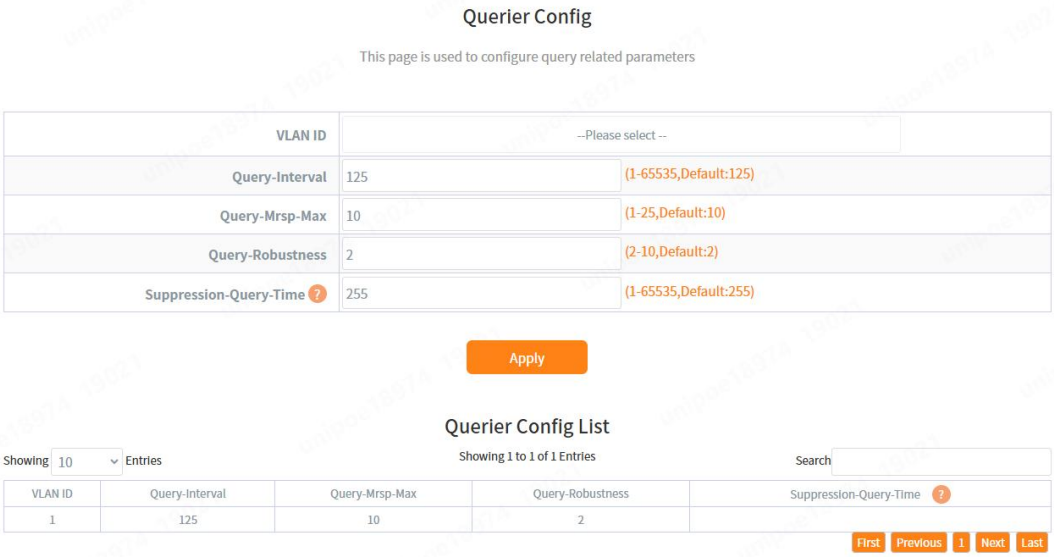
Note: Whether it is to configure parameters or restore the default state, it is required to check the box at the back to take effect. The group number and the number of source table entries are unified functions, so the two function parameters will take effect together (when one parameter is set, the other will be set to the default value).



Display the configuration parameters of the existing VLAN

7.1.4.Querier Config

IGMP Snooping query parameter configuration.

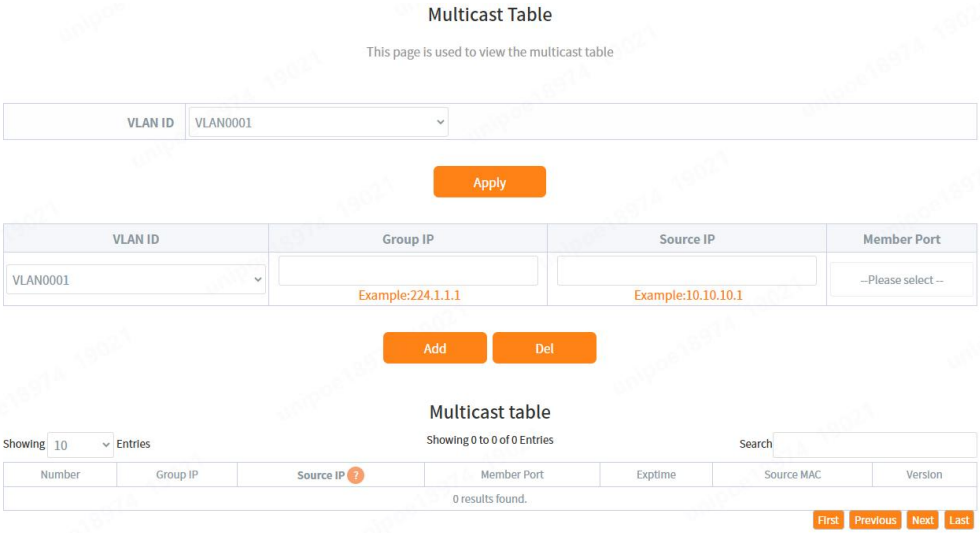


VLAN ID	Created VLAN ID	
Query-Interval	IGMP Snooping query interval, range: 1-65535	
Query-mrsp configuration	Maximum response time for group query	
Query-robustness configuration	IGMP Snooping robustness, range: 2-10	
Suppression-query-time configuration	Prohibited query time, range: 1-65535	
Operation type	Apply	Add the mrouter port parameter configuration checked under the selected VLAN

Display current configuration information

7.1.5.Multicast Table

The page displayed multicast table information.

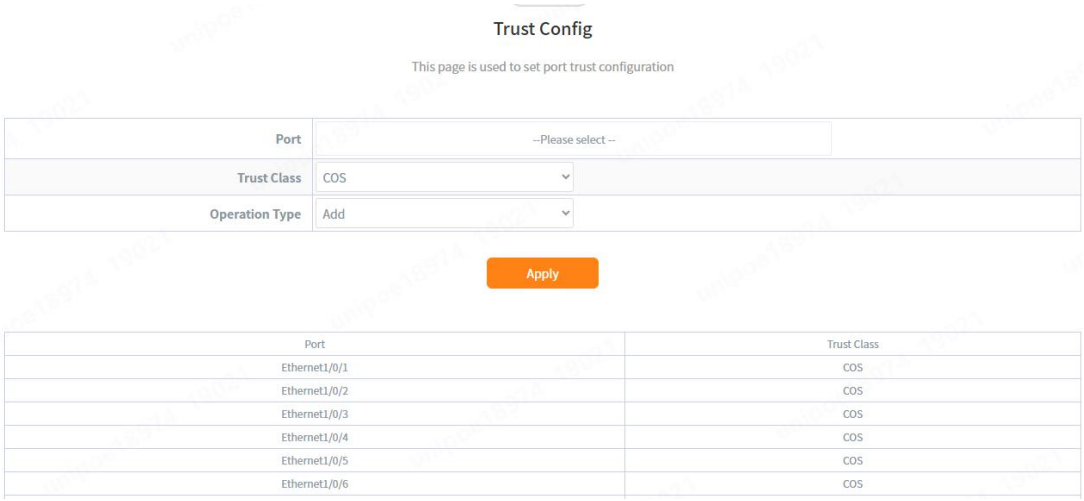


8. QoS Config

8.1. Port Config

8.1.1. Trust Config

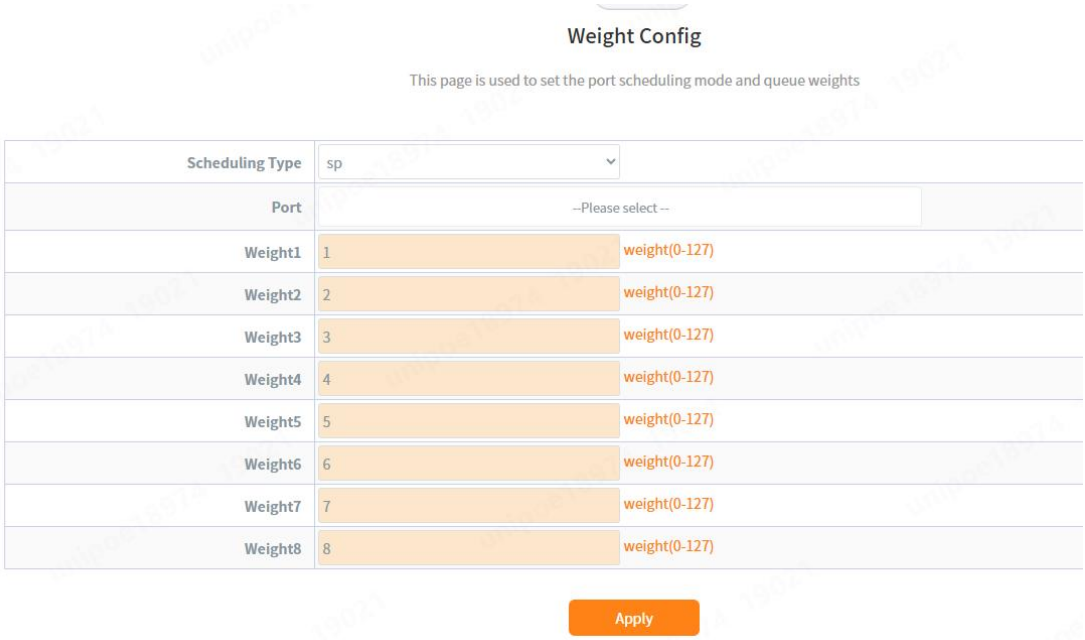
Configure port trust rules



Port	To configure the port name, click to expand the remaining ports	
Trust class	COS	Cos to int mapping based on intp field
	DSCP	Intp field based on dscp to intp mapping
Operation	add	Add a trust rule for the port
	Delete	Remove a trust rule for the port

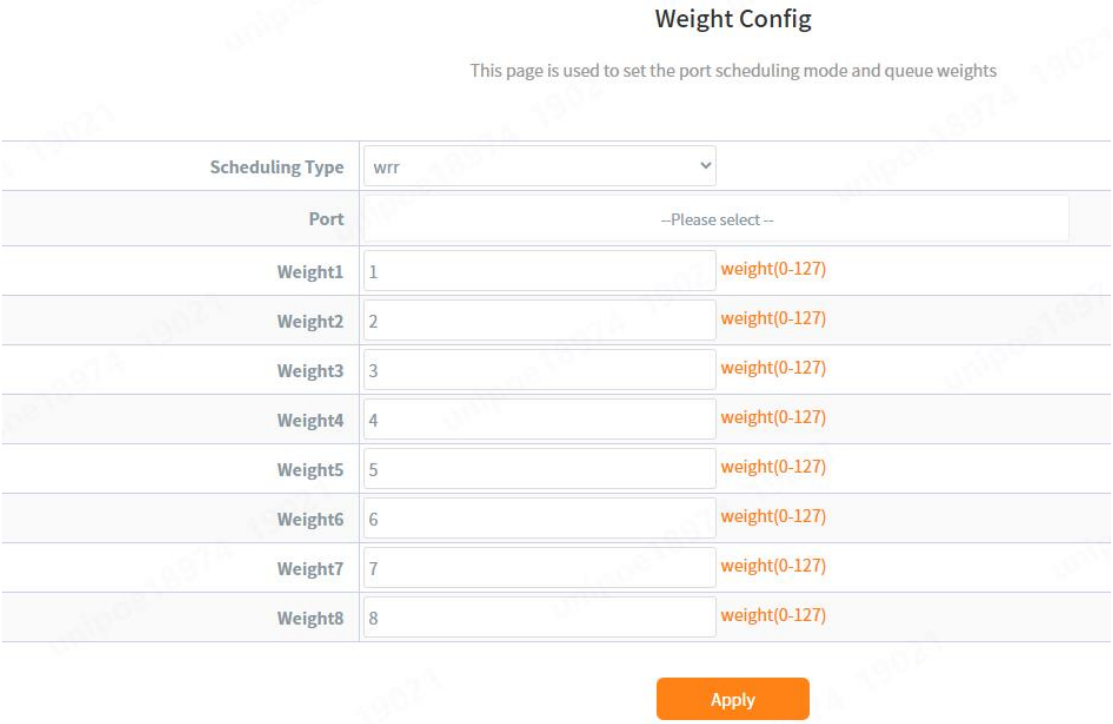
8.1.2.Weight Config

Configure the port to process the priority of packets according to different queue scheduling algorithms



Port	To configure the port name, click to expand the remaining ports	
Queue schedule algorithm	sp	Strict queuing priority, packet transmission in order of priority.
	wrr	Weighted round-robin scheduling. Rotate scheduling between queues to ensure that each queue gets a certain amount of service time
	wdrr	Weighted difference round-robin scheduling, based on message length transmission, based on the combined effect of weight and K value to generate the length of transmission in the message queue

Configure the weight value of the eight queues of each port, and allocate the number of packets according to the weight value



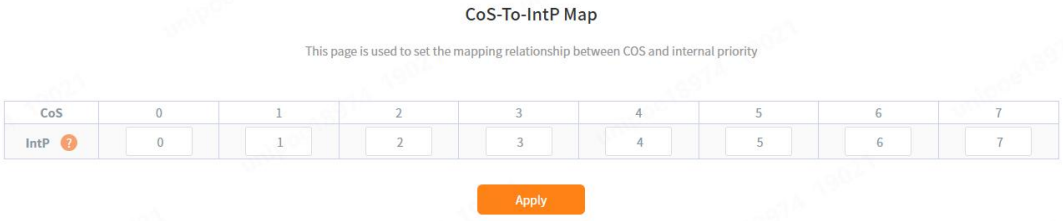
Port	To configure the port name, click to expand the remaining ports	
Weight1	The weight value of queue 1, the range is 0-127	
Weight2	The weight value of queue 2, the range is 0-127	
Weight3	The weight value of queue 3, the range is 0-127	
Weight4	The weight value of queue 4, the range is 0-127	
Weight5	The weight value of queue 5, the range is 0-127	
Weight6	The weight value of queue 6, the range is 0-127	
Weight7	The weight value of queue 7, the range is 0-127	
Weight8	The weight value of queue 8, the range is 0-127	
Operation	Apply	Add the weight of each queue to the port, and fill in all the weights of each queue before adding

Port	Queue Weight
Ethernet1/0/1	12345678
Ethernet1/0/2	12345678
Ethernet1/0/3	12345678
Ethernet1/0/4	12345678
Ethernet1/0/5	12345678
Ethernet1/0/6	12345678
Ethernet1/0/7	12345678
Ethernet1/0/8	12345678
Ethernet1/0/9	12345678
Ethernet1/0/10	12345678
Ethernet1/0/11	12345678
Ethernet1/0/12	12345678
Ethernet1/0/13	12345678
Ethernet1/0/14	12345678
Ethernet1/0/15	12345678
Ethernet1/0/16	12345678

Infomation feedback window

8.1.3.CoS-To-IntP Config

Configure the value mapped from the COS value to the internal priority (queue).



CoS value	The COS value carried in the message or the default COS value assigned when entering	
IntP value	The value of the internal priority (queue) to which the COS value will be mapped	
Operation type	Configuration	Configure the value of COS to IntP

Display the execution process and the current mapping relationship

8.1.4.DSCP-To-IntP Config

Configure the value mapped from the DSCP value to the IntP value.

DSCP value1-DSCP value8(optional)	Up to eight DSCP values can be configured to the new IntP value, among which DSCP value1 is required, DSCP valuce2-8 is optional, range: 0-63	
IntP value	New IntP value, range: 0-7	
Operation type	Apply	Configure DSCP to IntP value

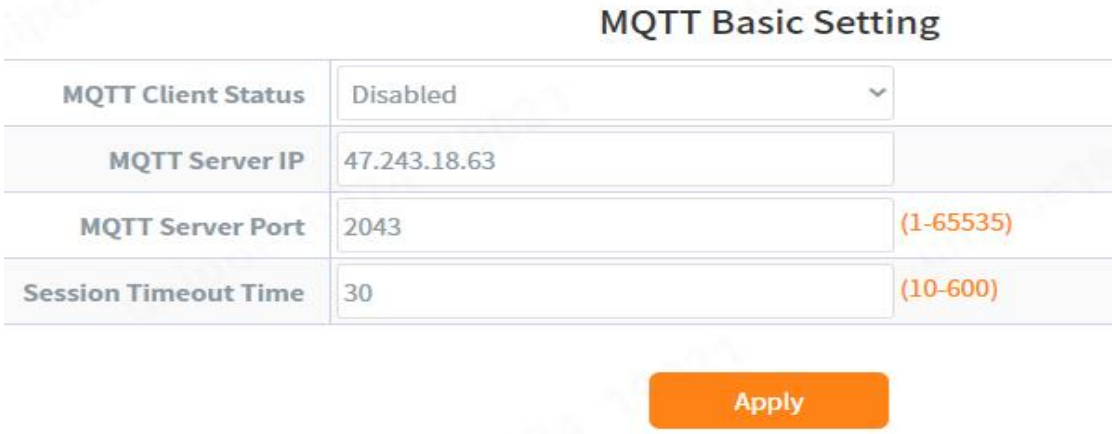
DSCP	Internal Priority	DSCP	Internal Priority	DSCP	Internal Priority	DSCP	Internal Priority
0	0	16	2	32	4	48	6
1	0	17	2	33	4	49	6
2	0	18	2	34	4	50	6
3	0	19	2	35	4	51	6
4	0	20	2	36	4	52	6
5	0	21	2	37	4	53	6
6	0	22	2	38	4	54	6
7	0	23	2	39	4	55	6
8	1	24	3	40	5	56	7
9	1	25	3	41	5	57	7
10	1	26	3	42	5	58	7
11	1	27	3	43	5	59	7
12	1	28	3	44	5	60	7
13	1	29	3	45	5	61	7
14	1	30	3	46	5	62	7
15	1	31	3	47	5	63	7

Shows the execution process and the current mapping relationship. The vertical d1 represents the tens digit of DSCP, and the horizontal d2 represents the single digit of DSCP. The value of the intersection of the two is the mapping value.

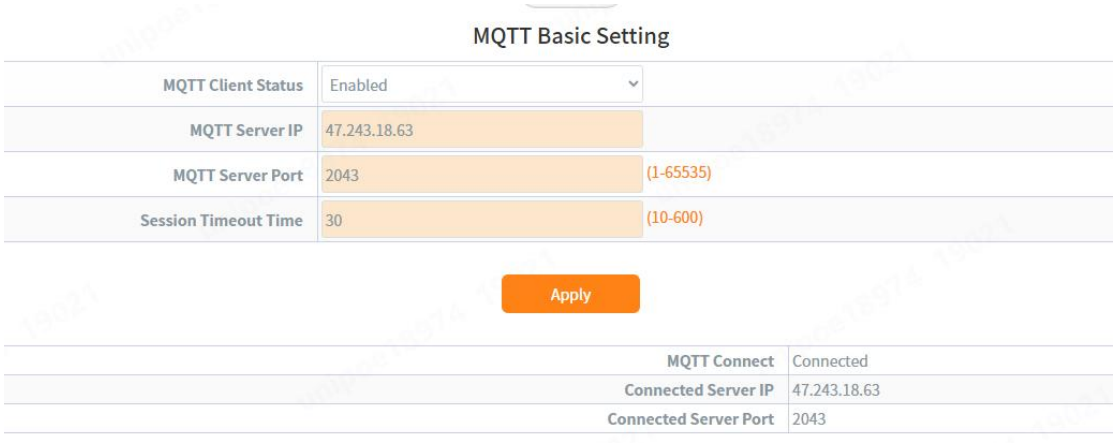
9.MQTT Config

9.1 MQTT

This section can be used for configuring MQTT functionality.
To modify the MQTT Server IP, MQTT Server Port, and Session Timeout Time, the prerequisite is to disable the MQTT Client Status and click "Apply" to configure it.



MQTT Client Status	Enabled	Enable MQTT Client Status status
	Disabled	Disable MQTT Client Status status
MQTT Server IP	Configure MQTT Server IP	
MQTT Server Port	Configure MQTT Server Port, range: 1-65535	
Session Timeout Time	Session Timeout Time, range: 10-600	



Display current configuration information