AW-IHB-1040

Industrial Lite Management PoE Switch

User Manual

Revision History:

Version	Date	Revision History
V1.0	2024.01.09	New first edition

Content

1. Log In

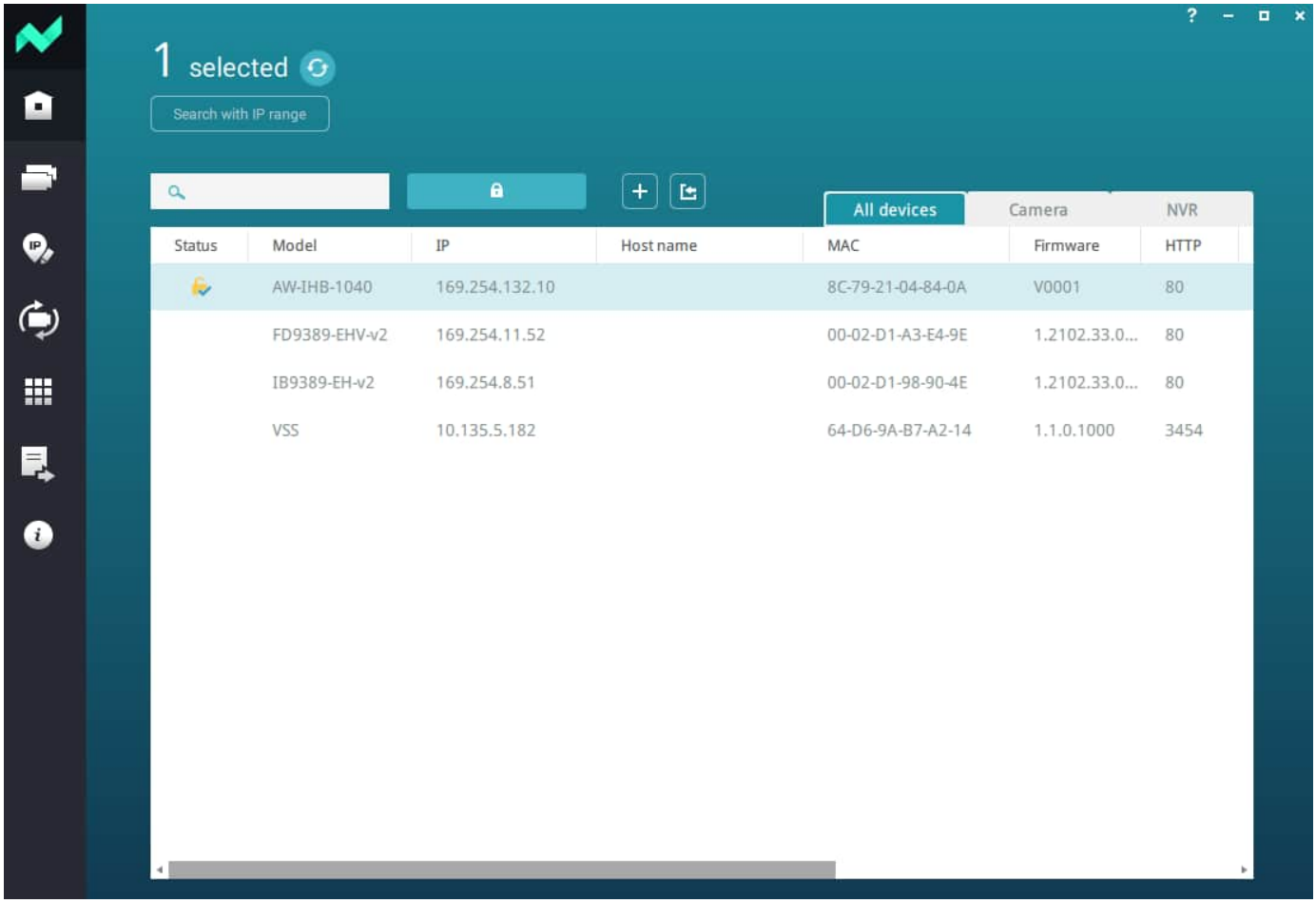
1.1. Log into web interface

The switch can be managed by entering the IP address of the device in the browsers (installed on your computer). The URL format in the address bar is:

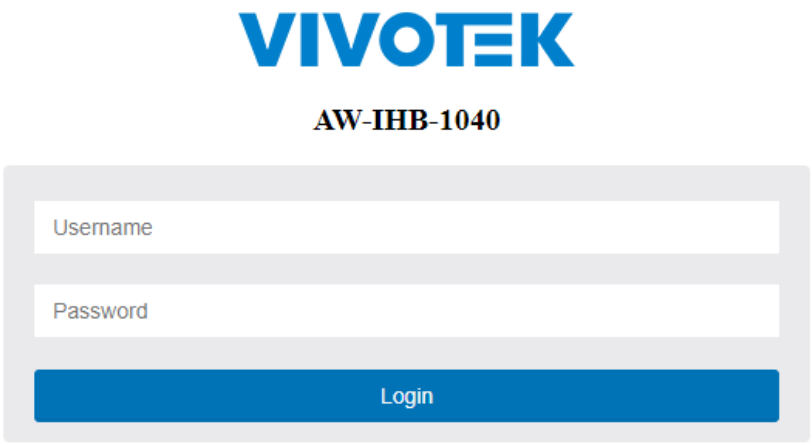
Note: The default factory IP address, username and password are as below.

IP Address	DHCP Client
Username	admin
Password	admin

As the default network setting is DHCP client, so If you do not have DHCP server to provide ip address to the switch, You can find the switches by using VIVOTEK’ s Shepherd utility.



The login window for user as following:

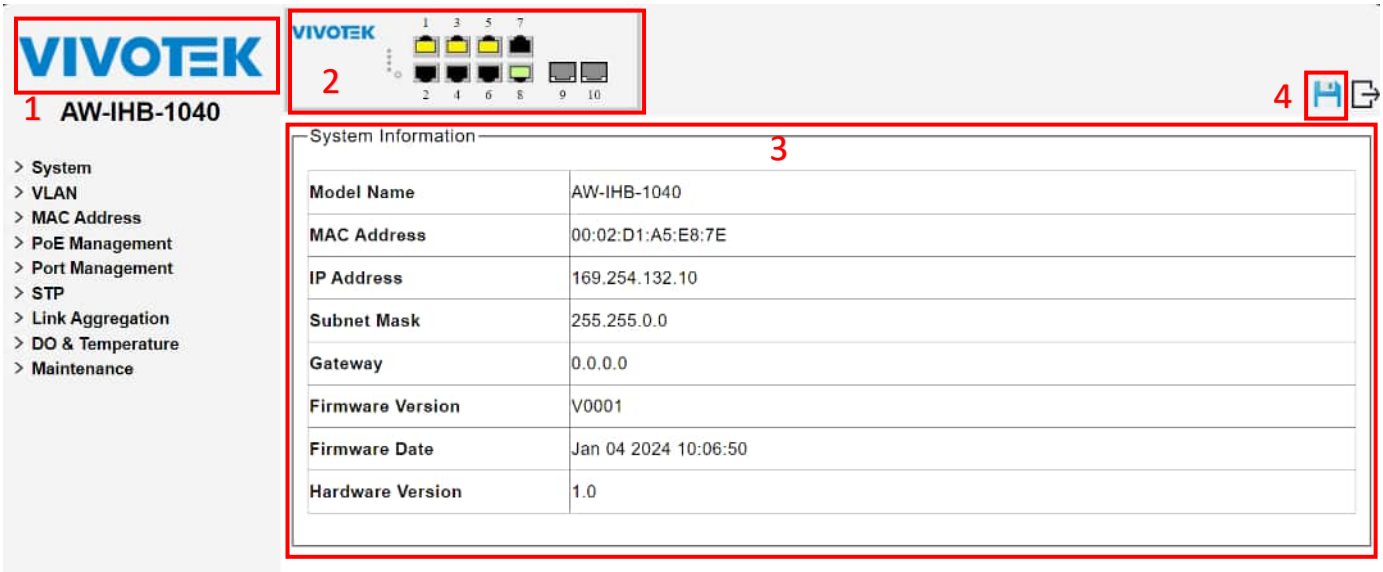


Picture 1-1Enter user name and password

Default Username and password are admin/ admin，Enter and clik“OK”，open the management interface

1.2. Web-based user interface

The user interface provides access to different configuration and management windows, allowing users to view performance statistics and monitor system status. The user interface is divided into three distinct areas as in following picture



Picture 1-2 Web Interface

Area	Function
Area 1	VIVOTEK LOGO: When you click VIVOTEK logo, it will bring a browser to VIVOTEK website.
Area 2	Port status: It will show the port status. When the port shows green, it means link up with 1000 mbps speed. When the port shows in amber, it means link up with 10/100 mbps speed.
Area 3	According to the user selection (area 3), it shows the switch information
Area 4	The disk icon will become bule after you change the settings. Please make sure to click  to save configuration after you change the settings otherwise the settings that you change will be gone after switch rebooting.

2. System

2.1. Information

Users can view the basic information of the switch, such as the managed IP address, Mac address, firmware version.

Click “system” > “information” ,shown as following:

System Information

Model Name	AW-IHB-1040
MAC Address	00:02:D1:A5:E8:7E
IP Address	169.254.132.10
Subnet Mask	255.255.0.0
Gateway	0.0.0.0
Firmware Version	V0001
Firmware Date	Jan 04 2024 10:06:50
Hardware Version	1.0

Picture 2-1 System information

2.2. IP Setting

Note: The factory default IP address of the switch is DHCP Client

Click "system" > " IP Setting" ,Shown as following:

Picture 2-2 IP Setting

The description of IP Setting:

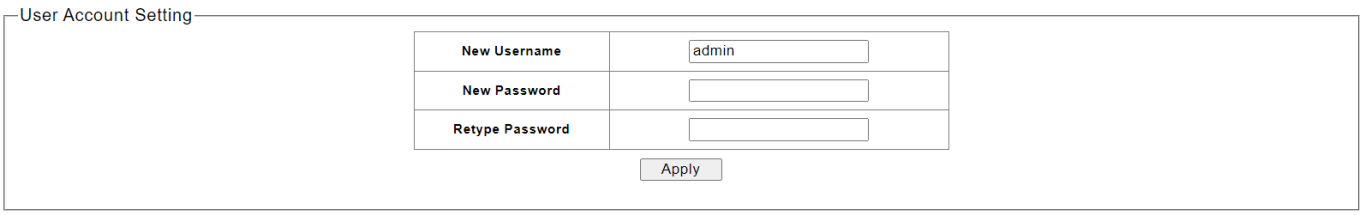
Parameters	Description
DHCP	- -If it is enabled, it means that the IPv4 DHCP client is enabled on the VLAN interface to dynamically obtain the IPv4 address of the switch, - If it is disabled, the static IP configuration of the switch is used
IP Address	- The user IP address
Subnet Mask	- The static subnet mask
Gateway	- The user gateway IPv4 address

Enter the new management IP address. Click Apply for saving the changes

2.3. User Account

You can modify the login username and password

Click "system" > "User Account" , shown as following:



Picture 2-4 User Account Setting

Description:

Parameters	Description
New Username	Enter the new user name
New Password	Enter the new password
Retype Password	Retype the new password

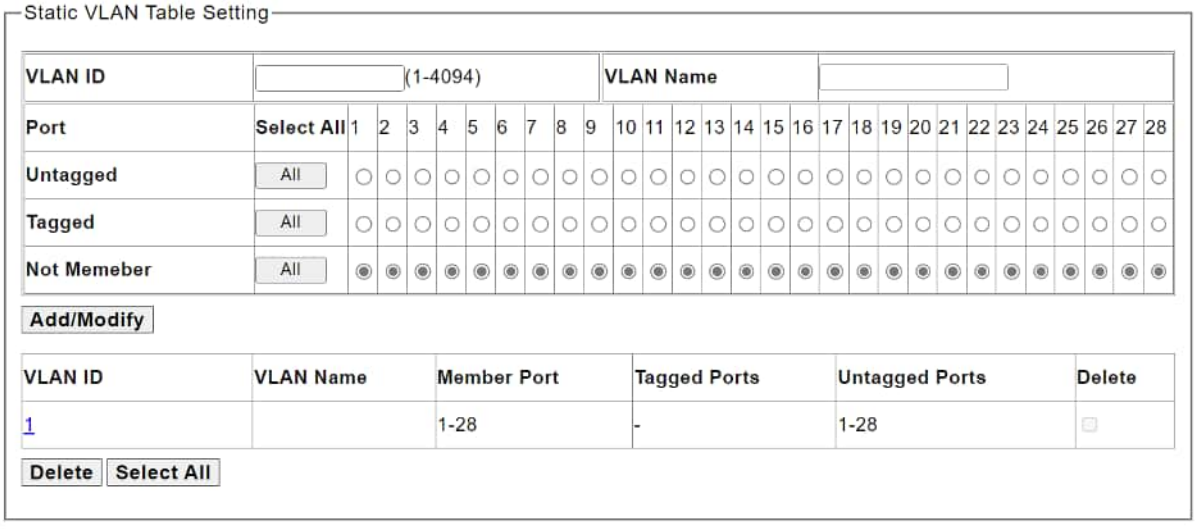
Click Apply for saving the changes.

3. VLAN

3.1. Static VLAN

This page is used to configure VLANs

Click "VLAN" > "Static VLAN", shown as following:



Picture 3-1 static vlan setting

Description:

Parameters	Description
VLAN ID	Enter VLAN ID 1-4094
PORT	Choose the configuration port
Untagged	Click to choose untagged member port
Tagged	Click to choose tagged member port
Not Member	Click to choose Not Member port

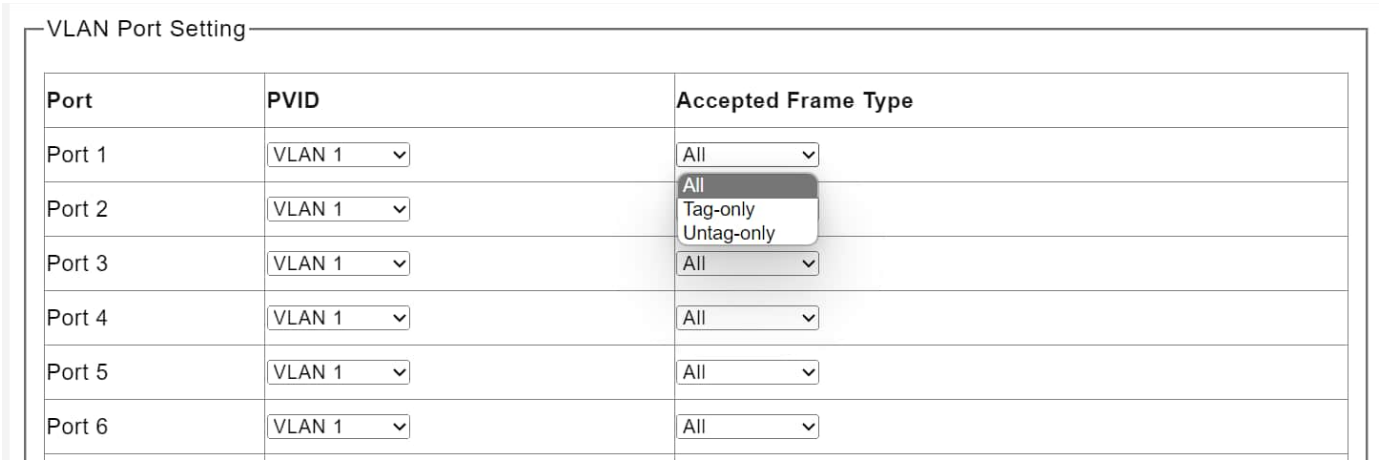
Click "Add" for saving the changes

Click "Delete" for saving the changes

3.2. VLAN Setting

The page is used to configure VLAN。

Click" Configuration" > "VLAN" > "VLAN setting" , shown as following:



Picture 3-1 VLAN Setting

Description:

Parameter	Description
PVID	Enter VLAN ID 1-4094
PORT	Choose the port for configuration
Accepted Frame Type	Choose all, tag-only or untagged-only

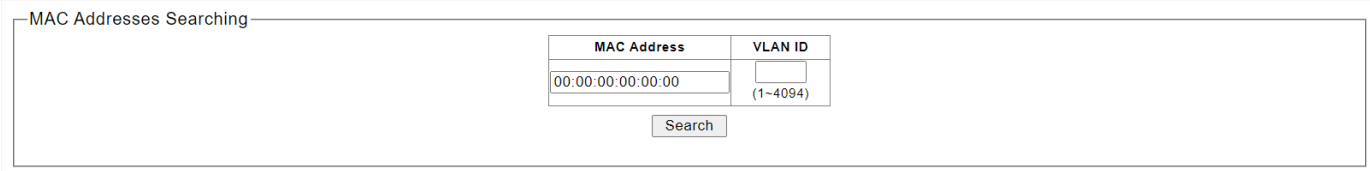
Click "Apply" for saving changes

4. MAC Address

4.1. MAC Search

The switch supports MAC search

Click " MAC Address" >" MAC Search", shown as following:

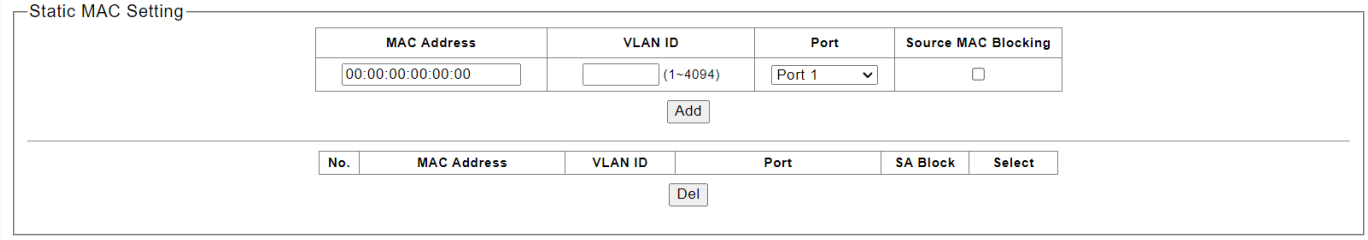


Picture 4-1 MAC Search

4.2. Static MAC

The switch supports static MAC

Click " MAC Address" >" Static MAC" ,shown as following:



Picture 4-2 Static Static MAC

Description:

Parameters	Description
MAC Address	Select the port for configuration
VLAN ID	Enable and disable
Port	(0-4160)
Source MAC Blocking	

Click "Apply" for saving the changes

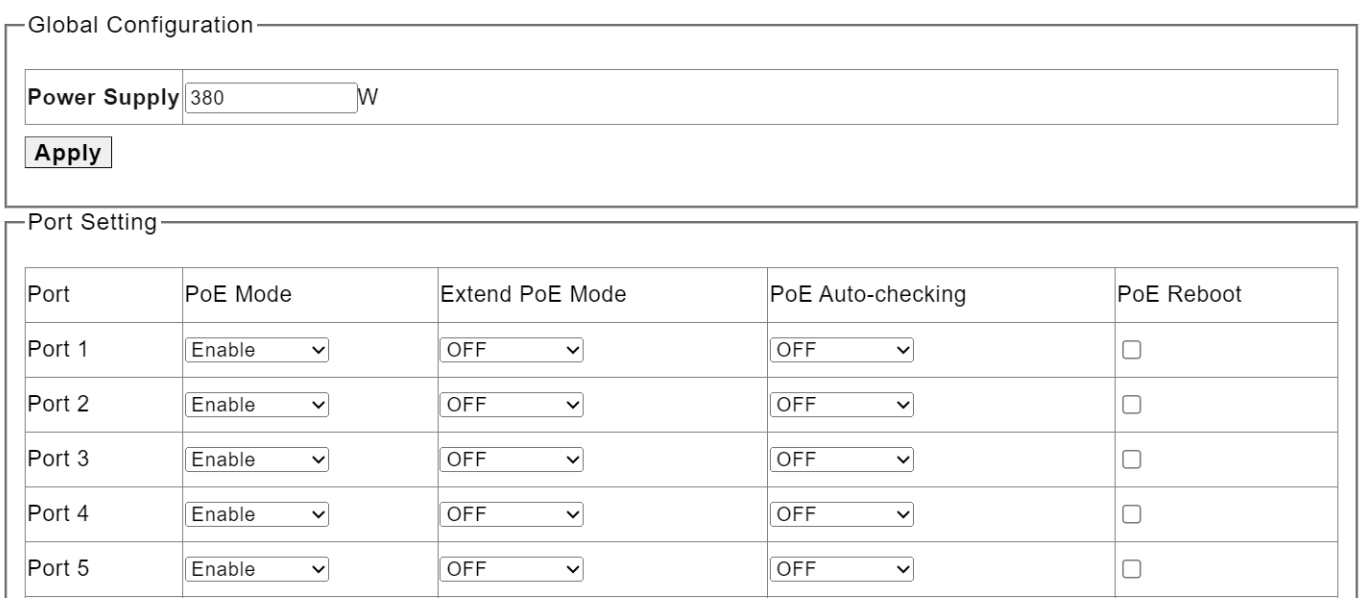
Click "Del" for saving the changes

5. PoE

5.1. PoE Management

This page is used to configure the PoE function.

Click" PoE Management" > "PoE setting " ,shown as following:



Picture 5-1 Port Setting

Description:

Parameters	Description
Power supply	Configure the total power budge for PoE
PoE Mode	Enable/Disable the PoE function
PoE Reboot	Reboot the port PoE
Extend PoE Mode	Extend PoE power to 250M on this port
PoE Auto-checking	The PoE port will reboot PD when there is no traffic for 120 seconds.
PoE Reboot	Select to reboot the port's PoE output

Click "Apply" for saving the changes

PoE Port status and information

It shows the status and detail information when you connect PoE devices to the PoE ports.

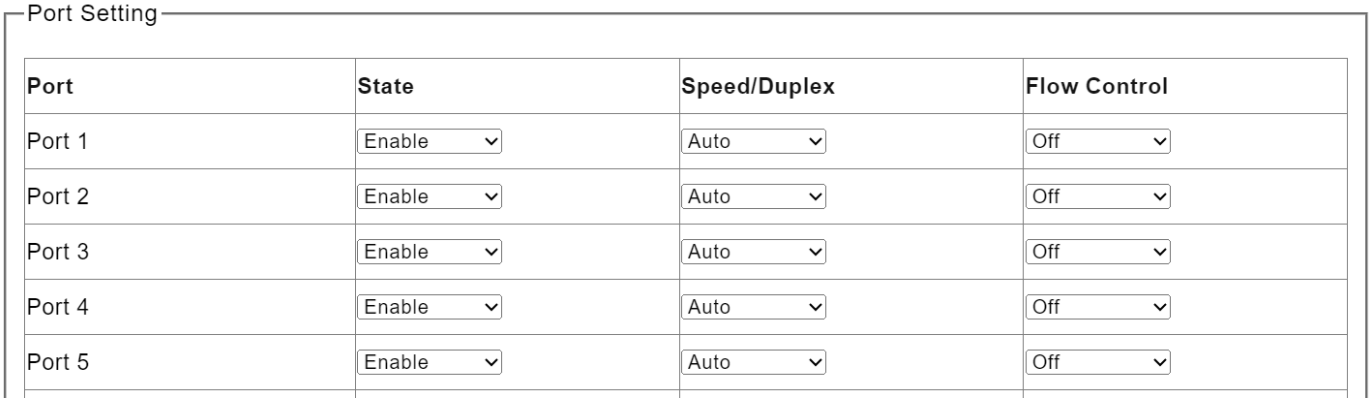
Port	PD Class	Power Allocated	Power Used	Current Used	Extend PoE Mode	PoE Auto-checking	PoE Real Status
Port 1	0	90[W]	4.9[W]	96[mA]	OFF	OFF	PoE turned ON
Port 2	0	90[W]	3.0[W]	59[mA]	OFF	OFF	PoE turned ON
Port 3	0	90[W]	3.4[W]	66[mA]	OFF	OFF	PoE turned ON
Port 4	-	0[W]	0[W]	0[mA]	OFF	OFF	No PD detected
Port 5	-	0[W]	0[W]	0[mA]	OFF	OFF	No PD detected
Port 6	-	0[W]	0[W]	0[mA]	OFF	OFF	No PD detected
Port 7	-	0[W]	0[W]	0[mA]	OFF	OFF	No PD detected

6. Port

6.1. Port Management

Configure the port setting here

Click “Port” > “Port Setting” ，shown as following：



Picture 6-1 Port Setting

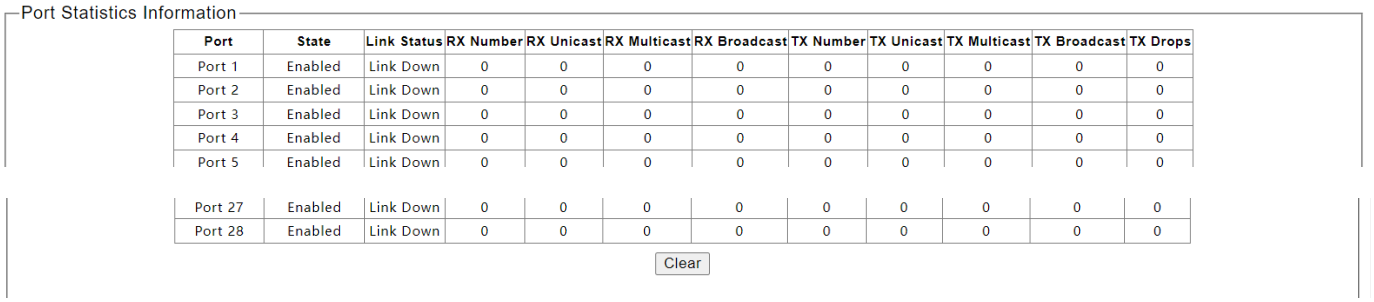
Description:

Parameters	Description
Port	The port for configuration
State	Enable/Disable the port
Speed/Duplex	Choose the speed mode, can select Auto/ 10Mbps HDX/10Mbps FDX/ 100Mbps HDX /100Mbps FDX/ 1000M FDX
Flow Control	Enable (on)/Disable(off) the flow control function

Click “Apply” for saving the changes

6.2. Port Statistics

Click “ Port” > “ Port Statistics” to check the configuration, shown as following:


Port Statistics Information

Port	State	Link Status	RX Number	RX Unicast	RX Multicast	RX Broadcast	TX Number	TX Unicast	TX Multicast	TX Broadcast	TX Drops
Port 1	Enabled	Link Down	0	0	0	0	0	0	0	0	0
Port 2	Enabled	Link Down	0	0	0	0	0	0	0	0	0
Port 3	Enabled	Link Down	0	0	0	0	0	0	0	0	0
Port 4	Enabled	Link Down	0	0	0	0	0	0	0	0	0
Port 5	Enabled	Link Down	0	0	0	0	0	0	0	0	0
Port 27	Enabled	Link Down	0	0	0	0	0	0	0	0	0
Port 28	Enabled	Link Down	0	0	0	0	0	0	0	0	0

Clear

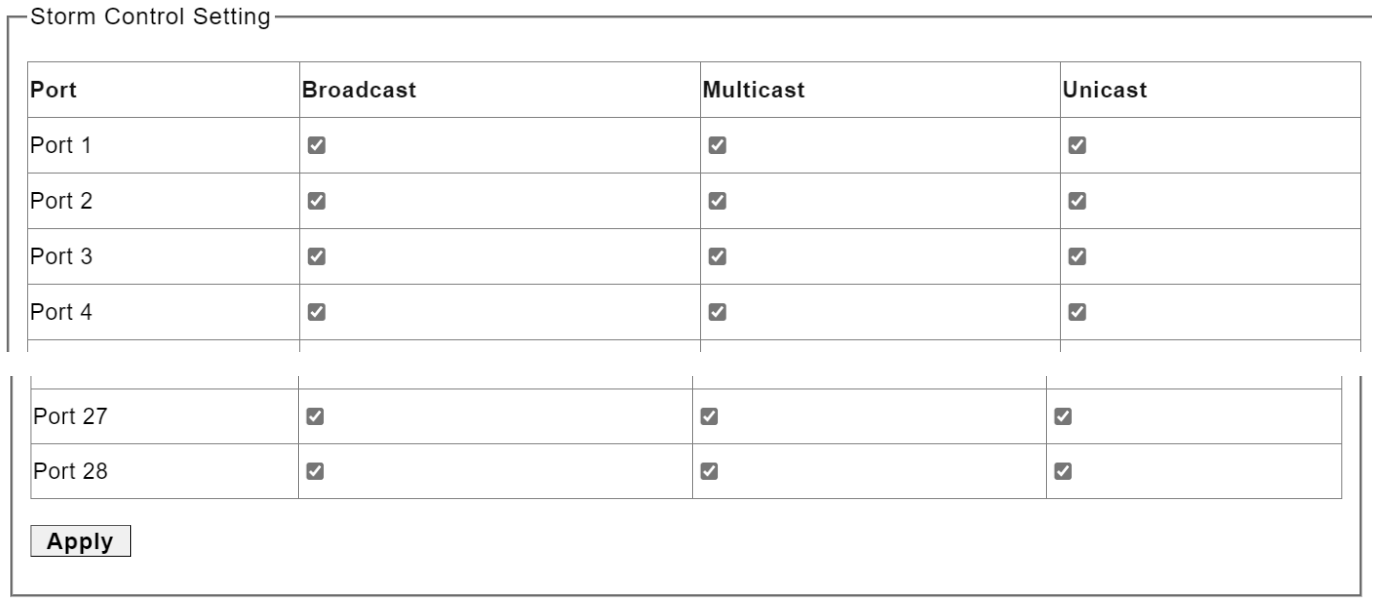
Picture 6-2 Port Statistics

Click “clear” for saving the changes

6.3. Storm Control

The switch supports Storm Control

Click” Port ” > “ Storm Control” , shown as following:


Storm Control Setting

Port	Broadcast	Multicast	Unicast
Port 1	☑	☑	☑
Port 2	☑	☑	☑
Port 3	☑	☑	☑
Port 4	☑	☑	☑
Port 27	☑	☑	☑
Port 28	☑	☑	☑

Apply

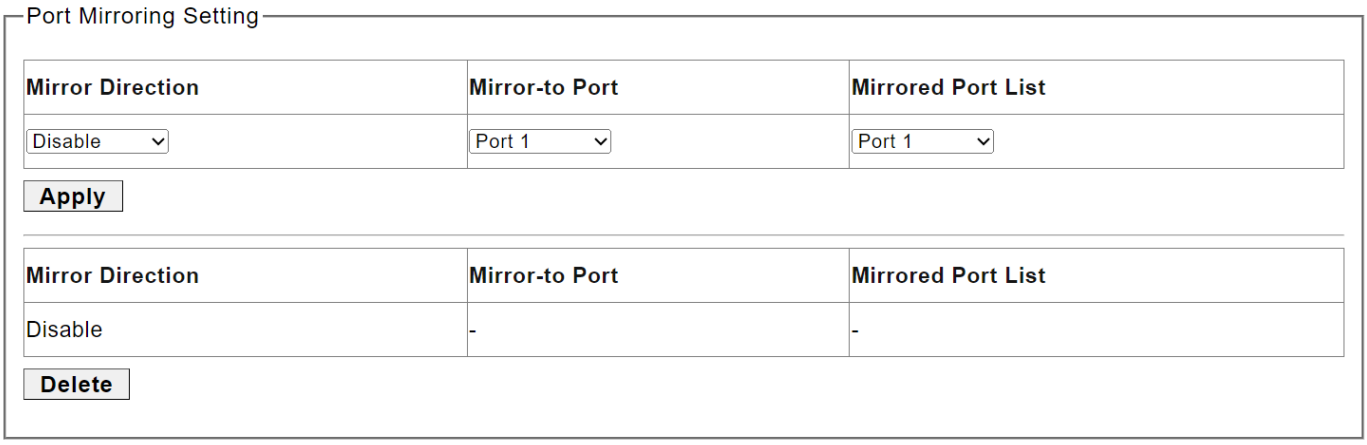
Picture 6-3 Storm Control

Select the storm type for control, and click “Apply” for saving the changes

6.4. Port-based Mirroring

The port mirroring function completely maps the service or control packet traffic of some ports to the specified port. The specified port is the "mirroring port", and the mapped port is the "mirrored port". Connecting a network analyzer to a mirroring port can clearly analyze the packets of the mirroring source port without destroying the normal services of the mirroring source port. Port mirroring is a convenient online monitoring function. All ports of the system can be configured as mirroring source ports, but only one mirroring destination port can be configured. When a port is configured as a mirror port, its corresponding port cannot be configured as a source port. The source port refers to the mirrored port, and multiple ports can be configured. The mirrored destination port can only be configured with one port.

Click " Port" > " Port-based Mirroring" ,shown as following:



Picture 6-4 Port S Mirroring

Description:

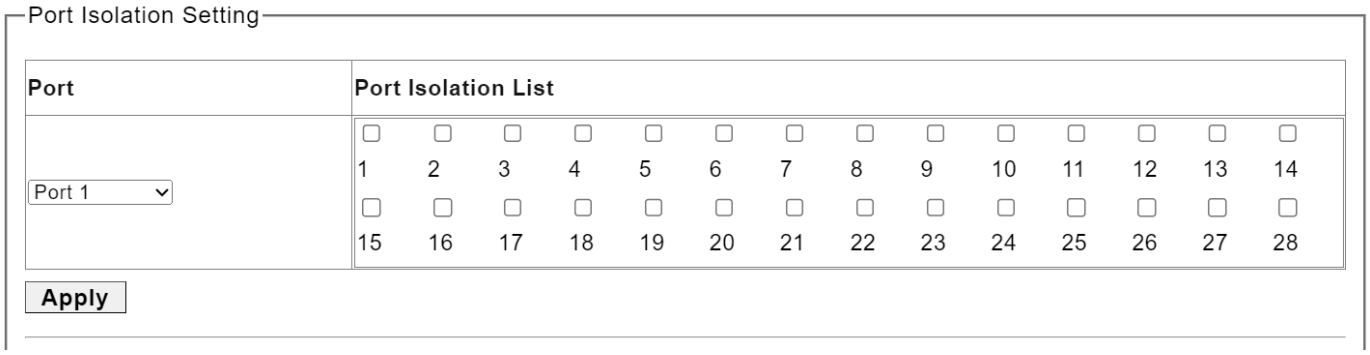
Parameters	Description
Mirroring Port	mirror destination port
Mirrored Port List	mirror source port
Mirror Direction	RX,TX,BOTH

Click "Apply" for saving the changes

6.5. Port Isolation

The switch supports port isolation function

Click" Port" > " Port Isolation" , shown as following:



Picture 6-5 Port isolation

Description:

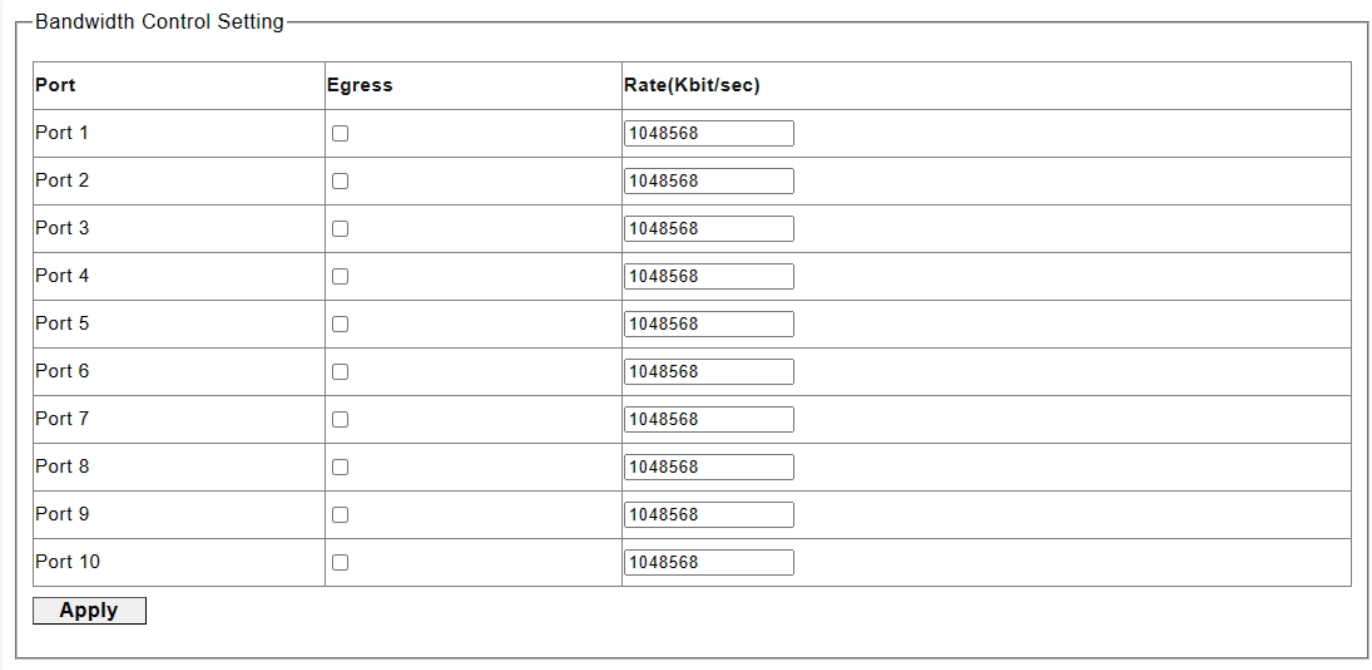
Parameters	Desription
Port	Select the port for configuration
Port Isolation List	Select the ports for isolation from the selected port

Click "Apply" for saving the changes

6.6. Bandwidth Control

The switch supports port bandwidth control configuration

Click " Port" > " Bandwidth Control", shown as following:



Picture 6-6 Bandwidth Control

Description:

Parameters	Description
Port	The port for configuration
Egress	Click to enable/disable the Egress
Rate	Enter the packet rate (0-1000000, multiple of 8)

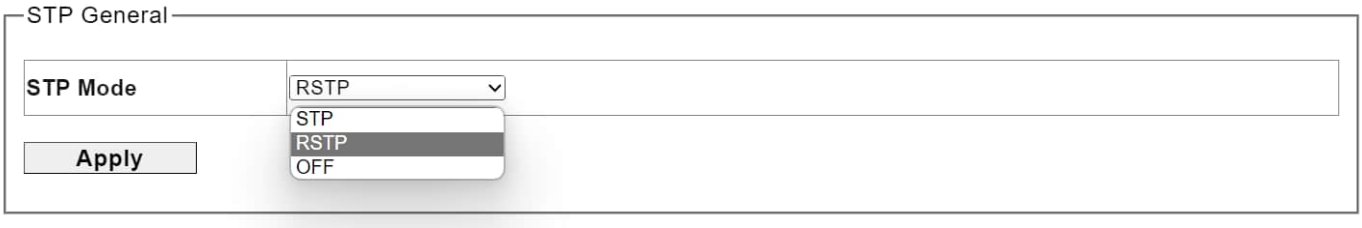
Click "Apply" for saving the changes

7.STP

7.1. STP General

The user can configure spanning tree protocol to avoid looping and connect switches as ring topology for cable redundancy.

Click" STP" > "STP General", shown as following:



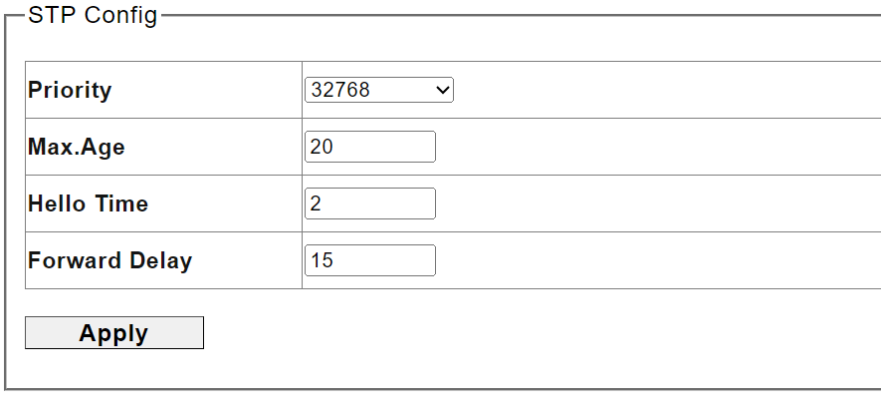
Picture 7.1 Spanning Tree Protocol

Description:

Parameters	Description
STP	Enable spanning tree protocol
RSTP	Enable rapid spanning tree protocol
OFF	Disable spanning tree protocol

Click "Apply" for saving the changes

7.2 STP Config



Picture 7.2 Spanning Tree Protocol Configuration

Description:

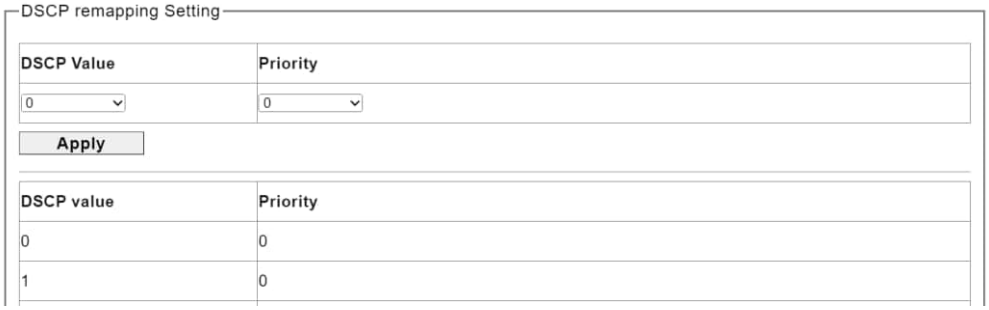
Parameters	Description
Priority	The priority parameter used in the CIST(Common and Internal Spanning Tree) connection. 0 / 4096 / 8192 / 12288 / 16384 / 20480 / 24576 / 28672 / 32768 / 36864 / 40960 / 45056 / 49152 / 53248 / 57344 / 61440
Max.Age	6-40sec. The same definition as in the RSTP protocol.
Hello Time	By default, the hello time is 2 seconds. If the device does not receive configuration BPDUs within the timeout period, it recalculates the spanning tree. The formula for calculating the timeout period is timeout period = timeout factor × 3 × hello time.
Forward Delay	4-30sec. The same definition as in the RSTP protocol.

8. QoS

8.1. Dscp remapping

This page is used to configure port’ s DSCP remapping.

Click “QoS” > “Dscp remapping”, shown as following:



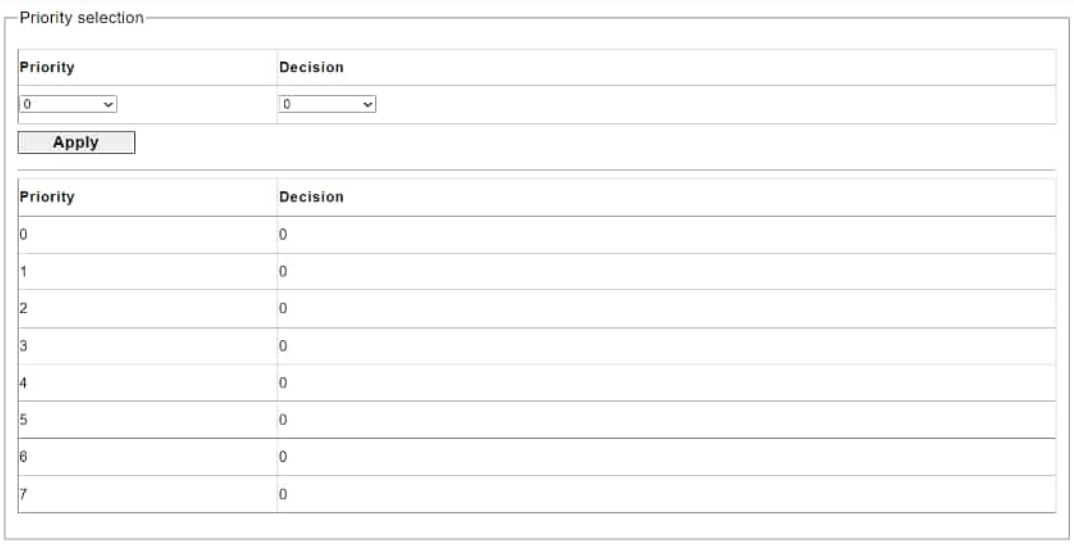
Picture 7-1 Dscp remapping

Select the DSCP Value and priority in the pull-down list

Click “Apply” for saving the changes

8.2. Priority to Queue

Click “QoS” > “ Priority to Queue”, shown as following:



Picture 7-2 Priority to Queue

Select the Priority and Decision in the pull-down list

Click "Apply" for saving the changes

8.3. Port-based Priority

Click "QoS" > " Port-based Priority " , shown as following:

Picture 7-3 Port-based Priority

Select the port and priority in the pull-down list

Click "Apply" for saving the changes

9. Link Aggregation

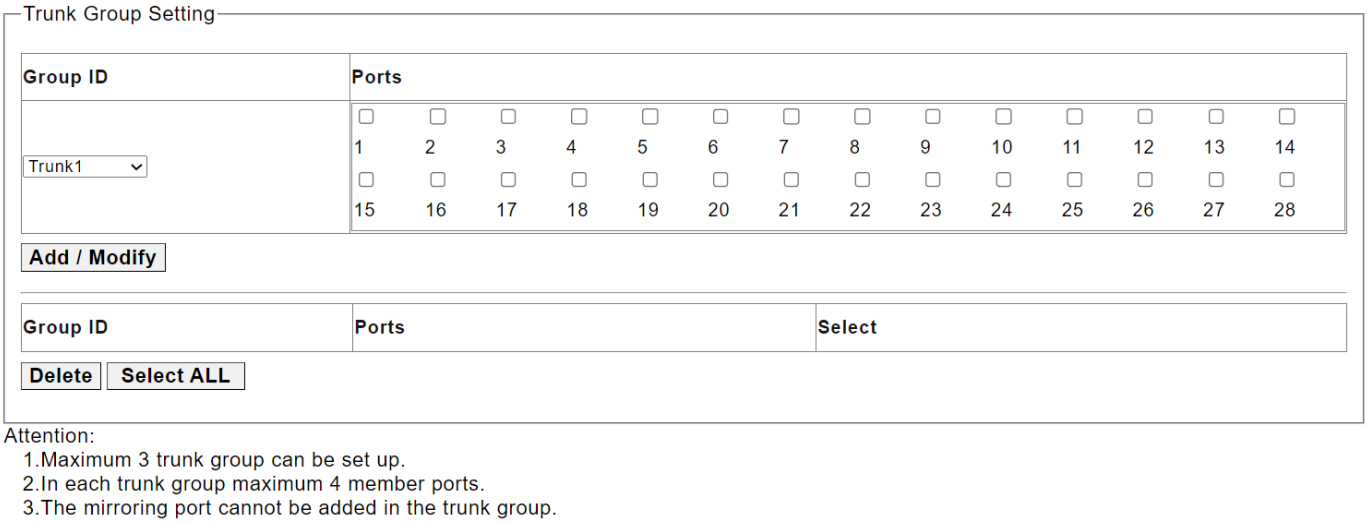
9.1. Trunk Group Setting

Users can establish multiple links between multiple switches. Link Aggregation is a method to increase bandwidth by bundling a group of physical interfaces together as a logical interface. The switch series supports up to 2-13 port aggregation groups in accordance with the port numbers.

Note: If any port in the link aggregation group is disconnected, packets sent to the disconnected port will share the load with the other ports connected in the link aggregation group.

On this page, the user can configure the port static aggregation settings of the switch.

Click " Link Aggregation" > "Trunk Group Setting", shown as following:



Picture 8-1 Trunk Group Setting

Configuration Description:

Parameters	Description
Group ID	Trunk group ID, maximum 3 trunk groups
Ports	Ports numbers in a trunk group

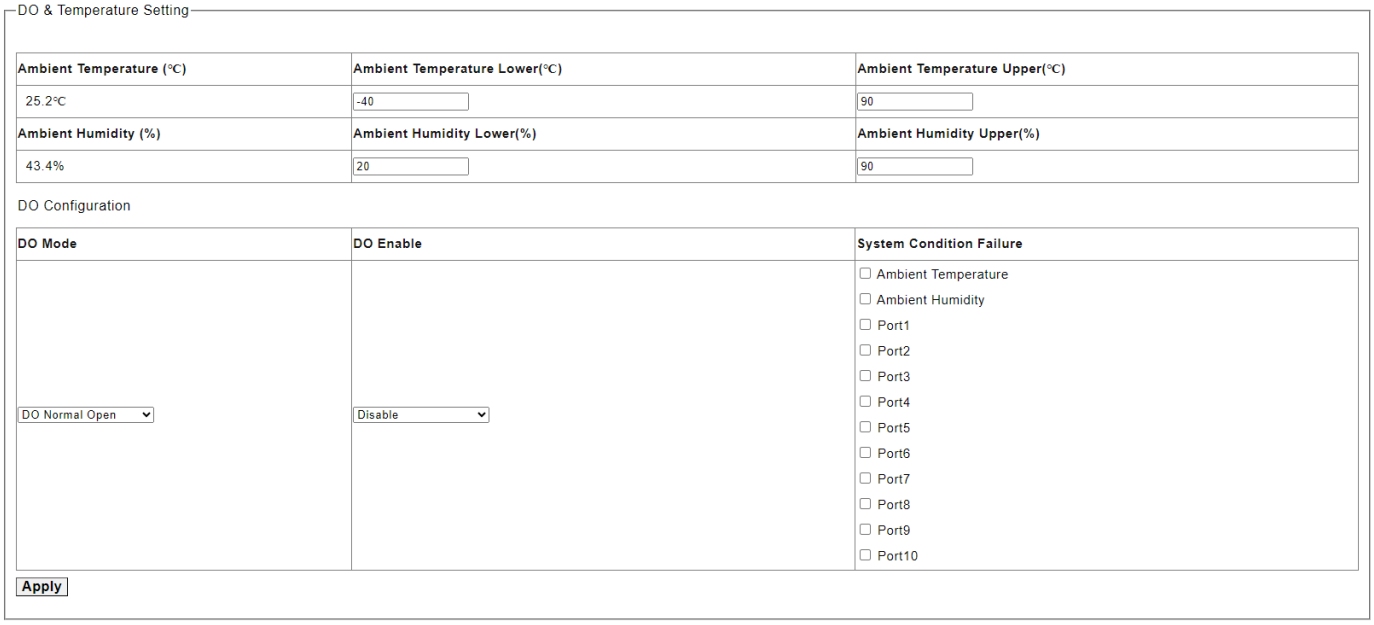
Click "Apply" for saving the changes

Click Delete to delete the selected trunk group

Note: A static trunk group can be configured with up to 4 ports.

10. DO & Temperature

10.1. DO & Temperature Setting



The switch comes with a temperature and humidity sensor which can detect ambient temperature and humidity. You can connect an alarm, fan or heater….etc to DO port. Once the event is triggered, the DO device will be on.

Do & Temperature Setting

- **Ambient Temperature:**
  Environment's actual temperature.
- **Ambient Temperature Lower (℃):**
  When the actual temperature is below the number that you set, it will trigger DO device.
- **Ambient Temperature Upper (℃):**
  When the actual temperature is higher than the number that you set, it will trigger DO device.
- **Ambient Humidity (%):**
  Environment's actual humidity.
- **Ambient Humidity Lower (%):**
  When the actual humidity is below the number that you set, it will trigger DO device.
- **Ambient Humidity Upper (%):**
  When the actual humidity is higher than the number that you set, it will trigger DO device.

DO Configuration

- **DO Mode:**

DO normal open: DO1 and DO2 are in the open position.

DO normal close: DO1 and DO2 are in the closed position

- **DO Enable:**

  Default is disabled.

- **System Condition Failure:**

  You can choose the events that you want to enable.

  Ambient Temperature: when you enable it, the DO device will be triggered when the temperature goes over or below the temperature that you set.

  Ambient Humidity: when you enable it, the DO device will be triggered when the humidity goes over or below the humidity that you set.

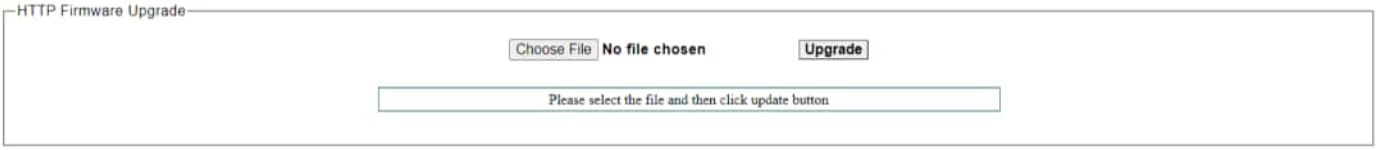
  Port1 to Port10: when those ports are disconnected or PoE power failure, it will trigger DO devic

11. Maintenance

11.1. Firmware Upgrade

The switch supports firmware upgrade on-line

Click "Tools" > " Firmware Upgrade ",shown as following:



Picture 9-1 Firmware Upgrade

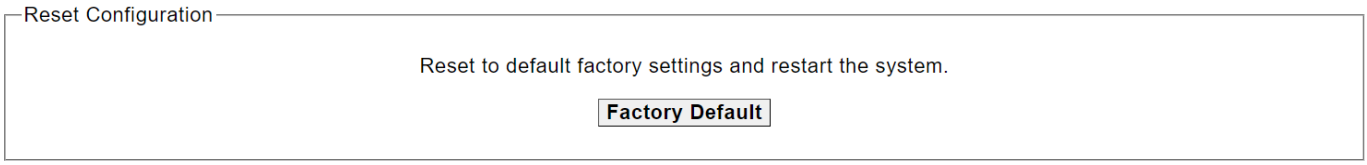
Click "choose file" to upload a new firmware file, then click "upgrade" to update to the new version firmware

Note: After upgrading, the switch will reboot automatically and back to the log in page

:

11.2. Reset

Click "Tools" > "Reset ", shown as following:



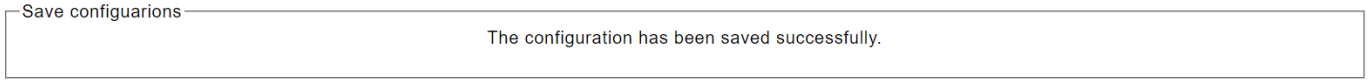
Picture 9-3 factory default

Click factory default to restore

11.3. Save

Click "Maintenance" > "Save " to save configuration, shown as following:

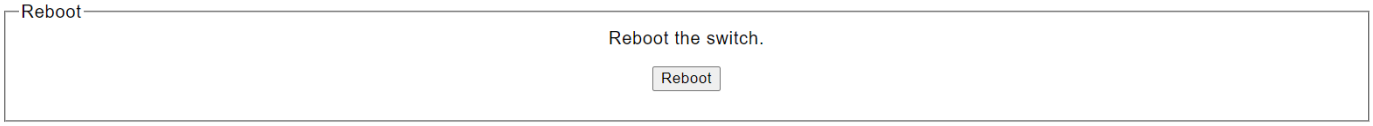
*Please note that you must save configuration after you change the settings otherwise the settings that you change will be gone after switch rebooting.



Picture 9-4 Save

11.4. Reboot

Click "Maintenance" > "reboot ", to reboot the switch, shown as following:



Picture 9-5 Reboot