

# 16-Port Gigabit + 4-Port Gigabit Combo Base-T/SFP L2 Managed PoE Switch



## User Manual

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# 1. Product Introduction

Congratulations on your purchasing of the 16-Port Gigabit + 4-Port Gigabit Combo Base-T/SFP L2 Managed PoE Switch. Before you install and use this product, please read this manual carefully for full exploiting the functions of this product.

## 1.1. Product Overview

The Switch is a high performance the second managed gigabit switch. Provides Sixteen 10/100/1000Mbps self-adaption RJ45 ports, plus four gigabit Combo ports, it can be used to link bandwidth higher upstream equipment. Support VLAN ACL based on port, easily implement network monitoring, traffic regulation, priority tag and traffic control. Support traditional STP/RSTP/MSTP 2 link protection technology; greatly improve the ability of fault tolerance, redundancy backup to ensure the stable operation of the network. Support ACL control based on the time, easy control the access time accurately. Support 802.1x authentication based on the port and MAC, easily set user access. Perfect QOS strategy and plenty of VLAN function. PoE ports can automatically detect and supply power with those IEEE 802.3at/af compliant Powered Devices (PD). In this situation, the electrical power is transmitted along with data in one single cable allowing you to expand your network where there are no power lines or outlets, where you wish to fix devices such as AP, IP Cameras or IP Phones, etc

## 1.2. Features

- Comply with IEEE802.3i, IEEE802.3u, IEEE802.3ab, IEEE802.3x, IEEE802.3z, IEEE802.3ad ,standards
- Supports IEEE802.3at/af PoE standards
- Supports PoE power up to 30W for each PoE port, total power up to 240W for all PoE ports
- Supports IEEE802.3x flow control for Full-duplex Mode and backpressure for Half-duplex Mode
- Supports MAC address auto-learning and auto-aging
- Store and forward mode operates
- Support SNMP/RMON/TELENT
- Supports IEEE802.1Q VLAN,4K VLAN Table
- Support IEEE802.1p Priority Queues
- Support 1.5K entry ACL
- Support Storm Control
- Support QoS、 Port Mirroring、 Link Aggregation Protocol
- LED indicators for monitoring PSE, Link/Activity/Speed
- Web-based Management Support

## 1.3. External Component Description

### 1.3.1. Front Panel

The front panel of the Switch consists of a series of LED indicators, 1 x Reset button, 1x Console port, 16 x 10/100/1000Mbps RJ-45 ports and 4x Combo ports as shown as below.



Figure 1 - Front Panel

#### LED indicators:

The LED Indicators will allow you to monitor, diagnose and troubleshoot any potential problem with the Switch, connection or attached devices.



Figure 2 - LED Indicator

The following chart shows the LED indicators of the Switch along with explanation of each indicator.

LED Indicator	Faceplate Marker	Status	Indication
Power Indicator	PWR	Off	Power Off
		Solid green	Power On
System indicator	SYS	Off	System not started
		Blinking green	System is starting or the system starts successfully
10/100/1000 BASE-T adaptive Ethernet port	Link/Act /Speed	Off	The port is NOT connected.
		Solid green	The port is connected at 1000Mbps.

indicators (1-16)		Solid orange	The port is connected at 100/10Mbps
		Blinking	The port is transmitting or receiving data.
Combo port indicators (17-20/SFP1~4)	Link/Act	Off	The port is NOT connected.
		Solid green	The port is connected at 1000Mbps.
		Blinking	The port is transmitting or receiving data.
PoE status indicators (1-16)	PoE	Off	No PD is connected to the corresponding port, or no power is supplied according to the power limits of the port
		Solid yellow	A Powered Device is connected to the port, which supply power successfully.
		Blinking	The PoE power circuit may be in short or the power current may be overloaded

**Reset button (Reset):**

Keep the device powered on and push a paper clip into the hole. Press down the button for 5 seconds to restore the Switch to its original factory default settings.

**Console port (Console):**

Designed to connect with the serial port of a computer or terminal for monitoring and configuring the Switch.

**10/100/1000Mbps RJ-45 ports (1~16):**

Designed to connect to the device with a bandwidth of 10Mbps, 100Mbps or 1000Mbps. Each has a corresponding Link/Act/Speed and PoE indicator.

**Combo ports (17~20, SFP1~4):**

Designed to install the SFP module. The switch features four SFP receiver slots, which are Shared with four related RJ45 ports (17-20).An SFP port and a related RJ45 port are called "composite" ports, which means that they can't be used at the same time, only the SFP port works or only the RJ45 port works simultaneously.



### 1.3.2. Rear Panel

The rear panel of the Switch contains AC Power Connector and Grounding Terminal shown as below.



Figure 3 - Rear Panel

#### **AC Power Connector:**

Power is supplied through an external AC power adapter. It supports AC 100~240V, 50/60Hz.

#### **Grounding Terminal:**

Located on the left side of the power supply connector, use wire grounding to lightning protection.

### 1.4. Package Contents

Before installing the Switch, make sure that the following the "packing list" listed OK. If any part is lost and damaged, please contact your local agent immediately. In addition, make sure that you have the tools install switches and cables by your hands.

- One PoE Web Smart Ethernet Switch.
- One Installation Component
- One AC power cord.
- One User Manual.

## 2. Installing and Connecting the Switch

This part describes how to install your PoE Ethernet Switch and make connections to it. Please read the following topics and perform the procedures in the order being presented.

### 2.1. Installation

Please follow the following instructions in avoid of incorrect installation causing device damage and security threat.

- Put the Switch on stable place or desktop in case of falling damage.
- Make sure the Switch works in the proper AC input range and matches the voltage labeled on the Switch.
- To keep the Switch free from lightning, do not open the Switch's shell even in power failure.
- Make sure that there is proper heat dissipation from and adequate ventilation around the Switch.
- Make sure the cabinet to enough back up the weight of the Switch and its accessories.

#### 2.1.1. Desktop Installation

Sometimes users are not equipped with the 19-inch standard cabinet. So when installing the Switch on a desktop, please attach these cushioning rubber feet provided on the bottom at each corner of the Switch in case of the external vibration. Allow adequate space for ventilation between the device and the objects around it.

#### 2.1.2. Rack-mountable Installation in 19-inch Cabinet

The Switch can be mounted in an EIA standard-sized, 19-inch rack, which can be placed in a wiring closet with other equipment. To install the Switch, please follow these steps:

- A. attach the mounting brackets on the Switch's side panels (one on each side) and secure them with the screws provided.



Figure 4 - Bracket Installation

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

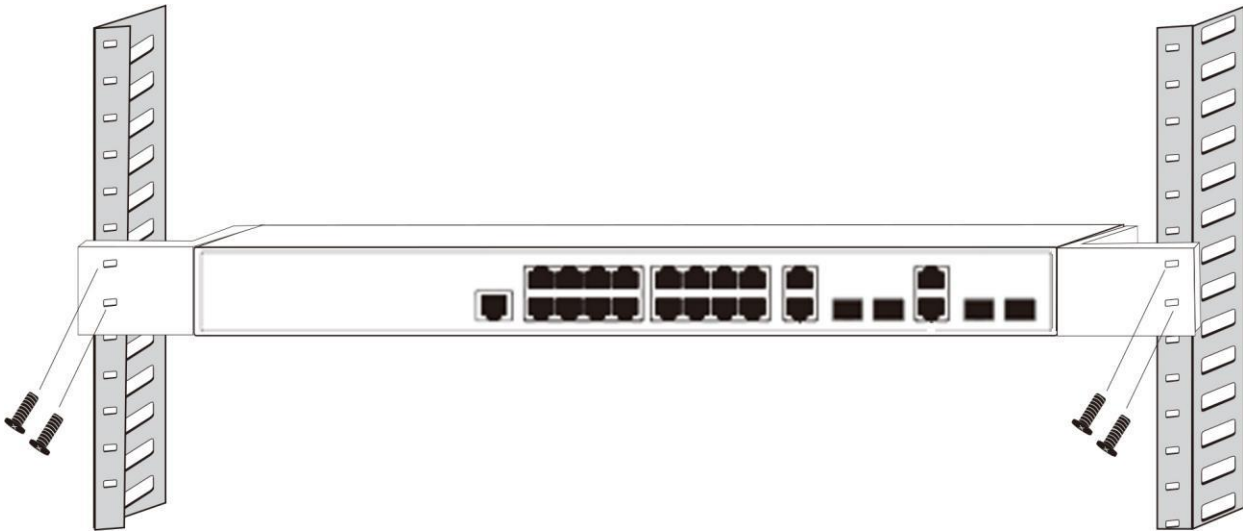


Figure 5 - Rack Installation

### 2.1.3. Power on the Switch

The Switch is powered on by the AC 100-240V 50/60Hz internal high-performance power supply. Please follow the next tips to connect:

#### AC Electrical Outlet:

It is recommended to use single-phase three-wire receptacle with neutral outlet or multifunctional computer professional receptacle. Please make sure to connect the metal ground connector to the grounding source on the outlet.

#### AC Power Cord Connection:

Connect the AC power connector in the back panel of the Switch to external receptacle with the included power cord, and check the power indicator is ON or not. When it is ON, it indicates the power connection is OK.

## 2.2. Connect Computer (NIC) to the Switch

Please insert the NIC into the computer, after installing network card driver, please connect one end of the twisted pair to RJ-45 jack of your computer, the other end will be connected to any RJ-45 port of the Switch, the distance between Switch and computer is around 100 meters. Once the connection is OK and the devices are power on normally, the LINK/ACT/Speed status indicator lights corresponding ports of the Switch.

## 2.3. Switch connection to the PD

1-16 ports of the Switch have PoE power supply function, the maximum output power up to 30W each port, it can make PD devices, such as internet phone, network camera, wireless access point work. You only need to connect the Switch PoE port directly connected to the PD port by network cable.

### 3. How to Login the Switch

#### 3.1. Switch to End Node

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

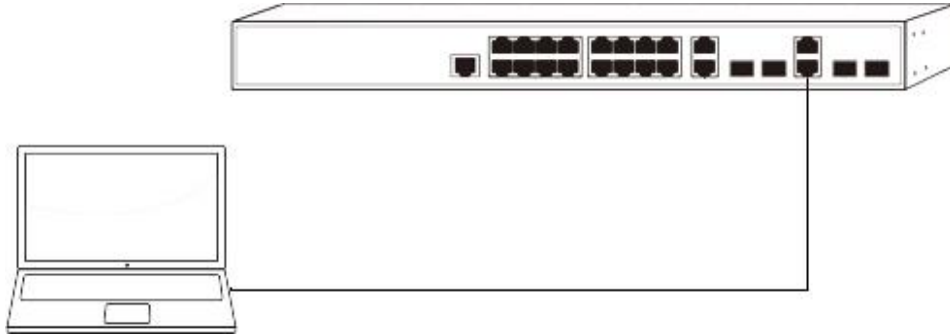


Figure 6 - Connect PC to Switch

Please refer to the LED Indicators. The LINK/ACT/Speed LEDs for each port lights on when the link is available.

#### 3.2. How to Login the Switch

As the Switch provides Web-based management login, you can configure your computer's IP address manually to log on to the Switch. The default settings of the Switch are shown below.

Parameter	Default Value
Default IP address	192.168.0.1
Default user name	admin
Default password	admin

You can log on to the configuration window of the Switch through following steps:

1. Connect the Switch with the computer NIC interface.
2. Power on the Switch.
3. Check whether the IP address of the computer is within this network segment: 192.168.0.xxx ("xxx" ranges 2~254), for example, 192.168.0.100.
4. Open the browser, and enter <http://192.168.0.1> and then press "Enter". The Switch login window appears, as shown below.

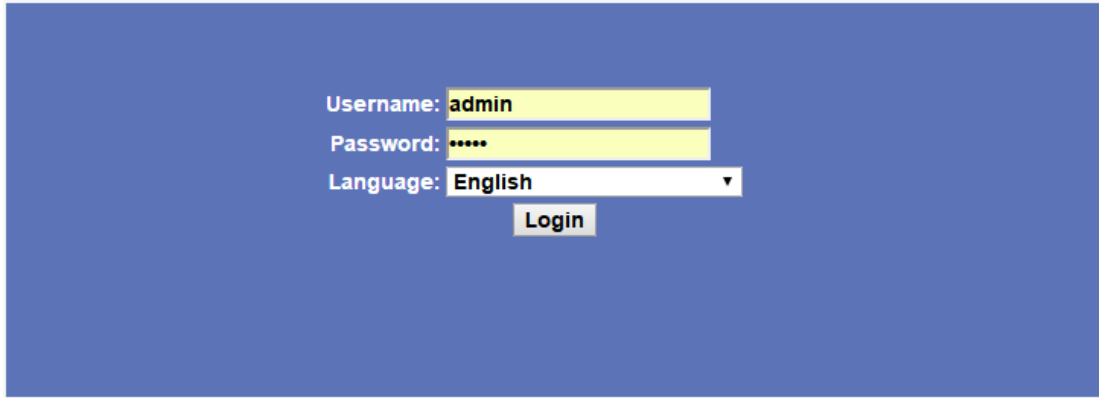


Figure 7- Login Windows

5. Switching language to English .Enter the Username and Password (The factory default Username is **admin** and Password is **admin**), and then click "**Login**" to log in to the Switch configuration window

The screenshot shows the switch configuration interface. At the top right, there are buttons for 'Save', 'Status', and 'Logout'. On the left, there is a navigation menu with 'Basic Setting', 'Advanced Application', and 'Management'. The main area displays a 'Port Status' table with the following data:

Port	Name	Link	Set Speed	State	LACP	TxPkts	RxPkts	Errors	Tx Bits/s	Rx Bits/s	Up Time
GE0/0/1		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/2		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/3		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/4		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/5		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/6		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/7		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/8		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/9		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/10		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/11		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/12		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/13		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/14		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/15		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/16		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/1/1		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/1/2		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/1/3		full-1000M	auto	forwarding	disabled	216	189	0	1432	584	0:04:17
GE0/1/4		down	auto	disabled	disabled	0	0	0	0	0	0:00:00

At the bottom of the table, there are radio buttons for 'Any' (selected) and 'Port', followed by a 'Clear Counter' button. The footer of the page contains the copyright notice: '© Copyright 2001-2019'.

## 4. WEB Configuration Guide

Switch configuration interface consists of 3 main areas, areas for the status bar at the top, the area on the left menu bar, right the main configuration window. Select the different functions in the function menu bar, you can modify all settings in the main configuration window.

The screenshot displays the switch configuration interface. At the top right, there are buttons for 'Save', 'Status', and 'Logout'. On the left, a vertical menu bar contains 'Basic Setting', 'Advanced Application', and 'Management'. The main content area is titled 'Port Status' and contains a table with the following columns: Port, Name, Link, Set Speed, State, LACP, TxPkts, RxPkts, Errors, Tx Bits/s, Rx Bits/s, and Up Time. The table lists ports GE0/0/1 through GE0/1/4. Port GE0/1/3 is the only one with data, showing a link speed of 1000M, a state of 'forwarding', and some traffic statistics. Below the table, there are radio buttons for 'Any' and 'Port', and a 'Clear Counter' button. The footer of the interface shows '© Copyright 2001-2019'.

Port	Name	Link	Set Speed	State	LACP	TxPkts	RxPkts	Errors	Tx Bits/s	Rx Bits/s	Up Time
GE0/0/1		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/2		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/3		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/4		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/5		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/6		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/7		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/8		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/9		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/10		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/11		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/12		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/13		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/14		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/15		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/0/16		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/1/1		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/1/2		down	auto	disabled	disabled	0	0	0	0	0	0:00:00
GE0/1/3		full-1000M	auto	forwarding	disabled	216	189	0	1432	584	0:04:17
GE0/1/4		down	auto	disabled	disabled	0	0	0	0	0	0:00:00

### 4.1. Basic Setting

Choose Basic Setting, and the following page appears. There are "System Info", "General Setup", "IP Setup", "Port Setup", configuration web pages.

The screenshot shows the 'Basic Setting' menu. The menu items are 'Basic Setting', 'Advanced Application', and 'Management'. Below these, there are four sub-menus: 'System Info', 'General Setup', 'IP Setup', and 'Port Setup'.

### 4.1.1. System Info

Selecting “**Basic Setting>System Information settings**” in the navigation bar, you can view the basic information of System and configure the IP address and System name.

### 4.1.2. General Setup

Selecting “**Basic Setting>General Setup**” in the navigation bar, you can view the basic information of Switch, Such as System description and so on. You can also modify System name, System contact and System location.

### 4.1.3. IP Setup

Selecting “**Basic Setting>IP Setup**” in the navigation bar, you can configure IP.


The screenshot displays the 'IP Setup' configuration page. On the left, a navigation menu shows 'Basic Setting', 'Advanced Application', and 'Management'. Under 'Management', 'System Info', 'General Setup', 'IP Setup' (highlighted with a red circle), and 'Port Setup' are listed. The main content area is titled 'Vlan Interface' and includes a 'VlanInterfaceConf' link. Below the title, there is a 'Creat:' section with a form for adding a new interface. The form has two fields: 'Interface' (set to 'vlan-interface') and 'Vlan ID' (set to '1'). Below the form are 'Add', 'Cancel', and 'Clear' buttons. Underneath is a 'List:' section with a table of existing interfaces.

Index	Name	Primary ipaddress	VLAN	Status	Delete
1	VLAN-IF1	192.168.1.1	1	Up	<input type="checkbox"/>

Below the table are 'Delete' and 'Cancel' buttons.

#### 4.1.3.1. Vlan interface

Selecting “**Basic Setting>IP Setup>Vlan interface**” in the navigation bar, you can configure Vlan interface.

 **Vlan Interface**
[VlanInterfaceConf](#)

**Creat:**

Interface	vlan-interface ▼
Vlan ID	1

**List:**

Index	Name	Primary ipaddress	VLAN	Status	Delete
1	<a href="#">VLAN-IF1</a>	192.168.1.1	1	Up	<input type="button" value="Delete"/>

**【Parameter Description】**

Parameter	Description
Interface	Selecting the interface: vlan-interface Supervlan-interface
Vlan ID	You can specify the vlan ID
Name	The name of interface

**4.1.3.2. Vlan interface Config**

Selecting “**Basic Setting>IP Setup>Vlan interface Config**” in the navigation bar, you can configure Vlan interface Config.



## Vlan Interface Config

[VlanInterface](#)

### VLAN Interface Name List:

Interface Name	VLAN-IF1 ▾
Vlan ID	1

### VLAN Interface Configuration:

Mode	Ip Address ▾
IP Address	0.0.0.0
NetMask Address	0.0.0.0
Override	<input type="checkbox"/>

### VLAN Interface List:

Index	Ip	Mask	Primary	Delete
1	192.168.1.1	255.0.0.0	<input checked="" type="radio"/>	<input type="checkbox"/>

#### 【Parameter Description】

Parameter	Description
Interface name	Name of interface
Vlan ID	You can specify the vlan ID
IP Address	User login in Switch using the IP Address
Override	You can override former original primary IP or not

#### 【Configuration example】

Such as: Setting IP address as 192.168.2.1 and mask as 255.255.255.0.And then selecting override.

## Vlan Interface Config

[VlanInterface](#)

### VLAN Interface Name List:

Interface Name	VLAN-IF1 ▾
Vlan ID	1

Apply Cancel

### VLAN Interface Configuration:

Mode	Ip Address ▾
IP Address	192.168.2.1
NetMask Address	255.255.255.0
Override	<input checked="" type="checkbox"/>

Add Refresh

### VLAN Interface List:

Index	Ip	Mask	Primary	Delete
1	192.168.1.1	255.0.0.0	<input checked="" type="radio"/>	<input type="checkbox"/>

Modify Delete Cancel

#### 4.1.4. Port Setup

Selecting "**Basic Setting>Port Setup**" in the navigation bar, you can configure the related parameter of port.

**Basic Setting**

Advanced Application Management

---

System Info

General Setup

IP Setup

**Port Setup**

Port basic settings

Port Number [Click for selecting]

2	4	6	8	10	12	14	16	18	20
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	0
1	3	5	7	9	11	13	15	17	19

Port Number

Port basic settings **Ethernet 1000M Port[1]**

Port	Status	Link	Priority	Set speed	Mode	Actual speed	Port description (0-128 chars)
GE0/0/1	enable	down	0	auto	auto	unknown	
<input type="button" value="Refresh"/> <input type="button" value="Modify"/>							
Ethernet 1000M Port							
GE0/0/1	enable	down	0	auto	auto	unknown	
GE0/0/2	enable	down	0	auto	auto	unknown	
GE0/0/3	enable	down	0	auto	auto	unknown	
GE0/0/4	enable	down	0	auto	auto	unknown	
GE0/0/5	enable	down	0	auto	auto	unknown	
GE0/0/6	enable	down	0	auto	auto	unknown	
GE0/0/7	enable	down	0	auto	auto	unknown	
GE0/0/8	enable	down	0	auto	auto	unknown	
GE0/0/9	enable	down	0	auto	auto	unknown	
GE0/0/10	enable	down	0	auto	auto	unknown	
GE0/0/11	enable	down	0	auto	auto	unknown	
GE0/0/12	enable	down	0	auto	auto	unknown	
GE0/0/13	enable	down	0	auto	auto	unknown	
GE0/0/14	enable	down	0	auto	auto	unknown	
GE0/0/15	enable	down	0	auto	auto	unknown	
GE0/0/16	enable	down	0	auto	auto	unknown	
GE0/1/1	enable	down	0	auto	auto	unknown	
GE0/1/2	enable	down	0	auto	auto	unknown	

**【Parameter Description】**

Parameter	Description
Port	Port number
status	Choose whether to close link port
link	Status: Down up
priority	Set port priority, the range of 0-7
Set speed	Choose the following modes: full-100 half-100 auto-100 auto
Mode	Choose the following kinds: auto slave master
Actual speed	The actual speed of the port
Port description	The port is described

**【Configuration example】**

- 14

Such as: Configure the related parameters for port 1, Status is "enable", Priority is "1", Set speed is "auto", Mode is "auto", Port description is "port 1".

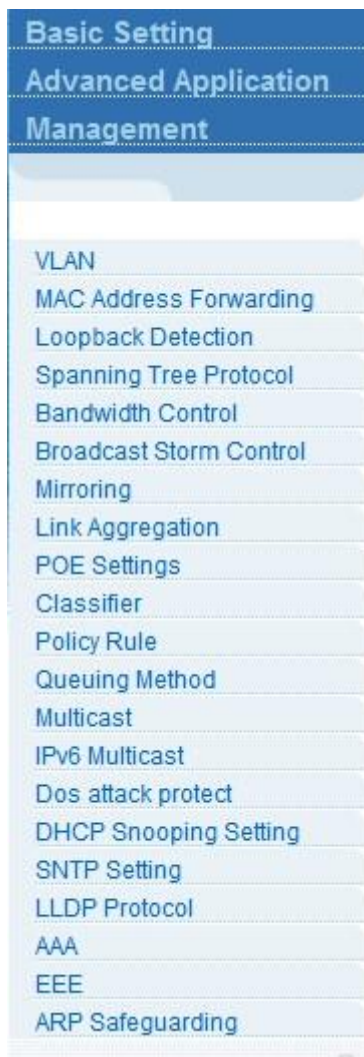
Port basic settings Ethernet 1000M Port[1]

Port	Status	Link	Priority	Set speed	Mode	Actual speed	Port description (0-128 chars)
GE0/0/1	enable	up	1	auto	auto	full-1000M	Port1

Refresh Modify

## 4.2. Advanced Application

Choose Advanced Application, and the following page appears. There are "VLAN", "MAC Address Forwarding", "Loopback Detection", "Spanning Tree Protocol", "Bandwidth Control", "Broadcast Storm Control", "Mirroring", "Link Aggregation", "POE Settings", "Classifier", "Policy Rule", "Queuing Method", "Multicast", "IPv6 Multicast", "Dos attack protect", "DHCP Snooping Setting", "SNTP Setting", "LLDP Protocol", "AAA", "EEE" and "ARP Safeguarding" configuration web pages.



### 4.2.1. VLAN

Selecting “**Advanced Application>VLAN**” in the navigation bar, you can configure VLAN.

The screenshot displays the 'VLAN Status' configuration page. On the left, a navigation menu includes 'Basic Setting', 'Advanced Application Management', and 'VLAN'. The main content area features a search bar for 'VLAN Search by VID' and a 'Search' button. Below this, it indicates 'The Number of VLAN: 1. Current Page: 1 of 1.' A table shows the following data:

Index	VID	Elapsed Time	Status
1	1	0:25:58	Static

Below the table is a port status grid for VLAN 1:

VID	Port Number									
	2	4	6	8	10	12	14	16	18	20
1	U	U	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U	U	U
VID	Port Number									
	1	3	5	7	9	11	13	15	17	19

At the bottom, there are navigation buttons: 'Change Pages', 'Previous', and 'Next'.

#### 4.2.1.1. VLAN Status

Selecting “**Advanced Application>VLAN>VLAN Status**”, in the navigation bar, you can view VLAN status.

**VLAN Status** [VLAN Port Settings](#) [Static VLAN](#)

VLAN Search by VID

The Number of VLAN: 1. Current Page: 1 of 1.

Index	VID	Elapsed Time	Status
1	1	0:25:58	Static

VID	Port Number									
	2	4	6	8	10	12	14	16	18	20
1	U	U	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U	U	U
VID	Port Number									
	1	3	5	7	9	11	13	15	17	19

【Parameter Description】

Parameter	Description
VLAN Status	View all vlans configured in the device
VLAN Search by VID	Enter VID to view the specified VLAN

【Configuration example】

Such as: View the VLAN of VID as “1”.

**VLAN Status** [VLAN Port Settings](#) [Static VLAN](#)

VLAN Search by VID

The Number of VLAN: 1. Current Page: 1 of 1.

Index	VID	Elapsed Time	Status
1	1	0:25:58	Static

VID	Port Number									
	2	4	6	8	10	12	14	16	18	20
1	U	U	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U	U	U
VID	Port Number									
	1	3	5	7	9	11	13	15	17	19

4.2.1.2. VLAN Port Settings

Selecting “Advanced Application>VLAN>VLAN Port Settings”, in the navigation bar, you can set VLAN port.

**VLAN Port Settings**
[Static VLAN](#)
[VLAN Status](#)

---

Global GVRP	<input type="checkbox"/>
permit vlan	<input style="width: 100%;" type="text"/>
PORT ID	<input style="width: 100%;" type="text"/>
port forbidden vlan	<input style="width: 100%;" type="text"/>

**Show Garp Information:**

Port	PVID	Acceptable Frame	Port Mode	Port GVRP	Ingress Check
*		All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Ethernet 1000M Port</b>					
GE0/0/1	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/2	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/3	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/4	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/5	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/6	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/7	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/8	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/9	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/10	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/11	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/12	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/13	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/14	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GE0/0/15	1	All	Hybrid	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**【Parameter Description】**

Parameter	Description
PVID	The PVID of the port can be modified, the default port PVID is "1"
Acceptable Frame	Choose the following kinds: All Tagged only Untagged only
Port Mode	Choose the following modes: Hybrid: The port can be either a tag member or untag member in a VLAN and can be a member port for multiple vlans. Trunk: The port can only be an tag member in a VLAN and

Parameter	Description
	can be a member port for multiple vlans Access: The port can only be a member of untag in VLAN and the port can only be in a VLAN.
Port GVRP	Select open or close GVRP, dynamic VLAN learning function, port mode must be Trunk mode
Ingress Check	Open port filtering function. If the port settings only receive the Tagged type of message, if the Ingress Check function is opened, the Untagged type of message will be discarded when the port receives the message of the untagged type of message, otherwise it can be forwarded. The default port filtering function opens.

#### 【Instructions】

Hybrid port to packet:

Receives a packet, judge whether there is a VLAN information: if there is no play in port PVID, exchanged and forwarding, if have, whether the Hybrid port allows the VLAN data into: if can be forwarded, or discarded (untag on port configuration is not considered, untag configuration only work when to send it a message).

Hybrid port to send packet:

1. Determine the VLAN in this port attributes (disp interface can see the port to which VLAN untag, which VLAN tag).
2. If it is untag stripping VLAN information, send again, if the tag is sent directly.

#### 【Configuration example】

Such as: The PVID of port 1 is set to "1", the frame type is set to "All", the port mode is set to "Hybrid", and the port GVRP is not turned on and the entry inspection function is opened.



#### 4.2.1.3. Static VLAN

Selecting "Advanced Application>Static VLAN" in the navigation bar, you can configure Static VLAN.



**Static VLAN**
[VLAN Port Settings](#)
[VLAN Status](#)

**Current static VLAN**

0001

Port Number <small>[Click for changing or selecting]</small>									
2	4	6	8	10	12	14	16	18	20
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
1	3	5	7	9	11	13	15	17	19
Port Number <small>[Select all: - [None] T [Tagged] U [Untagged]]</small>									

VLAN List	<input type="text" value="1"/>	<input type="button" value="Add"/>	<input type="button" value="Delete"/>
Name	<input type="text"/>	<input type="button" value="Modify"/>	<input type="button" value="Cancel"/>

**Total 1 records**

**【Parameter Description】**

Parameter	Description
VLAN List	VLAN Group ID
Name	VLAN Group name

**【Configuration example】**

Add and delete VLAN members

Such as: Adding a new VLAN, VLAN Group ID 120 contains non-untag member port 5~8. Tag member port 17, 18. The user can modify the port member by clicking on the white area below the port number;

**Static VLAN**
[VLAN Port Settings](#)
[VLAN Status](#)

Current static VLAN

0001  
10120

Port Number [Click for changing or selecting]									
2	4	6	8	10	12	14	16	18	20
-	-	U	U	-	-	-	-	T	-
-	-	U	U	-	-	-	-	T	-
1	3	5	7	9	11	13	15	17	19

Port Number [Select all: - [None] T [Tagged] U [Untagged]]

VLAN List  Add Delete

Name  Modify Cancel

Total 2 records

### 4.2.2. MAC Address Forwarding

Selecting “Advanced Application>MAC Address Forwarding”, in the navigation bar, you can configure MAC Address Forwarding.

**Basic Setting**

**Advanced Application Management**

VLAN

MAC Address Forwarding

Loopback Detection

Spanning Tree Protocol

Bandwidth Control

Broadcast Storm Control

Mirroring

Link Aggregation

POE Settings

Classifier

Policy Rule

Queuing Method

Multicast

IPv6 Multicast

Dos attack protect

DHCP Snooping Setting

SNTP Setting

LLDP Protocol

AAA

EEE

ARP Safeguarding

**MAC Address Forwarding**

MAC Address	<input style="width: 100px;" type="text"/>
VID	<input style="width: 100px;" type="text"/>
MAC Type	Static Mac
Port (No Blackhole Mac)	<input style="width: 100px;" type="text"/>

Add Cancel

Port Number [unknown source mac packet drop settings]									
2	4	6	8	10	12	14	16	18	20
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	3	5	7	9	11	13	15	17	19

Port Number [Apply all: ]

Modify

Index	Active	MAC Address	VID	Port	Status	Delete
1	Yes	00:0a:6a:00:03:ee	1	cpu	static	Delete
2	Yes	94:05:b6:5d:2e:79	1	GE0/1/3	dynamic	Delete

DelAll Refresh

【Parameter Description】

Parameter	Description
MAC Type	MAC Type: Static MAC Dynamic MAC Blackhole MAC Permanent MAC

**【Instructions】**

Blackhole MAC: If a PC's MAC address is configured on a switch to be a blackhole MAC, then the PC's package will be discarded by the switch and not forwarded to the network.

**【Configuration example】**

1. MAC Address Forwarding

MAC Address Forwarding

MAC Address	00 : 01 : 33 : jt : dc : aq
VID	1
MAC Type	Static Mac ▼
Port (No Blackhole Mac)	8

Add
Cancel

2. Unknown source mac packet drop settings.

Port Number [unknown source mac packet drop settings]

1	3	5	7	9	11
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	4	6	8	10	12

Port Number [Apply all: ]

Modify

**4.2.3. Lookback Detection**

Selecting “**Advanced Application>Lookback Detection**”, in the navigation bar, you can configure Lookback Detection.

**Basic Setting**

**Advanced Application**

**Management**

---

VLAN

MAC Address Forwarding

**Loopback Detection**

Spanning Tree Protocol

Bandwidth Control

Broadcast Storm Control

Mirroring

Link Aggregation

POE Settings

Classifier

Policy Rule

Queuing Method

Multicast

IPv6 Multicast

Dos attack protect

DHCP Snooping Setting

SNTP Setting

LLDP Protocol

AAA

EEE

ARP Safeguarding

**Loopback Detection**

Global State	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Addr-type	<input checked="" type="radio"/> Multicast <input type="radio"/> Broadcast
Action	<input type="radio"/> Discarding <input checked="" type="radio"/> Shutdown <input type="radio"/> None
Interval Time(s)	<input type="text" value="10"/>
Recover Time(s)	<input type="text" value="60"/>
Trap	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Log	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Port	Active
*	<input type="checkbox"/>
GE0/0/1	<input type="checkbox"/>
GE0/0/2	<input type="checkbox"/>
GE0/0/3	<input type="checkbox"/>
GE0/0/4	<input type="checkbox"/>
GE0/0/5	<input type="checkbox"/>
GE0/0/6	<input type="checkbox"/>
GE0/0/7	<input type="checkbox"/>
GE0/0/8	<input type="checkbox"/>
GE0/0/9	<input type="checkbox"/>
GE0/0/10	<input type="checkbox"/>
GE0/0/11	<input type="checkbox"/>
GE0/0/12	<input type="checkbox"/>
GE0/0/13	<input type="checkbox"/>
GE0/0/14	<input type="checkbox"/>
GE0/0/15	<input type="checkbox"/>

#### 4.2.4. Spanning Tree Protocol

Selecting “**Advanced Application>Spanning Tree Protocol**”, in the navigation bar, you can configure spanning tree protocol.

**Basic Setting**

**Advanced Application**

**Management**

---

VLAN

MAC Address Forwarding

Loopback Detection

**Spanning Tree Protocol**

Bandwidth Control

Broadcast Storm Control

Mirroring

Link Aggregation

POE Settings

Classifier

Policy Rule

Queuing Method

Multicast

IPv6 Multicast

Dos attack protect

DHCP Snooping Setting

SNTP Setting

LLDP Protocol

AAA

EEE

ARP Safeguarding

**Spanning Tree Protocol Status**

[Configuration](#) [STP/RSTP](#) [MSTP](#)

**Spanning Tree Protocol: RSTP**

Global Spanning Tree	Enable
Our Bridge ID	32768-000a.6a00.03ee
Root Bridge ID	32768-000a.6a00.03ee
Root Path Cost	0
Hello Time (second)	2
Max Age (second)	20
Forwarding Delay (second)	15
Topology Changed Times	0

Port	Active	Pathcost	Priority	Role	State
GE0/0/1	enable	200000	128	designatedPort	disabled
GE0/0/2	enable	200000	128	designatedPort	disabled
GE0/0/3	enable	200000	128	designatedPort	disabled
GE0/0/4	enable	200000	128	designatedPort	disabled
GE0/0/5	enable	200000	128	designatedPort	disabled
GE0/0/6	enable	200000	128	designatedPort	disabled
GE0/0/7	enable	200000	128	designatedPort	disabled
GE0/0/8	enable	200000	128	designatedPort	disabled
GE0/0/9	enable	200000	128	designatedPort	disabled
GE0/0/10	enable	200000	128	designatedPort	disabled
GE0/0/11	enable	200000	128	designatedPort	disabled
GE0/0/12	enable	200000	128	designatedPort	disabled
GE0/0/13	enable	200000	128	designatedPort	disabled
GE0/0/14	enable	200000	128	designatedPort	disabled
GE0/0/15	enable	200000	128	designatedPort	disabled

#### 4.2.4.1. Spanning Tree Protocol Status

Selecting “**Advanced Application>Spanning Tree Protocol>Spanning Tree Protocol status**”; in the navigation bar, you can view spanning tree protocol status.

 **Spanning Tree Protocol Status**
[Configuration](#) [STP/RSTP](#) [MSTP](#)
**Spanning Tree Protocol: RSTP**

Global Spanning Tree	Enable
Our Bridge ID	32768-000a.6a00.03ee
Root Bridge ID	32768-000a.6a00.03ee
Root Path Cost	0
Hello Time (second)	2
Max Age (second)	20
Forwarding Delay (second)	15
Topology Changed Times	0

Port	Active	Pathcost	Priority	Role	State
GE0/0/1	enable	200000	128	designatedPort	disabled
GE0/0/2	enable	200000	128	designatedPort	disabled
GE0/0/3	enable	200000	128	designatedPort	disabled
GE0/0/4	enable	200000	128	designatedPort	disabled
GE0/0/5	enable	200000	128	designatedPort	disabled
GE0/0/6	enable	200000	128	designatedPort	disabled
GE0/0/7	enable	200000	128	designatedPort	disabled
GE0/0/8	enable	200000	128	designatedPort	disabled
GE0/0/9	enable	200000	128	designatedPort	disabled
GE0/0/10	enable	200000	128	designatedPort	disabled
GE0/0/11	enable	200000	128	designatedPort	disabled
GE0/0/12	enable	200000	128	designatedPort	disabled
GE0/0/13	enable	200000	128	designatedPort	disabled
GE0/0/14	enable	200000	128	designatedPort	disabled
GE0/0/15	enable	200000	128	designatedPort	disabled

**【Parameter Description】**

Parameter	Description
Root Path Cost	Configure Root Path Cost
Hello time(second)	Switches sends bpdu in packet interval
Max age(second)	Ports are not yet received a message in the time, will initiate topology changes
Forwarding delay(second)	The state of the port switch time
Topology changed times	The number of topology changes

#### 4.2.4.2. Spanning Tree Configuration

Selecting “**Advanced Application>Spanning Tree Protocol>Spanning Tree configuration**”, in the navigation bar, you can configure spanning tree.

**Spanning Tree Configuration**
[Status](#)

**Spanning Tree Mode**

IEEE compatible Spanning Tree

**Rapid Spanning Tree**

Multiple Spanning Tree

**Global Spanning Tree status**

**Enable**

Disable

#### 【Parameter Description】

Parameter	Description
Spanning Tree Mode	Spanning tree mode: IEEE Compatible Spanning Tree Rapid Spanning Tree Multiple Spanning Tree
Global Spanning Tree Status	Select open or close Global Spanning

#### 【Configuration example】

Such as: Spanning Tree Mode as “Rapid Spanning Tree”, open Global Spanning.

**Spanning Tree Configuration**
[Status](#)

**Spanning Tree Mode**

IEEE compatible Spanning Tree

**Rapid Spanning Tree**

Multiple Spanning Tree

**Global Spanning Tree status**

**Enable**

Disable

#### 4.2.4.3. Compatible/Rapid Spanning Tree Protocol

Selecting "Advanced Application>Spanning Tree Protocol>Compatible/Rapid Spanning Tree Protocol", in the navigation bar, you can configure Compatible/Rapid Spanning Tree Protocol.

Compatible/Rapid Spanning Tree Protocol		Status
Bridge Priority	32768	
Hello Time	2	Seconds
MAX Age	20	Seconds
Forwarding Delay	15	Seconds

(Notice:When the port is a member of an aggregation group, the configuration is based on the maximum port configuration of the member.)

Port	Active	Priority	Path Cost	Path Cost Default Value
*	<input type="checkbox"/>			<input type="checkbox"/>
GE0/0/1	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/2	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/3	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/4	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/5	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/6	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/7	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/8	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/9	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/10	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/11	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/12	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/13	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>

#### 【Parameter Description】

Parameter	Description
Bridge Priority	Set bridge priority, the default instance bridge priority for 32768
Hello Time	Switches sends bpdv in packet interval
Max Age	Ports are not yet received a message in the time, will initiate topology changes
Forwarding Delay	The state of the port switch time
Port Priority	Set port instance priority, defaults to 128



Parameter	Description
Path Cost	Configure port costs

【Configuration example】

Such as:

1. Configure the bridge priority as 32768, the Hello Time is 2 seconds, the MAX Age is 20 seconds, and the Forwarding Delay is 15 seconds.

Compatible/Rapid Spanning Tree Protocol
Status

Bridge Priority	32768 ▼
Hello Time	2 Seconds
MAX Age	20 Seconds
Forwarding Delay	15 Seconds

2. The priority of port 16 is 64, and the path cost is 200000.

GE0/0/16	<input checked="" type="checkbox"/>	64	200000	<input checked="" type="checkbox"/>
GE0/1/1	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/1/2	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/1/3	<input checked="" type="checkbox"/>	128	20000	<input checked="" type="checkbox"/>
GE0/1/4	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>

Apply
Cancel

#### 4.2.4.4. Multiple Spanning Tree Protocol

Selecting "Advanced Application>Spanning Tree Protocol>Multiple Spanning Tree Protocol", in the navigation bar, you can configure Multiple Spanning Tree Protocol.

## Multiple Spanning Tree Protocol

[Status](#)

### Bridge:

Hello Time	2	seconds
MAX Age	20	seconds
Forwarding Delay	15	seconds
Maximum hops	20	
Configuration Name		
Revision Number	0	

Apply Cancel

### Instance:

Instance	0 ▼
Bridge Priority	32768 ▼
VLAN Range	

Apply Remove Cancel

### Show Mstp Instance Information:

Port	Active	External Path Cost	External Cost Default	Priority	Inner Path Cost	Inner Cost Default
*	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
GE0/0/1	<input checked="" type="checkbox"/>	20000	<input checked="" type="checkbox"/>	128	20000	<input checked="" type="checkbox"/>
GE0/0/2	<input checked="" type="checkbox"/>	200000	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/3	<input checked="" type="checkbox"/>	200000	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/4	<input checked="" type="checkbox"/>	200000	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/5	<input checked="" type="checkbox"/>	200000	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/6	<input checked="" type="checkbox"/>	200000	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>
GE0/0/7	<input checked="" type="checkbox"/>	200000	<input checked="" type="checkbox"/>	128	200000	<input checked="" type="checkbox"/>

### 【Parameter Description】

Parameter	Description
Hello Time	Switches sends bpd in packet interval
Max age	Ports are not yet received a message in the time, will initiate topology changes
Forwarding Delay	The state of the port switch time
Maximum Hops	Set the maximum number of hops that BPDUs can support in the spanning tree
Configuration Name	Fill in configuration name
Revision Number	Set revision number

Parameter	Description
Instance	Instance number
Bridge Priority	Priority setting bridge example, the default instance bridge priority for 32768
VLAN Range	Set VLAN range
Port Priority	Set port instance priority, defaults to 128
Path Cost	Configure port costs

【Configuration example】

1. Bridge

**Multiple Spanning Tree Protocol** [Status](#)

**Bridge:**

Hello Time	2	seconds
MAX Age	20	seconds
Forwarding Delay	15	seconds
Maximum hops	20	
Configuration Name	1	
Revision Number	0	

**Apply** **Cancel**

2. Instance

**Instance:**

Instance	1	
Bridge Priority	32768	
VLAN Range	1-8	

**Add** **Remove** **Clear**

#### 4.2.5. Bandwidth Control

Selecting “**Advanced Application>Bandwidth Control**”, in the navigation bar, you can configure Bandwidth Control.

**Basic Setting**

**Advanced Application**

**Management**

---

VLAN

MAC Address Forwarding

Loopback Detection

Spanning Tree Protocol

**Bandwidth Control**

Broadcast Storm Control

Mirroring

Link Aggregation

POE Settings

Classifier

Policy Rule

Queuing Method

Multicast

IPv6 Multicast

Dos attack protect

DHCP Snooping Setting

SNTP Setting

LLDP Protocol

AAA

EEE

ARP Safeguarding

**Bandwidth Control**

Port	Ingress Rate(unit: 16kbps)	Egress Rate(unit: 16kbps)
*	0	0
GE0/0/1	0	0
GE0/0/2	0	0
GE0/0/3	0	0
GE0/0/4	0	0
GE0/0/5	0	0
GE0/0/6	0	0
GE0/0/7	0	0
GE0/0/8	0	0
GE0/0/9	0	0
GE0/0/10	0	0
GE0/0/11	0	0
GE0/0/12	0	0
GE0/0/13	0	0
GE0/0/14	0	0
GE0/0/15	0	0
GE0/0/16	0	0
GE0/1/1	0	0
GE0/1/2	0	0
GE0/1/3	0	0
GE0/1/4	0	0

#### 【Instructions】

1 Mbit/s = 1000 Kbit/s = 1000 / 8 KB/s = 125 KB/s. That is, the theoretical rate of 1M bandwidth is 125 KB/s.

#### 【Configuration example】

Such as: Configure port-16 Ingress Rate is 64kbps, Egress Rate is 128kbps.

GE0/0/16	64	128
GE0/1/1	0	0
GE0/1/2	0	0
GE0/1/3	0	0
GE0/1/4	0	0

#### 4.2.6. Broadcast Storm Control

Selecting “**Advanced Application>Broadcast Storm Control**”; in the navigation bar, you can configure Broadcast Storm Control.

**Basic Setting**

Advanced Application Management

- VLAN
- MAC Address Forwarding
- Loopback Detection
- Spanning Tree Protocol
- Bandwidth Control
- Broadcast Storm Control**
- Mirroring
- Link Aggregation
- POE Settings
- Classifier
- Policy Rule
- Queuing Method
- Multicast
- IPv6 Multicast
- Dos attack protect
- DHCP Snooping Setting
- SNTP Setting
- LLDP Protocol
- AAA
- EEE
- ARP Safeguarding

**Broadcast Storm Control**

storm-suppression mode pkt ▾

Port	Broadcast(unit:64pps)		Multicast(unit:64pps)		Unicast(unit:64pps)	
*	<input type="text"/>	pps	<input type="text"/>	pps	<input type="text"/>	pps
GE0/0/1	0	pps	0	pps	0	pps
GE0/0/2	0	pps	0	pps	0	pps
GE0/0/3	0	pps	0	pps	0	pps
GE0/0/4	0	pps	0	pps	0	pps
GE0/0/5	0	pps	0	pps	0	pps
GE0/0/6	0	pps	0	pps	0	pps
GE0/0/7	0	pps	0	pps	0	pps
GE0/0/8	0	pps	0	pps	0	pps
GE0/0/9	0	pps	0	pps	0	pps
GE0/0/10	0	pps	0	pps	0	pps
GE0/0/11	0	pps	0	pps	0	pps
GE0/0/12	0	pps	0	pps	0	pps
GE0/0/13	0	pps	0	pps	0	pps
GE0/0/14	0	pps	0	pps	0	pps
GE0/0/15	0	pps	0	pps	0	pps
GE0/0/16	0	pps	0	pps	0	pps
GE0/1/1	0	pps	0	pps	0	pps
GE0/1/2	0	pps	0	pps	0	pps
GE0/1/3	0	pps	0	pps	0	pps

**【Parameter Description】**

Parameter	Description
Broadcast	Broadcast rate limitation(the range of: 64-32000000, unit: pps, you must enter multiple of 64, default to 49984)
Multicast	Multicast rate limitation(the range of: 64-32000000, unit: pps, you must enter multiple of 64, default to 49984)
Unicast	Unicast rate limitation(the range of: 64-32000000, unit: pps, you must enter multiple of 64, default to 49984)

**【Instructions】**

1 Mbit/s = 1000 Kbit/s = 1000 / 8 KB/s = 125 KB/s. That is, the theoretical rate of 1M bandwidth is 125 KB/s.

**【Configuration example】**

Such as: Set Port1 broadcast as 6400 pps, multicast as 3200 pps, unicast as 3200 pps.

Port	Broadcast(unit:64pps)		Multicast(unit:64pps)		Unicast(unit:64pps)	
*	<input type="text"/>	pps	<input type="text"/>	pps	<input type="text"/>	pps
GE0/0/1	6400	pps	3200	pps	3200	pps

## 4.2.7. Mirroring

Selecting “**Advanced Application>Mirroring**”, in the navigation bar, you can configure mirroring.

The screenshot shows the configuration page for Mirroring. The navigation bar includes 'Basic Setting', 'Advanced Application', and 'Management'. Under 'Advanced Application', 'Mirroring' is selected. The main configuration area has a 'Mirroring' header with an 'Active' checkbox (unchecked) and a 'Monitor Port' input field (empty). Below this is a table with three columns: 'Port', 'Mirrored', and 'Direction'. The table lists ports from GE0/0/1 to GE0/1/4, with 'Mirrored' checkboxes and 'Direction' dropdown menus set to 'Ingress'.

Port	Mirrored	Direction
*	<input type="checkbox"/>	Ingress ▼
GE0/0/1	<input type="checkbox"/>	Ingress ▼
GE0/0/2	<input type="checkbox"/>	Ingress ▼
GE0/0/3	<input type="checkbox"/>	Ingress ▼
GE0/0/4	<input type="checkbox"/>	Ingress ▼
GE0/0/5	<input type="checkbox"/>	Ingress ▼
GE0/0/6	<input type="checkbox"/>	Ingress ▼
GE0/0/7	<input type="checkbox"/>	Ingress ▼
GE0/0/8	<input type="checkbox"/>	Ingress ▼
GE0/0/9	<input type="checkbox"/>	Ingress ▼
GE0/0/10	<input type="checkbox"/>	Ingress ▼
GE0/0/11	<input type="checkbox"/>	Ingress ▼
GE0/0/12	<input type="checkbox"/>	Ingress ▼
GE0/0/13	<input type="checkbox"/>	Ingress ▼
GE0/0/14	<input type="checkbox"/>	Ingress ▼
GE0/0/15	<input type="checkbox"/>	Ingress ▼
GE0/0/16	<input type="checkbox"/>	Ingress ▼
GE0/1/1	<input type="checkbox"/>	Ingress ▼
GE0/1/2	<input type="checkbox"/>	Ingress ▼
GE0/1/3	<input type="checkbox"/>	Ingress ▼
GE0/1/4	<input type="checkbox"/>	Ingress ▼

### 【Parameter Description】

Parameter	Description
Active	Select open or close Mirroring
Monitor Port	Set up the monitoring port and forward the flow data of the source port to the message analyzer to analyze the message and then forward to the monitoring port
Mirrored	Check the box to configure the mirror source port
Direction	Configure the direction of the mirror message, choose: Ingress, Egress, Both

### 【Configuration example】

Such as: Open mirroring, configure monitoring port is port 8, the source port is port 7, and the mirror message is in both direction.

**Mirroring**

Active

Monitor Port

Port	Mirrored	Direction
*	<input type="checkbox"/>	Ingress ▼
GE0/0/1	<input type="checkbox"/>	Ingress ▼
GE0/0/2	<input type="checkbox"/>	Ingress ▼
GE0/0/3	<input type="checkbox"/>	Ingress ▼
GE0/0/4	<input type="checkbox"/>	Ingress ▼
GE0/0/5	<input type="checkbox"/>	Ingress ▼
GE0/0/6	<input type="checkbox"/>	Ingress ▼
GE0/0/7	<input checked="" type="checkbox"/>	Both ▼

### 4.2.8. Link Aggregation

Selecting “**Advanced Application>Link Aggregation**”, in the navigation bar, you can configure link aggregation.

**Basic Setting**

**Advanced Application**

**Management**

---

VLAN

MAC Address Forwarding

Loopback Detection

Spanning Tree Protocol

Bandwidth Control

Broadcast Storm Control

Mirroring

**Link Aggregation**

POE Settings

Classifier

Policy Rule

Queuing Method

Multicast

IPv6 Multicast

Dos attack protect

DHCP Snooping Setting

SNTP Setting

LLDP Protocol

AAA

EEE

ARP Safeguarding

**Link Aggregation Status**

Group ID	Enabled Ports	Synchronized Ports	Aggregator ID	Criteria	Status
T1	-	-	-	-	-
T2	-	-	-	-	-
T3	-	-	-	-	-
T4	-	-	-	-	-
T5	-	-	-	-	-
T6	-	-	-	-	-
T7	-	-	-	-	-

#### 4.2.8.1. Link Aggregation status

Selecting "**Advanced Application>Link Aggregation>Link Aggregation Status**", in the navigation bar, you can view link aggregation status, you can view Group ID, Enabled Ports, Synchronized Ports, Aggregator ID, Criteria, Status.

Link Aggregation Status			<a href="#">Link Aggregation Setting</a>		
Group ID	Enabled Ports	Synchronized Ports	Aggregator ID	Criteria	Status
T1	-	-	-	-	-
T2	-	-	-	-	-
T3	-	-	-	-	-
T4	-	-	-	-	-
T5	-	-	-	-	-
T6	-	-	-	-	-
T7	-	-	-	-	-

#### 4.2.8.2. Link Aggregation Setting

Selecting "**Advanced Application>Link Aggregation>Link Aggregation Setting**", in the navigation bar, you can set Link Aggregation.



## Link Aggregation Setting

Status [LACP](#)

Port	Group ID	Port LACP Mode
GE0/0/1	none ▼	active ▼
GE0/0/2	none ▼	active ▼
GE0/0/3	none ▼	active ▼
GE0/0/4	none ▼	active ▼
GE0/0/5	none ▼	active ▼
GE0/0/6	none ▼	active ▼
GE0/0/7	none ▼	active ▼
GE0/0/8	none ▼	active ▼
GE0/0/9	none ▼	active ▼
GE0/0/10	none ▼	active ▼
GE0/0/11	none ▼	active ▼
GE0/0/12	none ▼	active ▼
GE0/0/13	none ▼	active ▼
GE0/0/14	none ▼	active ▼
GE0/0/15	none ▼	active ▼
GE0/0/16	none ▼	active ▼
GE0/1/1	none ▼	active ▼
GE0/1/2	none ▼	active ▼
GE0/1/3	none ▼	active ▼
GE0/1/4	none ▼	active ▼

Apply

Cancel

## 【Parameter Description】

Parameter	Description
Group ID	Add the port to the specified Aggregation Group ID
Port LACP mode	Configure port aggregation(static/active/passive)
Criteria	Configure the Aggregation Group load balancing (src-mac/dst-mac/src-dst-mac/src-ip/dst-ip/src-dst-ip)

## 【Configuration example】

Such as: configure parameter of Aggregation Group port-8.

GE0/0/8	T1 ▼	active ▼
---------	------	----------

### 4.2.8.3. Link Aggregation Control Protocol

Selecting “**Advanced Application**> **Link Aggregation**> **Link Aggregation Control Protocol**”, in the navigation bar, you can configure Link Aggregation Control Protocol.

Link Aggregation Control Protocol
[Link Aggregation Setting](#)

System Priority	<input style="width: 90%;" type="text" value="32768"/>
-----------------	--

Group ID	Active	Eth-trunk Mode	Load-balance Mode
T1	<input type="checkbox"/>	static ▼	none ▼
T2	<input type="checkbox"/>	static ▼	none ▼
T3	<input type="checkbox"/>	static ▼	none ▼
T4	<input type="checkbox"/>	static ▼	none ▼
T5	<input type="checkbox"/>	static ▼	none ▼
T6	<input type="checkbox"/>	static ▼	none ▼
T7	<input type="checkbox"/>	static ▼	none ▼

Port	Port Priority
*	<input style="width: 90%;" type="text"/>
GE0/0/1	128
GE0/0/2	128
GE0/0/3	128
GE0/0/4	128
GE0/0/5	128
GE0/0/6	128
GE0/0/7	128
GE0/0/8	128
GE0/0/9	128
GE0/0/10	128

#### 【Parameter Description】

Parameter	Description
System priority	Aggregation group system priority, the default is 32768( the range of 1-65535)

**【Configuration example】**

Such as:

1. Open aggregation group T1 LACP.

Group ID	LACP Active
T0	<input type="checkbox"/>
T1	<input checked="" type="checkbox"/>

2. The priority for configuring port 8 is 64.

GE0/0/8	64
---------	----

#### 4.2.9. POE Settings

Selecting “Advanced Application>POE Settings”, you can configure POE.

The screenshot displays the configuration interface for POE Settings. On the left, a navigation menu lists various settings, with 'POE Settings' highlighted and circled in red. The main configuration area is titled 'POE Settings' and includes the following parameters:

power supply	internal power supply
power limit (1-240)	240 W
power consumption	0W
poe status poll	enable ▼

At the bottom of the configuration area, there are two buttons: 'Apply' and 'Cancel'.

##### 4.2.9.1. POE Settings

Selecting “Advanced Application>POE Settings”, you can configure POE.

**POE Settings** [POE Port Settings](#)

power supply	internal power supply
power limit (1-240)	240 W
power consumption	0W
poE status poll	enable ▼

**【Parameter Description】**

Parameter	Description
power limit	The power of switch POE can be limited

**【Configuration example】**

Such as: set power limit is 120W.

**POE Settings** [POE Port Settings](#)

power supply	internal power supply
power limit (1-240)	120 W
power consumption	0W
poE status poll	enable ▼

**4.2.9.2. POE Port Settings**

Selecting “**Advanced Application>POE Port Settings**”, in the navigation bar, you can configure POE Port.

**POE Port Settings** [POE Settings](#)

Port Number [Click for selecting]							
2	4	6	8	10	12	14	16
-	-	-	-	-	-	-	-
1	3	5	7	9	11	13	15
Port Number poe							

POE Port Settings [Ethernet 1000M Port\[2\]](#)

Port No.	Enable	Standard	Priority	Class	Power Limit(1-30):W	Power Consumption:W	Voltage:V	Status
GE0/0/2	enable ▼	ieee802.3at ▼	low ▼	5	30	0	0.0	status: Port is off - Detection is in process

(Note: It may take some time to display all ports information, please be patient.)

【Parameter Description】

Parameter	Description
Enable	Turn the port POE power on and off and the default is open
Standard	Configure ieee802.3af, ieee802.3at mode, default to ieee802.3at
Priority	Configure port Priority low, critical, high, the default priority is low
Power limit	The power of switch POE can be limited

【Configuration example】

Such as: Configure the POE for port 1.

POE Port Settings **Ethernet 1000M Port[1]**

Port No.	Enable	Standard	Priority	Class	Power Limit(1-30):W	Power Consumption:W	Voltage:V	Status
GE0/0/1	<input type="button" value="enable"/>	<input type="button" value="ieee802.3af"/>	<input type="button" value="high"/>	5	<input type="text" value="28"/>	0	0.0	status: Port is off - Detection is in process

(Note: It may take some time to display all ports information, please be patient.)

4.2.10. Classifier

Selecting “Advanced Application>Classifier”, in the navigation bar, you can configure Classifier.

**Basic Setting**

**Advanced Application**

**Management**

---

VLAN

MAC Address Forwarding

Loopback Detection

Spanning Tree Protocol

Bandwidth Control

Broadcast Storm Control

Mirroring

Link Aggregation

POE Settings

**Classifier**

Policy Rule

Queuing Method

Multicast

IPv6 Multicast

Dos attack protect

DHCP Snooping Setting

SNTP Setting

LLDP Protocol

AAA

EEE

ARP Safeguarding

**Classifier**

Type:

Action:

Name:

Subitem:

DSCP:  Any  be

IP Protocol:  All  Establish Only

Others  (Dec)

Source IP Address:  /

Destination IP Address:  /

Index	Active	Name	Subitem	Rule	Delete
<input type="button" value="Delete"/> <input type="button" value="Cancel"/>					

【Parameter Description】

Parameter	Description
Active	Active Classifier

### 4.2.11. Policy Rule

Selecting “Advanced Application>Policy Rule”, in the navigation bar, you can configure Policy Rule.

The screenshot displays the 'Policy' configuration page. On the left, a navigation menu includes 'Basic Setting', 'Advanced Application', and 'Management'. Under 'Advanced Application', 'Policy Rule' is selected and circled. The main configuration area has the following settings:

- Active:**  Interface
- Classifier(s):** Ip-ACL NULL, MAC-ACL NULL
- Priority:**  Enable 0
- DSCP:**  Enable be
- Egress Port:**  Enable CPU
- Rate limit:**  Enable Kbps <16-1000000>

Buttons for 'Add', 'Cancel', and 'Clear' are present. Below the configuration is a table with the following structure:

Index	Active	Type	Classifier(s)	Delete
<input type="button" value="Delete"/> <input type="button" value="Cancel"/>				

【Parameter Description】

Parameter	Description
Active	Active Classifier

### 4.2.12. Queuing Method

Selecting “Advanced Application>Queuing Method”, in the navigation bar, you can configure queuing method.

Basic Setting  
 Advanced Application  
 Management

- VLAN
- MAC Address Forwarding
- Loopback Detection
- Spanning Tree Protocol
- Bandwidth Control
- Broadcast Storm Control
- Mirroring
- Link Aggregation
- POE Settings
- Classifier
- Policy Rule
- Queuing Method**
- Multicast
- IPv6 Multicast
- Dos attack protect
- DHCP Snooping Setting
- SNTP Setting
- LLDP Protocol
- AAA
- EEE
- ARP Safeguarding

**Queuing Method**

Method	Weight							
	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7
SPQ								

**【Parameter Description】**

Parameter	Description
Method	Five method: SPQ,WRR,SP+WRR,WFQ,SP+WFQ

**【Configuration Example】**

**Queuing Method**

Method	Weight							
	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7
WRR	10	20	30	40	50	6	7	8

**4.2.13. Multicast**

Selecting “**Advanced Application>Multicast**”, in the navigation bar, you can configure Multicast.

The screenshot displays the configuration interface for a network switch. On the left, a navigation menu lists various settings, with 'Multicast' highlighted. The main area shows the 'Multicast Status' page, which includes a table with the following columns: Index, VID, Port, and Multicast Group. The 'Multicast Setting' link is visible in the top right corner.

#### 4.2.13.1. Multicast Status

Selecting “**Advanced Application>Multicast>Multicast Status**”, in the navigation bar, you can view all multicast. This includes the static configuration and the multicast that is learned through the IGMP-Snooping protocol.

This screenshot is identical to the one above, showing the 'Multicast Status' page with the table columns: Index, VID, Port, and Multicast Group.

#### 4.2.13.2. Multicast Settings

Selecting “**Advanced Application>Multicast>Multicast Settings**”, in the navigation bar, you can set multicast.



## Multicast Setting

### IGMP Snooping:

### Multicast Status

### Deny VLAN IGMP Filtering Profile

Active	<input type="checkbox"/>
Querier	<input type="checkbox"/>
Host Timeout	300 seconds
IGMP Route Port Forward	<input type="checkbox"/>

### Port Information:

Port	Max Group Limit	Fast Leave	Multicast Vlan	IGMP Filtering Profile
*		<input type="checkbox"/>		
GE0/0/1	507	<input type="checkbox"/>	0	
GE0/0/2	507	<input type="checkbox"/>	0	
GE0/0/3	507	<input type="checkbox"/>	0	
GE0/0/4	507	<input type="checkbox"/>	0	
GE0/0/5	507	<input type="checkbox"/>	0	
GE0/0/6	507	<input type="checkbox"/>	0	
GE0/0/7	507	<input type="checkbox"/>	0	
GE0/0/8	507	<input type="checkbox"/>	0	
GE0/0/9	507	<input type="checkbox"/>	0	
GE0/0/10	507	<input type="checkbox"/>	0	
GE0/0/11	507	<input type="checkbox"/>	0	
GE0/0/12	507	<input type="checkbox"/>	0	
GE0/0/13	507	<input type="checkbox"/>	0	
GE0/0/14	507	<input type="checkbox"/>	0	
GE0/0/15	507	<input type="checkbox"/>	0	
GE0/0/16	507	<input type="checkbox"/>	0	

### 【Parameter Description】

Parameter	Description
Active	Open IGMP-snooping
Querier	Open IGMP-snooping timed query function
Host Timeout	Configure the dynamic group sowing time (default 300s)
IGMP Route Port Forward	Open IGMP Route Port Forward
Max Group Limit	Max learning group of configuration port ( default 1020)
Fast Leave	Open port quick exit function (i.e., when the port receives the IGMP and leaves the message, immediately remove the port

Parameter	Description
	from the reshuffle group)
Multicast Vlan	The configuration group multicast the default VLAN
IGMP Filtering Profile	The configuration port refers to the multicast preview, which can only be learned to the group broadcast group that is allowed in the group broadcast preview, and cannot be learned to the multicast group which is forbidden by the group broadcast preview

【Configuratio

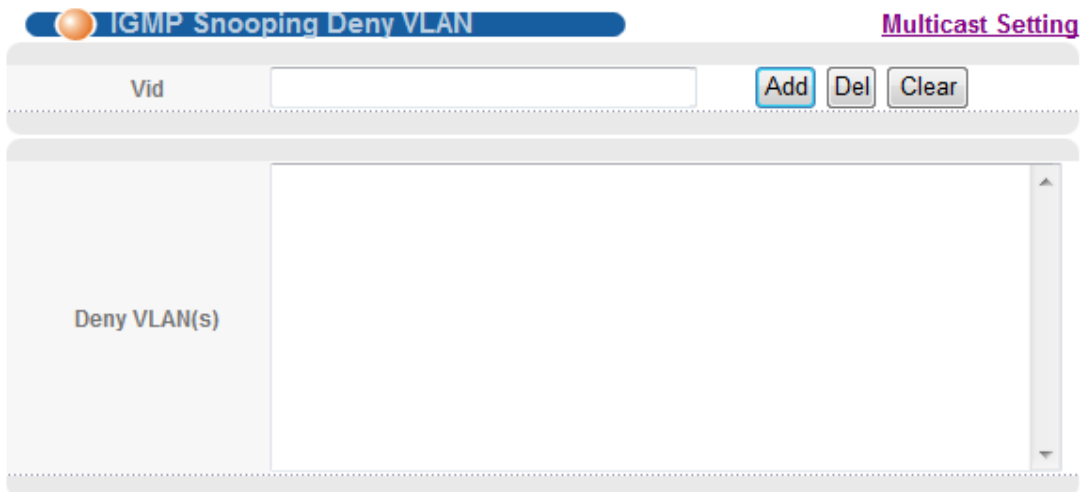
n Example】

Port Information:

Port	Max Group Limit	Fast Leave	Multicast Vlan	IGMP Filtering Profile
*		<input type="checkbox"/>		
GE0/0/1	508	<input checked="" type="checkbox"/>	1	1
GE0/0/2	508	<input type="checkbox"/>	0	

### 4.2.13.3. IGMP Snooping Dney VLAN

Selecting “**Advanced Application>Multicast>IGMP Snooping Dney VLAN**”, in the navigation bar, you can preview the banned group broadcast group, unable to learn the multicast group that is prohibited by the group preview.



【Parameter Description】

Parameter	Description
Vid	Vlan's ID

#### 4.2.13.4. IGMP Filtering Profile

Selecting “**Advanced Application>Multicast>IGMP Filtering Profile**”, in the navigation bar, you can add and remove the preview feature of the modified group.

**IGMP Filtering Profile**
[Multicast Setting](#)

**Profile Setup**

Profile ID

Profile Description

Profile Limit  permit  deny

Index	Profile ID	Profile Description	Profile Limit	Referred Port

Profile ID

Input Format  IP  MAC

Start Address

End Address

VLAN

Profile ID	Index	Start Addr	End Addr	VLAN	Delete

#### 【Parameter Description】

Parameter	Description
Profile ID	The range of 1-128
Profile Limit	Profile rules can be permit or deny
Input Format	The preview address can be configured to be either IP or MAC

#### 4.2.14. IPv6 Multicast

Selecting “**Advanced Application>IPv6 Multicast**”, in the navigation bar, you can configure IPv6 Multicast.

The screenshot shows the web management interface. On the left is a navigation menu with categories: Basic Setting, Advanced Application, and Management. Under Management, various settings are listed, with 'IPv6 Multicast' circled in red. On the right, the 'IPv6 Multicast Status' page is displayed, featuring a table with columns: Index, VID, Port, and IPv6 Multicast Group. A link for 'IPv6 Multicast Setting' is visible in the top right corner.

##### 4.2.14.1. IPv6 Multicast Status

Selecting “**Advanced Application>IPv6 Multicast>IPv6 Multicast Status**”, in the navigation bar, you can view all IPv6 Multicast groups.

The screenshot shows the 'IPv6 Multicast Status' page. At the top, there is a navigation bar with 'IPv6 Multicast Status' selected and 'IPv6 Multicast Setting' as a link. Below the navigation bar is a table header with the following columns: Index, VID, Port, and IPv6 Multicast Group.

#### 4.2.14.2. IPv6 Multicast Setting

Selecting “**Advanced Application>IPv6 Multicast>IPv6 Multicast Setting**”, in the navigation bar, you can configure IPv6 Multicast.

**IPv6 Multicast Setting**

[IPv6 Multicast Status](#)
[Deny VLAN](#)

**MLD Snooping:**

Active	<input type="checkbox"/>
Querier	<input type="checkbox"/>
Host Timeout	300 seconds
MLD Route Port Forward	<input type="checkbox"/>

**Port Information:**

Port	Max Group Limit	Fast Leave	IPv6 Multicast Vlan
*	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>
GE0/0/1	507	<input type="checkbox"/>	0
GE0/0/2	507	<input type="checkbox"/>	0
GE0/0/3	507	<input type="checkbox"/>	0
GE0/0/4	507	<input type="checkbox"/>	0
GE0/0/5	507	<input type="checkbox"/>	0
GE0/0/6	507	<input type="checkbox"/>	0
GE0/0/7	507	<input type="checkbox"/>	0
GE0/0/8	507	<input type="checkbox"/>	0
GE0/0/9	507	<input type="checkbox"/>	0
GE0/0/10	507	<input type="checkbox"/>	0
GE0/0/11	507	<input type="checkbox"/>	0
GE0/0/12	507	<input type="checkbox"/>	0
GE0/0/13	507	<input type="checkbox"/>	0
GE0/0/14	507	<input type="checkbox"/>	0
GE0/0/15	507	<input type="checkbox"/>	0
GE0/0/16	507	<input type="checkbox"/>	0

#### 【Parameter Description】

Parameter	Description
Active	Enable or disable MLD snooping
Querier	Enable or disable MLD snooping timed Querier
Host Timeout	Configure Dynamic IPv6 multicast aging time (default 300s)
MLD Route Port Forward	Enable or disable MLD Route Port Forward

Parameter	Description
Max Group Limit	Configure maximum learning IPv6 Multicast message of port(default 1020)
Fast Leave	Enable or disable Fast Leave (That is, when the port receives IGMP leave message, the port is deleted immediately from the IPv6 multicast group)
IPv6 Multicast VLAN	Configure IPv6 multicast default VLAN

【Configuration Example】

e】

IPv6 Multicast Setting [IPv6 Multicast Status](#) [Deny VLAN](#)  
 MLD Snooping:

Active	<input type="checkbox"/>
Querier	<input type="checkbox"/>
Host Timeout	300 seconds
MLD Route Port Forward	<input type="checkbox"/>

Port Information:

Port	Max Group Limit	Fast Leave	IPv6 Multicast Vlan
*		<input type="checkbox"/>	
GE0/0/1	508	<input checked="" type="checkbox"/>	1
GE0/0/2	508	<input type="checkbox"/>	0

### 4.2.14.3. MLD Snooping Dney VLAN

Selecting “Advanced Application>IPv6 Multicast>MLD Snooping Dney VLAN”, in the navigation bar, you can configure MLD Snooping Dney VLAN.

MLD Snooping Dney VLAN [IPv6 Multicast Setting](#)

Vid:  Add Del Clear

---

Deny VLAN(s)

【Parameter Description】

Parameter	Description
-----------	-------------

Parameter	Description
Vid	Vlan ID

#### 4.2.15. Dos attack protect

Selecting “**Advanced Application>Dos attack protect**”, in the navigation bar, you can configure dos attack protect.

The screenshot shows the configuration page for 'Dos Attack Protect'. The left sidebar contains a navigation menu with the following items: Basic Setting, Advanced Application, Management, VLAN, MAC Address Forwarding, Loopback Detection, Spanning Tree Protocol, Bandwidth Control, Broadcast Storm Control, Mirroring, Link Aggregation, POE Settings, Classifier, Policy Rule, Queuing Method, Multicast, IPv6 Multicast, **Dos attack protect** (highlighted), DHCP Snooping Setting, SNTP Setting, LLDP Protocol, AAA, EEE, and ARP Safeguarding. The main content area is titled 'Dos Attack Protect' and contains a section for 'dos attack control:'. Below this is a table with two columns: 'Dos attack packets class' and 'drop Active'. The table lists various attack types and their corresponding 'drop Active' status and values.

Dos attack packets class	drop Active
src mac and dst mac equal	<input type="checkbox"/>
src ip and dst ip equal	<input type="checkbox"/>
UDP with sport and dport equal	<input type="checkbox"/>
TCP with sport and dport equal	<input type="checkbox"/>
ICMPv4 payload maximum length	<input type="checkbox"/> 512
ICMPv6 payload maximum length	<input type="checkbox"/> 512
TCP control flags and sequence equal 0	<input type="checkbox"/>
TCP syn packets sport 0-1023, applies to unfragmented packets	<input type="checkbox"/>
enable dos attack ip first fragments	<input type="checkbox"/>
check minimum size of ipv6 fragments	<input type="checkbox"/> 1240
fragmented icmp packets	<input type="checkbox"/>
TCP fragments with offset value of 1(*8)	<input type="checkbox"/>
TCP with SYN & FIN bits	<input type="checkbox"/>
TCP with FIN,URG and PSH bits, and sequence equal 0	<input type="checkbox"/>
TCP first fragments with minimum tcp header length	<input type="checkbox"/> 20

At the bottom of the configuration page, there are 'Apply' and 'Cancel' buttons.

#### 【Parameter Description】

Parameter	Description
dos attack control	The DOS attack is controlled by the discarding behavior of the corresponding message

## 4.2.16. DHCP Snooping Setting

Selecting “**Advanced Application>DHCP Snooping Setting**”, in the navigation bar, you can configure DHCP Snooping.

The screenshot displays the DHCP Snooping configuration interface. On the left, a navigation menu lists various settings, with 'DHCP Snooping Setting' circled in red. The main panel shows the 'DHCP Snooping Setting' page with a sub-section for 'IP Source Guard'. The 'DHCP Snooping Enable' section has the 'Close' radio button selected. Below is a table of port configurations:


Port	Trust	Maxclients
*	<input type="checkbox"/>	
GE0/0/1	<input type="checkbox"/>	2048
GE0/0/2	<input type="checkbox"/>	2048
GE0/0/3	<input type="checkbox"/>	2048
GE0/0/4	<input type="checkbox"/>	2048
GE0/0/5	<input type="checkbox"/>	2048
GE0/0/6	<input type="checkbox"/>	2048
GE0/0/7	<input type="checkbox"/>	2048
GE0/0/8	<input type="checkbox"/>	2048
GE0/0/9	<input type="checkbox"/>	2048
GE0/0/10	<input type="checkbox"/>	2048
GE0/0/11	<input type="checkbox"/>	2048
GE0/0/12	<input type="checkbox"/>	2048
GE0/0/13	<input type="checkbox"/>	2048
GE0/0/14	<input type="checkbox"/>	2048
GE0/0/15	<input type="checkbox"/>	2048
GE0/0/16	<input type="checkbox"/>	2048
GE0/1/1	<input type="checkbox"/>	2048
GE0/1/2	<input type="checkbox"/>	2048
GE0/1/3	<input type="checkbox"/>	2048
GE0/1/4	<input type="checkbox"/>	2048

At the bottom of the page, there are 'Apply' and 'Cancel' buttons.

### 4.2.16.1. DHCP Snooping Setting

Selecting “**Advanced Application>DHCP Snooping Setting>DHCP Snooping Setting**”, in the navigation bar, you can configure DHCP Snooping.



 DHCP Snooping Setting
IP Source Guard

DHCP Snooping Enable  Close  Open

Port	Trust	Maxclients
*	<input type="checkbox"/>	<input type="text"/>
GE0/0/1	<input type="checkbox"/>	2048
GE0/0/2	<input type="checkbox"/>	2048
GE0/0/3	<input type="checkbox"/>	2048
GE0/0/4	<input type="checkbox"/>	2048
GE0/0/5	<input type="checkbox"/>	2048
GE0/0/6	<input type="checkbox"/>	2048
GE0/0/7	<input type="checkbox"/>	2048
GE0/0/8	<input type="checkbox"/>	2048
GE0/0/9	<input type="checkbox"/>	2048
GE0/0/10	<input type="checkbox"/>	2048
GE0/0/11	<input type="checkbox"/>	2048
GE0/0/12	<input type="checkbox"/>	2048
GE0/0/13	<input type="checkbox"/>	2048
GE0/0/14	<input type="checkbox"/>	2048
GE0/0/15	<input type="checkbox"/>	2048
GE0/0/16	<input type="checkbox"/>	2048
GE0/1/1	<input type="checkbox"/>	2048
GE0/1/2	<input type="checkbox"/>	2048
GE0/1/3	<input type="checkbox"/>	2048
GE0/1/4	<input type="checkbox"/>	2048

## 【Parameter Description】

Parameter	Description
DHCP Snooping Enable	Enable or disable DHCP Snooping serve
Trust	Enable or disable the DHCP Snooping port trust property state
Maxclients	Set Maxclients

## 【Configuration Example】

**DHCP Snooping Setting** [IP Source Guard](#)

DHCP Snooping Enable  Close  Open

Port	Trust	Maxclients
*	<input type="checkbox"/>	
GE0/0/1	<input checked="" type="checkbox"/>	2048

#### 4.2.16.2. IP Source Guard

Selecting "Advanced Application>DHCP Snooping Setting>IP Source Guard", in the navigation bar, you can configure IP Source Guard.

## IP-Source-Guard

System security settings

## DHCP Snooping Setting

Port	Mode
*	Disable ▼
GE0/0/1	Disable ▼
GE0/0/2	Disable ▼
GE0/0/3	Disable ▼
GE0/0/4	Disable ▼
GE0/0/5	Disable ▼
GE0/0/6	Disable ▼
GE0/0/7	Disable ▼
GE0/0/8	Disable ▼
GE0/0/9	Disable ▼
GE0/0/10	Disable ▼
GE0/0/11	Disable ▼
GE0/0/12	Disable ▼
GE0/0/13	Disable ▼
GE0/0/14	Disable ▼
GE0/0/15	Disable ▼
GE0/0/16	Disable ▼
GE0/1/1	Disable ▼
GE0/1/2	Disable ▼
GE0/1/3	Disable ▼
GE0/1/4	Disable ▼



### Add IP-MAC-PORT-VLAN binding entry

IP Address	<input type="text"/>
------------	----------------------

### 【Parameter Description】

Parameter	Description
Disable unbinding entry to access network	Enable or Disable unbinding entry to access network

### 【Instructions】

If you want to access shall be binding and switch the IP address of the same network segment.

## 4.2.17. SNTP Setting

Selecting “**Advanced Application>SNTP Setting**”, in the navigation bar, you can configure SNTP.

**Basic Setting**

**Advanced Application**

**Management**

---

VLAN

MAC Address Forwarding

Loopback Detection

Spanning Tree Protocol

Bandwidth Control

Broadcast Storm Control

Mirroring

Link Aggregation

POE Settings

Classifier

Policy Rule

Queuing Method

Multicast

IPv6 Multicast

Dos attack protect

DHCP Snooping Setting

**SNTP Setting**

LLDP Protocol

AAA

EEE

ARP Safeguarding

**SNTP Setup**

SNTP Client Enable

SNTP Client Mode	broadcast	
SNTP Client Poll Interval	1000	(64~1024)
SNTP Client Retransmit Times	3	(1~10)
SNTP Client Retransmit Interval	30	(3~30)
SNTP Client Broadcast Delay	3	(1~9999)ms
MD5 Authentication Enable	<input type="checkbox"/>	
Encrypt Enable	<input type="checkbox"/>	
SNTP Server IP Address		(X.X.X.X)
Backup Server IP Address		(X.X.X.X)
SNTP Server Key		

**Authentication Key List**

KeyID	Key	Trusted
<input type="text"/>	<input type="text"/>	YES

No Authentication Key configured.

**Valid Server List**

Server IP	Wildcard
<input type="text"/>	<input type="text"/>

### 【Parameter Description】

Parameter	Description
SNTP Client Enable	Enable or disable SNTP Client
SNTP Client Mode	SNTP Client Mode: broadcast, anycast multicast unicast
SNTP Client Poll Interval	It's interval that SNTP Client sends requests to SNTP Server
SNTP Client Retransmit Times	If SNTP Client does not receive a response within a certain period of time after sending a request,it will resend the request until the number of retransmissions exceeds the set

Parameter	Description
	value
SNTP Client Retransmit Interval	It's interval that SNTP Client resends requests to SNTP Server
SNTP Server IP Address	Set SNTP Server IP Address
Valid Server List Server IP	SNTP only receives the messages from Valid Server List Server IP configured
SNTP Client Enable	Enable or disable SNTP Client
SNTP Client Mode	SNTP Client Mode: broadcast, anycast multicast unicast
SNTP Client Poll Interval	It's interval that SNTP Client sends requests to SNTP Server
SNTP Client Retransmit Times	If SNTP Client does not receive a response within a certain period of time after sending a request,it will resend the request until the number of retransmissions exceeds the set value
Valid Server List Server IP	SNTP only receives the messages from Valid Server List Server IP configured

【Instr  
uctions  
】

SNTP Client receives and transmits messages from any SNTP Server when work mode of SNTP Client is broadcast or multicast. Local time cannot be synchronized to standard time if there is a malicious attack server (which provides incorrect time)

#### 4.2.18. LLDP Protocol

Selecting “**Advanced Application>LLDP Protocol**”, in the navigation bar, you can configure LLDP.

**Basic Setting**

**Advanced Application**

**Management**

---

VLAN

MAC Address Forwarding

Loopback Detection

Spanning Tree Protocol

Bandwidth Control

Broadcast Storm Control

Mirroring

Link Aggregation

POE Settings

Classifier

Policy Rule

Queuing Method

Multicast

IPv6 Multicast

Dos attack protect

DHCP Snooping Setting

SNTP Setting

**LLDP Protocol**

AAA

EEE

ARP Safeguarding

**LLDP Status**

[LLDP Setting](#)

Port	Mode	TxPkts	RxPkts	Neighbours
<a href="#">GE0/0/1</a>	Disabled	-	-	-
<a href="#">GE0/0/2</a>	Disabled	-	-	-
<a href="#">GE0/0/3</a>	Disabled	-	-	-
<a href="#">GE0/0/4</a>	Disabled	-	-	-
<a href="#">GE0/0/5</a>	Disabled	-	-	-
<a href="#">GE0/0/6</a>	Disabled	-	-	-
<a href="#">GE0/0/7</a>	Disabled	-	-	-
<a href="#">GE0/0/8</a>	Disabled	-	-	-
<a href="#">GE0/0/9</a>	Disabled	-	-	-
<a href="#">GE0/0/10</a>	Disabled	-	-	-
<a href="#">GE0/0/11</a>	Disabled	-	-	-
<a href="#">GE0/0/12</a>	Disabled	-	-	-
<a href="#">GE0/0/13</a>	Disabled	-	-	-
<a href="#">GE0/0/14</a>	Disabled	-	-	-
<a href="#">GE0/0/15</a>	Disabled	-	-	-
<a href="#">GE0/0/16</a>	Disabled	-	-	-
<a href="#">GE0/1/1</a>	Disabled	-	-	-
<a href="#">GE0/1/2</a>	Disabled	-	-	-
<a href="#">GE0/1/3</a>	Disabled	-	-	-
<a href="#">GE0/1/4</a>	Disabled	-	-	-


#### 4.2.18.1. LLDP Status

Selecting "**Advanced Application>LLDP Protocol>LLDP Status**", in the navigation bar, you can view LLDP status.

LLDP Status		LLDP Setting		
Port	Mode	TxPkts	RxPkts	Neighbours
<a href="#">GE0/0/1</a>	Disabled	-	-	-
<a href="#">GE0/0/2</a>	Disabled	-	-	-
<a href="#">GE0/0/3</a>	Disabled	-	-	-
<a href="#">GE0/0/4</a>	Disabled	-	-	-
<a href="#">GE0/0/5</a>	Disabled	-	-	-
<a href="#">GE0/0/6</a>	Disabled	-	-	-
<a href="#">GE0/0/7</a>	Disabled	-	-	-
<a href="#">GE0/0/8</a>	Disabled	-	-	-
<a href="#">GE0/0/9</a>	Disabled	-	-	-
<a href="#">GE0/0/10</a>	Disabled	-	-	-
<a href="#">GE0/0/11</a>	Disabled	-	-	-
<a href="#">GE0/0/12</a>	Disabled	-	-	-
<a href="#">GE0/0/13</a>	Disabled	-	-	-
<a href="#">GE0/0/14</a>	Disabled	-	-	-
<a href="#">GE0/0/15</a>	Disabled	-	-	-
<a href="#">GE0/0/16</a>	Disabled	-	-	-
<a href="#">GE0/1/1</a>	Disabled	-	-	-
<a href="#">GE0/1/2</a>	Disabled	-	-	-
<a href="#">GE0/1/3</a>	Disabled	-	-	-
<a href="#">GE0/1/4</a>	Disabled	-	-	-

#### 4.2.18.2. LLDP Setting

Selecting "**Advanced Application>LLDP Protocol>LLDP Setting**", in the navigation bar, you can configure LLDP.

 **LLDP Setting**
[LLDP Status](#)

Active	<input type="checkbox"/>	
Hello-time	30	seconds(5-32768)
Hold-time	4	seconds(2-10)

Port	Mode
*	Disable ▼
GE0/0/1	Disable ▼
GE0/0/2	Disable ▼
GE0/0/3	Disable ▼
GE0/0/4	Disable ▼
GE0/0/5	Disable ▼
GE0/0/6	Disable ▼
GE0/0/7	Disable ▼
GE0/0/8	Disable ▼
GE0/0/9	Disable ▼
GE0/0/10	Disable ▼
GE0/0/11	Disable ▼
GE0/0/12	Disable ▼
GE0/0/13	Disable ▼
GE0/0/14	Disable ▼
GE0/0/15	Disable ▼
GE0/0/16	Disable ▼
GE0/1/1	Disable ▼
GE0/1/2	Disable ▼
GE0/1/3	Disable ▼
GE0/1/4	Disable ▼

#### 4.2.19. AAA

Selecting "Advanced Application>AAA", in the navigation bar, you can configure AAA.



Basic Setting  
 Advanced Application  
 Management

802.1x AAA MUSER

EAP Forwarding Mode

Quiet Period  seconds(0-600)

VLAN  
 MAC Address Forwarding  
 Loopback Detection  
 Spanning Tree Protocol  
 Bandwidth Control  
 Broadcast Storm Control  
 Mirroring  
 Link Aggregation  
 POE Settings  
 Classifier  
 Policy Rule  
 Queuing Method  
 Multicast  
 IPv6 Multicast  
 Dos attack protect  
 DHCP Snooping Setting  
 SNTP Setting  
 LLDP Protocol  
 AAA  
 EEE  
 ARP Safeguarding

Port	Active	Port Control	Reauthentication	Reauthentication Timer	Max User(s)
*	disable	auto	Off	seconds	
GE0/0/1	disable	auto	Off	3600 seconds	100
GE0/0/2	disable	auto	Off	3600 seconds	100
GE0/0/3	disable	auto	Off	3600 seconds	100
GE0/0/4	disable	auto	Off	3600 seconds	100
GE0/0/5	disable	auto	Off	3600 seconds	100
GE0/0/6	disable	auto	Off	3600 seconds	100
GE0/0/7	disable	auto	Off	3600 seconds	100
GE0/0/8	disable	auto	Off	3600 seconds	100
GE0/0/9	disable	auto	Off	3600 seconds	100
GE0/0/10	disable	auto	Off	3600 seconds	100
GE0/0/11	disable	auto	Off	3600 seconds	100
GE0/0/12	disable	auto	Off	3600 seconds	100
GE0/0/13	disable	auto	Off	3600 seconds	100
GE0/0/14	disable	auto	Off	3600 seconds	100
GE0/0/15	disable	auto	Off	3600 seconds	100
GE0/0/16	disable	auto	Off	3600 seconds	100
GE0/1/1	disable	auto	Off	3600 seconds	100
GE0/1/2	disable	auto	Off	3600 seconds	100

#### 4.2.19.1. 802.1x

Selecting "Advanced Application>AAA>802.1x", in the navigation bar, you can configure 802.1x.

802.1x AAA MUSER

EAP Forwarding Mode

Quiet Period  seconds(0-600)

Port	Active	Port Control	Reauthentication	Reauthentication Timer	Max User(s)
*	disable	auto	Off	seconds	
GE0/0/1	disable	auto	Off	3600 seconds	100
GE0/0/2	disable	auto	Off	3600 seconds	100
GE0/0/3	disable	auto	Off	3600 seconds	100
GE0/0/4	disable	auto	Off	3600 seconds	100
GE0/0/5	disable	auto	Off	3600 seconds	100
GE0/0/6	disable	auto	Off	3600 seconds	100
GE0/0/7	disable	auto	Off	3600 seconds	100
GE0/0/8	disable	auto	Off	3600 seconds	100
GE0/0/9	disable	auto	Off	3600 seconds	100
GE0/0/10	disable	auto	Off	3600 seconds	100
GE0/0/11	disable	auto	Off	3600 seconds	100
GE0/0/12	disable	auto	Off	3600 seconds	100
GE0/0/13	disable	auto	Off	3600 seconds	100
GE0/0/14	disable	auto	Off	3600 seconds	100
GE0/0/15	disable	auto	Off	3600 seconds	100
GE0/0/16	disable	auto	Off	3600 seconds	100
GE0/1/1	disable	auto	Off	3600 seconds	100
GE0/1/2	disable	auto	Off	3600 seconds	100

## 【Parameter Description】

Parameter	Description
EAP Forwarding Mode	EAP Forwarding Mode : eap-finish, Eap-tansfer
Quiet Period	If the same user fails to log in more than the allowed value, he or she will not be allowed to try to log in at a certain time
Active	Active: disable portbased(multi) portbased(single) macbased
Port Control	Port Control: auto forceauthorized forceunauthorized
Reauthentication	After user authentication is passed, the port can be configured to reauthenticate or periodically re-authenticate
Reauthentication Timer	Time range of Reauthentication Timer: 10-3600 seconds
Max user(s)	The maximum number of users: 1-100

## 4.2.19.2. Radius Domain

Selecting “**Advanced Application>AAA>Radius Domain**”, in the navigation bar, you can configure Radius Domain.

[Domain](#)      [802.1x](#)      [MUSER](#)      [Radius](#)      [TACACS+](#)  
**Radius Domain:**

Active	<input type="checkbox"/>
Domain Name	<input type="text"/>
Default Domain	<input type="checkbox"/>
Radius Service Name	<input type="text"/>
Force Max Number	<input checked="" type="radio"/> Disable <input type="radio"/> <input type="text" value="1"/> (1-640)

Domain Name	Radius Service Name	Active	Delete

## 【Parameter Description】

Parameter	Description
Active	Enable or disable radius domain
Domain Name	Set domain name
Radius Server Name	Set Radius Server name
Force Max Number	Maximum number of user connections range: 1-640

## 【Instructions】

It needs to provide user name and password when the client is authenticated. The user name information generally includes the ISP information of user, domain and the ISP one-to-one correspondence, the main information domain is the domain of the user is authenticated and accounted by which RADIUS server.

**4.2.19.3. Remote Authentication**

Selecting "**Advanced Application>AAA>Remote Authentication**", in the navigation bar, you can configure Remote Authentication.

The screenshot shows a configuration page for Remote Authentication. The navigation bar at the top has a blue bar with an orange circle next to 'Remote Authentication'. Other navigation items are '802.1x', 'AAA', 'Radius', and 'TACACS+'. Below the navigation bar, there is a grey bar with 'Authentication Mode' and a dropdown menu showing 'Local'. At the bottom of the page, there are two buttons: 'Apply' and 'Cancel'.

## 【Parameter Description】

Parameter	Description
Authentication Mode	Authentication Mode: Local, Radius, Tacacs+

**4.2.19.4. TACACS+ Server Setup**

Selecting "**Advanced Application>AAA>TACACS+ Server Setup**", in the navigation bar, you can configure TACACS+ Server Setup.

**TACACS+ Server Setup** [AAA](#) [MUSER](#)

**Authentication Server**

Authentication Type:  ▼

Encrypt Key:

Preemption Time:  min (0-1440)

Index	IP Address	TCP Port	Shared Secret	TimeOut	Delete
1	<input type="text" value="0.0.0.0"/>	<input type="text" value="49"/>	<input type="text"/>	<input type="text" value="5"/>	<input type="checkbox"/>
2	<input type="text"/>	<input type="text" value="49"/>	<input type="text"/>	<input type="text" value="5"/>	<input type="checkbox"/>

**【Parameter Description】**

Parameter	Description
Authentication Type	Authentication Mode: ascii, Chap, pap
Preemption Time	The time range of Preemption Time: 0-1440 minutes

#### 4.2.19.5. Radius Server Setup

Selecting “**Advanced Application>AAA>Radius Server Setup**”, in the navigation bar, you can configure Radius Server Setup.

**RADIUS Server Setup**
AAA
MUSER

8021P Priority	<input type="checkbox"/>
H3C Cams	<input type="checkbox"/>
Bandwidth Limit	<input type="checkbox"/>

**Radius Host:**

Host Name	<input style="width: 95%;" type="text"/>
Preemption Time	0 <input style="width: 50px;" type="text"/> min (0-1440)

Server	Index	IP Address	UDP Port	Shared Secret
Authentication Server	1	0.0.0.0	1812	Switch
	2	0.0.0.0	1812	<input style="width: 100%;" type="text"/>
Accounting Server	1	0.0.0.0	1813	Switch
	2	0.0.0.0	1813	<input style="width: 100%;" type="text"/>

Host	Authentication IP Address	Accounting IP Address	Delete
			<input type="button" value="Delete"/> <input type="button" value="Cancel"/>

#### 【Parameter Description】

Parameter	Description
8021P Priority	After this function is turned on, if the user authentication is pass, it will modify the PVID of the user's port.
H3C Cams	In this feature, you can configure the version information of transmitting clients to the radius server through the radius attribute client-version.
Bandwidth limit	After this function is turned on, if the user authentication is pass, it will modify the Bandwidth of the user's port.

#### 4.2.20. EEE

Selecting "Advanced Application>EEE", The page can be turn the EEE on or off.

Basic Setting  
 Advanced Application  
 Management

VLAN  
 MAC Address Forwarding  
 Loopback Detection  
 Spanning Tree Protocol  
 Bandwidth Control  
 Broadcast Storm Control  
 Mirroring  
 Link Aggregation  
 POE Settings  
 Classifier  
 Policy Rule  
 Queuing Method  
 Multicast  
 IPv6 Multicast  
 Dos attack protect  
 DHCP Snooping Setting  
 SNTP Setting  
 LLDP Protocol  
 AAA  
**EEE**  
 ARP Safeguarding

Port	Enable
*	<input type="checkbox"/>
GE0/0/1	<input type="checkbox"/>
GE0/0/2	<input type="checkbox"/>
GE0/0/3	<input type="checkbox"/>
GE0/0/4	<input type="checkbox"/>
GE0/0/5	<input type="checkbox"/>
GE0/0/6	<input type="checkbox"/>
GE0/0/7	<input type="checkbox"/>
GE0/0/8	<input type="checkbox"/>
GE0/0/9	<input type="checkbox"/>
GE0/0/10	<input type="checkbox"/>
GE0/0/11	<input type="checkbox"/>
GE0/0/12	<input type="checkbox"/>
GE0/0/13	<input type="checkbox"/>
GE0/0/14	<input type="checkbox"/>
GE0/0/15	<input type="checkbox"/>
GE0/0/16	<input type="checkbox"/>
GE0/1/1	<input type="checkbox"/>
GE0/1/2	<input type="checkbox"/>
GE0/1/3	<input type="checkbox"/>
GE0/1/4	<input type="checkbox"/>

Apply Cancel

#### 4.2.21. ARP Safeguarding

Selecting “Advanced Application>ARP Safeguarding”, The page can be configured to prevent arp flooding.

**Basic Setting**

Advanced Application

**Management**

---

VLAN

MAC Address Forwarding

Loopback Detection

Spanning Tree Protocol

Bandwidth Control

Broadcast Storm Control

Mirroring

Link Aggregation

POE Settings

Classifier

Policy Rule

Queuing Method

Multicast

IPv6 Multicast

Dos attack protect

DHCP Snooping Setting

SNTP Setting

LLDP Protocol

AAA

EEE

**ARP Safeguarding**

ARP Anti-Flood

**Global Configuration**

ARP Anti-Flood	DISABLE ▾	Action	drop-arp ▾
Rate Limit	16 (1~100)pps	Recover Time	10 (0~1440)m

**Port Rate Limit Configuration**

Port	Rate Limit(1~100)pps	Port	Rate Limit(1~100)pps
GE0/0/1	0	GE0/0/2	0
GE0/0/3	0	GE0/0/4	0
GE0/0/5	0	GE0/0/6	0
GE0/0/7	0	GE0/0/8	0
GE0/0/9	0	GE0/0/10	0
GE0/0/11	0	GE0/0/12	0
GE0/0/13	0	GE0/0/14	0
GE0/0/15	0	GE0/0/16	0
GE0/1/1	0	GE0/1/2	0
GE0/1/3	0	GE0/1/4	0

**ARP Anti-Flood Entry**

Src MAC	Src IP	Port	VLAN	Recover Time(m)	Recover MAC

**【Parameter Description】**

Parameter	Description
Global Configuration	Enable or disable ARP Anti-flood
Port Rate Limit	It can set Arp message speed limit for specific interface. If it exceeds the speed limit, it is considered to be under attack.

### 4.3. Management

Choose Management, and the following page appears. There are "Management & Maintenance", "Access Control", "Diagnostic", "Syslog", configuration web pages.



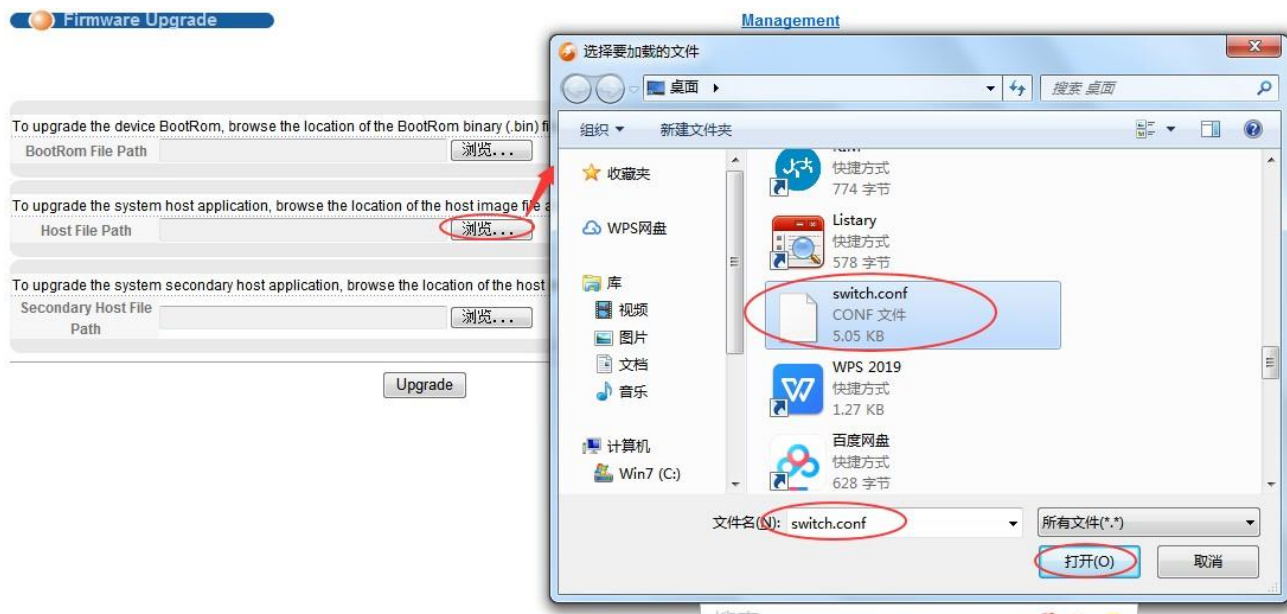
### 4.3.1. Management & Maintenance

Selecting “**Management> Management & Maintenance**”, in the navigation bar, you can Upgrade Firmware , Restart System and Maintenance switch.



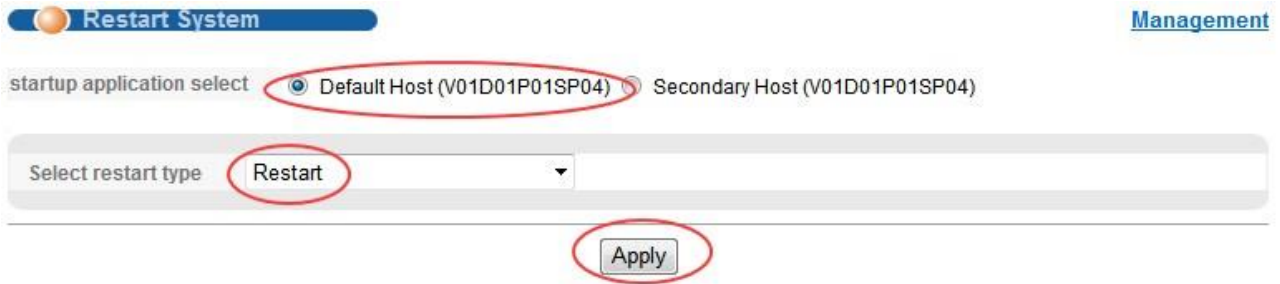
#### 【Configuration Example】

#### 1. Firmware Upgrade

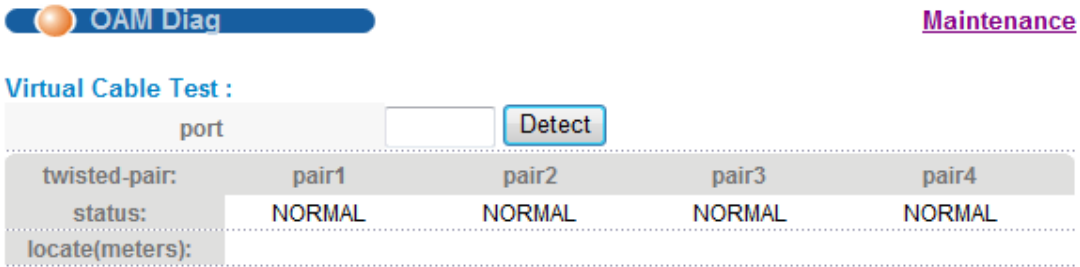


2.Restart system. Restart type: Restart, Restart with Factory Defaults.





3.OAM Diag, Virtual cable can be tested.



### 4.3.2. Access Control

Selecting “**Management> Access Control**”, in the navigation bar, you can set SNMP and Logins.



#### 4.3.2.1. SNMP

Selecting “**Management> Access Control>SNMP**”, in the navigation bar, you can configure SNMP.

## SNMP

### General Setting

[Access Control](#)
[User](#)

Snm Server	ENABLE ▾
Community Name	<input type="text"/>
Access privilege	Read-write ▾

### Trap Destination

Version	IP	Port	Username
v2c ▾	0.0.0.0	162	public
v2c ▾	0.0.0.0	162	public
v2c ▾	0.0.0.0	162	public
v2c ▾	0.0.0.0	162	public

### 【Parameter Description】

Parameter	Description
Community Name	Community string, is equal to the NMS and Snmp agent communication between the password
Access privilege	Read-only: specify the NMS (Snmp host) of MIB variables can only be read, cannot be modified Read- write: specify the NMS (Snmp host) of MIB variables can only read, can also be modified
Version	Set version: v1, v2c, v3
IP	Set the IP address of the trap host

### 【Configuration Example】

Such as: Add a group name public community, access to Read-Write. Set host 192.168.1.100 to receive trap messages. The specified version is v2c.

Snm Server	ENABLE ▾
Community Name	<input type="text"/>
Access privilege	Read-write ▾

Trap Destination

Version	IP	Port	Username
v2c ▾	0.0.0.0	162	public
v2c ▾	0.0.0.0	162	public
v2c ▾	0.0.0.0	162	public
v2c ▾	0.0.0.0	162	public

4.3.2.2. User Information

Selecting “**Management> Access Control>User Information**”, in the navigation bar, you can add user, set Security Level, Authentication, Privacy, Group, Password.

Username	<input type="text"/>		
Security Level	noauth ▾		
Authentication	MD5 ▾	Password	<input type="text"/>
Privacy	DES ▾	Password	<input type="text"/>
Group	initial ▾		

Index	Username	SecurityLevel	Authentication	Privacy	Group	Delete
1	initialmd5	pri	MD5	DES	initial	<input type="checkbox"/>
2	initialsha	pri	SHA	DES	initial	<input type="checkbox"/>
3	initialnone	noauth	noauth	nopri	initial	<input type="checkbox"/>

【Parameter Description】

Parameter	Description
Username	Snm username
Security Level	noauth auth

Parameter	Description
	pri
Authentication	MD5 SHA
Privacy	DES Privacy
Group	User group name
Password	Encrypted password

### 【Configuration Example】

Such as: Add group initial, add username user1.

The screenshot shows a configuration interface for a user. The 'User Information' section is active, and the 'SNMP Setting' section is also visible. The form fields are as follows:

Field	Value
Username	user1
Security Level	noauth
Authentication	MD5
Privacy	DES
Group	initial
Password (1)	admin
Password (2)	admin

Below the form, there are three buttons: **Add**, **Cancel**, and **Clear**.

### 4.3.2.3. Logins

Selecting “**Management>Access Control>Logins**”, in the navigation bar, you can modify admin password, configurable ordinary users.

**Logins** [Access Control](#) [Super Password](#)

**Edit admin**

Old Password (1-32 characters)	<input type="text"/>
New Password (1-32 characters)	<input type="text"/>
Retype to confirm	<input type="text"/>
User privilege (0:Guest 1:User 2-14:Operator 15:Manager)	15 Administrator

**Please record your new password whenever you change it. The system will lock you out if you have forgotten your password.**

**Edit Other Logins**

Login	User Name	New Password	Retype to confirm	User privilege
1				0 Guest ▼
2				0 Guest ▼
3				0 Guest ▼
4				0 Guest ▼
5				0 Guest ▼
6				0 Guest ▼
7				0 Guest ▼
8				0 Guest ▼
9				0 Guest ▼
10				0 Guest ▼
11				0 Guest ▼
12				0 Guest ▼
13				0 Guest ▼

**【Parameter Description】**

Parameter	Description
User privilege	0: Guest 1:User 2-14: Operator 15:Manager

**【Configuration Example】**

**Logins** [Access Control](#) [Super Password](#)

**Edit admin**

Old Password (1-32 characters)	•••••
New Password (1-32 characters)	•••••
Retype to confirm	•••••
User privilege (0:Guest 1:User 2-14:Operator 15:Administrator)	15 Administrator

**Modify**

Please record your new password whenever you change it. The system will lock you out if you have forgotten your password.

**Edit Other Logins**

Login	User Name	New Password	Retype to confirm	User privilege
1	admin	•••••	•••••	0 Guest
2				0 Guest

### 4.3.3. Diagnostic

Selecting **“Management> Diagnostic”**, in the navigation bar, you can Display or Clear System Log.

**Basic Setting**

**Advanced Application**

**Management**

---

Management & Maintenance

Access Control

**Diagnostic**

Syslog

**Diagnostic**

- Info -

System Log

**【Configuration Example】**

Such as: Display System Log.

**Diagnostic**

```

2001/01/01 08:06:41: %OAM-5-LOGIN: The remote client
192.168.1.100 (admin) has logged in at web 1.
2001/01/01 06:46:53: %OAM-5-LOGOUT: The remote client
192.168.1.100 (admin) has logged out at web 1.
2001/01/01 06:10:40: %OAM-5-LOGIN: The remote client
192.168.1.100 (admin) has logged in at web 1.
2001/01/01 03:57:56: %OAM-5-LOGOUT: The remote client
192.168.1.100 (admin) has logged out at web 1.
2001/01/01 03:30:36: %LACP-4-info: Get eth-trunk
policy ,group Id =7 is not active.
2001/01/01 03:30:36: %LACP-4-info: Get eth-trunk
policy ,group Id =6 is not active.
2001/01/01 03:30:36: %LACP-4-info: Get eth-trunk
policy ,group Id =5 is not active.
2001/01/01 03:30:36: %LACP-4-info: Get eth-trunk

```

System Log

#### 4.3.4. Syslog

Selecting "**Management> Syslog**", in the navigation bar, you can configure syslog.

**Basic Setting** **Syslog Setup** [Syslog Server Setup](#)

Syslog  Active

Logging type	Active	Facility
System	<input type="checkbox"/>	local use 7

##### 4.3.4.1. Syslog Setup

Selecting "**Management>Syslog>Syslog Setup**", in the navigation bar, you can start the logging function globally and the logging function of the corresponding module.

**Syslog Setup** [Syslog Server Setup](#)

Syslog Active

---

Logging type	Active	Facility
System	<input type="checkbox"/>	local use 7 ▼

Apply Cancel

**【Parameter Description】**

Parameter	Description
Facility	local use 0-7 kernel userlevel mail system sercurity_1-2 sysogd lineprinter Networknews uucp clock_1-2 ftp logaudit logalert

**【Configuration Example】**

Such as:



**Syslog Setup** [Syslog Server Setup](#)

Syslog Active

---

Logging type	Active	Facility
System	<input checked="" type="checkbox"/>	local use 7 ▼

#### 4.3.4.2. Syslog Server Setup

Selecting “**Management>Syslog>Syslog Server Setup**”, in the navigation bar, you can set syslog server.

**Syslog Server Setup** [Syslog Setup](#)

Active

Server Address

Log Level  ▼

---

Index	Active	IP Address	Log Level	Delete
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#### 【Parameter Description】

Parameter	Description
Server Address	Syslog Server Address

Parameter	Description
Log Level	Level 0
	Level 0-1
	Level 0-2
	Level 0-3
	Level 0-4
	Level 0-5
	Level 0-6
	Level 0-7
Server Address	Syslog Server Address

**【Instructions】**

Open the log switch, set up the syslog server, and the system log will be automatically pushed to the server.

**【Configuration Example】**

Such as: 1)set server address is 192.168.1.100.

 Syslog Server Setup
[Syslog Setup](#)

Active	<input checked="" type="checkbox"/>
Server Address	<input type="text" value="192.168.1.100"/>
Log Level	<input type="text" value="Level 0"/>

Index	Active	IP Address	Log Level	Delete
<a href="#">1</a>	Yes	192.168.1.100	0	<input type="checkbox"/>

## Appendix: Technical Specifications

Hardware Specifications		
<b>Standards and Protocols</b>	IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE802.3x, IEEE802.3z, IEEE802.3ad, IEEE802.1P, IEEE802.1Q IEEE802.3at, IEEE802.3af	
<b>Interface</b>	16x 10/100/1000Mbps Auto-Negotiation ports 4 x Gigabit Combo ports 1 x RJ45 Console Port	
<b>Network Media</b>	10BASE-T: UTP category 3,4,5 cable (maximum 100m) 100BASE-Tx: UTP category 5,5e cable (maximum 100m) 1000BASE-T: UTP category 5e,6 cable (maximum 100m) 1000Base-SX:62.5µm/50µm MMF(2m~550m) 1000Base-LX:62.5µm/50µm MMF(2m~550m) or 10µm SMF (2m~5000m)	
<b>Transfer Method</b>	Store-and-Forward	
<b>MAC Address Table</b>	8K	
<b>Switching Capacity</b>	40Gbps	
<b>Packet Forwarding Rate</b>	29.76Mpps	
<b>Packet Buffer</b>	4.1Mbit	
<b>Jumbo Frame</b>	9KBytes	
<b>PoE Ports(RJ45)</b>	16x PoE ports compliant with 802.3at/af	
<b>Power Pin Assignment</b>	1/2(+),3/6(-)	
<b>PoE Budget</b>	240W	
<b>LED indicators</b>	<b>Per Device</b>	Power&SYS : Green
	<b>Per Port</b>	10/100Mbps Link/Act:Orange 1000Mbps Link/Act: Green PoE: Yellow
<b>Power Supply</b>	100~240VAC,50/60HZ,260W	
<b>Power Consumption</b>	Maximum(PoE on): 283W(220V/50Hz)	
<b>Dimensions ( W x D x H )</b>	440*208*44mm	
<b>Environment</b>	Operating Temperature: 0°C~45°C Storage Temperature: -40°C~70°C Operating Humidity: 10%~90% non-condensing Storage humidity: 5%~90% non-condensing	

Software Specification	
System	IP Configuration(IPV4、IPV6)
	User Configuration
	Time Settings(SNTP)
	Log Management
	SNMP Management(V2)
	RMON
Port	Port Configuration
	Link Aggregation(static、Lacp)
	Port Mirroring
	Jumbo Frame
	Port Error Disabled Configuration
Vlan	Port based VLAN
	Protocol based VLAN
IGMP	IGMP Snooping (V2、V3)
	Multicast group (256)
STP	IEEE 802.1D STP
	IEEE 802.1W RSTP
	IEEE 802.1S MSTP
Security	Broadcast / Uncast / Multicast Storm Control
	IEEE 802.1x
	DHCP Snooping (IP、MAC、Port)
ACL	MAC-Based ACL
	MAC-Based ACE
	IPv4-Based ACL
	IPv4-Based ACE
QoS	WRR (Weighted Round Robin)
	Port based QoS
	IEEE 802.1p Class of Service
	DSCP-based QoS
	QoS basic mode
	QoS advanced mode (Policy based)
Bandwidth Control	Ingress Port
	Ingress VLAN

	Egress Port
	Egress Queue
MAC Address Setting	Static Mac Setting
	MAC Filtering
	Dynamic Address Learn/Setting
	Rma Setting
LLDP	LLDP Port Setting
	MED Network Policy
Management	System information
	Ping Test
	Factory Reboot Switch
	Backup/upgrade Management
	Configuration Management