Web Smart Managed Switches

User Manual

Models 508834, 560559, 561167, 561198, 561341, 561426, 562003





intellinet-network.com

CHAPTER 1	PRODUC	T INTRODUCTION	5
1.1	PRODU	CT OVERVIEW	5
1.2	FEATUR	ES	5
1.3	EXTERN	AL COMPONENT DESCRIPTION	6
1.3.1	FRO	NT PANEL (EXAMPLE SHOWN FROM 560559)	6
1.3.2	REAF	? PANEL (19 RACKMOUNT/DESKTOP EXAMPLE SHOWN)	7
1.4	ENVIRO	NMENT	8
1.5	PACKAG	JE CONTENTS	8
<u>CHAPTER 2</u> ·	- INSTALL	ING AND CONNECTING THE SWITCH	9
2.1	INSTALL	ATION (19 RACKMOUNT & DESKTOP VERSION)	9
2.1.1	INST	ALLATION IN A 19-INCH RACK / CABINET	9
2.1.2	DESK	(TOP INSTALLATION	10
2.1.3	DIN I	RAIL INSTALLATION	11
2.1.4	POW	/ER ON THE SWITCH	11
2.2	CONNE	CT COMPUTER (NIC) TO THE SWITCH	12
2.3	SWITCH	I CONNECTION TO THE PD (EXCLUDING 508834)	12
CHAPTER 3	HOW TO) LOG INTO THE SWITCH	.13
3.1	SWITCH	I TO END NODE	13
3.2	LOGIN I	NFORMATION	13
CHAPTER 4	- WEB CO	NFIGURATION GUIDE	.15
4.1	BASIC S	ETTING	15
4.1.1	SYST	EM INFO	16
4.1.2	GEN	ERAL SETUP	. 17
4.1.3	IP SE	TUP	. 18
4.2	1.3.1	VLAN INTERFACE	18
4.2	1.3.2	VLAN INTERFACE CONFIG	19
4.1.4	POR	T SETUP	21
4.1.5	DHC	P SERVER	23
4.2	1.5.1	DHCP SERVER POOL SET	24
4.2	1.5.2	DHCP SERVER GROUP SET	25
4.1.6	DHC	P-RELAY	25
4.1.7	POR	T INFORMATION	26
4.2	ADVAN	CED APPLICATION	27
4.2.1	VLAN	۷	28
4.2	2.1.1	VLAN STATUS	29
4.2	2.1.2	VLAN PORT SETTINGS	30

4.2.1.	.3 STATIC VLAN	32
4.2.2	MAC ADDRESS FORWARDING	33
4.2.3	LOOPBACK DETECTION (PART OF OUR SELF-HEALING NETWORK SUITE OF FEATUR	ES)
	35	
4.2.4	SPANNING TREE PROTOCOL (PART OF OUR SELF-HEALING NETWORK SUITE OF	
FEATUR	ES)	36
4.2.4.	1 SPANNING TREE PROTOCOL STATUS	37
4.2.4.	2 SPANNING TREE CONFIGURATION	38
4.2.4.	3 COMPATIBLE/RAPID SPANNING TREE PROTOCOL	39
4.2.4.	4 MULTIPLE SPANNING TREE PROTOCOL	41
4.2.5	BANDWIDTH CONTROL	42
4.2.6	BROADCAST STORM CONTROL	43
4.2.7	MIRRORING	45
4.2.8	LINK AGGREGATION	47
4.2.8.	1 LINK AGGREGATION STATUS	47
4.2.8.	2 LINK AGGREGATION SETTING	48
4.2.8.	3 LINK AGGREGATION CONTROL PROTOCOL	49
4.2.9	POE SETTINGS (EXCLUDES 508834, WHERE POE IS NOT SUPPORTED)	50
4.2.9.	1 POE SETTINGS	50
4.2.9.	2 POE PORT SETTINGS	51
4.2.10	POE SCHEDULING (PART OF OUR SELF-HEALING NETWORK SUITE OF FEATURES).52
4.2.10	0.1 POE SCHEDULING	52
4.2.10	0.2 CONFIGURE PORT POE SCHEDULING	53
4.2.11	PDM (PART OF OUR SELF-HEALING NETWORK SUITE OF FEATURES)	54
4.2.12	CLASSIFIER	55
4.2.13	POLICY RULE	56
4.2.14	QUEUING METHOD	57
4.2.15	MULTICAST	59
4.2.1	5.1 MULTICAST STATUS	59
4.2.1	5.2 MULTICAST SETTINGS	60
4.2.1	5.3 IGMP SNOOPING DENY VLAN	61
4.2.1	5.4 IGMP FILTERING PROFILE	62
4.2.16	IPV6 MULTICAST	63
4.2.10	6.1 IPV6 MULTICAST STATUS	63
4.2.10	6.2 IPV6 MULTICAST SETTING	64
4.2.10	6.3 MLD SNOOPING DENY VLAN	66
4.2.17	DOS ATTACK PROTECT	67
4.2.18	DHCP SNOOPING SETTING	68
4.2.18	8.1 DHCP SNOOPING SETTING	68
4.2.18	8.2 IP SOURCE GUARD	70
4.2.19	SNTP SETTING	71
4.2.20	LLDP PROTOCOL	73

4.	2.20.1	LLDP STATUS	73
4.	2.20.2	LLDP SETTING	74
4.2.2	21	AAA	74
4.	2.21.1	802.1X	75
4.	2.21.2	DOMAIN	77
4.	2.21.3	SET AUTHENTICATION	78
4.	2.21.4	TACACS+ SERVER SETUP	78
4.	2.21.5	RADIUS SERVER SETUP	79
4.2.2	22	EEE (PART OF OUR SELF-HEALING NETWORK SUITE OF FEATURES)	80
4.2.2	23	ARP SAFEGUARDING	80
4.2.2	24	PORT ISOLATION	81
4.2.2	25	MTU	81
4.2.2	26	WATCH DOG (PART OF OUR SELF-HEALING NETWORK SUITE OF FEATURES)	82
4.3	MAN	AGEMENT	83
4.3.1	L M	ANAGEMENT AND MAINTENANCE	83
4.3.2	2 A	CCESS CONTROL	84
4.	3.2.1	SNMP	84
4.	3.2.2	USER INFORMATION	85
4.	.3.2.3	LOGINS	86
4.	3.2.4	SUPER PASSWORD	88
4.3.3	3 D	AGNOSTIC	88
4.3.4	1 S1	′SLOG	89
4.	3.4.1	SYSLOG SETUP	89
4.	3.4.2	SYSLOG SERVER SETUP	90
CHAPTER 5	- APPE	NDIX	<u>92</u>
5.1	TECH	INICAL SPECIFICATIONS	92
5.1.1	L H.	ARDWARE SPECIFICATIONS	92
5.1.2	2 SC	DFTWARE SPECIFICATION	94
5.2	FEAT	URES AND TERMS EXPLAINED	95
CHAPTER 6	- ADDI	TIONAL INFORMATION	<u>97</u>
6.1	14/40		07
0.1 6.2	VVAS		97
0.Z			98
0.3	KEGU	JLAIURT JIAIEIVIENIS	98

Chapter 1 - Product Introduction

Thank you for purchasing this Intellinet Web Smart Managed Switch. Before you install and use this product, please read this manual carefully to benefit from the full set of features that are available.

1.1 Product Overview

These Layer 2 switches are designed to create a high-security and high-performance network with Self-Healing Network features. They provide from eight to 24 10/100/1000 Mbps auto-sensing RJ45 ports and 100/1000 Mbps SFP optical ports. All ports support wire-speed forwarding and can provide you with larger network flexibility.

Some of our newer features have been labeled as Self-Healing Network (SHN) features. These features are designed to assist in the automated preservation of health on the network. To assist even further, we have partnered with Domotz[™] to provide the additional option of Cloud Management, which gives the ability to administer our managed switches from any internet-connected device through an app on your smartphone or web application hosted by Domotz (Cloud Management is subscription-based, and information can be found at the following link: https://www.domotz.com/residential-plan.php.)

1.2 Features

- Compliance with IEEE 802.3i, IEEE 802.3u, IEEE802.3x, IEEE802.3ab, IEEE802.1q, IEEE802.1p standards
- In PoE versions, supports IEEE802.3af, IEEE802.3at standards, management of the PoE ports, PoE port power on/off, and port output power restriction
- Web interface management
- Up to 24 x 10/100/1000 Mbps Auto MDI/MDI-X Ethernet ports, ports Auto MDI/MDIX
- > 8K-entry MAC address table of the Switch with auto-learning and auto-aging
- Supports IEEE802.3x flow control for Full-duplex Mode and backpressure for Half-duplex Mode
- Supports QoS (quality of service), port mirroring, link aggregation protocol
- Supports packet length 9,216 bytes jumbo frame packet forwarding at wire speed
- LED indicators for monitoring Link / Activity / Speed and, in PoE versions, PSE monitoring

1.3 External Component Description

1.3.1 Front Panel (Example shown from 560559)

Depending on your model number, the front panel of the Switch consists of up to $24 \times 10/100/1000$ Mbps RJ45 ports, 4×1000 Mbps SFP ports (and $4 \times$ Uplink RJ45 ports), $1 \times$ Console port, $1 \times$ Reset button and a series of LED indicators as shown as below.



A — 10/100/1000 Mbps RJ45 ports (1 – 24):

Designed to connect to a device with a bandwidth of 10 Mbps, 100 Mbps or 1000 Mbps. Each has a corresponding 10/100/1000 Mbps LED (see E — LED indicators below).

B — SFP ports (SFP1, SFP2, 25S, etc.):

Designed to install an SFP module and connect to the device with a bandwidth of 1000 Mbps. Each has a corresponding 1000 Mbps LED.

Combo ports (25-28T) on model 561426:

The four SFP receiver slots are shared with four related RJ45 ports (25-28T). An SFP port and a related RJ45 port are called "composite" ports, which means that they can't be used at the same time. Either the SFP port works or the RJ45 port works.

C — Console port (Console):

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

D — Reset button (Reset):

With the device powered on, press down the button for about 5 seconds. The system restores the factory default settings.

E — LED indicators:

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

			24+	2SF	P Po	rt 10	/100	/100	0Mb	ps M	anaç	jed F	OE Ethernet S	witc
Power	•													
LNK/ACT/S	peed 🌒	•	•	•	•	•	•	•	•	•	•	•	•	
	2		6	8	10	12	14	16	18	20	22	24	SFP2	
PoE	•	٠	•	•	•	٠	•	•	•	•	•	•		
LNK/ACT/S	peed 🌒	•	•	•	•	•	•	•	•	•	•	•	•	
							13	15		19	21	23	SFP1	
PoE	•	•	•	•	•	•	•	•	•	•	•	•		

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

LED	COLOR	STATUS	STATUS DESCRIPTION
Dowor	Groop	On	Power On
POwer	Green	Off	Power Off
	Orange	On	A device is connected to the port
LINK/ACT/ Speed (1 – 24;	(10/100 Mbps) Green (1000 Mbps)	Off	No device is connected to the port
25T – 28T)		Flashing	Sending or receiving data
LINK/ACT/		On	A device is connected to the port
Speed	Green	Off	No device is connected to the port
(SFP1, 2)		Flashing	Sending or receiving data
Def		On	A Powered Device is connected to the port and is receiving power.
PoE (1 – 24) (excluding	Yellow	Off	No Powered Device is connected to the port, or no power is supplied according to the power limits of the port.
5000547		Flashing	The PoE power circuit may be in short or the power current may be overloaded.

1.3.2 Rear Panel (19 Rackmount/Desktop example shown)

The rear panel of the Switch contains AC power connector and one marker shown as below.



F — AC Power Connector:

Power is supplied through an external AC power adapter. See specifications for your model.

G — Grounding Terminal:

The Switch already comes with a Lightning Protection Mechanism. You can also ground the Switch through the PE (Protecting Earth) cable of an AC cord or with a Ground Cable.

1.4 Environment

- Operating Temperature: 0°C 45°C
- Storage Temperature: -40°C 70°C
- > Operating Humidity: 10% 90% non-condensing
- Storage humidity: 5% 90% non-condensing

1.5 Package Contents

Before installing the Switch, make sure that the following the packing list matches the items in the packaging. If any part is lost and damaged, please contact your local agent immediately. In addition, make sure that you have the tools to install switches and cables on hand.

- One Managed Ethernet Switch
- Four rubber feet, two mounting ears and eights screws (except for Industrial version 508834, which is for DIN Rail mounting)
- One AC power cord (except for Industrial version 508834, which is designed to receive power from an Industrial power source)
- Quick Install Guide

Chapter 2 - Installing and Connecting the Switch

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

2.1 Installation (19 Rackmount & Desktop version)

Please follow these instructions to avoid incorrect installation, cause device damage or security threats.

- > Put the Switch on stable place or desktop to prevent damage from falling.
- Make sure the Switch works in the proper AC input range and matches the voltage labeled on the Switch.
- To prevent electrical shocks, do not open the Switch's housing, even in power failure or if disconnected from a power source.
- Make sure that there is proper heat dissipation from and adequate ventilation around the Switch.
- > Make sure the cabinet can hold the weight of the Switch and its accessories.

2.1.1 Installation in a 19-inch Rack / 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, 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.



Bracket Installation

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



Rack Installation

2.1.2 Desktop Installation

If users are not equipped with a 19-inch standard cabinet, install the Switch on a desktop. Attach the included rubber feet on the bottom of the Switch at each corner to minimize external vibration. Allow adequate space for ventilation between the device and the objects around it.



Desktop Installation

2.1.3 DIN Rail Installation

For Industrial Models, the Switch can be installed onto a DIN rail. Follow these instructions:

- 1. With the DIN-rail bracket attached to the device with screws, angle the bracket onto the DIN rail.
- 2. Push in the device until it clicks into place.



2.1.4 Power on the Switch

The Switch is powered on by the AC $100 - 240 \vee 50/60$ Hz 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. When it is ON, it indicates the power connection is OK.

DC Terminal Block Installation (for Industrial models)

NOTE: Ensure all power is off/disconnected before beginning!

- **1.** Loosen appropriate screws.
- **2.** Insert bare power-supply wires into appropriate terminal slots (positive wire into positive slot; negative wire into negative slot).
- Tighten appropriate screws to secure wires. (If desired, repeat steps 1 3 on second input pair.)
- 4. Install block into the device and tighten screws.

Example — Your model may be different.



2.2 Connect Computer (NIC) to the Switch

After installing the network card driver, insert the NIC into the computer. Connect one end of the twisted pair to the RJ45 jack on your computer, and connect the other end to any RJ45 port of the Switch, with a maximum distance of 100 meters between the Switch and the computer. Once the connection is OK and the devices power on normally, the LINK/ACT/Speed status indicator lights, corresponding to ports on the Switch.

2.3 Switch connection to the PD (excluding 508834)

On PoE models, any ports that have a PoE indicator also have the PoE power supply function, which makes it possible to provide power to PD devices such as VoIP phones, network cameras, wireless access points and more. You only need to connect the Switch PoE port directly to the PD with a network cable.

Chapter 3 - How to Log into the Switch

3.1 Switch to End Node

Use standard Cat5 and higher 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.



Please refer to the LED Indicator table shown above. The LNK/ACT/Speed LEDs for each port lights when the link is available.

3.2 Login Information

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

Parameter	Default Value
Default IP address	192.168.2.1
Default Username	admin
Default Password	SERIAL NUMBER (S/N; found on
	the bottom of the switch)

You can log into 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: 192.168.2.xxx (xxx ranges 2 254), for example, 192.168.2.100.
- 4. Open the browser and enter http://192.168.2.1 and then press Enter. The Switch login window appears with the following picture:



Enter the Username and Password. The factory default Username is **admin** and the initial Password is the same as the serial number found on the bottom of the switch. Then click **Login** to log into the Switch configuration window.

Chapter 4 - Web Configuration Guide

The Switch configuration interface consists of three main areas: the status bar at the top, the left function menu bar, and the main configuration window. Select the different functions in the function menu bar to modify all settings in the main configuration window.

			-						T Save 19 Si	atus 🖹 Logo	
sic Setting	CO Por	t Status									
dvanced Application	Port #	Kame Link	Speed	State	LACP	TxPkts	RxPkts	Errors	Tx Bits/s	Rx Bits/s	Up Time
manament	GEO/0/1	down	auto i	disabled	disabled	0	0	0	0	0	0:00:00
anagement	GE0/0/2	up	auto-f1000M	forwarding	disabled	256	253	0	1024	176	0:08:44
	GE0/0/3	down	auto	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/4	down	auto I	disabled	disabled	0	0	0	0	0	0:00:00
10	GE0/0/5	down	n auto	disabled	disabled	0	0	0	0	0	0:00:00
	GEOIDIO	down	auto	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/7	down	n auto	disabled	disabled	0	0	0	0	0	0:00:00
	GEO/0/8	down	auto a	disabled	disabled	0	0	0	0	0	0:00:00
	GEO/D/2	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 a	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 a	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
	GE0/0/10	down	otus n	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/17	down	auto a	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/18	down	auto	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/19	down	auto	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/20	down	auto	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/21	down	auto	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/22	down	auto	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/23	down	auto	disabled	disabled	0	0	0	0	0	0:00:00
	GE0/0/24	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

Anv	
	Clear Counter
Post	

4.1 Basic Setting

Choose Basic Setting, and the following page appears. There are configuration web pages for **System Info, General Setup**, **IP Setup**, **Port Setup**, **DHCP server**, **DHCP-Relay**, and **Port Information**.

Basic Setting Advanced Application Management
System Info
General Setup
IP Setup
Port Setup
DHCP server
DHCP-Relay
Port Information

4.1.1 System Info

To view the basic information of System and configure the IP address and System name, select **Basic Setting>System Information settings** in the function menu bar.

Basic Setting	System information settion	ings
Advanced Application	Product description	Intellinet560559
Management	bootrom version	1.12
	Software version	Intellinet560559 V01D01P02SP05
	Product serialNo	123456789
Sustan Info	MAC address	00:e0:53:18:3b:1d
System mio	IP address	192.168.2.1 Setting
D Catua	Subnet mask	<u>255.255.255.0</u>
r belup Det Setur	Default gateway	0.0.0.0
Fort Setup	System startup time	0-Days 0-Hours 14-Minutes 21-Seconds
NOP Server	System application	running default application
Incr-Relay	System name	Intellinet560559 Setting
oremornation	System location	
	Web page timeout (in minute)	20

[Parameter Description]

Parameter	Description
Product description	Brief description of device type
Software version	Show switch's current software version.
MAC address	Show switch's physical address.
IP Address	The management IP of Switch
Subnet Mask	Configure the corresponding subnet mask of the IP address specified above. The default is 255.255.255.0.
Default Gateway	Specify a gateway address for the switch.
System name	System name.
System Location	Specify the system location.

[Information]

You can view and configure Running System status.

4.1.2 General Setup

To view the basic information of Switch, such as System Description and so on, select **Basic Setting>General Setup** in the function menu bar. You can also modify the System name, System contact and System location.

Basic Setting	General Setup	
Advanced Application	System description	Intellinet POE switch 560559
Management	System object ID	1.3.6.1.4.1.45855.1.3.68.1
	System port quantity	26
	System startup time	0-Days 0-Hours 15-Minutes 44-Seconds
System Info	System name	Intellinet560559
Seneral Setup	System location	
P Setup	System contact	admin
Port Setup	Product description	Intellinet560559
OHCP server		
DHCP-Relay		
Port Information		Refresh Modify

[Parameter Description]

Parameter	Description
System name	System name
System Location	Specify the system location
System contact	Including company or related URL
Product description	Brief description of device type.

[Configuration example]

To configure general system information:

- 1. Click Basic Setting > General Setup.
- **2.** Specify the system name as Switch, location as office, and contact information as admin for the system administrator.
- **3.** Click Apply.

<u>General Setup</u>		
System description	Intellinet POE switch 560559	
System object ID	1.3.6.1.4.1.45855.1.3.68.1	
System port quantity	26	
System startup time	0-Days 0-Hours 15-Minutes 44-Seconds	
System name	Switch	
System location	office	
System contact	admin	
Product description	Intellinet560559	



4.1.3 IP Setup

Basic Setting	🔵 🕘 Vlan li	nterface			<u>VI</u>	anInterfaceConf					
Advanced Application Management	Creat:	Interface Vlan ID	vlan-interface	~							
System Info General Setup Port Setup DHCP server	List:		Add Cance	lClear							
DHCP-Relay	Index	Name	Primary ipaddress	VLAN	Status	Delete					
Port Information	1	VLAN-IF1	192.168.2.1	1	Up						
	Delete Cancel										

To configure the IP, select **Basic Setting>IP Setup** in the function menu bar.

4.1.3.1 VLAN interface

To configure the VLAN Interface, select **Basic Setting>IP Setup>Vlan interface** in the function menu bar.

ninterfaceCo	Vla			nterface	Vlan Ir
					reat:
		\sim	vlan-interface	Interface	
			1	Vlan ID	
		Clear	Add Cance		
					ct.
Delete	Status	VLAN	Primary ipaddress	Name	Index
	Up	1	192.168.2.1	VLAN-IF1	1
	Up	1	192.168.2.1	VLAN-IF1	<u>1</u>

[Parameter Description]

Parameter	Description
Interface	Select the interface: vlan-interface Supervlan-interface
Vlan ID	Specify the vlan ID
Name	The name of interface

4.1.3.2 VLAN Interface Config

To adjust settings to the VLAN Interface Configuration, select **Basic Setting>IP** Setup>Vlan Interface Config in the function menu bar.

🔵 Vlan Inte	erface Config		VlanInterfac
VLAN Interface N	ame List:		
Inter	face Name	VLAN-IF1 V	
	Vlan ID	1	
		Apply Cancel	
VLAN Interface C	onfiguration:		
		Mode Ip Address 🗸	
		IP Address 0.0.0.0	
		NetMask Address 0.0.0.0	
		Override 🗌	
		Add Refresh	
VLAN Interface L	ist:		
Index	lp	Mask	Primary Delete
1	192.168.2.1	<u>255.255.255.0</u>	•

Modify Delete Cancel

[Parameter Description]

Parameter	Description
Interface name	Name of interface
Vlan ID	Specify the VLAN ID
IP Address	The IP address to log into the Switch
Override	You can override former original primary IP or not

[Configuration example]

To configure general system information:

- 1. Click Basic Setting > IP Setup >Vlan interface Config.
- 2. Specify the IP Address as 192.168.2.1.
- **3.** Click Add.

Web Smart Managed PoE Switches User Manual

Vlan Inter	face Config			VlanInterfa
LAN Interface Na	me List:			
Interf	ace Name	VLAN-IF1 V		
V	ian ID	1		
		Apply Cancel		
LAN Interface Co	onfiguration:		1	
		Mide Ip Address 🗸		
		IP Address 192.168.2.2		
		NetMask Address 255.255.255.0		
		Oven de 🗹		
		Add Refresh		
LAN Interface Lis	st:			
Index	lp	Mask	Primary	Delete
	102 189 2 1	255 255 255 0	۲	

4.1.4 Port Setup

To configure the related parameters of a port, select **Basic Setting**>**Port Setup** in the function menu bar.

Basic Setting	(🔘 F	ort basi	c setting	s													
Advanced Application							Dev	rice1 P	ort Nur	mber [(Click fo	r selec	ting]				
Management				2	4	6	8	10	12	14	16	18	20	22	24	26	
wanagement				0		-	-	-			-		-		-		
				-	-	-	-	-	-	-	-	-	-	-	-	-	
A 1 1 1				1	3	5	7	9	11	13	15	17	19	21	23	25	
System Info									Po	rt Num	ber						
General Setup					_												
IP Setup	Port basi	ic settings	Ethernet 1	000M	Port[1]]											
DHCP server	Port	Status	Link P	riority					Se	et spee	ed	Mo	de	Ac	tual s	peed	
DHCP-Relay	GE0/0/1	enable	V down ()				`	/ a	uto		✓ au	ito	∨ un	know	m	
Port Information								Ref	resh	Mod	dify						
								E	thern	et 100	OM Por	t					
U	GE0/0/1	enable	down 0						au	ito		aut	o	un	know	'n	
	GE0/0/2	enable	up 0						au	ito		aut	o	ful	1-100	M	
	GE0/0/3	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/4	enable	down 0					auto auto					unknown				
	GE0/0/5	enable	down 0					auto auto					o	unknown			
	GE0/0/6	enable	down 0					auto auto					o	unknown			
	GE0/0/7	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/8	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/9	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/10	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/11	enable	down 0						au	ito		aut	o	un	know	'n	
	GE0/0/12	enable	down 0						au	ito		aut	o	un	know	'n	
	GE0/0/13	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/14	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/15	enable	down 0						au	ito		aut	o	un	know	'n	
	GE0/0/16	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/17	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/18	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/19	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/20	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/21	enable	down 0						au	ito		aut	to	un	know	m	
	GE0/0/22	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/23	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/0/24	enable	down 0						au	ito		aut	to	un	know	m	
	GE0/1/1	enable	down 0						au	ito		aut	o	un	know	m	
	GE0/1/2	enable	down 0						au	ito		aut	o	un	know	m	

[Parameter Description]

Parameter	Description
Port	Port number
Status	Choose whether to enable or disable the link port
Link	Status: down up
Priority	Set port priority in the range of $0-7$
Set speed	Choose the following modes: 10/100 Mbps ports: full-10 half-10 auto-10 full-100 half-100

Web Smart Managed PoE Switches User Manual

Parameter	Description
	auto-100
	10/100/1000 Mbps ports: full-10 half-10 auto-10 full-100 half-100 auto-100 full-1000 half-1000 auto-1000 auto-1000 auto
Mode	Choose the following kinds: auto slave master
Actual speed	Displays the actual speed of the port
Port description	Describe the port.

[Configuration example]

To configure static routes:

- **1.** Click Basic Setting > Port Setup.
- 2. 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.
- **3.** Click Modify.

Port bas	Port basic settings Ethernet 1000M Port[1]											
Port	Status	Link	Priority		Set speed		Mode		Actual speed	Port desc	ription (0-128 cl	hars)
GE0/0/1	enable v	down	1	T	auto	•	auto	۲	unknown	port1		
				Refres	sh Modify	\triangleright						

4.1.5 DHCP Server

To configure the DHCP server pool and DHCP server group, select **Basic Setting>DHCP Server** in the function menu bar.

Basic Setting	🔵 🔘 DHCP serve	r pool set			DHCP ser	<u>ver group set</u>	
Advanced Application	ip pool	•					
Management	name			lease time	0 day 0) hour 0 minute	
	Gate Address			lp Mask			
System Info	First DNS			Sencondary DNS			
General Setup	list of assignable add	ress:					
IP Setup	number	start address		end address			
Port Setup	0					delete	
DHCP-Relay	1					delete	
Port Information	2					delete	
	3					delete	
	4					delete	
	5					delete	
	6					delete	
	7					delete	
		Add	d Delete	Save			

23

4.1.5.1 DHCP server pool set

To configure DHCP Server pool set, select **Basic Setting>DHCP server>DHCP server pool set** in the function menu bar.

🔵 🔘 DHCP serv	er pool set		DHCP server group set
ip pool	\checkmark		
name		lease time	0 day 0 hour 0 minute
Gate Address		lp Mask	
First DNS		Sencondary DNS	
list of assignable ad	dress:		
number	start address	end address	
0			delete
1			delete
2			delete
3			delete
4			delete
5			delete
6			delete
7			delete
	Add Del	ete Save	

[Parameter Description]

Parameter	Description
ip pool	IP pool ID
name	Set the name of IP pool
lease time	Set lease time
Gate Address	Set gate address
Ip Mask	Set IP mask
First DNS	Set first DNS
Secondary DNS	Set secondary DNS
Start address	Set start address range
End address	Set end address range

4.1.5.2 DHCP server group set

To configure the DHCP Server group, select **Basic Setting>DHCP server>DHCP server** group set link to the right of the header.

) DHCP s	server pool set		DHCP server group set
ol	~		
		يما	ase time 0 day 0 hour 0 minute
	HCP server grou	in set	DHCP server in pool set
all group	nor server groe		
interface	name	VLAN-IF1	\checkmark
Vlan id		1	
group id			
IP addres	S		
list:		delete group delete	e intf apply
in	dex i	ntf name	group id

[Parameter Description]

Parameter	Description
group id	Provide the DHCP server group ID
IP address	Provide the DHCP server IP address

4.1.6 DHCP-Relay

To turn on the DHCP relay function, hide DHCP Server, and set the source IP used, select **Basic Setting>DHCP-Relay** in the function menu bar.

Basic Setting	OHCP-Relay Setting	
Advanced Application	DHCP-Relay Enable	Close Open
Management	Hide DHCP Parameter	Close Open
	Source IP Set	ingress egress
		A 1
System Info		Apply
General Setup		
IP Setup	Port Table	
Port Setup	Port	Relay Enable
DHCP server	*	
DHCP-Relay		
Port Information		Modify Cancel
		Modily Gancer

4.1.7 Port Information

To view port information, select **Basic Setting**>**Port Information** in the function menu bar.

Basic Setting	🔵 🕘 Port In	formation		
Advanced Application	Port	link Status	Receive bit/sec	Transmit bit/sec
, avanoca / ppiloadon	GE0/0/1	down	0	0
Management	GE0/0/2	up	6.37Kbps	24.11Kbps
	GE0/0/3	down	0	0
	GE0/0/4	down	0	0
System Info	GE0/0/5	down	0	0
General Setup	GE0/0/6	down	0	0
IP Setup	GE0/0/7	down	0	0
Port Setup	GE0/0/8	down	0	0
DHCP server	GE0/0/9	down	0	0
DHCP-Relay	GE0/0/10	down	0	0
Port Information	GE0/0/11	down	0	0
	GE0/0/12	down	0	0
	GE0/0/13	down	0	0
	GE0/0/14	down	0	0
	GE0/0/15	down	0	0
	GE0/0/16	down	0	0
	GE0/0/17	down	0	0
	GE0/0/18	down	0	0
	GE0/0/19	down	0	0
	GE0/0/20	down	0	0
	GE0/0/21	down	0	0
	GE0/0/22	down	0	0
	GE0/0/23	down	0	0
	GE0/0/24	down	0	0
	GE0/1/1	down	0	0
	GE0/1/2	down	0	0
	Total		6.37Kbps	24.11Kbps

4.2 Advanced Application

Choose Advanced Application, and the function menu bar shows configuration web pages for VLAN, MAC Address Forwarding, Loopback Detection, Spanning Tree Protocol, Bandwidth Control, Broadcast Storm Control, Mirroring, Link Aggregation, PoE Settings, PoE Scheduling, PDM, Classifier, Policy Rule, Queuing Method, Multicast, IPv6 Multicast, Dos attack protect, DHCP Snooping Setting, SNTP Setting, LLDP Protocol, AAA, EEE, ARP Safeguarding, Port Isolation, MTU, and Watch Dog.

Basic Setting
Advanced Application
Management
2
MLAN
VLAN
MAC Address Forwarding
Loopback Detection
Spanning Tree Protocol
Bandwidth Control
Broadcast Storm Control
Mirroring
Link Aggregation
PoE Settings
POE Scheduling
PDM
Classifier
Policy Rule
Queuing Method
Multicast
IPv6 Multicast
Dos attack protect
DHCP Snooping Setting
SNTP Setting
LLDP Protocol
AAA
EEE
ARP Safeguarding
Port Isolation
MTU
Watch Dog

4.2.1 VLAN

To configure VLAN, select **Advanced Application**>**VLAN** in the function menu bar.

Basic Setting	COVLAN :	Statu	<u>s</u>						VL	AN Po	ort Set	<u>ttings</u>		Static VLA
Advanced Application		Γ	Search											
Management														
					_									
	The Number of	VLAN	l: 1. C	urrent	Page	: 1 of	1.							
	Index			VID				Elaps	ed Tir	ne			Sta	tus
VLAN Stress Converting	1			1				0:	27:46				Sta	atic
MAC Address Forwarding														
Cooppack Detection		1					Po	rt Num	hor					
Spanning Tree Protocol	VID				0	40	10			40				
Bandwidth Control		2	4	6	8	10	12	14	16	18	20	22	24	26
Broadcast Storm Control	1	U	U	U	U	U	U	U	U	U	U	U	U	U
wirroring	· · ·	U	U	U	U	U	U	U	U	U	U	U	U	U
Link Aggregation	VID	1	3	5	7	9	11	13	15	17	19	21	23	25
PoE Settings	VID	Port Number												
POE Scheduling	L													
PDM														
Classifier														
Policy Rule														
Queuing Method														
Multicast														
IPv6 Multicast														
Dos attack protect														
DHCP Snooping Setting														
SNTP Setting														
LLDP Protocol														
AAA														
EEE														
ARP Safeguarding														
Port Isolation														
MTU														
Watch Dog														

[Information]

Traditional Ethernet uses a common communication medium and is based on Carrier Sense Multiple Access/Collision Detect (CSMA/CD) data network communication protocol. Overloaded hosts in a LAN will cause major collisions, flooding broadcasts, subpar performance, or even the collapse of the Internet using standard Ethernet. While substantial collisions can be avoided by connecting LANs through switches, flooding broadcasts cannot be avoided because they consume a lot of bandwidth resources and could result in significant security issues.

A network topology called a Virtual Local Area Network (VLAN) is set up using a logical plan rather than a physical one. Switches use VLAN technology to manage broadcast in LANs. You can divide a physical LAN into several logical LANs, each with its own broadcast domain, by implementing VLANs. The communication between hosts on the same VLAN is similar to that of a LAN. However, hosts in separate VLANs are unable to directly connect with one another.

VLANs therefore restrict broadcast packets. Standard Ethernet is how hosts in the same VLAN communicate, while Layer 3 switches, routers, and other Internet-connected devices are the method of communication for hosts in separate VLANs.

4.2.1.1 VLAN Status

To view VLAN status, select **Advanced Application**>**VLAN**>**VLAN Status** in the function menu bar.

<u>VLAN S</u>	VLAN Port Settings Static VLAN							ic VLAN						
Ň	/LAN S	Search	ı by VI	D			Search							
The Number of	VLAN	: 1. C	urrent	Page	: 1 of	1.								
Index			VID				Elaps	ed Tin	ne			Sta	tus	
1			1				0:	27:46				Static		
VID	Port Number													
VID	2	4	6	8	10	12	14	16	18	20	22	24	26	
1	U	U	U	U	U	U	U	U	U	U	U	U	U	
· ·	U	U	U	U	U	U	U	U	U	U	U	U	U	
VID	1 3 5 7 9						13	15	17	19	21	23	25	
VID						Po	rt Num	ber						

[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]

View the VLAN of VID as 1.

C in the second	_		VL	AN Po	ort Set	<u>tings</u>		Stat	ic VLAN						
N	1	1		Search											
The Number of	VLAN	: 1. Ci	urrent	Page	: 1 of	1.									
Index			VID				Elaps	ed Tin	ne			Sta	tus		
1			1				0:	27:46				Sta	Static		
						Po	rt Num	ber							
VID	2	4	6	8	10	12	14	16	18	20	22	24	26		
	U	U	U	U	U	U	U	U	U	U	U	U	U		
1	U	U	U	U	U	U	U	U	U	U	U	U	U		
1 3 5 7 9						11	13	15	17	19	21	23	25		
VID						Po	rt Num	ber						1	

4.2.1.2 VLAN Port Settings

To configure or adjust settings related to a VLAN port, select Advanced Application>VLAN>VLAN Port Settings in the function menu bar.

CONVLAN	Port Settings			Stat	tic VLAN	VLAN Status
	Global GVRP]	
	permit vlan					
	PORT ID				\sim	
	port forbidden vlan					
		20	dd rosot de			
Show Garp In	formation:	a		21		
	01.00				D (010)	
Port	PVID	Accepta	ble Frame	Port Mode	Port GVR	P Ingress Check
· · · · · · · · · · · · · · · · · · ·		All	V arnet 1000M P	Hybrid V		
GE0/0/1	1	All				
GE0/0/2	1	All	~	Hybrid V		
GE0/0/3	1	All	~			
GE0/0/4	1	All	~			
GE0/0/5	1	All	~			
GE0/0/6	1	All	~			
GE0/0/7	1	All				
GE0/0/8	1	All				
GE0/0/9	1					
GE0/0/10	1					
GE0/0/11	1			Hybrid		
GE0/0/12	1		 			
GE0/0/13	1			Hybrid V		
GE0/0/14	1			Hybrid V		
GE0/0/15	1		¥	Hybrid V		
GE0/0/16	1		 	Hybrid V		
GE0/0/17	1					
GE0/0/18	1		¥	Hybrid V		
CE0/0/10	1					
GE0/0/20	1					
GE0/0/21	1					
GE0/0/22	1			Hybrid V		
GE0/0/23	1		 			
0E0/0/23	1					
GE0/0/24	1					
GE0/1/1	4	All				
GE0/1/2		All	Y	Hybria 🗸		

Apply Cancel

[Parameter Description]

Parameter	Description
PVID (Port VLAN ID)	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:

Parameter	Description
	Hybrid : The port can be either a tagged member or untagged member in the VLAN and can be a member port for multiple VLANs. Used to connect switches to each other and to computers.
	Trunk : The port can only be a tagged member in the VLAN and can be a member port for multiple VLANs. Typically used to connect switches to each other.
	Access : port belongs to one VLAN. Common use is to connect computer ports. The port can only be an untagged member in the VLAN and the port can only be in one VLAN, not multiple.
Port GVRP	Select enable or disable GVRP (a dynamic VLAN learning function); port mode must be Trunk mode.
Ingress Check	Enable port filtering function. If enabled, the port checks for a tagged message. If the message is untagged, it is disregarded. If disabled, all messages are allowed through.

Configuration example

- 1. Click Advanced Application > VLAN> VLAN Port Settings.
- 2. 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.
- **3.** Click Apply.

GE0/0/1	1	All	•	Hybrid 🔻	

4.2.1.3 Static VLAN

To configure a Static VLAN, select **Advanced Application**>**VLAN**>**Static VLAN** in the function menu bar.

COST Stat	ic V	LAI	N								VLA	N Po	rt Sett	tings		VLA	V Statu	15
Current																		
static																		
VLAN																		
0001 ^		C)evic	e1 P	ort Nu	Imber	[Click	for c	hangi	ng or	select	ting]						
	2	4	6	8	10	12	14	16	18	20	22	24	26					
	U	U	U	U	U	U	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	21	23	25					
	Port	Nun	nber	[Sel	ect all	- [N	one]	Т	agge	ed]	U [Ui	ntag	ged]]					
																_		
			V	LAN	List		Ľ	1					A	bb	Delet	e		
				Nar	ne		[Mod	lify	Can	cel		
\sim																		
Total 1																		
records																		

[Parameter Description]

Parameter	Description
VLAN List	VLAN group ID
Name	VLAN group name

[Configuration example]

To add and delete VLAN members:

- **1.** Click Advanced Application > VLAN> Static VLAN.
- Add a new VLAN with VLAN Group ID (VLAN List) 120, which contains untagged member ports 1 – 4 and Tagged member ports 5 - 8. The user can modify the port member by clicking on the white area below the port number.
- 3. Click Apply.

click Abb	JIY.																
COD Sta	tic V	LAI	N								VLA	N Por	rt Setting	S	VLA	N Stat	us
Current static VLAN																	
0001 ^		C)evio	:e1 P	ort N	umbe	r [Clic	k for c	hangi	ing or	select	ting]					
	2	4	6	8	10	12	14	16	18	20	22	24	26				
	U	U	Т	Т	U	U	U	U	U	U	U	U	U				
	U	U	т	Т	U	U	U	U	U	U	U	U	U				
	1	3	5	7	9	11	13	15	17	19	21	23	25				
	POI	NUI	nber	[Sei	ect al	I: - [N	lone]	T	Tagg	ed]	U [U	ntagg	ged]]				
			V	'LAN	List			120					Add	Dele	te		
				Nar	ne								Modify	Car	ncel		
Total 1																	
records																	

4.2.2 MAC Address Forwarding

To configure MAC Address Forwarding, select **Advanced Application>MAC Address Forwarding** in the function menu bar.

Deale Catting		MA	C Ad	draes	e Fon	wardi	ina	_							
Basic Setting		<u>IVIA</u>	C Au	uncas	5101	waru	nig								
Advanced Application		M	AC Ad	dress			:		1:		:	:		:	1
Management			VID								·				
			MAC T	уре		Sta	atic Ma	1C	\sim						
	P	ort (No	Blac	chole I	Mac)			1							
VLAN						·····		4							
WAC Address Forwarding			_		_			_			_				
Loopback Detection								A	dd	Cance	el				
Spanning Tree Protocol															
Bandwidth Control		De	vice1 F	Port Nu	imber	unkno	wn sou	irce ma	ic pacl	ket dro	p settin	igs]			
Broadcast Storm Control	2	4	6	8	10	12	14	16	18	20	22	24	26		
Mirroring															
Link Aggregation															
PoE Settings	1	3	5	7	9	11	13	15	17	19	21	23	25		
POE Scheduling			-												
PDM					Pon	numb	er (Ap	piy all:							
Classifier										410 x					
Policy Rule									Mod	dify					
Queuing Method											_	-			
Multicast	In	dex	Ac	tive		MAG	C Addr	ess		VIE	D	Po	rt	Status	Delete
IPv6 Multicast		1)	es		00:e0	:53:18:	3b:1d		1		ср	u	static	Delete
Dos attack protect		2	١	es		74:da	:38:a1	2d:2f		1		GE0	/0/2	dynamic	Delete
ENTR Setting															
U DP Protocol								Del	AH	Defer	- 1-				
								Del	All	Refre	sn				
FFF															
ARP Safeguarding															
Port Isolation															
MTU															
Watch Dog															
MTU Watch Dog															

[Parameter Description]

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

[Information]

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

[Configuration example]

- 1. Click Advanced Application > MAC Address Forwarding.
- **2.** Provide the MAC address, VID, choose the MAC Type and enter port number for the blackhole MAC:

Web Smart Managed PoE Switches User Manual

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

3. Unknown source MAC packet drop settings.

	Dev	vice1 F	Port Nu	mber [unknov	vn sou	rce ma	ic pack	et drop	p settin	gs]	
2	4	6	8	10	12	14	16	18	20	22	24	26
	\checkmark											
1	3	5	7	9	11	13	15	17	19	21	23	25
				Port	Numb	er [App	oly all:					
								-				
							- (Mod	lify)		

4. Click Modify.

4.2.3 Loopback Detection (Part of our Self-Healing Network Suite of

Features)

To configure Loopback Detection, select **Advanced Application**>Loopback Detection in the function menu bar. Loopback Detection allows the switch to detect loops in the network. When a loop is detected on a port, the switch will display an alert on the management interface and further block the corresponding port according to your configurations.

Basic Setting	🛯 🥥 Loopback Detection	
Advanced Application		
Management	Global State	O Fachla 🔍 Diachla
munugement	Giobal State	
	Addr-type	Multicast Broadcast
	Action	O Discarding Shutdown O None
VLAN	Interval Time(s)	10
MAC Address Forwarding	Recover Time(s)	60
Eoopback Detection	Trap	Enable Disable
Spanning rive Protocol	Log	Enable O Disable
Bandwidth Control		
Broadcast Storm Control		
Mirronng		Apply Cancel
Link Aggregation		
POE Sebeduling		
Classifier	Port	Active
Policy Pula	•	
Oucuing Method	GE0/0/1	
Wulticast	GE0/0/2	
IPu8 Multicast	GE0/0/3	
Dos attack protect	GE0/0/4	
DHCP Spooning Setting	GE0/0/5	
SNTP Setting	GE0/0/6	
LI DP Protocol	GE0/0/7	
	GE0/0/8	
EEE	GE0/0/9	
ARP Safeouarding	GE0/0/10	
Port Isolation	GE0/0/11	
MTU	GE0/0/12	
Watch Dog	GE0/0/12	
	GEDID/14	
	GEWW14	
	GE0/0/15	
	GE0/0/16	
	GE0/0/17	
	GE0/0/18	
	GE0/0/19	
	GE0/0/20	
	GE0/0/21	
	GE0/0/22	
	GE0/0/23	
	GE0/0/24	
	GE0/1/1	
	GE0/1/2	

Apply Cancel

[Parameter Description]

Parameter	Description
Interval Times	Set the interval of sending loopback detection packets.
Recover Times	Set the recovery time globally

4.2.4 Spanning Tree Protocol (Part of our Self-Healing Network

Suite of Features)

To configure Spanning Tree Protocol (STP), select **Advanced Application>Spanning Tree Protocol** in the function menu bar. According to the IEEE 802.1D standard, STP is used to create ring-free networks on the Data Link layer in a local network. A ring network can be separated from the network by using STP-enabled devices that identify loops and block ports from endlessly repeating and forwarding packets.

Basic Setting	🔵 🅘 Spanr	ning Tree l	Protocol Sta	Configuration STP/RSTP MS			
Advanced Application	Spanning Tree	Protocol	ретр				
Management	spanning rree	FIOLOCOI.	KJIF				
	Global Spanning Tree				Enable		
	Our Bridge ID				32768-00e0.5318.3b1d		
VI AN	Root Bridge ID				32768-00e0.5318.3b1d		
MAC Address Forwarding	Root Path Cost				0		
Loopback Detection	Hello Time (second)				2		
opanning Tree Protocol	Max Age (second)				20		
Bandwidth Control	Forwarding Delay (second)				0		
Broadcast Storm Control		Joiogy chair	ged miles				
Mirroring	Port	Active	Pathcost	Priority	Role	State	
Link Aggregation	GE0/0/1	enable	200000	128	designatedPort	disabled	
PoE Settings	GE0/0/2	enable	200000	128	designatedPort	forwarding	
POE Scheduling	050/0/2	enable	200000	420	designated off	disabled	
PDM	GE0/0/3	enable	200000	128	designatedPort	disabled	
Classifier	GE0/0/4	enable	200000	128	designatedPort	disabled	
Policy Rule	GE0/0/5	enable	200000	128	designatedPort	disabled	
Queuing Method	GE0/0/6	enable	200000	128	designatedPort	disabled	
Multicast	GE0/0/7	enable	200000	128	designatedPort	disabled	
Dos attack protect	GE0/0/8	enable	200000	128	designatedPort	disabled	
DHCP Snooping Setting	GE0/0/9	enable	200000	128	designatedPort	disabled	
SNTP Setting	GE0/0/10	enable	200000	128	designatedPort	disabled	
LLDP Protocol	GE0/0/11	enable	200000	128	designatedPort	disabled	
AAA	GE0/0/12	enable	200000	128	designatedPort	disabled	
EEE	GE0/0/13	enable	200000	128	designatedPort	disabled	
ARP Safeguarding	GE0/0/14	enable	200000	128	designatedPort	disabled	
Port Isolation	CE0/0/45	enable	200000	420	designated Ort	disabled	
MTU	GE0/0/15	enable	200000	128	designatedPort	disabled	
Watch Dog	GE0/0/16	enable	200000	128	designatedPort	disabled	
	GE0/0/17	enable	200000	128	designatedPort	disabled	
	GE0/0/18	enable	200000	128	designatedPort	disabled	
	GE0/0/19	enable	200000	128	designatedPort	disabled	
	GE0/0/20	enable	200000	128	designatedPort	disabled	
	GE0/0/21	enable	200000	128	designatedPort	disabled	
	GE0/0/22	enable	200000	128	designatedPort	disabled	
	GE0/0/23	enable	200000	128	designatedPort	disabled	
	GE0/0/24	enable	200000	128	designatedPort	disabled	
	GE0/1/1	enable	200000	128	designatedPort	disabled	
	GE0/1/2	enable	200000	128	designatedPort	disabled	
4.2.4.1 Spanning Tree Protocol Status

To view Spanning Tree Protocol status, select Advanced Application>Spanning Tree Protocol>Spanning Tree Protocol Status in the function menu bar.

🌙 Spàn	ning Tree I	Protocol Sta	tus	Configuration	1 STP/RSTP	
anning Tre	e Protocol: I	RSTP				
Global Spanning Tree				Enable		
	Our Bridg	je ID		32768-00e0.5318.3b1d		
	Root Bridg	ge ID		32768-00e0.5318.3	o1d	
	Root Path	Cost		0		
	Hello Time (s	iecond)		2		
	Max Age (se	econd)		20		
For	warding Dela	iy (second)		15		
Toj	pology Chan	ged Times		0		
Port	Active	Pathcost	Priority	Role	State	
GE0/0/1	enable	200000	128	designatedPort	disabled	
GE0/0/2	enable	20000	128	designatedPort	forwarding	
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	
GE0/0/16	enable	200000	128	designatedPort	disabled	
GE0/0/17	enable	200000	128	designatedPort	disabled	
GE0/0/18	enable	200000	128	designatedPort	disabled	
GE0/0/19	enable	200000	128	designatedPort	disabled	
GE0/0/20	enable	200000	128	designatedPort	disabled	
GE0/0/21	enable	200000	128	designatedPort	disabled	
GE0/0/22	enable	200000	128	designatedPort	disabled	
GE0/0/23	enable	200000	128	designatedPort	disabled	
GE0/0/24	enable	200000	128	designatedPort	disabled	
GE0/1/1	enable	200000	128	designatedPort	disabled	
GE0/1/2	enable	200000	128	designatedPort	disabled	

Parameter	Description
Root Path Cost	Configure Root Path Cost
Hello time (second)	Send Bridge Protocol Data Unit (BPDU) in packet interval
Max age (second)	Topology changes are initiated for ports that have not received a message in the time specified
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

To configure Spanning Tree, select Advanced Application>Spanning Tree Protocol>Spanning Tree configuration in the function menu bar.

Spanning Tree Co	nfiguration	Status
Spanning Tree Mode	 IEEE compatible Spanning Tree Rapid Spanning Tree Multiple Spanning Tree 	
Global Spanning Tree status	EnableDisable	
Apply Cancel		

[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 Enable or Disable		

4.2.4.3 Compatible/Rapid Spanning Tree Protocol

To configure Compatible/Rapid Spanning Tree Protocol, select Advanced Application>Spanning Tree Protocol>Compatible/Rapid Spanning Tree Protocol in the function menu bar.

Compatible/Rapid Spanning Tree Protocol Status				
Bridge Priority	32768	\checkmark		
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
•				
GE0/0/1		128	200000	
GE0/0/2		128	20000	
GE0/0/3		128	200000	
GE0/0/4		128	200000	
GE0/0/5		128	200000	
GE0/0/6		128	200000	
GE0/0/7		128	200000	
GE0/0/8		128	200000	
GE0/0/9		128	200000	
GE0/0/10		128	200000	
GE0/0/11		128	200000	
GE0/0/12		128	200000	
GE0/0/13		128	200000	
GE0/0/14		128	200000	
GE0/0/15		128	200000	
GE0/0/16		128	200000	
GE0/0/17		128	200000	
GE0/0/18		128	200000	
GE0/0/19		128	200000	
GE0/0/20		128	200000	
GE0/0/21		128	200000	
GE0/0/22		128	200000	
GE0/0/23		128	200000	
GE0/0/24		128	200000	
GE0/1/1		128	200000	
GE0/1/2	\checkmark	128	200000	\checkmark

Apply Cancel

Parameter	Description
Bridge Priority	Set bridge priority, the default instance bridge priority for 32768
Hello Time	Send Bridge Protocol Data Unit (BPDU) in packet interval
Max Age	The time the switch will wait before initiating topology changes for ports that have not received a message
Forwarding Delay	The state of the port switch time
Priority	Set port instance priority, defaults to 128
Path Cost	Configure port costs

[Configuration example]

As shown in the figure, configure Switch-A as the root bridge and S-switch-B as the designated Bridge.

The links connected by S-switch-B and S-switch-C are backup links. When the links connected by S-switch-B, S-switch-A and S-switch-C fail, the backup link will come into effect.



S-switch-A Configuration:

- 1. Configure Ethernet0/0/1 and Ethernet0/0/2 as a trunk port.
- 2. Configure spanning-tree priority as 0.
- 3. Enable RSTP globally.

S-switch-B Configuration:

- 1. Configure Ethernet0/0/1 and Ethernet0/0/2 as a trunk port.
- 2. Configure spanning-tree priority as 4096, and configure the Ethernet0/0/1 port path cost and the Ethernet0/0/2 port path cost as 10.
- **3.** Enable RSTP globally.

S-switch-C Configuration:

- **1.** Configure Ethernet0/0/1 and Ethernet0/0/2 as a trunk port.
- 2. Configure the EthernetO/O/1 port path cost and EthernetO/O/2 port path cost as 10 to ensure that the link between Switch-B and Switch-C is the main link.
- **3.** Enable RSTP globally.

4.2.4.4 Multiple Spanning Tree Protocol

To configure Multiple Spanning Tree Protocol, select Advanced Application>Spanning Tree Protocol>Multiple Spanning Tree Protocol in the function menu bar.

age:			
Hello Time		2	seconds
MAX Age		20	seconds
Forwarding Delay	1	15	seconds
Maximum hope		20	
Configuration Name			
Revision Number		0	
	1	Apply	Cancel
tance:			
Instance	0 ~		
		-	

Apply Remove Cancel

Show Mstp Instance Information:

Port	Active	External Path Cost	External Cost Default	Priority	Inner Path Cost	Inner Cost Default
•						
GE0/0/1		200000		128	200000	
GE0/0/2		20000		128	20000	
GE0/0/3	V	200000		128	200000	
GE0/0/4		200000		128	200000	
GE0/0/5		200000	2	128	200000	
GE0/0/6		200000		128	200000	
GE0/0/7		200000	2	128	200000	
GE0/0/8	V	200000	V	128	200000	
GE0/0/9		200000		128	200000	
GE0/0/10	<u>~</u>	200000		128	200000	
GE0/0/11		200000	2	128	200000	
GE0/0/12	V	200000	2	128	200000	
GE0/0/13		200000		128	200000	
GE0/0/14	2	200000		128	200000	
GE0/0/15	2	200000		128	200000	
GE0/0/16		200000	2	128	200000	
GE0/0/17	V	200000	2	128	200000	
GE0/0/18	V	200000	2	128	200000	
GE0/0/19		200000		128	200000	
GE0/0/20	2	200000		128	200000	
GE0/0/21	<u>~</u>	200000		128	200000	<u>~</u>
GE0/0/22		200000	2	128	200000	
GE0/0/23		200000	2	128	200000	
GE0/0/24		200000		128	200000	
GE0/1/1		200000		128	200000	
GE0/1/2		200000		128	200000	

Apply Cancel

Parameter	Description
Hello Time	Send BPDU in packet interval
Max age	The time the switch will wait before initiating topology changes for ports that have not received a message
Forwarding Delay	The state of the port switch time

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

4.2.5 Bandwidth Control

To configure Bandwidth Control, select **Advanced Application>Bandwidth Control** in the function menu bar.

Basic Setting	Bandwidth	Control	
Advanced Application	Port	Ingress Rate(unit: 16kbps)	Egress Rate(unit: 16kbps)
Management	*		
2	GE0/0/1	0	0
	GE0/0/2	0	0
VLAN	GE0/0/3	0	0
MAC Address Forwarding	GE0/0/4	0	0
Loopback Detection	GE0/0/5	0	0
Spanning Tree Protocol	GE0/0/6	0	0
Bandwidth Control	GE0/0/7	0	0
Broadcast Storm Control	GE0/0/8	0	0
Mirroring	GE0/0/9	0	0
Link Aggregation	GE0/0/10	0	0
POE Settings	CE0/0/10	0	
PDM	GEO/0/11	0	0
Classifier	GE0/0/12	U	0
Policy Rule	GE0/0/13	0	0
Queuing Method	GE0/0/14	0	0
Multicast	GE0/0/15	0	0
IPv6 Multicast	GE0/0/16	0	0
Dos attack protect	GE0/0/17	0	0
DHCP Snooping Setting	GE0/0/18	0	0
SNTP Setting	GE0/0/19	0	0
LLDP Protocol	GE0/0/20	0	0
FFF	GE0/0/21	0	0
ARP Safeguarding	GE0/0/22	0	0
Port Isolation	GE0/0/23	0	0
МТО	GE0/0/24	0	0
Watch Dog	GE0/1/1	0	0
	OEMIN		0
	GEU/1/2	U	U

Refresh Apply Cancel

[Information]

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]

Configure bandwidth control for port 8.

- **1.** Click Basic Setting > Bandwidth Control.
- 2. Configure port-8 Ingress Rate as 64 kbps and the Egress Rate as 128 kbps.

GE0/0/8	64		128	
GE0/0/9	0		0	
GE0/0/10	0		0	
	-	1	-	

3. Click Apply.

4.2.6 Broadcast Storm Control

To configure Broadcast Storm Control, select **Advanced Application>Broadcast Storm Control** in the function menu bar.

Basic Setting	Broadcast	Storm Contr	ol				
Advanced Application	storm-suppression m	ode	pkt 🗸				
Management							
				Apply			
				Арріу			
VLAN	Port	Broadcas	t(unit:pps)	Multicast	(unit:pps)	Unicast	(unit:r
MAC Address Forwarding	*		nns		nns		
Loopback Detection	GE0/0/1	0	ppo	0	ppo	0	
Spanning Tree Protocol	050/0/1	0	pps	0	pps	0	
Bandwidth Control	GE0/0/2	U	pps	U	pps	U	
aroadcast Storm Control	GE0/0/3	0	pps	0	pps	0	
Mirroring	GE0/0/4	0	pps	0	pps	0	
LINK Aggregation	GE0/0/5	0	pps	0	pps	0	
PUE Settings	GE0/0/6	0	pps	0	pps	0	
PDM	GE0/0/7	0	pps	0	pps	0	
Classifier	GE0/0/8	0	nns	0	nns	0	
Policy Rule	GE0/0/9	0	ppo	0	ppo	0	
Queuing Method	OEOIOIS	0	pps	0	pps	0	
Multicast	GE0/0/10	U	pps	U	pps	U	
IPv6 Multicast	GE0/0/11	0	pps	0	pps	0	
Dos attack protect	GE0/0/12	0	pps	0	pps	0	
DHCP Snooping Setting	GE0/0/13	0	pps	0	pps	0	
SNTP Setting	GE0/0/14	0	pps	0	pps	0	
LLDP Protocol	GE0/0/15	0	pps	0	pps	0	
AAA	GE0/0/16	0	nns	0	nns	0	
EEE	GE0/0/17	<u>~</u>	pps	0	pps	0	
ARP Safeguarding	GEV/0/1/	0	pps	0	pps	0	
Port Isolation	GE0/0/18	U	pps	U	pps	U	
MTU	GE0/0/19	0	pps	0	pps	0	
Watch Dog	GE0/0/20	0	pps	0	pps	0	
	GE0/0/21	0	pps	0	pps	0	
	GE0/0/22	0	pps	0	pps	0	
	GE0/0/23	0	pps	0	pps	0	
	GE0/0/24	0	pps	0	pps	0	
	GE0/1/1	0	pps	0	pps	0	
	GE0/1/2	0	nne	0	nne	0	

Refresh Apply Cancel

[Parameter Description]

Parameter	Description
Broadcast	Broadcast rate limitation (the range of 64 - 32000000, unit: pps; you must enter a multiple of 64, default is 49984)

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

[Information]

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]

To configure broadcast storm control for port 1.

- 1. Click Basic Setting > Broadcast Storm Control.
- 2. Set port 1 broadcast as 6400 pps, multicast as 3200 pps, and unicast as 3200 pps.

Port	Broadcast(unit:64	4pps)	Multicast(unit:64	pps)	Unicast(unit:64	ops)
*		pps		pps		pps
GE0/0/1	6400	pps	3200	pps	3200	pps
GE0/0/2	0	pps	0	pps	0	pps

3. Click Apply.

4.2.7 Mirroring

To configure mirroring, select **Advanced Application**>**Mirroring** in the function menu bar.

Advanced Application	Active		
Management	Monitor Po	rt 📃	
	Port	Mirrorad	Direction
VLAN			Ingross V
WAC Address Forwarding	GEOIDIT		Ingress V
Loopback Detection	GEOROT		Ingress +
Spanning Tree Protocol	GE0/0/2		Ingress V
Sandwidth Control	GE0/0/3		ingress V
Broadcast Storm Control	GE0/0/4		Ingress V
dirroring	GE0/0/5		Ingress V
Link Aggregation	GE0/0/6		Ingress V
PoE Settings	GE0/0/7		Ingress ~
POE Scheduling	GE0/0/8		Ingress ∨
PDM	GE0/0/9		Ingress 🗸
Classifier	GE0/0/10		Ingress V
Policy Rule	GE0/0/11	Ö	Ingress V
Queuing Method	GE0/0/12		Ingress V
Aulticast	GE0/0/13		Ingress V
Pv6 Multicast	GE0/0/14		Ingress V
Jos attack protect	GE0/0/15		Ingress V
DHCP Snooping Setting	GE0/0/16		Ingress V
SNTP Setting	GE0/0/17		
LDP Protocol	GE0/0/19		Ingrees V
AAA	GE0/0/10	(()())(-(-))(()(())(-(-	Ingress v
LEE	CE0/0/20		Ingress v
ARP Safeguarding	GE0/0/20	U	ingress V
Port Isolation	GE0/0/21	<u></u>	Ingress ~
410	GE0/0/22		Ingress ~
vatch Dog	GE0/0/23		Ingress ~
	GE0/0/24		Ingress V
	GE0/1/1		Ingress ∨
	GE0/1/2		Ingress V

Apply Cancel

[Parameter Description]

Parameter	Description		
Active	Select to enable or disable 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]

- **1.** Click Advanced Application > Mirroring.
- **2.** Enable mirroring; the monitoring port is port 8, the source port is port 7, and the mirror message is in both directions.
- **3.** Click Apply.

Web Smart Managed PoE Switches User Manual

Mirroring		
Active		
Monitor Port		
Port	Mirrored	Direction
*		Ingress T
GE0/0/1		Ingress T
GE0/0/2		Ingress V
GE0/0/3		Ingress T
GE0/0/4		Ingress T
GE0/0/5		Ingress T
GE0/0/6		Ingress T
GE0/0/7		Both 🔻

4.2.8 Link Aggregation

To configure link aggregation, select **Advanced Application**>**Link Aggregation** in the function menu bar. With the LAG (Link Aggregation Group) function enabled, you can aggregate multiple physical ports into a logical interface to increase link bandwidth and configure the backup ports to enhance the connection reliability. You can configure LAG in two ways:

- Static LAG: The member ports are manually added to the LAG.
- LACP (Link Aggregation Control Protocol): The switch uses LACP to implement dynamic link aggregation and disaggregation by exchanging LACP packets with its partner. LACP extends the flexibility of the LAG configuration.

Advanced Application Aggregator ID Criteria Statu Management 1 - - - T1 - - - - T2 - - - - T2 - - - - - MAC Address Forwarding - - - - - - Loopback Detection Spanning Tree Protocol T6 -<	Basic Setting		ink Aggregat	ion Status		Link Aggregat	ion Setti
Management ID T1 - - - T2 - - - - T3 - - - - - T3 -	Advanced Application	Group	Enabled Ports	Synchronized Ports	Aggregator ID	Criteria	Status
11 -	Management	T1					
vLAN T3 - - - T4 - - - - T6 - - - - Spanning Tree Protocol T6 - - - Spanning Tree Protocol T6 - - - Bandwidth Control Broadcast Storm Control T7 - - - Microing - - - - - POE Scheduling - - - - PDC Scheduling - - - - PDM Classifier - - - Policy Rule Caueuing Method - - - Muticast - - - - ProS Auticast - - - - ProS Nuticast - - - - Dres String ShTP Setting - - - ShTP Setting - - - - Dreb Solition - - - - AAA - - - - ATU - - - - AAA - - -	managomont	T2	-	-	-	-	-
VLAN T4 - - - - MAC Address Forwarding T5 - - - - Loopback Detection T6 - - - - Spanning Tree Protocol T7 - - - - Bandwidth Control T7 - - - - Broadcast Storm Control T7 - - - - Wirroring - - - - - POB Scheduling - - - - - POB Scheduling - - - - - POB Scheduling - - - - - Policy Rule - - - - - Queuing Method - - - - - Vulticast - - - - - DHCP Snoping Setting SNTP Setting - - - SNTP Setting - - - - - Port Isolation - - - - - Watch Doa - - - - -		T3		-	-		
VLAN 1 -		T4					
MAC Address Forwarding 13 - <	VLAN	TE					
Loopack Detection 10	MAC Address Forwarding	TG	-	-	-	-	-
Spanning Tree Protocol Broadcast Storm Control Mirroring Del Settings POE Settings POE Settings POE Settings POE Settings POB Cassifier Classifier Policy Rule Cueuing Method Multicast DPoS Multicast DPoS Multicast DPoS Multicast DPC Setting DHCP Sonoping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation TTU Watch Doo	Loopback Detection	10					
Bandwidth Control Bandwidth Control Bandwidth Control Init Agregation PoE Settings POE Setduling PDM Classifier Policy Rule Queuing Method Mutticast PLYG Multicast PLYG Multicast DhCP Snooping Setting SNTP Setting LLDP Protocol AAA AEEE APP Safeguarding Port Isolation TTU Wtoth Doo	Spanning Tree Protocol	17		-	-	-	-
Irradical Storm Control Mirroring Mirroring PoE Scheduling PDB PDB Classifier Policy Rule Queuing Method Multicast DicP Shooping Setting SNTP Shooping Setting SNTP Shooping Setting LLP Protocol AAA EEE APS Safeguarding Port Isolation TTU Watch Doa	Bandwidth Control	10	-	-	-	-	-
Mirroing Link Aggregation POE Setings POE Setheduling PDM Classifier Classifier Oueuing Method Multicast Dos attack protect DHCP Snooping Setting SHTP Setting LLDP Protocol AAA AEP Safeguarding Port Isolation MTU Watch Doo	Broadcast Storm Control						
Link Agregation PoE Settings PoE Settings POB Setduing PDM Classifier Policy Rule Queuing Method Muticast Ups Muticast Dos attack protect DHCP Snooping Setting DHCP Snooping Setting LIDP Protocol AAA AAA EEE APP Safeguarding Port Isolation TTU Watch Doo	Mirroring						
PoE Scheduling POM Scheduling PDM Classifier Policy Rule Queuing Method Queuing Method Muticast DPoS Mutic Post Dos attack protect DHCP Snooping Setting DHCP Snooping Setting LLP Protocol AAA EEE APP Safeguarding Port Isolation TU Wetch Doo	Link Aggregation						
POE Scheduling PDM Classifier Policy Rule Queuing Method Wulticast PV6 Multicast Dos attack protect Dos Statck protect DHCP Snooping Setting SHTP Setting LLDP Protocol AAA AAP Safeguarding Port Isolation MTU Watch Doo	PoE Settings						
PDM Classifier Policy Rule Queuing Method Muticast Pro6 Muticast Dos attack protect DHCP Snoping Setting SNTP Setting LDP Protocol AAA EEE APS afeguarding Port Isolation MTU Watch Dos	POE Scheduling						
Classifier Policy Rule Queuing Method Multicast DPoS Mutic Frotect DHCP Snooping Setting DHCP Snooping Setting LLP Protocol AAA AAA EEE APP Safeguarding Port Isolation TTU Watch Doo	PDM						
Policy Rule Queuing Method Multicast IPV6 Multicast Dos attack protect DHCP Snooping Setting ShTP Setting LLDP Protocol AAA AAR Safeguarding Port Isolation MTU Watch Doo	Classifier						
Cueuing Method Multicast Multicast Dos attack protect Dis attack protect DHCP Snooping Setting LLDP Protocol AAA AAA EEE EEE APP Safeguarding Port Isolation TTU Watch Doo	Policy Rule						
Multicast UPV6 Multicast Dos attack protect DHCP Snooping Setting LLDP Protocol AAA AAA EEE APP Safeguarding Port Isolation TTU Watch Dog	Queuing Method						
IPV6 Multicast Dos attack protect DHCP Snooping Setting LLDP Protocol AAA EEE EARP Safeguarding Port Isolation MTU Watch Doo	Multicast						
Dos attack protect DHCP Snooping Setting DHCP Snooping Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Doo	IPv6 Multicast						
DHCP Snooping Setting SNTP Setting LLDP Protocol AAA AAA EEE APP Safeguarding Port Isolation MTU Watch Dog	Dos attack protect						
SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	DHCP Snooping Setting						
LLDP Protocol AAA EEE EAP Safeguarding Port Isolation MTU Watch Dog	SNTP Setting						
AAA EEE APP Safeguarding Port Isolation TTU Watch Dog	LLDP Protocol						
EEE ARP Safeguarding Port Isolation MTU Watch Dog	AAA						
ARP Safeguarding Port Isolation MTU Watch Doo	EEE						
Port Isolation Transmission Control Co	ARP Safeguarding						
MTU Valch Dog	Port Isolation						
Watch Dog	MTU						
	Watch Dog						

4.2.8.1 Link Aggregation status

To view link aggregation status, Group ID, Enabled Ports, Synchronized Ports, Aggregator ID, Criteria, and overall Status, select **Advanced Application>Link Aggregation>Link Aggregation Status** in the function menu bar.

	ink Aggregat	ion Status		Link Aggregat	ion Setting
Group ID	Enabled Ports	Synchronized Ports	Aggregator ID	Criteria	Status
T1	-	-	-	-	-
T2	-	-	-	-	-
Т3	-	-	-	-	-
T4	-	-	-	-	-
T5	-	-	-	-	-
Т6	-	-	-	-	-
T7	-	-	-	-	-
Т8	-	-	-	-	-

4.2.8.2 Link Aggregation Setting

To set Link Aggregation, select **Advanced Application>Link Aggregation>Link Aggregation Setting** in the function menu bar.

Link Aggregation Set	ting	<u>Status</u> <u>L</u>
Port	Group ID	Port LACP Mode
GE0/0/1	none \checkmark	active 🗸
GE0/0/2	none \checkmark	active 🗸
GE0/0/3	none \checkmark	active 🗸
GE0/0/4	none 🗸	active 🗸
GE0/0/5	none 🗸	active 🗸
GE0/0/6	none \checkmark	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 🗸
GE0/0/17	none 🗸	active 🗸
GE0/0/18	none 🗸	active 🗸
GE0/0/19	none 🗸	active 🗸
GE0/0/20	none 🗸	active 🗸
GE0/0/21	none 🗸	active 🗸
GE0/0/22	none 🗸	active 🗸
GE0/0/23	none 🗸	active 🗸
GE0/0/24	none 🗸	active 🗸
GE0/1/1	none 🗸	active V
GE0/1/2	none 🗸	active V

Apply Cancel

Parameter	Description
Group ID	Add the port to the specified Aggregation Group ID
Port LACP mode	Configure port aggregation (active/passive)

4.2.8.3 Link Aggregation Control Protocol

To configure Link Aggregation Control Protocol, select Advanced Application>Link Aggregation>Link Aggregation Control Protocol in the function menu bar.

Link Aggregation Control	Protocol	Link Aggregation S
System Priority	32768	
Load-balance Mode	src-ma	o ∨
Group ID	Active	Eth-trunk Mode
T1		static 🗸
T2		static 🗸
T3		static 🗸
T4		static 🗸
T5		static 🗸
T6		static 🗸
Τ7		static 🗸
TR		statio V

Port	Port Priority
•	
GE0/0/1	128
GE0/0/2	128
GE0/0/3	128
GE0/0/4	128
GE0/0/5	128
GE0/0/8	128
GE0/0/7	128
GE0/0/8	128
GE0/0/9	128
GE0/0/10	128
GE0/0/11	128
GE0/0/12	128
GE0/0/13	128
GE0/0/14	128
GE0/0/15	128
GE0/0/16	128
GE0/0/17	128
GE0/0/18	128
GE0/0/19	128
GE0/0/20	128
GE0/0/21	128
GE0/0/22	128
GE0/0/23	128
GE0/0/24	128
GE0/1/1	128
GE0/1/2	128

Apply Cancel

Parameter	Description
System priority	Aggregation group system priority, the default is 32768 (the range is 1 - 65535)
Load-balance Mode	Configure the Aggregation Group load balancing (src-mac/dst-mac/src-dst-mac/src-ip/dst-ip/src-dst-ip)

4.2.9 PoE Settings (excludes 508834, where PoE is not supported)

To adjust settings for PoE, select Advanced Application>PoE Settings.

Basic Setting	Ob Settings	PoE Port Settings
Advanced Application		
Management	power supply	
		W
	power consumption	
VLAN	PoE status poll	enable ~
MAC Address Forwarding		
Loopback Detection		
Spanning Tree Protocol	power supply	
Bandwidth Control	power consumption	
Broadcast Storm Control	PoE status poll	
Mirroring		
Link Aggregation		Apply Cancel
PoE Settings		
POE Scheduling		
PDM		
Classifier		
Policy Rule		
Queuing Method		
Multicast		
IPv6 Multicast		
Dos attack protect		
DHCP Snooping Setting		
SNTP Setting		
LLDP Protocol		
AAA		
EEE		
ARP Safeguarding		
Port Isolation		
MTU		
Watch Dog		

4.2.9.1 PoE Settings

To configure PoE, select **Advanced Application**>**PoE Settings**.

power supply	internal power supply
power limit (1-370)	370 W
power consumption	OW
PoE status poll	enable V

[Parameter Description]

Parameter	Description
power limit	Set the limit for the overall power of PoE switch

【Configuration example】

Set the power limit to 360 W.

O E Settings	POE Port Settings
power supply	internal power supply
power consumption poe status poll	0W disable ▼
	(Apply) Cancel

4.2.9.2 PoE Port Settings

To configure settings for a PoE Port, select **Advanced Application>PoE Settings>PoE Port Settings** in the function menu bar.

🔍 🍑 PoE Port Settings 💦 刘	PoE Se	ttings												
				Dev	ice1 F	ort Nu	nber [C	Click fo	r selec	ting]				
	2	4	6	8	10	12	14	16	18	20	22	24	26	
	0	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1	3	5	7	9	11	13	15	17	19	21	23	25	
						Port I	Numbe	r PoE						
PoE Port Settings Ethernet 1000M Port[1]														
Port No. Enable Standard	Priority	Cla	ass Po	wer L	imit(1	-30):W	Po	wer Co	onsum	ption:	w	Voltag	e:V S	Status
GE0/0/1 enable ∨ ieee802.3at ∨	low N	/ 5	30)]	0					0.0	s	tatus: Port is off - Detection is in process
				F	Refre	sh N	lodify							
Show all ports information (Note: It may	take some	time to	displa	y all po	rts inf	ormatio	n, plea	ise be	patient	.)				

[Parameter Description]

Parameter	Description
Enable	Turn the port PoE power on and off; the default is enabled
Standard	Configure IEEE 802.3af or IEEE 802.3at mode; the default is IEEE 802.3at
Priority	Configure port priority as low, critical, high; the default priority is low
Power limit	Set the power limit of PoE port

[Configuration example]

Configure the PoE for port 1.



4.2.10 PoE Scheduling (Part of our Self-Healing Network Suite of Features)

To configure PoE Scheduling, select **Advanced Application>PoE Scheduling**.

Basic Setting	COP POE Sch	neduling			Configure P	ort POE Schedulin
Advanced Application	POE Scheduling	Configuration				
Management	Range Name		Daily			
	From: Week	Sun 🗸		To: Week	Sun 🗸	
VLAN	From: Time (HH:MM)	00 ~ 00	~	To: Time (HH:MM)	00 🗸 0	0 ~
MAC Address Forwarding						
Loopback Detection						
Spanning Tree Protocol			A	pply		
Bandwidth Control	Total Entries: 0					
Broadcast Storm Control	Range Name	Start Weekday	Start Time	End Weekday	End Time	
Mirroring						
Link Aggregation						
PoE Settings						
OE Scheduling						
PDM						
Classifier						
Policy Rule						
Queuing Method						
Multicast						
IPv8 Multicast						
Dos attack protect						
DHCP Snooping Setting						
SNTP Setting						
LLDP Protocol						
AAA						
EEE						
ARP Safeguarding						
Port Isolation						
MTU						
Watch Dog						

4.2.10.1 PoE Scheduling

To configure PoE Scheduling, select **Advanced Application**>**PoE Scheduling**.

onfiguration			Configure Port POE Scheduling
	Daily		
Sun 🗸		To: Week	Sun 🗸
00 ~ 00	~	To: Time (HH:MM)	00 ~ 00 ~
	A	pply	
Start Weekday	Start Time	End Weekday	End Time
	Sun V 00 V 00	Start Weekday Start Time	Start Weekday Start Time End Weekday

Parameter	Description
Range Name	Set the name for the schedule
From: Week	Set the start day
To: Week	Set the end day
From: Time (HH:MM)	Set the start time
To: Time (HH:MM)	Set the end time

[Configuration example]

Set Range Name 1 with the values shown.

POE Schedulin	cheduling ng Configui	ation			Co	onfigure Port P	OE Schedu
Range Name	1		Daily				
From: Week	Mon	\sim		To: Week	Thurs	\sim	
From: Time (HH:MM)	08	√ 30	~	To: Time (HH:MM	18	∨ 00	\sim
				Apply			

4.2.10.2 Configure Port PoE Scheduling

To configure Port PoE Scheduling, select **Advanced Application>PoE Scheduling>Configure Port PoE Scheduling** in the function menu bar.

Configure Port POE Schedu	e Port PO	E Scheduli tration	ng	POE Scheduling
From Port POE Scheduling	eth1 None	~	To Port	eth1 🗸
		App	bly	
Port		POE Sch	eduling	
eth1				Delete POE Scheduling
eth2				Delete POE Scheduling
eth3				Delete POE Scheduling
eth4				Delete POE Scheduling
eth5				Delete POE Scheduling
eth6				Delete POE Scheduling
eth7				Delete POE Scheduling
eth8				Delete POE Scheduling
eth9				Delete POE Scheduling
eth10				Delete POE Scheduling
eth11				Delete POE Scheduling
eth12				Delete POE Scheduling
eth13				Delete POE Scheduling
eth14				Delete POE Scheduling
eth15				Delete POE Scheduling
eth16				Delete POE Scheduling
eth17				Delete POE Scheduling
eth18				Delete POE Scheduling
eth19				Delete POE Scheduling
eth20				Delete POE Scheduling
eth21				Delete POE Scheduling
eth22				Delete POE Scheduling
eth23				Delete POE Scheduling
eth24				Delete POE Scheduling

[Parameter Description]

Parameter	Description
From Port	Set the start port
To Port	Set the end port

[Configuration example]

Configure PoE from Port 1 to Port 16.

Ort POE Schedu	e Port P ling Conf	OE Scho iguration	eduling	<u>PC</u>	E Scheduling
From Port POE Scheduling	eth1 None	~	To Port	eth16	~
FOE Schedding	None		Apply		

4.2.11 PDM (Part of our Self-Healing Network Suite of Features)

To configure the Powered Device Monitor (PDM) which restarts "down" devices, select **Advanced Application>PDM**.

asic Setting									
Advanced Application	PDM Configuration								
Management	From Port	eth1	\sim		To Po	rt	eth1	\sim	
	PDM State	Disabled	~		PD IP	Address]
	Poll Interval(10-300)	30		sec	Retry	Count(0-5)	2		
VLAN	Waiting Time(30,300)	00			Action		Both	~	
MAC Address Forwarding	Waning Time(50-500)	50		auc	Action		Dotti	+	
Loopback Detection									
Spanning Tree Protocol					Apply				
3andwidth Control									
Broadcast Storm Control	Port	PDM State	PD IP Addr	688	Poll Interval	Retry C	ount	Waiting Time	Action
Airroring	eth1	Disabled	0.0.0.0		30	2		15	nothing
Link Aggregation	eth2	Disabled	0.0.0.0		30	2		15	nothing
PoE Settings	eth3	Disabled	0.0.0.0		30	2		15	nothing
POE Scheduling	eth4	Disabled	0.0.0.0		30	2		15	nothing
DM	eth5	Disabled	0.0.0.0		30	2		15	nothing
Classifier	eth6	Disabled	0.0.0.0		30	2		15	nothing
Policy Rule	eth7	Disabled	0.0.0.0		30	2		15	nothing
Queuing Method	eth8	Disabled	0.0.0.0		30	2		15	nothing
Aulticast	eth9	Disabled	0.0.0.0		30	2		15	nothing
Pv6 Multicast	eth10	Disabled	0.0.0.0		30	2		15	nothing
Dos attack protect	eth11	Disabled	0.0.0.0		30	2		15	nothing
OHCP Snooping Setting	eth12	Disabled	0.0.0.0		30	2		15	nothing
SNTP Setting	eth13	Disabled	0.0.0.0		30	2		15	nothing
LDP Protocol	eth14	Disabled	0.0.0.0		30	2		15	nothing
AAA	eth15	Disabled	0.0.0.0		30	2		15	nothing
EE	eth16	Disabled	0.0.0.0		30	2		15	nothing
ARP Safeguarding	eth17	Disabled	0.0.0.0		30	2		15	nothing
Port Isolation	eth18	Disabled	0.0.0.0		30	2		15	nothing
ITU	eth19	Disabled	0.0.0.0		30	2		15	nothing
Vatch Dog	eth20	Disabled	0.0.0.0		30	2		15	nothing
	eth21	Disabled	0.0.0.0		30	2		15	nothing
	eth22	Disabled	0.0.0.0		30	2		15	nothing
	eth23	Disabled	0.0.0.0		30	2		15	nothing
	eth24	Disabled	0.0.0.0		30	2		15	nothing

Parameter	Description
From Port	Set the start port
To Port	Set the end port
PDM State	Set the PDM State (disabled and enabled)
Poll Interval	Set the poll interval, range 10 - 300 s
Retry Count	Set the retry count, range 0 - 5
Waiting Time	Set the waiting time, range 30 - 300 s
Action	Set the Action (Reset/Notify/Both)

4.2.12 Classifier

To configure Classifier, select **Advanced Application**>**Classifier** in the function menu bar.

Advanced Application Type IP Management Action Deny Action Deny Name Sublem 0 O VLAN DSCP Any Obe Sublem 0 O Jopback Detection DSCP Any Obe Synning Tree Protocol Address Cochers Broadcast Storn Control IP Protocol Cobe Minroring Address 0.0.0 PoS Settings Destination IP 0.0.0 POK Fulle Index Active Name Subitem Rule Delete Cancel Delete Dos attack protect DPP Totocol AAA	Basic Setting	Classif	fier		
Management Action Deny Imagement VLAN Name Subitem Imagement MAC Address Forwarding DSCP Imagement Imagement Loopback Detection DSCP Imagement Imagement Spanning Tree Protocol Imagement Imagement Imagement Source IP Imagement Imagement Imagement Pois Stellings Imagement Imagement Imagement Pois Stelling Imagement Imagement Imagement Pois Multicast Imagement Imagement Imagement Pois Stelling Imagement Imagement Imagement Pois Multicast Imagement Imagement Imagement Pois Stelling Imagement Imagement <th>Advanced Application</th> <th>Туре</th> <th>IP V</th> <th></th> <th></th>	Advanced Application	Туре	IP V		
Name 0 VLAN Sublism MAC Address Forwarding DSCP Loopback Detection 0 Spaning Tree Protocol Any O be ~ Bandwidth Control IP Protocol Bandwidth Control Source IP Mirroring 0.0.0 Junk Aggregation 0.0.0 POE Scheduling 0.0.0 POS Cancel Clear Index Active Name Sublism Mitrosting Dolete Causeing Method Delete Mitrosting Dolete Causeing Setting Delete Causeing Setting Delete Cancel Delete	Management	Action	Deny V		
VLAN DSCP Any Obe MAC Address Forwarding DSCP Any Obe Loopback Detection DSCP Any Obe Spanning Tree Protocol Bandwidth Control Protocol Bandwidth Control Address (Dec) Bandwidth Control Address (Dec) Bandwidth Control Destination IP 0.0.0 Mirroring Address (Dec) DeS Settings Dot 0.0 / POE Settings Dot 0.0 / POE Settings Index Active Name Subitem Rule Poletet Cancel DhCP Snooping Setting Delete SNTP Setting LDP Protocol AAA AAA		Name			
VLAN DSCP Any O be MAC Address Forwarding Loopback Detection Spanning Tree Protocol Bandwidth Control Broadcast Stom Control Source IP Miroring Address Pois Settings POK Pois Yaule Outlets Index Active Name Subitem Rule Delete Cancel Dird Multicast Dos stating Photocol AAA		Subitem	0		
MAC Address Forwarding Loopback Detection Spanning Tee Protocol Bandwidth Control Broadcast Storm Control Mirroring POE Settings POE Settings PDM Classifier PDR/Rule Clausifier PDR/Rule PDR/	VLAN	DSCP			
Loopback Detection Spanning Tree Protocol Broadcast Storm Control Broadcast Storm Control Mirroring Address Destings POE Settings POE Setting POE Valie Cassifier Policy Valie Index Active Name Sublitem Rule Delete Cancel Delet	MAC Address Forwarding	0.001			
Spanning Tree Protocol O Others (Dec) Bandwidth Control Source IP Address 0.0.0 Mirroring Destination IP Address 0.0.0 POE Settings POE Setting POM Clear Delete Cancel Delete Cancel Delete Cancel Delete Cancel	Loopback Detection	IP Protocol	All V Establish On	liy	
Bandwidth Control Broadcast Storm Control Mitroring Address Destination IP Classifier PDM Cl	Spanning Tree Protocol		Others (Dec)		
Broadcast Storm Control Mirroring Address Addres Address Addres Add	Bandwidth Control	Source IP	0000 /		
Mirroring Destination IP 0.0.0 / /	Broadcast Storm Control	Address			
Link Aggregation PoE Stetings PDM Cassilier	Mirroring	Destination IP	0.0.0.0 /		
PoE Settings PDE Settings PDE Settings PDM Cassifier Palky Kule Index Active Name SubItem Rule Delete Cancel Delete Cancel DEPOSocial Cancel C	Link Aggregation	Address			
POE Scheduling PDM Cassifier Policy Rule Cueuing Method Index Active Name SubItem Rule Delete Cancel POF Multicast POF Multicast Dos stack protect DHCP Snooping Setting LLDP Protocol AAA	PoE Settings				
PDM Cancel Clear C	POE Scheduling				
Diassifier Index Active Name Sublem Rule Delete Ocuring Method Mullicast Index Delete Cancel Delete Mullicast Delete Cancel Cancel Delete Cancel DHCP Snooping Setting LLDP Protocol AAA AAA Delete Cancel	PDM		A	pply Cancel Clear	
Policy Rule Index Active Name Subitem Rule Delete Questing Method Multicast Index <	Classifier				
Queuing Method Multicast IPv6 Multicast Dos attack protect DHCP Snooping Setting SNTP Setting LLDP Protocol AAA	Policy Rule	Index Ac	tive Name Subltem	Rule	Delete
Multicast IPv6 Multicast Dos attack protect DHCP Snooping Setting LLDP Protocol AAA	Queuing Method				
IPv6 Multicast Delete Cancel Dos attack protect DHCP Snooping Setting SNTP Setting LLDP Protocol AAA	Multicast				
Dos attack protect DHCP Snooping Setting LLDP Protocol AAA	IPv6 Multicast			Delete Cancel	
DHCP Snooping Setting SNTP Setting LLDP Protocol AAA	Dos attack protect			belete	
SNTP Setting LLDP Protocol AAA	DHCP Snooping Setting				
LLDP Protocol	SNTP Setting				
AAA	LLDP Protocol				
	AAA				
EEE	EEE				
ARP Safeguarding	ARP Safeguarding				
Port Isolation					
MTU	Port Isolation				
Watch Dog	Port Isolation MTU				

Parameter	Description
Action	Deny or Permit
Туре	IP or MAC
Action	Permit or Deny

4.2.13 Policy Rule

To configure Policy Rule, select **Advanced Application**>**Policy Rule** in the function menu bar.

Basic Setting	Olicy			
Advanced Application	Active			
Management	Classifier(s)			
	Priority	Enable 0 V		
	DSCD			
VLAN	DSCP			
MAC Address Forwarding	Egress Port		ОСРИ	
Loopback Detection	Rate limit	Enable	Kbps <16-1000000>	
Spanning Tree Protocol				
Bandwidth Control				
Broadcast Storm Control			Add Cancel Clear	
Mirroring				
Link Aggregation	Index Active	Type	Classifier(s)	Delet
PoE Settings	maon mouro	1700	chaosino (b)	00101
POE Scheduling				
PDM				
Classifier			Delete Cancel	
Policy Rule				
Queuing wethod				
Multicast				
IPv6 Multicast				
Dos attack protect				
DHCP Snooping Setting				
SNTP Setting				
LLDP Protocol				
AAA				
EEE				
ARP Safeguarding				
Port Isolation				
MTH				
MIU				

Parameter	Description
Active	Activate Classifier
Classifier(s)	Note: Classification rules must match
Priority	Choose whether to enable priority and set priority
DSCP	Choose whether to enable DSCP
Egress Port	Choose whether to enable an egress port and set
Rate limit	Choose whether to enable a rate limt and set

4.2.14 Queuing Method

To configure queuing method, select **Advanced Application>Queuing Method** in the function menu bar.

Basic Setting	C () Queu	iı	ing Meth	ing Method	ing Method	ing Method	ing Method	ing Method	ing Method
dvanced Application	Method					We	Weight	Weight	Weight
Management	method		Q0	Q0 Q1	Q0 Q1 Q2	Q0 Q1 Q2 Q3	Q0 Q1 Q2 Q3 Q4	Q0 Q1 Q2 Q3 Q4 Q5	Q0 Q1 Q2 Q3 Q4 Q5 Q6
management	SPQ 🗸								
			-						
MI ANI					Appl	Apply Cance	Apply Cancel	Apply Cancel	Apply Cancel
MAC Address Febuarding									
Loopback Detection									
Spanning Tree Protocol									
Bandwidth Control									
Broadcast Storm Control									
Mirroring									
Link Aggregation									
PoE Settings									
POE Scheduling									
PDM									
Classifier									
Policy Rule									
Queuing Method									
Multicast									
IPv6 Multicast									
Dos attack protect									
DHCP Snooping Setting									
SNTP Setting									
LLDP Protocol									
AAA									
ADD Cofeenanding									
ARP Sateguarding									
PORT ISOLATION									
Watch Dog									
watch boy									

[Parameter Description **]**

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

[Information]

- Strict-Priority (SP) and Weighted Round Robin (WRR).
 - **1.** Strict Priority Queueing



Strict Priority Queueing is specially designed to meet the demands of critical services or applications. Critical services or applications such as voice are delay-sensitive and thus require to be dequeued and sent first before packets in other queues are dequeued on a congested network. For example, four egress queues 3, 2, 1 and 0 with descending priority are configured on a port. Under the SP algorithm, the port strictly prioritizes packets from a higher-priority queue over those from a lowerpriority queue. Namely, only after packets in the highest-priority queue are emptied can packets in a lower-priority queue be forwarded. Therefore, high-priority packets are always processed before those of less priority. Medium-priority packets are always processed before low-priority packets. The lowest-priority queue is serviced only when highest-priority queues had no packets buffered. Disadvantages of SP: The SP queueing method gives absolute priority to high-priority packets over lowpriority traffic, so it should be used with care. The moment a higher-priority packet arrives in its queue, servicing of the lower-priority packets is interrupted in favor of the higher-priority queue; packets can also be dropped if the amount of highpriority traffic is too great to be emptied within a short time.

2. Weighted Round Robin



The WRR queue-scheduling algorithm ensures every queue receives guaranteed service time by taking turns according to a schedule determined by weighted values. Assume a 100-M port has four egress queues with four weight values w3, w2, w1 and w0 and the corresponding values 25, 15, 5 and 5 that reflect the proportion of resources assigned to those four queues. The queue with the lowest priority can be assured of receiving at least 10 Mbps bandwidth, which avoids the disadvantage of the SP algorithm where packets in low-priority queues may not be served for long periods of time. Another advantage of the WRR algorithm is that, though the queues are scheduled in turn, the service time for each queue is not fixed. That is, when a queue is emptied, the next queue is scheduled for service. Therefore, bandwidth resources are more fully utilized.

4.2.15 Multicast

To configure Multicast, select **Advanced Application**>**Multicast** in the function menu bar.

ic Setting	Multicast Status	Multicast Status	Multicast Status
anced Application	Index	Index VID	Index VID Port
nariement			
lagement			
N			
Address Forwarding			
back Detection			
ning Tree Protocol			
lwidth Control			
dcast Storm Control			
ring			
Aggregation			
Settings			
Scheduling			
sifier			
y Rule			
uing Method			
Cast			
attack protect			
P Snooping Setting			
P Setting			
P Protocol			
Safeguarding			
Isolation			
h Dog			
0			

4.2.15.1 Multicast Status

To view all multicast, including the static configuration and the multicast that is learned through the IGMP-Snooping protocol, select **Advanced Application>Multicast>Multicast Status** in the function menu bar.

🔵 🔘 Multicast Status			Multicast Setting
Index	VID	Port	Multicast Group

4.2.15.2 Multicast Settings

To set multicast, select **Advanced Application>Multicast>Multicast Settings** in the function menu bar.

IGMP Sno	lticast iting oping:	<u>Multica</u>	<u>st Status</u>	<u>Deny VLAN</u>	IGMP Filtering Profile
	Activ	e			
	Querie	۶r			
	Host Tim	eout	0	seconds	
	IGMP Route Po	rt Forward			
Port Inform	nation:				
Port	Max Group Lim	it Fast Leave	Multicast Vlan	IGMP F	Filtering Profile
*					
GE0/0/1	506		0		
GE0/0/2	506		0		
GE0/0/3	506		0		
GE0/0/4	506		0		
GE0/0/5	506		0		
GE0/0/6	506		0		
GE0/0/7	506		0		
GE0/0/8	506		0		
GE0/0/9	506		0		
GE0/0/10	506		0		
GE0/0/11	506		0		
GE0/0/12	506		0		
GE0/0/13	506		0		
GE0/0/14	506		0		
GE0/0/15	506		0		
GE0/0/16	506		0		
GE0/0/17	506		0		
GE0/0/18	506		0		
GE0/0/19	506		0		
GE0/0/20	506		0		
GE0/0/21	506		0		
GE0/0/22	506		0		
GE0/0/23	506		0		
GE0/0/24	506		0		
GE0/1/1	506		0		
GE0/1/2	506		0		

Apply Cancel

Parameter	Description
Active	Enable IGMP snooping
Querier	Enable IGMP snooping timed query function
Host Timeout	Configure the dynamic group sowing time (default 300 s)
IGMP Route Port Forward	Enable IGMP Route Port Forward

Parameter	Description
Max Group Limit	Max learning group of configuration port (default 1020)
Fast Leave	Enable port quick-exit function (i.e., when the port receives the IGMP and leaves the message, immediately remove the port 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 by the broadcast group that is allowed in the group broadcast preview and cannot be learned by the multicast group, which is forbidden by the group broadcast preview

4.2.15.3 IGMP Snooping Deny VLAN

To preview the banned group broadcast group that is unable to learn the multicast group which is prohibited by the group preview, select **Advanced Application>Multicast>IGMP Snooping Deny VLAN** in the function menu bar.

🔵 🔘 IGMP Snoop	Ding Deny VLAN Multic	<u>ast Setting</u>
Vid	Add Del Clear	ſ
Deny VLAN(s)		
		-

Parameter	Description
Vid	VLAN ID

4.2.15.4 IGMP Filtering Profile

To add and remove the preview feature of the modified group, select Advanced Application>Multicast>IGMP Filtering Profile in the function menu bar.

Р	rofile ID			
Profile	Description			
Pro	ofile Limit	🖲 permit 🔘 den	у	
		Add Modify	Del Clear	
dex	Profile ID	Profile Description	Profile Limit	Referred Port
P	Profile ID			
Inp	ut Format	IP 🔘 MAC		
Sta	rt Address			
End	d Address			
	VLAN			
		Add	lear	

[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

[Configuration example]

As shown in the figure, host-A, host-B and host-C belong to VLAN2, VLAN3 and VLAN4, respectively. The configuration enables the three hosts to receive the data of the multicast group with the group address of 224.0.1.1 - 224.0.1.3.



1. Enable IGMP Snooping.

Add different ports to different VLANs.
 The host sends the report message to

the switch, and the switch learns the multicast group.

4. The multicast source router sends a query message to the switch, which will learn the routing port table entry.

5. The multicast source router sends a multicast traffic stream to the switch and the switch distributes it to the hosts.

4.2.16 IPv6 Multicast

To configure IPv6 Multicast, select **Advanced Application**>IPv6 Multicast in the function menu bar.

Advanced Application Management VLAN MAC Address Forwarding Loopback Detection Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Minroring Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast ILDP Protocol AAA EEE ARP Safeguarding Port Indiation MTU Wath Dog	Basic Setting	() IPv6 Multicast	Status		
Management VLAN MAC Address Forwarding Loopback Detection Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation PoE Scheduling PDM Classifier Policy Rule Queuing Method Multicast PV6 Multicast Dos anach protect DHCP Snooping Setting SINTP Setting LLDP Protocol AAA EE ARP Safeguarding Port Isolation MTU Watch Dog	Advanced Application	Index	VID	Port	
Warragement VLAN MAC Address Forwarding Loopback Detection Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation PoE Scheduling PDM Classifier Policy Rule Queuing Method Multicast PVS Anteck protect DDs anteck protect DHCP Snooping Setting SINTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog					
VLAN MAC Address Forwarding Loopback Detection Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation PoE Scheduling POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast Prof Nulticast Dis attack protect DHCP Snooping Setting SINTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Management				-
VLAN MAC Address Forwarding Loopback Detection Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast Prof Multicast Dros stateck protect DHCP Snooping Setting SINTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog					
VLAN MAC Address Forwarding Loopback Detection Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast PV6 Multicast Dos attack protect DHCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog					
MAC Address Forwarding Loopback Detection Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast PV6 Multicast DHCP Snooping Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	VLAN				
Loopback Detection Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queeing Method Muticast PV6 Mutticast DHCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	MAC Address Forwarding				
Spanning Tree Protocol Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast Pv6 Multicast Dos anack protect DDFC Psnooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Loopback Detection				
Bandwidth Control Broadcast Storm Control Mirroring Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast PV6 Multicast Dos anack protect DBCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Spanning Tree Protocol				
Broadcast Storm Control Mirroring Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Mutticast PVG Mutticast Dos attack protect DHCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Bandwidth Control				
Mirroring Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast PV6 Multicast DFV6 Multicast DBS Adducted DHCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Broadcast Storm Control				
Link Aggregation PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast IPv6 Multicast Dos attack protect DHCP Snooping Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Mirroring				
PoE Settings POE Scheduling PDM Classifier Policy Rule Queuing Method Muticast IPv6 Mutticast Dos mask protect DHCP Snooping Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Link Aggregation				
POE Scheduling PDM Classifier Policy Rule Queuing Method Multicast Dv6 Multicast Dv6 Multicast Db7 Shooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	PoE Settings				
PDM Classifier Policy Rule Queuing Method Multicast PV6 Multicast Dos anack protect DHCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	POE Scheduling				
Classifier Policy Rule Queuing Method Multicast PV6 Multicast Dos anack protect DHCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	PDM				
Policy Rule Queuing Method Multicast IPv6 Multicast Dos attack protect DB CP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Classifier				
Queuing Method Multicast IPv6 Multicast Dos stack protect DHCP Snooping Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Policy Rule				
Multicast IPv6 Multicast Dos attack protect DHCP Snooping Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Queuing Method				
IPv6 Multicast Dos attack protect DHCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Multicast				
Dos attack protect DHCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	IPv6 Multicast				
DHCP Snooping Setting SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	Dos attack protect				
SNTP Setting LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	DHCP Snooping Setting				
LLDP Protocol AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	SNTP Setting				
AAA EEE ARP Safeguarding Port Isolation MTU Watch Dog	LLDP Protocol				
EEE ARP Safeguarding Port Isolation MTU Watch Dog	AAA				
ARP Safeguarding Port Isolation MTU Watch Dog	EEE				
Port Isolation MTU Watch Dog	ARP Safeguarding				
MTU Watch Dog	Port Isolation				
Watch Dog	MTU				
	Watch Dog				

4.2.16.1 IPv6 Multicast Status

To view all IPv6 multicast groups, select **Advanced Application>IPv6 Multicast>IPv6 Multicast Status** in the function menu bar.

🔍 🥥 IPv6 Multicast Status 💦 🔪			IPv6 Multicast Setting
Index	VID	Port	IPv6 Multicast Group

4.2.16.2 IPv6 Multicast Setting

To configure IPv6 Multicast, select **Advanced Application**>IPv6 Multicast>IPv6 Multicast Setting in the function menu bar.

🔵 🔘 IPv6 Multi	cast Setting	IPv	6 Multicast Status	Deny VLAN
MLD Snooping:				
	Active			
	Querier			
	Host Timeout	300 sec	onds	
MLD F	Route Port Forward			
Port Information:				
D-4	1	5-11-		
Port	Max Group Limit	Fast Leave	IPv6 Multicast	Vian
*				
GE0/0/1	506		0	
GE0/0/2	506		0	
GE0/0/3	506		0	
GE0/0/4	506		0	
GE0/0/5	506		0	
GE0/0/6	506		0	
GE0/0/7	506		0	
GE0/0/8	506		0	
GE0/0/9	506		0	
GE0/0/10	506		0	
GE0/0/11	506		0	
GE0/0/12	506		0	
GE0/0/13	506		0	
GE0/0/14	506		0	
GE0/0/15	506		0	
GE0/0/16	506		0	
GE0/0/17	506		0	
GE0/0/18	506		0	
GE0/0/19	506		0	
GE0/0/20	506		0	
GE0/0/21	506		0	
GE0/0/22	506		0	
GE0/0/23	506		0	
GE0/0/24	506		0	
GE0/1/1	506		0	
GE0/1/2	506		0	

Apply Cancel

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)

Parameter	Description
MLD Route Port Forward	Enable or disable MLD Route Port Forward
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]

MLD Snooping:	ticast Setting		<u>IPv6 M</u>	<u>Iulticast Status</u>	<u>Deny VLAN</u>
	Active				
	Querier				
	Host Timeout	300	second	ls	
MLC	Route Port Forward		l		
Port Information	:				
Port	Max Group Limi	it Fasi	t Leave	IPv6 Multicas	t Vlan
*					
GE0/0/1	507		 Image: A start of the start of	1	-
			_	-	₹

4.2.16.3 MLD Snooping Deny VLAN

To configure MLD Snooping Deny VLAN, select **Advanced Application>IPv6 Multicast>MLD Snooping Deny VLAN** in the function menu bar.

C 🥥 MLD Snoop	ng Dney VLAN IPv6 Multicast Setting
Vid	Add Del Clear
Deny VLAN(s)	

Parameter	Description
Vid	VLAN ID

4.2.17 DoS Attack Protect

To configure DoS Attack Protect, select **Advanced Application**>**Dos Attack Protect** in the function menu bar.

Basic Setting	Oos Attack Protect				
Advanced Application	dos attack control:				
Management	Dos attack packets class			dro	p Active
	src mac and dst mac equal				
	src ip and dst ip equal				
VLAN	UDP with sport and dport equal				
MAC Address Forwarding	TCP with sport and dport equal				
Loopback Detection	ICMPv4 payload maxinum length				512
Spanning Tree Protocol	ICMPv6 payload maxinum length			Π	512
Bandwidth Control	TCP control flags and sequence equal 0				
Broadcast Storm Control	TCP syn packets sport 0-1023 applies to	unfragmen	ited	_	
Mirroring	packets	anginor			
Link Aggregation	enable dos attack ip first fragments			Π	
PoE Settings	check minimum size of ipv6 fragments			Π	1240
POE Scheduling	fragmented icmp packets			Π	
PUM	TCP fragments with offset value of 1(*8)			H	
Dolicy Dule	TCP with SYN & FIN bits			H	
Queuing Method	TCP with FIN.URG and PSH bits and secu	uence equ	al O		
Multicast	TCP frist fragments with minimum tcp hea	der length		П	20
IPv6 Multicast		uor rongin		_	
Dos attack protect		Apply	Cancel	Г	
DHCP Snooping Setting		11.0			
SNTP Setting					
LLDP Protocol					
AAA					
EEE					
ARP Safeguarding					
Port Isolation					
MTU					
Watch Dog					

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

4.2.18 DHCP Snooping Setting

To configure DHCP Snooping, select **Advanced Application**>**DHCP Snooping Setting** in the function menu bar.

Basic Setting	DHCP Snooping Se	tting	IP Source Gu
Advanced Application	DHCP Snooping Enable	Close O Open	
Management		e contre e optim	
	Dert	Trust	Mavalianta
	Poli	ITUSE	Maxcuents
VLAN	05000		
MAC Address Forwarding	GE0/0/1		2048
Loopback Detection	GE0/0/2		2048
Spanning Tree Protocol	GE0/0/3		2048
Bandwidth Control	GE0/0/4		2048
Broadcast Storm Control	GE0/0/5		2048
Mirroring	GE0/0/6		2048
Link Aggregation	GE0/0/7		2048
PoE Settings	GEORGIA		2040
POE Scheduling	GE0/0/8		2048
PDM	GE0/0/9		2048
Classifier	GE0/0/10		2048
Policy Rule	GE0/0/11		2048
Queuing Method	GE0/0/12		2048
Multicast	GE0/0/13		2048
IPv6 Multicast	GE0/0/14		2048
DUCD Seconian Setting	CEO/O/AE		2040
Shurp Shooping Setting	GE0/0/15		2048
LI DP Protocol	GE0/0/16		2048
	GE0/0/17		2048
FFF	GE0/0/18		2048
ARP Safeguarding	GE0/0/19		2048
Port Isolation	GE0/0/20		2048
MTU	GE0/0/21		2048
Watch Dog	GE0/0/22		2048
	GE0/0/23		2049
	GLUIUIZJ		2040
	GE0/0/24		2048
	GE0/1/1		2048
	GE0/1/2		2048

4.2.18.1 DHCP Snooping Setting

To configure DHCP Snooping, select Advanced Application>DHCP Snooping Setting>DHCP Snooping Setting in the function menu bar. Today's networks can be large and complicated. If the number of wireless network devices exceeds the number of assigned or available IP addresses or if a wireless device's location changes, it becomes necessary to update the corresponding IP address. One way to do this is through Dynamic Host Configuration Protocol (DHCP), the network configuration protocol optimized and developed based on BOOTP.

Web Smart Managed PoE Switches User Manual

DHCP Snooping Settin	g)	IP Source
Snooping Enable	Close O Open	
Port	Trust	Maxclients
±		
GE0/0/1		2048
GE0/0/2		2048
GE0/0/3		2048
GE0/0/4		2048
GE0/0/5		2048
GE0/0/6		2048
GE0/0/7		2048
GE0/0/8		2048
GE0/0/9		2048
GE0/0/10		2048
GE0/0/11		2048
GE0/0/12		2048
GE0/0/13		2048
GE0/0/14		2048
GE0/0/15		2048
GE0/0/16		2048
GE0/0/17		2048
GE0/0/18		2048
GE0/0/19		2048
GE0/0/20		2048
GE0/0/21		2048
GE0/0/22		2048
GE0/0/23		2048
GE0/0/24		2048
GE0/1/1		2048
GE0/1/2	Π	2048

Apply Cancel

[Parameter Description]

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

【Configuration Example】

DHCP Snooping Set	tting	IP Source Guard
DHCP Snooping Enable	Close Open	
Port	Trust	Maxclients
*		
GE0/0/1		2048
	_	

4.2.18.2 IP Source Guard

To configure IP Source Guard, select **Advanced Application>DHCP Snooping Setting>IP Source Guard** in the function menu bar.

ystem security settings	-					
Port		Mode	;			
*	[Disable	\sim			
GE0/0/1		Disable	\sim			
GE0/0/2		Disable	\sim			
GE0/0/3		Disable	\sim			
GE0/0/4		Disable	\sim			
GE0/0/5		Disable	\sim			
GE0/0/6		Disable	\sim			
GE0/0/7		Disable	\sim			
GE0/0/8		Disable	~			
GE0/0/9		Disable	\sim			
GE0/0/10		Disable	\sim			
GE0/0/11		Disable	\sim			
GE0/0/12		Disable	\sim			
GE0/0/13		Disable	\sim			
GE0/0/14		Disable	\sim			
GE0/0/15		Disable	\sim			
GE0/0/16		Disable	\sim			
GE0/0/17		Disable	\sim			
GE0/0/18		Disable	\sim			
GE0/0/19		Disable	\sim			
GE0/0/20		Disable	\sim			
GE0/0/21		Disable	\sim			
GE0/0/22		Disable	\sim			
GE0/0/23		Disable	\sim			
GE0/0/24		Disable	\sim			
GE0/1/1		Disable	\sim			
GE0/1/2		Disable	~			
	110					
	modify cancel					
dd IP-MAC-PORT-VLAN binding	g entry			bindAdm	In	
IP Address						
MAC Address (H:H:H:H:H:H)		 :	1			
Port			 l			
VIANID						
VEANID						
	add cancel					
inding table				Or	e Click Unbinding	

Refresh

Parameter	Description	
Mode	Setting the Mode (Disable, IP, IP+MAC, IP+MAC+VLAN)	

4.2.19 SNTP Setting

To configure SNTP, select **Advanced Application**>**SNTP Setting** in the function menu bar.

Basic Setting	SNTP Setup			
Advanced Application	SNTP Client Enable			
Management				
			1	
		Apply		
VLAN				
MAC Address Forwarding	SNTP Client Mode	broadcast V		
Loopback Detection	SNTP Client Poll Interval	1000	(64~1024)	
Spanning Tree Protocol	SNTP Client Petransmit Times	2	(1~10)	
Bandwidth Control	SNTD Client Determent Internal		(1.10)	
Broadcast Storm Control	SNTP Client Retransmit Interval	30	(3~30)	
Mirroring	SNTP Client Broadcast Delay	3	(1~9999)ms	
Link Aggregation	MD5 Authentication Enable			
PoE Settings	Encrypt Enable			
POE Scheduling	SNTP Server IP Address		(X.X.X.X)	
PDM	Backup Server IP Address		(X.X.X.X)	
Classifier	SNTP Server Key			
Policy Rule				
Queuing Method				
Multicast		Apply Ref	resh	
IPv6 Multicast				
Dos attack protect	Authentication Key List			
DHCP Snooping Setting			T .	
SNTP Setting	KeyID Key		Truste	d
LLDP Protocol			YES	/
AAA	No Authentication Key configed.			
EEE				
ARP Safeguarding	1	AJJ W.J.C. D.	1 0-1411	
Port Isolation	l	Add Modify De	Delkii	
мти	Valid Server List			
Watch Dog	valiu server List			
	Server IP	Wild	lcard	
	No Valid server configed.			

Add Del DelAll

Parameter	Description	
SNTP Client Enable	Enable or disable SNTP Client	
SNTP Client Mode	SNTP Client Mode: broadcast, anycast, multicast, unicast	
SNTP Client Poll Interval	The interval that SNTP Client sends requests to the SNTP Server	
SNTP Client Retransmit Times	If SNTP Client does not receive a response within a certain period after sending a request, it will resend the request until the number of retransmissions exceeds the set value	
SNTP Client Retransmit Interval	The interval that SNTP Client resends requests to the SNTP Server	
SNTP Client Broadcast Delay	Set SNTP Client Broadcast Delay times	
MD5 Authentication Enable	Enable or disable MD5 Authentication	
Encrypt Enable	Enable or disable Encrypt	
SNTP Server IP Address	Set SNTP Server IP Address	
Backup Server IP Address	Set Backup Server IP Address	

Parameter	Description	
SNTP Server Key	Set SNTP Server Key	

[Information]

SNTP Client receives and transmits messages from any SNTP Server when the work mode of the 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).
4.2.20 LLDP Protocol

To configure LLDP, select **Advanced Application**>**LLDP Protocol** in the function menu bar.

Basic Setting	COLLUP Stat	us			LLDP Setting
Advanced Application	Port	Mode	TxPkts	RxPkts	Neighbours
	GE0/0/1	Disabled	-	-	-
Management	GE0/0/2	Disabled	-	-	-
	GE0/0/3	Disabled	-	-	-
	GE0/0/4	Disabled	-	-	-
VLAN	GE0/0/5	Disabled	-	-	-
MAC Address Forwarding	GE0/0/6	Disabled	-		
Loopback Detection	GE0/0/7	Disabled	-	-	-
Spanning Tree Protocol	GE0/0/8	Disabled	-	-	-
Bandwidth Control	GE0/0/9	Disabled	-		
Broadcast Storm Control	GE0/0/10	Disabled	-	-	-
Mirroring	GE0/0/11	Disabled	-	-	-
Link Aggregation	GE0/0/12	Disabled	-	-	-
PoE Settings	GE0/0/13	Disabled	-	-	-
POE Scheduling	GE0/0/14	Disabled	-	-	-
PDM	GE0/0/15	Disabled	-	-	-
Classifier	GE0/0/16	Disabled	-	-	-
Policy Rule	GE0/0/17	Disabled	-	-	-
Queuing Method	GE0/0/18	Disabled	-	-	-
Multicast	GE0/0/19	Disabled	-	-	-
IPv6 Multicast	GE0/0/20	Disabled	-	-	-
Dos attack protect	GE0/0/21	Disabled	-	-	-
DHCP Snooping Setting	GE0/0/22	Disabled	-	-	-
SNTP Setting	GE0/0/23	Disabled	-		-
LOP Protocol	GE0/0/24	Disabled	-	-	-
AAA	GE0/1/1	Disabled	-	-	-
EEE	GE0/1/2	Disabled	-	-	-
ARP Safeguarding					
Port Isolation					
MTU					
Watch Dog					

4.2.20.1 LLDP Status

To view LLDP status, select **Advanced Application>LLDP Protocol>LLDP Status** in the function menu bar.

COLLEDP Status				LLDP Setting
Port	Mode	TxPkts	RxPkts	Neighbours
GE0/0/1	Disabled	-	-	-
GE0/0/2	Disabled	-	-	-
GE0/0/3	Disabled	-	-	-
<u>GE0/0/4</u>	Disabled	-	-	-
<u>GE0/0/5</u>	Disabled	-	-	-
GE0/0/6	Disabled	-	-	-
GE0/0/7	Disabled	-	-	-
GE0/0/8	Disabled	-	-	-
GE0/0/9	Disabled	-	-	-
GE0/0/10	Disabled	-	-	-
GE0/0/11	Disabled	-	-	-
GE0/0/12	Disabled	-	-	-
GE0/0/13	Disabled	-	-	-
GE0/0/14	Disabled	-	-	-
GE0/0/15	Disabled	-	-	-
GE0/0/16	Disabled	-	-	-
GE0/0/17	Disabled	-	-	-
GE0/0/18	Disabled	-	-	-
GE0/0/19	Disabled	-	-	-
GE0/0/20	Disabled	-	-	-
GE0/0/21	Disabled	-	-	-
GE0/0/22	Disabled	-	-	-
GE0/0/23	Disabled	-	-	-
GE0/0/24	Disabled	-	-	-
<u>GE0/1/1</u>	Disabled	-	-	-
GE0/1/2	Disabled	-	-	-

4.2.20.2 LLDP Setting

To configure LLDP, select **Advanced Application>LLDP Protocol>LLDP Setting** in the function menu bar.

Active		
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 V
GE0/0/7		Disable V
GE0/0/8		Disable V
GE0/0/9		Disable V
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 ~
GE0/0/17		Disable ~
GE0/0/18		Disable ~
GE0/0/19		Disable ~
GE0/0/20		Disable ~
GE0/0/21		Disable ~
GE0/0/22		Disable ~
GE0/0/23		Disable ~
GE0/0/24		Disable ~
GE0/1/1		Disable ~
GE0/1/2		Disable V

4.2.21 AAA

To configure AAA, select **Advanced Application**>**AAA** in the function menu bar.

S00) Resuthentication is a second	on Timer Max User(s
n Reauthenticatio	on Timer Max User(s
n Reauthenticatio	on Timer Max User(s
an Reaumentication	on liner Max User(s
3600	
1.65(3)	econds
3000 5	econds 64
3600 se	econds 64
3600 si	econds 64
3600 se	econds 64
3600 se	econds 64
3600 94	econds 64
3600 se	econds 64
3600 se	econds 64
3600	econds 64
3600	econds 64
3600	econds 64
2600	econda 64
3600 8	econds 04
3000 8	econds 04
3600 si	econds 04
3600 se	econds 64
3600 54	econds 64
3600 54	econds 64
3600 54	econds 64
3600	econds 64
3600	econds 64
3600	econda 64
	3600 s 3600 s 3600 s 3600 s 3600 s 3600 s 3600 s 3600 s

Apply Cancel

4.2.21.1 802.1x

To configure 802.1x, select **Advanced Application**>**AAA**>**802.1x** in the function menu bar.

	EAP For Qui	vardin et Peri	g Mode d		eap-finish 0seconds(0-600)			
		_						
Port	Active		Port Contr	rol	Reauthentication	Reauthent	ication Timer	Max User(
*	disable	~	auto				seconds	
GE0/0/1	disable	<u> </u>	auto	~	Off ~	3600	seconds	64
GE0/0/2	disable	~	auto	~	Off V	3600	seconds	64
GE0/0/3	disable	~	auto	~	Off ~	3600	seconds	64
GE0/0/4	disable	~	auto	~	Off ~	3600	seconds	64
GE0/0/5	disable	\sim	auto	\sim	Off ~	3600	seconds	64
GE0/0/6	disable	\sim	auto	\sim	Off ~	3600	seconds	64
GE0/0/7	disable	\sim	auto	\sim	Off 🗸	3600	seconds	64
GE0/0/8	disable	\sim	auto	\sim	Off 🗸	3600	seconds	64
GE0/0/9	disable	\sim	auto	\sim	Off 🗸	3600	seconds	64
GE0/0/10	disable	\sim	auto	\sim	Off 🗸	3600	seconds	64
GE0/0/11	disable	\sim	auto	\sim	Off 🗸	3600	seconds	64
GE0/0/12	disable	\sim	auto	\sim	Off 🗸	3600	seconds	64
GE0/0/13	disable	\sim	auto	\sim	Off 🗸	3600	seconds	64
GE0/0/14	disable	\sim	auto	~	Off V	3600	seconds	64
GE0/0/15	disable	\sim	auto	~	Off V	3600	seconds	64
GE0/0/16	disable	\sim	auto	~	Off V	3600	seconds	64
GE0/0/17	disable	\sim	auto	~	Off V	3600	seconds	64
GE0/0/18	disable	\sim	auto	~	Off V	3600	seconds	64
GE0/0/19	disable	\sim	auto	~	Off V	3600	seconds	64
GE0/0/20	disable	\sim	auto	\sim	Off ~	3600	seconds	64
GE0/0/21	disable	\sim	auto	\sim	Off V	3600	seconds	64
GE0/0/22	disable	\sim	auto	\sim	Off V	3600	seconds	64
GE0/0/23	disable	\sim	auto	\sim	Off ~	3600	seconds	64
GE0/0/24	disable	\sim	auto	~	Off V	3600	seconds	64
GE0/1/1	disable	\sim	auto	\sim	Off V	3600	seconds	64
05040	diaabla		auto	~	Off v	3600	eeconde	64

Apply Cancel

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 until a certain time
Active	Active: disable portbased (multi) portbased (single) macbased
Port Control	Port Control: auto forceauthorized forceunauthorized

Parameter	Description
Reauthentication	After user authentication is passed, the port can be configured to require reauthentication or to periodically re-authenticate
Reauthentication Timer	Time range: 10 - 3600 seconds
Max user(s)	The maximum number of users: 1 - 100

GE0/0/1	disable	T	auto	•	Off ▼	3600	seconds	100		
									Arrent + + -	

4.2.21.2 Domain

To configure RADIUS Domain, select **Advanced Application>AAA> Domain** in the function menu bar.

Comain Radius Domain:	<u>802.1x</u>	MUSER	<u>Radius</u>	TACACS+
Active Domain Name Default Domain Radius Service Name Force Max Number		Disable		
Domain Name	[Add Clear Radius Service Name	e J	Active Delete

Delete Cancel

[Parameter Description]

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

[Information]

This function requires a username and password to authenticate a client. The username information generally includes the user's ISP information, the domain and one-to-one correspondence with the ISP. The main information domain is the domain of the user that is authenticated and accounted for by the RADIUS server.

4.2.21.3 Set Authentication

To configure Remote Authentication, select **Advanced Application**>**AAA**>**Set Authentication** in the function menu bar.



[Parameter Description **]**

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

4.2.21.4 TACACS+ Server Setup

To configure TACACS+ Server Setup, select **Advanced Application>AAA>TACACS+ Server Setup** in the function menu bar.

	TACACS+ Server Set	tup		AAA	MUSER
Auther	ntication Server				
	Authoptication	Turna			
	Autientication	туре			
	Encrypt Key	/			
	Preemption Ti	me	0 min (0-1440)		
Index	IP Address	TCP Port	Shared Secret	TimeOut	Delete
1	0.0.0.0	49		5	
2	0.0.0.0	49		5	
		······································			

Apply Cancel

[Parameter Description]

Parameter	Description		
Authenication Type	Authenication Mode: ascii, chap, pap		
Preemption Time	The time range: 0 - 1440 minutes		

4.2.21.5 Radius Server Setup

To configure RADIUS Server Setup, select **Advanced Application>AAA>Radius Server Setup** in the function menu bar.

RADIUS Server S	Setup_			AAA	MUSE
802	1P Priori	ty [
Н	3C Cams				
Band	dwidth Li	mit [
		Apply Canc	el		
dius Host:					
Host Name					
Preemption Time	0	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	Quiltab	
Accounting Server	1	0.0.0.0	1813	Switch	
	2	0.0.0.0	1813		
	_	Add Canes			
		Add Callee			
Host Ar	uthentica	tion IP Address	Account	ing IP Address	Delete

[Parameter Description]

Parameter	Description
8021P Priority	If activated and user authentication is successful, this function will modify the PVID of the user's port.
H3C Cams	If activated, this function configures the version information of transmitting clients to the RADIUS server through the RADIUS attribute client-version.
Bandwidth limit	If activated and user authentication is successful, this function will modify the bandwidth of the user's port.

4.2.22 EEE (Part of our Self-Healing Network Suite of Features)

To enable or disable the function for Energy Efficient Ethernet, select **Advanced Application>EEE** in the function menu bar.

	LLL	
Advanced Application	Port	Enable
Management	*	
	GE0/0/1	
	GE0/0/2	
VLAN	GE0/0/3	
MAC Address Forwarding	GE0/0/4	
Loopback Detection	GE0/0/5	
Spanning Tree Protocol	GE0/0/6	
Bandwidth Control	GE0/0/7	
Broadcast Storm Control	GE0/0/8	
Mirroring	GE0/0/9	
Link Aggregation	GE0/0/10	
PoE Settings	GE0/0/11	
POE Scheduling	GE0/0/12	
PDM	GE0/0/13	
Classifier	GE0/0/14	
Policy Rule	GE0/0/15	
Queuing Method	GE0/0/16	
Multicast	GE0/0/17	
IPv6 Multicast	GE0/0/18	
Dos attack protect	CE0/0/19	
DHCP Snooping Setting	GE0/0/20	
SNTP Setting	CE0/0/21	
LLDP Protocol	0500021	
AAA	GE0/0/22	
	GE0/0/23	
ARP Safeguarding	GE0/0/24	
Port Isolation		
MTU	Apply	Cancel

4.2.23 ARP Safeguarding

To prevent ARP flooding, select **Advanced Application**>**ARP Safeguarding**.

Advanced Application	Giobal Collingui	ation						
Management	ARP Anti-Flood	DISABLE	\sim		Action	drop-ar	p 🗸	
	Rate Limit	16	(1~100)pps		Recover Time	10	(0~14	140)m
VLAN				Appl	v Del			
MAC Address Forwarding	Port Rate Limit	Configurat	tion					
Loopback Detection	Po	rt	Rate Limit	1~100)pps	P	ort	Ra	te Limit(1~100)pps
Spanning Tree Protocol	GEO	/0/1	0		GE	0/0/2	0	
Bandwidth Control	OEA	0.0			00	0/0/4		
Broadcast Storm Control	GEU	10/3	<u>v</u>		GE	0/0/4	0	
Mirroring	GE0	/0/5	0		GE	0/0/6	0	
Link Aggregation	GE0	/0/7	0		GE	0/0/8	0	
PoE Settings	GE0	/0/9	0		GEO	/0/10	0	
POE Scheduling	CEA	0/11	-		050	10/12	-	
PDM	GLU	0/11	<u>v</u>			10/12	U	
Classifier	GE0/	0/13	0		GEO	/0/14	0	
Policy Rule	GE0/	0/15	0		GEO	/0/16	0	
Queuing Method	GE0/	0/17	0		GEO	/0/18	0	
Multicast	GEO	0/10	0		GEO	0/20	0	
Pv6 Multicast	OL0/	0.13	×			10120		
Dos attack protect	GE0/	0/21	0		GEO	/0/22	0	
DHCP Snooping Setting	GE0/	0/23	0		GEO	/0/24	0	
SNTP Setting	GE0	/1/1	0		GE	0/1/2	0	
LLDP Protocol				_			-	
AAA				A	pply			
EEE	ARP Anti-Flood	Entry						
ARP Safeguarding	Src MAC		Src IP	Port	VLAN	Recover 1	Time(m)	Recover MAC
Port Isolation								
VITU				Refres	h Apply			
Watch Dog								

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

4.2.24 Port Isolation

To configure Port Isolation, select **Advanced Application**>**Port Isolation**.

Basic Setting	Port Isolation				
Advanced Application	From Port To Port	From F	orward Port	to Forward Port	
Management	GE0/0/1 V GE0/0/1	GE0/0	V1 ∨	GE0/0/1 V	Add Delete
management					
	Port			Forwarding	Domain
	GE0/0/1			ethernet 0/0/1 to e	ethernet 0/1/2
VLAN	GE0/0/2			ethernet 0/0/1 to e	ethernet 0/1/2
MAC Address Forwarding	GE0/0/3			ethernet 0/0/1 to e	ethernet 0/1/2
Loopback Detection	GE0/0/4			ethernet 0/0/1 to e	ethernet 0/1/2
Spanning Tree Protocol	GE0/0/5			ethernet 0/0/1 to e	ethernet 0/1/2
Bandwidth Control	GE0/0/6			ethernet 0/0/1 to e	ethernet 0/1/2
Broadcast Storm Control	GE0/0/7			ethernet 0/0/1 to e	ethernet 0/1/2
Mirroring	GE0/0/8			ethernet 0/0/1 to e	ethernet 0/1/2
Link Aggregation	GE0/0/9			ethernet 0/0/1 to e	ethernet 0/1/2
PoE Settings	GE0/0/10)		ethernet 0/0/1 to e	ethernet 0/1/2
POE Scheduling	GE0/0/11	I		ethernet 0/0/1 to e	ethernet 0/1/2
PDM	GE0/0/12	2		ethernet 0/0/1 to e	ethernet 0/1/2
Classifier	GE0/0/13	3		ethernet 0/0/1 to e	ethernet 0/1/2
Policy Rule	GE0/0/14	4		ethernet 0/0/1 to e	ethernet 0/1/2
Queuing Method	GE0/0/15	5		ethernet 0/0/1 to e	ethernet 0/1/2
Multicast	GE0/0/16	6		ethernet 0/0/1 to e	ethernet 0/1/2
IPv6 Multicast	GE0/0/17	7		ethernet 0/0/1 to e	ethernet 0/1/2
Dos attack protect	GE0/0/18	3		ethernet 0/0/1 to e	ethernet 0/1/2
DHCP Snooping Setting	GE0/0/19)		ethernet 0/0/1 to e	ethernet 0/1/2
SNTP Setting	GE0/0/20)		ethernet 0/0/1 to e	ethernet 0/1/2
LLDP Protocol	GE0/0/21	1		ethernet 0/0/1 to e	ethernet 0/1/2
AAA	GE0/0/22	2		ethernet 0/0/1 to e	ethernet 0/1/2
EEE	GE0/0/23	3		ethernet 0/0/1 to e	ethernet 0/1/2
ARP Safeguarding	GE0/0/24	4		ethernet 0/0/1 to e	ethernet 0/1/2
Port Isolation	GE0/1/1			ethernet 0/0/1 to e	ethernet 0/1/2
MIG	GE0/1/2			ethernet 0/0/1 to e	ethernet 0/1/2
Watch Dog					

4.2.25 MTU

To configure to MTU, select **Advanced Application>MTU**.

Basic Setting	MTU		
Advanced Application	MTU	10240	(1522 ~ 10240)
Management		10240	(1322 - 10240)
		Apply	
VLAN			
MAC Address Forwarding			
Loopback Detection			
Spanning Tree Protocol			
Bandwidth Control			
Broadcast Storm Control			
Mirroring			
Link Aggregation			
PoE Settings			
POE Scheduling			
PDM			
Classifier			
Policy Rule			
Queuing Method			
Multicast			
IPv6 Multicast			
Dos attack protect			
DHCP Snooping Setting			
SNTP Setting			
LLDP Protocol			
AAA			
EEE			
ARP Safeguarding			
Port Isolation			
MTU			

Parameter	Description
MTU	Set MTU, range 1522 - 10240

4.2.26 Watch Dog (Part of our Self-Healing Network Suite of

Features)

4.2.26

To configure Watch Dog, select **Advanced Application>Watch Dog**.

Basic Setting	Watch Dog	
Advanced Application		
Management	Watch Dog Status	isable
	CPIL Busy Threshold	130DIC
VLAN		
MAC Address Forwarding	Apply Cancel	
Loopback Detection		
Spanning Tree Protocol		
Bandwidth Control		
Broadcast Storm Control		
Mirroring		
Link Aggregation		
PoE Settings		
POE Scheduling		
PDM		
Classifier		
Policy Rule		
Queuing Method		
Multicast		
IPv6 Multicast		
Dos attack protect		
DHCP Snooping Setting		
SNTP Setting		
LLDP Protocol		
AAA		
EEE		
ARP Safeguarding		
Port Isolation		
MTU		
Watch Dog		

Parameter	Description
Watch Dog Status	Enable or disable Watch Dog Status
CPU Busy Threshold	Set the CPU Busy Threshold

4.3 Management

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



4.3.1 Management and Maintenance

To upgrade firmware, restart the system and perform switch maintenance, select **Management > Management & Maintenance** in the function menu bar.

Basic Setting	Management and Maintenance			
Advanced Application	Switch Management:			
Management	Firmware Upgrade	Click Here		
	Configure Restore/Backup	Click Here		
	Restart System	Click Here		
Management & Maintenance	Switch Maintenance:	Click Here		
Diagnostic	CAIN Didg			
Syslog				

[Configuration Example]

- **1.** Firmware Upgrade.
- 2. Restart system. Restart type: Restart, Restart with Factory Defaults.

Contemport Restart System		<u>Management</u>
startup application select	Default Host (V01D01P02SP05) Secondary Host (V01D01P02SP05)	
Sele	ect restart typ	
	Apply	

3. OAM Diag, Virtual cable can be tested.

🔇 🍥 OAM Diag				Maintenance
Virtual Cable Test :		Detect		
port		Detect		
twisted-pair:	pair1	pair2	pair3	pair4
status:	NORMAL	NORMAL	NORMAL	NORMAL
locate(meters):				

4.3.2 Access Control

To set SNMP and Logins, select **Management**>Access Control in the function menu bar.

Basic Setting	Access Control		
Advanced Application			
Management	SNMP	Click Here	
management	Logins	Click Here	
Management & Maintenance			
Access Control			
Diagnostic			
Syslog			

4.3.2.1 SNMP

To configure SNMP, select **Management**> **Access Control**>**SNMP** in the function menu bar.

General Setting	Access Control	<u>User</u>
Snmp Server	ENABLE V	
All Community	public 🗸	
Community Name	public	
Access privilege	Read-write V	

rap Destination								
IP	Port	Username						
0.0.0.0	162	public						
0.0.0.0	162	public						
0.0.0.0	162	public						
0.0.0.0	162	public						
	IP 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	IP Port 0.0.0.0 162 0.0.0.0 162 0.0.0.0 162 0.0.0.0 162 0.0.0.0 162						

Delete Apply Cancel

Parameter	Description
All Community	Set All Community
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 read and also be modified
Version	Set version: v1, v2c, v3
IP	Set the IP address of the trap host

Add a group name public community, set access to Read-Write. Set host 192.168.2.3 to receive trap messages. The specified version is v2c.

Snmp Server			ENABLE V		
All Community			ublic 🗸		
Community Name			public		
Access privilege			ead-write 🗸	Read-write V	
Destin	ation	Port	Ilea	ername	
Destin reion 2c ~	ation 192.168.2.3	Port	public	ername	
Destin reion 2c ~	ation 192.168.2.3	Port 162 182	public public	ername	
Destin resion $2c \lor$ $2c \lor$	ation 192.168.2.3 U.U.U.U 0.0.0.0	Rort 162 162 162	public public public	ername	

4.3.2.2 User Information

To add a user, set a Security Level, Authentication, Privacy, Group and Password, select **Management**> Access Control>User Information in the function menu bar.

🕘 User l	nformation				SNMP Setting	
Username Security Leve Authenticatio Privacy Group	n mauth v n MD5 v DES v initial v	Passw Passw	vord			
Index	Username	SecurityLevel	Authentication	Privacy	Group	Delete
1	initialmd5	pri	MD5	DES	initial	
2	initialsha	pri	SHA	DES	initial	
3	initialnone	noauth	noauth	nopri	initial	

I

Delete Cancel

Parameter	Description
Username	SNMP username
Security Level	Noauth, auth, pri
Authentication	MD5, SHA
Privacy	DES Privacy
Group	User group name
Password	Encrypted password

Add group initial, add username user1.

Isername	user1				
curity Level	noauth 🔻				
thentication	MD5 🔻	Password	admin		
Privacy	DES V	Password	admin		
Group	initial 🔻		L		

4.3.2.3 Logins

To modify the admin password and configure ordinary users, select **Management>Access Control>Logins** in the function menu bar.

Edit admin	Access Control	Super Password
Old Password (1-32 characters)		
New Password (1-32 characters)		
Retype to confirm		
Encrypt password	0 Clear password 🗸 🗸	
User privilege (0:Guest 1:User 2-14:Operator	15 Administrator	
15:Manager)		
Mod	dify	

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

Edit Oth	er Logins				
Login	User Name	New Password	Retype to confirm	Encrypt password	User privilege
1				0 Clear word 🛛 🗸	0 Guest V
2				0 Clear word 🗸 🗸	0 Guest 🗸 🗸
3				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
4				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
5				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
6				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
7				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
8				0 Clear word 🛛 🗸	0 Guest V
9				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
10				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
11				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
12			1	0 Clear word 🛛 🗸	0 Guest 🗸 🗸
13				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
14				0 Clear word 🛛 🗸	0 Guest 🗸 🗸
15				0 Clear word 🛛 🗸	0 Guest 🗸 🗸

Apply Cancel

Parameter	Description
User privilege	0 - 1: normal; 2 - 15: administrator

Official Logins	Access Control Super Password
Edit admin	
Old Password (1-32 characters)	•••••
New Password (1-32 characters)	•••••
Retype to confirm	••••
Encrypt password	0 Clear password 🗸
User privilege (0:Guest 1:User 2-14:Operat	15 Administrator
15:Manager)	
	Modify

nin	User Name	New Password	Retype to confirm	Encrypt passwor	d	User privil	eae
1	Anne	••••	••••	0 Clear word		0 Guest	_
2				0 Clear word	~	0 Guest	·····
3				0 Clear word	2	0 Guest	```
4		1	Î	0 Clear word	$\overline{}$	0 Guest	```
5				0 Clear word	$\overline{}$	0 Guest	```
6		Ì	Î	0 Clear word	$\overline{}$	0 Guest	````
7		İ	1	0 Clear word	$\overline{}$	0 Guest	,
8		I		0 Clear word	7	0 Guest	,
9		I		0 Clear word	\sim	0 Guest	
0		1	1	0 Clear word	$\overline{}$	0 Guest	,
11		Ì	1	0 Clear word	$\overline{}$	0 Guest	`
2				0 Clear word	$\overline{\sim}$	0 Guest	```
13				0 Clear word	$\overline{}$	0 Guest	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
4		Ì	Ì	0 Clear word	7	0 Guest	```
15		Ì	İ	0 Clear word	7	0 Guest	,



4.3.2.4 Super Password

To set a Super Password, select **Management>Access Control>Super Password** in the function menu bar.

Super Password			Access Contro
Privilege		Password	
1			
2			
3			
4			
5			
6			
7			
8			-i
9			
10			
11			7
12			
13			
14			
15			
	Modify		
Edit User Privilege			
User Name	User Privilege	Input Pa	assword
	Analy Oregan		

4.3.3 Diagnostic

Display System

To display or clear the System Log, select **Management**> **Diagnostic** in the function menu bar.

Basic Setting Advanced Application Management	- Info -	c	
Management & Maintenance Access Control Diagnostic Syslog			
	System Log	Display Clear	
ſ	Configura	tion Example	
og.			



4.3.4 Syslog

To configure the Syslog, select **Management**> **Syslog** in the function menu bar.

Basic Setting	🔵 🥥 Syslog Setup		Syslog Server Setup
Advanced Application Management	Syslog	Active 💟	
Management & Maintenance	Logging type	Active	Facility
Access Control Diagnostic Syslog	System		local use 7 🔹
		Apply Cancel	

4.3.4.1 Syslog Setup

To start the logging function globally and the logging function of the corresponding module, select **Management>Syslog>Syslog Setup** in the function menu bar.

🕘 Syslog Setup 📃		Syslog Server Setup
Syslog	Active 🖉	
Logging type	Activo	Eacility
System	Active	
C) Cloth	5	
	Apply Cancel	

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

🔵 Syslog Setup		Syslog Server Setup
Syslog	Active	
Logging type	Active	Facility
System		local use 7 🔹
	Apply Cancel	

4.3.4.2 Syslog Server Setup

To set the syslog server, select **Management>Syslog>Syslog Server Setup** in the function menu bar.

🔵 Syslo	g Server	Setup		Syslog Setup
Acti	ve			
Server A	ddress	0.0.0.0		
Log Lo	evel	Level 0 🔻		
		Add Cancel C	lear	
Index	Active	IP Address	Log Level	Delete
		Delete Cance	I	

Parameter	Description	
Server Address	Syslog Server Address	
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	

[Information]

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

[Configuration Example]

Set server address to 192.168.2.100.

Sysic	og Server	Setup		Syslog Set
Acti	ive			
Server A	ddress	192.168.2.100		
Log L	evel	Level 0 V		
Index	Active	IP Address	Log Level	Delete
1	Yes	192.168.2.100	0	
		Delete Cancel		

Chapter 5 - Appendix

5.1 Technical Specifications

5.1.1 Hardware Specifications		
Standards	IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.3z, IEEE 802.3at (excluding 508834), IEEE 802.3af (excluding 508834), IEEE 802.1q, IEEE	
	802.1p	
	10Base-T: UTP category 3, 4, 5 cable (maximum 100 m)	
	100Base-Tx: UTP category 5, 5e cable (maximum 100 m)	
Network Media (Cable)	1000Base-T: UTP category 5e, 6 cable (maximum 100 m)	
	1000Base-SX:62.5μm/50μm MMF (2 m – 550 m)	
	1000Base-LX:62.5µm/50µm MMF (2 m – 550 m) or 10µm SMF (2	
	m – 5000 m)	
	• 560559: 26 (24 RJ45, 2 SFP)	
	• 561167: 10 (8 RJ45, 2 SFP)	
	• 561198: 18 (16 RJ45, 2 SFP)	
Number of Ports (Total)	• 561341: 18 (16 RJ45, 2 SFP)	
	• 561426: 28 (24 RJ45, 4 Combo [4 SFP, 4 RJ45 Uplinks])	
	• 508834: 10 (8 RJ45, 2 SFP)	
	• 562003: 10 (8 RJ45, 2 SFP)	
Transfer Method	Store-and-Forward	
	• 560559: 52 Gbps	
	• 561167: 20 Gbps	
	• 561198: 36 Gbps	
Switching Capacity	• 561341: 36 Gbps	
	• 561426: 56 Gbps	
	• 508834: 20 Gbps	
	• 562003: 20 Gbps	
MAC Address Learning	8,192	
Desket Ferrusedine Data	• 1,488,000 pps (1000 Mbps), 148,800 pps (100 Mbps), 14,880	
Packet Forwarding Rate	pps (10 Mbps)	
De cluct Duffer	• 560559, 561167, 561198, 561341: 512 kBytes	
Packet Butter	• 561426, 508834, 562003: 4.1 Mbit	
Jumbo Frame	Up to 9,216	
PoE Ports (RJ45)	• 560559: 24	

		• 561167:8
		• 561198: 16
		• 561341: 16
		• 561426: 24
		• 508834: not applicable
		• 562003: 8
PoE Budget		• 560559: 240 W
		• 561167: 140 W
		• 561198: 374 W
		• 561341: 220 W
		• 561426: 370 W
		• 508834: not applicable
		• 562003: 242 W
Power Pin Ass	ignment	1/2(+),3/6(-) (excluding 508834)
		Standard Switches
	Per Device	System Power
Indicators	Per Device	Industrial Switch 508834
		PWR1, PWR2, System Power
	Per Port	Link/Activity/Speed, PoE (excluding 508834)
Frame Filterin	g and Forward	10 Mbps: 14880pps
Rate		100 Mbps: 148800pps
		1000 Mbps: 1488000pps
		• 560559: 440 (W) x 208 (L) x 44 (H) mm (17.3 x 8.19 x 1.7 in.)
		• 561167: 280 (W) x 180 (L) x 44 (H) mm (11.02 x 7.09 x 1.73 in.)
		• 561198: 440 (W) x 208 (L) x 44 (H) mm (17.32 x 8.19 x 1.73 in.)
Dimensions (V	V x L × H)	• 561341: 440 (W) x 208 (L) x 44 (H) mm (17.32 x 8.19 x 1.73 in.)
		• 561426: 440 (W) x 208 (L) x 44 (H) mm (17.32 x 8.19 x 1.73 in.)
		• 508834: 140 (W) x 175 (L) x 55 (H) mm (5.51 x 6.89 x 2.17 in.)
		• 562003: 230 (W) x 280 (L) x 44 (H) mm (9.06 x 11.02 x 1.73 in.)
		• 560559: 90 – 260 V AC, 50 – 60 Hz
		• 561167, 561198, 561341, 562003: 100.0 – 240.0 VAC, 50 – 60
Power Supply		Hz
		• 561426: 90 – 240 V AC, 50 – 60 Hz
		• 508834: 44.0 - 57.0 VDC
Power consumption		• 560559: 260 watts (max.)
		• 561167: 163.2 watts (max.)
		• 561198: 410 watts (max.)
		• 561341: 260 watts (max.)
		• 561426: 431.7 watts (max.)
		• 508834: 8.76 watts (max.)
		• 562003 : 252 watts (max.)

	Standard Switches
Environment	Operating Temperature: 0°C – 45°C
	Storage Temperature: -40°C – 70°C
	Operating Humidity: 10% – 90% non-condensing
	Storage humidity: 5% – 90% non-condensing
	Industrial Version 508834
	Operating Temperature: -40 °C – 85°C
	Storage Temperature: -40°C – 85°C
	Operating Humidity: 5% – 95% RH non-condensing
	Storage humidity: 5% – 95% RH non-condensing

5.1.2 Software Specification

Basic function	Ethernet Setup
	STP/RSTP/MSTP
	Storm-control
	Port Monitor
	Port rate-limit
	MAC filtering
	ARP deception, network cheating
	Filtering the IP port
Three lowers of functional	Static binding IP and MAC
Three layers of functional	ARP trust port
	Static routing capacity
	Ping and Traceroute
	ACE capacity
The cocurity policy	ACL
The security policy	QoS
	DAI
VLAN	Port based VLAN
VLAN	802.1Q VLAN
	RADIUS
Safety features	TACACS+
	Preventing DoS attacks
	dot1x
	Gateway ARP deception
Application protocol	DHCP Relay
	DHCP Snooping
	DHCP Client
	FTP/TFTP

Management	HTTP WEB
	Telnet
	SSH
	Console
Other function	LLDP
	IGMP Snooping
	SNMPV1, V2c, V3
	RMON (1, 2, 3, 9)
	PoE Status
PoE Management	Power supply management mode(auto/energy/static)
	The port priority

5.2 Features and Terms Explained

VLAN

A Virtual Local Area Network, this allows network admins to maintain a virtual network to optimize devices attached to the switch for better overall performance.

MAC Address Forwarding

The ability in Layer 2 networking to control network traffic based on MAC address within VLANs.

Loopback Detection

Loopback Detection allows the switch to detect loops in the network (multiple connections from one device to another). When a loop is detected on a port, the switch will display an alert on the management interface and block the traffic on the corresponding port.

Spanning Tree Protocol (STP)

Another form of loopback discovery and protection based upon the IEEE802.1D standard.

Bandwidth Control

The ability to limit network traffic on a specific port of the switch on an inbound and/or outbound basis.

Broadcast Storm Control

Storm control and equivalent protocols allow you to rate-limit broadcast packets.

Broadcast storm control is a feature of many managed switches in which the switch intentionally ceases to forward all broadcast traffic if the bandwidth consumed by incoming broadcast frames exceeds a designated configurable threshold.

Mirroring

The ability to duplicate network traffic from one port to another, on an inbound and/or outbound basis.

Link Aggregation

The ability to link multiple ports into one logical interface to increase bandwidth.

ΡοΕ

Power over Ethernet, a technique for delivering DC power to devices over copper Ethernet cabling, eliminating the need for separate power supplies and outlets. Current standards are IEEE802.3af/at and bt.

PoE Scheduling

The ability to schedule the availability of PoE on each port of the switch on a day/time basis.

PDM

Powered Device Monitoring, a function that restarts any connected PoE device that fails to respond or send out network traffic. (Configurable on Intellinet Network Solutions Managed Switches).

Chapter 6 - Additional Information

6.1 WASTE ELECTRICAL & ELECTRONIC EQUIPMENT

DISPOSAL OF ELECTRIC AND ELECTRONIC EQUIPMENT (Applicable In the E.U. and Other European Countries With Separate Collection Systems)

ENGLISH: This symbol on the product or its packaging means that this product must not be treated as unsorted household waste. In accordance with EU Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE), this electrical product must be disposed of in accordance with the user's local regulations for electrical or electronic waste. Please dispose of this product by returning it to your local point of sale or recycling pickup point in your municipality.

DEUTSCH: Dieses auf dem Produkt oder der Verpackung angebrachte Symbol zeigt an, dass dieses Produkt nicht mit dem Hausmüll entsorgtwerden darf. In Übereinstimmung mit der Richtlinie 2012/19/EU des Europäischen Parlaments und des Rates über Elektro- und Elektronik-Altgeräte (WEEE) darf dieses Elektrogerät nicht im normalen Hausmüll oder dem Gelben Sack entsorgt werden. Wenn Sie dieses Produkt entsorgen möchten, bringen Sie es bitte zur Verkaufsstelle zurück oder zum Recycling-Sammelpunkt Ihrer Gemeinde. ESPAÑOL: Este símbolo en el producto o su embalaie indica que el producto no debe tratarse como residuo doméstico. De conformidad con la Directiva 2012/19/EU de la UE sobre residuos de aparatos eléctricos y electrónicos (RAEE), este producto eléctrico no puede desecharse se con el resto de residuos no clasificados. Deshágase de este producto devolviéndolo a su punto de venta o a un punto de recolección municipal para su reciclaje.

FRANÇAIS: Ce symbole sur le produit ou son emballage signifie que ce produit ne doit pas

être traité comme un déchet ménager. Conformément à la Directive 2012/19/EU sur les déchets d'équipements électriques et électroniques (DEEE), ce produit électrique ne doit en aucun cas être mis au rebut sous forme de déchet municipal non trié. Veuillez vous débarrasser de ce produit en le renvoyant à son point de vente ou au point de ramassage local dans votre municipalité, à des fins de recyclage.

POLSKI: Jeśli na produkcie lub jego opakowaniu umieszczono ten symbol, wówczas w czasie utylizacji nie wolno wyrzucać tego produktu wraz z odpadami komunalnymi. Zgodnie z Dyrektywą Nr 2012/19/EU w sprawie zużytego sprzętu elektrycznego i elektronicznego (WEEE), niniejszego produktu elektrycznego nie wolno usuwać jako nie posortowanego odpadu komunalnego. Prosimy o usuniecie niniejszego produktu poprzez jego zwrot do punktu zakupu lub oddanie do miejscowego komunalnego punktu zbiórki odpadów przeznaczonych do recyklingu.

ITALIANO: Questo simbolo sui prodotto o sulla relativa confezione indica che il prodotto non va trattato come un rifiuto domestico. In ottemperanza alla Direttiva UE 2012/19/EU sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE), questa prodotto elettrico non deve essere smaltito come rifiuto municipale misto. Si prega di smaltire il prodotto riportandolo al punto vendita o al punto di raccolta municipale locale per un opportuno riciclaggio.

6.2 WARRANTY

Go to Intellinet-network.com

EN MÉXICO: Póliza de Garantía Intellinet Network Solutions — Datos del importador y responsable ante el consumidor • IC Intracom México, S.A.P.I. de C.V. • Av. Interceptor Poniente # 73, Col. Parque Industrial La Joya, Cuautitlán Izcalli, Estado de México, C.P. 54730, México. • Tel. (55)1500-4500 • La presente garantía cubre los siguientes productos contra cualquier defecto de fabricación en sus materiales y mano de obra. A. Garantizamos los productos de limpieza, aire comprimido y consumibles, por 60 dias a partir de la fecha de entrega, o por el tiempo en que se agote totalmente su contenido por su propia función de uso, lo que suceda primero. B. Garantizamos los productos con partes móviles por 3 años. C. Garantizamos los demás productos por 5 años (productos sin partes móviles), bajo las siguientes condiciones: 1. Todos los productos a que se refiere esta garantía, ampara su cambio físico, sin ningún cargo para el consumidor. 2. El comercializador no tiene talleres de servicio, debido a que los productos que se garantizan no cuentan con reparaciones, ni refacciones, ya que su garantía es de cambio físico. 3. La garantía cubre exclusivamente aquellas partes, equipos o sub-ensambles que hayan sido instaladas de fábrica y no incluye en ningún caso el equipo adicional o cualesquiera que hayan sido adicionados al mismo por el usuario o distribuidor. • Para hacer efectiva esta garantía bastará con presentar el producto al distribuidor en el domicilio donde fue adquirido o en el domicilio de IC Intracom México, S.A.P.I. de C.V., junto con los accesorios contenidos en su empaque, acompañado de su póliza debidamente llenada y sellada por la casa vendedora (indispensable el sello y fecha de compra) donde lo adquirió, o bien, la factura o ticket de compra original donde se mencione claramente el modelo, número de serie (cuando aplique) y fecha de adquisición. Esta garantía no es válida en los siguientes casos: Si el producto se hubiese utilizado en condiciones distintas a las normales; si el producto no ha sido operado conforme a los instructivos de uso; o si el producto ha sido alterado o tratado de ser reparado por el consumidor o terceras personas.

6.3 REGULATORY STATEMENTS

FCC Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense. Any changes or modifications made to this equipment without the approval of the manufacturer could result in the product not meeting the Class A limits, in which case the FCC could void the user's authority to operate the equipment.

ENGLISH : This device complies with the requirements of CE 2014/30/EU (UKCA Electromagnetic Compatibility Regulations 2016) and / or 2014/35/EU (UKCA Electrical Equipment [Safety] Regulations 2016). The Declaration of Conformity for is available at:

DEUTSCH : Dieses Gerät enspricht der CE 2014/30/EU und / oder 2014/35/EU. Die Konformitätserklärung für dieses Produkt finden Sie unter:

ESPAÑOL : Este dispositivo cumple con los requerimientos de CE 2014/30/EU y / o 2014/35/EU. La declaración de conformidad esta disponible en:

FRANÇAIS: Cet appareil satisfait aux exigences de CE 2014/30/EU et / ou 2014/35/EU. La Déclaration de Conformité est disponible à:

POLSKI : Urządzenie spełnia wymagania CE 2014/30/EU I / lub 2014/35/EU. Deklaracja zgodności dostępna jest na stronie internetowej producenta:

ITALIANO : Questo dispositivo è conforme alla CE 2014/30/EU e / o 2014/35/EU. La dichiarazione di conformità è disponibile al:

support.intellinet-network.com/barcode/560559 support.intellinet-network.com/barcode/561167 support.intellinet-network.com/barcode/561198 support.intellinet-network.com/barcode/561341 support.intellinet-network.com/barcode/561426 support.intellinet-network.com/barcode/508834 support.intellinet-network.com/barcode/562003

CE





CA

North America IC Intracom America 550 Commerce Blvd. Oldsmar, FL 34677 USA Asia & Africa IC Intracom Asia 4-F, No. 77, Sec. 1, Xintai 5th Rd. Xizhi Dist., New Taipei City 221, Taiwan Europe IC Intracom Europe Löhbacher Str. 7, D-58553 Halver, Germany

All trademarks and trade names are the property of their respective owners. © IC Intracom. All rights reserved. Intellinet Network Solutions is a trademark of IC Intracom, registered in the U.S. and other countries.

INT_Web_Smart_Switch_UM_0424_REV_5.03