# FIBERROAD

# Web-based Network Management User Manual

About This Manual

#### Introduction

This document chapter includes an introduction to the Fiberroad L2+ Managed WebGUI Network Management, which also contains Fiberroad Industrial Grade Ethernet Switch and Commercial Grade Ethernet Switch Series.

#### Conventions

This document contains notices, figures, screen captures, and certain text conventions.

#### Figures and Screen Captures

This document provides figures and screen captures as examples. These examples contain sample data. This data may vary from the actual data on an installed system.

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#### Units of Measurement

Units of measurement in this publication conform to SI standards and practices.

Jan 01, 2022 Version number: 1.0

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## **Revision History**

Version	Date	Author	Reasons of Change	Section(s) Affected
1.0	2017/12/04		Initial Release	All
2.0	2022/07/4		MSTP/Port Description/Static Route/Summer Time	Portion

# Chapter 1 System Configurations

This chapter describes the port configuration in detail, including but not limit to the following:

- Administrator
- Router Table
- ARP Table
- Software Upgrade

#### 1. About Web-GUI Management

There is an embedded HTML web site residing in flash memory on CPU board of the switch, which offers advanced management features and allows users to manage the switch from anywhere on the network through a standard browser such as Mozilla Firefox or Chrome. (Note: Window IE is not supported) The Web-Based Management supports Mozilla Firefox 54.X or later, or Chrome 59.X or later. The Web browser is a program that can read hypertext.

#### 1.1 Preparing for Web Management

Before using the web management, install the Ethernet Switch on the network and make sure that any one of the PCs on the network can connect with the Ethernet through the web browser.

All of the Fiberroad Network Switch default value of IP, subnet mask, username and password are listed as below:

- IP Address: 192.168.1.6
- HTTP service: Enable
- User Name: admin
- Password: admin

← → C ▲ Not secure | 192.168.1.92/dologin.asp

Guest :

FR-7M348	BF Industrial Et	hernet Swit	ch
Username Password			Login

#### **1.2 Device Summary**

Overview the device information and port status.



L2+ Managed MAX Industrial Ethernet Switch Series



L2+ Managed Industrial Ethernet Switch with Serial Ports Series

+ C a feterer	192303-001-01-00					s) n 🖉	net)
BERROAD	4.5						~) ••
and Drivery	Steam Mile March		rie1	a statut	a subject	Access of the st	
aves Samean	Proceedings and	He BARLY	9,5	EA.0	6.6	Six and	
at a constant of the second	For all Notices and	B. Broker S. Carlo	40	14.0	6.0	Sec. and	
engeret.	Franklink Salar	85	4,9	ECO.	6/6	Sec. and	
or the lagest set	Service Triangenties	NO D D U D B	an s	100	6.00	Trease.	
Narod	Date of Time	A10101014	955	100	600	D.K	
	Ever of True	A March Monard	9,0	1.00	6.00	Server.	
	Caret far year of	2015	66,9	260	6.00	ED.K	
	Non-up/parts	Non Children 2	4.5	20.0	6.00	wow.	
			45	14.0	6/6	Sec.em	
			10,21	28.0	6.0	in m	
			497.00	ECO.	6/6	Co. and	
			970	100	6.08	Trease.	
	to apr		000	1.00	6.00	Served.	
			026	1.65	6.00	Servec	
			6010	3000	6.00	arow	
		OW Many Man	44,54	28.0	6.00	909K	
			49/37	MAR	6/6	1V	
			10,731	88.0	1.0	27	
			49,791	tro	94.89V	<b>N</b> <sup>4</sup>	

L2+ Managed Industrial Ethernet Switch Series



L2+ Managed Industrial Ethernet Switch with Optical Fiber Bypass Series



L2+ Managed Industrial Ethernet Switch Series



L2+ Managed PoE Switch Series(Commercial Grade)

#### 1.3 System - Administrator

#### 1.3.1 System-Administrator-Administrators

Add Users and its level, status and description.

Expand  Collapse	Name	Password						
Device Summary		admin		Super Administrator				
😑 System		Add User						
Administrator		Name						
Administrators		Password						
- Online Users		Confirm Password						
- Management Setting		Level	Guest User 👻					
System Log		Status	Super Administrator Senior Administrator					
Configurations		Description	Junior Administrator					
Date & Time			Guest User Cance	N				
-Summer Time								
Device Status ARP Table								
- Software Upgrade								
-Reboot								
Version Information								
Management								
Base Configuration								
Advanced								
L3 Config								
Alarm								
PoE Management								
Extended								
14			~			NI -	A	
ltem			D	escriptio	n	INO	tes	
Name/Dace	word /	ConfirmPass	word			٨٥	Needed	
Name/Pass	woru/	Commeass	word			AS	Needed	
Level			S	iper/Sen	ior/Junior/C	Suest		
				•	ion/jamon/e	50050		
Status			0	N/OFF				
Descriptior						٨с	Needed	
Description	•					AS	Needed	

Remarks: 1. A total of 16 users can be added regardless of the level

#### 1.3.2 System – Administrator - Online Users

Overview online users information

Expand  Collapse	Name	Level	Login Type	Login Information	Login Time	Description
- Device Summary	*admin	Super Administrator	web-3	:ffff:192.168.1.138	2000-01-01 00:07:08	Default Administrator
😑 System		current administrator.)				
Administrator	(married married	ourrent automations,				
Administrators				Refresh		
Online Users						
-Management Setting						
System Log						
Configurations						
-Date & Time						
Summer Time						
Device Status						
- ARP Table						
- Software Upgrade						
Reboot						
Version Information						
Management						
Base Configuration						
Advanced						
L3 Config						
Alarm						
PoE Management						
Extended						

#### Remarks: 1, Only super administrator have this privilege.

#### 1.3.3 System – Administrator – Management Setting

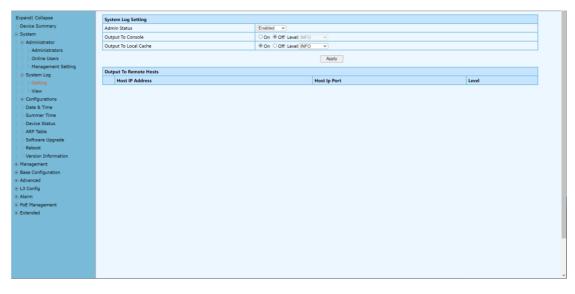
Access Timeout Setting

Login Way Setting		
mmary Console Timeout	5 <1-30> Default:5minutes	
Telnet	Enabled      Disabled Timeout 5	<1-30> Default:5minutes
trator SSH	Enabled      Disabled Timeout 5	<1-30> Default:5minutes
e Users WEB	Enabled Obisabled Timeout 5	<1-30> Default:Sminutes
igement Setting	o traves o traves interactor	CLARK RELATIONED
Log	Refres	h Apply
rations		
Time		
r Time		
Status		
le la		
e Upgrade		
Information		
int		
guration		
ement		

ltem	Description	Notes
Consolt Timeout	1-30(When enabled)	Default:5 minutes
Telnet Timeout	1-30(When enabled)	Default:5 minutes
SSH Timeout	1-30(When enabled)	Default:5 minutes
WEB Timeout	1-30(When enabled)	Default:5 minutes

#### 1.4 System Log 1.4.1 System Log – Setting

In the system log setting interface, you can view or modify system log configuration



ltem	Description	Notes
Admin Status	Enable/Disable	Default: Enable
Output To Console	ON/OFF	Default:OFF
Output To Local Cache	ON/OFF	Defalt:ON
Level	System log level, divided into 8	Default: INFO

levels according to the severity EMERG: level 0, the system cannot be used ALERT : Level 1, need to be processed immediately CRIT: Level 2, Severe State ERR: Level 3, Error Status WARNNING : Level 4, Warning Status NOTICE : Level 5, normal but important state INFO : Level 6, Notification Event DEBUG : Level 7, debugging information

Click the "Add" button, to the output to remote hosts setting.

Expand  Collapse	System Log Setting			
-Device Summary	Admin Status			
😑 System	Output To Console	Setting		
Administrator	Output To Local Cache	Host IP Address		tpv4(A.B.C.D)
Administrators	output to cotar catric	Host Ip Port	514	(514 <1024-65534>) Default 514
- Online Users		Level	INFO 🗸	
Management Setting	Output To Remote Hosts		EMERG ALERT	Cancel
B-System Log	Host IP Address		CRIT	
	Host IP Address		ERR WARNING	
View			NOTICE	
Configurations			NOTICE INFO DEBUG	(
-Date & Time			01000	
-Summer Time				
- Device Status				
ARP Table				
-Software Upgrade				
Reboot				
Version Information				
Management				
Base Configuration				
Advanced				
L3 Config				
Alarm				
PoE Management				
Extended				

ltem	Description	Notes
Host IP Address	Remote log host IP address	
Host IP Port	Remote log host port, range 514,1024- 65534	Default:514
Level	System log level, divided into 8 levels according to severity EMERG: level 0, system cannot be used ALERT : Level 1, need to be processed immediately CRIT: Level 2, Severe State ERR : Level 2, Severe State ERR : Level 3, Error Status WARNNING : Level 4, Warning Status NOTICE : Level 5, normal but important state INFO : Level 6, Notification Event	Default: INFO

# **DEBUG** : Level 7, debugging information

Remarks: 1. The smaller the log level value, the higher the level. Only logs with a level equal to or greater than the set level will be output. For example, if you set the logging level to the console to 5 (NOTICE), only logs with level 0 to 5 will be output to the console.

#### 1.4.2 System Log – View

Expand  Collapse	System Log
Device Summary	Refresh Reversed Export Clear
System	2000-01-01 00:00:13 I MAIN: sysDoRestoreDefaultAndReboot! [Reset Button]
Administrator	2000-01-01 00:00:16 I LOGD: Syslead Stop
Administrators	2000-01-01 00:00:10 I LOGD: Syslagd Bart 2000-01-01 00:00:10 I LOGD: Output to Console(level=INFO) disabled
Online Users	2000-01-01 00100110 I LOGD: output to Cache File(level=INFO) enabled 2000-01-01 0010010 I LOGD: output to TFTF Rever(level=INFO, j=0,0,0,010) disabled
Management Setting	2000-01-01 00:00:13 I MAIN: sysDoRestoreDefaultAndReboot! [Reset Button]
😸 System Log	2000-01-01 00:00:15 I LODD: Syslogd Stop 2000-01-01 00:00:00 I LODD: Syslogd Start
Setting	2000-01-01 00:00:08 I LOGD: Output to Console(level=INFO) disabled
	2000-01-01 00100108 I LOGD: Output to Tert Server(level=INFO,jp=0.0.0.010) disabled
Configurations	2000-01-01 00100199 N MAIN: Switch Daemon Version: V2.0 2000-01-01 0010012 T MAIN: symbolestoreBealLandHeboott [Reset Button]
Date & Time	2000-01-01 00:00:14 I LOGD: Syslogd Stop
Summer Time	2000-01-01 00:00:08 I LOGD: Sysledd Start 2000-01-01 00:00:08 I LOGD: Cutput to Console(level=INFO) disabled
Device Status	2000-01-01 00100108 I LOGDi output to TCFF Berver(level=INFO) enabled
ARP Table	2000-01-01 00:00:08 N MAIN: Switch Daemon Version: V2.0
Software Upgrade	2000-01-01 001012 I MAIN: sysDoRestoreDefaultAndReboot! [Reset Button] 2000-01-01 00100124 I LOGI: Syslead Stop
Reboot	2000-01-01 00:00:09 1 LOGD output to Console(level-INFO) disabled
Version Information	2000-01-01 00:00:09 I LOGD: Output to Cache File(level=INFO) enabled
Management	2000-01-01 001019 1 LOGD: Output to TTTF Server(level=NTFO,1p=0.0.0.010) disabled 2000-01-01 00100131 MAIN; sysObestoreEstaultAndeboot: [Reset Button]
Base Configuration	2000-01-01 00:00:15 I L60D: Sysleyd Step
Advanced	
L3 Config	
Alarm	
PoE Management	
Extended	

ltem	Description	Notes
Refresh	Refresh the system log content	
Reversed	New to old display in chronological order	
Export	Export the contents of the system log	
Clear	Clear he contents of the system log	

#### 1.5 Configurations 1.5.1 Configurations - View

•			-
Expand  Collapse	Configuration View		
Device Summary	Configuration View	Running Configuration Startup Configuration Reload	1
E-System	Running Configuration	· · · · · · · · · · · · · · · · · · ·	1
Administrator	System Name : switch		
System Log	Product : FR-7M3208		
Configurations	<pre>!Software Version : V2.0(V2.0) !Product MAC Address : 001893-12544D</pre>		
-View	<pre>!System Date Time : 2000-01-01 00:05:41 ! Running Configuration</pre>		
Import	[command in 'system'		
Export	!system time time timeZone 26		
Restore Factory Default	no ntp		
Date & Time	! !syslog		
-Summer Time	syslog enable no syslog console		
- Device Status	syslog cache enable level 6		
ARP Table	laccess timeout		
- Software Upgrade	timeout console 5		
Reboot	timeout telnet 5 timeout web 5		
Version Information	timeout ssh 5		
Management			
Base Configuration	'command in 'administrator'		
Advanced	login way enable telnet		
L3 Config			-
Alarm			
PoE Management			
-Port Config			
-Smart Power Config			
Time Range Config			
-Timing Supply Config			
Extended			

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Item	Description	Notes
Running Configuration	Show system running configuration	Text Style
Startup Configuration	Show system startup configuration	Text Style
Reload	Reload the running or startup configuration	

#### **1.5.2 Configurations – Import**

Expand  Collapse	Configuration Import		
-Device Summary	Import	Browse	
🖻 System			
Administrator		Submit	
System Log			
Configurations			
View			
-Import			
Export			
Restore Factory Default			
Date & Time			
-Summer Time			
-Device Status			
-ARP Table			
-Software Upgrade			
Reboot			
Version Information			
Management			
Base Configuration			
Advanced			
L3 Config			
Alarm			
PoE Management			
-Port Config			
-Smart Power Config			
Time Range Config			
Timing Supply Config			
Extended			

Remarks: 1, In the Configurations [Import] interface, click [Browse], select the configuration file to import, and click [Submit] to start the import.

#### 1.5.3 Configurations – Export

Expand  Collapse	Startup configuration		
-Device Summary	Export	Export	
🖻 System			
Administrator	Running configuration		
System Log	Export	Export	
Configurations			
View			
Import			
Restore Factory Default			
Date & Time			
-Summer Time			
-Device Status			
ARP Table			
-Software Upgrade			
Reboot			
Version Information			
Management			
Base Configuration			
Advanced			
E3 Config			
Alarm			
🖶 PoE Management			
Port Config			
Smart Power Config			
Time Range Config			
Timing Supply Config			
Extended			

Remarks: 1. Export configuration is divided into startup configuration and running configuration. Click [Export] in the corresponding project to prompt up the "File Save" dialog box (different browsers may differ, here take the IE11 browser as an example), click [Save] to export the corresponding configuration file to the local.

# Expand: Exter Factory Data Device Summary Exter Factory Data Image: Static Controls Exter Factory Data

#### **1.5.4 Configurations – Restore Factory Default**

#### **Configuration Steps**

1, Click [Restore] and then click [OK] in the confirmation dialog box to restore the factory configuration.

2. Click [Cancel] to cancel the factory configuration restoration. After a successful factory reset, the system automatically restarts to take effect to the factory configuration.

#### 1.5.5 Configurations – Date & Time

Expand  Collapse	Date & Time	
- Device Summary	System Time	2000-01-01 00:08:00
System		
Administrator	Time Zone	
System Log	Manual Set Time	2000 v Year 01 v Month 01 v Day 00 v Hour 07 v Minute 57 v Second Set to PC time
Configurations	SNTP Client	Disabled v
View		Refresh Apply
Import		toman rappy
Export		
Restore Factory Default		
-Date & Time		
-Summer Time		
- Device Status		
ARP Table		
-Software Upgrade		
Reboot		
-Version Information		
Management		
Base Configuration		
Advanced		
L3 Config		
Alarm		
PoE Management		
-Port Config		
-Smart Power Config		
-Time Range Config		
-Timing Supply Config		
Extended		

ltem	Description	Notes
System Time	Display the actual effective system time.	Read Only
Time Zone	System time zone setting, select any time	
Time Zone	zone from the drop-down list.	
Manual Set	It can be set after the SNTP client is disabled.	
Time	The year range is 1970-2037.Others are the	
Time	same as the common settings.	
Set to PC time	Synchronize with PC time	
SNTP Client	Enabled: Enable the SNTP client	Default:Disabled

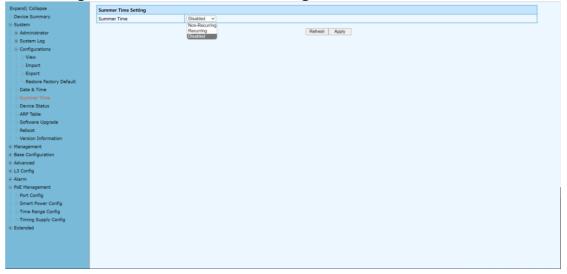
#### Disabled: Disable the SNTP client

Date & Time	
System Time	2018.06.25-17:15:52
Time Zone	(GMT+8:00) Beijing, Perth, Singapore, Hong Kong •
Manual Set Time	2018 • Year 6 • Month 25 • Day 17 • Hour 15 • Minute 10 • Second
SNTP Client	Enabled •
	✓ Unicast IP:8.8.8.8 Interval(unit:minutes): 1440 <10-43200> Sync now
	MultiCast
	🔲 Broadcast
	Sync Status

Refresh Apply

ltem	Description	Notes
Synchronous Mode	Unicast Multicast Broadcast	These three modes are multi-selectable, but at least one must be selected
IP	IP address pf SNTP, Default IP address 8.8.8.8; Interval range 10-43200, and Only for unicast default value 1440	
Interval	SNTP client time synchronization interval	Only for unicast
Sync now	SNTP client immediate synchronize times	

#### 1.5.6 Configurations – Summer Time Setting



#### **Configuration Step**

1.Select [System/ Summer Time] in the navigation bar to enter the [Summer Time] interface.

#### **Non-Recurring**

Summer Time Setting	Summer Time Setting	
Summer Time	Non-Recur V	
Start Time	1970 v Year 01 v Month 01 v Day 00 v Hour 00 v Minute 00 v Second	
End Time	[1970 ▼] Year [01 ▼] Month [01 ▼] Day [00 ▼] Hour [00 ▼] Minute [00 ▼] Second	
Offset(unit:minutes)	0 <1-1440> Default.0minutes	
Refresh Apply		

#### Recurring

Summer Time Setting	ummer Time Setting	
Summer Time	Recurring V	
Start Month	January V	
Start Week	First V	
Start Day	Monday V	
Starting Time of Day	00 V Hour 00 V Minute 00 V Second	
End Month	January 💙	
End Week	First V	
End Day	Monday V	
Ending Time of Day	00 v Hour 00 v Minute 00 v Second	
Offset(unit:minutes)	0 <1-1440> Default:0minutes	

#### **Default: Disabled**

#### 1.5.7 Configurations – Device Status

xpand  Collapse	Device Information	
Device Summary	Product Model	FR-7M3208
System	System Name	switch
Administrator	Product MAC Address	001893-12544D
System Log	Product Serial Number	N/A
Configurations	Software Version	V2.0
View Import	Software Released Date	2022-04-27 09:30:55
Export	Hardware Version	V2.0
Restore Factory Default	Date And Time	2000-01-01 00:11:01
Date & Time	Running Time	11 Minute 1 Second
-Summer Time	CPU Usage	18.0%
Device Status	Memory Usage	26.9% (Total:126484 KBytes, Free:92436 KBytes)
ARP Table	Nvram Usage	3.9% (Total:262136 Bytes, Free:251880 Bytes)
-Software Upgrade	Current Temperature	31.0 °C
Reboot	Power Supply Status	Power 1
Version Information		
Management		Refresh
Base Configuration		
Advanced		
L3 Config		
Alarm		
PoE Management		
-Port Config		
-Smart Power Config		
Time Range Config		
Timing Supply Config		
Extended		

In the [Device Status] interface, the basic information and the operating status information of the device system are displayed.

ltem	Description	Notes
Product Model	The device mode	Read Only
Product MAC	The device MAC address	Read Only
Address		
Product Serial	The device product serial number	Read Only
Number		
Software Version	The software version running on	Read Only
Software	The time when running the software	Read Only
Released Date		
Hardware Version	The hardware version of the current device	Read Only
Date and Time	The device system time	Read Only
<b>Operation Hours</b>	The system running time	Read Only
CPU Usage	The system's CPU usage.	Read Only
Memory Usage	The memory usage of the device system	Read Only
Configuration	Configuration space usage of the device	Read Only
Usage	system	

#### **1.5.8 Configurations – ARP Table**

Each switch has an ARP table to stroe the IP addresses and MAC addresses of the network devices.

Expand  Collapse	IP Address	MAC Address	Interface
Device Summary			
B System	192.168.1.138	98FC84-E3273F	ipO
Administrator			
System Log			
Configurations			
View			
-Import			
-Export			
Restore Factory Default			
- Summer Time			
- Summer Time - Device Status			
ARP Table			
- Software Upgrade - Reboot			
Version Information			
Management			
Base Configuration			
Advanced			
L3 Config			
Alarm			
PoE Management			
-Port Config			
-Smart Power Config			
-Time Range Config			
Timing Supply Config			
Extended			
		Prev Next 1 1 Go First Last Refresh	

#### 1.5.9 Configurations – Software Upgrade

Expand  Collapse	System Information		
Device Summary	Product Model	FR-7M3208	
System	Software Released Time	2022-04-27 09:30:55	
Administrator	Software Version	V2.0	
System Log			
Configurations	Software Upgrade		
View	Software Upgrade	Browse	
Import			
Export		Submit	
Restore Factory Default			
Date & Time			
-Summer Time			
-Device Status			
-ARP Table			
Software Upgrade			
Reboot			
Version Information			
Management			
Base Configuration			
Advanced			
L3 Config			
Alarm			
PoE Management			
-Port Config			
- Smart Power Config			
-Time Range Config			
Timing Supply Config			
Extended			

#### **Configuration Step**

1, On the [Software Upgrade] interface, click [Browse] to select the upgrade file to be imported. (The upgrade files are generally of the form .ub and .urk. Marked with "b" for BOOT files and "r" for "File System". The file is marked with k for the file with the kernel. Click [Submit]. The system starts uploading the upgrade file. After the upload is complete, the device automatically restarts to update the software after the upgrade is complete.

2, During the software upgrade, make sure that the device is powered up until the upgrade is completed.

#### 1.5.10 Configurations – Reboot

Expand] Collapse Rebot   Device Summary Rebot   System Rebot   System Log Rebot   Softmutons Softmutons   Softmuton	-Device Summary	
Device Summary     Reboot       Reboot     Reboot       Reboot     Reboot       Reboot     Reboot       Reboot     Reboot       Restore Factory Data     Reboot       Restore Factory Data<		
<ul> <li>System Log</li> <li>Administrator</li> <li>Software Log</li> <li>Configurations</li> <li>Import</li> <li>Export</li> <li>Export</li> <li>Export</li> <li>Summer Time</li> <li>Device Status</li> <li>Software Upgrade</li> <li>Software Upgrade</li> <li>Software Upgrade</li> <li>Base Configuration</li> <li>Advanced</li> <li>I Config</li> <li>Smart Flower Config</li> <li>Smart Flower Config</li> <li>Time Stapp Config</li> </ul>	System	
i System Log Configurations Very Very Very Very Very Very Very Very Very Very		NEXTOR LEGNOR
Configurations         Verw         Impot         Expot         Restore Fatory Default         Date 5 Time         Summer Time         Software Upgride         Restore Fatory Default         Version Information         Alvanced         Alvanced         Sators         Version Fatory Config         Smare Timey         Base Configuration         Sators         For Hanagement         For Exponse         For Exponse <td>Administrator</td> <td></td>	Administrator	
Import       Import       Export       Export       Summer Time       Date 5 Time       Sumver Time       Date 5 Time       Software Upgode       Software Upgode       Software Upgode       Babeon       Config       Aarm       Poet Config       Smart Power Config       Time Suppy Config	System Log	
Inport Inport Restor Sectory Default Restor Sectory Default Summer Time Device Status ARP Table Software Upgrade Restor R	Configurations	
Image: Part Part Part Part Part Part Part Part	View	
Pate A Time Summer Time Device Status APP Table Software Upgrade Software Upgrade Software Upgrade Base Configuration Advanced Advanced Advanced Soft Status Advanced Soft Status Advanced Soft Status Advanced Soft Status S	Import	
Date 3 Time         Summer Time         Device Staus         AP Table         Software Upgade         Rebots         Wesion Information         Management         4 Advanced         4 Jarmagement         • Saftware Upgade         • Base Configuration         • U Config         • Smart Power Config         • Timing Supply Config         • Timing Supply Config	Export	
Summer Time       Device Status       ARP Table       Software Upgrade       Rebort       Version Information       Rearconfuguration       & Advanced       & L3 Config       & Advanced       Pot Config       Smart Rever Config       Time Range Config       Time Range Config	Restore Factory Default	
Period         ARP Table         Software Upgrade         Rebot         Wesion Information         Management         Base Configuration         + Idanagement         + Alarm         PoE Management         PoE Management         PoE Gonfig         Smart Power Config         Tmen Range Config         Timen Range Config		
ARP Table Software Upgrade Reboot Westion Information Management & Management & Advanced & I.S. Config # Advanced # Jamm # Pot Sonfig Smart Rever Config Time Range Config		
Schware Upgrade       Raboot       Wraion Information       Management       E Advanced       * Advanced       * Advanced       * Advanced       * De Management       * De Management       * Poer Schift       * Poer Schift       * Time Range Config       * Time Range Config		
Rebot       Version Information       Management       4 Advanced       4 L3 Config       4 Advanced       • L3 Config       • PoE Management       • Pot Config       • Smart Rower Config       • Timme Range Config       • Timme Range Config	ARP Table	
Version Information  Management  Ease Configuration  Advanced  Advanced  FOE Management  Pet Config  Smart Rower Config  Time Runge Config  Time		
* Hanagement * Base Configuration * L3 Config * L3 Config * PoE Management PoE Management . Pot Config Smart Power Config Time Range Config		
Base Configuration     Advanced     4. Sconfig     Klamm     FoE Management     Port Config     Smart Rower Config     Time Range Config     Time (Config)	Version Information	
* Advanced * L3 Config * D5 Managament - Port Config - Smart Power Config - Time Range Config - Time Range Config		
L3 Config     Alarm     PoE Management     Port Config     Smart Power Config     Time Range Config     Time Range Config	Base Configuration	
Alarm     Pot Config     Smart Power Config     Time Range Config     Time Range Config		
Pot Config Smart Pover Config Time Range Config Timing Supply Config		
Port Config Smart Rower Config Time Range Config Time (Supp) Config		
Smart Power Config Time Range Config Time Range Config		
Time Range Config Timing Supply Config		
- Timing Supply Config		
• Extended		
	e Extended	

#### **Configuration Step**

1.Select [System / Configurations / Reboot] in the navigation bar to enter the [Reboot] interface

2. Click [Reboot] and the 'Confirm Restart' dialog box will pop up. Click OK to restart the device. A restart progress bar is displayed. Click [Cancel] to cancel the restart of the device.

192.168.1.6 says Are you sure you want to reboot the system?	20
Message window	
System is rebooting	
12% Continue	

# Chapter 2 Management Configurations

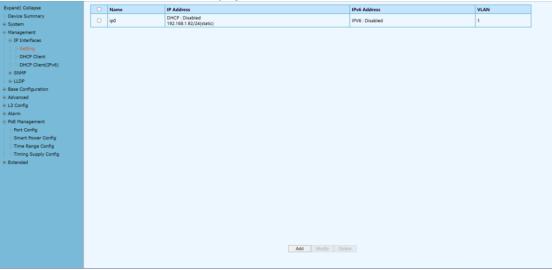
This chapter describes the port configuration in detail, including but not limit to the following:

- IP Interface
- SNMP
- LLDP

#### 2. Management

#### 2.1.1 Management - IP Interfaces - Settings

IP (Internet Protocol Address) is short for IP Address. IP address is a unified address format provided by the IP protocol, which assigns a logical address to each network and host on the Internet to mask physical address differences.



#### **Configuration Steps**

1. Select [Management / IP Interface / Setting] in the navigation bar to enter the IP interface [Setting].

2. All current IP interface and configuration information can be viewed in the IP interface [Setting],

3. To add a new IP interface, click [Add], then fill in the relevant configuration, and click [Apply],

4. To modify an IP interface, check the corresponding IP interface, click [modify], then modify the configuration, and click [Apply], the IP interface is shown.

5. To delete an IP interface, check the appropriate IP interface and click [Delete].

Setting		
Static IP Address	IPv4(A.B.C.D)	
Subnet Mask	IPv4(A.B.C.D)	
VLAN	<1-4094>	
IPv6	Disabled V	
IPv6 Address	IPv6(X::X:X/M)	
	Apply Cancel	

ltem	Description	Notes
Static IP Address	Static IPv4 address, the format is dotted decimal system, each interface IPv4 address can not be in the same network segment.	A.B.C.D
Mask	The mask of IPv4 address	A.B.C.D
VLAN	VLAN bound by assigned IP interface	<1 – 4094>
IPv6	Disabled/Enabled	Default:Disabled
IPv6 Address	X::X:X/M	

#### 2.1.2 Management – IP Interfaces – DHCP Client

Expand  Collapse	DHCP Client Setting	
- Device Summary	Admin Status	Disabled V Apply
System		1.000010.0
Management	DHCP Client Status	
IP Interfaces	Status	
Setting	IP Address	
-DHCP Client	Subnet Mask	
DHCP Client(IPv6)	Lease Time	
• SNMP	Lease Obtained	
LLDP     Base Configuration	Lease Expires	
Base Configuration     Advanced		
L3 Config		Renow Release Refresh
Alarm	("Please refresh the page after Renew or Release.)	
B PoE Management		
-Port Config		
-Smart Power Config		
Time Range Config		
Timing Supply Config		
Extended		

Configuration Step

1,Select [Management / IP Interface / DHCP Client] in the navigation bar to enter the [DHCP Client] interface.

2,In the [DHCP Client] interface, you can view the current configuration information and DHCP client status.

ltem	Description	Notes
Admin Status	Enable/Disable	Default: Disable
Renew	DHCP Client renew the configuration	
Release	DHCP Client release the current	

	configuration
Refresh	Refresh the configuration

#### 2.1.3 Management – IP Interfaces – DHCP Client(IPv6)

Expand  Collapse	DHCP Client(IPv6) Setting	
- Device Summary	Admin Status	Disabled V Apply
System		
Management	DHCP Client(IPv6) Status	
IP Interfaces	Status	
Setting	IPv6 Address	
-DHCP Client	Lease Time	
DHCP Client(IPv6)	Lease Obtained	
B LLDP	Lease Expires	
Base Configuration		
Advanced		Renew Release Refresh
L3 Config	("Please refresh the page after Renew or Release.)	
Alarm		
PoE Management		
-Port Config		
-Smart Power Config		
-Time Range Config		
Timing Supply Config		
Extended		

#### **Configuration Steps**

1,Select [Management / IP Interface / DHCP Client(IPv6] in the navigation bar to enter the [DHCP Client(IPv6] interface.

2,In the [DHCP Client(IPv6)] interface, you can view the current configuration information and DHCP client status.

ltem	Description	Notes		
Admin Status	Enable/Disable Default: Disable			
Renew	DHCP Client renew the configuration			
Release	DHCP Client release the current			
	configuration			
Refresh	Refresh the configuration			

#### 2.2 Management – SNMP

#### 2.2.1 Management -SNMP - v1/v2 setting

The Simple Network Management Protocol (**SNMP**) is an Internet Standard protocol that is based on the manager/agent model with a simple request/response format. The network manager issues a request and the managed agents will send responses in return.

Even all Colleges								
Expand  Collapse - Device Summary	SNMP Basic Setting							
System	Admin Status	Enabled      Disabled						
Management	SNMP Port	161 <1-65535> Default:161						
IP Interfaces	System Name	switch	(Any UTF-8 String Except Spaces, MA	X: 255 Bytes)				
Setting	System Location	location	(Any UTF-8 String Except Spaces, MA	X: 255 Bytes)				
-DHCP Client	System Contact	contact	(Any UTF-8 String Except Spaces, MA	X: 255 Bytes)				
DHCP Client(IPv6)								
SNMP	Communities							
		Community (Any UTF-8 String Except Spaces, MAX: 127 Bytes)	Туре	Add				
-V3 Setting	Communities	public	Read-Only     Read-Write					
-Trap Setting		private	Read-Only     Read-Write					
LLDP		(house)	o head only o head think					
L3 Config Alarm Pot Kanagement Port Config Smart Power Config Time Range Config Timing Supply Config Extended								

#### **Configuration Steps**

1.Select [Management / SNMP / V1/V2 Setting] in the navigation bar to enter the SNMP interface.

2.You can view the Base Setting of SNMP in the [SNMP Base Setting] interface.

3.To modify the Base Configuration, modify the corresponding configuration in the configuration box, and then click [Apply] to make effective.

4. If you want to add a group word, click [Add] and a group word is added to set the group word name and type. The system supports up to eight group characters, with the first and second being the default, so you can add up to six more. Click [Apply] to make effective.

5. To delete a group word, click [Delete] on the right corresponding entry (the first and second are the system default, cannot be deleted), and click [Apply] to make effective.

ltem	Description	Notes
Admin Status	Enable / Disable	Default: Enable
SNMP Port	SNMP port with Range <1-65535>	Default: 161
	System name, any legal character other	
SNMP Name	than a space can be entered with a	
	maximum length of 255	
	System location information, any legal	
System Location	character other than a space can be	
	entered with a maximum length of 255	
	System contact information, any legal	
System Contact	character other than a space can be	
	entered with a maximum length of 255	
Communities	Name: Any legal character other than a	

space can be entered with a maximum length of 127 Type: Read and write **Note**: The system supports a maximum of 8 group characters and requires at least two group characters. The default two group characters can only change the group name, cannot change the type or delete. Click [Add ] to add a group character, add a group character can change the name and type, and delete.

#### 2.2.2 Management – SNMP – v3 setting

SNMPv3 addresses issues related to the large-scale deployment of SNMP, accounting, and fault management. Currently, SNMP is predominantly used for monitoring and performance management. SNMPv3 defines **a secure version of SNMP** and also facilitates remote configuration of the SNMP entities.

			0				
Expand  Collapse	User Name	User Type	Security Level	Auth Type	Auth Password	Priv Type	Priv Password
- Device Summary							
System							
🖶 Management							
IP Interfaces							
-Setting							
DHCP Client(IPv6)							
-SNMP							
-V1/V2 Setting							
-V3 Setting							
-Trap Setting							
LLDP							
Base Configuration							
Advanced							
L3 Config							
Alarm							
🖶 PoE Management							
-Port Config							
-Smart Power Config							
-Time Range Config							
Timing Supply Config							
Extended							
				Add Modify	Delete		

#### **Configuration Steps**

1.Select [Management / SNMP V3 Setting] in the navigation bar to enter the SNMP interface.

2.You can view the Base Setting of SNMP in the [SNMP Base Setting] interface.

3.To modify the Base Configuration, modify the corresponding configuration in the configuration box, and then click [Apply] to make effective.

4. If you want to add a group word, click [Add] and a group word is added to set the group word name and type. The system supports up to eight group characters, with the first and second being the default, so you can add up to six more. Click [Apply] to make effective.

5. To delete a group word, click [Delete] on the right corresponding entry (the first and second are the system default, cannot be deleted), and click [Apply] to make effective.

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Expand  Collapse	User Name Us	ser Type		Auth Type	Auth Password	Priv Type	Priv Password	
Device Summary     System		SNMP V3 User						
<ul> <li>System</li> <li>Management</li> </ul>		User Name	[					
-IP Interfaces		User Type	Read-Write V					
Setting		Security Level	authPriv V					
DHCP Client		Auth Type	MD5 V		1			
DHCP Client(IPv6)		Auth Password			1			
SNMP		Priv Type	DES V		1			
-V1/V2 Setting		Priv Password			]			
-V3 Setting Trap Setting			Apply Cancel		]			
Irap Setting								
Base Configuration								
Advanced								
L3 Config								
Alarm								
PoE Management								
-Port Config								
-Smart Power Config Time Range Config								
Timing Supply Config								
Extended								

ltem	Description
User Name	As Needed
User Type	Read-Write/ Read-Only
	NoAuthNoPriv:Communication without authentication and
	privacy.
Security Level	AuthNoRriv:Communication with authentication an witout
	privacy.
	AuthRriv:Communication with authentication and privacy.
	NoAuthNoPriv can't support
	<b>MD5:</b> The MD5 message-digest algorithm is a cryptographically
	broken but still widely used hash function producing a 128-bit
Auth Type	hash value.
Additype	SHA: In cryptography, SHA-1 (Secure Hash Algorithm 1) is a
	cryptographic hash function which takes an input and produces
	a 160-bit (20-byte) hash value known as a message digest –
	typically rendered as a hexadecimal number, 40 digits long.
Auth	As Needed
Password	As Needed
	Only supports AuthPriv level
	<b>DES:</b> DES is based on the Feistel structure where the plaintext is
	divided into two halves. DES takes input as 64-bit plain text and
Priv Type	56-bit key to produce 64-bit Ciphertext.
	<b>AES:</b> AES algorithm takes 128-bit plaintext and 128-bit secret key
	which together forms a 128-bit block which is depicted as 4 X 4
	square matrix.
Priv password	As Needed

#### 2.2.3 Management – SNMP – Trap Setting

The Simple Network Management Protocol (SNMP) is an Internet-standard protocol used to manage devices on IP networks. The SNMP messages are used to inspect and communicate information about managed objects. The Trap message is one of the types of SNMP messages which are generated to report system events.

Expand  Collapse	SNMP Trap Setting								
- Device Summary	Admin Status O Enabled ® Disabled								
System	Send Authentication Failed Trap	O Enal	Enabled ® Disabled						
Management	Default Trap Community	public	ublic (Any UTF-8 String Except Spaces, MAX: 127 Bytes)						
IP Interfaces		Index				Add			
Setting	Trap Servers	1	public	192.168.1.166	162				
			hanne	102.100.1.100	102				
DHCP Client(IPv6)			Apply						
SNMP									
-V1/V2 Setting -V3 Setting									
Trap Setting									
LLDP									
Base Configuration									
Advanced									
L3 Config									
Alarm									
PoE Management									
Port Config									
-Smart Power Config									
-Time Range Config									
Timing Supply Config									
Extended									

#### **Configuration Steps**

1. Select [Management / SNMP / Trap Setting] in the navigation bar and enter the SNMP [Trap Setting] interface.

2. The current trap configuration of SNMP can be viewed in the SNMP [Trap Setting] interface.

3. If you need to modify the Trap Setting, modify the corresponding configuration in the configuration box, and then click [Apply],

4. If you want to add a Trap server, click [Add] and the Trap server entry will occur. The system supports up to 4 groups of Trap servers, the first group is the default of the system and cannot be deleted, so you can add up to 3 groups of Trap servers, click [Apply] to make effective.

5. If you want to delete the Trap server, click [Delete] on the right of the corresponding entry (where group 1 is the default of the system and cannot be deleted), and click [Apply] to make effective.

SNMP Trap Setting							
Admin Status	OEn	abled 💿 Disabled					
Send Authentication Failed Trap	OEn	Denabled  Opisabled					
Default Trap Community	public	;	(Any	UTF-8 String Except Spaces, MA	X: 127 Bytes)		
Tran Gaman	Index	Community (Any UTF-8 String Except Spaces, MAX: 127 Bytes)		Server IP Address	Server IP Port <1-65535> Add		
Trap Servers	1	public 192.168.1.166 162					
		Apply					

ltem	Description	Notes
Admin Status	Enable / DIsable	Default: Enable
Send Authentication Failed Trap	<b>Enable</b> : Enable the Sending SNMP Authentication Failed Trap <b>Disable</b> : Disable the Sending SNMP Authentication Failed Trap	Default:Disable

Default Trap	Default trap Community characters, any				
Community	legal character other than a space can be				
Community	entered with a maximum length of 127				
	Coummunity Characters: Any legal				
	character other than a space can be				
	entered with a maximum length of 127				
	Server IP Address: The IP address of				
	trap serve, IPv4, dot decimal format.				
	Server IP Port: The IP port of trap serve,				
	range <1-65535>, default 162				
Trap Server	Note: The system supports up to 4				
	servers. Click the [Add]to add. The				
	system default server number:1,				
	community character: public, IP				
	address: 192.168.1.166, IP port: 162. The				
	default server cannot be deleted, but the				
	added server can be deleted.				

#### 2.3 Management – LLDP

#### 2.3.1 Management – LLDP - Global Setting

LLDP can be used in scenarios where you need to work between devices which are not Fiberroad proprietary and devices which are Fiberroad proprietary. You can use the LLDP protocol for troubleshooting purposes. The switch gives all the information about the current LLDP status of ports and you can use this information to fix connectivity problems within the network.

Expand  Collapse	LLDP global setting		
Device Summary	LLDP admin status	Disabled v	
System	Transmit interval	30	<5-32768> Default:30 second
Management	Hold multiplier	4	<2-10> Default:4
IP Interfaces	Reinit delay	2	<1-10> Default:2 second
Setting DHCP Client	Trap interval	30	<5-3600> Default:30 second
DHCP Client(IPv6)	Transmit credit num	5	<1-100> Default:5
.SNMP	Fast transmit interval	1	<1-3600> Default:1 second
-V1/V2 Setting	Fast transmit num	4	<1-8> Default:4
-V3 Setting			
Trap Setting			Apply
i≡-LLDP			
-Global Setting			
Port Configurations			
Base Configuration			
Advanced			
L3 Config			
Alarm			
PoE Management			
-Port Config			
-Smart Power Config			
-Time Range Config			
Timing Supply Config			
Timing Supply Config     Extended			

#### **Configuration Steps**

1. Select [Management / LLDP / Global Setting] in the navigation bar to enter the LLDP [Global Setting] interface.

2. The LLDP global configuration can be viewed in the LLDP [Global Setting] interface.

3. Modify the corresponding LLDP configuration in the LLDP [Global Setting] interface, and then click [Apply].

LLDP global setting							
LLDP admin status	Disabled •						
Transmit interval	30	<5-32768> Default:30 second					
Hold multiplier	4	<2-10> Default:4					
Reinit delay	2	<1-10> Default:2 second					
Trap interval	30	<5-3600> Default:30 second					
Transmit credit num	5	<1-100> Default:5					
Fast transmit interval	1	<1-3600> Default:1 second					
Fast transmit num	4	<1-8> Default:4					
		Apply					

ltem	Description	Notes
LLDP admin status	Enable / Disable	Default:
		Disable
Transmit interval	LLDP transmit interval range 5-32768	Default: 30
Hold multiplier	LLDP hold multiplier range 2-10	Default: 4
Reinit delay	LLDP reinit delay range 1-10	Default: 2
Trap interval	LLDP trap inerval range 5-3600	Default: 30
Transmit credit num	LLDP transmit credit num range 1-100	Default: 5
Fast transmit	LLDP fast transmit interval range 1-3600	Default: 1
interval		
Fast transmit num	LLDP fast transmit num range 1-8	Default: 4

#### 2.3.2 Management – LLDP – Port Configurations

Expand  Collapse	Port	Destination addres	Admin Status	Transmit inter val(s)	Hold multip lier	Reinit delay (s)	Trap interva l(s)	Transmit c t num	redi	Fast transi erval(s)	mit int	Fast trans	smit	Trap enable	TLVs transmit enable
s System		0180C2-00000E V	0 V											0 V	•
Management	GE/1	0180C2-00000E	Disabled ~	0	0	0	0	0		0	1	0	1	Disabled V	
IP Interfaces			(		<u> </u>			<u> </u>			)				
Setting	GE/2	0180C2-00000E	Disabled ~	0	0	0	0	0		0	ļ	0	J	Disabled V	· ·
DHCP Client	GE/3	0180C2-00000E	Disabled ~	0	0	0	0	0		0		0		Disabled ~	•
DHCP Client(IPv6)     SNMP	GE/4	0180C2-00000E	Disabled ~	0	0	0	0	0		0		0		Disabled V	•
-V1/V2 Setting	GE/5	0180C2-00000E	Disabled ~	0	0	0	0	0		0		0		Disabled ~	•
V3 Setting	GE/6	0180C2-00000E	Disabled ~	0	0	0	0	0		0		0		Disabled ~	
Trap Setting	GE/7	0180C2-00000E	Disabled V	0	0	0	0	0		0	, 1	0	2	Disabled V	•
⊜-LLDP	- ·										1		J		
-Global Setting -Port Configurations	GE/8	0180C2-00000E	Disabled ~	0	0	0	0	0		0		0		Disabled ~	•
Base Configuration	GE/9	0180C2-00000E	Disabled ~	0	0	0	0	0		0		0		Disabled ~	•
Advanced	GE/10	0180C2-00000E	Disabled ~	0	0	0	0	0		0		0		Disabled ~	
L3 Config									_		,				
Alarm							Apply	Refresh							
PoE Management															
-Port Config															
-Smart Power Config															
Time Range Config															
Timing Supply Config     Extended															
- Extended															

#### Configuration Steps,

1. Select [Management / LLDP / Port Configuration] in the navigation bar to enter the LLDP [Port Configuration] interface

2. The LLDP port corresponding configuration can be viewed in the LLDP [Port Configuration] interface

3. Choose the LLDP configuration of all ports corresponding to any destination address 0180C2-00000E, 0180C2-000003, 0180C2-000000 in the LLDP [Port Configuration] interface

4. To modify the LLDP configuration of a destination address port, click [Modify] after selecting the destination address, and enter the port configuration interface4.Select or fill out the configuration items that need to be modified, and click [Apply] to make effective. There will be a corresponding prompt if the configuration item is incorrectly filled.

ltem	Description	Notes
	0180C2-00000E	
<b>Destination Address</b>	0180C2-000003	
	0180C2-000000	

Remarks :

0x0180-C200-000E for LLDP frames destined for nearest bridge agents. 0x0180-C200-0000 for LLDP frames destined for nearest customer bridge agents. 0x0180-C200-0003 for LLDP frames destined for nearest non-TPMR bridge agents.

ltem	Description	Notes
	Transmit Only: Enable LLDP port transmit	
	function	
	Receive Only: Enable LLDP port receive	
Admin Status	function	Default:
Aumin Status	Transmit and receive: Enable LLDP port	Disable
	transmit and receive function	
	Disable: Disable LLDP port transmit and	
	receive function	
	Default: Use[Global Setting] transmit	
Transmit Interval(s)	interval	
	LLDP transmit interval range 5-32768	
	Default: Use[Global Setting] hold	
Hold Multiplier	multiplier	
	LLDP hold multiplier range 2-10	
Reinit Delay(s)	Default: Use[Global Setting] reinit delay	
Kellin Delay(S)	LLDP reinit delay range 1-10	
Tran Intonyal(s)	Default: Use[Global Setting] trap interval	
Trap Interval(s)	LLDP trap inerval range 5-3600	
Transmist credit	Default: Use[Global Setting] Transmist	
num	credit num	
	LLDP transmit credit num range 1-100	
Fast transmit	Default: Use[Global Setting] Fast transmit	
interval(s)	interval	
interval(s)	LLDP fast transmit interval range 1-3600	
	Default: Use[Global Setting] Fast transmit	
Fast transmit num	num	
	LLDP fast transmit num range 1-8	
Trap enable	Enable / Disable	
	Port Description	
TLVs transmit	System Name	
enable	System Description	
	System Capabilities	

## **Chapter 3 Base Configuration**

This chapter describes the port configuration in detail, including but not limit to the following:

- Ports
- VLAN
- QOS
- FDB

#### 3 Base Configuration 3.1.1Base Configuration-Port-Status And Setting

Expand  Collapse		Running Status					Admin Status						
- Device Summary	Port	Link Status	Port Type	Speed	Duplex	Rx Rate(bps)	Tx Rate(bps)	Admin Status	Speed	Duplex	Flow Control	EEE	Setting
<ul> <li>System</li> </ul>	GE/1	¥	Copper	100M	Full	0.00	32.41K	On	Auto	Auto	Off	Disabled	Modify
Management	GE/2	¥	Copper	100M	Full	0.00	32.41K	On	Auto	Auto	Off	Disabled	Modify
Base Configuration	GE/3	×	Copper	10M	Half	0.00	0.00	On	Auto	Auto	Off	Disabled	Modify
Ports     Status And Setting	GE/4	v.	Copper	100M	Full	0.00		On	Auto	Auto	Off	Disabled	Modify
Description	GE/5	×	Copper	10M	Half	0.00	0.00	On	Auto	Auto	Off	Disabled	Modify
Statistics	GE/6	¥	Copper	100M	Full	0.00	32.24K	On	Auto	Auto	Off	Disabled	Modify
-Sfp Information	GE/7	¥	Copper	1000M	Full	56.35K	19.94K	On	Auto	Auto	Off	Disabled	Modify
-Sfp Detail Information	GE/8	¥	Copper	100M	Full	0.00	32.24K	On	Auto	Auto	Off	Disabled	Modify
Traffic	GE/9	×	Fiber	10M	Half	0.00	0.00	On	Fiber-Auto	Full	Off	Disabled	Modify
VLAN     QOS	GE/10	×	Fiber	10M	Half	0.00	0.00	On	Fiber-Auto	Full	Off	Disabled	Modify
Port Isolate     Storm Filers     Advanced     IS Config     Alarm     Port Config     Port Config     Snart Power Config     Snart Power Config     Timing Supply Config     Extended													

#### **Configuration Steps**

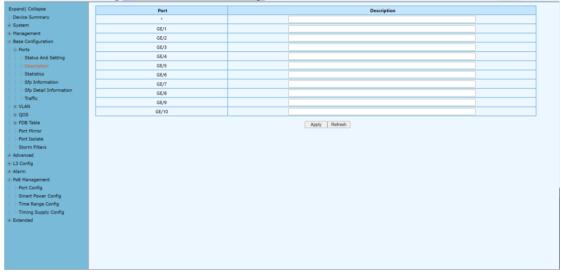
- 1. Select [Bae Configuration / Ports / Status and Setting] in the navigation bar to enter the [Status and Setting] interface.
- 2. The Status and Settings interface shows the operating status and configuration information for each port.

Setting	
Port	GE/1
Link Status	Link Down
Admin Status	On v
Fiber Mode	Fiber-Auto V
EEE	Disabled V
	Apply Cancel

3. If you need to modify the configuration of a port, just click the [Modify] on the right side corresponding entry. to enter the modification interface and modify the corresponding configuration item. Click the [Apply] to complete the modification, and click the [Cancel] to cancel the modification.

ltem	Description	Notes
Port	The name and number of the port	
Link Status	Indicates that the port is linked up	
	Indicates that the port is linked down	
Port Type	Copper or Fiber Port	
Rate	The port working speed, unconnected port	
	is always displayed as 10M	
Duplex	The port working duplex mode, the	
	unconnected port always shows half	
	duplex	
ltem	Description	Notes
Port		Read Only
Link Status		Read Only
Admin Status	ON/OFF	Default: ON
Fiber Mode	Fiber-Auto	Default:
	Fiber-100M	Fiber-Auto
	Fiber-1000M	
EEE	Energy Efficient Ethernet	Default:
	Enabled / Disabled	Disabled

Remarks: Energy Efficient Ethernet (EEE) is an IEEE 802.3az standard that is designed to reduce power consumption in ethernet network during idle periods.



#### 3.1.2 Base Configuration-Port-Description

#### 3.1.3 Base Configuration-Port-Statistics

xpand  Collapse	Expand   Collapse			
Device Summary System	Port:GE/1     Clear			
Management	Rx Bytes	181996	Tx Bytes	3605822
Management Base Configuration	Rx Packets	380	Tx Packets	27426
Base Configuration     Borts	Rx Unicast Packets	292	Tx Unicast Packets	234
Status And Setting	Rx Multicast Packets	56	Tx Multicast Packets	8467
-Description	Rx Broadcast Packets	32	Tx Broadcast Packets	18725
Statistics	Rx Discards Packets	0	Tx Discards Packets	0
-Sfp Information	Rx Pause Packets	0	Tx Pause Packets	0
-Sfp Detail Information	Drop Events	0	Fcs Errors	0
Traffic	Fragments	0		
+ VLAN	Port:GE/2     Clear			
. QOS				
FDB Table	Port:GE/3     Clear			
-Port Mirror	Port:GE/4     Clear			
-Port Isolate	Port:GE/5     Clear			
Storm Filters				
Advanced	Port:GE/6     Clear			
L3 Config	▼ Port:GE/7 Clear			
Alarm	Rx Bytes	6208721	Tx Bytes	14875507
PoE Management Port Config	Rx Packets	43911	Tx Packets	22834
-Smart Power Config	Rx Unicast Packets	14984	Tx Unicast Packets	22032
Time Range Config	Rx Multicast Packets	8860	Tx Multicast Packets	576
Timing Supply Config	Rx Broadcast Packets	20067	Tx Broadcast Packets	226
Extended	Rx Discards Packets	0	Tx Discards Packets	0
	Rx Pause Packets	0	Tx Pause Packets	0
	Drop Events	0	Fos Fronts	0
			lear All Refresh	

#### **Configuration Steps**

Select [Base Configuration / Ports / Statistics] to enter the port [Statistics] page
 The [Statistics] shows each port statistical information. You can expand corresponding port statistics by clicking flag on the left of port entry, and click cleared button on the right to clear the statistics of the port.

3. Click the [Refresh] to update the statistics of all ports. Click [Clear All] to clear the statistics for all ports.

ltem	Description	Notes
Rx / Tx Packets	Total received / sent packets	
Rx / Tx Unicast Packets	Total received / sent unicast packets	
Rx / Tx Multicast Packets	Total received / sent multicast packets	
Rx / Tx Broadcast	Total received / sent broadcast packets	
Packets		
Rx / Tx Discards Packets	Total received / sent discarded packets	
Rx / Tx Pause Packets	Total received / sent flow control packets	
Drop Events	Drop messages (interval sampling)	
FCS Errors	FCS error packet	
Fragments	Fragment packets (less than 64 bytes)	

## 3.1.4 Base Configuration-Port-SFP Information

		0											
Expand  Collapse	Port	Status	Wavelength(nm)	Distance(m)	Bit Rate(MBd)	Ethernet Codes	DDM	Calibrated	Tx Power(dBm)	Rx Power(dBm)	Temperature(°C)	Voltage(V)	Current(mA)
Device Summary	GE/9	Inserted	1310	20000	1300	N/A	Supported	Internally	-4.98	-inf	23.55	3.28	10.90
• System	GE/10	Inserted	1310	20000	1300	Fiber-1000M	Supported	Internally	-7.00	-inf	21.11	3.28	9.05
Management													
Base Configuration								Refresh					
Ports													
-Status And Setting													
Description													
Statistics													
-Sfp Information													
-Sfp Detail Information													
Traffic													
. VLAN													
· QOS													
FDB Table													
-Port Mirror													
-Port Isolate													
-Storm Filters													
Advanced													
L3 Config													
Alarm													
PoE Management													
Port Config													
-Smart Power Config													
-Time Range Config													
-Timing Supply Config													
Extended													

ltem	Description	Notes
Port	The name of information	Read Only
Status	Removed / Inserted	Read Only
Wavelength	Operating Wavelength	Read Only
Distance(m)	SFP effective transmission distance	Unit: Meter
Bit Rate	N/A / Bit Rata	Unit: MBd
Ethernet Codes	N/A / Fiber-100M / Fiber-1000M	Read Only
DDM	N/A / Supported	Read Only
Calibrated	N/A / Internally / Externally	Read Only
Tx Power(dBm)	Transmitter optical power	Unit: dBm
Rx Power(dBm)	Receiver optical power	Unit: dBm
Temperature(℃)	SFP operating temperature	Unit: °C
Voltage(V)	SFP Voltage	Unit: V
Crrent(mA)	SFP Current	Unit: mA

mal compare	Expand   Collapse					
evice Summary	· Port:GE/9					
ystem	Status	Inserted	Ethernet Codes	BASE-BX10	Mode	Single Mode
lanagement	Wavelength(nm)	1310	Distance(m)	20000	Bit Rate(MBd)	1300
ase Configuration	Vendor Name	OEM	OUI	00-00-00	PN	SFP Transceiver
Status And Setting	Version		SN	HW352107150386	Date	2021-07-15
Description	Connector Type	LC	DDM	Supported	Calibrated	Internally
Statistics	Tx Power(dBm)	-5.01	Rx Power(dBm)	-inf	Temperature(°C)	31.25
Sfp Information	Voltage(V)	3.28	Current(mA)	10.80		
Sfp Detail Information	· Port:GE/10					
Traffic	Status	Inserted	Ethernet Codes	1000BASE-LX	Mode	Single Mode
VLAN	Wavelength(nm)	1310	Distance(m)	20000	Bit Rate(MBd)	1300
QOS	Vendor Name	OEM	OUI	00-00-00	PN	SFP
FDB Table	Version	000	SN	HW35207001557	Date	2020-07-04
Port Mirror Port Isolate	Connector Type	LC	DDM	Supported	Calibrated	Internally
Storm Filters	Tx Power(dBm)	-7.00	Rx Power(dBm)	·inf	Temperature(°C)	27.40
dvanced	Voltage(V)	3.28	Current(mA)	9.30		
3 Config				(1997)		
larm				Refresh		
oE Management						
Port Config						
Smart Power Config						
Time Range Config						
Timing Supply Config						
tended						

#### 3.1.5 Base Configuration-Port-SFP Detail Information

3.1.6 Base Configuration-Port-Traffic



Remarks: Real-time traffic statistics of each ports.

### 3.2 Base Configuration - VLAN 3.2.1 Base Configuration-VLAN-Basic Setting

	0					0						
i  Collapse	VLAN Setting											
ice Summary	Choose Range	1-200	× 1	Search ('N	I':VLAN Port Memb	er, 'U':VLAN Ur	tagged Member)					
tem	vlan	Name	GE/1	GE/2	GE/3	GE/4	GE/5	GE/6	GE/7	GE/8	GE/9	GE/10
nagement	1	VLAN1	U	U	U	U	U	U	U	U	U	U
e Configuration												
Ports												
/LAN												
-Basic Setting												
Port Setting												
Double VLAN												
ços												
DB Table												
Port Mirror												
Port Isolate												
Storm Filters												
anced												
Config												
m												
Management												
Port Config												
Smart Power Config												
Time Range Config												
Timing Supply Config												
ended												
						Top Bott	iom Setting					

### **Configuration Steps**

1. Select [Base Configuration / VLAN / Basic Setting] to enter the VLAN [Basic Setting] interface.

2. On [Basic Setting] interface, you can view the related configuration information of each VLAN. If you want to find information about a VLAN ID, select the range of the VLAN ID in the drop-down box, enter the specified VLAN ID in the input box, and click [Search].

3. To add, modify, or delete VLANs, click [Setting]. Enter the VLAN to be added, modified, or deleted in the <VLAN list> box on setup interface. Then select Add, Modify, or Delete. Click [Apply]. The setting and modification options can only modify the VLAN name

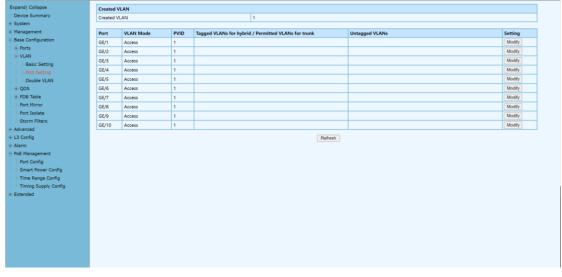
Basic Setting						
Created VLAN	1					
VLAN List	Example:1-10,13,15-4094					
	Add      Delete      Modify Name:					
	Apply Cancel					

ltem	Description	Notes
Choose Range		
	To search for a VLAN ID	
	1. Select the interval where the VLAN to be	
	searched in the interval selection box;	
Search	2. If you enter a specific VLAN ID in the	
Search	input box, for example 11, the information	
	bar with the VLAN number 11 turns yellow;	
	3. If there is no such VLAN, the	
	corresponding information is prompted.	
Тор	Display the first page of VLAN information	
Bottom	Display the last page of VLAN information	

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ltem	Description	Notes
VLAN List Box	It is to input the VLAN list to be set and supports multi-VLAN batch input, such as 1,2,3,4-10	
Add	To add the VLAN that is entered in the VLAN list box. VLAN 1 is the default VLAN. It already exists and does not need to be created	
Delete	To delete the VLAN input in the VLAN list box. VLAN 1 is the default VLAN and cannot be deleted.	
Modify	To modify the VLAN input in the VLAN list box. The VLAN name can be modified. The new name needs to be entered in the name box.	

### 3.2.2 Base Configuration-VLAN-Port Setting



### **Configuration Steps**

1. Select [Base Configuration / VLAN / Port Setting] to enter the VLAN Port Setting interface.

2. On the [Port Setting] interface, you can view the VLAN related configuration information of each port.

3. To modify the VLAN configuration of a port, click [Modify] in the corresponding port display field to enter the port setting interface,

4. Select or fill in the configuration items that need to be modified and click [Apply]. There will be prompts if the configuration item is filled in incorrectly.

Port Setting							
Port	GE/1	$\sim$					
VLAN Mode	trunk	~					
PVID	39		<1-4094>				
Permitted VLAN	Replace Add Delete All Created VLAN  Example:1-10,13,15-4094						
		,	Apply	Cancel			
Description							

ltem

Notes

Port	Port Name Information	
VLAN Mode	Port VLAN Mode <b>Access</b> : Access mode <b>Trunk</b> : Trunk mode <b>Hybrid</b> : Hybrid mode	
PVID	Port PVID	<1-4094>
Tagged VLAN	List of VLANs allowed to pass through the port. It supports batch input of multiple VLANs. For example: '1,2,3,4-10'; Add: Add the tagged VLAN to the port as the input VLAN; Delete: Delete the VLAN from the tagged VLAN of the port; Replace: Replace the original tagged VLAN of the port with the input VLAN; All created VLANs: All the created VLANs are tagged VLANs of the port. Even if they are created later, they will be automatically added to the tagged VLAN of the port.	
Untagged VLAN	<ul> <li>Port untagged VLAN list, supports multi-VLAN batch input, such as: "1,2,3,4-10";</li> <li>Add: Add the incoming VLAN to the untagged VLAN of the port;</li> <li>Delete: Delete the incoming VLAN from the untagged VLAN of the port.</li> <li>Replace: Replace the original untagged VLAN of the port with the input VLAN.</li> </ul>	

### 3.2.3 Base Configuration-VLAN-Double VLAN

and  Collapse					
	Port	Mode	Outer PVID	Ingress Mode	Egress Mode
avice Summary		<ul> <li>v</li> </ul>	· •	<ul> <li>v</li> </ul>	0 V
rstem	GE/1	Disabled ~	1 🗸	All	Untagged V
anagement	GE/2	Disabled ~	1 ~	All	Untagged V
se Configuration	GE/3	Disabled ~	1 ~	All Y	Untagged V
Ports VLAN	GE/4	Disabled ~	1 ~	All	Untagged V
-Basic Setting	GE/5	Disabled ~	1 ~	All	Untagged V
-Port Setting	GE/6	Disabled ~	1 ~	All v	Untagged V
Double VLAN	GE/7	Disabled ~	1 ~	All Y	Untagged V
QOS	GE/8	Disabled ~	1 ~	All	Untagged V
FDB Table	GE/9	Disabled ~	1 ~	All 🗸	Untagged V
Port Mirror	GE/10	Disabled V	1 ~	All	Untagged V
E Management					
E Management Port Config Smart Power Config Time Range Config Timing Supply Config tended					

Item Description Notes
------------------------

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Port	Port Name Information	Read Only
Mode	Enabled / Disabled	Default: Disabled
Outer PVID	1, 33-46	
Ingress Mode	All / Tagged / Untagged	Default : All
Egress Mode	Tagged / Untagged	Default: Untagged

### 3.3 Base Configuration-QOS

### 3.3.1 Base Configuration-QoS- Mapping -802.1p Priority

The 802.1p determines the packet's queue in the outbound port on the switch.

6 7 6 7	
6 7	

### **Configuration Steps**

1. Select [Base Configuration / QOS / Mapping / 802.1p Priority] in the navigation bar to enter the QOS [802.1p Priority] interface.

2. On the QOS [802.1p Priority] interface, you can view the mapping from 802.1p priorities to local priorities.

802.1p Priority Mapping																
802.1p Priority	0		1		2		3		4		5		6		7	
Local Priority	0	~	1	~	2	~	3	~	4	~	5	~	6	~	7	~
	Acely Back															

3. To modify the mapping relationship, click [Modify] and select the mapped local priority for the corresponding 802.1p priority in drop-down list box.

ltem	Description	Notes					
Modify	Modify the mapping between	802.1p					
wouny	priorities and local priorities						

### 3.3.2 Base Configuration-QoS- Mapping – DSCP Priority

DSCP is a 6-bit packet header value used for traffic classification and priority assignment.

scal Priority SCP Priority SCP Priority SCP Priority SCP Priority SCP Priority SCP Priority SCP Priority	0	1 0 9 1 17 2	2 0 10 1 18		4 0 12 1		6 0 14	7 0 15
scal Priority SCP Priority SCP Priority SCP Priority SCP Priority SCP Priority SCP Priority SCP Priority	0 8 1 16 2	0 9 1 17	0 10 1	0 11	0	0	0 14	0
SCP Priority scal Priority SCP Priority scal Priority SCP Priority scal Priority	8 1 16 2	9 1 17	10 1	11	12	13	14	15
ocal Priority SCP Priority ocal Priority SCP Priority ocal Priority	1 16 2	1 17	1					
SCP Priority ocal Priority SCP Priority ocal Priority	16 2	17	-	1	1	1		
ocal Priority SCP Priority ocal Priority	2		18				1	1
SCP Priority scal Priority		2		19	20	21	22	23
cal Priority	24	-	2	2	2	2	2	2
		25	26	27	28	29	30	31
con pulsales	3	3	3	3	3	3	3	3
SCP Priority	32	33	34	35	36	37	38	39
cal Priority	4	4	4	4	4	4	4	4
SCP Priority	40	41	42	43	44	45	46	47
cal Priority	5	5	5	5	5	5	5	5
SCP Priority	48	49	50	51	52	53	54	55
cal Priority	6	6	6	6	6	6	6	6
SCP Priority	56	57	58	59	60	61	62	63
cal Priority	7	7	7	7	7	7	7	7
						-		
				Modify				
	cal Priority ICP Priority cal Priority ICP Priority	cal Priority 5 ICP Priority 48 cal Priority 6 ICP Priority 56	state         state           CP Priority         48         49           cal Priority         6         6           CP Priority         56         57	cal Priority         5         5           CP Priority         48         49         50           cal Priority         6         6         6           CP Priority         56         57         58	cal Priority         5         5         5           CP Priority         48         49         50         51           cal Priority         6         6         6         6           CP Priority         50         57         58         59	cal Priority         5         5         5         5           CP Priority         48         49         50         51         52           cal Priority         6         6         6         6         6           cP Priority         50         57         58         59         60           cal Priority         7         7         7         7         7	cal Priority         5         5         5         5         5           CP Priority         440         490         500         510         52         53           cal Priority         60         <	cal Priority         5         5         5         5         5           CP Priority         48         49         50         51         52         53         54           cal Priority         6         6         6         6         6         6           cal Priority         50         57         58         59         60         61         62           cal Priority         7         7         7         7         7         7         7         7

### **Configuration Steps**

1. Select [Base Configuration / QOS / Mapping / DSCP Priority] in the navigation bar to enter the QOS DSCP Priority Mapping interface.

2. On the QOS [DSCP Priority] interface, you can view the mapping from DSCP priorities to local priorities.

3. To modify the mapping relationship, click [Modify] and select the mapped local priority for the corresponding DSCP priority in drop-down list box

ltem	Description	Notes
Modify	Modify the mapping between DSCP	
Mouny	priorities and local priorities	

### 3.3.3 Base Configuration-QoS- Mapping – Local Priority

The local priority is assigned to the local clock and is used if needed when the data associated with the local clock is compared with data on another potential grandmaster (or the master) clock.

Expand  Collapse	Local Priority M	lapping							
- Device Summary	Local Priority	0	1	2	3	4	5	6	7
System	Queue	0	1	2	3	4	5	6	7
Management	4	-					-		
Base Configuration					Modify				
Ports									
-VLAN									
Basic Setting									
-Port Setting									
Double VLAN									
⊕-QOS									
Mapping									
-802.1p Priority									
DSCP Priority									
Local Priority									
Ports									
FDB Table									
-Port Mirror									
-Port Isolate									
-Storm Filters									
Advanced									
L3 Config									
Alarm									
PoE Management									
-Port Config Smart Power Config									
Time Range Config									
Timing Supply Config     Extended									
Extended									

### **Configuration Steps**

1. Select [Base Configuration / QOS / Mapping / Local Priority] in the navigation bar to enter the QOS Local Mapping.

2. You can view the mapping from the local priority to the egress queue on the QOS [Local Priority] interface.

3. To modify the mapping relationship, click [Modify] and select the mapped egress queue for the corresponding local priority in drop-down list box.

ltem	Description	Notes
	Modify the mapping relationship	
Modify	between the local precedence and the	ne
	egress queue	

### 3.4 Base Configuration-QoS- Ports

### 3.4.1 Base Configuration-QoS- Ports-Port Priority

Quality of Service (QoS) Port-based settings allow you to configure each port on the device for QoS Local Area Network (LAN) settings using different priority levels for network traffic. This allows the router to prioritize and handle traffic differently on each port so you may get the best performance while connecting to a range of devices.

ollapse	Port	Default Priority	QOS Policy	Schedule Mode	Weights	Setting
Summary	GE/1	0	NONE	SP		Modify
	GE/2	0	NONE	SP		Modify
ment nfiguration	GE/3	0	NONE	SP		Modify
nnguration	GE/4	0	NONE	SP		Modify
	GE/5	0	NONE	SP		Modify
sic Setting	GE/6	0	NONE	SP		Modify
rt Setting	GE/7	0	NONE	SP		Modify
uble VLAN	GE/8	0	NONE	SP		Modify
	GE/9	0	NONE	SP		Modify
pping 802.1p Priority	GE/10	0	NONE	SP		Modify
Local Priority rts Port Priority Rate Limitation						
rts Port Priority Rate Limitation Table dirror solate n Filters						
rts Port Priority Rate Limitation Table Alirror Solate Filters Id						
rts Port Priority Rate Limitation Table dirror solate n Filters						
rts Port Priority Rate Limitation Table diffor Filters d g						
rts Port Priority Rate Limitation Table dirror solate f Filters d g agement						
rts Port Priority Rate Limitation Table Airror solate of Filters d g agement config						
rts Port Priority Rate Limitation Table dirror solate f Filters d g agement						
rts Port Priority Rate Limitation Table In Filters d g segment config Every Config						

### **Configuration Steps**

1. Select [Base Configuration / QOS / Ports / Port Priority] in the navigation bar to enter the QOS [Port Priority] interface.

2. The QOS related configuration of the port can be viewed on the QOS [Port Priority] interface.

3. To modify the QOS configuration of a port, click [Modify] on the corresponding port display to enter the port setting interface, as shown in Figure 5.4.

4. Select or fill in the configuration items that need to be modified and click [Apply] to confirm. There will be prompts if the configuration item is filled in incorrectly.

Port Priority	
Port	GE/2 •
Default Priority	0 <0-7>
QOS Policy	NONE
Schedule Mode	SP V
Weights	1 .3 .5 .7 .11 .25 .31 .44 <1-127>
	Apply Cancel

ltem	Description	Notes
Port	Port name information	
<b>Default Priority</b>	The port default with priority	Range <0-7>
	NONE: indicates no policy. The port does not	
	have a policy by default.	
QoS Policy	COS: COS priority policy	
	DSCP: DSCP priority policy	
	OS-DSCP: COS-DSCP priority policy	
Scheduling	SP: Strict Priority scheduling strategy	

Mode	WRR: Weighted Round Robin scheduling
	strategy
	WFQ: Weighted Fair Queue scheduling strategy
	If the selected scheduling mode is WRR or
Waights	WFQ, you need to configure the weight of each
Weights	queue, total 8 queues. To set 8 weights, the
	weight of all queues must be 127.

### 3.4.2 Base Configuration-QoS- Ports-Rate Limitation

Port-based rate limiting allows you to limit the speed at which network traffic is sent or received by a device that is connected to a port on your switch. Unlike 802.1p Quality of Service (QoS), port-based rate limiting does not prioritize information based on type. Rate limiting simply means that the switch will slow down traffic on a port to keep it from exceeding the limit that you set. If you set the rate limit on a port too low, you might see degraded video stream quality, sluggish response times during online activity, and other problems.

Expand  Collapse	Port	Ingress Rate Limitation	Rate(Kbps)	Egress Rate Limitation	Rate(Kbps)	Setting
Device Summary	GE/1	Off	N/A	Off	N/A	Modify
System	GE/2	Off	N/A	Off	N/A	Modify
Management	GE/3	Off	N/A	Off	N/A	Modify
Base Configuration  Base Configuration	GE/4	Off	N/A	Off	N/A	Modify
- VLAN	GE/5	Off	N/A	Off	N/A	Modify
Basic Setting	GE/6	Off	N/A	Off	N/A	Modify
-Port Setting	GE/7	Off	N/A	Off	N/A	Modify
- Double VLAN	GE/8	Off	N/A	Off	N/A	Modify
⊜ QOS	GE/9	Off	N/A	Off	N/A	Modify
Mapping	GE/10	Off	N/A	Off	N/A	Modify
-802.1p Priority						
-DSCP Priority						
Local Priority						
Local Priority						
Local Priority Ports Port Priority						
Local Priority Ports Port Priority						
Local Priority     Ports     Port Priority     Rate Limitation						
Cocal Priority  Ports  Port Priority  Rate Limitation  FDB Table						
Local Priority     Ports     Port Priority     Rate Limitation     FDB Table     Port Mirror						
Local Priority     Ports     Port Priority     Rate Limitation     FDB Table     Port Mirror     Port Isolate     Storm Filters						
Local Priority     Ports     Port Priority     Rate Limitation     FDB Table     Port Isolate     Storm Filters     Advanced						
Local Priority Ports Port Priority Rate Limitation PDB Table Port Mirror Port Isolate						
Local Priority     Ports     Port Priority     Rate Limitation     Port Traile     Port Stale     Storm Filters     Advanced     L3 Config						
Clocal Priority Posts Posts Post Vinity Post Network Post Network Post Network Post Network Post Network Storm Filters Advanced La Config Alarm						
Local Priority Ports Ports Port Fronty Port Minor Port Isolate Storm Filters Advanced L3 Config Alam Pet Kangement Port Config						
Ports     Ports     Port Frienty     Resc Unitation     Port Nance     Port Nance     Port Nance     Port Nance     Storm Filters     Advanced     L3 Config     Aam     Port Config     Smart Power Config						
Local Priority Ports Ports Port Frointy Port Prost Port Infort Port Isolate Storm Filters Advanced Lid Config Port Roagement Port Config						

### **Configuration Steps**

1. Select [Base Configuration / QOS / Port / Rate Limitation] in the navigation bar to enter the QOS [Rate Limitation] interface.

2. On the QOS [Rate Limitation] interface, you can view the related configuration of the port's speed limit.

3. To modify the port's speed limit configuration, click [Modify] in the port display column to enter the Rate Limitation setting interface.

4. Select or fill in the configuration items that need to be modified and click [Apply] to confirm. There will be prompts if the configuration item is filled in incorrectly.

Dese	cription		Note
	Apply Cancel		
Egress Rate Limitation	◯ On ● Off	<16-1000000>kbps	
Ingress Rate Limitation	On  Off	<16-1000000>kbps	
Port	GE/5 •		
Rate Limitation			

Port	Port name information
	Set the port's entry speed limit:
	<b>On:</b> Enables the port to limit the rate
Ingress Rate	of ingress. The rate limit ranges
Limitation	from <16-1000000>
	<b>OFF:</b> Close the port's ingress rate
	limit
	Set the port's output speed limit:
Faress Date	<b>On:</b> Enables the port to limit the rate of
Egress Rate Limitation	egress. The rate limit ranges from <16-
Limitation	100000>
	<b>OFF:</b> Close the port's egress rate limit

### 3.5 Base Configuration-FDB Table

### 3.5.1 Base Configuration-FDB Table- Configuration – Aging Setting

Expand  Collapse	Aging Setting	
Device Summary	Aging Time(unit:second)	On ○ Off 300     <1-86400> Default:300second
System	Fast Aging Time	Enabled
Management	rost riging time	
Base Configuration		Apply
+ Ports		
⊨-VLAN		
-Basic Setting		
-Port Setting		
Double VLAN		
e-QOS		
Mapping		
-802.1p Priority		
-DSCP Priority		
Local Priority		
B-Ports		
-Port Priority		
Rate Limitation		
E-FDB Table		
Configuration		
Aging Setting		
-Static MAC Entry		
Port Learning Ability		
-FDB Table		
Delete Entries		
-Port Mirror		
-Port Isolate		
-Storm Filters		
Advanced		
E-L3 Config		
🖲 Alarm		
PoE Management		

### **Configuration Steps**

1. Select [Base Configuration / FDB Table / Configuration / Aging Time] to enter the [Aging Time] interface.

2. The aging time related configuration of the FDB Table can be viewed in the [Aging Time] interface.

3. If you need to modify the aging time configuration of the FDB Table, you can modify the corresponding configuration in the aging time configuration box and click [Apply].

ltem	Description	Notes
	The FDB Table aging time can be configured	
	via the radio button.	
	<b>Enabled</b> : The aging time is on. Range 1-86400	
Aging Time	seconds, default value 300 seconds.	
Aging Time	Disabled: The FDB Table never aging, but the	
	system resetting could clear the dynamic	
	forwarding entries.	
	Note: Default with Enable, 300 seconds.	
	·	

### 3.5.2 Base Configuration-FDB Table- Configuration – Static Mac Entry

### WebGUI User Manual

Expand  Collapse	MAC Address				VLAN	Port	
Device Summary							
System		Static MAC Entry					
Management		MAC Address		XXXXXX-XXXXXXX			
😑 Base Configuration		VLAN	<1	-4094>			
Ports		Port	GE/1 👻		1		
-VLAN			Apply Can	lec	1		
-Basic Setting					,		
-Port Setting							
Double VLAN							
⊜-QOS							
🖶 Mapping							
-802.1p Priority							
- DSCP Priority							
Local Priority							
🖹 Ports							
-Port Priority							
Rate Limitation							
FDB Table							
😑 Configuration							
-Aging Setting							
Static MAC Entry							
Port Learning Ability							
-FDB Table							
Delete Entries							
- Port Mirror							
-Port Isolate							
-Storm Filters							
Advanced							
E3 Config							
Alarm							
PoE Management	*						

### **Configuration Steps**

1. Select [Base Configuration / FDB Table / Configuration / Static MAC Entry] to enter the [Static MAC Entry] configuration interface.

2. On FDB Table [Static MAC Entry] interface, you can view the static MAC related configuration information of FDB Table,

3. If add a new static MAC address, click [Add] to enter the Static MAC configuration interface. Fill in the corresponding configuration items and click [Apply] to complete the addition. There will be prompts if the configuration item is filled in incorrectly.

4. If modify the static MAC address, select the corresponding static MAC address and click [Modify] to enter [Static MAC Entry] interface. To modify the corresponding configuration item, click [Apply] to complete the modification. There will be prompts if the configuration item is filled in incorrectly.

5. If delete a static MAC, select the corresponding static MAC and click [Delete] to delete the static MAC.

ltem	Description	Notes
MAC Address	A valid unicast MAC address, format XXXXXX -	
WAC AUULESS	XXXXXX	
VLAN	A valid VLAN ID, rang 1-4094	
Port	Select a specified port	

### 3.5.3 Base Configuration-FDB Table- Configuration – Port Learning Ability

### WebGUI User Manual

Expand  Collapse					
	-	Port	Admin Status	Learning Number	Setting
-Device Summary		GE/1	On	8192	Modify
System		GE/2	On	8192	Modify
Management		GE/3	On	8192	Modify
Base Configuration		GE/4	On	8192	Modify
Ports     VLAN			On	8192	Modify
Basic Setting			On	8192	Modify
-Port Setting			On	8192	Modify
- Double VLAN			On	8192	Modify
e QOS					
B-Mapping			On	8192	Modify
-802.1p Priority		GE/10	On	8192	Modify
- DSCP Priority		Note If you want to modify port learn	ning ability, you must disable the port security.		
-Local Priority			and anoth has more assess the barrowards.		
Ports					
Ports					
-Port Priority					
-Port Priority Rate Limitation					
Port Priority Rate Limitation FDB Table					
Port Priority Rate Limitation FDB Table					
Port Priority Rate Limitation B FDB Table Configuration Aging Setting					
Port Priority Rate Limitation FDB Table Configuration Aging Setting Static MAC Entry					
Port Priority     Rate Limitation     FDB Table     Configuration     Aging Setting     Static MAC Entry     Port Learning Ability					
Port Priority  Rete Limitation  FDB Table  Gonguration  Aging Setting  Static MAC Entry  Port Learning Ability  FDB Table					
Port Priority Rate Limitation FDB Table Configuration Aging Setting Static MAC Entry Port Learning Ability FDB Table Delete Entries					
Port Priority Rate Limitation PDB Table Configuration Aging Setting Static MAC Entry Pot Learning Ability FDB Table Delete Entries Pot Mirror					
Port Priority Rate Limitation PFDB Table PFDB Table Static MAC Entry Port Learning Ability PDB Table Delete Entries Port Mirror Port Solate					
Port Priority Rate Limitation PFDS Table PFDS Table Port Learning Ability PDT Stable Delete Entries Port Solate Storm Filters Advanced US Config					
Port Priority Rate Limitation PDB Table Configuration Aging Setting Static MAC Entry Port Learning Ability PDB Table Delete Entries Port Miror Port Isolate Storm Filters Advanced					

### **Configuration Steps**

1. Select [Base Configuration / FDB Table / Configuration / Port Learning Ability] to enter the [Port Learning Ability] interface.

2. On the FDB Table [Port Learning Ability] interface, you can view the Port Learning Ability related configuration information of FDB Table.

3. To modify the Port Learning Ability configuration, click [Modify] in the corresponding port column to enter the port configuration interface.

4. Select or fill in the configuration items that need to be modified and click [Apply]. There will be prompts if the configuration item is filled in incorrectly.

ltem	Description	Notes
Port	Port name, selected modified port	
	Functional configuration of port learning,	
	configured via radio buttons.	
	ON: The Port Learning Ability is on. IS3000	
Learning	/ IS2000 series range is 1-8192;	
	OFF: Closes the Port Learning Ability.	
	Note: The default is Enable with value	
	8192.	

Remarks: The number of address learning is shared by all ports

### 3.5.4 Base Configuration-FDB Table- FDB Table

The FDB (forwarding database) table is used by a Layer 2 device (switch/bridge) to store the MAC addresses that have been learned and which ports that MAC address was learned on. The MAC addresses are learned through transparent bridging on switches and dedicated bridges.

Instrument         Instrument <thinstrument< th="">         Instrument         Instrume</thinstrument<>	Expand  Collapse		Index	MAC Address	VLAN	Port	Туре		
System         I         Outro Water Management         I         Outro Marka         I         Outro Marka           Management         2         000111/122A         1         0/7         épamic           Base Configuration         2         000110-070A         1         0/7         épamic           VAN         2         3         00018-070303         1         0/7         épamic           VAN         5         00018-07031-072A         1         0/7         épamic           VAN         5         00018-0703-072A         1         0/7         épamic           VAN         5         00019-04804         1         0/7         épamic           VAN         5         00190-04804         1         0/7         épamic           1         00190-02084-04513         1         0/7         épamic           1         00190-02084-04512         1         0/7         épamic			Index		1 LAN				
Management         I									
Base Configuration         -         4         0008Ab-AMF3/F         1         0L/1         dynamic           + Ports         5         00189-13542         1         67/7         dynamic           + VAM         5         0189-13542         1         67/7         dynamic           + QOS         4         00189-13542         1         01/7         dynamic           + QOS         4         00189-13542         1         0/7         dynamic           + POS Table         7         00189-0680CA         1         0/7         dynamic           + POS Table         0         8         002564-69753         1         0/7         dynamic           + POS Table         0         0         00562-3910A         1         0/7         dynamic           + POS Table         0         10         00562-3910A         1         0/7         dynamic           + POS Table         0         10         00562-3910A         1         0/7         dynamic           + Post Marce         1         0         00562-39127         1         0         0/7         dynamic           - Storn Filters         1         10         06562-49122         1         0 <th>Management</th> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td>	Management		-						
Ports         9         9         001993-173264         1         06/7         dynamic           * VAAN         0         4         001993-173264         1         06/7         dynamic           * QOS         0         4         001993-173264         1         06/7         dynamic           * QOS         0         7         001993-08306A         1         06/7         dynamic           * POB Table         0         8         002064-94593         1         06/7         dynamic           Dielse Extress         0         10         002064-94593         1         06/7         dynamic           Dielse Extress         0         10         002064-94593         1         0         06/7         dynamic           Port Isolate         0         10         002064-94593         1         0         07/7         dynamic           Storm Filters         0         10         00506-732327         1         0         07/7         dynamic           Storm Filters         0         10         00504-55302         1         0         0/7         dynamic           Storm Filters         0         14         0077774         dynamic         0	Base Configuration		-		1				
• VAN         • <th>Ports</th> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td>	Ports				1				
POS base         I         0L/7         dynamic           # POS Table         0         01910-0A88CA         1         0L/7         dynamic           # Configuration         0         8         002986-#FE33         1         0E7         dynamic           # Configuration         0         9         002986-#FE33         1         0E7         dynamic           # Configuration         0         9         002862-48/0A         1         0E/7         dynamic           # Configuration         1         002862-48/02         1         0E/7         dynamic           Post Table         18         002862-48/02         1         0E/7         dynamic           Post Table         12         002862-48/02         1         0E/7         dynamic           Storn Filters         13         0E/82-48/02         1         0E/7         dynamic           Storn Filters         13         0E/874-57726         1         0E/7         dynamic           C J Config         15         010064-48/04         1         0E/7         dynamic           C Adamod         16         2046-10004A         1         0E/7         dynamic           C Bol Anagement         16	+ VLAN				1				
Pot Nate         I         06/7         dynamic           i Configuration         I         002084-9FE53         1         0E/7         dynamic           i Configuration         I         00506-2010         1         0E/7         dynamic           i Delete Entries         I         0         00506-2010         1         0E/7         dynamic           Port Nimor         I         0         00506-20127         1         0E/7         dynamic           Port Nimor         I         II         00506-20127         II         0E/7         dynamic           Port Nimor         II         0         00506-20127         II         0E/7         dynamic           Storm Filters         II         0         00506-20127         II         0E/7         dynamic           Storm Filters         II         0         00506-20127         II         0E/7         dynamic           Storm Filters         II         0         06244-65000         II         0E/7         dynamic           Cloning         II         0167-6624/4         0100-1         0E/7         dynamic           Cloning         II         01064-662/4         II         0E/7         dynamic	⊕ qos				1				
Pot Name         9         00E84c-3401AD         1         0E/7         6ynamic           Pot Name         19         00E84c-3401AD         1         0E/7         6ynamic           Pot Name         10         00E84c-3401AD         1         0E/7         6ynamic           Pot Name         1         00E84c-3401AD         1         0E/7         6ynamic           Pot Name         1         0E68c-37332P         1         0E/7         6ynamic           Pot Name         12         0E84c-48152         1         0E/7         6ynamic           Storn Filters         13         0E84d-95300C         1         0E/7         6ynamic           4 Advanced         1         0E/7         6ynamic         0         0E/7         6ynamic           4 Config         18         0E94d-957276         1         0E/7         6ynamic           Alam         16         02064c-40124         1         0E/7         6ynamic           Alam         16         2040A-1000AA         1         0E/7         6ynamic           Pot Name         1         2040A-1000AA         1         0E/7         6ynamic	FDB Table		7		1		dynamic		
Delete Entries         I         0E/240         0E/240         off         dynamic           Port Minor         I         00504C-3491AA         1         0E/7         dynamic           Port Minor         I         10         00504C-32927         1         0E/7         dynamic           Storm Filters         I         I         00504C-32927         I         0E/7         dynamic           Storm Filters         I         I         00504C-3292         I         0E/7         dynamic           Storm Filters         I         I         0824C-3901C         I         0E/7         dynamic           Storm Filters         I         I         0824C-3901C         I         0E/7         dynamic           L2 Config         I         I         08778-53726         I         0E/7         dynamic           L2 Config         I         I         01074-60004         I         0E/7         dynamic           Aarm         I         I         01004-00004         I         0E/7         dynamic           Del Management         I         02064-10004         I         0E/7         dynamic	Configuration		8		1		dynamic		
Port Mirror         II         00584c-37327         1         0E/7         dynamic           Port Stoate         I2         00584c-6912         1         6E/7         dynamic           Storm Filters         I3         06824c-55302         1         6E/7         dynamic           Advanced         I4         067         dynamic         dynamic           I Gong         I4         0879Fs-1772A         I         0         6/7         dynamic           I Gong         IS         10054c-6687         1         0         6/7         dynamic           Alarm         I6         3004c-8000A         1         0         6/7         dynamic           I FoE Management         IF         0096c-11939         1         0         6/7         dynamic	-FDB Table	0	9	00E04C-36016D	1		dynamic		
Port Isolate         I         006804-08F122         1         067/1         dynamic           Storm Filters         I         006804-58500C         1         067/1         dynamic           Advanced         I         0         08244-55300C         1         06/7         dynamic           L (Scong)         I         0         06/7         dynamic         dynamic           Alarm         I         0         007/2         dynamic         dynamic           Pob Management         I         0         009/2         dynamic         dynamic	Delete Entries		10	00E04C-3601AA	1	0E/7	dynamic		
Storm Filters         Image: Constraint of the state of the stat	-Port Mirror		11	00E04C-373329	1	0E/7	dynamic		
Advanced         Image: Constraint of the second of th			12	00E04C-4BE122	1	GE/7	dynamic		
L3 Config         1         0/7         symmetry           -         1         0/7         symmetry			13	086266-55303C	1	GE/7	dynamic		
Alam         I         OE/T + 4.5674         I         OE/T + 6.6774         Optimize           • POE Management         I <t< td=""><th></th><td></td><td>14</td><td>089798-F37726</td><td>1</td><td>GE/7</td><td>dynamic</td></t<>			14	089798-F37726	1	GE/7	dynamic		
PDE Management         I         0E/7         dynamic           1         1         0E/7         dynamic		0	15	10E7C6-6C6B74	1	GE/7	dynamic		
			16	201A06-BD004A	1	GE/7	dynamic		
e Extended		0	17	209BE6-123918	1	GE/7	dynamic		
Prov Next 1 /4 Go First Last Dolete Refresh									

### **Configuration Steps**

1. Select [Base Configuration / FDB Table / FDB Table] to enter [FDB Table] interface.

2. On the FDB Table interface, you can view the FDB Table information.

3. If delete a forwarding entry, select the corresponding forwarding entry or select it all and click [Delete] to delete the entry.

Expand  Collapse	MAC Deletion	
Device Summary		
System	Delete By	ALL
Management	Dynamic or Static	Dynamic Static
Base Configuration	VLAN	<1-4094×
Ports	Port	GE/1 V
. VLAN		Apply
QOS		white
-FDB Table		
Configuration		
-FDB Table		
-Port Mirror		
-Port Isolate		
-Storm Filters		
Advanced		
L3 Config		
Alarm		
PoE Management		
Extended		

### **Configuration Steps**

Select [Base Configuration / FDB Table / Delete] to enter the [Delete] interface.
 If delete related entries in the FDB Table in batches, select the corresponding remove condition in the MAC address deletion column, and then click [Apply].

ltem	Description	Notes
	All: Deletes all FDB Table entries.	
Doloto By	VLAN: Specifies the VLAN ID to delete FDB Table	
Delete By	entries.	
	Port: Specify the port number to delete the FDB	

	Table entries.
Dynamic or static	Dynamic: Delete the dynamic FDB Table entries that have been learned. Static: Delete manually added static FDB Table entries.
VLAN	Delete the forwarding entry of the specified VLAN. The range is 1-4094.
Port	Delete the forwarding entry of the specified port.

### 3.5.6 Base Configuration-FDB Table- Port Mirror

Port mirroring is used on a network switch to send a copy of network packets seen on one switch port (or an entire VLAN) to a network monitoring connection on another switch port. This is commonly used for network appliances that require monitoring of network traffic such as an intrusion detection system, passive probe or real user monitoring (RUM) technology that is used to support application performance management (APM).

Expand  Collapse	Port Mirror Setting									
Device Summary	Admin Status	Disabled	~							
System	Monitor Port	GE/1	~							
Management			CPU	GE/1	GE/2	GE/3	GE/4	GE/5	GE/6	GE/7
Base Configuration	Source Ingress Ports	GE/8	GE/9	GE/10	- 0E/2	062/3	06/4	C 0E/5	C 0E/6	C 0E//
Ports										
+ VLAN	Source Egress Ports		CPU	GE/1	🗆 GE/2	🗆 GE/3	🗆 GE/4	🗆 GE/5	🗆 GE/6	GE/7
e QOS		GE/8	GE/9	GE/10						
🖶 FDB Table				Apply						
<ul> <li>Configuration</li> </ul>				rappi						
FDB Table										
Delete Entries										
Port Isolate										
-Storm Filters										
Advanced										
L3 Config										
Alarm										
PoE Management										
Extended										

### **Configuration Steps**

1.Select [Base Configuration / Port Mirror] in the navigation bar to enter the [Port Mirror] configuration interface

2.Modify the port mirroring configuration information. Pull down and select to disable or enable mirroring, select the mirroring destination port, check the ingress port and egress port, the ingress or egress cannot contain the destination port, and click [apply] to submit the modification

ltem	Description	Notes
Admin Status	Select whether to enable port mirroring	
Monitor Port	Select the destination port for port mirroring via	
Monitor Port	drop-down box	
	Select the source port list in the ingress direction.	
Source Ingress	It can be selected with the check button. (The	
Ports	source port list cannot contain the destination	
	port)	

	Select the source port list in the egress direction.
Source Egress	It can be selected with the check button. (The
Ports	source port list cannot contain the destination
	port)

### 3.5.7 Base Configuration-FDB Table- Port Isolate

Port isolation allows a network administrator to prevent traffic from being sent between specific ports. This can be configured in addition to an existing VLAN configuration, so even client traffic within the same VLAN will be restricted.

Expand  Collapse	D ID Isolate Ports	
-Device Summary		
🔋 System	Isolate Add	
Management	Isolate ID dt-32>	
Base Configuration		
+ Ports	Isolate Ports 0 0E/1 0 0E/2 0 0E/3 0 0E/4 0 0E/5 0 0E/6 0 0E/7 0 0E/8	
+-VLAN	06/70	
+ QOS	Apply Cancel	
FDB Table		
Configuration		
FDB Table		
Delete Entries		
-Port Mirror		
-Port Isolate		
Storm Filters		
Advanced		
L3 Config		
Alarm		
PoE Management		
Extended		
	Add Modify Delate	
	AGD Modely Levels	

### **Configuration Steps**

1.Select [Base Configuration / Port Isolate] in the navigation bar to enter the [Port Isolate] configuration interface

2.Modify the port isolate configuration information. Pull down and select to Add or Modify, enter Isolate ID, select a Isolate Ports, and click [apply] to submit the modification.

### 3.5.8 Base Configuration-FDB Table- Storm Filters

Broadcast filtering helps to prevent a broadcast storm, which is a massive

transmission of broadcast packets being sent by a single port to every port on a local area network (LAN). Forwarded message responses can overload network resources, slow regular network traffic, or cause the network to time out. Broadcast filtering lets you limit the number of broadcast packets that each port sends. When you turn on broadcast filtering, you have the option to set the storm control rate on each port of your switch.

05/1	Broadcast Packets	Threshold(kbps)	Unknown Unicast Packets	Threshold(kbps)	Unknown Multicast Packets	Threshold(kbps)	Setting
GE/1	On	64	011	N/A	011	N/A	Modify
GE/2	On	64	Off	N/A	Off	N/A	Modify
GE/3	On	64	Off	N/A	Off	N/A	Modify
6E/4	On	64	Off	N/A	Off	N/A	Modify
GE/5	On	64	Off	N/A	Off	N/A	Modify
GE/6	On	64	Off	N/A	Off	N/A	Modify
6E/7	On	64	Off	N/A	Off	N/A	Modify
GE/8	On	64	Off	N/A	Off	N/A	Modify
GE/9	On	64	Off		Off	N/A	Modify
GE/10	On	64	Off		Off	N/A	Modify

### **Configuration Steps**

1. Select [Base Configuration / Storm Filters] in the navigation bar to enter [Storm Filters] configuration interface.

2. The Storm Filtering interface displays broadcast storm filtering configuration information for each port.

3. To modify the port storm filtering configuration information, click the [Modify] to enter the [Storm Filters] modification interface, as shown in Figure 13.2. Enter valid configuration parameters and click [Apply] to submit the changes. Click [Cancel] to cancel the modification

ltem	Description	Notes
Port	Modify the configured port	
Broadcast Packets	<b>ON</b> - If you choose to enable, enter the corresponding rate suppression value, <16-1000000>, and enter 16, unit is kbps <b>OFF</b>	
Unknown Unicast Packets	<b>On</b> - If you choose to enable, enter the corresponding rate suppression value, <16-1000000>, enter 16, unit is kbps <b>OFF</b>	
Unknown Multicast Packets	<b>On</b> - If you choose to enable, enter the corresponding rate suppression value, <16-1000000>, enter 16, unit is kbps <b>OFF</b>	

## Chapter 4 Advanced Configurations

This chapter describes the advance configuration in detail, including but not limit to the following:

- ACL
- DHCP snooping
- ✤ Multicast
- GMRP
- GVRP
- EPRS

### 4. Advanced Configuration

### 4.1 Advanced Configuration – Ports – Ports Security

Port security is a layer-2 traffic control feature on Fiberroad Industrial switches. It enables an administrator configure individual switch ports to allow only a specified number of source MAC addresses ingressing the port.

xpand  Collapse	Port	Mode	Action	State	MAC 1	MAC 2	MAC 3	Clear
Device Summary	•	0 V	0 V					Clear
System	GE/1	Disabled V	Trap 🗸	Non-Execution	000000-000000	000000-000000	000000-000000	Clear
Management	GE/2	Disabled V	Trap	Non-Execution	000000-000000	000000-000000	000000-000000	Clear
Base Configuration Advanced	0E/3	Disabled V	Trap	Non-Execution	000000-000000	000000-000000	000000-000000	Clear
-Ports	GE/4	Disabled V	Trap	Non-Execution	000000-000000	000000-000000	000000+000000	Clear
-Port Security	GE/5	Disabled Y	Trap	Non-Execution	000000-000000	000000-000000	000000-000000	Clear
+ ACL	GE/6	Disabled V	Trap	Non-Execution	000000-000000	000000-000000	000000-000000	Clear
DHCP snooping	GE/7	Disabled Y	Trap 👻	Non-Execution	000000-000000	000000-000000	000000+000000	Clear
DHCP Server	GE/8	Disabled V	Trap	Non-Execution	000000-000000	000000-000000	000000-000000	Clear
Multicast	GE/9	Disabled ~	Trap 💙	Non-Execution	000000-000000	000000-000000	000000-000000	Clear
GMRP     GVRP	GE/10	Disabled V	Trap	Non-Execution	000000-000000	000000-000000	000000-000000	Clear
Link Aggregation     Loopback     STP	Note:If you want	to modify the mode, you	must enable the port learning ability an	d set the learning number to 8192	Apply Refresh			
+-Loopback	Note:If you want	to modify the mode, you	must enable the port learning ability an	d set the learning number to 8192				

### **Configuration Steps**

1.Select [Advance] in the navigation bar to enter the [Port Security] configuration interface

2.Modify the Port Security configuration information. Pull down and select to disabled or enabled mode, select the action, enter the number of MAC addresses to be secured on a port, and click [apply] to submit the modification.

ltem	Description	Notes
Mode	Enable port security on the desired ports. If	
	desired, specify the secure MAC address.	
Action	Trap/Shundown/Trap&Shundown/Drop/Trap&Drop	
MAC 1/MAC	You can add MAC address to the list of secure	
2/MAC 3	address	

Remarks: If you want to modify the mode, you must enable the port learning ability and set the learning number to 8192.

### 4.2 Advanced Configuration – ACL

### 4.2.1 Advanced Configuration – ACL – ACL Group Setting

The Groups for ACLs feature lets you classify users, devices, or protocols into groups and apply those groups to access control lists (ACLs) to create access control policies for those groups.

Expand  Collapse		
Device Summary		
System	ACL Group Setting	
Management	Index	-0-3999+
Base Configuration	Group Name	
Advanced		
Ports	Binding Ports	0 0E/6 0 0E/7 0 0E/8 0 0E/9 0 0E/10
Port Security		(Leave Binding Ports empty to disable the ACL Group.)
⊕-ACL		Apply Cancel
-ACL Group Setting		
-ACL Rule Setting		
DHCP snooping		
DHCP Server		
Multicast		
()-GMRP		
⊕-GVRP		
0 802.1X		
Link Aggregation		
Loopback		
()-STP		
ERPS		
L3 Config		
Alarm		
PoE Management		
Extended		

### **Configuration Step**

1. Select [Advanced / ACL / ACL Group Setting] in the navigation bar to enter the ACL interface.

2. The ACL information will be added in [ACL Group Setting] interface.

3. Add an ACL Group: click [Add] to enter [ACL Group Setting] interface, An ordinal number (0-3999) is assigned to the group. Set a name for the group, not repeatable. Then select the port and bind to the group. It is not workable if port binding not done. Click [Apply] to complete the configuration.

4. Modify an ACL Group Configuration: select an ACL group and click [Modify] to enter the [ACL Group Setting] interface. Fill in the required configuration items, and click [Apply] to complete the configuration.

5. Delete an ACL Group Configuration: select an ACL group and click [Delete] to delete the configuration.

ACL Group Setting						
Index		<0-399	9>			
Group Name						
	🔲 All	GE/1	GE/2	GE/3	🔲 GE/4	GE/5
Binding Ports	🔲 GE/6	🔲 GE/7	🔲 GE/8	GE/9	🔲 GE/10	
(Leave Binding Ports empty to disable the ACL Group.)						
		Apply	Car	ncel		

ltem	Description	Notes
	ACL group index, range <0-3999>, divided into 4	
	matching groups L2, L3 / L4, Source L2 / L3 / L4,	
	Destination L2 / L3 / L4. The matching items	
	supported by each matching group are as follows:	
Index	L2: Source MAC, Destination MAC, Ethernet type,	
Index	VLAN, IP protocol, range 0-999.	
	L3 / L4: VLAN, Source IP, Destination IP, Source IP	
	port, Destination IP port, IP protocol, range 1000-	
	1999.	
	Source L2 / L3 / L4: Source MAC, Ethernet type,	

	VLAN, Source IP, Source IP port, IP protocol, range
	2000-2999.
	Destination L2 / L3 / L4: Destination MAC,
	Ethernet type, VLAN, Destination IP, Destination
	IP port, IP protocol, range 3000-3999.
	The Group name must be unique and string
Group Name	format, ASCII code A-Z, a-z,0-9, _, no more than 32
	characters.
Binding Ports	An ACL is applied to a certain port or some port,
binuing Ports	then the bound port ACL becomes effective.

### 4.2.2 Advanced Configuration – ACL – ACL Rule Setting

ACLs are a collection of permit and deny conditions, called rules, that provide security by blocking unauthorized users and allowing authorized users to access specific resources. ACLs can block any unwarranted attempts to reach network resources.

(pand) Collapse	ACL Group Information		
Device Summary	Choose Range 0-999		
System		ACL Rule Setting	
Management	Index	Index	<0-65535+
Base Configuration		Action	● Drop ○ Permit ○ Redirect GE/1
Advanced		Filtering Rule	
😑-Ports			Apply Cancel
-Port Security			
-ACL			
ACL Group Setting			
-ACL Rule Setting			
DHCP snooping			
DHCP Server			
Multicast			
GMRP			
GVRP			
802.1X			
Link Aggregation			
Loopback			
STP			
ERPS			
L3 Config			
Alarm			
PoE Management			
Extended			

### **Configuration Step**

1. Select [Advanced / ACL / ACL Rule Setting] in the navigation bar to enter the ACL Rule view interface.

2. In Select Range, select the interval of the group in the first drop-down list, and select a specific group within the group interval in second drop-down list. The next two lines show the selected group name and the port that the group binds. The table shows the ACL rules that the group has configured. Click the icon  $\boxplus$  in the filter rule bar to expand and view the specific content of the filter rule, the icon changed to be  $\square$ .

	Index		Action	Filtering Rule
Choose	Range	0-999 🗸	v	
ACL Gro	oup Information	n		
•				

3. Add an ACL Rule: click [Add] to enter the ACL rule setting interface.One of the filtering rules can be selected by selecting different filters via the drop-down list, and then the corresponding filtering items will be automatically generated for users to fill in. You can also remove the filter items by the [Delete] on the right side. Fill in the required configuration items, and click [Apply] to complete the

### configuration.

ACL Rule Setting	
Index	<0-65535>
Action	Drop      Permit      Redirect GE/1
Filtering Rule	<b>V</b>
	Apply Cancel

4. Modify an ACL Rule: select an ACL and click 'Modify' to enter the [ACL Rule Setting] interface. Fill in the required configuration items, and click 'Apply' to complete the configuration.

5. Delete an ACL Rule: select an ACL and click 'Delete' to delete the configuration.

ACL Rule Setting		
Index	<0-65535>	
Action	● Drop ○ Permit ○ Redirect GE/1 ✓	
Filtering Rule		
IP Protocol	● ICMP ○ IGMP ○ TCP ○ UDP	Delete
Source MAC	Any O XXXXXXXXXXXX MASK: FFFFF-FFFFF	Delete
Destination MAC	Any O XXXXXXXXXXX MASK: FFFFF-FFFFF	Delete
VLAN	● Any ○ <1-4094>	Delete
Ethernet Type	Any O Hex	Delete
	Apply Cancel	

ltem	Description	Notes
Index	ACL Rule Index	
	When the message conforms to the filter rule, the	
	action includes:	
Action	Allow	
	Discarded	
	Redirect to the destination port	
	ACL filtering rules include:	
	Source MAC	
	Destination MAC	
	IP Protocol	
Filtoring Dulo	Ethernet type	
Filtering Rule	VLAN	
	The filtering items can be filtered by a range via	
	setting the mask.	
	Note: When the match mask is 1, it is	
	matched. Not matched at 0	
ltem	Description	Notes

Item	Description	Notes
Sources MAC	Format xxxxxx-xxxxx, support the mask, default mask ffffff-ffffff	
Destination MAC	Format xxxxxx-xxxxx, support the mask, default mask ffffff-ffffff	
IP Protocol	Only supports TCP, UDP, ICMP, IGMP currently	
Ethernet Type	Hexadecimal format, support mask, default mask FFFF	
VLAN	<1-4094>	

### **4.3 Advanced Configuration – DHCP snooping**

### 4.3.1 Advanced Configuration – DHCP snooping – Global Setting

DHCP snooping is a security feature that acts like a firewall between untrusted hosts and trusted DHCP servers.

Expand  Collapse					
	DHCP snoopoing Global Setting				
- Device Summary	Admin Status	Off	×		
<ul> <li>System</li> </ul>	DHCP option 82	Off	×		
Management					
Base Configuration				Apply	
Advanced					
+ Ports					
-Port Security					
+ ACL					
-ACL Group Setting					
ACL Rule Setting					
DHCP snooping					
- Port Setting					
Binding Table					
DHCP Server					
Multicast					
GMRP					
. GVRP					
802.1X					
Link Aggregation					
Loopback					
()-STP					
. ERPS					
E L3 Config					
i Alarm					
PoE Management					
Extended					
Extended					

### **Configuration Steps**

1. Select [Advanced / DHCP Snooping / Global Setting] in the navigation bar to enter the [Global Setting] interface of DHCP snooping.

2. The global configuration information can be viewed in of DHCP snooping [Global Setting] interface.

3. To modify the global configuration of DHCP snooping in the DHCP snooping global configuration box, click [Apply].

DHCP snoopoing Global Setting		
Admin Status	Off	
DHCP option 82	Off	

Apply

ltem	Description	Notes
Admin Status	ON: Enable DHCP Snooping Global	Default:
Aumin Status	OFF: Disable DHCP Snooping Global	OFF
DHCP option 82	ON: Enable DHCP Snooping Global	Default:
	OFF: Disable DHCP Snooping Global	OFF

Expand  Collapse	Port					Remote ID			
Device Summary	0E/1								
System	GE/2	Setting							
Management	GE/3	Port	GE/1	~					
Base Configuration		Trust	No	×					
Advanced	OE/4	Circuit ID			(Any U	TF-8 String Except S	Spaces, MAX: 32 Bytes)		
Ports	GE/5	Remote ID			(Any U	TF-8 String Except 5	Spaces, MAX: 32 Bytes)		
-Port Security	GE/6			Apply	Cano	el			
. ACL	GE/7								
-ACL Group Setting	GE/8								
ACL Rule Setting	GE/9								
DHCP snooping	GE/10								
- Global Setting									
-Port Setting									
Binding Table									
DHCP Server									
DHCP Server									
DHCP Server     Multicast									
DHCP Server     Multicast     GMRP									
DHCP Server     Multicast     GMRP     GVRP									
DHCP Server     Multicast     GMRP     GVRP     802.1X									
DHCP Server     Multicast     GMRP     GVRP     802.1X     Link Aggregation									
DHCP Server     Multicast     GMRP     GVRP     G02.1X     Link Aggregation     Loopback									
DHCP Server     Multicast     GMRP     GORP     802.1X     Link Aggregation     Loopback     STP     ERPS									
DHCP Server     Multicaat     GMRP     GVRP     GOVRP     Unk Aggregation     Link Aggregation     Loopback     STP     ERPS     La Config									
DHCP Server     Multicast     GMRP     GVRP     B02.1X     Loopback     STP									

### 4.3.2 Advanced Configuration – DHCP snooping – Port Setting

### **Configuration Steps**

1. Select [Advanced / DHCP Snooping / Port Setting] in the navigation bar to enter the DHCP snooping [Port Setting] interface.

2. The port configuration can be viewed in the DHCP snooping [Port Setting] interface.

3. To modify the DHCP snooping configuration for a port, click the [modify] to enter the port configuration interface, as shown in figure 17.2.

4. Select or fill in the configuration items that need to be modified, and click [Apply] to make effective. There will be prompts if the configuration items are incorrectly filled.

ltem	Description	Notes
Port	The name of information	
Trust	Yes: Set as trust port	
Trust	No: Set as untrust port	
Circuit ID	Default by global agent circuit ID	
Remote ID	Default by global agent remote ID	

# Payandi Calaga Vali Part System <

### 4.3.3 Advanced Configuration – DHCP snooping – Binding Table

### **Configuration Steps**

1.Select [Advanced / DHCP Snooping / Binding Table] in the navigation bar to enter the DHCP snooping [Binding Table] interface.

2.All bind list information can be viewed in the DHCP snooping [Binding Table] interface.

3.Click [Refresh] to update all DHCP snooping bind list information.

### 4.4 Advanced Configuration – DHCP Server

### 4.4.1 Advanced Configuration – DHCP Server – Global Setting

A DHCP Server is a network server that automatically provides and assigns IP address, default gateways and other network parameters to client devices. It relies on the standard protocol know as Dynamic Host configuration protocol or DHCP to respond to broadcast queries by clients.

Expand  Collapse	DHCP server Global Setting			
- Device Summary	Admin Status	Disabled	V	
System	Lease Times(unit:minutes)	30	<30-525600> Default:30minutes	
Management		1		
Base Configuration			Apply	
Advanced				
Ports	IP Interfaces		tatus	Setting
-Port Security	ip0	D	isabled	Modify
- ACL				
ACL Group Setting				
ACL Rule Setting				
DHCP snooping				
-Global Setting				
- Port Setting				
Binding Table				
DHCP Server				
-Global Setting				
-IP Address Pool				
- IP Address Lease Informat				
Multicast				
III-GMRP				
GVRP				
0.1X				
Link Aggregation				
E-Loopback				
⊕-STP				
ERPS				
E3 Config				
🔋 Alarm				
PoE Management				
🖲 Extended 🗸 👻				

### **Configuration Steps**

1.Select [Advanced / DHCP Server / Global] in the navigation bar to enter the DHCP Server[Global Setting] interface.

2.The DHCP server global setting admin status can be enabled/disable , and enter the lease times.

Remarks: 1. This DHCP-assigned IP address is not permanent and expires in about 24 hours.

3, Click [Modify] to modify IP interface individually.

Setting		
IP Interfaces	ip0	~
Status	Disabled	~
	Apply	Cancel

ltem	Description	Notes
Admin Status	Enabled / Disabled DHCP server global setting	Default: Disabled
Lease time	<30-525600>	Default:30minutes
Status	Enabled / Disabled IP interface individually	Default:30minutes

### 4.4.2 Advanced Configuration – DHCP Server – IP Address Pool

Each DHCP address pool has a group of assignable IP addresses and network configuration parameters. The DHCP server selects IP addresses and other parameters from the address pool and assigns them to the DHCP clients.

and  Collapse   Index Index	Pool Name IP Interface Start IP Address End I			way DNS Server Secondary DNS Server	Static IP Addre
System	Setting Pool Name				
Management					
Base Configuration	IP Interface	••• V			
Advanced	Start IP Address	IPv4(A.I			
(+) Ports	End IP Address	IPv4(A.I	3.C.D)		
-Port Security	Subnet Mask	IPv4(A.I	3.C.D)		
() ACL	Lease Times	● No ○ Yes <3	0-525600+minutes		
-ACL Group Setting	Default Gateway	● No ○ Yes	IPv4(A.B.C.D)		
ACL Rule Setting	DNS Server	● No ○ Yes	IPv4(A.B.C.D)		
DHCP snooping	Secondary DNS Server	No O Yes	IPv4(A.B.C.D)		
-Global Setting	Static IP Address		(P1%(A.D.0.0)		
- Port Setting	Static IP Address	Add			
Binding Table		Apply Cancel			
DHCP Server					
- Global Setting					
- IP Address Pool					
IP Address Lease Informat					
Multicast					
GMRP					
GVRP					
802.1X					
E-Link Aggregation					
Eoopback					
. STP					
ERPS					
L3 Config					
Alarm					
PoE Management					
Extended 🗸					

### **Configuration Steps**

1.Select [Advanced / DHCP Server / IP Address Pool] in the navigation bar to enter the DHCP Server[IP Address Pool] interface.

2. All IP Address Pool information can be viewed in the DHCP Server [IP Address Pool] interface.

3, Click [Add] to add IP address pool individually. Click [Apply] to complete the configuration.

ltem	Description	Notes
Pool Name	The name information of IP address pool	Default: None
IP Interface	Select a needed IP interface	Default: None
Start IP Address	Start IP Address in the IP address pool	Default: None
End IP Address	End IP Address in the IP address pool	Default: None
Subnet Mask	Subnet Mask of IP address	Default: None
Lease Times	No	Default: None
	Yes: <30-525600> minutes	
Default Gateway	No	Default: None
	Yes IPv4(A.B.C.D)	
DNS Server	No	Default: None
	Yes IPv4(A.B.C.D)	
Secondary DNS	No	Default: None
Server	Yes IPv4(A.B.C.D)	
Static IP Address	Add Static IP Address as needed	Default: None

### 4.4.3 Advanced Configuration – DHCP Server – IP Address Lease Information

### **Configuration Steps**

1.Select [Advanced / DHCP Server / IP Address Lease Information] in the navigation bar to enter the DHCP Server [IP Address Lease Information] interface.

Expand  Collapse				
	IP Address M	MAC Address	Expired Time	IP Interface
- Device Summary				
System				
Management				
Base Configuration				
Advanced				
⊜-Ports				
-Port Security				
⊜-ACL				
ACL Group Setting				
-ACL Rule Setting				
DHCP snooping				
-Global Setting				
-Port Setting				
-Binding Table				
S-DHCP Server				
-Global Setting				
- IP Address Pool				
IP Address Lease Informat				
Hulticast				
. GMRP				
€-GVRP				
* 802.1X				
Link Aggregation				
Loopback				
€-STP				
ERPS				
L3 Config				
Alarm		Prev Next 1 1	Go First Last Refresh	
PoE Management		Prev Next 1	GO FROI LOSI Relfest	
Extended				

2. All IP Address Lease Information can be viewed in the DHCP Server [IP Address Lease Information] interface.

3, Click [Refresh] to refresh the list of the information.

### 4.5 Advanced Configuration – Multicast

### 4.5.1 Advanced Configuration – Multicast – Manual Address Setting

Multicast is the delivery of information to a group of destinations simultaneously, using the most efficient strategy to deliver messages over each link of the network only once, and create copies only when the links to the destinations split.

Expand  Collapse	MAC Address				AN		Ports	Setting	
Device Summary									
System		Manual Address Setting							
Management		MAC Address			XXXXXXXX - XXX	XXX			
Base Configuration		VLAN			«1-4094»				
Advanced			All	GE/1	GE/2	GE/3			
- Ports		Ports	GE/4	GE/5	GE/6	GE/7			
-Port Security			GE/8		GE/10				
- ACL			Apply	Cancel	1				
ACL Group Setting									
ACL Rule Setting									
DHCP snooping									
- Global Setting									
- Port Setting									
Binding Table									
DHCP Server									
-Global Setting									
- IP Address Pool									
IP Address Lease Informat									
Multicast									
IGMP snooping									
. GMRP									
GVRP									
1 802.1X									
Link Aggregation									
-Loopback									
() STP									
• ERPS									
L3 Config	*								
the county	<u> </u>								

### **Configuration Steps**

1.Select [Advanced / Multicast /Manual Address Setting] in the navigation bar to enter the Multicast [Manual Address Setting] interface.

2. All manual address can be viewed in the Multicast [Manual Address Setting] interface.

3, Click [Add] to manual add MAC address and VLAN for corresponding ports.4, Click [Apply] to complete the configurations

**4.5.2 Advanced Configuration – Multicast – IGMP snooping Global Setting** IGMP snooping is the process of listening to Internet Group Management Protocol(IGMP) network traffic to control delivery of IP multicasts.

Expand  Collapse	*	IGMP snooping Global Setting			
Device Summary					
System		Admin Status	Disabled V		
Management		Binding VLAN	1		
Base Configuration		Add or Remove VLAN	Add O Dele	Example:1-10,13,15-4094	
Advanced		Router Port Aging Time(unit:second)	105	<30-300 second	
Ports		Host Port Aging Time(unit:second)	260	<60-600+second	
Port Security					
ACL				Apply	
ACL Group Setting					
ACL Rule Setting					
DHCP snooping					
Global Setting					
-Port Setting					
-Binding Table					
DHCP Server					
Global Setting					
- IP Address Pool					
-IP Address Lease Informat					
Multicast					
-Manual Address Setting					
B IGMP snooping					
Global Setting					
-VLAN Setting					
-IP Groups					
MAC Groups					
Multicast Table					
. GMRP					
. GVRP					
# 802.1X					
Link Aggregation	*				

### **Configuration Steps**

1. Select [Advanced / Multicast / IGMP snooping / Global Setting] in the navigation bar to enter the [Global Setting].

2. You can view the global configuration of IGMP snooping on the IGMP snooping global interface.

3. If you need to modify the global configuration of IGMP snooping, you can modify the corresponding configuration in the configuration box, and then click [Apply].

ltem	Description	Notes
Admin Status	Enabled: Enable the IGMP snooping function	Default:
Aumin Status	Disabled: Disable IGMP snooping function	Disabled
<b>Blinding VLAN</b>	List of VLANs to be bound	
	Select the operation for the VLAN and enter the	
	list of VLANs to add or remove:	
Add or Remove	Add: Add a VLAN. The format is as follows: 1-	
VLAN	10,13,15-4094;	
	Delete: Delete the VLAN. The format is as	
	follows: 1-10,13,15-4094.	
Route Port	Valid aging time of routed ports, range 30-300.	
Aging Time	The default is 105. The unit is seconds.	
Host Port Aging	Effective host port aging time, range 60-600. The	Unit:
Time	default is 260.	Second

### 4.5.3 Advanced Configuration – Multicast – IGMP snooping VLAN setting

To run the IGMP Snooping querier on a VLAN, you have to enable it globally and on the VLAN. To enable IGMP snooping on a specific VLAN, use the IP IGMP snooping VLAN enable command in switch configuration mode.

Expand  Collapse	VLA	NN I	Router Ports	Fast Leave	Querier	Querier Interval(s)	Querier Source IP Address	Setting
-Device Summary	1					duerier interval(s)	Querier Source IP Address	
System	<u> </u>		Dynamic	Disabled	Disabled			Modify
Management								
Base Configuration								
Advanced								
Ports								
Port Security								
ACL								
ACL Group Setting								
ACL Group Setting								
DHCP snooping								
-Global Setting								
- Port Setting								
-Binding Table								
DHCP Server								
-Global Setting								
- IP Address Pool								
- IP Address Lease Informat								
-Multicast								
Manual Address Setting								
B IGMP snooping								
Global Setting								
-VLAN Setting								
-IP Groups								
MAC Groups								
-Multicast Table								
GMRP								
GVRP								
0 802.1X					Prev Next	1 1 Go First Last	Bulk Configuration	
Link Aggregation								
i Link Aggregation								

### **Configuration Steps**

1. Select [Advanced / IGMP Snooping / VLAN Settings] to enter the VLAN Settings

VLAN	Router Ports	Fast Leave	Querier	Querier Interval(s)	Querier Source IP Address	Setting
1	Dynamic	Disabled	Disabled			Modify
		[	Prev Ne>	tt 1 /1 Go Home 1	ail Bulk Configuration	

2. The IGMP snooping [VLAN Settings] interface displays all the VLAN configuration information of IGMP Snooping.

3. Modify individual bound VLAN configuration information. After entering the [VLAN Settings] interface, click the [Modify] to enter the modification interface, as shown in Figure 12.2. Enter valid configuration parameters and click [Apply] to submit the modification. Click [Cancel] to abandon the modification.

VLAN Setting	
VLAN	1 <1-4094>
Router Port Mode	Dynamic •
Fast Leave	Disabled •
Querier	Disabled •
Querier Interval	60 s <30-120>s
Querier Source IP Addres	s 0.0.0.0 A.B.C.D
	Apply Cancel

4. Bulk VLAN configuration information in batches. After entering the [VLAN Setting], click the [Bulk Configuration] at the bottom of the page to enter the [VLAN Bulk Configuration], as shown in Figure 12.3. Enter valid configuration parameters and click [Apply] to submit the modification. Click [Cancel] to abandon the modification.

<b>VLAN Bulk Configuration</b>	
VLAN List	Example:1-10,13,15-4094
Router Port Mode	Dynamic •
Fast Leave	Disabled •
Querier	Disabled •
	Apply Cancel

ltem	Description	Notes
VLAN	VLAN being configured	
	Select the mode of the routed port in this VLAN. Use the drop-down box to modify it.	
RouterPort Mode	<b>Dynamic</b> <b>Static</b> - If you choose the static routing port mode, you still need to select specific routing ports. It can be selected with the check button.	
Fast Leave Mode	Select whether to enable the quick leave mode under this VLAN. Use the drop-down box to modify it. <b>Disabled</b> <b>Enabled</b>	
Querier	Select whether to enable the querier function in this VLAN. Use the drop-down box to modify it. <b>Disabled</b> <b>Enable</b> - If the querier is enabled, you need to set the corresponding querier interval and query source IP address.	
Query Interval	The query interval of the querier is 30-120 seconds.	
Queryer Source IP Address	Set the source IP address of the query message sent by the querier. The valid unicast address is "192.168.1.11". "0.0.0.0" is also available	

### 4.5.4 Advanced Configuration – Multicast – IGMP snooping IP Groups

Expand  Collapse	VLAN IP Ports
Device Summary	
System	
Management	
Base Configuration	
Advanced	
. Ports	
-Port Security	
-ACL	
ACL Group Setting	
ACL Rule Setting	
DHCP snooping	
-Global Setting	
- Port Setting	
Binding Table	
B-DHCP Server	
- Global Setting	
- IP Address Pool	
- IP Address Lease Informat	
-Multicast	
-Manual Address Setting	
B IGMP snooping	
-Global Setting	
-VLAN Setting	
-IP Groups	
MAC Groups	
-Multicast Table	
GMRP	
GVRP	Prev Next 1 /1 Go First Last Refresh
• 802.1X	Prev Next 1 / 1 Go First Last Refresh
E Link Aggregation	

### **Configuration Steps**

Select [Advanced / IGMP snooping / IP Groups] in the navigation bar to enter the IP Group interface.

The IGMP snooping [IP group] interface displays the IP group information maintained by IGMP Snooping and can be refreshed by clicking the [Refresh].



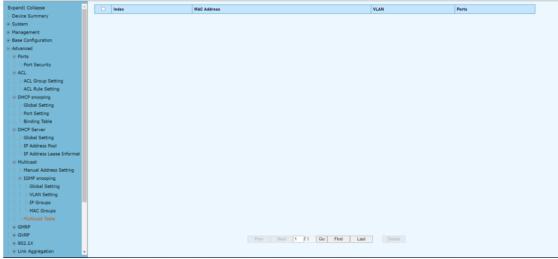
4.5.5 Advanced Configuration – Multicast – IGMP snooping MAC Groups

### **Configuration Steps**

1. Select [Advanced / IGMP Snooping / MAC Groups] in the navigation bar to enter the MAC Group interface

2. The IGMP snooping [MAC Group] interface displays the MAC group information maintained by IGMP Snooping. Click the Refresh button to refresh.

### 4.5.6 Advanced Configuration – Multicast – IGMP snooping Multicast Table



### **Configuration Steps**

1. Select [Advanced / IGMP Snooping / Multicast Table] in the navigation bar to enter the Multicast Table interface

2. The IGMP snooping [Multicast Table] interface displays the Multicast Table information maintained by IGMP Snooping. Click the Refresh button to refresh.

### 4.6 Advanced Configuration – GMRP

### 4.6.1 Advanced Configuration – GMRP– GMRP Setting

GARP Multicast Registration Protocol (GMRP) is a Generic Attribute Registration Protocol (GARP) application that provides a constrained multicast flooding facility similar to IGMP snooping. GMRP and GARP are industry-standard protocols defined by the IEEE 802.1

Hol Ima         Iou - rive-2r40-milascode float line 1 2 - lazer timo (bradiscide)           ase Configuration         Ioi Time 0         00         -rive-2r40-milascode float line 1 2 - lazer timo (bradiscide)           ase Configuration         Ioi Time 0         00         -rive-2r40-milascode float line 1 2 - lazer timo (bradiscide)           Normed         Leave Time 0         000         -rive-2r40-milascode float line 1 2 - lazer time (bradiscide)           Normed         Leave Time 0         1000         -rive-2r40-milascode float line 1 2 - lazer time (bradiscide)           Normed         Leave Time 0         1000         -rive-2r40-milascode float line 0 2 - rive-2r40-milascode           Normed         Leave Time 0         1000         -rive-2r40-milascode float line 0 2 - rive-2r40-milascode           Normed         Leave Time 0         Normed         -rive-2r40-milascode float line 0 2 - rive-2r40-milascode           Normed         Formed         Mode - rive-2r40-milascode float line 0 2 - rive-2r40-milascode float l
Value         Hold Time         100 - 400-42140-millisecnds (hold line * 2 - join time) Default 100 millisecnds           ase Configuration         Join Time 0         0.00 - 400-42740-millisecnds (lou line * 2 - viae time) Default 100 millisecnds           Ase Configuration         Join Time 0         0.00 - 400-42740-millisecnds (lou line * 2 - viae time) Default 200 millisecnds           Ase Time 0         0.00 - 400-42740-millisecnds (lou line * 2 - viae time) Default 200 millisecnds           Ports         Leave Time 0         0.00 - 400-42740-millisecnds (lou line * 2 - viae time) Default 200 millisecnds           DRCP social         Leave Time 0         0.00 - 400-42740-millisecnds Clave time + Leave at line domillisecnds           DRCP social         Leave Time 0         - 400-42740-millisecnds Clave time + Leave at line domillisecnds           DRCP social         Mode         Mode         Seciel           DRCP social         Mode         Mode         Mode           ORMP         6/2         Fabidaria         Mode           ORMP         6/2         Fabidaria         Mode           ORVP         6/2         Fabidaria         Mode           Unick Ageregation         Fabidaria         Mode         Mode           Unick Ageregation         Fabidaria         Mode         Mode           Unick Ageregation         Fabidarion<
Management Base Configuration Advanced         Join Time         200         ditol-22140-milliseconds [doin time * 2 ~ 4 save time) Data/t200 milliseconds           Laws Time         0000         000         000
Base Configuration Akanced         Leave Time         000         id00-22740-milliseconds Gave time + ia ve alt time) befault 400 milliseconds           4 Parts         Leave Alt Time         1000         id00-22740-milliseconds Gave time + ia ve alt time) befault 400 milliseconds           4 Parts         Leave Alt Time         1000         id00-22740-milliseconds Gave time + ia ve alt time) befault 400 milliseconds           4 Parts         Leave Alt Time         1000         id00-22740-milliseconds Gave time + ia ve alt time) befault 400 milliseconds           6 ORF         ORF Parts         Def Concord         Apply           6 ORF Parts         ORF Part Made         Modify           6 ORF Parts         OF/1         Forbidden         Modify           6 ORF Parts         OF/2         Forbidden         Modify           6 ORF Parts         OF/3         Forbidden         Modify           6 ORF Parts         OF/3         Forbidden         Modify           6 ORF Parts         Forbidden         Forbidden         Modify           6 ORF Parts         Forbidden         Modify         Modify           6 ORF Parts         Forbidden         Modify         Modify           6 ORF Parts         Forbidden         Modify         Modify           6 ORF Parts         Forbidden
Advanced Ports     Lave All Time     Intol 1000 1000 milliseconds Default3000 milliseconds       * ACL          Control 1000 1000 milliseconds Default3000 milliseconds        * ACL          Control 1000 1000 milliseconds        * DHCP snowing          Porta       * DHCP snowing          Porta       * MUldask          Control 1000 1000 milliseconds         Porta        * MUldask          Control 1000 1000 milliseconds        * MUldask          Control 1000 1000 milliseconds        * GMRP          Control 1000 1000 milliseconds        * GMRP          Control 1000 1000 milliseconds        * GMRP          Control 1000 1000 1000 milliseconds        * GMRP          Control 1000 1000 1000 milliseconds        * GMRP          Control 1000 1000 1000 1000 1000 1000 1000 10
Purds     Purd     Marker in the intervention of th
PhCP Server         Part         ORRP Part Made         Setting           8 DHCP Server         Part         ORRP Part Made         Setting           8 DHCP Server         06/1         Farioden         Mody           8 DHCP Server         06/2         Farioden         Mody           9 OURP         06/2         Farioden         Mody
BHCP stronging         Port         ORAP Per Mode         Setting           BHCP Sarvey         Port         Mode         Setting           Multicast         06/1         Forbiden         Mode           GMRP P         06/2         Forbiden         Mode           GMRP Setting         06/2         Forbiden         Mode           BO2.1X         06/2         Forbiden         Mode           ILin Approption         06/3         Forbiden         Mode           ILin Approption         06/2         Forbiden         Mode           BO2.1X         06/2         Forbiden         Mode           ILin Approption         06/3         Forbiden         Mode           ILin Approption         06/7         Forbiden         Mode           BEPS         06/8         Forbiden         Mode
# Multicast         0E/i         Forbidem         Modify           0 MAP         0E/i         Forbidem         Modify           0 MAP         0E/i         Forbidem         Modify           0 MAP         0E/i         Forbidem         Modify           0 GMAP         Forbidem         Modify         Modify
GMP         Eg2         Prisidan         Idody           GMP Setting         EG2         Frisidan         Modify           GMP Setting         EG2         Frisidan         Modify           GMP Setting         EG2         Frisidan         Modify           H OD_L Setting         EFrisidan         Modify         Modify           H OD_L Setting         EFrisidan         Modify         Modify           H Link Agergation         EFris         Frisidan         Modify           EXPS         OF/7         Frisidan         Modify
OddRP Setting         Odd // Comment         Odd // Comment         Odd // Comment           # GVAP         G/2         Parbiden         Modify           # GVA         Farbiden         Modify           # Lok Aggregation         G/2         Farbiden         Modify           # STP         G/2         Farbiden         Modify           # Start         G/2         Farbiden         Modify
GVP         GV7         Person         Mode           0.01,12         GF/4         Person         Mode           0.02,142         GF/4         Person         Mode           0.01,142         GF/4         Person         Mode           0.01,142         GF/4         Person         Mode           0.01,142         GF/4         Person         Mode           1.00,000         GF/4         Person         Mode           1.00,000         GF/4         Person         Mode           0.01,142         GF/4         Person         Mode           0.01,142         GF/4         Person         Mode
# 802.1X         6E/4         Farbiden         Modify           # Unk Aggregation         6E/5         Farbiden         Modify           # Loopback         0E/6         Farbiden         Modify           # STP         0E/7         Farbiden         Modify           # RPS         0E/8         Farbiden         Modify
# Link Apgregation         65/5         Forbiden         Modify           # Loopback         66/A         Forbiden         Modify           # STPP         66/7         Forbiden         Modify           # RPS         66/8         Forbiden         Modify
# Loopback         0f/4         Furbiden         Modify           # STP         0f/7         Furbiden         Modify           # EMPS         0f/8         Furbiden         Modify
* ERPS 06/8 Forbidden Modify
13 Confin DE/A Excluder Notific
Alarm 0E/10 Forbidden Modify
PGE Management Extended

### **Configuration steps**

1. Select [GMRP / GMRP Setting] in the navigation bar to enter the GMRP configuration interface.

2. You can view the global configuration of GMRP in the [GMRP Global Settings] interface

3. If you need to modify the global configuration of GMRP, modify the corresponding configuration in the GMRP global configuration box, and then click <Apply>.

ltem	Description Notes	
Admin Status	GMRP global enable switch. De	
	Enabled: Enable GMRP function;	Disabled
	Disabled: Disable the GMRP function.	
Hold Time	Hold timer period, the range is 100-32760 (ms), $\leq 2$	
	the default value is 100ms;	
Join Time	Join timer period, the range is 100-32760 (ms),	≤2
	the default value is 200ms;	
Leave Time	Leave timer period, the range is 100-32760 (ms),	
	the default value is 600ms	≤ Leave All
		Time
Leave All Time	ime Leave all timer period, the range is 100-32760 Leave	
	(ms), the default value is 10000ms;	≤ Leave All
		Time

### GMRP Port Mode Configurations,

1.If you need to modify the Port Mode of GMRP, Click [modify] to select GMRP Mode as Normal , Fixed, Forbidden

GMRP Port Mode			
Port	GE/1 V		
GMRP Mode	O Normal O Fixed  Forbidden		
Apply Cancel			

ltem	Description	Notes
Port	Port name of information	
GMRP Mode	Normal, Fixed, Forbidden	Default: Forbidden

### 4.7 Advanced Configuration – GVRP

### 4.7.1 Advanced Configuration – GVRP – GVRP Setting

Same as GMRP, GVRP (GARP VLAN Registration Protocol) is a VLAN registration protocol based on GARP (Generic Attribute Registration Protocol), which is used to register and deregister VLAN attributes

Expand  Collapse	GVRP Global Setting		
- Device Summary	Admin Status	Disabled V	
• System	Hold Time	100 <100-32760+milliseconds (hold time * 2 <= join time) Default:100 milliseconds	
Management	Join Time	200 <100-32760>milliseconds (join time * 2 <= leave time) Default:200 milliseconds	
Base Configuration	Leave Time	600 <100-32760+milliseconds (leave time <= leave all time) Default:600 milliseconds	
Advanced	Leave all Time	10000 <100-32760+milliseconds Default:10000 milliseconds	
- ACL			
DHCP snooping	Apply		
DHCP Server	Port	GVRP Port Mode	Setting
Multicast		Forbidden	Modify
()-GMRP		Forbidden	Modify
GMRP Setting		Forbidden	Modify
-GVRP		Forbidden	Modify
-GVRP Setting		Forbidden	Modify
802.1X		Forbidden	
Link Aggregation			Modify
Loopback	-	Forbidden	Modify
STP		Forbidden	Modify
. ERPS		Forbidden	Modify
L3 Config	GE/10	Forbidden	Modify
-Alarm PoE Management			
Extended			
Extended			

### **Configuration Steps**

1.Select [GVRP/GVRP configuration] from the navigation bar to enter the GVRP configuration interface.

2.The global configuration of GVRP can be viewed in the [GVRP global Settings] interface,

3.To modify the GVRP global configuration, modify the corresponding configuration in the GVRP global configuration box, and then click < apply >.

Item Description		Notes
Admin Status	GVRP global enable switch. Enabled: Enable GVRP function; Disabled: Disable the GVRP function.	DEFAULT: DISABLED
Hold Time	Hold timer period, the range is 100-32760 (ms), the default value is 100ms;	≤2
Join Time Join timer period, the range is 100-32760 (ms), the default value is 200ms;		≤2
Leave Time Leave timer period, the range is 100-32760 LE		LEAVE TIME ≤

	(ms), the default value is 600ms	LEAVE ALL TIME
Leave All Time	Leave all timer period, the range is 100-	LEAVE TIME ≤
	32760 (ms), the default value is 10000ms;	LEAVE ALL TIME

### **GVRP Port Mode Configurations,**

1.If you need to modify the Port Mode of GVRP, Click [modify] to select GVRP Mode as Normal ,

GVRP Port Mode		
Port	GE/1 🗸	
GVRP Mode	○Normal ○Fixed ●Forbidden	
Apply Cancel		

Forbidden

ltem	Description Notes	
Port	Port Port name of information	
<b>GVRP Mode</b> Normal, Fixed, Forbidden Default: Forbid		Default: Forbidden

### 4.8 Advanced Configuration – 802.1X

### 4.8.1 Advanced Configuration – 802.1X – Authentication Server

IEEE 802.1X is an IEEE Standard for port-based Network Access Control (PNAC). It is part of the IEEE 802.1 group of networking protocols. It provides an authentication mechanism to devices wishing to attach to a LAN or WLAN.



### **Configuration Steps**

1. Select [Advanced / 802.1X / Authentication Server] in the navigation bar to enter Radius Authentication Server Configuration.

2. Check the configuration information in the interface

3. To apply the Authentication Server configuration, click [Apply] in the Authentication Server configuration box.

ltem	Description	Notes
Host	The IP of Radius Authenticated Server, IPv4 and	ł
	Dotted decimal format	
Port Number	The port of Radius Authenticated Server,	Default:1812
	range<1-65535>, default with 1812	
Shared Key	Must be consistent with Radius server,	
	otherwise it can not pass authentication.	
	String format, only contain letters, numbers,	
	underscores, and the length cannot be more	
	than 20 byte	

### 4.8.2 Advanced Configuration – 802.1X – Global Setting

Expand  Collapse	802.1x Global Configuration		
- Device Summary	Admin Status Disabled v		
System	Reauthentication Disabled ~		
Management	Quiet Function Disabled v		
Base Configuration	Authentication Method	● EAP ○ CHAP ○ PAI	þ
Advanced  Ports	Tx Period(unit:Second)	30	<1-120> Default:30
ACL	Supplicant Timeout(unit:Second)	30	<1-120> Default:30
DHCP snooping	Server Timeout(unit:Second)	30	<1-120> Default:30
DHCP Server	ReAuthentication Period(unit:Second)	3600	<60-7200> Default:3600
Multicast	Quiet Period(unit:Second)	60	<10-3600> Default:60
GMRP		1	
GMRP Setting	Apply		
- GVRP			
GVRP Setting			
⊜-802.1X			
-Authentication Server			
Global Setting			
- Port Configurations			
User Authentication Info			
Link Aggregation			
Loopback			
() STP			
ERPS			
L3 Config			
Alarm			
PoE Management			
Extended			

### **Configuration Steps**

1. Select [Advanced / 802.1X / Global Setting] in the navigation bar to enter the [Global Setting] interface.

2. The global configuration information can be viewed in the interface.

3. To modify the global configuration in the Global Configuration box, click [Apply].

ltem	Description	Notes
Admin Status	Disabled: Disabled Global 802.1X	Default:
Aumin Status	Enabled: Enabled Global 802.1X	Disabled
Reatuthentication	Disabled: Disabled re-authentication	Default:
Reacucinencication	Enabled: Enabled re-authentication	Disabled
Quiet Function	Disabled: Disabled quiet function	Default:
Quiet Function	Enabled: Enabled quiet function	Disabled
Authentication Method	EAP/PAP/CHAP	
Tx Period (Unit:Second)	1-120	Default: 30
Supplicant Timeout	1-120	Default: 30
(Unit: Second)	1-120	Delault. 50
Server Timeout	1-120	Default: 30
(Unit:Second)	1-120	Delault. 50
<b>ReAuthentication Period</b>	60-7200	Default:

WebGUI User Manual

(Unit:Second)		3600
Quiet Period	10-3600	Default: 60
(Unit:Second)	10 3000	Derdalt. 60

Expand  Collapse	Port	Admin Status	Authentication Control	Authentication Mode	Max Host Number	Setting
- Device Summary	GE/1	Disabled	Auto	PortBased	8	Modify
System	GE/2	Disabled	Auto	PortBased	8	Modify
Management     Base Configuration	GE/3	Disabled	Auto	PortBased	8	Modify
Advanced	GE/4	Disabled	Auto	PortBased	8	Modify
Ports	GE/5	Disabled	Auto	PortBased	8	Modify
ACL	GE/6	Disabled	Auto	PortBased	8	Modify
DHCP snooping	GE/7	Disabled	Auto	PortBased	8	Modify
DHCP Server	GE/8	Disabled	Auto	PortBased	8	Modify
Multicast	GE/9	Disabled	Auto	PortBased	8	Modify
GMRP	GE/10	Disabled	Auto	PortBased	8	Modify
GMRP Setting						
GVRP Setting     B02.1X     Authentication Server						
802.1X     Authentication Server     Global Setting     Port Configurations     User Authentication Info     Link Aggregation     Lopback						
802.1X     Authentication Server     Global Setting     Port Configurations     User Authentication Info     Link Aggregation     Loopback     STP						
002.1X     duthentication Server     Global Setting     Pert Configurations     User Authentication Info     Unix Aggregation     Loopback     STP     ERP5						
B02.1X     Authentication Server     Global Setting     Port Configurations     User Authentication Info     Link Aggregation     Ecopolack     STP     ECOPS     ESP5     ESP5     ECOPS     ECOPS						
802.1X     Autoritation Server     Global Setting     Port Configurations     User Autoritation Info     Link Aggregation     User Autoritation Info     STP     ERPS     L3 Config     Alarm						
B02.1X     Authentication Server     Global Setting     Port Configurations     User Authentication Info     Unix Aggregation     Lonk Aggregation     STP     ST						
802.1X     Autoritation Server     Global Setting     Port Configurations     User Autoritation Info     Link Aggregation     User Autoritation Info     STP     ERPS     L3 Config     Alarm						
B02.1X     Authentication Server     Global Setting     Port Configurations     User Authentication Info     Unix Aggregation     Lonk Aggregation     STP     ST						

### 4.8.3 Advanced Configuration – 802.1X – Port Configurations

### **Configuration Steps**

1. Select [Advanced / 802.1X / Port Configurations] in the navigation bar to enter the [Port Configurations] interface.

On the [Port Configurations] interface, you can view the configuration information of each port, the current 802.1X configuration information of each port is displayed.
 To modify the configuration of a port, simply click the [Edit] in corresponding entry to enter modification interface, as shown in Figure 10.4. Modify the corresponding configuration item, click the [Apply] to complete the modification, and click the [Cancel] to cancel the modification.

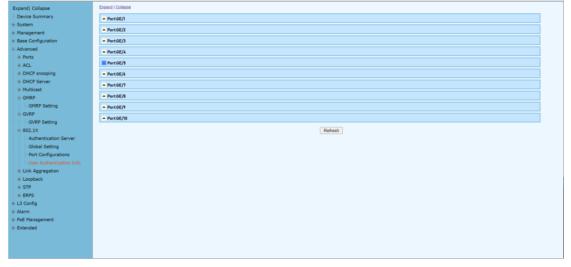
802.1X Port Configurations							
Port	GE/5 •						
Admin Status	Disabled •						
Authentication Control	Auto 🔻						
Authentication Mode	PortBased •						
Max Host Number	8 <1-8> Default:8						
Apply Cancel							

# Remarks: When the 802.1X port is configured to authentication mode, all authenticated users will go offline and re-authentication is required to access the network.

ltem	Description	Notes		
Port	Selected port configurations			
Admin Status	Enabled: Enabled port 802.1X	Default:		
Aumin Status	Disabled: Disabled port 802.1X	Disabled		
	Auto: You cannot access the network before			
Authentication	authentication. You can access the network			
Control	after passing the authentication.			
Control	Forced-Authentication: Always have access to			
	the network			

	Forced-Unauthentication: Always cannot				
	access the network				
	PortBased: After a user is authenticated, all				
Authentication	users can access the network.				
Mode	MacBased: All users need to be authenticated				
	individually to access the network.				
Max Host	There is maximum number of authenticated				
	hosts supported by the port. Authentication	Default: 8			
Number	will fail if this number is exceeded.				

### 4.8.4 Advanced Configuration – 802.1X – User Authentication Info



### **Configuration Steps**

1. Select [Advanced / 802.1X / User Authentication Information] in the navigation bar to enter the [User Authentication Information] interface.

2. Click [Expand] in the upper left corner to expand the user authentication information for all ports, and click [Close] to close the user authentication information for all ports. Click the  $\boxplus$  icon to expand the user authentication information for the corresponding port, and click the  $\square$  icon to close the user authentication information information for the corresponding port.

3. The authentication information of the user can be viewed on this interface: user name, client MAC address, and the time the authentication passed.

4. Click [Refresh] to refresh the current user authentication information.

### 4.9 Advanced Configuration – Link Aggregation

### 4.9.1 Advanced Configuration – Link Aggregation – Global Setting

Link aggregation is a way of bundling a bunch of individual (Ethernet) links together so they act like a single logical link.

Expand  Collapse	LACP Setting	LACP Setting								
-Device Summary	System MAC	System MAC 001893-12544D								
System	System Priority	System Priority 32768 -0-65535- Default:32768								
Management	Distribution Algorithm		Source Port Source MAC Destination MAC Source IP Destination IP Source IP Port Destination IP Port							
Base Configuration				a Port & Source MAC & Destination MAC & Source IP & Destination IP & Source IP Port & Destination IP Port						
Advanced				Apply						
Ports	Group ID	Group Mode	Minimu	n Link Number	Maximum Link Number		Member Ports	Valid Port List		
+ ACL										
DHCP snooping										
DHCP Server										
<ul> <li>Multicast</li> </ul>										
- GMRP										
GMRP Setting										
⊜-GVRP										
GVRP Setting										
0-802.1X										
Link Aggregation										
-Port Configurations										
Aggregate Information										
Loopback										
()-STP										
ERPS										
L3 Config					Add Doloto					
Alarm										
PoE Management										
Extended										

### **Configuration Steps**

1.Select [Advanced / Link Aggregation / Global Setting] in the navigation bar to enter the [Link Aggregation / Global Setting] interface.

2. The link aggregation global configuration can be viewed in the link aggregation global setting interface.

3.To modify the global configuration of link aggregation, modify the corresponding configuration in the LACP (Link Aggregation Control Protocol) configuration box, and then click [Apply]

4.If you want to add an aggregation group, click [set], as shown in figure 14.2. click [Apply].

ltem	Description	Notes
System MAC		
System Priority	Set the link aggregation system priority, range 0-65535, the smaller the better.	Default: 32768
Distribution Algorithm	The system supports one or more to compute the load ports according to the source port, source MAC, destination MAC, source IP, destination IP, source IP port and destination IP	
Group ID	Aggregation Group ID information	
Group Mode	Set Aggregation Group Mode Manual: Manual mode, the port of the aggregation group member is manually configured and the port LACP protocol is closed. Static: Static mode, the port of the aggregation group member is manually configured and the port LACP protocol is on.	

	The active ports minimum number of
Minimum Port	aggregation group configuration, ranging <0-
	8>, and the value cannot exceed the
	maximum number of links.
	The active ports maximum number of
Maximum Port	aggregation group configuration, ranging <0-
	8>, and the value cannot be less than the
	minimum number of links.
Member Port	Member port of aggregation group
List	configuration

### 4.9.2 Advanced Configuration – Link Aggregation – Port Configuations

Expand  Collapse	Port	Group ID	Priority	Admin Key	LACP Mode	LACP Admin Status	Setting
-Device Summary	GE/1	0	32768	0	Active	Disabled	Modify
System	GE/2	0	32768	0	Active	Disabled	Modify
Management     Base Configuration	GE/3	0	32768	0	Active	Disabled	Modify
Advanced	GE/4	0	32768	0	Active	Disabled	Modify
Ports	GE/5	0	32768	0	Active	Disabled	Modify
. ACL	GE/6	0	32768	0	Active	Disabled	Modify
DHCP snooping	GE/7	0	32768	0	Active	Disabled	Modify
DHCP Server	GE/8	0	32768	0	Active	Disabled	Modify
Multicast	GE/9	0	32768	0	Active	Disabled	Modify
GMRP GMRP Setting	GE/10	0	32768	0	Active	Disabled	Modify
GVRP Setting							
GVRP Setting							
(e)-802.1X							
Link Aggregation							
-Global Setting							
-Port Configurations							
Aggregate Information							
I Loopback							
• STP							
ERPS     L3 Config							
Alarm							
PoE Management							
Extended							

### **Configuration Steps**

1. Select [Advanced / Link Aggregation / Port Configurations] in the navigation bar to enter the link aggregation [Port Configurations] interface.

2. In the link aggregation [Port Configurations]interface, you can view the link aggregation related configuration of the port.

3. If the link aggregation configuration of the port needs to be modified, click the [Modify] to enter the port configuration interface.

4. Select or fill in the configuration items that need to be modified, and click [Apply] to make effective. If the configuration items are incorrectly filled, there will be corresponding prompts.

ltem	Description	Notes
Port	Name of port	
Group ID	The Port ID of aggregation group	
Priority	Port link aggregation priority, range <0-65535>	Default:32768
Admin Key	Enter a value to configure the LACP actor admin key that is used while port participates in dynamic aggregation selection. Rang:<0- 65535>	Default: 0

LACP Mode	Port master-slave mode in LACP protocol Active: Active mode, the port send protocol messages automatically when LACP protocol enabled. Passive: Passive mode, the port will not send protocol messages automatically, but only send when received protocol messages.	Default: Active
LACP Admin	Enabled: Enabled LACP on port	Default:
Status	Disabled: Disabled LACP on port	Disabled

# 4.9.3 Advanced Configuration – Link Aggregation – Aggregation Information

Expand  Collapse	Expand   Collapse	Expans   Collapse									
- Device Summary	PortOE/I										
<ul> <li>System</li> </ul>	Pert0E/2										
Management											
<ul> <li>Base Configuration</li> </ul>	* Pert56/3										
Advanced	Lacp Actor Information:										
Ports     ACL	LACP enabled	Disabled				Group ID		N/A			
ACL     DHCP snooping	Priority	32768			_	Admin Key		0			
DHCP snooping     DHCP Server	Operate Key	0			_	Admin active mode		Active			
Multicast	Selected	Unselected									
GMRP	State	Activity	Timeout	Aggregation		chronization	Collecti	ng	Distributing	Defaulted	Expired
GMRP Setting		Passive	LongTimeout	FALSE	FALS	SE	FALSE		FALSE	FALSE	FALSE
⊜-GVRP	Lacp Partner Information:										
GVRP Setting	System MAC	000000-000000	1			System priority		0			
0 802.1X	Port name	N/A				Port priority		0			
Link Aggregation	Operate key	0									
- Global Setting	State	Activity	Timeout	Aggregation	Sync	chronization	Collecti	ng	Distributing	Defaulted	Expired
-Port Configurations	atate	Passive	LongTimeout	FALSE	FALS	SE	FALSE		FALSE	FALSE	FALSE
-Aggregate Information	Port:GE/4										
Eoopback	- Port.GE/5										
- Global Setting											
- Port Configurations	<ul> <li>Port:GE/6</li> </ul>										
III STP	A Port:GE/7										
ERPS	Port:GE/8										
L3 Config											
Alarm	Port:GE/9										
PoE Management     Extended						Refresh					
. Extended						runusi					

## **Configuration Steps**

1. Select [Advanced / Link Aggregation / Aggregate Information]in the navigation bar to enter the [Link Aggregation / Aggregation Information]interface.

2. In the link aggregation [Aggregate Information] interface, all port link aggregation related information can be viewed.

3. Click [Refresh] to see the latest aggregation information for each port.

# 4.10 Advanced Configuration – Loopback 4.10.1 Advanced Configuration – Loopback – Global Setting

	U		
Expand  Collapse	Loopback Global Configuration		
- Device Summary	Detection Timer(unit:Second)	5	<1-32767+ Default:5
System	Resume Timer(unit:Second)	30	<10-65535> Default:30
Management	Needine Inner (unit. Secondy	00	-10-93337. Delitatica0
Base Configuration			Apply
Advanced			
<ul> <li>Ports</li> </ul>			
+ ACL			
DHCP snooping			
DHCP Server			
Multicast			
GMRP			
GMRP Setting			
GVRP			
GVRP Setting			
# 802.1X			
Link Aggregation			
-Global Setting			
-Port Configurations			
-Aggregate Information			
Loopback			
-Global Setting			
-Port Configurations			
+ STP			
ERPS			
L3 Config			
Alarm			
PoE Management			
Extended			

# **Configuration Steps**

1. Select [Advanced / Loopback / Global Setting] in the navigation bar to enter [Global Setting] interface.

2. In the global configuration interface, you can view the global configuration information.

3. To modify the global configuration, modify the corresponding configuration in the Global Configuration box and click [Apply], as shown in Figure 11.1

ltem	Description	Notes
Detection	Loop detection packet sending interval,	Default: 5sec
Timer	range<1-32767>	Delault. SSec
Resume Timer	Port auto resume period, range<10-65535>,	
Resume filmer	must be less than 2x detection timer	

and  Collapse	Port	Admin Status	Resume Mode	Execute Operate	Port Status	Setting
vice Summary	GE/1	Disabled	Automation	Shutdown	Linkup	Modify Resume Now
/stem	GE/2	Disabled	Automation	Shutdown	Linkup	Modify Resume Now
anagement	GE/3	Disabled	Automation	Shutdown	Linkdown	Modify Resume Now
ase Configuration dvanced	GE/4	Disabled	Automation	Shutdown	Linkup	Modify Resume Now
Ports	GE/5	Disabled	Automation	Shutdown	Linkdown	Modify Resume Now
ACL	GE/6	Disabled	Automation	Shutdown	Linkup	Modify Resume Now
DHCP snooping	GE/7	Disabled	Automation	Shutdown	Linkup	Modify Resume Now
-DHCP Server	GE/8	Disabled	Automation	Shutdown	Linkup	Modify Resume Now
Multicast	GE/9	Disabled	Automation	Shutdown	Linkdown	Modify Resume Now
GMRP GMRP Setting	GE/10	Disabled	Automation	Shutdown	Linkdown	Modify Resume Now
GVRP Setting 802.1X Link Aggregation						
802.1X						
802.1X Link Aggregation Global Setting Port Configurations Aggregate Information Loopback Global Setting Port Configurations STP ERPS Config						

# 4.10.2 Advanced Configuration – Loopback – Port Configuration

# **Configuration Steps**

1. Select [Advanced / Loop Detection / Port Configuration] in the navigation bar to enter the Port Configuration interface.

2. On the Port Configuration page, you can see the loop detection configuration information and running status of all the ports.

3. To modify the configuration of a port, simply click the [Edit] on the right side of the corresponding entry to enter the modification interface. Modify the corresponding configuration item, click the [Apply] to complete the modification, and click the [Cancel] to cancel the modification.

Port	Admin Status	Resume Mode	Execute Operate	Port Status	Setting
GE/1	Disabled	Atuomation	Shutdown	Linkdown	Modify Resume Now
GE/2	Disabled	Atuomation	Shutdown	Linkdown	Modify Resume Now
GE/3	Disabled	Atuomation	Shutdown	Linkdown	Modify Resume Now
GE/4	Disabled	Atuomation	Shutdown	Linkdown	Modify Resume Now
GE/5	Disabled	Atuomation	Shutdown	Linkdown	Modify Resume Now
GE/6	Disabled	Atuomation	Shutdown	Linkdown	Modify Resume Now
GE/7	Disabled	Atuomation	Shutdown	Linkdown	Modify Resume Now
GE/8	Disabled	Atuomation	Shutdown	Linkup	Modify Resume Now
GE/9	Disabled	Atuomation	Shutdown	Linkdown	Modify Resume Now
GE/10	Disabled	Atuomation	Shutdown	Linkdown	Modify Resume Now

4. After a loop occurs on a port and the port is shut down or blocked by a specified action, if you want to restore it immediately, you can click the [Restore Now] on the right side of the corresponding entry.

LoopBack Port Configurations						
Port	GE/7 •					
Admin Status	Disabled •					
Resume Mode	Atuomation •					
Execute Operate	Shutdown •					
	Apply Cancel					

ltem	Description	Notes
Port	Selected Port	
Admin Status	Disabled: Disabled loop detection	Default:
Admin Status	Enabled: Enabled loop detection	Disabled

	Automatic: After the loop occurs, the port is closed or blocked, and the port automatically
Resume Mode	recovers.
	Manual: After a loop occurs, the port is closed
	or blocked, need to manually restore the port.
	Shutdown: After the loop occurs, the port is
Execute	shutdown
Operate	Blocked: After a loop occurs, the port is
	blocked

#### 4.11 Advanced Configuration – STP 4.11.1 Advanced – STP – Bridge Configuration

The Spanning Tree Protocol (STP) is responsible for identifying links in the network and shutting down the redundant ones, preventing possible network loops. In order to do so, all switches in the network exchange BPDU messages between them to agree upon the root bridge.

Expand  Collapse	Basic Settings		
- Device Summary	Protocol Version	RSTP 👻	
• System	Bridge Priority	32768 🗸	
Management	Forward Delay	15	«4-30»
<ul> <li>Base Configuration</li> <li>Advanced</li> </ul>	Max Age	20	«6-40»
Ports	Maximum Hop Count	20	«6-40»
# ACL	Transmit Hold Count	6	41-10>
DHCP snooping			
DHCP Server	Advanced Settings		
+-Multicast	Edge Port BPDU Filtering		
@ GMRP	Edge Port BPDU Guard		
GMRP Setting	Port Error Recovery		
GVRP GVRP Setting	Port Error Recovery Timeout	0	<30-8640>
teopation     toppation     toppation			Apply Refreen

## **Configuration Steps**

1. Select [Advanced / STP / Bridge Configuration] in the navigation bar to enter the STP[Bridge Configuration] interface.

2. The STP Bridge Configuration can be viewed in the [Bridge Configuration] interface.

3. To modify the configuration, you can enter the values that need to be configured directly in corresponding configuration item.

ltem	Description	Notes
STP Mode	STP/RSTP/MSTP	
Bridge Priority	STP System priority,Range<0-61440>, the step must be 4096	Default: 32768
Forward Delay	Delay when port switch between disabled / listening / learning / forwarding, Range<4-30>	Default:15sec
Max Age	The maximum survival time of the STP protocol packet received by the bridge. If no new protocol packets received at this time, the packet will be discarded. Range<6-40>	Default: 20second
Maximum Hop	Determines the transmission range of bpdu.	Default:

Count	The range of hops is 6-40.	20
Transmit Hold	Count the number of sending hops. The count	Default: 6 per
Count	range is 1-10.	sec
Edge Port BPDU Filtering	BPDU filtering will prevent the switch from sending BPDUs to the host on a port with the edge port feature enabled.	Default: Disabled
Edge Port BPDU Guard	BPDU guards prevent bridging loops by enabling ports with edge port characteristics to enter the err-disable state when receiving BPDUs	
Port Error Recovery	Enable the recovery function for the port in the err-disable state. If checked, it is enabled. By default, if it is not checked, it is disabled.	
Port Error Recovery Timeout	Restart this port after timeout.	

## 4.11.2 Advanced-STP-Mapping Configuration

Expand  Collapse	Configuration Identification			
- Device Summary	Configuration Name	[		
<ul> <li>System</li> </ul>	Configuration Revision	0	<0-65535>	
Management		1		
Base Configuration	MSTI Mapping			
Advanced	MSTI	VLANs Mapped		
<ul> <li>Ports</li> </ul>				
+ ACL	MSTII		ti di	
DHCP snooping	MSTI2			
DHCP Server     Multicast	Moliz		Ŕ	
- GMRP	MSTI3			
GMRP Setting			h	
GVRP	MSTI4			
GVRP Setting		L	k	
• 802.1X	MSTI5			
Link Aggregation		(	~	_
Loopback	MSTI6			
⊜ STP		( (		_
Bridge Configuration	MSTI7		A	
Mapping Configuration				
Priority Configuration			Apply Refresh	
-CIST Port Configuration				
MSTI Port Configuration				
Bridges Status				
Ports Status				
Statistics				
ERPS				
L3 Config				
Alarm				
PoE Management				

#### **Configuration Steps**

1. Select [Advanced / STP / Mapping Configurations] in the navigation bar to enter the STP [Mapping Configuration] interface.

2. The STP Mapping configuration information can be viewed in the [Mapping Configurations] interface.

3. To modify the mapping configuration, you can enter configuration item on the right side of the corresponding ccolumn .

ltem	Description	Notes
Port	Port Name	
Configuraiton Name	MAC address identifier	
Configuration Revision	The modification range is 0-65535	Default:0
VLANs Mapped	Use commas to separate, the VLAN range is 1- 4096, such as 2-5, 7, 9, etc	

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# 4.11.3 Advanced-STP-Priority Configuration

Expand  Collapse	<u>^</u>	MSTI Priority Configuration	
Device Summary		MSTI	Priority
System		•	• v
Management		CIST	32768 V
Base Configuration		MSTII	32768 *
Advanced			
(i) Ports		MSTI2	
+ ACL		MSTI3	32768 V
DHCP snooping		MSTI4	32768 ~
DHCP Server		MSTI5	32768 🗸
Multicast		MSTI6	32768 🗸
GMRP		MSTI7	32768 ~
GMRP Setting			Apply Refresh
⊜-GVRP			Appay Postean
GVRP Setting			
02.1X			
Eink Aggregation			
Loopback			
⊜-STP			
Bridge Configuration			
Mapping Configuration			
Priority Configuration			
CIST Port Configuration			
-MSTI Port Configuration			
-Bridges Status			
-Ports Status			
Statistics			
ERPS			
L3 Config			
Alarm			
PoE Management	٠		

## **Configuration Steps**

- 1. Select [Advanced / STP / Priority Configurations] in the navigation bar to enter the STP [Priority Configuration] interface.
- 2. The STP Priority configuration information can be viewed in the [Priority Configurations] interface.
- 3. To modify the priority configuration, you can enter configuration item on the right side of the corresponding column .

ltem	Description	Notes
Priority	The size of the bridge priority determines whether the device can be selected as the root of the spanning tree. The bridge priority ranges from 0 to 61440	Default:32768

## 4.11.4 Advanced-STP-CIST Port Configuraion

Expand  Collapse	Port	STP Enabled		ath Cost	Priority	Admin Edge	Auto Edge	Restricted		BPDU Guard	Point-to-point	
- Device Summary	Port	STP Enabled		ath Cost	Priority	Admin Edge	Auto Edge	Role	TCN	BPDU Guard	Point-to-point	
System	•		0 V		<> v	0 V	0			0	0 V	
Management	GE/1		Specific V	200000	128 🗸	Non-Edge V					Auto 🗸	
<ul> <li>Base Configuration</li> <li>Advanced</li> </ul>	GE/2		Specific V	200000	128 🗸	Non-Edge V					Auto 🗸	
Advanced  Ports	GE/3		Specific ~	200000	128 ~	Non-Edge V				0	Auto 🗸	
- ACL	GE/4		Specific V	200000	128 ~	Non-Edge V					Auto	
DHCP snooping	GE/5		Specific V	200000	128 ~	Non-Edge V			0	0	Auto	
DHCP Server	GE/6		Specific V	200000	128 ~	Non-Edge V		0	0	0	Auto	
Multicast	0E/7		Specific V	200000	128 ~	Non-Edge V		0		0	Auto ~	
	GE/8			200000	128 ~	Non-Edge V		0			Auto ~	
GMRP Setting			Specific ~				-					
⊜-GVRP	GE/9		Specific V	200000	128 🗸	Non-Edge ~					Auto 🗸	
GVRP Setting	GE/10		Specific V	200000	128 🛩	Non-Edge 🛩					Auto 💙	
Link Aggregation     Loopback     STP												
-Bridge Configuration												
Priority Configuration												
-CIST Port Configuration												
-MSTI Port Configuration												
-Bridges Status												
Ports Status												
Statistics												
1 1												
ERPS												
ERPS     L3 Config     Alarm												

## **Configuration Steps**

- 1. Select [Advanced / STP / CIST Port Configuration] in the navigation bar to enter the STP [CIST Port Configuration] interface.
- 2. The STP CIST Port Configuration can be viewed in the [CIST Port Configuration]

interface.

3. To modify the CIST Port Configuration, you can enter configuration item on the corresponding column .

corresponding		
ltem	Description	Notes
Port	Display switch port number	
STP Enabled	The checked end means the port stp function is enabled. If it is not checked, it is disabled.	Default:Disabled
Path Cost	Specific Auto Specific Auto: Auto Negotiation Specific: Manual Setting	Default:Auto
Priority	When the port priority is changed, STP will recalculate the role of the port and perform state migration. The value of the port priority can only be a multiple of 16. The configuration range is 0-240.	Default:128
Admin Edge	Non-Edge/Edge	Default: Non-Edge
Auto Edge	If it is selected, automatic edge port identification is enabled. If it is not selected, automatic edge port identification is disabled. By default, automatic edge port identification is enabled	
Role	If it is selected, the role is enabled. If it is not selected, the role is disabled. By default, the role is disabled	
TCN	The check end indicates TCN. If the check end is not selected, TCN is disabled.	Default:Disabled
BPDU Guard	The BPDU Guard enables an edge port to enter the Err-disable state when receiving BPDUs to prevents bridge loops. The BPDU filter prevents the switch from sending BPDUs to hosts on an edge port. This function is disabled by default	
	Force True: Indicates point-to-point link.	
Point-to-Point	If the port is in full-duplex mode, the link type is point-to-point link. <b>Force False:</b> Shared link. If the link is running in half-duplex mode, the link type is shared. <b>Auto:</b> Indicates that the port automatically establishes a link. The default port automatically establishes a link. Nowadays, switches are generally of point-to- point link type	

# 4.11.5 Advanced-STP-MSTI Port Configuraion

Device Summary System	Port		Path Cost	Priority
Management	•	0 V		
Base Configuration	GE/1	Specific V	200000	128 🗸
Advanced	0E/2	Specific V	200000	128 🗸
Ports	0E/3	Specific V	200000	128 🗸
. ACL	GE/4	Specific V	200000	128 🗸
DHCP snooping	GE/5	Specific V	200000	128 🗸
DHCP Server	GE/6	Specific V	200000	128 ¥
Multicast     GMRP	GE/7	Specific V	200000	128 🗸
GMRP Setting	GE/8	Specific V	200000	128 ¥
GVRP	GE/9	Specific V	200000	128 🗸
- GVRP Setting	0E/10	Specific V	200000	128 ¥
• 802.1X			Apply Refresh	
Link Aggregation     Loopback     STP     Bridge Configuration     Mapping Configuration			Apply Refresh	
Link Aggregation     Loopback     STP     Bridge Configuration     Mapping Configuration     Priority Configuration     CIST Port Configuration     MSTI Port Configuration			Apply Rafresh	
Link Aggregation     Loopback     STP     Endge Configuration     Mapping Configuration     Priority Configuration     CIST Port Configuration     STIP Port Configuration     Bridges Status     Forts Status			Apply Raficeth	
Link Aggregation     Loopback     STP     String Configuration     Mapping Configuration     CIST Port Configuration     CIST Port Configuration     MSTI Port Configuration     MSTI Port Configuration     Bridges Status     Ports Status     Statutics			Apply Rafresh	
Link Aggregation     Loopback     STP     Srdge Configuration     Mapping Configuration     Priority Configuration     CIST Fort Configuration     Mitiges Status     Protect Configuration     Bridges Status			Apply Rafresh	

## **Configuration Steps**

- 1. Select [Advanced / STP / MSTI Port Configuration] in the navigation bar to enter the STP [MSTI Port Configuration] interface.
- 2. The STP MSTI Port Configuration can be viewed in the [MSTI Port Configuration] interface.
- 3. To modify the MSTI Port Configuration, you can enter configuration item on the corresponding column .

Port	Display switch port number	
Path Cost	Specific Auto Specific Auto: Auto Negotiation Specific: Manual Setting	
Priority	When the port priority is changed, STP will recalculate the role of the port and perform state migration. The value of the port priority can only be a multiple of 16. The configuration range is 0-240.	Default:128

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## 4.11.6 Advanced-STP-Bridges Status

-Device Summary	-	MSTI	Bridge ID	Root		Topology Flag	Topology Change Last	
System				ID	Port	Path Cost		second and a second
Management		CIST	32768.00-18-93-12-54-4D	32768.00-18-93-12-54-4D		0	Steady	0d 01:34:18
Base Configuration		-						
Advanced				,	Refresh			
Ports								
() ACL								
DHCP snooping								
DHCP Server								
Multicast								
GMRP								
GMRP Setting								
GVRP Setting								
802.1X								
Link Aggregation								
Loopback								
⊫-STP								
Bridge Configuration								
-Mapping Configuration								
-Priority Configuration								
-CIST Port Configuration								
-MSTI Port Configuration								
-Bridges Status								
-Ports Status								
Statistics								
ERPS								
L3 Config								
Alarm								
PoE Management								
Extended								

## **Configuration Steps**

1. Select [Advanced / STP / Bridges Status] in the navigation bar and enter the STP [Bridges Status] interface.

- 2. The Bridges Statuscan be viewed in the [Bridges Status] interface
- 3. Click [Refresh] to show the latest running information.

# Click the name of the MSTI column, for example, the blue text with the underline "CIST" here, to view detailed status information about the bridge.

and the second											
- Device Summary	STP I	TP Detailed Bridge Status									
System	Bridg	ge Instance	2	CIST							
Management	Bridg	ge ID		32768.00-18-93-12-54-4D							
Base Configuration	Root	ID		32768.00-18-93-12-54-4D							
Advanced	Root	Port									
+ Ports	Root	Path Cost		0							
+ ACL	Regio	onal Root		32768.00-18-93-12-54-4D							
DHCP snooping	Int. P	Path Cost		0							
DHCP Server	Max	Hops		20							
Multicast	Topol	logy Flag		Steady							
GMRP GMRP Setting	Topol	logy Chang	ge Count	0							
GVRP Setting		logy Chang		0d 01:38:22							
GVRP Setting											
802.1X	CIST	Ports & Ag	ggregations State								
Link Aggregation	Port		Role	State	Priority	Path Cost	Edge	Point-to-point	Uptime		
Loopback	GE/1		DesignatedPort	Forwarding	128	200000	Yes	Yes	0d 01:38:23		
-STP	GE/2		DesignatedPort	Forwarding	128	200000	Yes	Yes	0d 01:38:22		
Bridge Configuration	GE/4		DesignatedPort	Forwarding	128	200000	Yes	Yes	0d 01:38:26		
-Mapping Configuration	GE/6		DesignatedPort	Forwarding	128	200000	Yes	Yes	0d 01:39:13		
-Priority Configuration	<b>GE/7</b>		DesignatedPort	Forwarding	128	200000	No	Yes	0d 01:39:25		
-CIST Port Configuration	GE/8	1	DesignatedPort	Forwarding	128	200000	Yes	Yes	0d 01:39:20		
MSTI Port Configuration											
-Bridges Status					Re	fresh Back					
Ports Status											
Statistics											
ERPS											
L3 Config											
Alarm											
PoE Management     Fxtended											
* Extended											

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# 4.11.7 Advanced-STP-Ports Status

Expand  Collapse	^	Port	CIST Role	CIST State	Uptime
-Device Summary		GE/1	DesignatedPort	Forwarding	0d 01:46:56
• System		GE/2	DesignatedPort	Forwarding	0d 01:46:55
Management		GE/3	Disabled	Discarding	
<ul> <li>Base Configuration</li> <li>Advanced</li> </ul>		GE/4	DesignatedPort	Forwarding	0d 01:46:59
Advanced  Ports		GE/5	Disabled	Discarding	-
ACL		GE/6	DesignatedPort	Forwarding	0d 01:47:46
DHCP snooping		0E/7	DesignatedPort	Forwarding	0d 01:47:58
DHCP Server		GE/8	DesignatedPort	Forwarding	0d 01:47:53
Multicast		GE/9	Disabled	Discarding	-
B GMRP		0E/10	Disabled	Discarding	
GMRP Setting					
. GVRP				Refresh	
GVRP Setting					
# 802.1X					
Link Aggregation					
Loopback					
⊜ STP					
-Bridge Configuration					
-Mapping Configuration					
-Priority Configuration					
- CIST Port Configuration					
-MSTI Port Configuration					
-Bridges Status					
Statistics					
. ERPS					
L3 Config					
Alarm	-				
PoE Management	×.				

## **Configuration Steps**

- 1. Select [Advanced / STP / Ports Status] in the navigation bar and enter the STP [Ports Status] interface.
- 2. The Bridges Statuscan be viewed in the [Ports Status] interface
- 3. Click [Refresh] to show the latest running information.

## 4.11.8 Advanced Configuration – Statistics

Expand  Collapse	-	-		Transmitte	ed			Receiver	i .		Discarde	đ
- Device Summary		Port	MSTP	RSTP	STP	TCN	MSTP	RSTP	STP	TCN	Unknown	Illegal
🔅 System		GE/1	0	3030	0	0	0	0	0	0	0	0
Management		GE/2	0	3030	0	0	0	0	0	0	0	0
Base Configuration		GE/4	0	3032	0	0	0	0	0	0	0	0
Advanced		GE/6	0	3054		0	0	0	0	0	0	0
Ports		GE/7	0	3063		0	0	2	0	0	0	0
ACL		GE/8	0	3057		0	0	0	0	0	0	0
DHCP snooping		06/6	0	3037	0	0	0	0	0	0	0	0
DHCP Server								Refresh				
<ul> <li>Multicast</li> </ul>												
GMRP												
GMRP Setting												
⊜-GVRP												
GVRP Setting												
802.1X												
Eink Aggregation												
<ul> <li>Loopback</li> </ul>												
⊜-STP												
-Bridge Configuration												
-Mapping Configuration												
-Priority Configuration												
- CIST Port Configuration												
MSTI Port Configuration												
-Bridges Status												
-Ports Status												
Statistics												
. ERPS												
<ul> <li>L3 Config</li> </ul>												
Alarm												
PoE Management												

## **Configuration Step**

1. Select [Advanced / STP / Statistics] in the navigation bar and enter the STP [Statistics] interface.

- 2. The STP current running information can be viewed in the [Statistics] interface
- 3. Click [Refresh] to show the latest running information.

# 4.12 Advanced Configuration – ERPS

# 4.12.1 Advanced Configuration – Global Setting

Ethernet Ring Protection Switching, or ERPS, is an effort at ITU-T under G. 8032 Recommendation to provide sub-50ms protection and recovery switching for Ethernet traffic in a ring topology and at the same time ensuring that there are no loops formed at the Ethernet layer.

Expand  Collapse	<u>^</u>	ERPS Global Setting		1
-Device Summary		Link Check		1
System			Disabled	-
Management			Enabled Apply	
Base Configuration		Note:There is a way to check port link by sense	ding packets. If the optical port is used as the ring port, it is recommended to "Disable'the link check. If the ethernet port is the ring port, you may decide whether to "Enable" it in following two cases:	
Advanced		(1) Please enable it if the switching time dema	and is very high. Although the switching time has been improved, the drawback is that the packet mechanism will occupy bandwidth.	
<ul> <li>Ports</li> </ul>		(2) Please disable it if the switching time requi	arement is not high.	
+ ACL				
DHCP snooping				
DHCP Server				
Multicast				
⊜-GMRP				
GMRP Setting				
e-GVRP				
GVRP Setting				
(i) 802.1X				
Link Aggregation				
Loopback				
⊜-STP				
-Bridge Configuration				
-Mapping Configuration				
-Priority Configuration				
-CIST Port Configuration				
-MSTI Port Configuration				
-Bridges Status				
-Ports Status				
Statistics	-			
E ERPS				
-Global Setting				
-Ring Setting				
Ring Information	*			

## **Configuration Step**

1.Select [Advanced / ERPS / Global Setting] in the navigation bar and enter the ERPS [Global Setting] interface

Remarks: 1, There is a way to check port link by sending packets. If the optical port is used as the ring port, it is recommended to 'Disable' the link check. If the ethernet port is the ring port, you may decide whether to 'enable' it in the following two cases: (1) Please enable it if the switch time demand is very high. Although the switching time has been improved, the drawback is that the packet mechanism will occupy bandwidth.

(2) Please disable it if the switching time requirement is not high.

# 4.12.2 Advanced Configuration – ERPS - Ring Setting

ip buse comparation									
Advanced		Ring ID Ring Type Node Type P							rd Timer HoldOff Timer Switching Mode Setting
<ul> <li>Ports</li> </ul>			Ring Adding						
+ ACL			Ring ID	(		<1-255>			-
DHCP snooping			Ring Type	major-ring					-
DHCP Server			Nade Type	transfer	-				
Multicast			Protocol Vlan	transfor		<1-4094×			
GMRP			East Port	05.0					
GMRP Setting				GE/1	~				
- GVRP			West Port	GE/1	۷				
GVRP Setting			RPL Port	none	~				
● 802.1X			Belong Major ring	none					
Link Aggregation			Virtual Channel	with	~				
-Loopback			WTR Timer	1		<1-12> minutes D	efault:1 minutes, Step is	1 minutes	
i⊜-STP			Guard Timer	500		+10-2000+ millis	econds Default:500 milli	seconds, Step is 10 milliseconds	
Bridge Configuration			HoldOff Timer	0		<0-10000> millis	econds Default:0 millise	conds, Step is 100 milliseconds	
Mapping Configuration						Apply	Cancel		
Priority Configuration								2	
-CIST Port Configuration									
MSTI Port Configuration									
-Bridges Status									
Ports Status									
Statistics									
- Global Setting									
-Ring Setting									
Ring Information									
L3 Config									
🖲 Alarm									
PoE Management									
Extended									
	1								

# **Configuration Step**

1. Select [Advanced / ERPS / Ring Setting] in the navigation bar and enter the ERPS [Ring Setting] interface

ltem	Description	Notes		
Ring ID	Ring Adding ID <1-255>			
Ring Type	Major-ring / Sub-ring			
Node Type	<ul> <li>Transfer: Forward both service packets and protocol packets</li> <li>rpl-owner: Responsible for blocking traffic over the RPL so that no loops are formed in the Ethernet traffic. There can be only one RPL owner in a ring.</li> <li>rpl-neighbour: An Ethernet ring node adjacent to the RPL. It is responsible for blocking its end of the RPL under normal conditions. This node type is optional and prevents RPL usage when protected.</li> </ul>			
Protocol VLAN	OI VLAN Adding ring ERPS protocol VLAN			
East Port	A Ring port created on this node			
West Port	Another ring port created on the node			
RPL Port	*Port on an RPL Link East Port West Port			
Belong Major Ring				
Virtual Channel				
WTR Timer	<1-12> minutes, Default: 1 minutes, Step 1 minutes			
Guard Timer	<10-2000>milliseconds Default:500 milliseconds, Step is 10 milliseconds			
HoldOff Timer	<0-10000>milliseconds Default:0 milliseconds, Step is 100 milliseconds			

# 4.12.3 Advanced Configuration – ERPS - Ring Information

- Buse comparation	Expand   Collaose
Advanced	
Ports	Retreah
+ ACL	
DHCP snooping	
DHCP Server	
Multicast	
GMRP	
GMRP Setting	
GVRP	
GVRP Setting	
• 802.1X	
Link Aggregation	
Loopback	
⊜-STP	
-Bridge Configuration	
-Mapping Configuration	
-Priority Configuration	
-CIST Port Configuration	
MSTI Port Configuration	
-Bridges Status	
-Ports Status	
Statistics	
ERPS	
- Global Setting	
-Ring Setting	
-Ring Information	
L3 Config	
Alarm	
PoE Management	
Extended	

# **Configuration Step**

1. Select [Advanced / ERPS / Ring Informations] in the navigation bar to enter the interface of ERPS [Ring Network Information].

2. The ERPS current running information can be viewed in the [Ring Informations] interface.

3. Click [Refresh] to show the latest running information.

Expand	Collapse

▼ Ring ID:1							
Ring Type	major-ring	Node Type	transfer	Protocol Vlan	1		
Revertive	revertive	FSM State	protection	Virtual Channel	with		
East Port	GE/1/blocking	West Port	GE/2/blocking	Belong Major ring	N/A		
Guard Timer	500milliseconds	HoldOff Timer	0milliseconds	WTB Timer	5000milliseconds		
WTR Timer	1minutes	Force Switch	Disabled	Manual Switch	Disabled		
Refresh							

# 4.13 L3 Config – Static Router Config

ip wave companying							
⊜-Advanced			iubnet Mask			Туре	
Ports		Static Entries	55.255.255.0				
ACL		Add Type	Route ~				
DHCP snooping	_	Destination		IPv4(A.B.C.D)			
DHCP Server		Subnet Mask		IPv4(A.B.C.D)	-		
Multicast					-		
- GMRP		Gateway		IPv4(A.B.C.D)			
GMRP Setting			Apply Cancel				
@-GVRP							
GVRP Setting							
0-802.1X							
Link Aggregation							
Loopback							
⊜-STP							
Bridge Configuration							
Mapping Configuration							
Priority Configuration							
CIST Port Configuration							
MSTI Port Configuration							
-Bridges Status							
- Ports Status							
Statistics							
ERPS							
Global Setting							
-Ring Setting							
Ring Information							
🖶 L3 Config							
Static Router Config							
Alarm							
PoE Management							
the External and	Ľ.						

# **Configuration Step**

1. Select [Advanced / L3 Config] in the navigation bar to enter the interface of Static Router Config.

2. The Static Router Configuration can be viewed in the [Static Router Config]

interface.

3. Click [Add] to add additional Static Enrties .

	<u>v</u>			<u> </u>	
Multicast	Alarm Event	Port	Admin Status	Link Status	Alarm Status
GMRP		•			
-GVRP	LinkDown	GE/1	Disabled V	<b>v</b>	No
GVRP Setting	LinkDown	0E/2	Disabled V	V	No
802.1X	LinkDown	GE/3	Disabled V	×	No
Link Aggregation	LinkDown	GE/4	Disabled V	¥	No
Loopback	LinkDown	GE/5	Disabled V	×	No
⊜-STP	LinkDown	GE/6	Disabled V	¥	No
-Bridge Configuration	LinkDown	GE/7	Disabled V	¥	No
-Mapping Configuration	LinkDown	GE/8	Disabled V	¥	No
Priority Configuration	LinkDown	GE/9	Disabled V	*	No
- CIST Port Configuration - MSTI Port Configuration	LinkDown	GE/10	Disabled V	×	No
Bridges Status	Power Supply	N/A	Enabled	N/A	Yes(Power 2)
-Ports Status	Low Temperature	N/A	Enabled V	N/A	No
Statistics	High Temperature	N/A	Enabled V	N/A	No
ERPS	LinkDown	GE/1	Disabled V	¥	No
-Global Setting	LinkDown	GE/2	Disabled V	¥	No
-Ring Setting	LinkDown	0E/3	Disabled V	×	No
Ring Information	LinkDown	GE/4	Disabled V	¥	No
L3 Config	LinkDown	GE/5	Disabled V	×	No
Static Router Config	LinkDown	GE/6	Disabled V	V	No
Alarm	LinkDown	GE/7	Disabled V	¥	No
-Relay Setting	LinkDown	GE/8	Disabled V	V	No
Led Setting Temperature Setting	LinkDown	GE/9	Disabled V	×	No
-Trap Setting	LinkDown	GE/10	Disabled V	*	No
Power Setting	Power Supply	N/A	Enabled V	N/A	Yes(Power 2)
PoE Management			Apply Refresh		
Extended			repuy remain		

# 4.14 Advanced Configuration – Alarm 4.14.1 Advanced Configuration – Alarm –Relay Setting

# **Configuration Step**

1. Select [Advanced / Alarm / Relay Setting] in the navigation bar to enter the interface of Alarm [Relay Setting].

2. The Alarm Event, Admin Status, Link Status and Alarm Status can be viewed in the [Relay Setting] interface

- 3 Select [Disabled/Enabled] of admin Status, Click[Apply] to submit the admin status.
- 4. Click [Refresh] to show the latest running information.

Expand  Collapse	Alarm Event	Port	Admin Status	Link Status	Alarm Status
- Device Summary		•	0 V		
<ul> <li>System</li> </ul>	LinkDown	GE/1	Disabled V	¥	No
Management	LinkDown	GE/2	Disabled V	¥	No
Base Configuration	LinkDown	GE/3	Disabled V	×	No
Advanced     Ports	LinkDown	GE/4	Disabled V	¥	No
Ports     ACL	LinkDown	GE/5	Disabled Y	×	No
DHCP snooping	LinkDown	GE/6	Disabled V	¥	No
DHCP Server	LinkDown	GE/7	Disabled V	¥	No
Multicast	LinkDown	GE/8	Disabled V	¥	No
GMRP	LinkDown	GE/9	Disabled ¥	×	No
GMRP Setting	LinkDown	GE/10	Disabled V	×	No
⊜ GVRP	Power Supply	N/A	Enabled	N/A	Yes
GVRP Setting	Low Temperature	N/A	Enabled V	N/A	No
0.802.1X	High Temperature	N/A	Enabled V	N/A	No
Link Aggregation		-			
Loopback			Apply Refresh		
STP					
ERPS					
L3 Config					
Static Router Config					
Relay Setting					
-Led Setting					
Temperature Setting					
-Temperature Setting					
Trap Setting					

# 4.13.2 Advanced Configuration – Alarm – Led Setting

# **Configuration Step**

1. Select [Advanced / Alarm / Led Setting] in the navigation bar to enter the interface of Alarm [Led Setting].

2. The Alarm Event, Admin Status, Link Status and Alarm Status can be viewed in the [Led Setting] interface

- 3 Select [Disabled/Enabled] of admin Status, Click[Apply] to submit the admin status.
- 4 Click [Refresh] to show the latest running information.

	rature Alarm Setting		
	t Temperature	37 °C	
System Low Te	mperature Threshold(°C)	-40	<-50 - 125> Default:-40
Management	emperature Threshold(*C)	85	<-50 - 125> Default:85
Base Configuration		100	
Advanced			Refresh Apply
Ports			
(i) ACL			
DHCP snooping			
DHCP Server			
Multicast			
GMRP			
GMRP Setting			
⊕ GVRP			
-GVRP Setting			
(i) 802.1X			
Link Aggregation			
Eoopback			
. STP			
. ERPS			
E3 Config			
Static Router Config			
Alarm			
-Relay Setting			
-Led Setting			
Temperature Setting			
-Trap Setting			
Power Setting			
PoE Management			
Extended			

# 4.13.3 Advanced Configuration – Alarm – Temperature Setting

## **Configuration Step**

1. Select [Advanced / Alarm /Temperature Setting] in the navigation bar to enter the interface of Alarm [Temperature].

2. The current temperature and temperature setting can be viewed in the [Temperature Setting] interface

3 Enter required temperature value at the Low / High Temperature Threshold ( $^{\circ}$ C), Click [Apply] to submit the modification.

4. Click [Refresh] to show the latest information.

## 4.13.4 Advanced Configuration – Alarm – Trap Setting

Expand  Collapse	Alarm Event	Port	Admin Status	Link Status	Alarm Status
Device Summary		•	o v		
System	LinkUp	GE/1	Disabled V	¥	No
Management	LinkUp	OE/2	Disabled V	¥	No
Base Configuration	LinkUp	GE/3	Disabled V	×	No
Advanced	LinkUp	GE/4	Disabled V	¥	No
Ports     ACL	LinkUp	GE/5	Disabled V	×	No
DHCP snooping	LinkUp	GE/6	Disabled V	v	No
DHCP Server	LinkUp	GE/7	Disabled Y	¥	No
Multicast	LinkUp	GE/8	Disabled V	¥	No
GMRP	LinkUp	GE/9	Disabled V	×	No
GMRP Setting	LinkUp	GE/10	Disabled V	×	No
# GVRP	LinkDown	GE/1	Disabled Y	¥	No
GVRP Setting	LinkDown	GE/2	Disabled V	¥	No
(i) 802.1X	LinkDown	GE/3	Disabled V	×	No
Link Aggregation	LinkDown	GE/4	Disabled V	¥	No
Loopback	LinkDown	GE/5	Disabled V	×	No
• STP	LinkDown	GE/6	Disabled V	¥	No
ERPS	LinkDown	GE/7	Disabled V	¥	No
Static Router Config	LinkDown	GE/8	Disabled V	¥	No
Alarm	LinkDown	GE/9	Disabled V	×	No
Relay Setting	LinkDown	GE/10	Disabled V	×	No
-Led Setting	Power Supply	N/A	Enabled V	N/A	Yes(Power 2)
Temperature Setting	Low Temperature	N/A	Enabled	N/A	No
-Trap Setting	High Temperature	N/A	Enabled V	N/A	No
Power Setting			. Anthe Defeat		
PoE Management			Apply Refresh		

# **Configuration Step**

1. Select [Advanced / Alarm / Trap Setting] in the navigation bar to enter the interface of Alarm [Trap Setting].

2. The Alarm Event, Admin Status, Link Status and Alarm Status can be viewed in the [Trap Setting] interface

- 3 Select [Disabled/Enabled] of admin Status, Click[Apply] to submit the admin status.
- 4 Click [Refresh] to show the latest running information.

## 4.13.5 Advanced Configuration – Alarm – Power Setting

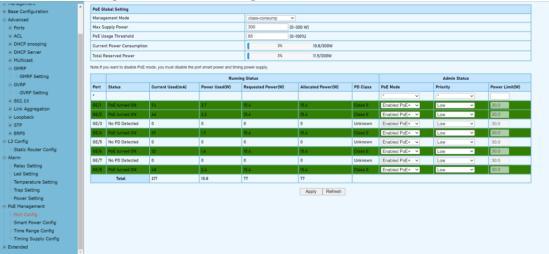
Expand  Collapse	Power Alarm Setting					
- Device Summary	Power Supply Status	Power 1				
System	Power Supply Capability	Power 1 & Power 2				
Management	Power Supply Configuration	2 Power 1 2 Power 2				
Base Configuration						
Advanced		Refresh Apply				
Ports						
- ACL						
DHCP snooping						
DHCP Server						
Multicast						
GMRP						
GMRP Setting						
-GVRP						
GVRP Setting						
#-802.1X						
Link Aggregation						
Loopback						
. STP						
. ERPS						
😑 L3 Config						
Static Router Config						
🔅 Alarm						
-Relay Setting						
-Led Setting						
-Temperature Setting						
-Trap Setting						
Power Setting						
PoE Management						
Extended						

## **Configuration Step**

1. Select [Advanced / Alarm / Power Setting] in the navigation bar to enter the interface of Alarm [Power Setting].

# 4.15 PoE Management

## 4.15.1 PoE Management – Port Configuration



## **Configuration Step**

1. Select [PoE Management/Port Configuration] in the navigation bar to enter the interface of [Port Configuration].

2. The PoE Port Status and configuration can be viewed in the [Port Configuration] interface.

PoE Global Setting								
Management Mode	agement Mode class-consump							
Max Supply Power	300	(0~300 W)						
PoE Usage Threshold	85	(0~100%)						
Current Power Consumption	3%	10.8/300W						
Total Reserved Power	3%	11.5/300W						
Note!If you want to disable PoE mode, you must disable the port smart power and timing power supply.								

Item	Description						
	1) Class-reserved						
	2) Class-consump						
	3) Allocated-reserved						
	4) Allocated-consump						
	<b>Class</b> : The corresponding power is allocated						
	according to PD grading, as shown in the figure below:						
	Class 0 Class 1 Class 2 Class 4 Class 4						
	Watts 15.4W 4.0W 7.0W 15.4W 30.0W						
Management Mode	Allocated: A power value is directly assigned to PD						
	regardless of the PD level, and this power value can						
	be set. If PoE+ is enabled, the maximum power is						
	15.4W. If PoE+ is enabled, The maximum power is						
	30.0W.						
	<b>Reserved</b> : Calculate the total power of the system						
	according to the power allocated to PD.						
	<b>Consump</b> : The total system is calculated according to						
	the current power consumed by PD.						
	When the power consumed exceeds this threshold,						
PoE Usage Threshold	the interface will display red if the corresponding PoE						
-	Max lights will be lightened.						
Current Power	The sum of the power consumption of all PDs as a						
Consumption	percentage of the total maximum output power.						
Total Reserved Power	Power allocated to PD as a percentage of total power						

			Runnir	Admin Status					
Port	Status	Current Used(mA)	Power Used(W)	Requested Power(W)	Allocated Power(W)	PD Class	PoE Mode	Priority	Power Limit(W)
٠							* •	* •	
GE/1	PoE turned ON	54	2.7	15.4	15.4	Class 0	Enabled PoE+ 🗸	Low 🗸	30.0
GE/2	PoE turned ON	44	2.2	15.4	15.4	Class O	Enabled PoE+ V	Low 🗸	30.0
GE/3	No PD Detected	0	0	0	0	Unknown	Enabled PoE+ V	Low 🗸	30.0
GE/4	PoE turned ON	39	1.9	15.4	15.4	Class 0	Enabled PoE+ 🗸	Low 🗸	30.0
GE/5	No PD Detected	0	0	0	0	Unknown	Enabled PoE+ V	Low 🗸	30.0
GE/6	PoE turned ON	32	1.6	15.4	15.4	Class O	Enabled PoE+ 🗸	Low 🗸	30.0
GE/7	No PD Detected	0	0	0	0	Unknown	Enabled PoE+ V	Low 🗸	30.0
GE/8	PoE turned ON	48	2.4	15.4	15.4	Class 0	Enabled PoE+ 🗸	Low 🗸	30.0
	Total	217	10.9	77	77				

Description					
Port/Current Used(mA)/Power Used(W)/Requested					
Power(W)/Allocated Power(W)/PD Class (Class0-4)					
<b>PoE Mode</b> :(Disable/Enabled PoE/Enabled PoE+)					
<b>Priority</b> : Low(Default), High and Critical					
When the power consumed by the PD device is					
greater than the total power that the PSE can provide,					
it is a means to ensure that key devices can supply					
power preferentially. When the power supply of the					

PSE equipment is insufficient, if different terminals When the port priorities are the same, the priority is sorted according to the port number, and the port with the smaller port number is given priority to ensure the power supply.

**Power Limit(W)**: The maximum output power of the port. This value only takes effect when the management mode is Allocated.

#### 4.15.2 PoE Management – Smart Power Configuration

ip moneyomens								
Base Configuration	imart Power Config							
Advanced     Zero Tr	Fraffic Duration	120	(60~600s)					
Ports     If there is	ere is no traffic detected on the port after the above duration, the port will disable PoE and reenable POE after 10 seconds.							
Bad Se	int Smart Power Config							
DHCP snooping	•	Smart Power						
DHCP Server		* v						
+ Multicast	U							
GE/1		Disabled V						
GMRP Setting 0E/2		Disabled V						
GVRP 0E/3		Disabled 🗸						
GVRP Setting GE/4		Disabled 🗸						
# 802.1X GE/5	[	Disabled 🗸						
Link Aggregation     OE/6	0	Disabled V						
Loopback     GE/7	0	Disabled ~						
GE/8	0	Disabled V						
ERPS								
🖶 L3 Config			Apply Refresh					
Static Router Config								
🖶 Alarm								
-Relay Setting								
-Led Setting								
-Temperature Setting								
-Trap Setting								
-Power Setting								
PoE Management								
-Port Config								
Smart Power Config								
-Time Range Config								
Timing Supply Config								
Extended								

#### **Configuration Step**

1. Select [PoE Management/Smart Power Configuration] in the navigation bar to enter the interface of [Smart Power Configuration].

2. The smart power configuration can be viewed in the [Smart Power Configuration] interface.

ltem	Description
Zero Traffic Duration	If there is no traffic detected on the port after the above duration(Zero Traffic Durtation), the port will disable PoE and reenable PoE after 10 seconds. Configurable Duration: 60-600s
Smart Power	Disabled/Enable (Default: Disbled)

# 4.15.3 PoE Management – Time Range and Time Supply Configuration

de contradicional de la contradición de la contradi					
Base Configuration	Name Name	Status			
Advanced				(	Dolote
Ports		Add Time Range Config Name			
-ACL					
DHCP snooping		Mode	Absolute O Perio		
DHCP Server		Start Time		01 ~ 00 ~ 00 ~ 00 ~	
Multicast		End Time		01 ~ 00 ~ : 00 ~ : 00 ~	
GMRP			Apply	Cancel	
GMRP Setting					
GVRP Setting					
802.1X					
Link Aggregation					
Loopback					
() STP					
() ERPS					
E L3 Config					
-Static Router Config					
Alarm					
-Relay Setting					
-Led Setting					
-Temperature Setting					
-Trap Setting					
-Power Setting					
PoE Management					
-Port Config					
-Smart Power Config					
-Time Range Config					
Timing Supply Config					
Extended					

## **Configuration Step**

1. Select [PoE Management/Time Range and Timing Supply Configuration] in the navigation bar to enter the interface of [Time Range and Timing Supply Configuration].

2. The smart poe schedule can be configurate with [Time Range and Timing Supply Configuration] interface.

## **PoE Schedule Configuraion Step**

	0 1
Add Time Range Confi	9
Name	
Mode	Absolute O Periodic
Start Time	1970 - 01 - 01 - 00 - : 00 - : 00 -
End Time	1970 - 01 - 01 - 00 - : 00 - : 00 -
	Apply Cancel

1. Enter the name of Time Range

2. Select Mode [Absolute / Periodic]

## 3. When selected Absolute mode, also select start time and end time

Add Time Range Config						
Name						
Mode	O Absolute   Periodic					
Time	$\boxed{00 \checkmark}: \boxed{00 \checkmark}: 00 - \boxed{00 \checkmark}: \boxed{00 \checkmark}: 00$					
Week	□ Sun □ Mon □ Tues □ Wed □ Thur □ Fri □ Sat					
	Apply Cancel					

4. When selected Periodic mode, also select time and week.

Note: This time is the system time used, so it is best to enable the SNTP client of the switch to synchronize the system time.

## 4.16 Extended

#### 4.16.1 Extended – Port Cable Setting

You can check the status of copper cables using the time domain reflectometer (TDR). The TDR detects a cable fault by sending a signal through the cable and reading the signal that is reflected back to it. All or part of the signal can be reflected back by any number of cable defects or by the end of the cable itself.

#### WebGUI User Manual

		Port Cable Test								
Ports		Port Cable Test								
(i)-ACL		Port List	Ο,							
DHCP snooping				GE/1 GE/2	. OE/3	🗆 GE/4	🗆 GE/5	🗆 GE/6	GE/7	🗆 GE/8
DHCP Server										
Multicast	-									
⊜-GMRP			Channel A(		Channel B(m)		Channel C(m)		Channel D(m)	
GMRP Setting		Port	Channel A	(m)	Channel B(m)		Channel C(m)		Channel D(m)	
GVRP										
- GVRP Setting										
(i) 802.1X										
Link Aggregation										
Eoopback										
+ STP										
ERPS										
E L3 Config										
Static Router Config										
Alarm										
-Relay Setting										
-Led Setting										
-Temperature Setting										
-Trap Setting										
-Power Setting										
PoE Management										
-Port Config										
Smart Power Config										
-Time Range Config										
Timing Supply Config										
Extended										
Port Cable Test										
Ping Test										

## **Configuration Step**

1. Select [Advanced / Extended /Port Cable Test] in the navigation bar to enter the interface of [Port Cable Test]

- 2. The Port Cable Setting and Result can be viewed in the [Port Cable Test] interface
- 3 Select needed test port at the port list ,Click[Start] to submit the testing.

#### 4.16.2 Extended – Ping Test

The easiest way to ping a specific port is to use the telnet command followed by the IP address and the port that you want to ping.

Ports	^	Ping Test
ACL		Start Clear
DHCP snooping		
DHCP Server		
Multicast		
. GMRP		
GMRP Setting		
B-GVRP		
GVRP Setting		
802.1X		
E-Link Aggregation		
Loopback		
* STP		
ERPS		
😑 L3 Config		
-Static Router Config		
🖻 Alarm		
-Relay Setting		
-Led Setting		
Temperature Setting		<u>[</u> *
-Trap Setting		
Power Setting		
PoE Management		
-Port Config		
-Smart Power Config		
-Time Range Config		
Timing Supply Config		
Extended		
-Port Cable Test		
-Ping Test		

#### **Configuration Steps**

1. Select [Advanced / Extended /Ping Test] in the navigation bar to enter the interface of [Ping Test].

- 2. The ping test configuration and process can be viewed in the [Ping Test] interface
- 3 Enter destination address, Click[Start] to submit the ping test, all the command can be viewed at the below blank.
- 4. Click [clean] to clean all of the command at the blank..

# **5** Extension

#### 5.1 Series Management

## 5.1.1 Series Managemetn- Serial Device

← → C ▲ Not secure   192.16	68.1.6/main.asp					e 🖈 🖈 🗖	😲 🗄
FIBERROAD	Parts ALM Parts ALM REF OCHMICLE	<b>نفرغا</b> <b>تفاقر فا</b>			Running Time: 00:00:56	Save Language: Auto V Log	gout
Expand  Collapse	Device ID	Туре	Baud Rate	Data Bits	Parity	Stop Bits	
-Device Summary	100 C	O V	<ul> <li>V</li> </ul>	0 V	0 V	0 ¥	
-System	1	232 🗸	9600 🗸	8 🗸	None 👻	1 🗸	
Management	2	232 🗸	9600 🗸	8 💌	None 💙	1 🗸	
Base Configuration							
Advanced			Apply	Refresh			
L3 Config							
🔅 Alarm 🖻 Serial Management							
Serial Management							
-Serial Protocol							
Serial Statistics							
Extended							

#### **Configuration Steps**

1. Select [Serial Management /Serial Device] in the navigation bar to enter the interface of Serial Management [Serial Device].

2. The serial ports configuration can be viewed in the [Serial Device] interface

3. Select required Type, Baud Rate, Data Bits, Parity, Stop Bits , Click[Apply] to submit the modification.

4. Click [Refresh] to show the latest information

ltem	Description		
Туре	Type of serial ports <b>&lt;232/422/485&gt;</b>		
Baud Rate	To make two devices compatible with each other baud rate is mentioned in the serial communication so that the transmission becomes easy and error free. <b>&lt;2400-115200&gt;</b>		
Data Bits	The data bits transferred through a serial port might represent device commands, sensor readings, error messages, and so on. <b>&lt;5-8&gt;</b>		
Parity	Parity is a method of detecting errors in transmission. When parity is used with a serial port, an extra data bit is sent with each data character, arranged so that the number of 1 bits in each character, including the parity bit, is always odd or always even. <b><none even="" odd=""></none></b>		
Stop Bits	The stop bit is used to signal the end of a frame. The data is contained in the data bits and the parity bit is an extra bit that is often used to detect transmission errors. <1/2>		

# 5.1.2 Series Managemetn- Serial Protocol

← → C A Not secure   192.168.1.6/main.asp						
Expand  Collapse	Device ID	Mode	Remote IP	Remote Port (500-65535)	Local Port (500-65535)	
Device Summary		♦ ¥				
* System	1	Disable	0.0.0.0	0	0	
Management	2	Disable TCP Server	0.0.0.0	0	0	
Base Configuration		TCP Client				
Advanced		UDP Modbus ASCII TCP Server	Apply Refresh			
B L3 Config		Modbus RTU TCP Server Modbus ASCII TCP Client				
Alarm     Serial Management		Modbus RTU TCP Client				
Serial Device						
-Serial Protocol						
Serial Statistics						
Extended						

## **Configuration Steps**

1. Select [Serial Management /Serial Protocol] in the navigation bar to enter the interface of Serial Management [Serial Protocol].

 The serial ports protocol can be viewed in the [Serial Protocol] interface
 Select required Mode, Remote IP, Remote Port, Local Port Click[Apply] to submit the modification.

5. Click [Refresh] to show the latest information.

ltem	Description
	Disable
	TCP Server: Stream the serial communication
	through TCP/IP protocol
	TCP Client: TCP Client will connect to server to
	realize data transmission between the serial port
Mode	device and server. <b>UDP:</b> In UDP Mode, you can
wode	unicast or multiunicast data from a serial device to
	one or multiple host computers. Modbus ASCII
	TCP Server
	Modbus RTU TCP Server
	Modbus ASCII TCP Client
	Modbus RTU TCP Client
Remote IP	As needed
Remote Port	<500-65535>
Local Port	<500-65535>

NOTE: The original Modbus specification included two possible transmission modes: ASCII and RTU. Modbus RTU mode is the most common implementation, using binary coding and CRC error-checking. Modbus ASCII messages (though somewhat more readable because they use ASCII characters) is less efficient and uses less effective LRC error checking. ASCII mode uses ASCII characters to begin and end messages whereas RTU uses time gaps (3.5 character times) of silence for framing. The two modes are incompatible so a device configured for ASCII mode cannot communicate with one using RTU. Modbus ASCII messages require twice as many bytes to transmit the same content as a Modbus RTU message



# 5.1.3 Series Managemetn- Serial Statistics

## **Configuration Steps**

1. Select [Serial Management /Serial Statistic] in the navigation bar to enter the interface of Serial Management [Serial Statistics].

- 2. The serial ports setatistics can be viewed in the [Serial Protocol] interface.
- 3. Click [Clear All] to restart the staticstics .
- 4. Click [Refresh] to show the update statistics information.

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