

FIBERROAD

Web-based
Network Management
User Manual

Ver. 2.0



About This Manual

Introduction

This document chapter includes an introduction to the Fiberroad Managed Media Converter family,

Conventions

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

Figures and Screen Captures

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

Copyright©2022 Fiberroad Technology Co., Ltd. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, be it electronically, mechanically, or by any other means such as photocopying, recording or otherwise, without the prior written permission of Fiberroad Technology Co., Ltd. (Fiberroad)

Information provided by Fiberroad is believed to be accurate and reliable. However, no responsibility is assumed by Fiberroad for its use nor for any infringements of patents or other rights of third parties that may result from its use. No license is granted by implication or otherwise under any patent rights of Fiberroad.

The information contained in this publication is subject to change without notice.

Trademarks

Fiberroad's trademarks have been identified as such. However, the presence or absence of such identification does not affect the legal status of any brand.

Units of Measurement

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

Jan 01, 2022

CONTENTS

Revision History.....	5
Chapter 1 System Configurations.....	6
1. About Web-GUI Management.....	6
1.1 Preparing for Web Management.....	6
1.2 System.....	7
1.2.1 System Information.....	7
1.2.2 System-IP Setting.....	7
1.2.3 System – User Account.....	8
1.2.4 System-Port Setting.....	9
Chapter 2 Network Configurations.....	10
2. Configuration.....	10
2.1 Configuration-VLAN.....	10
2.1.1 Configuration-VLAN-Static VLAN.....	10
2.1.2 Configuration-VLAN-VLAN Setting.....	11
2.2 Configuration-QoS.....	11
2.2.1 Configuration-QoS-Priority Selection.....	11
2.2.2 Configuration-QoS-DSCP Remapping.....	12
2.2.3 Configuration-QoS-Priority To Queue.....	12
2.2.4 Configuration-QoS-Queue Weight.....	13
2.3 IGMP.....	13
2.3.1 IGMP-IGMP.....	13
2.4 Trunk Group Setting.....	14
2.5 Loop Prevention.....	14
2.6 Card Information.....	15
2.7 Port Isolation.....	16
2.8 Bandwidth Control.....	16
2.9 Jumbo Frame.....	17
2.10 MAC Constraint.....	17
2.11 Green Ethernet.....	18
2.12 EEE.....	19
2.13 Security-MAC Address-MAC Search.....	19
2.14 Security-MAC Address-Static MAC.....	20

2.15 Security- Storm Control20

2.16 Mirroring – Port Statistics21

2.17 Cable Diagnostic21

2.18 Tools – Firmware Upgrade22

2.19 Tools – Configuraion Backup22

2.20 Tools – Reset.....23

2.21 Tools – Save23

2.22 Tools – Reboot.....24

Revision History

Version	Date	Author	Reasons of Change	Section(s) Affected
1.0	2022/1/16		Initial Release	All



Chapter 1 System Configurations

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

- ❖ System Information
 - ❖ IP Setting
 - ❖ User Account
 - ❖ Port Setting
-

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 Managed Media Converter or Managed Fiber Switch on the network and make sure that any one of the PCs on the network can connect with the Managed Media Converter or Managed Fiber Switch through the web browser.

The managed media converter default value of IP, subnet mask, username and password are listed as below:

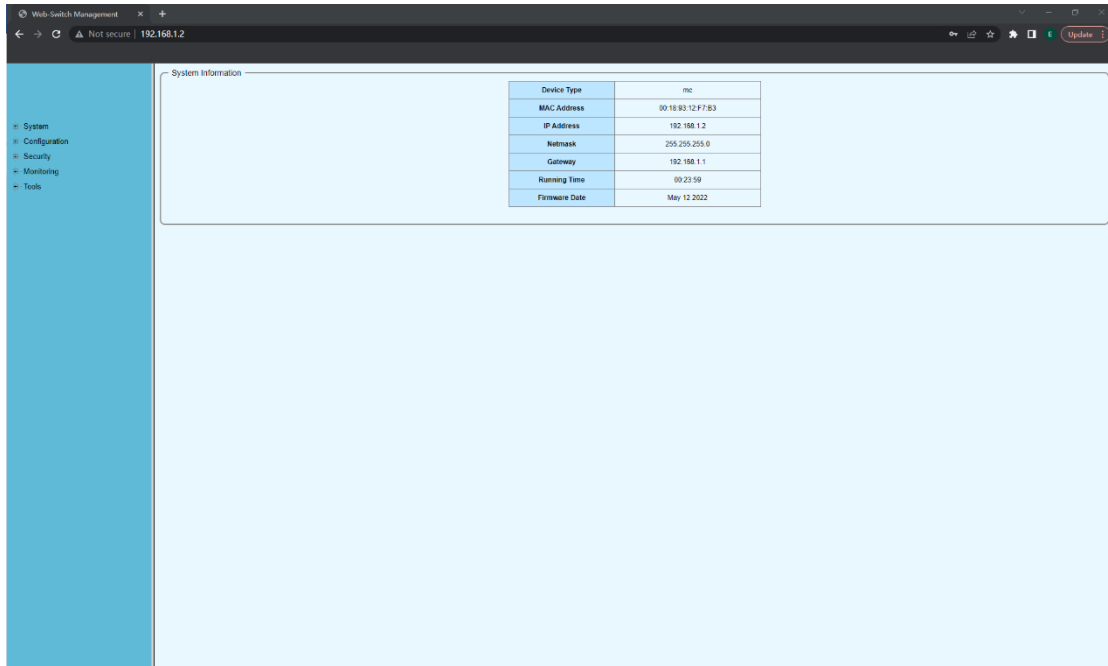
- ❖ IP Address: 192.168.1.2
- ❖ HTTP service: Enable
- ❖ User Name: admin
- ❖ Password: admin



1.2 System

1.2.1 System Information

Overview the device information and port status.

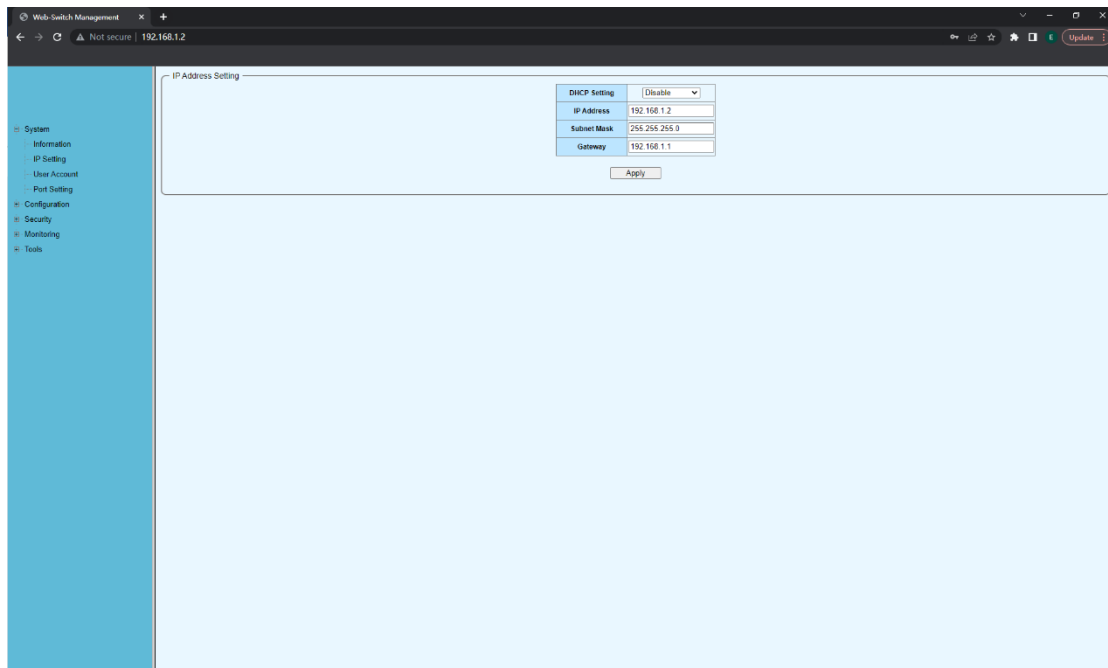


The screenshot shows the 'System Information' page in the Web Switch Management interface. The page title is 'System Information'. On the left, there is a navigation menu with the following items: System, Configuration, Security, Monitoring, and Tools. The main content area displays a table with the following data:

Device Type	mc
MAC Address	00:18:83:12:F7:83
IP Address	192.168.1.2
Netmask	255.255.255.0
Gateway	192.168.1.1
Running Time	00:23:59
Firmware Date	May 12 2022

1.2.2 System-IP Setting

The IP address setting surface is used to configure IP.



The screenshot shows the 'IP Address Setting' page in the Web Switch Management interface. The page title is 'IP Address Setting'. On the left, there is a navigation menu with the following items: System, Information, IP Setting, User Account, Port Setting, Configuration, Security, Monitoring, and Tools. The main content area displays a form with the following fields:

DHCP Setting	Disable
IP Address	192.168.1.2
Subnet Mask	255.255.255.0
Gateway	192.168.1.1

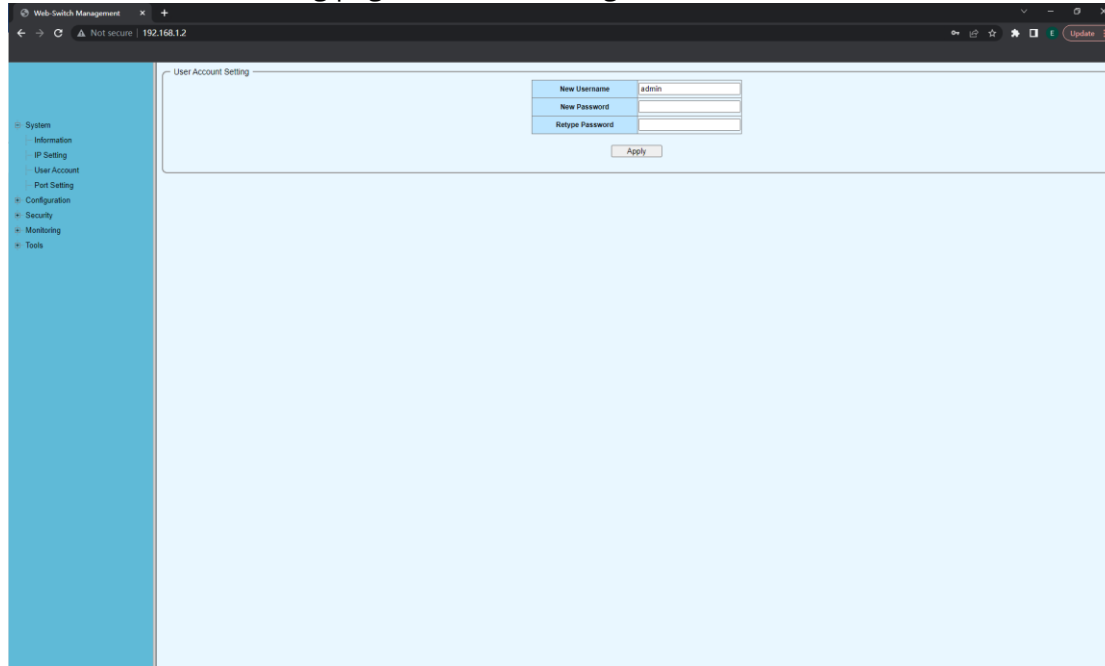
Below the form is an 'Apply' button.

Item	Description	Notes
DHCP	Enable/Disable	When enabled, enable the DHC client to obtain the dynamic IP address. When disabled, use the

		configured static IP address.
IP Address	Default:192.168.1.2	Static IP Address
Subnet Mask	Default:255.255.255.0	Static IP subnet mask
Gateway	Default:192.168.1.1	Gateway Address

1.2.3 System – User Account

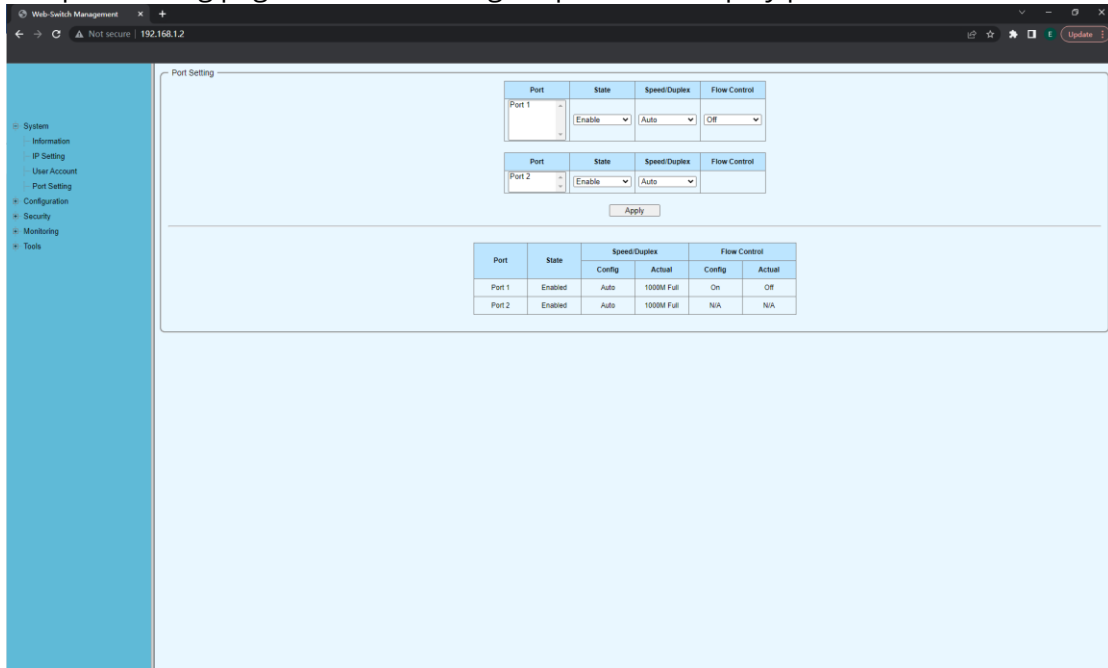
The user account setting page is used to configure user accounts.



Item	Description	Notes
New user name	Add a new user name	
New Password	Add a new user name	
Retype Password	Confirm the password of the new user	

1.2.4 System-Port Setting

The port setting page is used to configure ports and display port status.



Item	Description	Notes
Port 1	Lan (RJ45) Port	
Port 2	Optical Fiber Port	
State	Port state in enable/disable	
Speed/Duplex	<p>Port Speed or Mode</p>	
Flow Control	On/Off	



Chapter 2 Network Configurations

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

- ❖ VLAN
- ❖ QoS
- ❖ EEE
- ❖ Security

2. Configuration

2.1 Configuration-VLAN

2.1.1 Configuyration-VLAN-Static VLAN

The static VLAN table setting page is used to add or delete VLANs in the form of tag or untag, and display the port information of VLANs.

The screenshot shows the 'Static VLAN Table Setting' page in a web management interface. The page is titled 'Static VLAN Table Setting' and contains a form for adding or modifying a VLAN. The form has the following fields:

VLAN ID	VLAN Name
1-4094	
Port	Select All 1 Port 2
Untagged	All <input type="checkbox"/>
Tagged	All <input type="checkbox"/>
Not Member	All <input type="checkbox"/>

Below the form is an 'Add / Modify' button. Below the form is a table displaying existing VLANs:

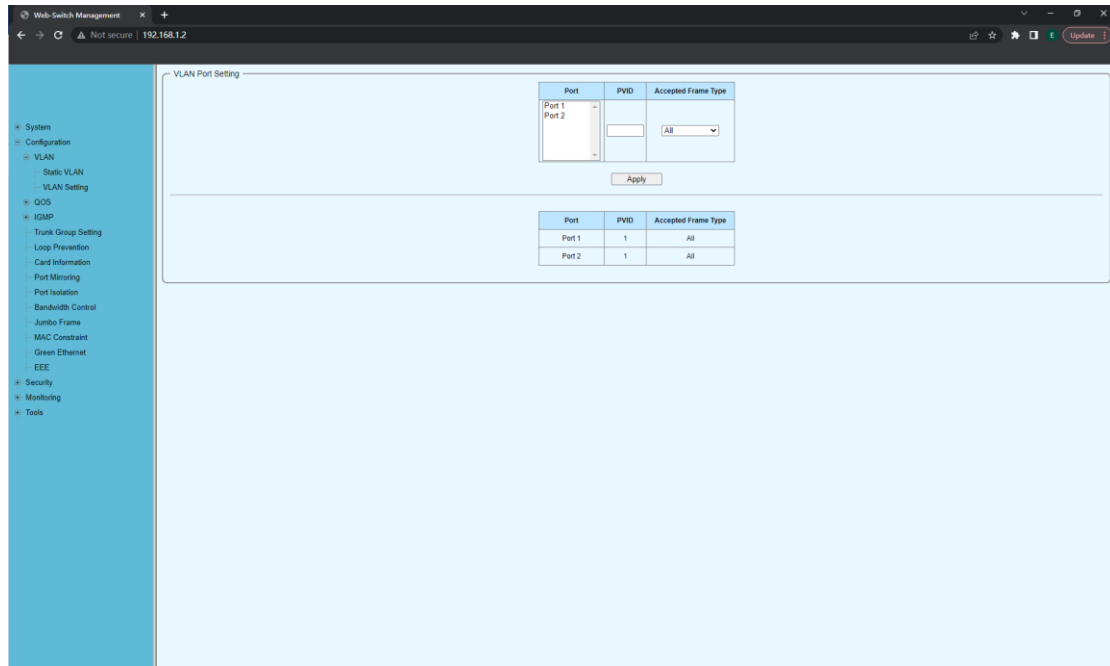
VLAN ID	VLAN Name	Member Ports	Tagged Ports	Untagged Ports	Delete
1		1-2	-	1-2	<input type="checkbox"/>

Below the table are 'Delete' and 'Select All' buttons. The left sidebar contains a navigation menu with the following items:

- System
- Configuration
 - VLAN
 - Static VLAN
 - VLAN Setting
 - QoS
 - IGMP
 - Trunk Group Setting
 - Loop Prevention
 - Card Information
 - Port Mirroring
 - Port Isolation
 - Bandwidth Control
 - Jumbo Frame
 - MAC Constraint
 - Green Ethernet
 - EEE
 - Security
 - Monitoring
 - Tools

2.1.2 Configuration-VLAN-VLAN Setting

The VLAN side setting page is used to configure the PVID of the port and the type of received frame.



The screenshot shows the 'VLAN Port Setting' page in the Web-Switch Management interface. The page has a left sidebar with a navigation menu and a main content area. The main content area contains a configuration form and a table.

Configuration Form:

Port	PVID	Accepted Frame Type
Port 1		All
Port 2		All

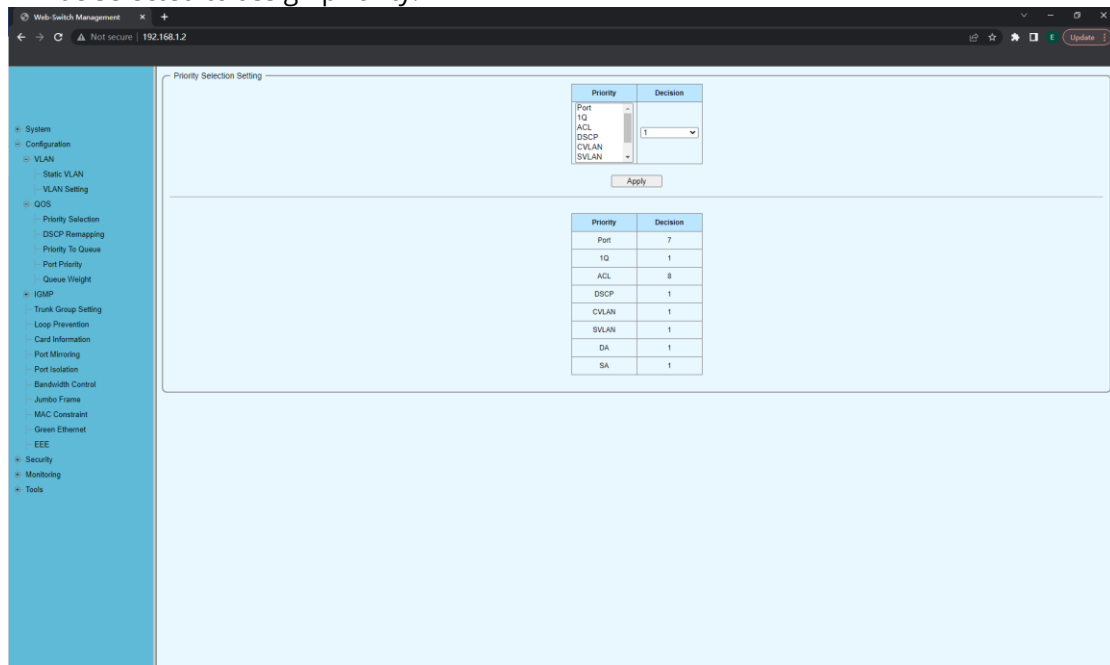
Table:

Port	PVID	Accepted Frame Type
Port 1	1	All
Port 2	1	All

2.2 Configuration-QoS

2.2.1 Configuration-QoS-Priority Selection

The priority selection setting page is used to configure the priority source weight. When the received packet is paired with multiple sources, the source with the highest weight will be selected to assign priority.



The screenshot shows the 'Priority Selection Setting' page in the Web-Switch Management interface. The page has a left sidebar with a navigation menu and a main content area. The main content area contains a configuration form and a table.

Configuration Form:

Priority	Decision
Port	
1Q	1
ACL	
DSCP	
CVLAN	
SVLAN	

Table:

Priority	Decision
Port	7
1Q	1
ACL	8
DSCP	1
CVLAN	1
SVLAN	1
DA	1
SA	1

2.2.2 Configuration-QoS-DSCP Remapping

The DSCP remapping settings page is used to configure the internal priority mapping based on DSCP priority.

The screenshot shows the 'DSCP Remapping Setting' page. On the left is a navigation menu with categories: System, Configuration (VLAN, QoS, IGMP), Security, Monitoring, and Tools. The QoS section is expanded, showing 'DSCP Remapping' selected. The main content area has a title 'DSCP Remapping Setting'. At the top, there is a control panel with a 'DSCP Value' dropdown menu (values 0-5) and a 'Priority' dropdown menu (value 0), with an 'Apply' button below. Below this is a table with 25 rows, each with a 'DSCP Value' and a 'Priority' column. All 'Priority' values are currently set to 0.

DSCP Value	Priority
0	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0

2.2.3 Configuration-QoS-Priority To Queue

The priority queue ID setting page is used to configure the internal priority to queue mapping.

The screenshot shows the 'Priority To Queue ID Setting' page. The navigation menu is the same as in the previous screenshot, with 'Priority To Queue' selected under the QoS section. The main content area has a title 'Priority To Queue ID Setting'. At the top, there is a control panel with a 'Priority' dropdown menu (values 0-5) and a 'Queue ID' dropdown menu (value 1), with an 'Apply' button below. Below this is a table with 8 rows, each with a 'Priority' and a 'Queue ID' column. The 'Queue ID' values are 1, 1, 2, 2, 3, 3, 4, 4.

Priority	Queue ID
0	1
1	1
2	2
3	2
4	3
5	3
6	4
7	4

2.2.4 Configuration-QoS-Queue Weight

The queue weight page is used to configure the weight of queue priority algorithm.

The screenshot shows the 'Queue Weight Setting' page in a web management interface. The page has a left sidebar with a navigation menu and a main content area. The main content area contains a form for configuring queue weights. At the top, there is a table with two columns: 'Priority Queue' and 'Weight'. The 'Priority Queue' column has values 1, 2, 3, and 4 (lowest to highest). The 'Weight' column has a dropdown menu set to 'Strict priority'. Below this table is an 'Apply' button. Below the 'Apply' button is another table with two columns: 'Priority Queue' and 'Weight'. This table has four rows, each with a priority queue number (1, 2, 3, 4) and the weight 'Strict priority'.

Priority Queue	Weight
1 (lowest)	Strict priority
2	Strict priority
3	Strict priority
4 (highest)	Strict priority

Priority Queue	Weight
1	Strict priority
2	Strict priority
3	Strict priority
4	Strict priority

2.3 IGMP

2.3.1 IGMP-IGMP

IGMP page, used to configure IGMP enabled or disabled and display IGMP list items. After checking enable, the group broadcast text learned through IGMP protocol is allowed to pass.

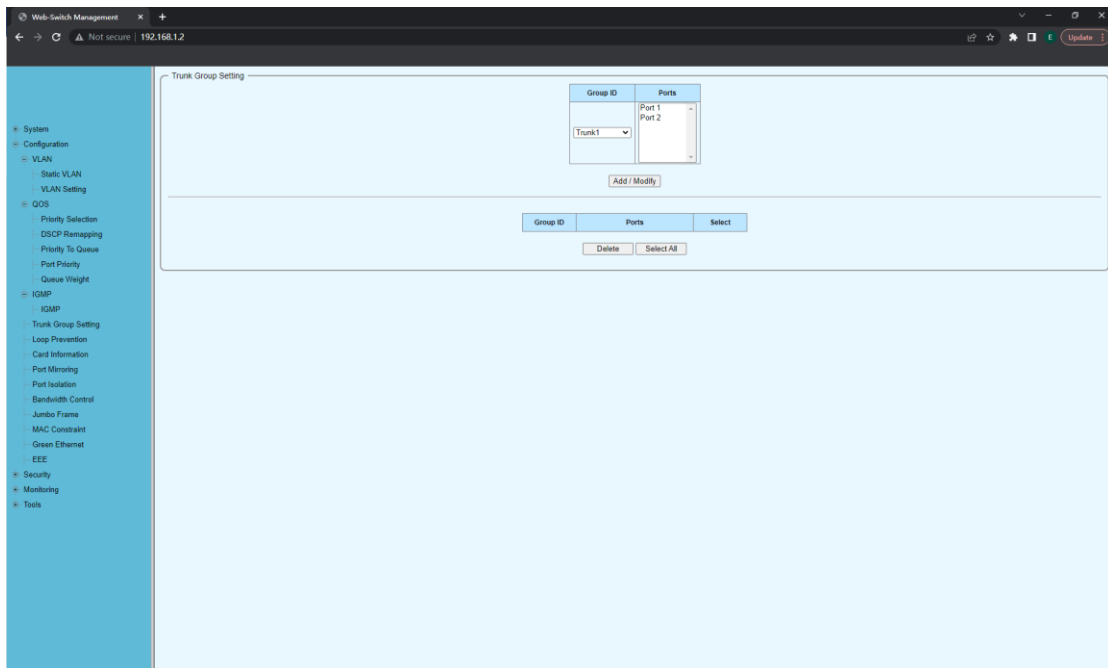
The display information includes the IP address, port and VLAN ID learned through IGMP.

The screenshot shows the 'IGMP Enable Setting' page in a web management interface. The page has a left sidebar with a navigation menu and a main content area. The main content area contains a form for configuring IGMP settings. At the top, there is a section titled 'IGMP Enable Setting' with an 'Enable' checkbox checked and an 'Apply' button. Below this is a section titled 'Dump IGMP Entry' with a table header containing 'IP Address', 'Ports', and 'Vid'.

IP Address	Ports	Vid
------------	-------	-----

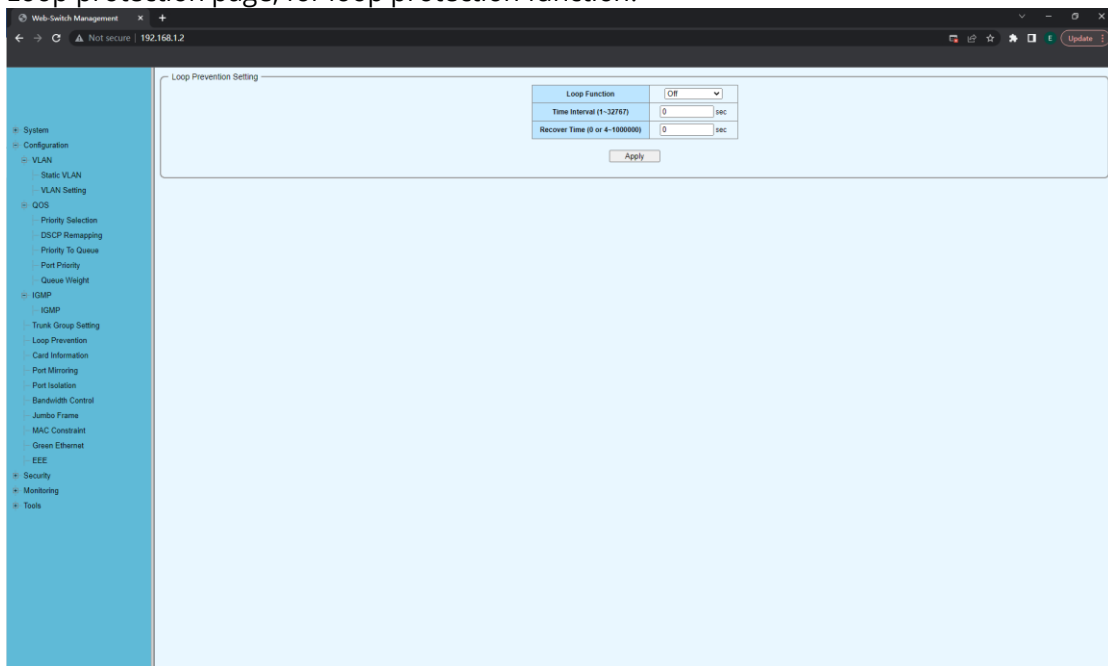
2.4 Trunk Group Setting

Trunk group settings page, which is used to configure and show port aggregation.



2.5 Loop Prevention

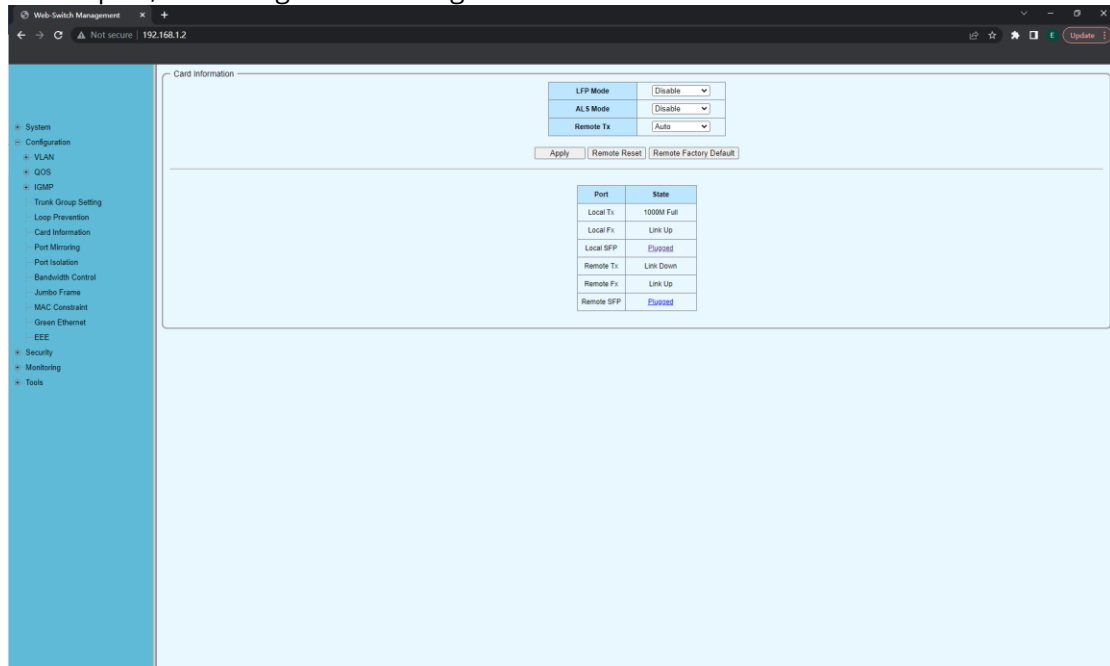
Loop protection page, for loop protection function.



Item	Description	Notes
Loop Function	Off	Default: Off
Time Interval	1~32767 sec	
Recover Time	0 or 4~1000000 sec	

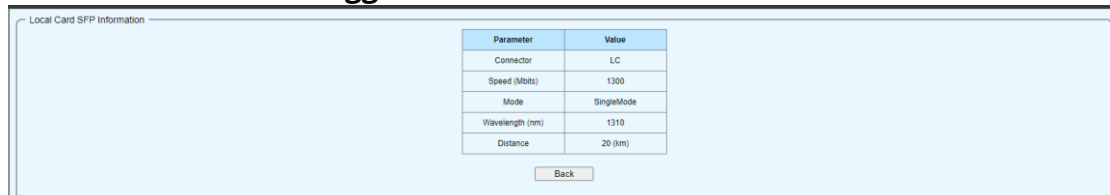
2.6 Card Information

Card Information page to show the local and remote card and port state, including Tx and Fx port, also being able to configure LFP and ALS mode.



Item	Description	Notes		
LFP Mode	Disable/Enable	Default: Disable		
ALS Mode	Disable/Enable	Default: Disable		
Remote Tx	<div style="border: 1px solid #ccc; padding: 5px; display: inline-block;"> <table border="1"> <tr> <td>Remote Tx</td> <td>Auto</td> </tr> </table> </div>	Remote Tx	Auto	
Remote Tx	Auto			

Click the Local SFP "Plugged" to check the SFP State

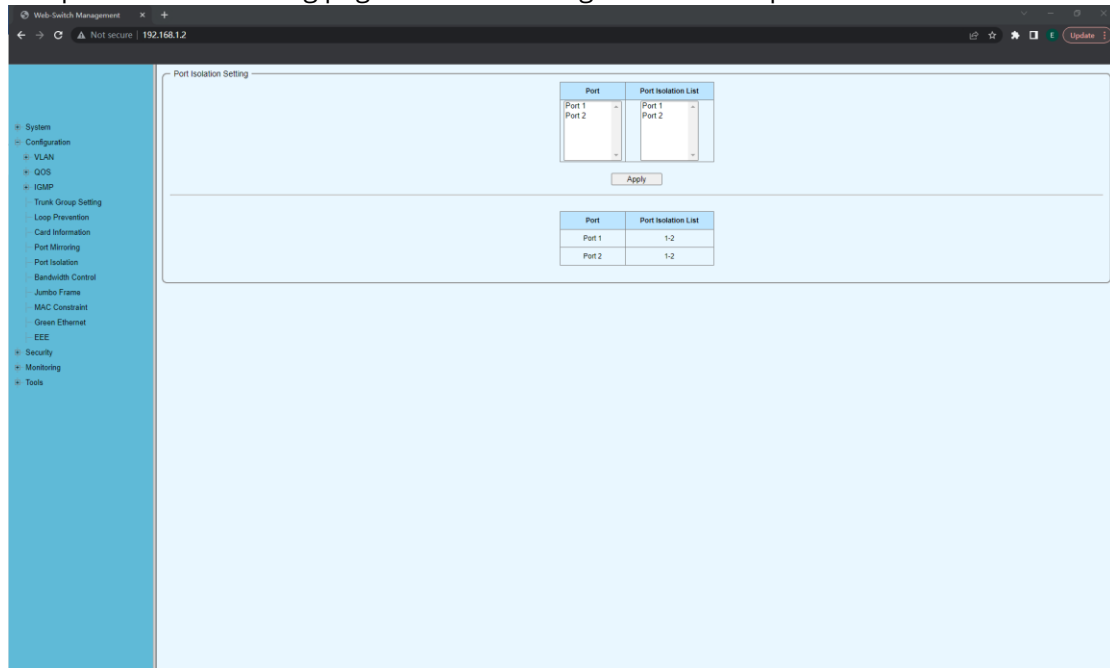


Click the Remote SFP "Plugged" to check the SFP State



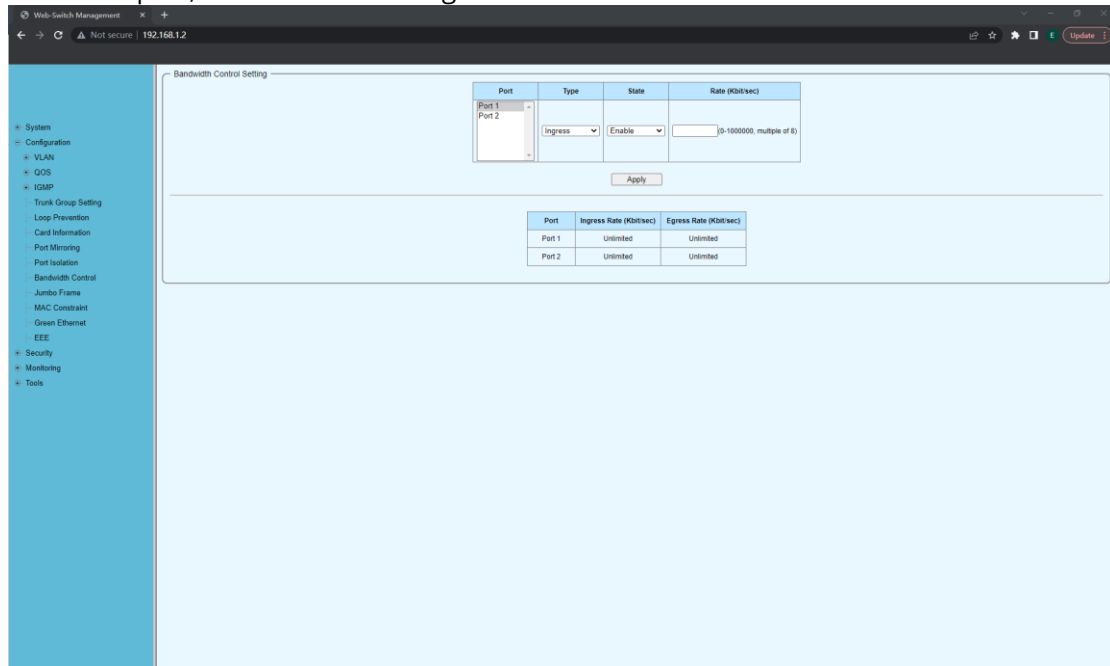
2.7 Port Isolation

The port isolation setting page is used to configure and show port isolation.



2.8 Bandwidth Control

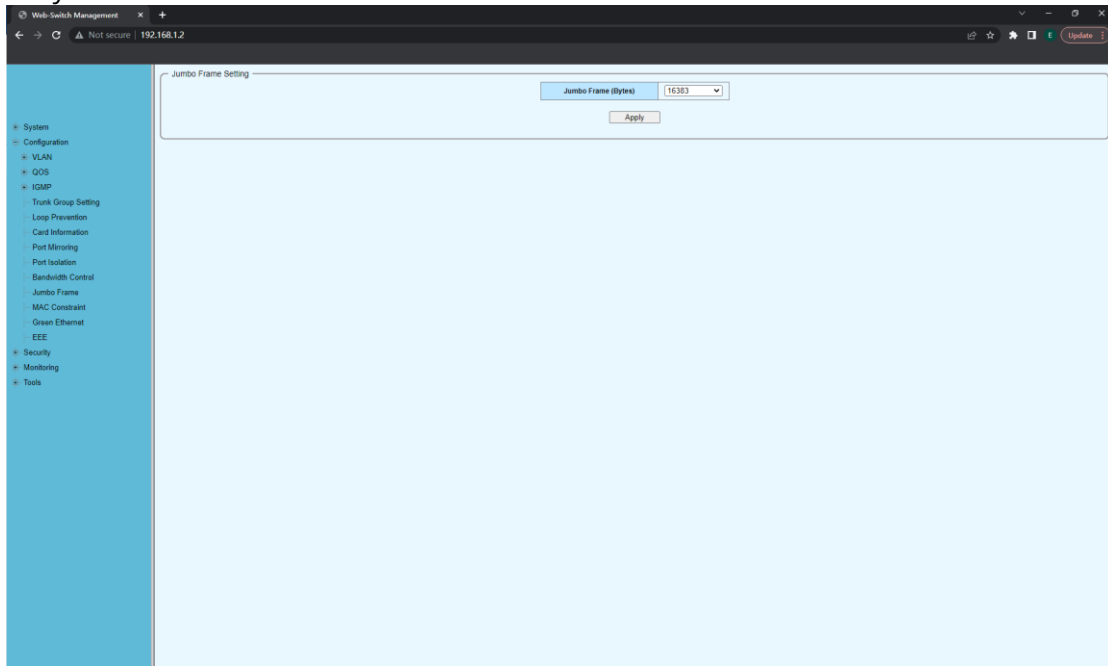
The bandwidth control setting page is used to configure the message bandwidth in and out of the port, also show the configuration information.



Item	Description	Notes
Port	Port 1 / Port 2	
Type	Ingress/Egress	
State	Enable/Disable	
Rate	0-1000000, multiple of 8	Unit: Kbit/sec

2.9 Jumbo Frame

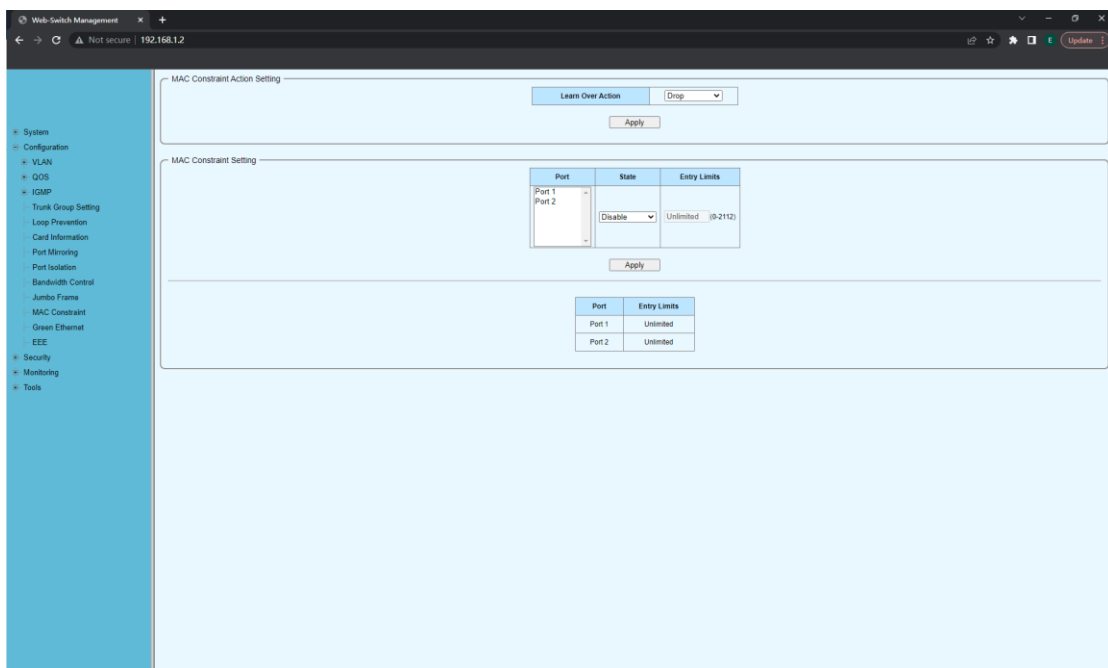
Giant frame setting page, which is used to configure the maximum frame length allowed, in bytes.



Item	Description	Notes
Jumbo Frame		Unit: Bytes

2.10 MAC Constraint

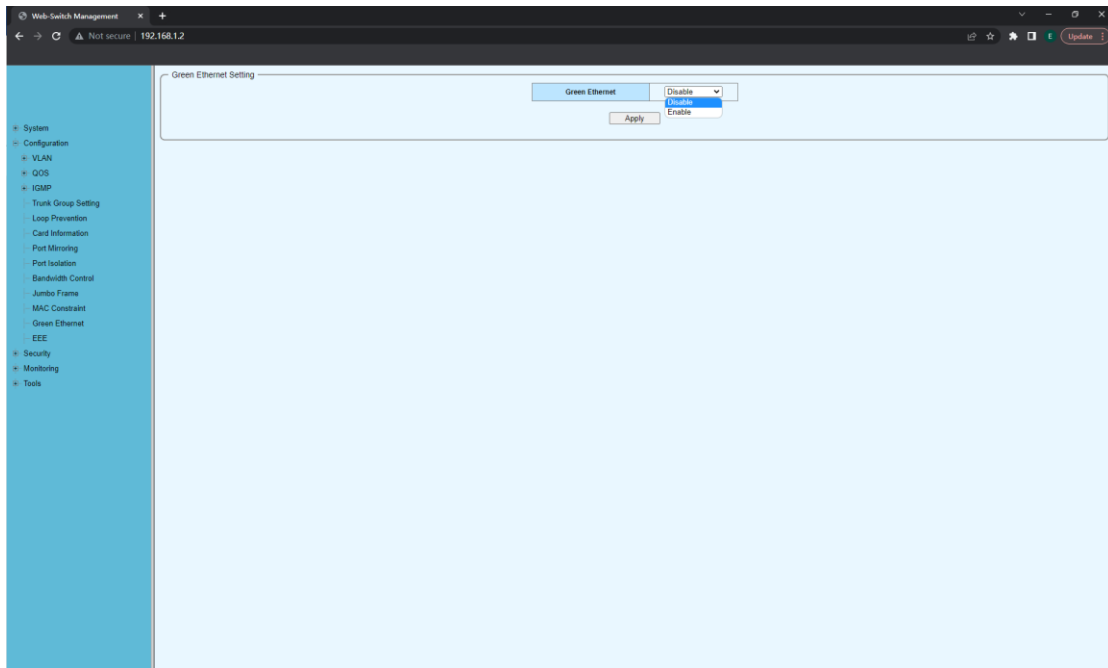
The MAC constraint behavior page is used to configure the number of MAC allowed to be learned by the port and the processing behavior of the MAC address learned by the port.



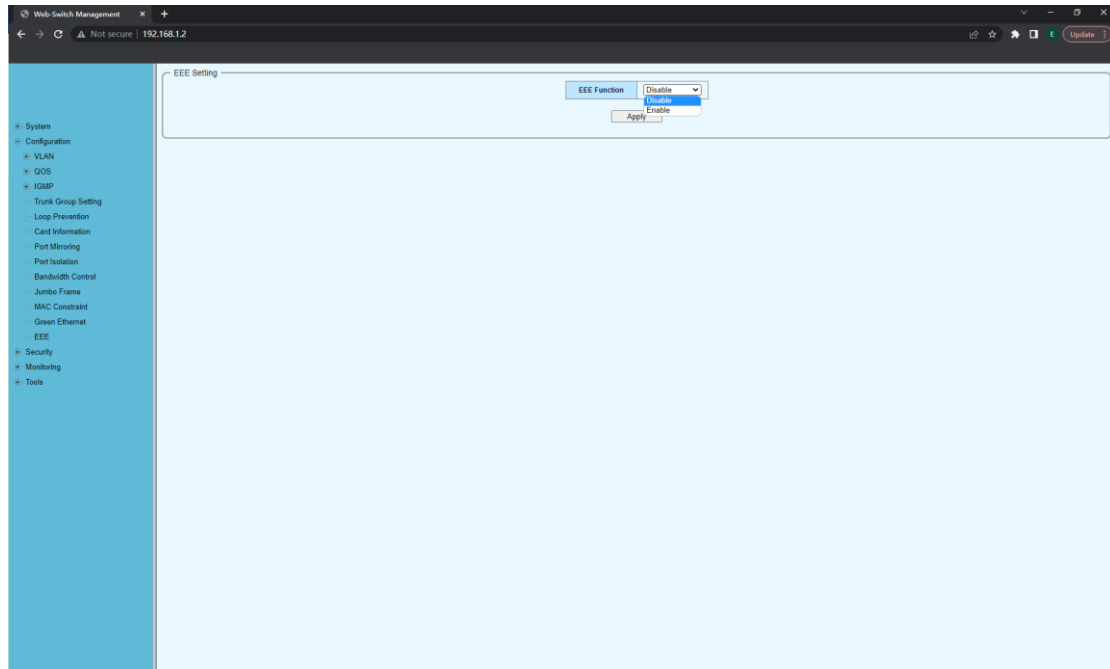
Item	Description	Notes
Learn Over Action	Drop/Flooding	Unit: Bytes
	MAC Constraint Setting	
Entry Limits	0-2112	

2.11 Green Ethernet

The green Ethernet setting page is used to enable or disable the green Ethernet function. Reduce energy consumption by setting green Ethernet function. When the Green function is enabled, the system will automatically detect the cable length and select different power modes to obtain the best performance and minimum power consumption. If the connection is disconnected, the port will enter the power saving mode within 0 seconds.

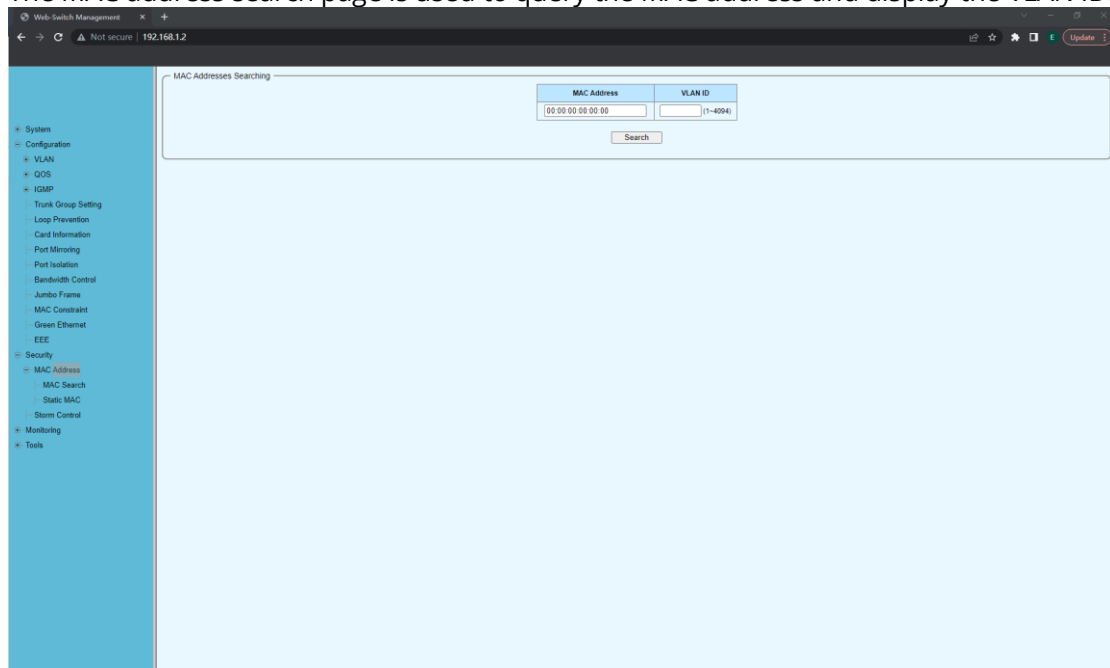


2.12 EEE



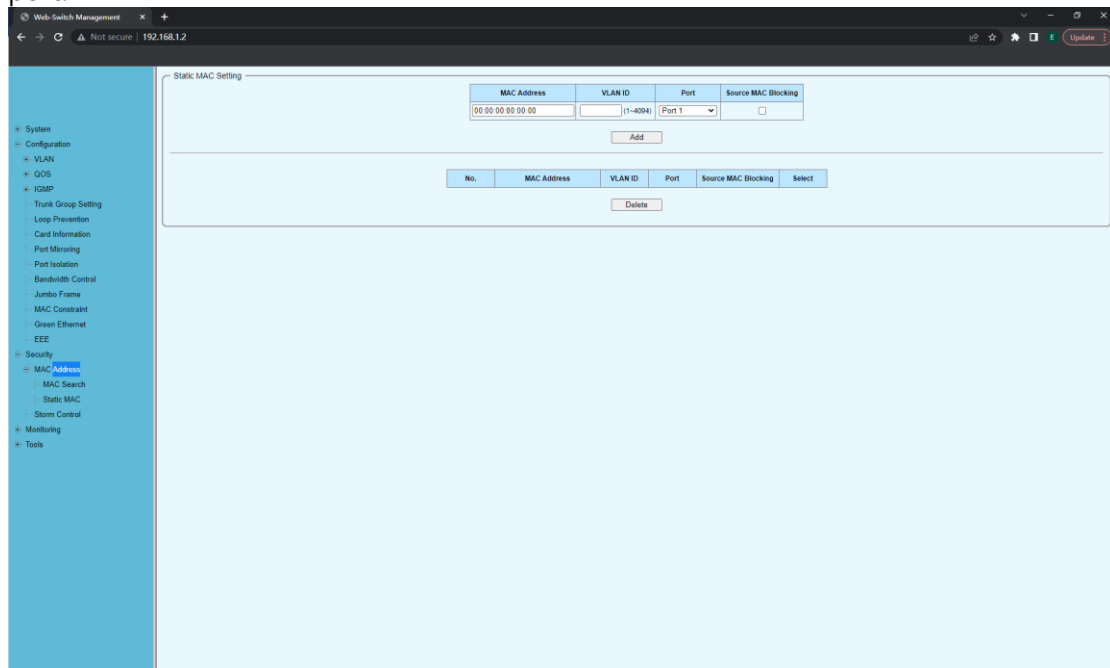
2.13 Security-MAC Address-MAC Search

The MAC address search page is used to query the MAC address and display the VLAN ID.



2.14 Security-MAC Address-Static MAC

The static MAC page is used to add, display and delete the static MAC address of the port.



The screenshot shows the 'Static MAC Setting' page in the Web-Switch Management interface. The page has a left sidebar with a navigation menu and a main content area. The main content area contains a form to add a static MAC address and a table to display existing entries.

Static MAC Setting Form:

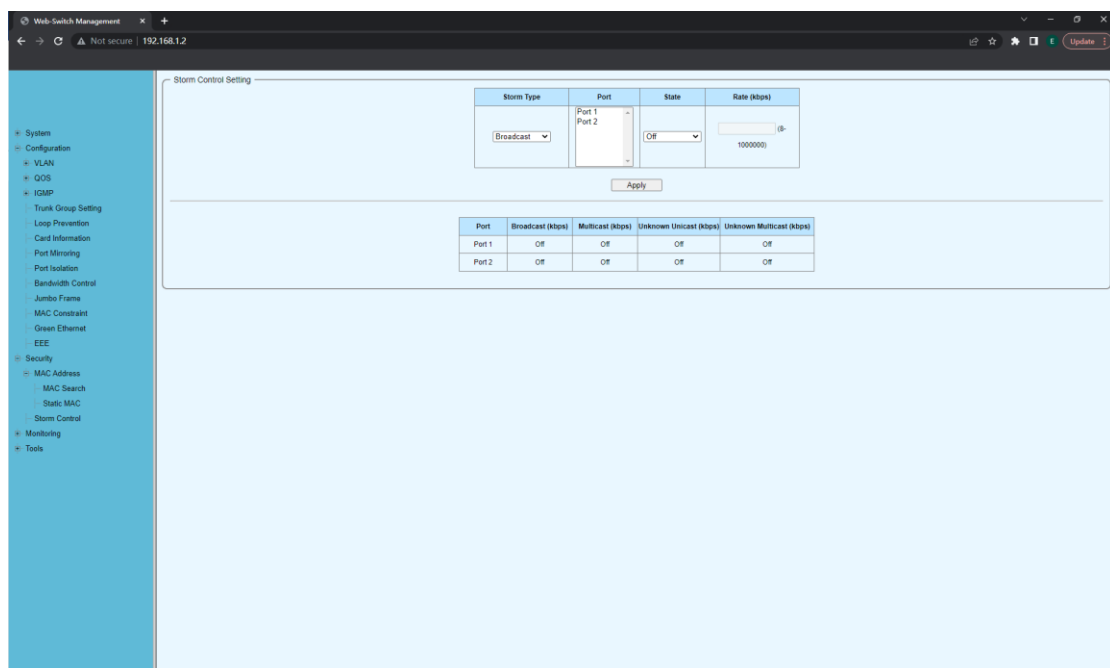
MAC Address	VLAN ID	Port	Source MAC Blocking
00:00:00:00:00:00	(1-4094)	Port 1	<input type="checkbox"/>

Static MAC Setting Table:

No.	MAC Address	VLAN ID	Port	Source MAC Blocking	Select
-----	-------------	---------	------	---------------------	--------

2.15 Security- Storm Control

The storm suppression page is used to suppress the flood message.



The screenshot shows the 'Storm Control Setting' page in the Web-Switch Management interface. The page has a left sidebar with a navigation menu and a main content area. The main content area contains a form to configure storm control settings and a table to display the current settings for each port.

Storm Control Setting Form:

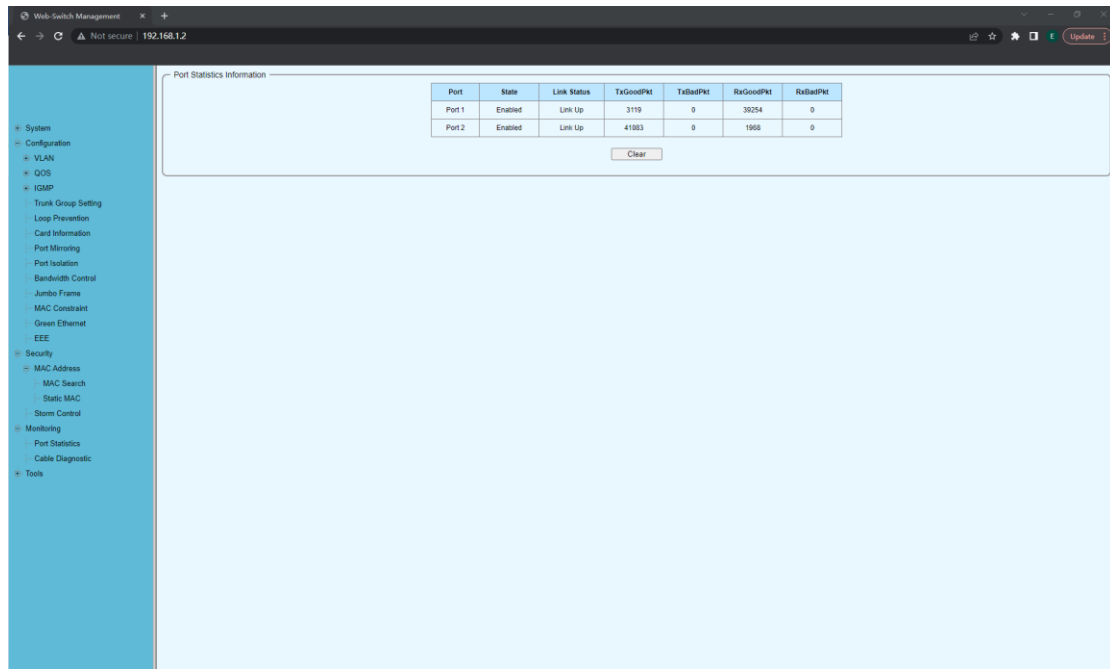
Storm Type	Port	State	Rate (kbps)
Broadcast	Port 1 Port 2	Off	1000000

Storm Control Setting Table:

Port	Broadcast (kbps)	Multicast (kbps)	Unknown Unicast (kbps)	Unknown Multicast (kbps)
Port 1	Off	Off	Off	Off
Port 2	Off	Off	Off	Off

2.16 Mirroring – Port Statistics

The display letter includes the status of the port, the connection status, the correct data packet sent, the wrong data packet sent, the correct data packet received and the wrong data packet received.



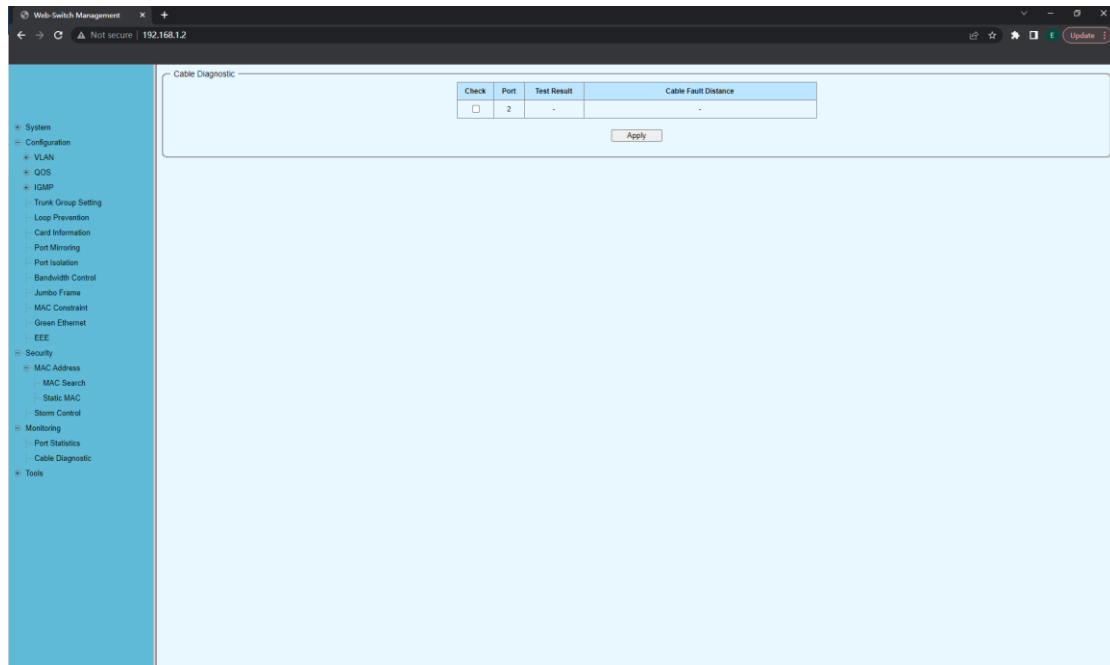
The screenshot shows the 'Port Statistics Information' page in the Web-Switch Management interface. The page displays a table with the following data:

Port	State	Link Status	TxGoodPkt	TxBadPkt	RxGoodPkt	RxBadPkt
Port 1	Enabled	Link Up	3119	0	39254	0
Port 2	Enabled	Link Up	41083	0	1968	0

Below the table is a 'Clear' button. The left sidebar contains a navigation menu with categories: System, Configuration (VLAN, QOS, IGMP, Trunk Group Setting, Loop Prevention, Card Information, Port Mirroring, Port Isolation, Bandwidth Control, Jumbo Frame, MAC Constraint, Green Ethernet, EEE), Security (MAC Address, MAC Search, Static MAC, Storm Control), Monitoring (Port Statistics, Cable Diagnostic), and Tools.

2.17 Cable Diagnostic

The cable diagnosis page is used to diagnose whether the network line is normal.



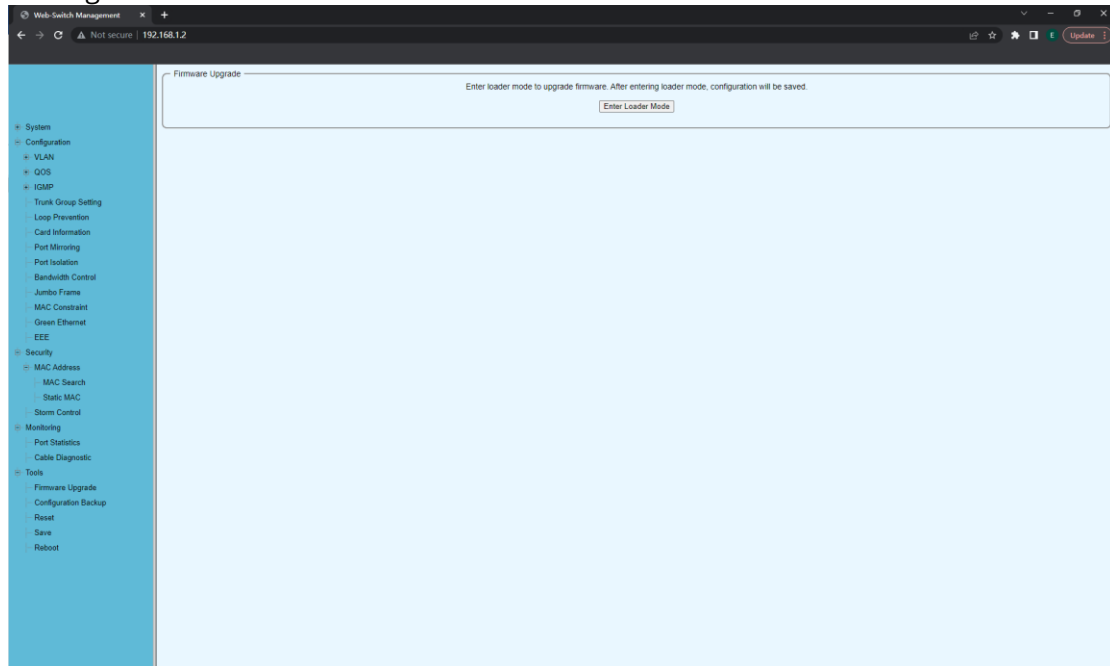
The screenshot shows the 'Cable Diagnostic' page in the Web-Switch Management interface. The page displays a table with the following data:

Check	Port	Test Result	Cable Fault Distance
<input type="checkbox"/>	2	-	-

Below the table is an 'Apply' button. The left sidebar contains a navigation menu with categories: System, Configuration (VLAN, QOS, IGMP, Trunk Group Setting, Loop Prevention, Card Information, Port Mirroring, Port Isolation, Bandwidth Control, Jumbo Frame, MAC Constraint, Green Ethernet, EEE), Security (MAC Address, MAC Search, Static MAC, Storm Control), Monitoring (Port Statistics, Cable Diagnostic), and Tools.

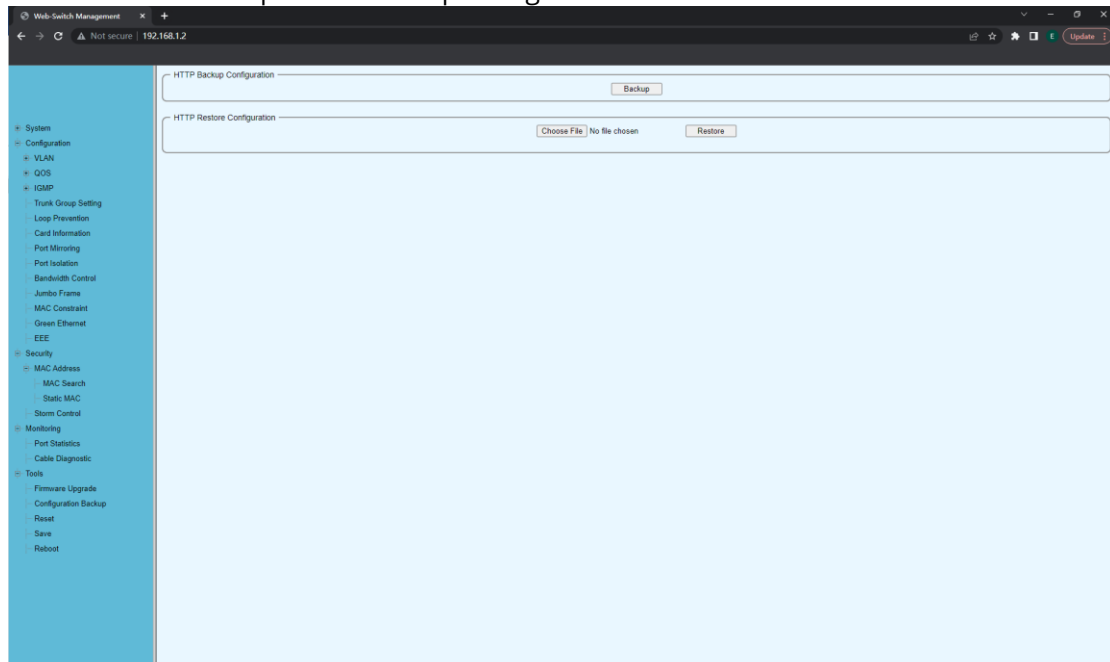
2.18 Tools – Firmware Upgrade

The firmware upgrade page is used to enter the loading mode and upgrade in the loading mode.



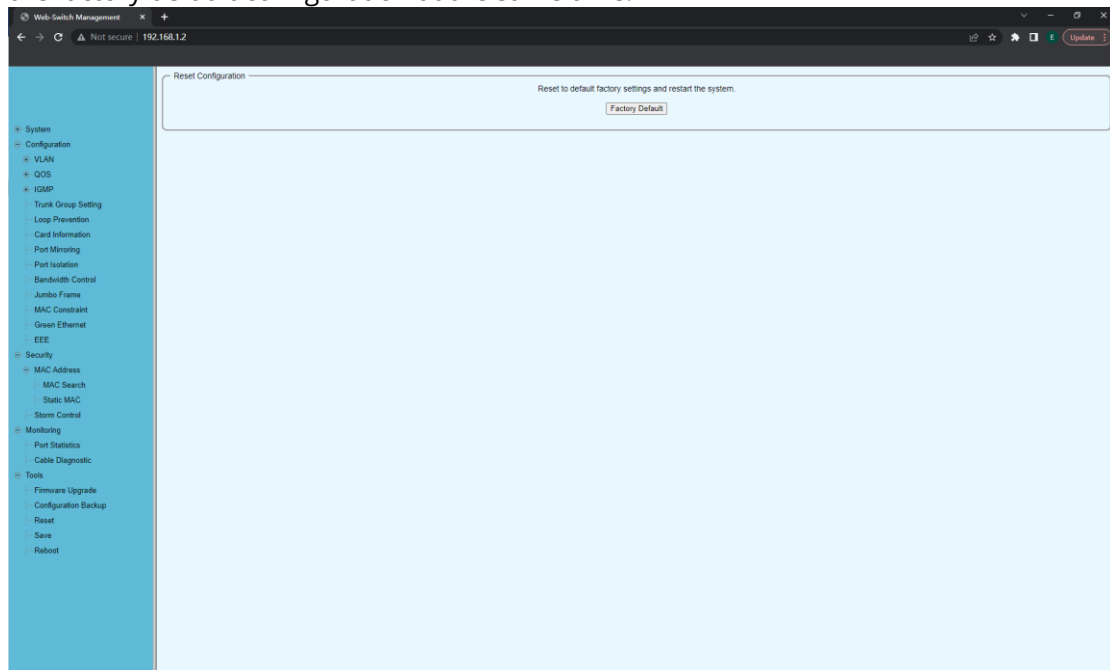
2.19 Tools – Configuraion Backup

The configuration backup page is used for configuration import and export. Click the Backup button to export the configuration to PC backup. Click the select File button to restore the configuration, select the configuration of PC backup, and then click the restore button to import the backup configuration into the device.



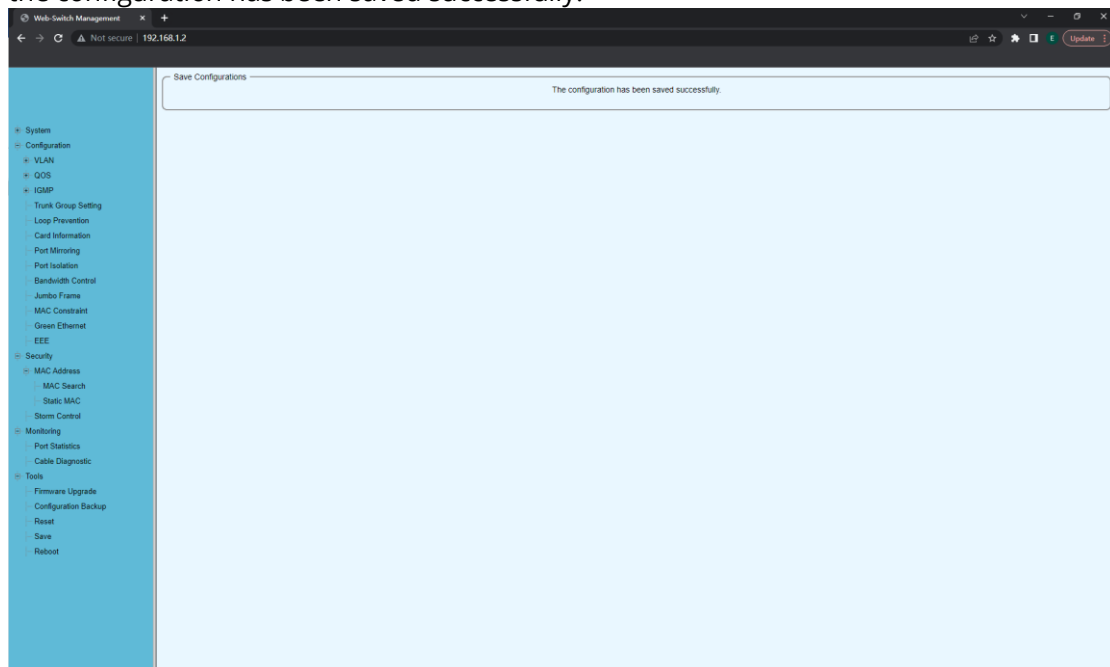
2.20 Tools – Reset

The restore configuration page is used to restore the factory settings. Enter the reset page and click the restore factory default button. The system will restart and restore to the factory default configuration at the same time.



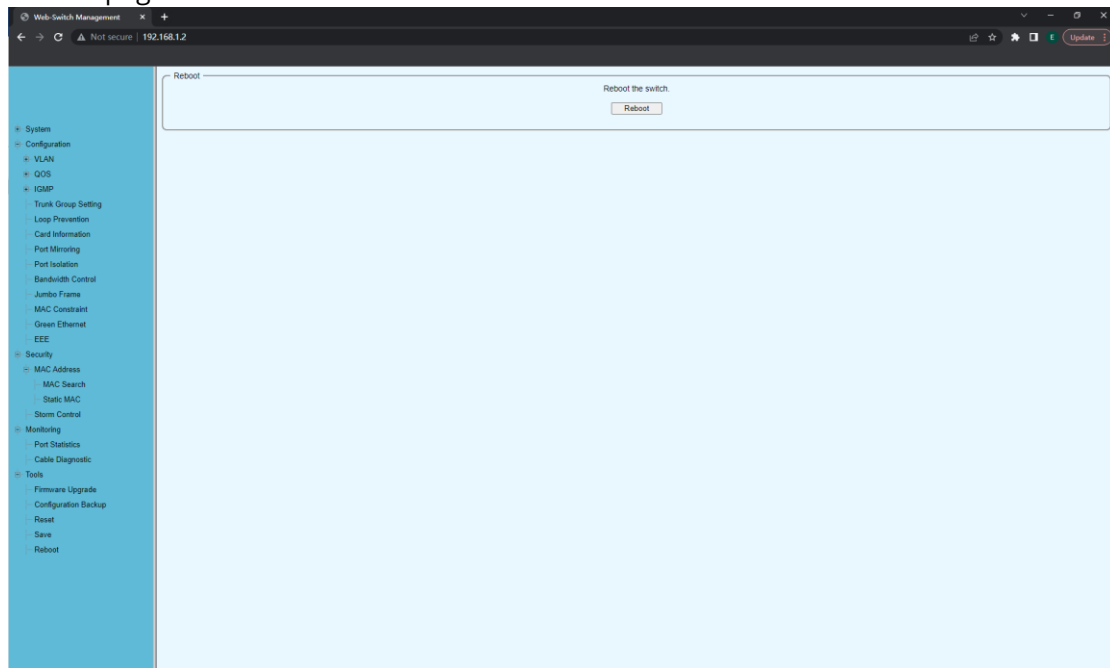
2.21 Tools – Save

The save page is used to save the configuration. After clicking the save page, the system configuration will be saved immediately, and the configuration saving page will show that the configuration has been saved successfully.



2.22 Tools – Reboot

Reboot paged used to reboot the device.



The information in this document is subject to change without notice. Fiberroad has made all effects to ensure the accuracy of the information, but all information in this document does not constitute any kind of warranty. If you have any questions please feel free to contact to us.

Fiberroad Technology Co., Ltd

www.fiberroad.com

Sales Support: sales@fiberroad.com

Technical Support: support@fiberroad.com

Service Support: service@fiberroad.com

