Ruijie RG-S5315-E Series Switches

S5315_RGOS 12.6(3)B0701P1

Web-based Configuration Guide

Preface

Intended Audience

This document is intended for:

- Network engineers
- Technical support and servicing engineers
- Network administrators

Technical Support

- Ruijie Networks website: https://www.ruijie.com/
- Online support center: https://www.ruijie.com/support
- Case portal: https://caseportal.ruijie.com
- Community: https://community.ruijienetworks.com
- Email support: service_rj@ruijie.com
- Live chat: https://www.ruijie.com/rita
- Documentation feedback: doc@ruijie.com.cn

Conventions

1. Conversions

GUI Symbol	Description	Example
Boldface	1. Button names 2. Window names, tab name, field name and menu items 3. Link	1. Click OK. 2. Select Config Wizard. 3. Click the Download File link.
>	Multi-level menus items	Select System > Time.

2. Signs

The signs used in this document are described as follows:

🔴 **Warning**

An alert that calls attention to important rules and information that if not understood or followed can result in data loss or equipment damage.

⚠️ **Caution**

An alert that calls attention to essential information that if not understood or followed can result in function failure or performance degradation.

ℹ️ **Note**

An alert that contains additional or supplementary information that if not understood or followed will not lead to serious consequences.

⊘ **Specification**

An alert that contains a description of product or version support.

3. Notes

The manual provides configuration information, including models, port types, and command line interfaces, for reference purposes only. In the event of any discrepancy or inconsistency between the manual and the actual version, the actual version shall take precedence.

Contents

1 Overview

This document describes how to use the eWeb management system. You can use the eWeb management system to configure common settings for devices.

You can access the eWeb management system through a browser (such as Google Chrome) to manage switches.

2 Typical Applications

Typical Application	Description
Managing Devices Through the eWeb Management System	After switches are properly configured, you can access the eWeb management system through a browser to manage these switches.

2.1 Managing Devices Through the eWeb Management System

2.1.1 Server requirements

Before you log in to the web system for the first time, you can connect the PC to the console port of the device and configure the device's IP address. Run the **enable service web-server all** command to enable the web service function. The configuration is as follows:

```
Hostname> enable
Web login password and enable password isn't set up, please set the password. //
If you start up an unconfigured device, you need to set the login password and
enable password for the web system.

Please Set the password:********

Please check the password:********

Set the password success!

Hostname#
Hostname# configure
Hostname(config)# interface gigabitEthernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# ip address 192.168.3.100 255.255.255.0 //
Configure the IP address for eWeb login. This IP address must be reachable from the IP address of the
PC which is used to log in to the eWeb.
Hostname(config-if-GigabitEthernet 0/1)# exit
Hostname(config)# ip route 0.0.0.0 0.0.0.0 192.168.3.1 // Configure the gateway.
```

```
Hostname(config)# enable service web-server // Enable the HTTP and HTTPS.
```

The default username is admin, and the password is the one configured during the initial device setup for the web service.

> ⚠️ **Caution**
>
> For your network security, you are advised to regularly change your login password.

2.1.2 Client requirements

1. Client: A client refers to a PC or a mobile terminal such as a laptop. A network administrator can log in to the eWeb graphical user interface (GUI) of a switch from the client's browser to manage switches.

2. Browser: Google Chrome is recommended. Exceptions such as garbled characters or formatting errors may occur if an unsupported browser is used. If an exception occurs due to the use of an old version of Google Chrome, you are advised to upgrade it to the latest version.

3. Resolution: You are advised to set the resolution to 1600 x 900 or 1920 x 1080. If other resolutions are used, font and formatting issues may occur.

3 eWeb Management System

3.1 Logging In

3.1.1 Logging In to the Web Management System

Enter the switch IP address in your browser's address bar. Make sure that the IP address is reachable. The login page is displayed.

Figure 3-1   Logging In

1. Enter the username and password and click **Log In**. The main interface of the eWeb management system is

displayed.

2.   If you need customer service assistance, contact local technical support.

3.   To prevent login through brute-force cracking, your account will be locked for 10 minutes after 5 failed attempts. You cannot log in during the locking period.
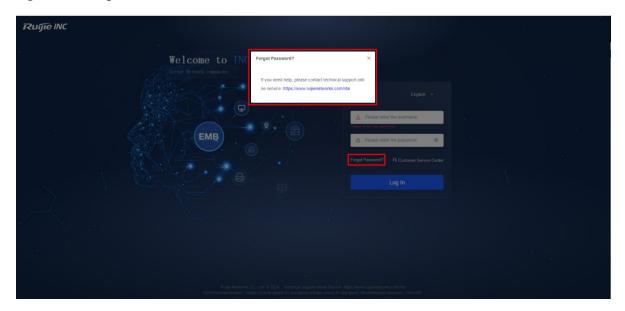
> ℹ️ **Note**
>
> To use the eWeb management system, ensure that the rg-web component has been installed on the switch and the web service has been enabled (if the web service is not enabled, run the **enable service web-server** command in config mode to enable it). Otherwise, the login page is not displayed. In most situations, the rg-web component is integrated in the rgos.bin system by default. However, if it is not installed, you can install it by installing the upgrade file mentioned in this release note of the eWeb management system.

3.1.2 Forgot Password

If you cannot remember your username or password, click **Forgot Password?**

Figure 3-2   Forgot Password

If the Telnet password is known, run the **webmaster password** command. The configuration is as follows: The configuration is as follows:

```
Hostname> enable
Hostname# configure
Hostname(config)# webmaster level 0 username admin password hostname@123
```

3.2 Main Interface

The main interface of the eWeb management system is displayed.
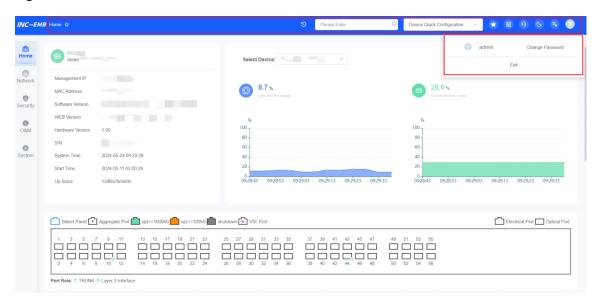
Figure 3-3   Main Interface

3.2.2 Header

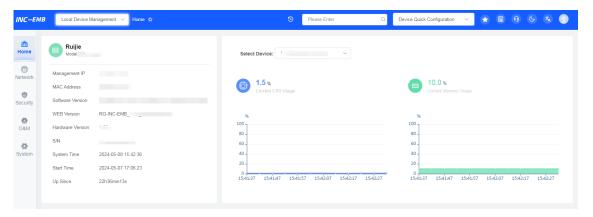This area displays links to common functions, including Favorites, Quick Search, Access History, Quick Setup, Change Language, Exit, Operation Log, Theme Switching, and Customer Service Center. You can click these links to switch to specific configuration pages.

Figure 3-4   Header
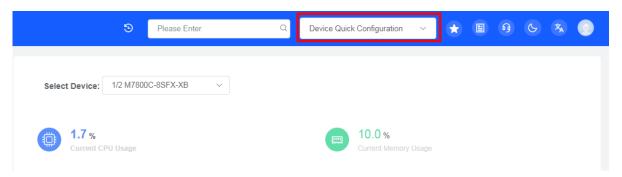
1. Quick Setup

The switch is not configured when you log in to the eWeb management system for the first time. You can use the **Quick Setup** wizard to configure common settings for the device.

Click **Device Quick Configuration** in the drop-down list box in the upper right corner to enter the **Device Quick Configuration** page, as shown in the following figure. For details, see the Quick Setup section.
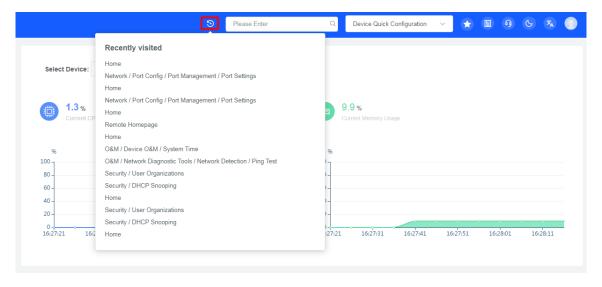
Figure 3-5   Quick Setup

2.   Access History

Click the **Recently visited** icon in the upper right corner to display the access history, as shown in Figure 3-6. You can view the pages that you recently visited.
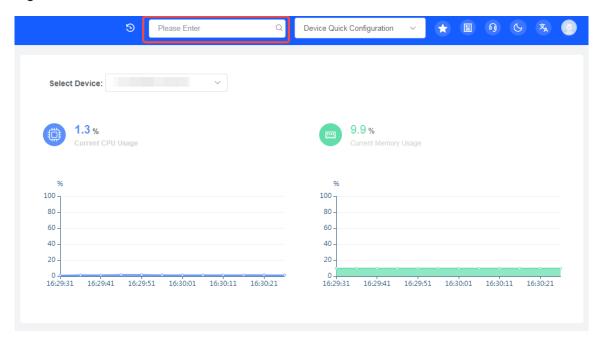
**Figure 3-6   Recently Visited**

3.   Quick Search
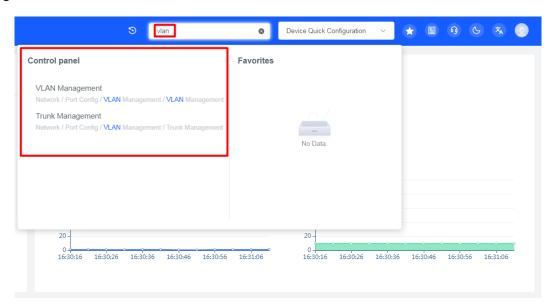
Click the **Quick Search** box in the upper right corner and then enter a keyword to perform a quick search, as shown in Figure 3-7. You can search for items of **Control panel** and **Favorites** by entering a keyword, and view, select, and clear historical search items.

Figure 3-7   Quick Search

- Searching for Items of Control Panel

    Enter a keyword in the search box to query the items of **Control panel**, as shown in Figure 3-8.
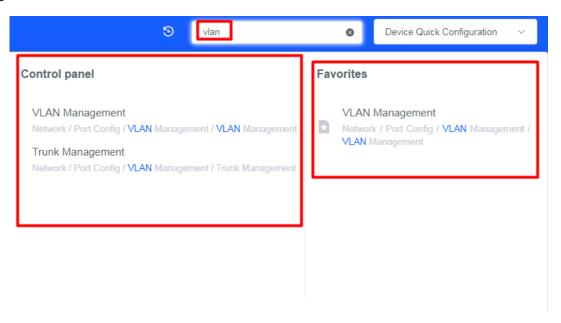
Figure 3-8   Control Panel

- Searching for Favorites

    If the menu items corresponding to the keyword is added to your favorites, they are displayed in the **Favorites** area, as shown in Figure 3-9.

Figure 3-9   Favorites

- Selecting the Search History

  In the **Search history** area, select the keyword, as shown in Figure 3-10. Then, the related menu items are displayed in the **Control panel** area.
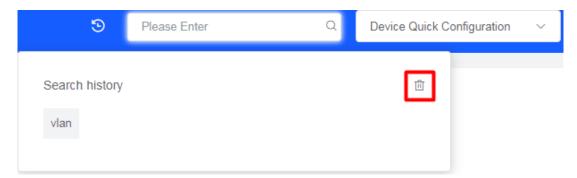
Figure 3-10 Search History
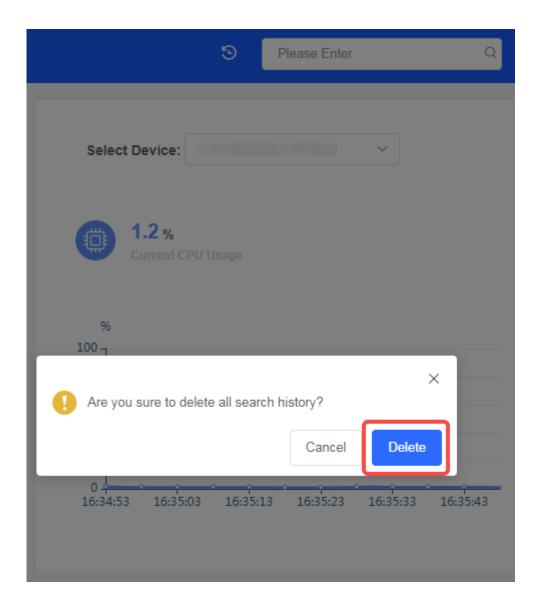
- Clearing the Search History

  As shown in Figure 3-11, click the **Delete** icon in the upper right corner of the **Search history** area. In the dialog box that appears, select **Delete** to delete all search history entries.

Figure 3-11 Clearing the Search History
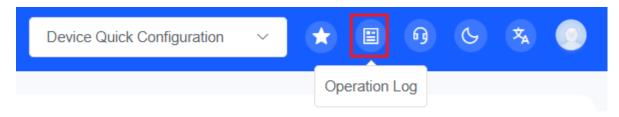
4. Operation Log

Click **Operation Log** in the upper right corner to go to the operation log page, as shown in the following figure. This page displays operation logs of the system. For details, see theOperation Log section.

Figure 3-12 Operation Log
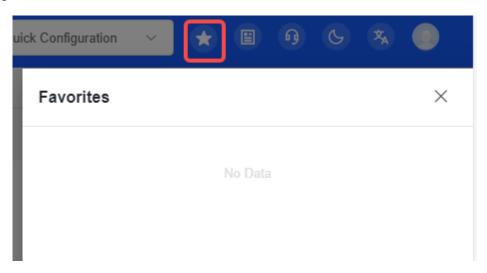
5. Favorites

● Favorites

Click the **Favorite** icon in the upper right corner to access the **Favorites** page, as shown in Figure 3-13. You can query and remove favorite information on this page.
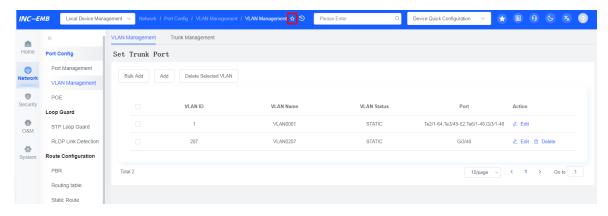
Figure 3-13 Favorites

● Adding Pages to Favorites
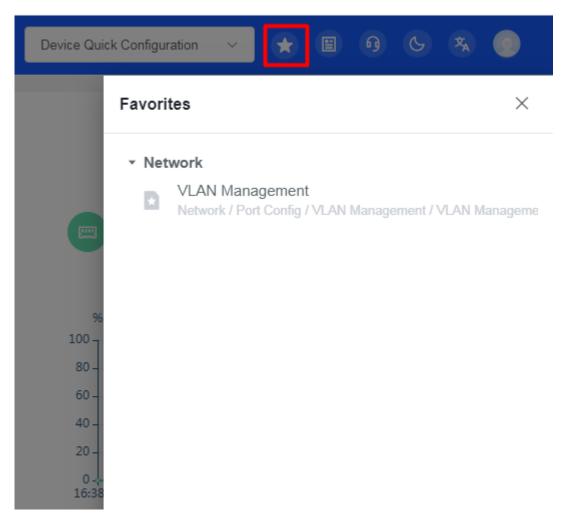
For frequently accessed pages, add them to favorites so that you can quickly redirect to these pages next time. After you access the page of a function that you want to add to your favorites, click the **Favorites** icon in the top navigation bar, as shown in Figure 3-14.

Figure 3-14 Adding Pages to Favorites

Click the **Favorites** icon in the upper right corner to query favorite information, as shown in Figure 3-15.

Figure 3-15 Querying Favorite Information

- Canceling Favorite Pages

  For a page added to your favorites, the **Favorites** icon is highlighted. Click the highlighted **Favorites** icon to remove the page from favorites.

Figure 3-16 Cancel Favorite Pages
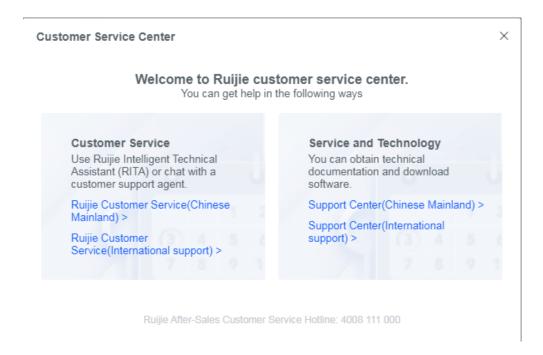
6. Customer Service Center

Click the **Customer Service** icon in the upper right corner to quickly access the customer service channels, including the **Customer Service** channel and **Service and Technology** channel, as shown in the following figure. You can click the links to obtain required services.

Figure 3-17 Customer Service Center

7. Theme Switching

Click the Theme Switching icon in the upper right corner to switch the theme. The system supports two theme tones: light and dark, as shown in the following figure.

Figure 3-18 Theme Switching

8. Language Switching

Click the Language Switching icon in the upper right corner to switch the system language. The system supports Chinese and English.

Figure 3-19 Language Switching

9. Changing Password
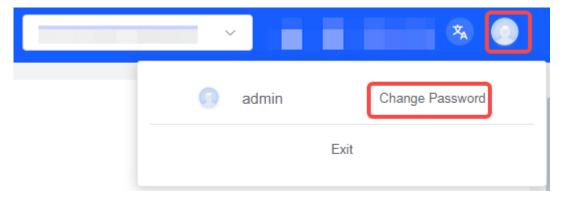
To change the password, click the Account icon in the upper right corner and click **Change Password**.

⚠️ **Caution**
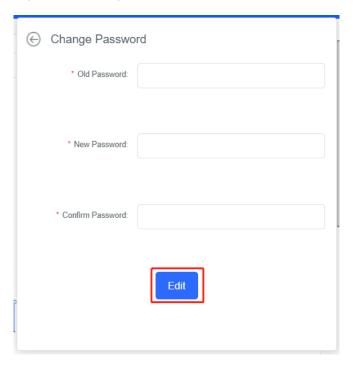
You can change the password only when you know the current password. If you forgot the password, please refer to theForgot Password section.

Figure 3-20 Change Password

Click **Change Password**. The **Change Password** window is displayed. Enter the old password and new password, and click **Edit**.
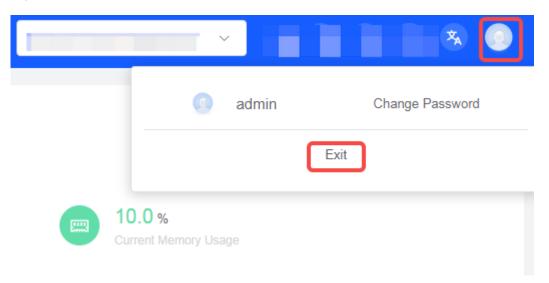
Figure 3-21 Change Password

10. Exit

After the device management is complete, click **Exit** to exit the eWeb home page and return to the login page, as shown in the following figure.
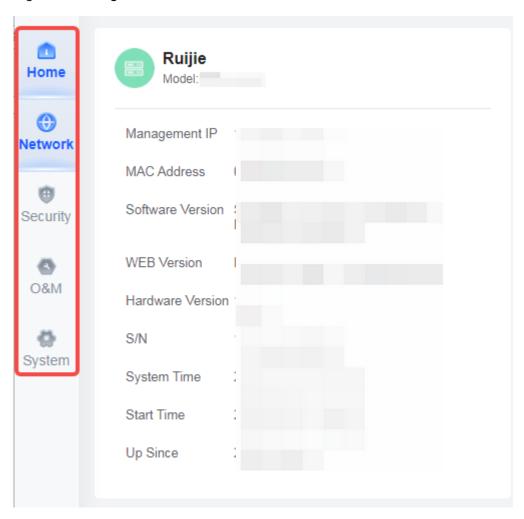
Figure 3-22 Exit

3.2.3 Navigation Menu

This area displays main tabs of the eWeb management system.

Figure 3-23 Navigation Menu

3.2.4 Main Operation Area

In this area, you can perform configurations on the eWeb management system. When you click the shortcut menu at the left of the page, the detailed configuration page is displayed.

3.3 Quick Configuration

The switch is not configured when you log in to the eWeb management system for the first time. To simplify the configuration, you can use the **Quick Setup** wizard to configure common settings for the switch.
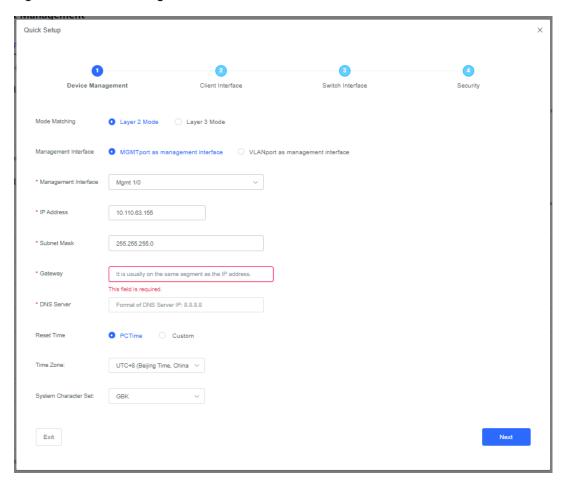
> **Note**
>
> You can click **Device Quick Configuration** in the upper-right corner of the main interface of the eWeb management system to open the **Quick Setup** wizard.

3.3.1 Layer 2 Mode

There are four steps in this mode.
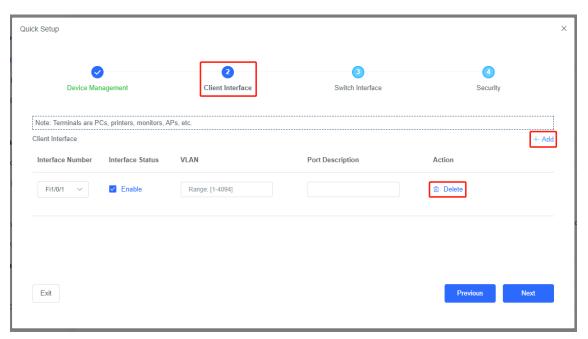
(1) Device Management

Figure 3-24 Device Management
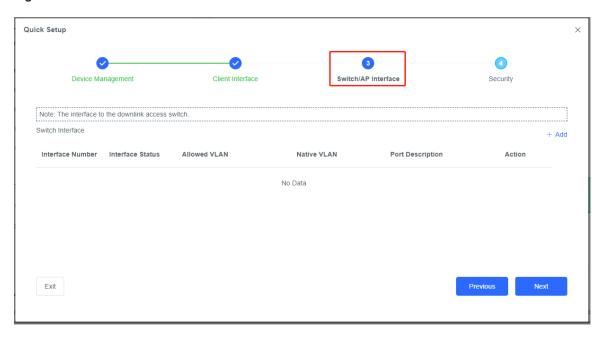
(2) Client Interface

Figure 3-25 Client Interface
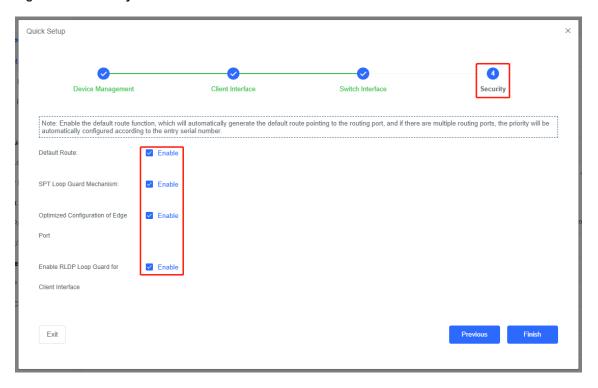
(3) Switch/AP Interface

Figure 3-26 Switch/AP Interface

(1) Security

Figure 3-27 Security
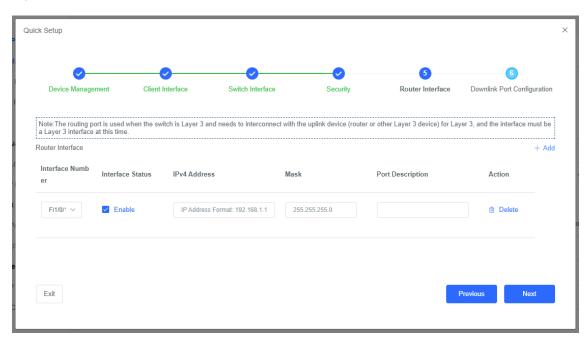
3.3.2 Layer 3 Mode

There are six steps in this mode.

The first four steps are the same as those in Layer 2 mode, so only the last two steps are described here.
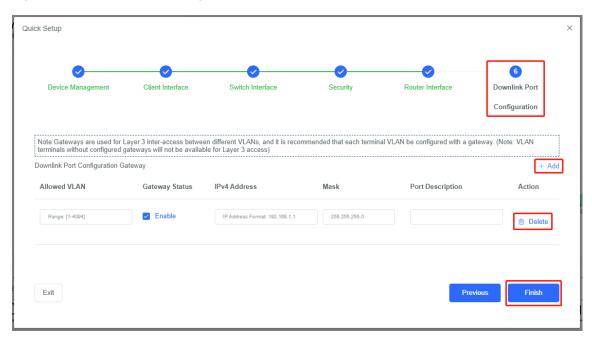
(1) Router Interface (Layer 3 Mode)

Figure 3-28 Router Interface

(2) Downlink Port Configuration (Layer 3 Mode)

Figure 3-29 Downlink Port Configuration

3.4 Home Page
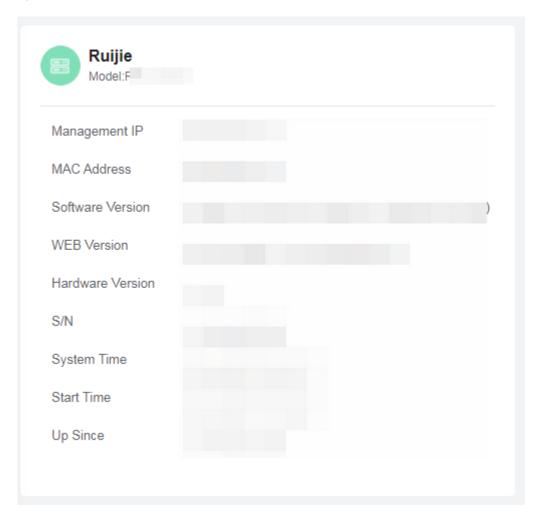
After you log in to the eWeb management system, you will be automatically redirected to the home page. Or, you can click **Home** in the navigation menu to switch to the home page.

On this page, you can view the CPU, memory usage, system version, current system time, and other information of the switch. By analyzing the trend of Top 5 interface traffic, you can identify common network problems on this page and quickly resolve these problems.

3.4.1 Overview

At the top of the home page, you can view the switch name, model, management IP address, MAC address, software version, hardware version, serial number, system time, startup time, and uptime. You can reset the system time on the **System Time** page by choosing **O&M** > **Device O&M** > **System Time**.
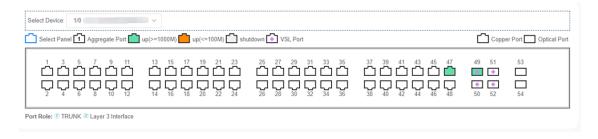
Figure 3-30 Overview

3.4.2 Interfaces

In the upper part of the home page is the interface panel where interface information is displayed. The panel shows the basic interface configurations, such as interface type, state, aggregated interface, and virtual switching link (SVL) interface.

Figure 3-31 Interfaces
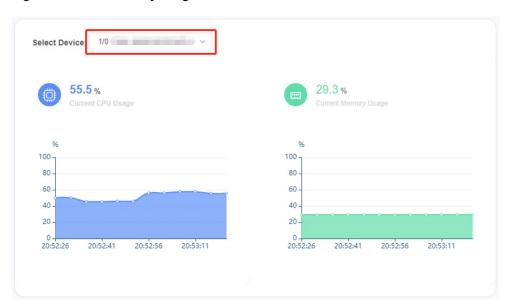
3.4.3 CPU/Memory Usage

The CPU and memory usage of the switch is displayed at the top of the home page.

(1) CPU: indicates the CPU usage of the device. It helps you learn about the device running status.

(2) Memory: indicates the memory usage of the device.

Figure 3-32 CPU/Memory Usage

In the **Temperature** panel, you can view the temperature of a card slot by selecting a card clot from the **Card Slot** drop-down list box.

3.4.4 Temperature/Power Module/Fan

The middle part of the home page displays the temperature, power module status, fan status of the switch at different positions.

Figure 3-33 Temperature/Power Module/Fan

3.4.5 Bandwidth

Figure 3-34 Bandwidth

You can click **More** in the **Top 5 Interface Bandwidth Usage** panel to query more details about interface bandwidth utilization.

Figure 3-35 Top 5 Interface Bandwidth Usage

- Back: returns to the home page.
- Refresh: re-queries the interface bandwidth utilization.
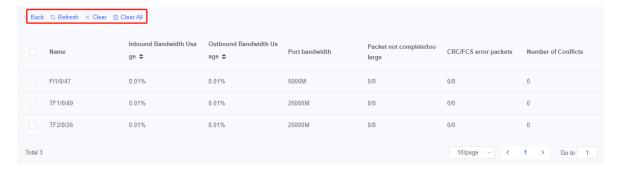- Clear: deletes statistics about a selected interface, such as the number of error packets and conflicting count.

● Clear All: deletes statistics about all interfaces, such as the number of error packets and conflicting count.
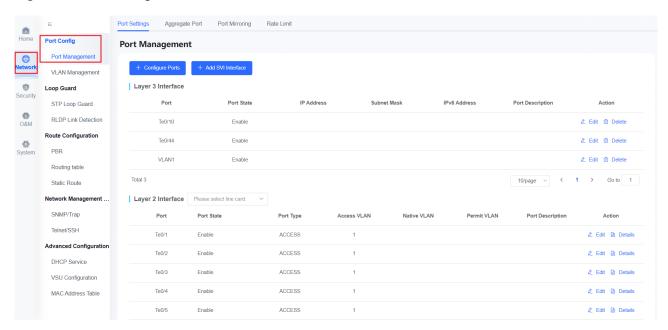
3.5 Network

3.5.1 Port Config

1. Port Management

Choose **Network** > **Port Config** > **Port Management** > **Port Configuration** to access the Port Configuration page.
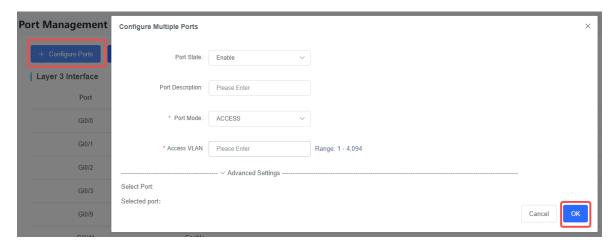
Figure 3-36 Port Management

(2) Port Configuration

● Configuring multiple ports

Click **Configure Ports** and the **Configure Multiple Ports** window is displayed. Set configuration parameters and click **OK**.
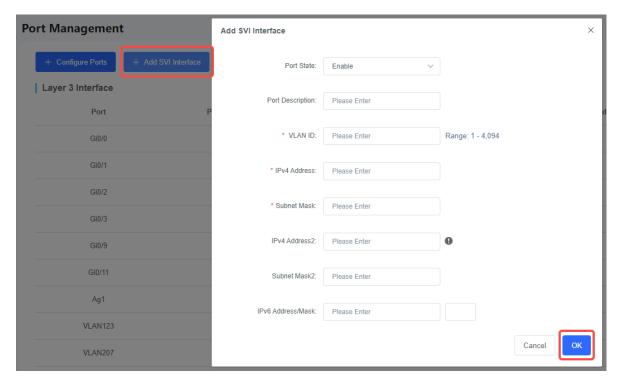
Figure 3-37 Port Configuration

● Adding SVI Interface
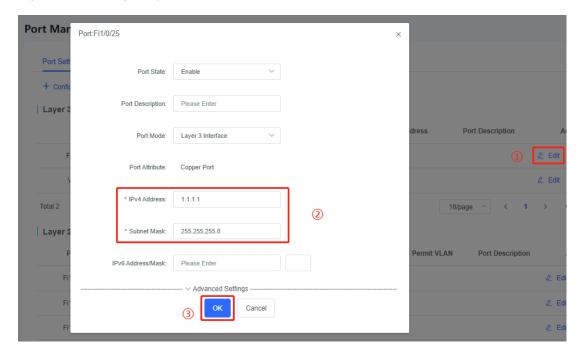
Click **Add SVI Interface**. Set configuration parameters in the displayed window. Click **OK**. The result can be viewed in the **Layer 3 Interface** list.

Figure 3-38 Adding SVI Interface
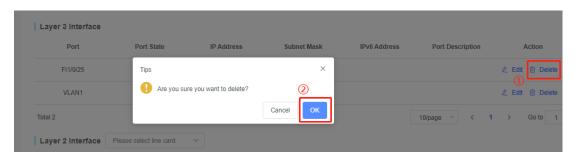
● Editing a Layer 3 interface

● Click **Edit**. Set configuration parameters in the displayed window. Click **OK.** The result can be viewed in the interface list. When the **Port Mode** is **Layer 3 Interface**, the result is displayed in the Layer 3 interface list. When the **Port Mode** is **Trunk Port** or **Access Port**, the result is displayed in the Layer 2 interface list.

Figure 3-39 Editing a Layer 3 interface

- Deleting a Layer 3 interface

  Click **Delete**. Click **OK** in the displayed window. The selected port can be removed from in the interface list.

Figure 3-40 Deleting a Layer 3 interface

- Editing a Layer 2 interface

- Click **Edit**. Set configuration parameters in the displayed window. Click **OK** The result can be viewed in the interface list. When the port mode is a Layer 3 port, the result can be viewed in the Layer 3 port list. When the port mode is a trunk port or an access port, the result can be viewed in the Layer 2 port list.
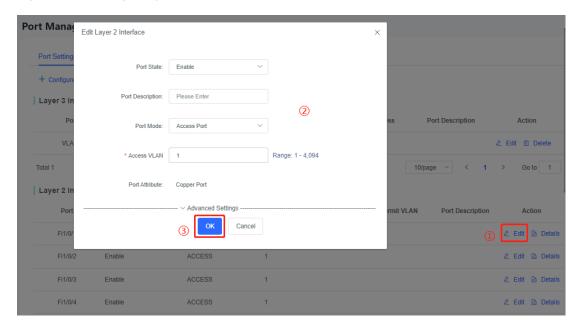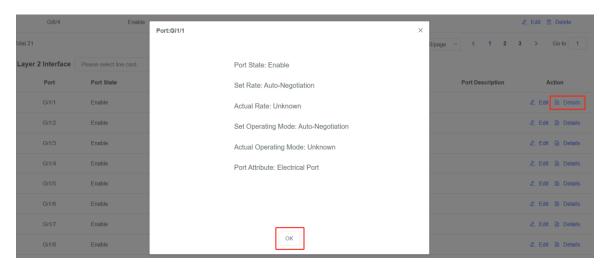
Figure 3-41 Editing a Layer 2 interface

- A Layer 2 interface details

  Click **Details**. You can view detailed information about a selected port.

Figure 3-42 A Layer 2 interface details
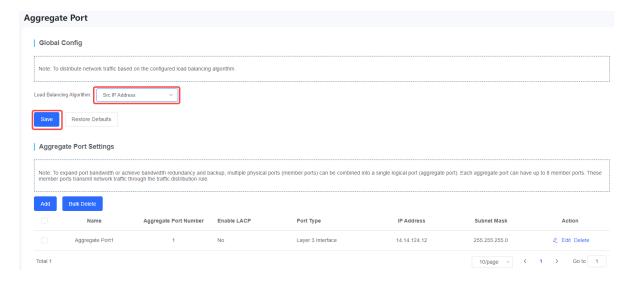
(3) Aggregate Port

To expand port bandwidth or achieve bandwidth redundancy and backup, multiple physical ports (member ports) can be combined into a single logical port (aggregate port). Each aggregate port can have up to 8 member ports. These member ports transmit network traffic through the traffic distribution rule.

- Global Config

  Select an algorithm from the **Load Balancing Algorithm** drop down list box. Click **Save**.
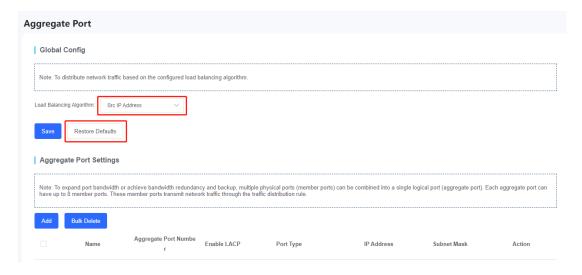
Figure 3-43 Global Config

- Restoring default settings

    Click **Restoring Defaults** to restore the load balancing algorithm to the default algorithm.
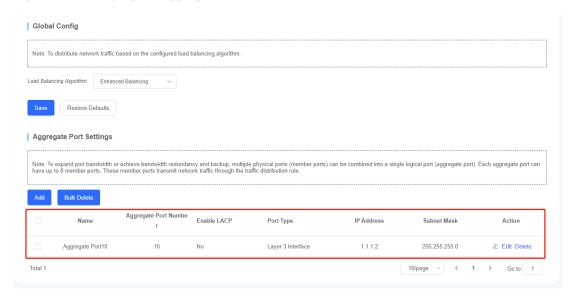
Figure 3-44 Restoring default settings

- Aggregate interface

    Aggregate interface list: displays all aggregate ports and related information, including the name, port number, LACP status, port type, IP address, and subnet mask.

Figure 3-45 Querying the aggregated port list
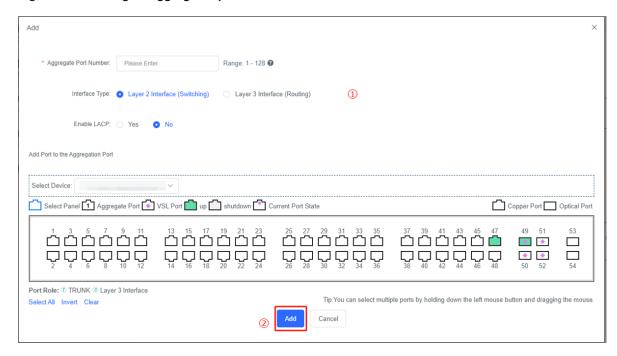
● Adding an aggregated port

Click **Add**. Set configuration parameters in the displayed window. Click **Add**. The result can be viewed in the Aggregate Port list.

Figure 3-46 Adding an aggregated port-1

Figure 3-47 Adding an aggregated port-2

- Deleting multiple aggregated ports

    a   Click **Bulk Delete**.

    b   Click **OK** in the displayed window. The selected aggregated ports can be removed from in the Aggregate Port list

Figure 3-48 Deleting multiple aggregated ports

- Editing an aggregated port

    a   Click **Edit**. Set configuration parameters in the displayed window.

    b   Click **Save**. The result can be viewed in the Aggregate Port list.
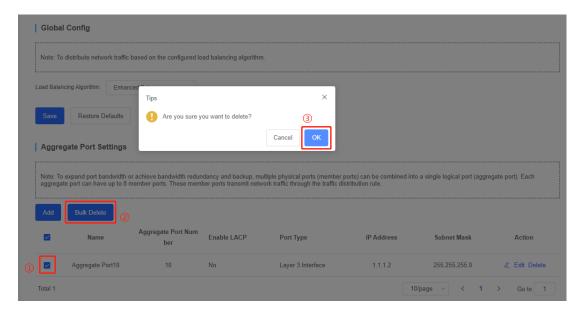
Figure 3-49 Editing an aggregated port
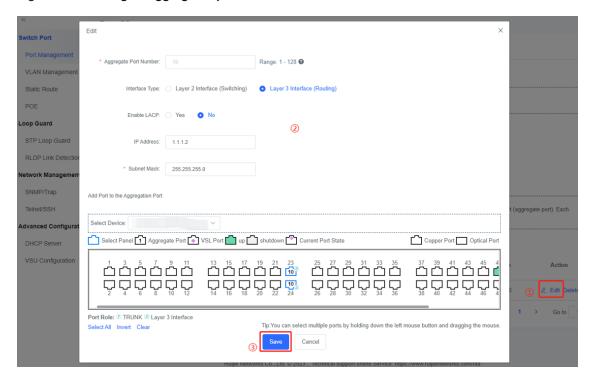

- Deleting an aggregated port

  a   Click **Delete**.

  b   Click **OK** in the displayed window. The selected port can be removed from in the Aggregate Port list
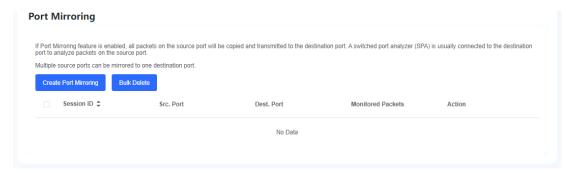
Figure 3-50 Deleting an aggregated port

(4) Port Mirroring
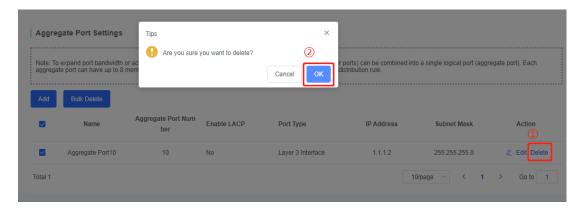
After port mirroring is enabled on a source port, all packets on the source port are copied and forwarded to a destination port. A packet analyzer is usually connected to the destination port to analyze the packets on the source port.

Figure 3-51 Port Mirroring

- Creating port mirroring

  a   Click **Create port mirroring**.

  b   Set configuration parameters in the displayed window.

  c   Click **OK**. The result can be viewed in the list.

Figure 3-52 Creating port mirroring-1

Figure 3-53 Creating port mirroring-2
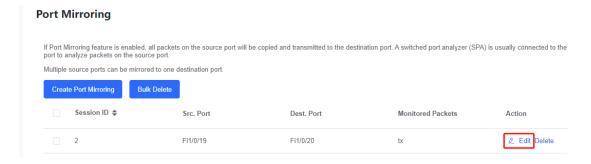
- Deleting multiple mirrored ports

  Click **Bulk Delete**. Click **OK** in the displayed window. The mirrored ports can be deleted.

Figure 3-54 Deleting multiple mirrored ports
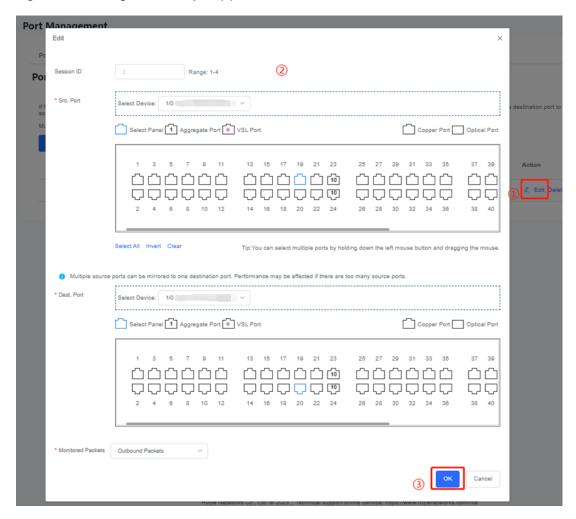
●   Editing a mirrored port

Figure 3-55 Editing a mirrored port (1)
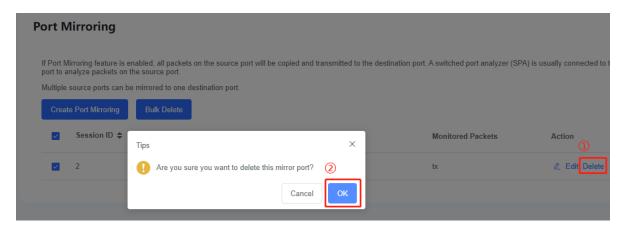
a   Click **Edit**.

b   Set configuration parameters in the displayed window.

c   Click **OK**. The result can be viewed in the list.

Figure 3-56 Editing a mirrored port (2)

●   Deleting a mirrored port

Figure 3-57 Deleting a mirrored port

     a   Click **Delete**.
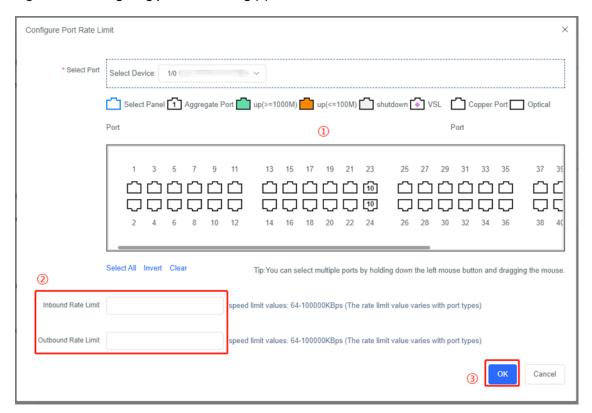
     b   Click **OK** in the displayed window. The mirrored ports can be deleted.

(5) Rate Limit

●   Configuring port rate limiting

Figure 3-58 Configuring port rate limiting (1)
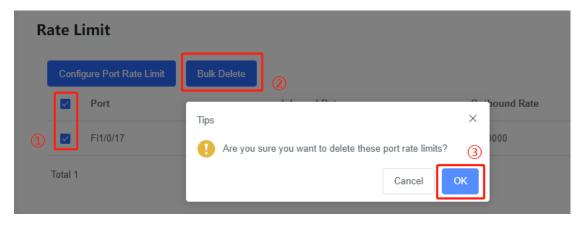
     a   Click **Configure Port Rate Limit**.

     b   Set configuration parameters in the displayed window.

     c   Click **OK**. The result can be viewed in the list.

Figure 3-59 Configuring port rate limiting (2)
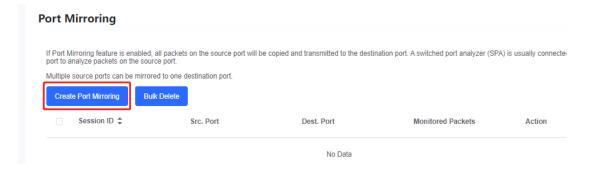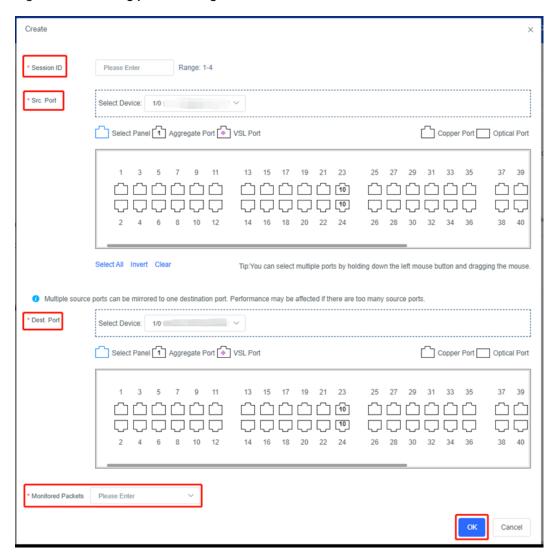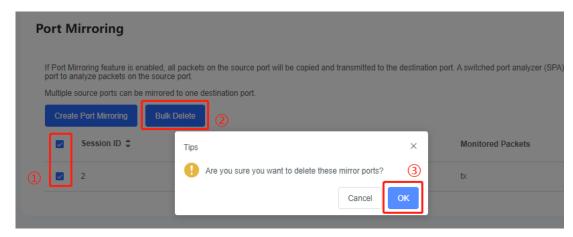

- Deleting multiple rate limiting entries

    Click **Bulk Delete**. Click **OK** in the displayed window. The rate limiting entries can be deleted.

Figure 3-60 Deleting multiple rate limiting entries
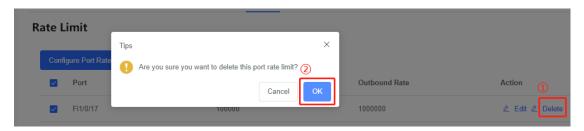
- Editing a port rate limiting entry

    Click **Edit**. Set configuration parameters in the displayed window. Click **OK**. The result can be viewed in the list.

Figure 3-61 Editing a port rate limiting entry
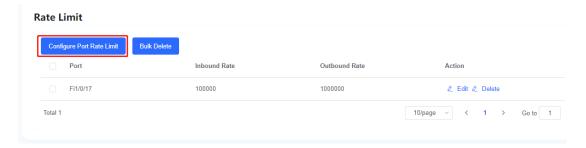

- Deleting a port rate limiting entry

  Click **Delete**. Click **OK** in the displayed window. The rate limiting entry can be deleted.
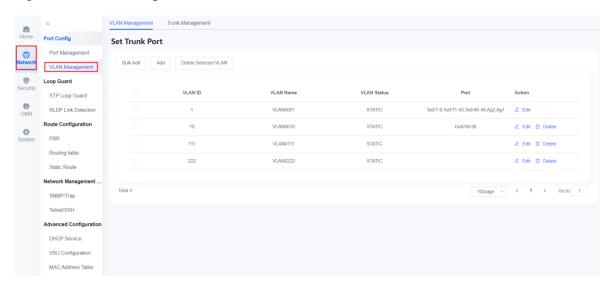
Figure 3-62 Deleting a port rate limiting entry

2. **VLAN Management**

Choose **Network** > **Switch Port** > VLAN Management to access the VLAN Management page.
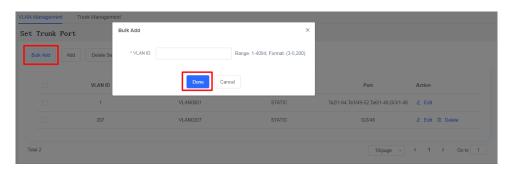
Figure 3-63 VLAN Management

(2) VLAN Management

- VLAN Adding multiple VLANs

To add multiple VLANs, click **Bulk Add** and the **Bulk Add** window is displayed. Enter the VLAN ID and click **Done**.
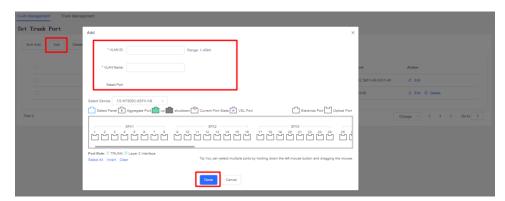
Figure 3-64 VLAN Adding multiple VLANs

- Adding a single VLAN

   To add a single VLAN, click **Add** and the **Add** window is displayed. Set configuration parameters and click **Done**.
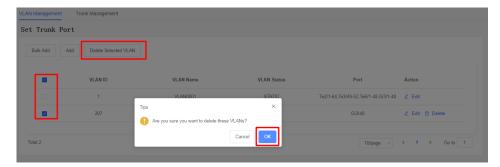
Figure 3-65 Adding a single VLAN

- Deleting multiple VLANs

    To delete the selected VLANs, click black box before each VLAN to select multiple VLANs, then click **Delete Selected VLAN**. The error message is displayed. Click **OK**.
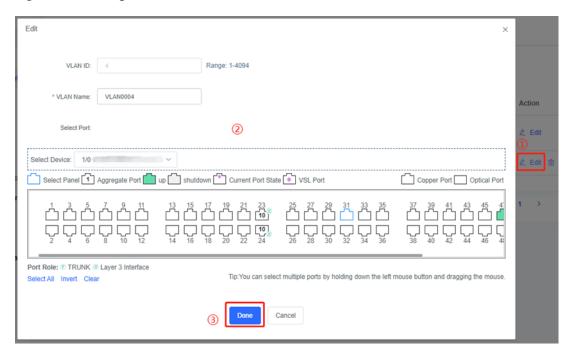
Figure 3-66 Deleting multiple VLANs

- Editing a VLAN

To edit a VLAN, click **Edit**, and the Edit window is displayed. Set configuration parameters and click **Done**.
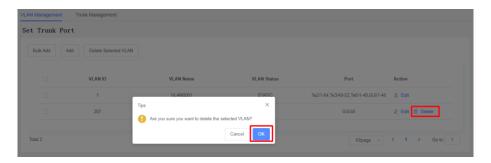
Figure 3-67 Editing a VLAN

- Deleting a VLAN
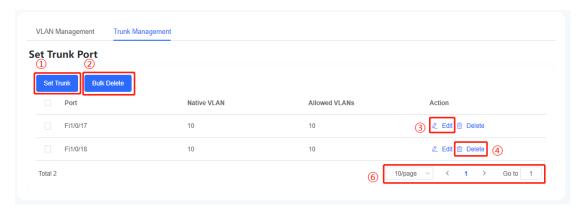
  To delete a VLAN, click **Delete**. The **Error** dialog box is displayed. Click **OK**.

Figure 3-68 Deleting a VLAN

- Trunk Management
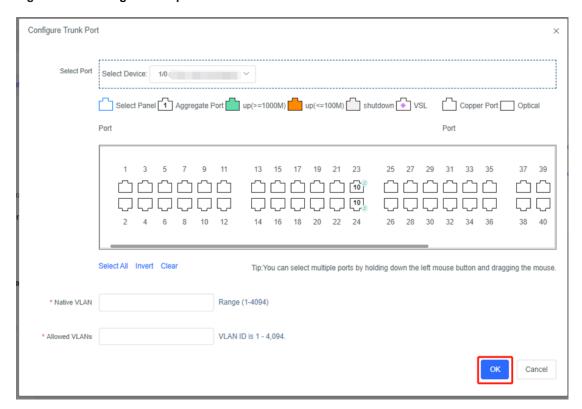
Figure 3-69 Trunk Management

● Setting a Trunk port

To set a trunk port, click **Set Trunk**. The **Configure Trunk Port** window is displayed. Set configuration parameters and click **OK**.
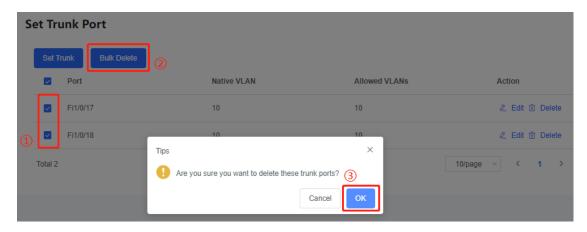
Figure 3-70 Setting a Trunk port

● Deleting multiple trunk ports

To delete multiple trunk ports, click black box next to each trunk port to select multiple trunk ports, and then click **Bulk Delete**. The **Error** dialog box is displayed. Click **OK**.

Figure 3-71 Deleting multiple trunk ports

- Editing a trunk port

    To edit a Trunk port, click **Edit**. The Edit Trunk Port window is displayed. Set configuration parameters and Click **OK**.
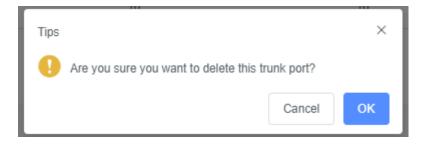
Figure 3-72 Editing a trunk port

- Deleting a trunk port

    To delete a selected trunk port, Click **Delete**. The **Error** dialog box is displayed. Click **OK**.
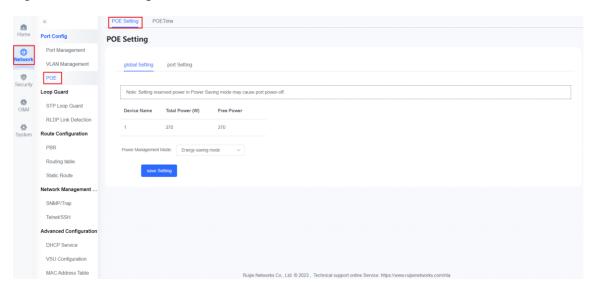
Figure 3-73 Deleting a trunk port

3. PoE

(1) POE Setting
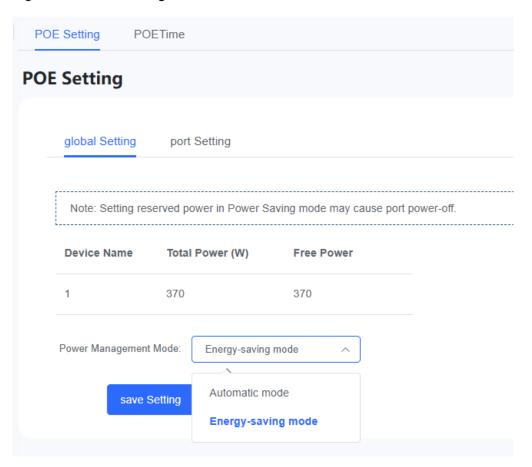
Choose **Network** > **Switch Port** > **POE** to access the **PoE Setting** page.

Figure 3-74 POE Setting
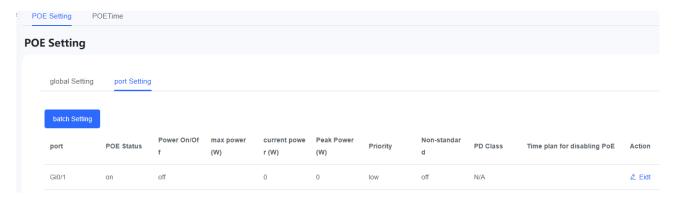
● Global Setting

Figure 3-75 Global Setting
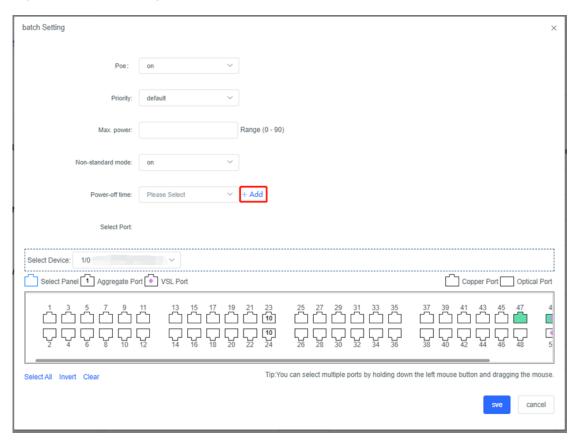
● Port Setting

Figure 3-76 Port Setting

Click **batch Setting**, set configuration parameters on the **Batch Setting** page. Click **save**.
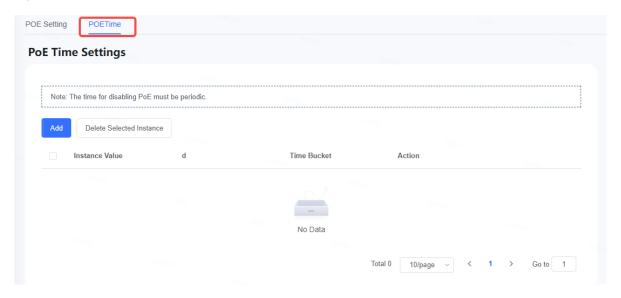
Figure 3-77 Batch Setting

(2) POE Time:

PoE can be disabled based on the specified periodic time range, which can be configured on this page.
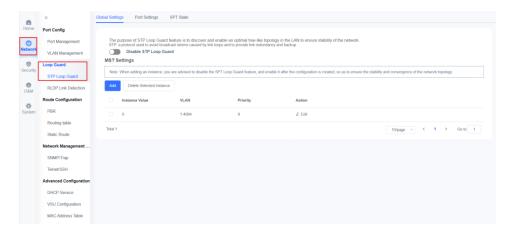
Figure 3-78 POE Time

3.5.2 Loop Guard

1. STP Loop Guard
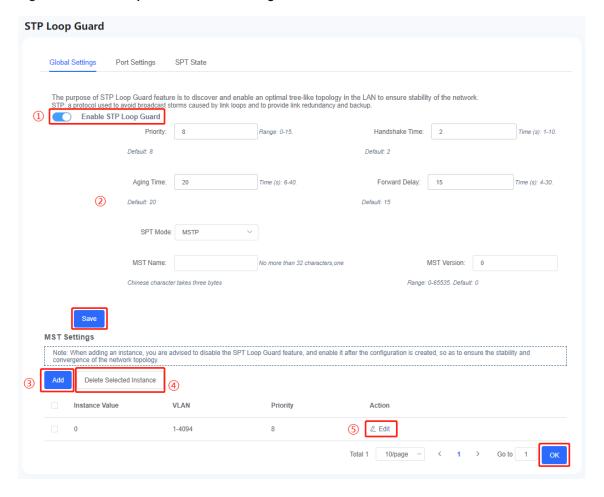
Figure 3-79 STP Loop Guard

Enable or disables STP Loop Guard: Click **Enable STP Loop Guard** to enable or disable STP loop guard.

(2) Global Settings

Figure 3-80 STP Loop Guard - Global Settings
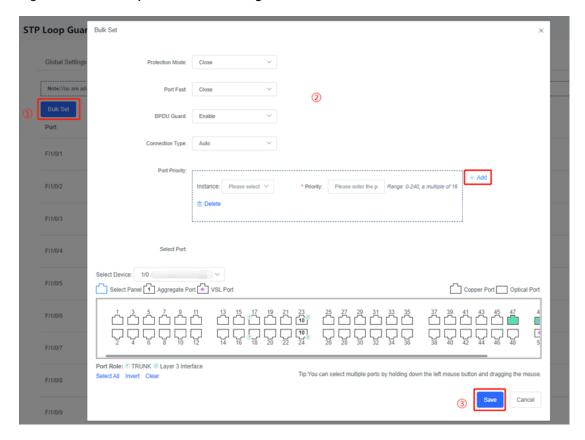
a   Global Settings: Enable **STP Loop Guard** and set configuration parameters. There are three STP modes, which are STP, RSTP, and MSTP. Click **Save** to submit the global settings.

b   Add instances: Click **Add** to add instances.

c   Delete instances: Click **Delete Selected instance** to delete instances.

d   Edit instances: Click **Edit** to edit instances.

(3) Port Settings

> 🛈 **Note**
>
> You are advised to enable **Port Fast** on the port directly connected to a PC.

● Setting the STP loop guard function for multiple ports

Click **Bulk Set**. The **Bulk Set** window is displayed. Set configuration parameters. Add or delete the port priority by clicking **Add** or **Delete**. Select multiple ports, and click **Save** to submit the configuration. Then the result will be displayed in the list.
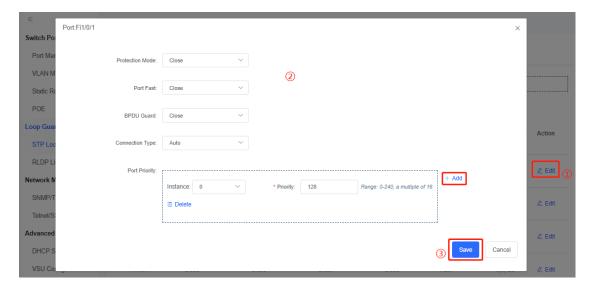
Figure 3-81 STP Loop Guard - Port Settings

- Editing the STP loop guard function for a single port

  Click **Edit** in the **Action** column. A window is displayed. Set configuration parameters. Add or delete the port priority by clicking **Add** or **Delete**. Click **Save** to submit the configuration. Then the result will be displayed in the list.
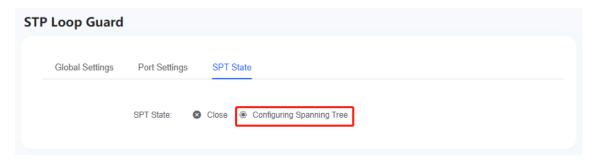
Figure 3-82 Editing the STP loop guard function for a single port

(4) STP State
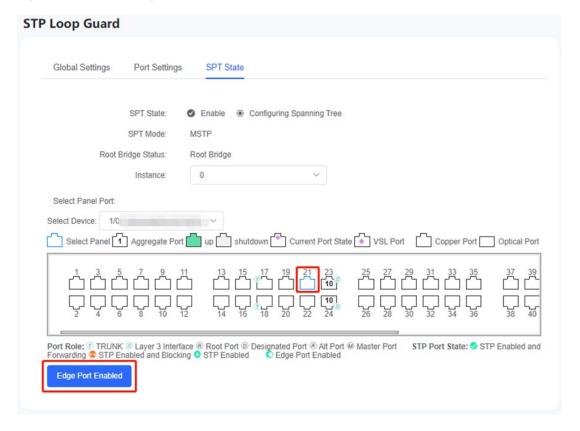
Click **Configuring Spanning Tree** to enable the STP loop guard function.

Figure 3-83 STP Loop Guard - STP State

- Disable Edge Port

    Select a disabled edge port and click **Edge Port Enabled** The icon of Port 21 is changed to enabled state.
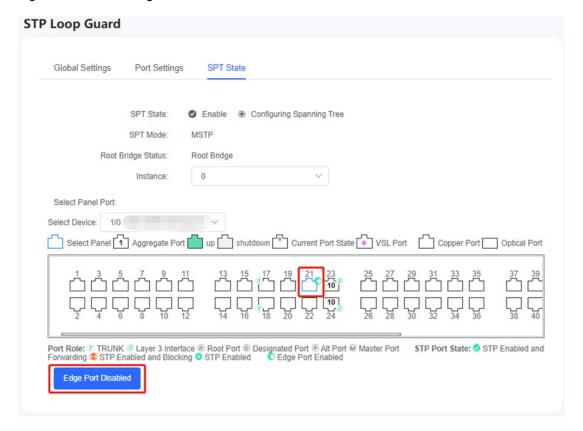
Figure 3-84 Disable Edge Port

- Enable Edge Port

    Select an enabled edge port and click **Edge Port Disabled**. The icon of Port 21 is changed to disabled state.
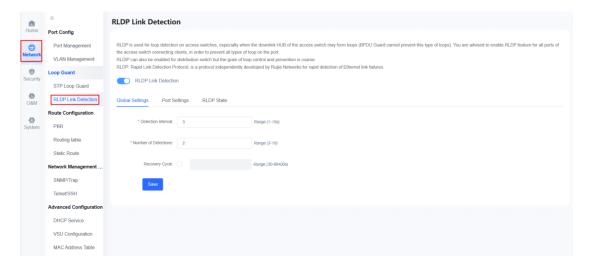
Figure 3-85 Enable Edge Port

2. RLDP Link Detection
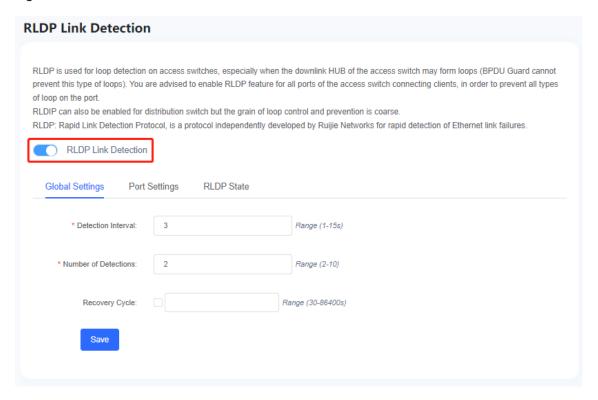
Choose **Network** > **Loop Guard** > **RLDP Link Detection** to access the **RLDP Link Detection** page.

Figure 3-86 RLDP Link Detection
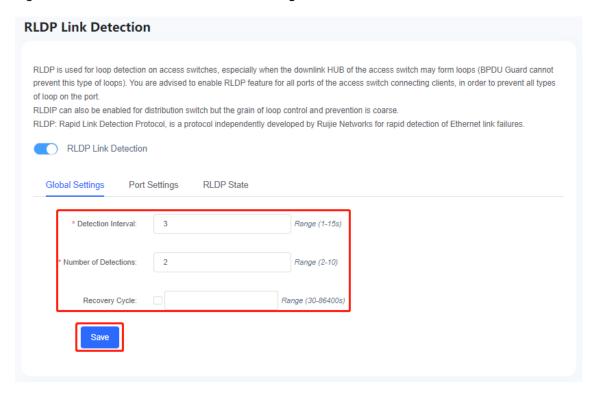
Click **RLDP Link Detection** to enable or disable RLDP.

Figure 3-87 Enable/disable RLDP Link Detection

(2) Global Settings

Figure 3-88 RLDP Link Detection - Global Settings

- **Save**: After you have entered the detection interval, number of detections, and restoration cycle (optional),
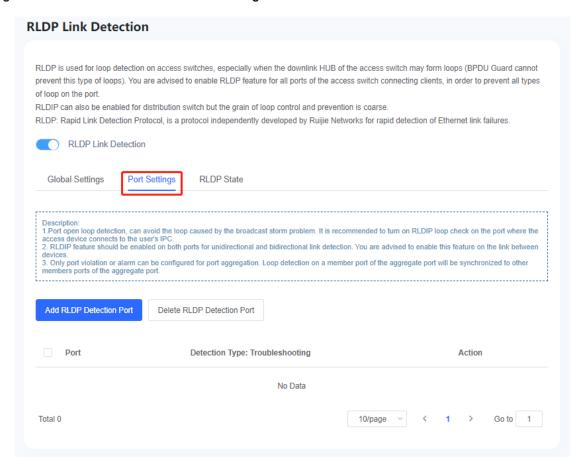
click **Save** to save the global settings.

(3) Port Settings

> **ℹ Notes**
> ● Port open loop detection, can avoid the loop caused by the broadcast storm problem. It is recommended to turn on RLDIP loop check on the port where the access device connects to the user's IPC.
> ● RLDP feature should be enabled on both ports for unidirectional and bidirectional link detection. You are advised to enable this feature on the link between devices.
> ● Only port violation or alarm can be configured for port aggregation. Loop detection on a member port of the aggregate port will be synchronized to other members ports of the aggregate port.
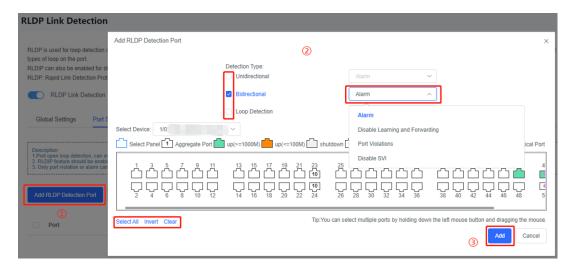
Figure 3-89 RLDP Link Detection - Port Settings

● Adding an RLDP detection port
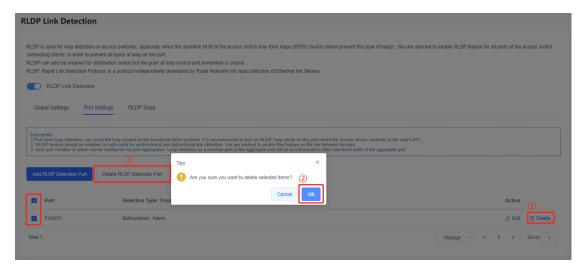
Click **Add RLDP-enabled port**. The **Add RLDP Detection Port** window is displayed. RLDP involves unidirectional link detection, bidirectional link detection, and loop detection. You can select multiple ports one by one, or using the **Select All**, **Invert**, and **Clear** button. Click **Add** to submit the configuration. The result will be displayed in the list.

Figure 3-90 Adding an RLDP detection port
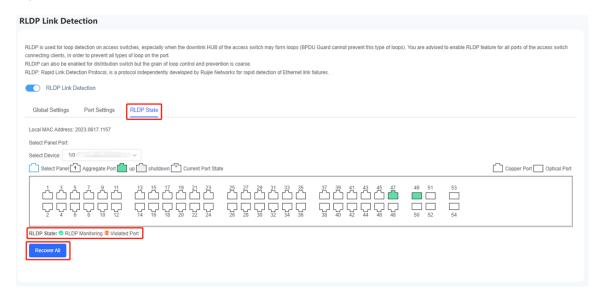
● Deleting RLDP detection ports

Select one or multiple ports. Click **Delete** or **Delete RLDP Detection Port** to delete the selected ports.

Figure 3-91 Deleting RLDP Detection Ports
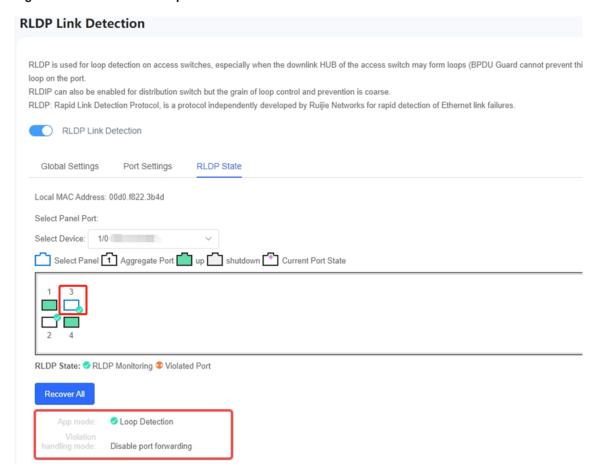
(4) RLDP State

Figure 3-92 RLDP Link Detection - RLDP State
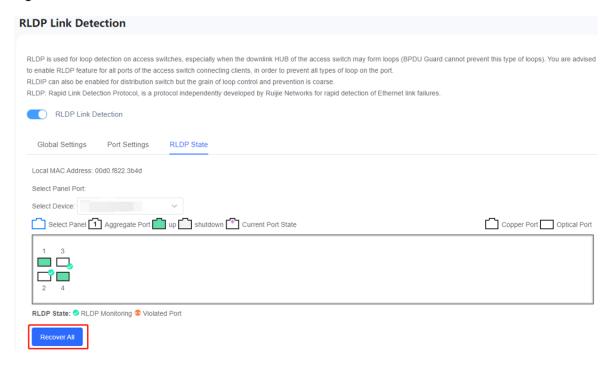
RLDP State: You can view the RLDP state of a port enabled with RLDP detection on the panel by clicking it.

Figure 3-93 RLDP state of a port

Restore All: You can click **Restore All** to recover all violated ports.

Figure 3-94 Restore All

3.5.3 Route Configuration
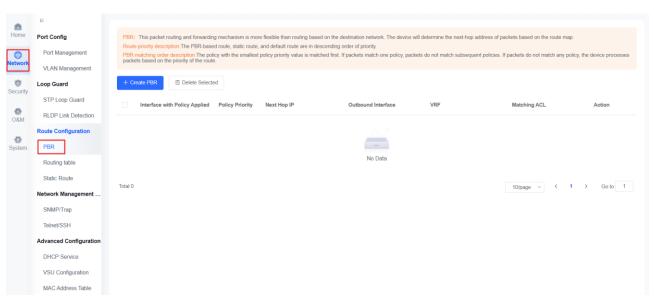
1. PBR

Route priority description: The PBR-based route, static route, and default route are in descending order of priority.

PBR matching order description: The policy with the smallest policy priority value is matched first.

Choose **Network** > **Route Configuration** > **PBR**.
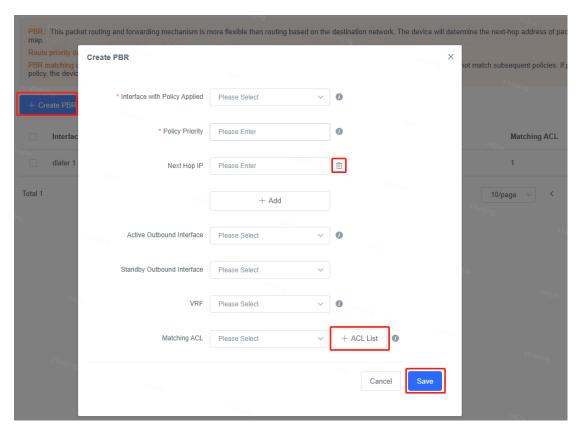
Figure 3-95 PBR

(2) Creating a PBR

Click **Create PBR**. Set the configuration items in the pop-up window. Click **Save** to deliver the configuration.

Figure 3-96 Creating a PBR
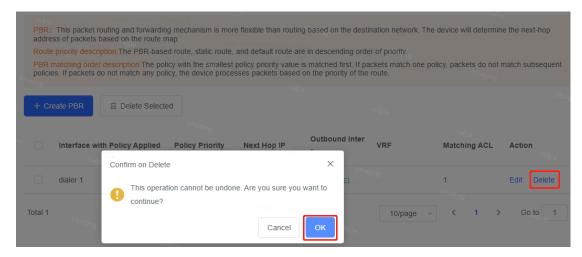
(3) Editing a PBR

Click **Edit** in the **Action** column of a PBR. Modify the configuration items in the pop-up window. Click **Save** to deliver the configuration.

(4) Deleting a PBR

You can delete one PBR or delete multiple PBRs in a batch. Select PBRs and click **Delete Selected** to delete the PBRs in a batch. Click **Delete** in the **Action** column of a PBR to delete it.
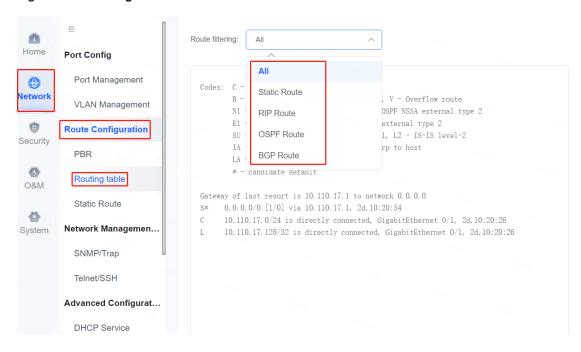
Figure 3-97 Deleting a PBR

2.   Routing table

Choose **Network** > **Route Configuration** > **Routing table**. You can select a route type from the **Route filtering** drop-down list to filter routes.

Figure 3-98 Routing table

3.   Static Route

Static Route: By adding a static route, packets destined for a specified destination network are routed along a predetermined path.

Routing Preference: Source In Source Out > Forward DNS Proxy > Policy Routing > User Routing and Application Routing > Static Routing > Address Base Auto Routing > Multi-Link Load Balancing and Default Routing

---
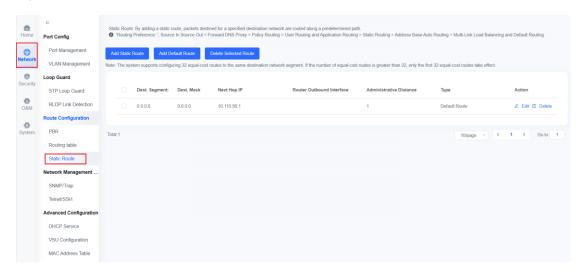
⚠ **Caution**

The system allows you to configure 32 equal-cost routes with the same destination network segment. If the upper limit is exceeded, the configuration only takes effect for the first 32 routes.

Choose **Network** > **Route Configuration** > **Static Route**.
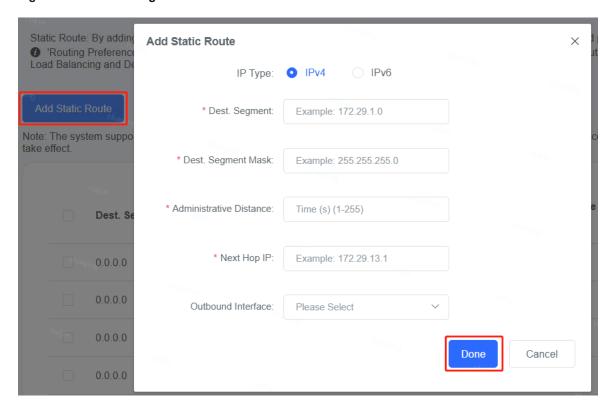
Figure 3-99 Static Route

(2) Adding a Static Route

Click **Add Static Route**. In the pop-up window, set relevant parameters. After the configuration is complete, click **Done**.
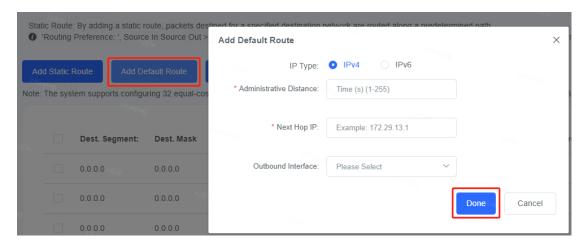
Figure 3-100   Adding a Static Route

(3) Adding a Default Route

Click **Add Default Route**. In the pop-up window, set relevant parameters. After the configuration is complete, click **Done**.
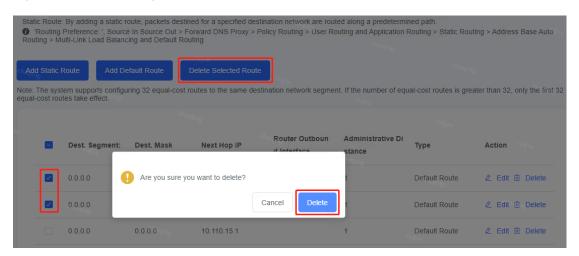
Figure 3-101   **Adding a Default Route**

(4) Deleting Selected Routes

Select multiple routes and click **Delete Selected Route**. In the dialog box that is displayed, click **Delete**.
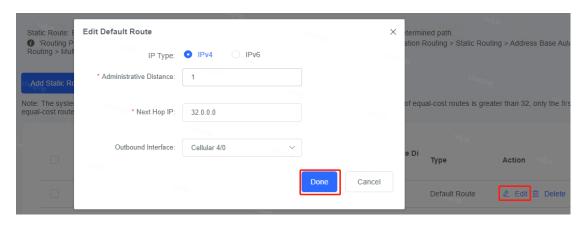
Figure 3-102   **Deleting Selected Routes**

(5) Editing Default Route

Click **Edit** on the **Action** column of a route. In the pop-up window, set the configuration items. After the configuration is complete, click **Done**.
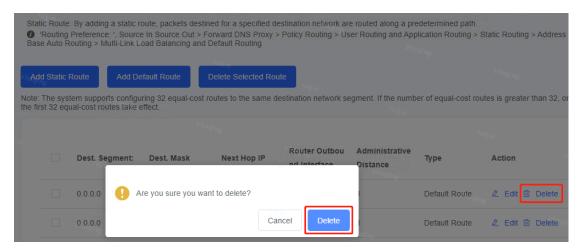
Figure 3-103   Editing Default Route

(6) Deleting a route

Click **Delete** on the **Action** column. On the displayed dialog box, click **Delete**.

Figure 3-104   Deleting a route
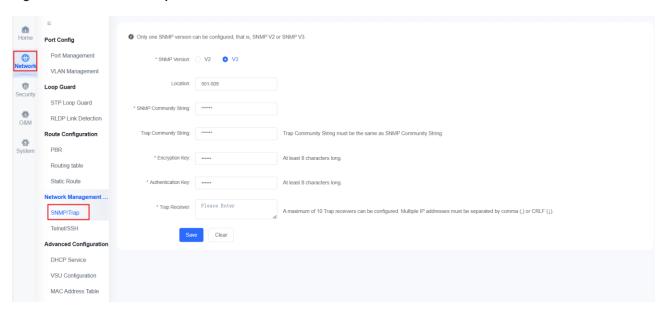
3.5.4 Network Management Protocols

1. SNMP/Trap

Choose Network > Network Management Protocols > SNMP/Trap to access the SNMP/Trap function page.

The Simple Network Management Protocol (SNMP) enables a network administrator to easily monitor and manage nodes on a network.

Figure 3-105   SNMP/Trap
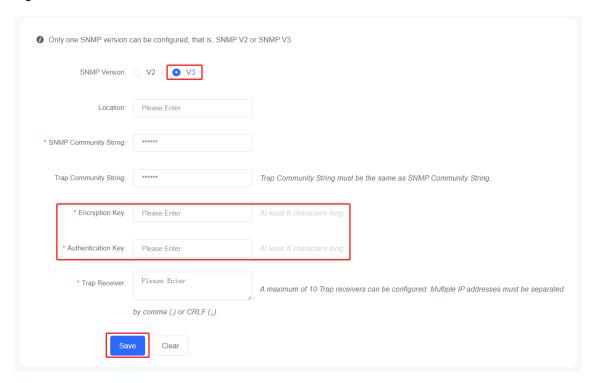
- SNMP Version: indicates the SNMP version supported by the device, which can be SNMPv2 or SNMPv3.

- Location: indicates the location of the device.

- SNMP Community String: is used by the management host to connect to a device.

- Trap Community String: is used to connect to the management host. When an alarm is generated on a device, the switch can send the alarm to the management host.

- Trap receiver: refers to the management host that receives alarms from a switch. A maximum of 10 trap receivers can be configured.

- **SNMP V2**: Select **V2**. Set configuration parameters and click **Save** to submit the configuration.

Figure 3-106   SNMP V2

- **SNMP V3**: Select **V3**. Set configuration parameters and click **Save** to submit the configuration.

Figure 3-107   SNMP V3
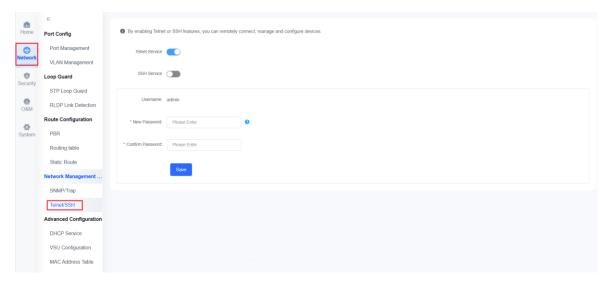
- **Clear**: Click **Clear** to clear the SNMPv2 or SNMPv3 configuration.

2.   Telnet/SSH

Choose **Network** > **Network Management Protocols** > **Telnet/SSH** to access the **Telnet/SSH** function page.
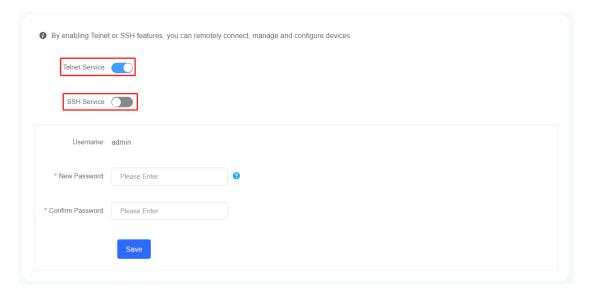
Figure 3-108   Telnet/SSH

Telnet/SSH: Click **Telnet Service** to enable or disable the Telnet service, and click **SSH Service** to enable or disable the SSH service.

The default user name is **admin**. Set configuration parameters and click **Save** to submit Telnet or SSH configurations. When both the Telnet service and SSH service are disabled, you do not need to set a password.

Figure 3-109   Enable/disable Telnet/SSH

When configuring a switch through Telnet, you must log in with this password.
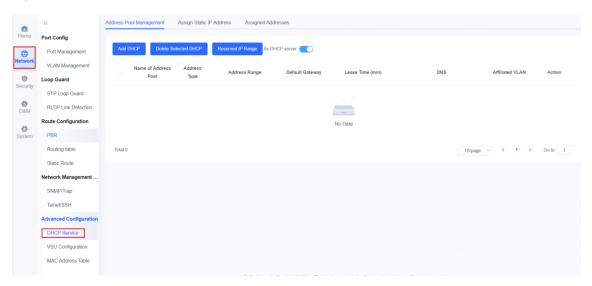
> ℹ️ **Note**
>
> Remember the new password for login next time.

3.5.5   Advanced Configuration

1.   DHCP Server

Choose **Network** > **Advanced Configuration** > **DHCP Server** to access the DHCP Server page.
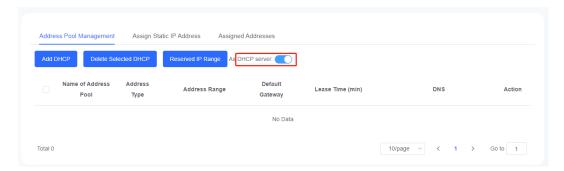
Figure 3-110   DHCP Server

(2)   Address Pool Management
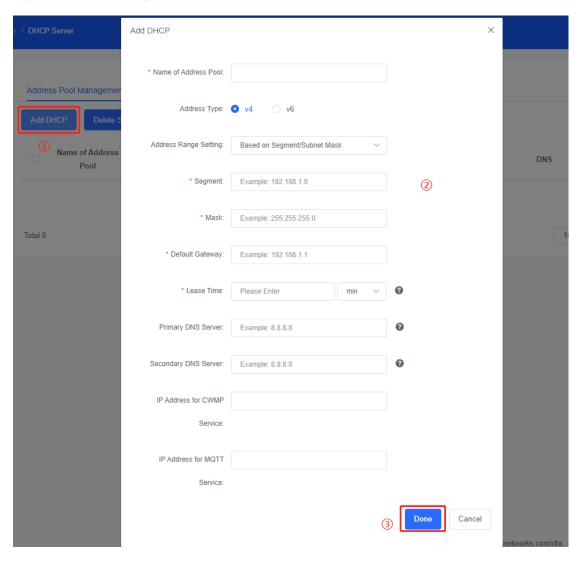
Click **As DHCP server** to enable or disable DHCP server.

Figure 3-111   Address Pool Management
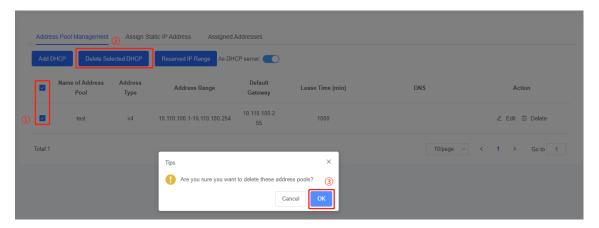
● Adding a DHCP address pool

   a   Click **Add DHCP**.

   b   Set configuration parameters in the displayed windows.

   c   Click **Done**. The result will be displayed in the list.

Figure 3-112   Adding a DHCP address poo
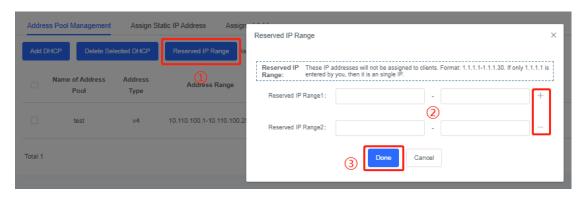
● Deleting the selected DHCP address pool

a   Click **Delete Selected DHCP**.

b   Click **OK**. The selected DHCP address pool is deleted.

Figure 3-113   Deleting the selected DHCP address pool
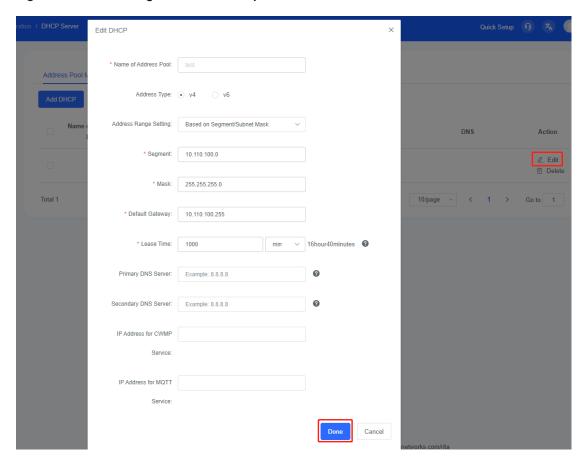
● Configuring the reserved IP range

a   Click **Reserved IP Range**.

b   Set configuration parameters in the displayed windows.

c   Click **Done**. The result will be displayed on the Reserved IP Range page. The IP addresses in the configured reserved IP range will not be assigned to the clients.

Figure 3-114   Configuring the reserved IP range
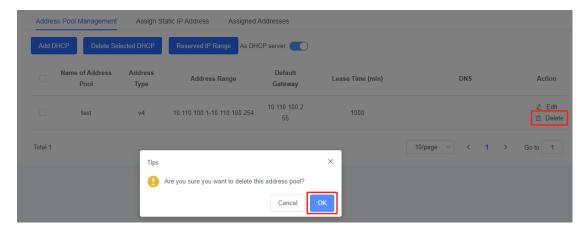
● Editing a DHCP address pool

a   Click Edit.

b   Set configuration parameters in the displayed windows.

c   Click Done. The result will be displayed in the list.

Figure 3-115   Editing a DHCP address pool
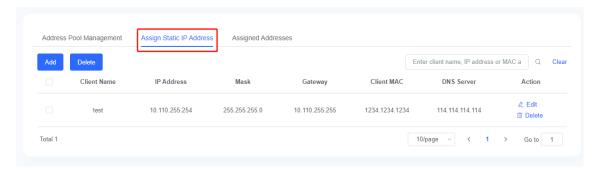
- Deleting a DHCP address pool

Figure 3-116   Deleting a DHCP address pool

(3) Assign Static IP Address
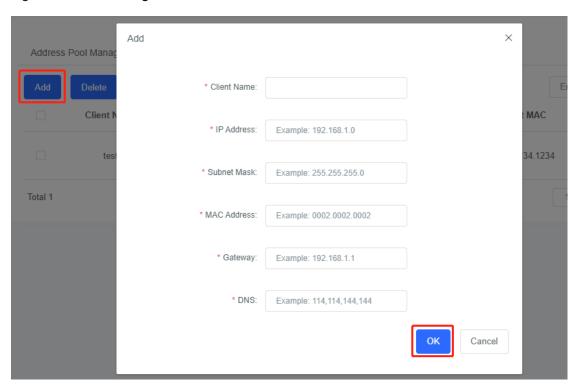
Figure 3-117   Assign Static IP Address

- Adding a static IP Address

  Click **Add**. Set configuration parameters in the displayed windows. Click **OK**. The result will be displayed in the list.
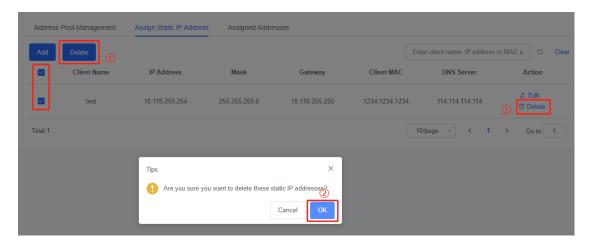
Figure 3-118   Adding a static IP Address

- Deleting a static IP Address

  Click **Delete**. Click **OK** in the displayed windows. The static ip address will be deleted from the list.
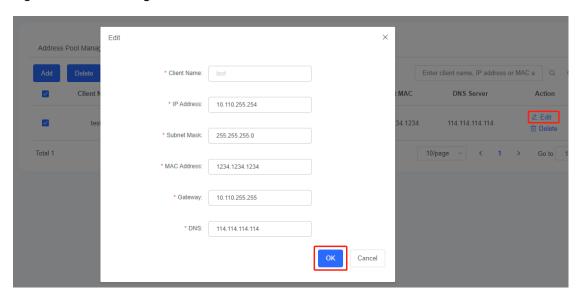
Figure 3-119   Deleting a static IP Address

- Editing a static IP Address

  Click **Edit**. Set configuration parameters in the displayed windows. Click **OK**. The result will be displayed in the list.

Figure 3-120   Editing a static IP Address
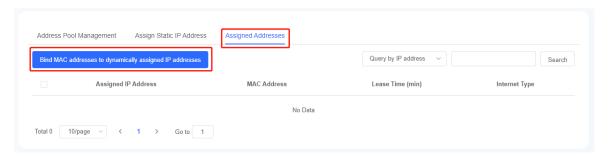

(4) Assigned Addresses

On this page, you can bind MAC addresses to dynamic IP addresses and reclaim assigned addresses.

a   Select the assigned IP addresses, and click Bind MAC addresses to dynamically assigned IP addresses.

b   On the displayed dialog box, click OK.
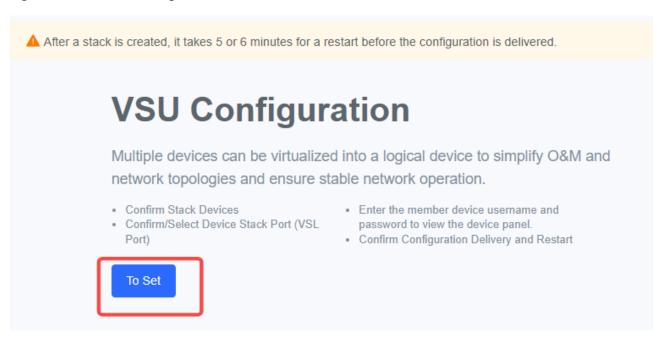
Figure 3-121   Assigned Addresses

2. VSU Settings

Choose **Network** > **Advanced Configuration** > **VSU Settings** to access the **VSU Settings** page.

Figure 3-122   VSU Settings

- VSU settings

  As shown in Figure 3-122, click **To Set**. The **Create Stack (VSU)** page is displayed.

  On the **Create Stack (VSU)** page, set **DomianID** and click **Add Member**. Configure the member information and click **Confirm**. Click **Deliver Configuration and Restart**. Wait for the device to restart and enter the VSU mode.

Figure 3-123   Create Stack (VSU)
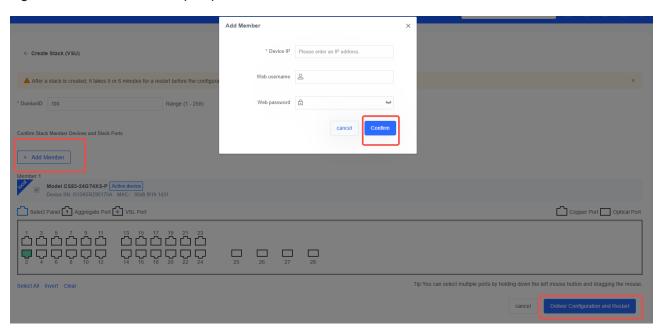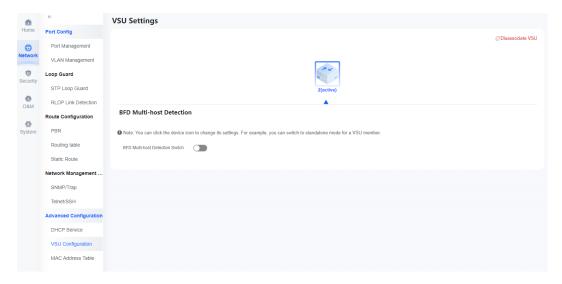
shows the **VSU Settings** page after the device restarts and you perform the VSU configuration.

Figure 3-124   VSU Settings

(2) Deleting a VSU Stack
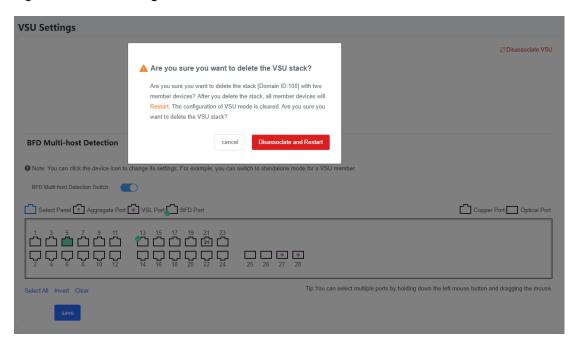
⚠️ **Caution**

After you delete the VSU stack, all member devices will restart and the configuration of VSU mode will be cleared. Please operate with caution.

Click **Disassociate** VSU. On the displayed dialog box, click **Disassociate and Restart** to delete a VSU stack.
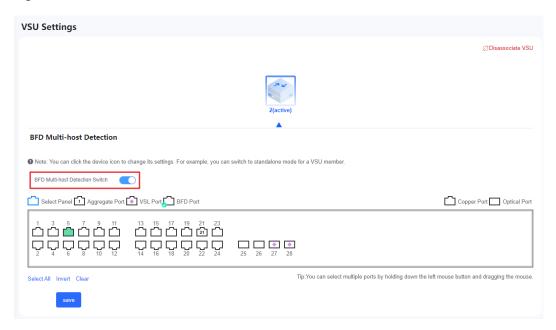
Figure 3-125   Deleting a VSU Stack

(3) BFD Multi-host Detection Switch
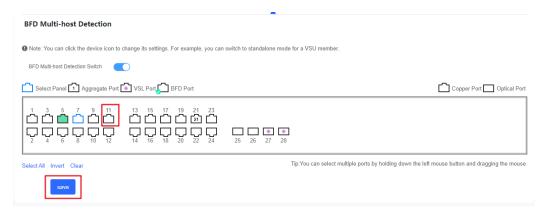
You can click **BFD Multi-host Detection Switch** to enable or disable the BFD Multi-host Detection.

Figure 3-126   Enable/disable BFD Multi-host Detection Switch

Click a port on which BFD is not enabled. Click **Save** to enable BFD on the port.
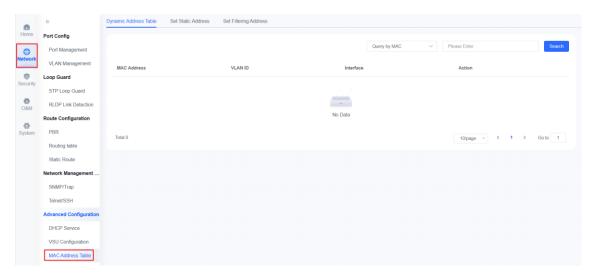
Figure 3-127   Enable BFD on the port

3. MAC Address Table

Choose **Network** > **Advanced Configuration** > **MAC Address Table** to access the MAC Address Table page, as shown in the following figure. On this page, you can query dynamic address tables, set static addresses, and configure addresses to be filtered out.

Figure 3-128   MAC Address Table
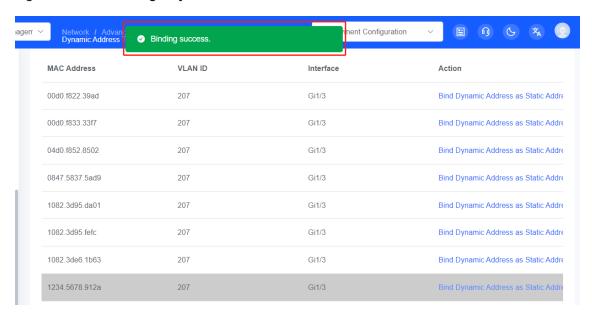
(2) Dynamic Address Table

You can bind a dynamic address as a static address and query dynamic MAC addresses on this page.
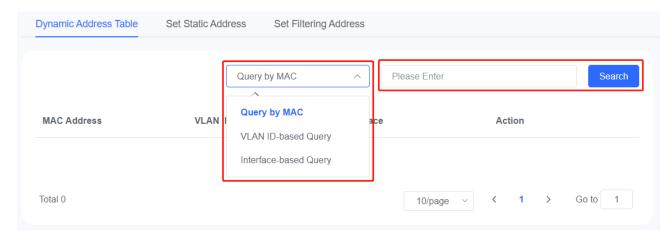
○ Binding a dynamic address as a static address: Click **Bind Dynamic Address as Static Address** in the **Action** column. After the operation is successful, a message indicating binding success is displayed and the bound address is displayed in the static address list.

Figure 3-129   Binding a Dynamic Address as a Static Address

○ Querying dynamic MAC addresses: Click the drop-down list box on the left, and select a condition to query MAC addresses. In the search box, enter the corresponding content. Click **Search** to search for dynamic MAC addresses that meet the conditions. For example, if you select **VLAN ID-based Query**, you need to enter the VLAN ID in the search box.

Figure 3-130   Querying dynamic MAC addresses

(3) Set Static Address

When the switch forwards data, it forwards packets based on the MAC address table. You need to manually bind MAC address of network devices to connected device interfaces. For example, a static address is configured. If the packet received in the VLAN carries the static address, the packet will be forwarded to the specified interface. If IEEE 802.1x authentication is enabled on an interface, you can configure MAC address binding without authentication.
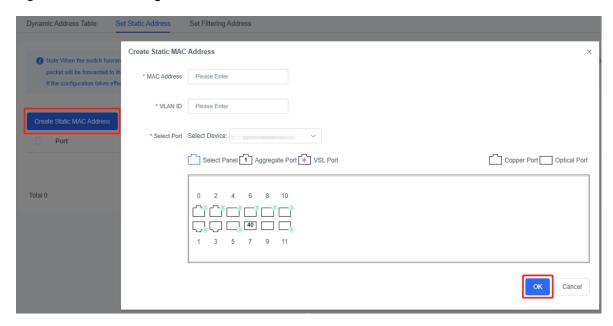
If the configuration takes effect but is not displayed properly on the page, please refresh the page.

On the **Set Static Address** page, you can create or delete static MAC addresses.

● Creating a Static Address

Click **Create Static MAC Address**. In the pop-up window, set the configuration items and click **OK** to deliver the configuration. A static MAC address is created.
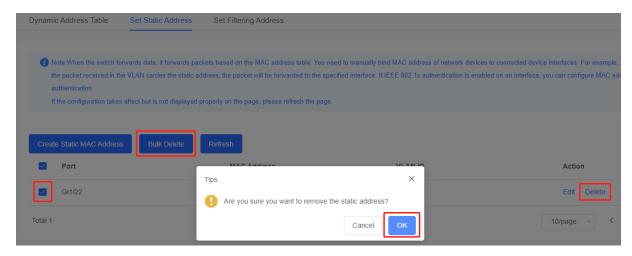
Figure 3-131   Creating a Static Address

● Deleting Static Addresses

Select one static address or multiple static addresses to be deleted, click **Delete** in the **Action** column or click **Bulk Delete**. In the displayed dialog box, click **OK**.
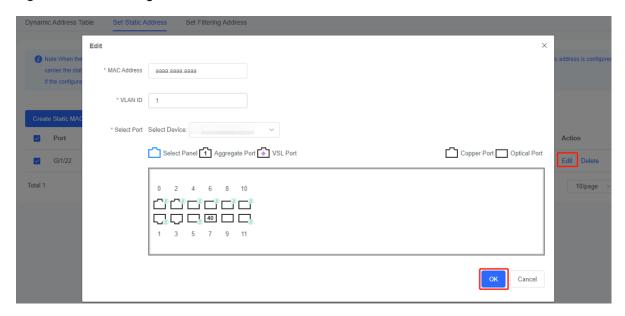
Figure 3-132   Deleting Static Addresses

● Editing a Static Address

Click **Edit** in the **Action** column. In the pop-up window, set the configuration items. Click **OK** to deliver the configuration.

Figure 3-133   Editing a Static Address

(4) Set Filtering Address

The switch forwards data based on the MAC address table. When receiving a packet with the source address or destination address of the configured to-be-filtered MAC address in a VLAN, the switch discards the packet. For example, if a user initiates ARP attacks, the MAC address of the user can be configured as a to-be-filtered address to prevent attacks.

If the configuration takes effect but is not displayed properly on the page, please refresh the page.

● Setting a MAC Address to Be Filtered Out

Click **Create Filtered Address**. In the pop-up window, set the configuration items. Click **OK** to set a MAC address to be filtered out.
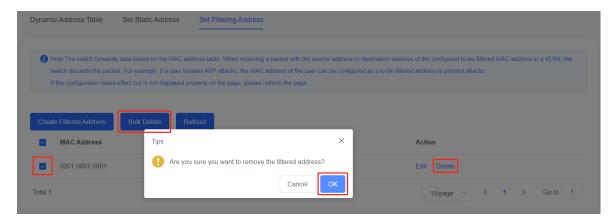
Figure 3-134   Setting a MAC Address to Be Filtered Out

● Deleting MAC Addresses to Be Filtered Out

Select one address or multiple addresses to be deleted, click **Delete** in the **Action** column or click **Bulk Delete**. In the displayed dialog box, click **OK**.

Figure 3-135   Deleting MAC Addresses to Be Filtered Out

- Editing a MAC Address to Be Filtered Out

  Click **Edit** in the **Action** column. In the pop-up window, set the configuration items. Click **OK** to complete the modification.

Figure 3-136   Editing a MAC Address to Be Filtered Out
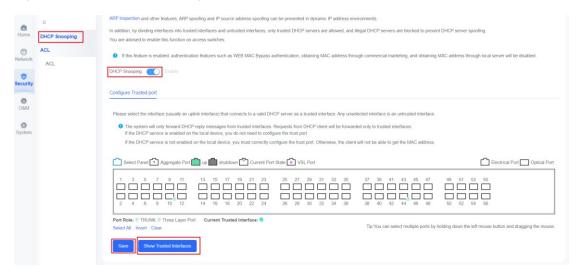
3.6 Security

3.6.1 DHCP Snooping

Choose **Security** > **DHCP Snooping** to access the **DHCP Snooping** page. Click **DHCP Snooping** to enable or disable DHCP Snooping. You can configure trusted interfaces in the page.
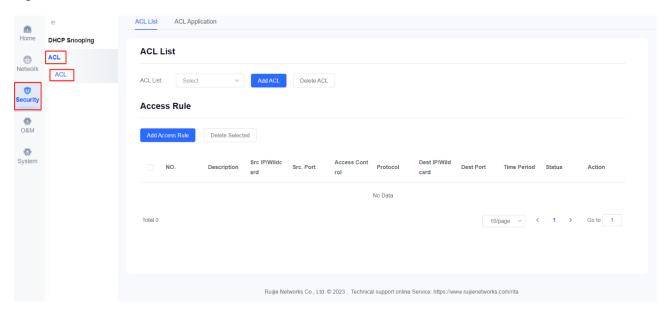
Figure 3-137   DHCP Snooping

3.6.2 ACL

Choose **Security** > **ACL** to access the **ACL** page.
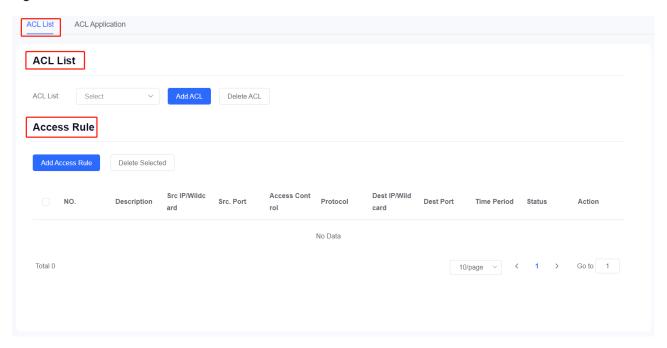
Figure 3-138   ACL

2. **ACL List**

On this page, you can add or delete ACLs, and add, delete, or edit ACEs, as shown in the following figure.
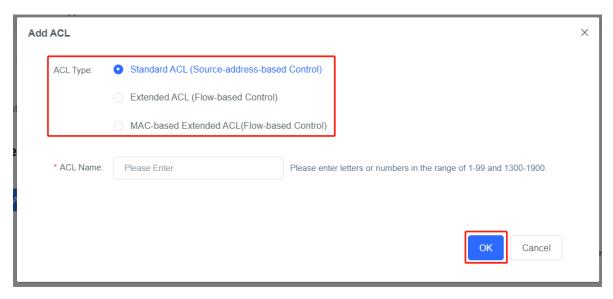
Figure 3-139   **ACL List**

(2) Adding an ACL

Click **Add ACL**. In the pop-up window, set the configuration items. Click **OK** to add an ACE.
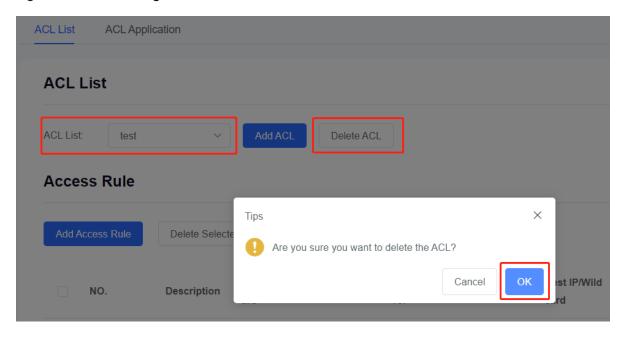
Figure 3-140   **Adding an ACL**

(3) Deleting an ACL

Select an ACL and click **Delete ACL**. On the displayed dialog box, click **OK** to delete the ACL.

Figure 3-141   Deleting an ACL

(4) Adding an ACE

Select the ACL list and click **Add Access Rule**. In the pop-up window, set the configuration items. Click **OK** to add an ACE.

Figure 3-142   Adding an ACE 1
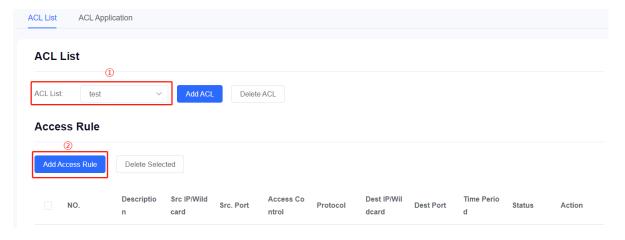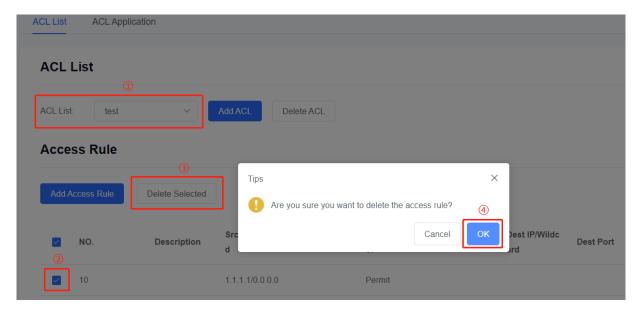
Figure 3-143   Adding an ACE 2

(5) Deleting an ACE

Select the ACL and ACE in sequence. Click **Delete Selected**. In the displayed dialog box, click **OK** to delete the ACE.

Figure 3-144   Deleting an ACE

- Editing an ACE

    Click **Edit** on the **Action** column. Modify the configuration items in the pop-up window. Click **OK**.

- Moving an ACE

    Click **Move** on the **Action** column. In the displayed dialog box, enter the sequence number of the ACL rule to be moved and click **Move**. After the operation is successful, a message indicating "ACE switching is successful" is displayed. The ACE rule and the selected rule are switched, as shown in the following figure.

Figure 3-145   Moving an ACE
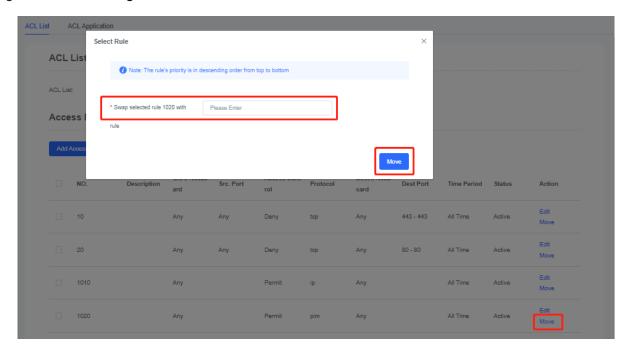
Figure 3-146   ACE Rule Before Moving
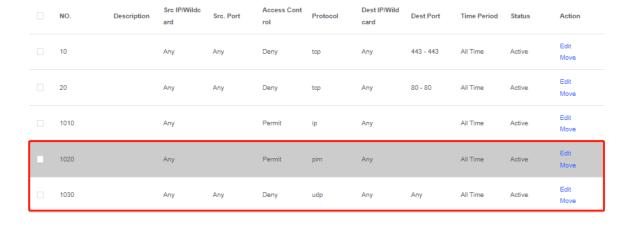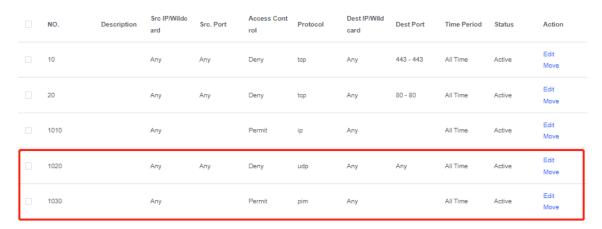
Figure 3-147   ACE Rule After Moving

	NO.	Description	Src IP/Wildcard	Src. Port	Access Control	Protocol	Dest IP/Wildcard	Dest Port	Time Period	Status	Action
☐	10		Any	Any	Deny	tcp	Any	443 - 443	All Time	Active	Edit Move
☐	20		Any	Any	Deny	tcp	Any	80 - 80	All Time	Active	Edit Move
☐	1010		Any		Permit	ip	Any		All Time	Active	Edit Move
☐	1020		Any	Any	Deny	udp	Any	Any	All Time	Active	Edit Move
☐	1030		Any		Permit	pim	Any		All Time	Active	Edit Move

3. ACL Application
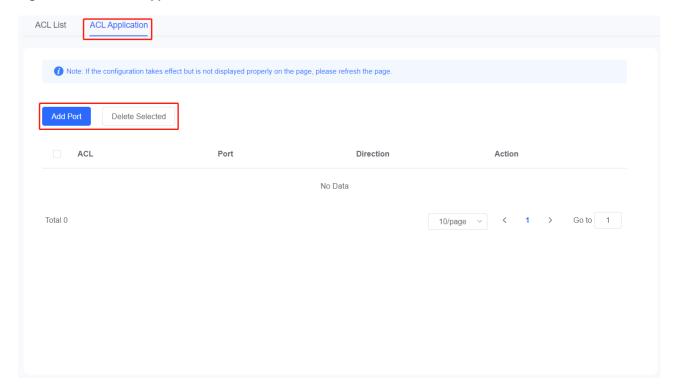
⚠ **Caution**

If the configuration takes effect but is not displayed properly on the page, please refresh the page.

On this page, you can add, delete, or edit application ports of an ACL, as shown in the following figure.
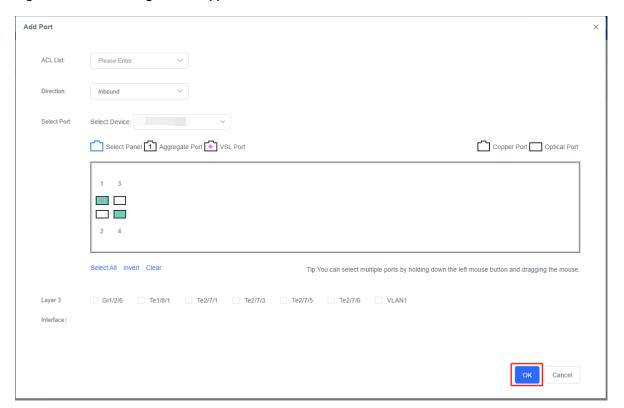
Figure 3-148   ACL Application

(2) Adding an ACL Application Port

Click **Add Port**. In the pop-up window, set configuration items. Click **OK** to add an application port of an ACL.
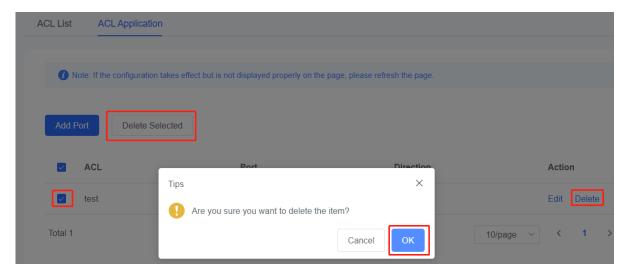
Figure 3-149   Adding an ACL Application Port

(3) Deleting an Application Port

You can delete one application port or application ports in batches. Select the application port to be deleted
and click **Delete** or **Delete Selected**. On the displayed dialog box, click **OK**.

Figure 3-150   Deleting an Application Port

(4) Editing an Application Port
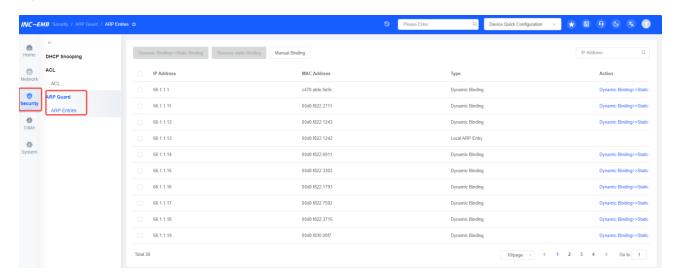
Click **Edit** on the **Action** column. Modify the configuration items in the pop-up window. Click **OK**.

3.6.3 ARP Anti-Spoofing

The ARP spoofing function supports ARP entries

Choose **Security** > **ARP Guard** > **ARP Entries**, as shown in Figure 3-151.
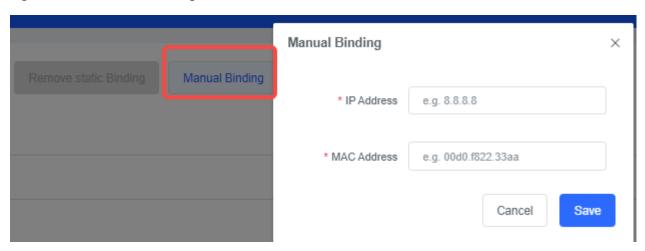
Figure 3-151   **ARP Entries**

- Creating a Static ARP Entry

  As shown in Figure 3-152, click **Manual Binding** to configure a static ARP entry containing the IP and MAC addresses.
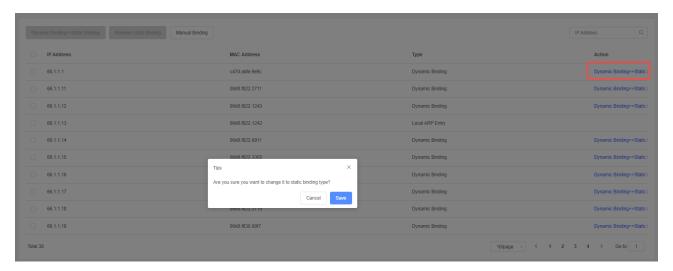
Figure 3-152   **Manual Binding**

- Converting a Dynamic ARP Entry into a Static ARP Entry
○ Convert a dynamic ARP entry into a static ARP entry.

  As shown in Figure 3-153, select a dynamic ARP entry and click **Dynamic Binding>>Static**.
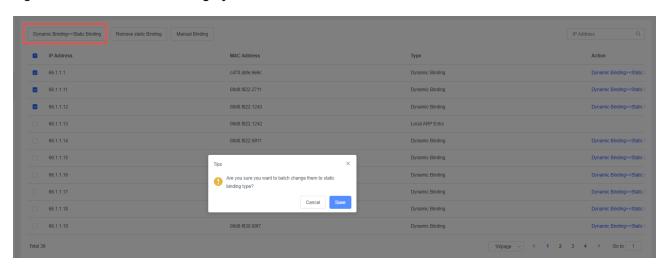
Figure 3-153   Converting a Dynamic ARP Entry

○   Convert multiple dynamic ARP entries to static ARP entries in a batch.

As shown in Figure 3-154, select multiple dynamic ARP entries and click **Dynamic Binding>>Static**.

Figure 3-154   Batch Converting Dynamic ARP Entries
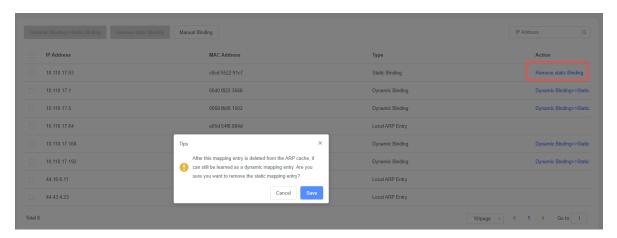
●   Deleting a Static ARP Entry

After a static ARP entry is deleted from the ARP cache, the entry type changes to dynamic binding.

○   Delete a static ARP entry.

As shown in Figure 3-155, select a static binding entry and click **Remove static Binding** in the **Action** column.
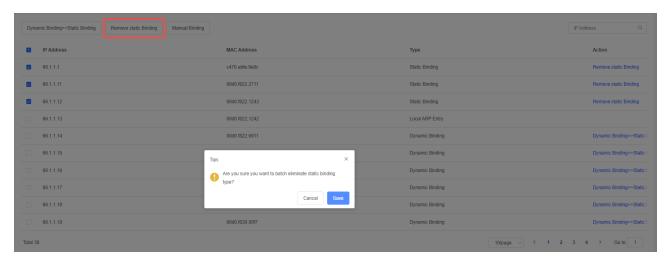
Figure 3-155   Deleting a Static ARP Entry

○   Delete multiple static ARP entries in a batch.

As shown in Figure 3-156, select multiple static ARP entries to be deleted and click **Remove static Binding** in the upper part of the page.

Figure 3-156   Batch Deleting Static ARP Entries
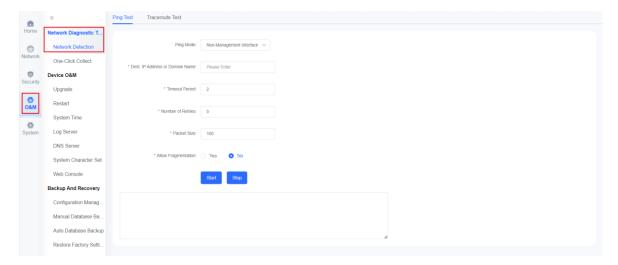
3.7   O&M

3.7.1   Network Diagnostic Tools

1.   Network Detection
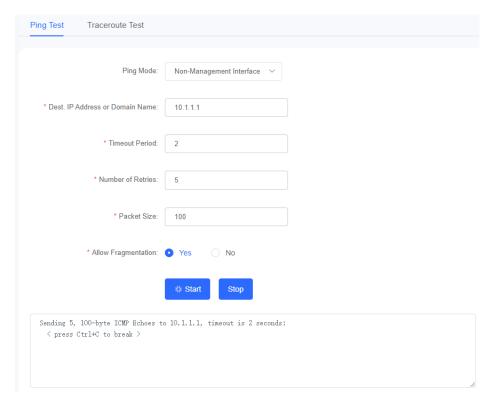
Choose **O&M** > **Network Diagnostic Tools** > **Network Detection** to access the Network Detection page.

Figure 3-157   Network Detection

(2) Ping Test

Figure 3-158   Ping Test
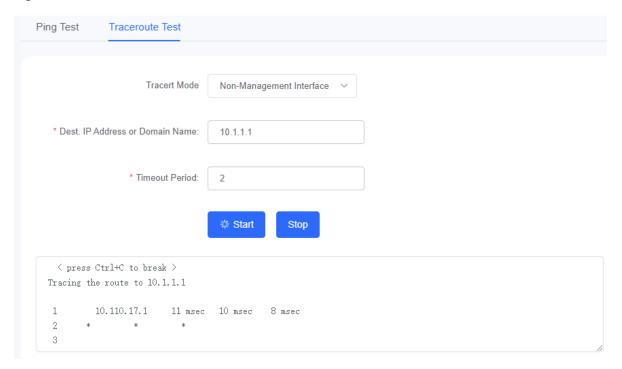
- **Start**: Select **Non-Management Interface** from the **Ping Mode** drop-down list box to select the ping mode. You can select **Non-Management Interface** and **Management Interface**. Enter the destination IP address or domain name, timeout period, number of attempts, and packet size. After setting configuration parameters, click **Start** to run the ping test. After the ping test is complete, the test results will be displayed.

> **Note**
>
> The Allow Fragmentation item is displayed only when Ping Mode is set to Non-Management Interface.

● **Stop**: Click **Stop** to stop the current ping test.

(3) Trace route Test

Figure 3-159   Trace route Test
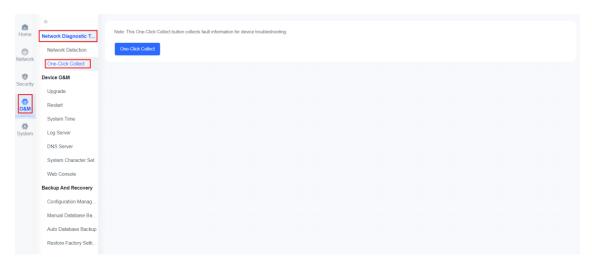
● **Start**: Select **Non-Management Interface** from the **Tracert Mode** drop-down list box to select the tracert mode. You can select **Non-Management Interface** and **Management Interface**. Enter the destination IP address or domain name and timeout period. Click **Start** to run the tracert test. After the tracert test is complete, the test results will be displayed.

● **Stop**: Click **Stop** to stop the current tracert test.

2. One-Click Collect

Choose **O&M** > **Network Diagnostic Tools** > **One-Click Collect** to access the One-Click Collect page.
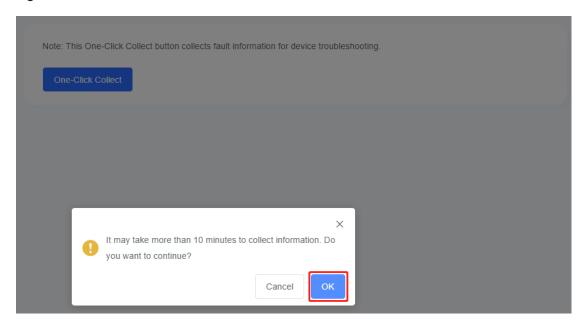
You can use the **One-Click Collect** function to collect switch fault information for troubleshooting.

Figure 3-160   One-Click Collect
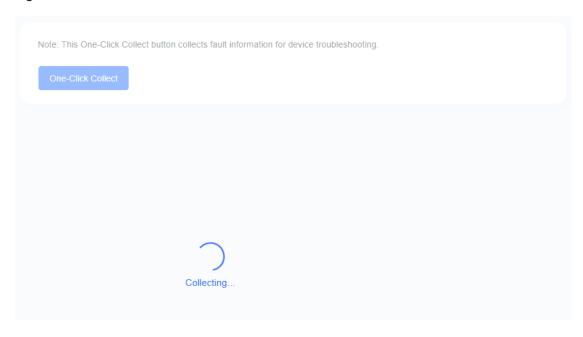
Collecting fault information may take about 10 minutes. After the collection is complete, you can download the collected fault information to a file named **tech_ vsd0_ 20210716142650.tar.gz**. Click **One-Click Collect**. The **Notice** dialog box is displayed.

Figure 3-161   One-Click Collect 1
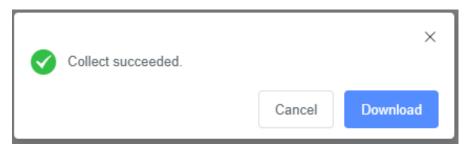
Click **OK**. The collecting process starts.

Figure 3-162   One-Click Collect 2

After the collection process is complete, the **Notice** dialog box is displayed. Click **Download** to download the collected information in a **tar.gz** compressed file.

Figure 3-163   One-Click Collect 3
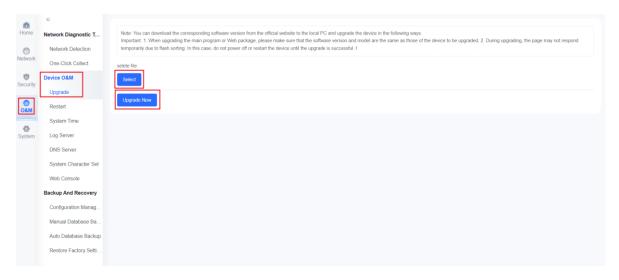
3.7.2 Device O&M

1. Upgrade

Choose **O&M** > **Device O&M** > **Upgrade** to access the Upgrade page.

Figure 3-164   Upgrade

> **ⓘ Note**
>
> You can download the required software version file from Ruijie Networks' official website to the local PC and upgrade the switch using the downloaded file.
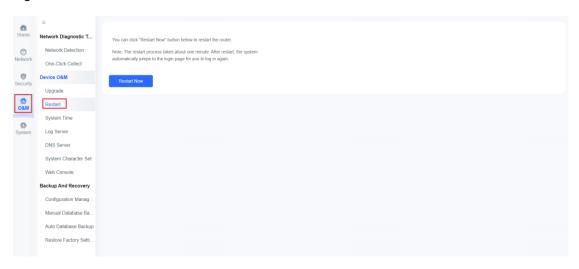
> **⚠ Caution**
> - When upgrading the main program or the web package, ensure that the version and model are the same as those of the current switch.
> - During upgrading, there may be no response temporarily due to flash loading. In this case, do not power off or restart the switch until the upgrade is successful.

2. Restart

Choose **O&M** > **Device O&M** > **Restart** to access the **Restart** page.

- Click **Restart Now** to restart a switch.

- The restart process takes about 1 minute. Do not perform any operation during this period.

- After the switch is successfully restarted, the current page will be refreshed automatically.
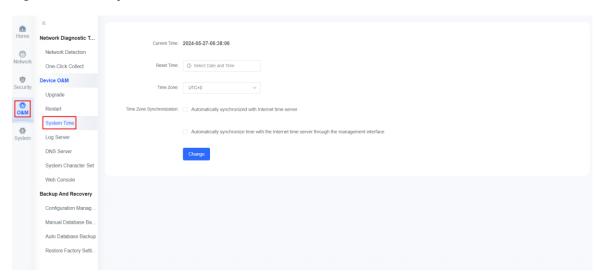
Figure 3-165   Restart

3.   System Time

Choose **O&M** > **Device O&M** > **System Time** to access the System Time page
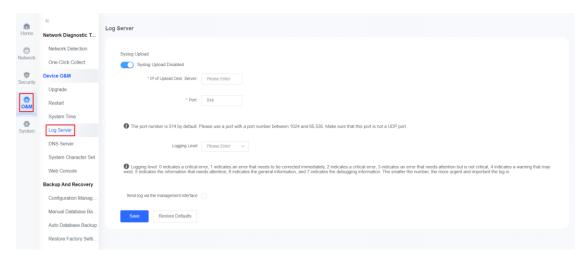
Figure 3-166   System Time

4.   Log Server

Choose **O&M** > **Device O&M** > **Log Server** to access the **Log Server** page. Click **Syslog Upload** to enable or disable the syslog upload function.

Figure 3-167   Log Server
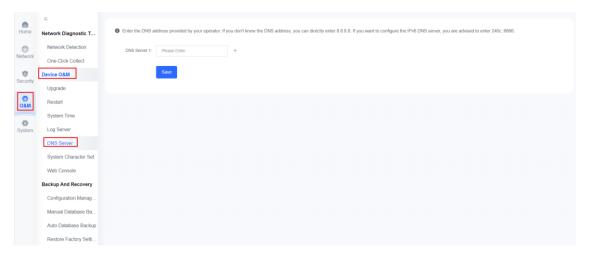
5. DNS Server

Choose **O&M** > **Device O&M** > **DNS Server** to access the **DNS Server** page.

● Click **+** to add a DNS server.

● Click **x** to delete a DNS server.

● Click **Save** to submit the configuration.
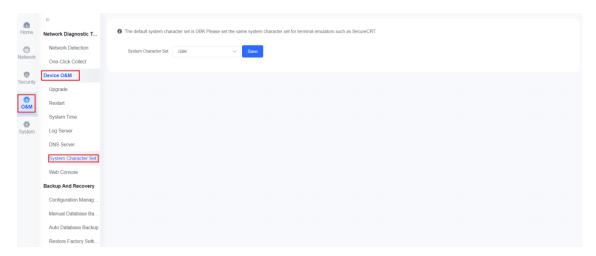
Figure 3-168   DNS Server

6. System Character Set

Choose **O&M** > **Device O&M** > **System Character Set** to access the **System Character Set** page.

Figure 3-169   System Character Set
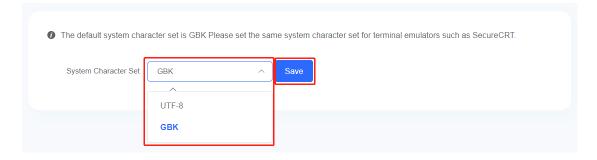
There are two options in the **System Character** Set drop-down list box, which are **UTF-8** and **GBK**. After a character set is selected, click **Save** to save the configuration.

ℹ **Note**

The default value is **UTF-8**.

Figure 3-170   Setting System Character

7. Web Console

Choose **O&M** > **Device O&M** > **Web Console** to access the **Web Console** page.

Figure 3-171   Web Console

1. Enter a command in **Command Input** box and click **Send**. The command execution result will be displayed in the console.

2. Click **Clear Screen** to clear the output result.

3.7.3 Backup And Recovery

1. Configuration Management
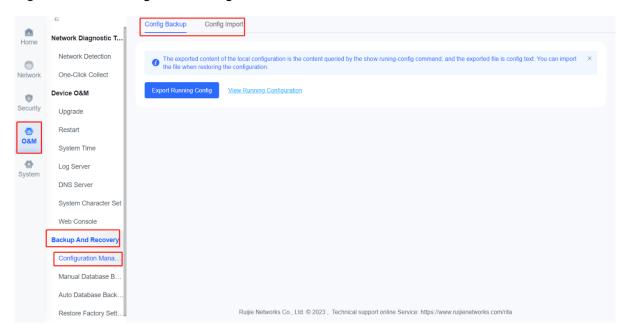
Choose **O&M** > **Backup And Recovery** > **Configuration Management**. On this page, you can perform local configuration backup and local configuration import. The local configuration backup and import functions are used to restore local configurations and implement fast local configuration.

⚠️ **Caution**

● The exported configuration of the local device is the local device configuration, which is the **show runing-config** command output. The exported file is **config.text.** You can import this file to restore the configuration.

● You can import the **config.text** file to the device on the **Config Import** page. After the configuration file is imported, the device restarts and the configuration takes effect. Do not close or refresh the page during the import. Otherwise, the import may fail.

Figure 3-172   Configuration Management

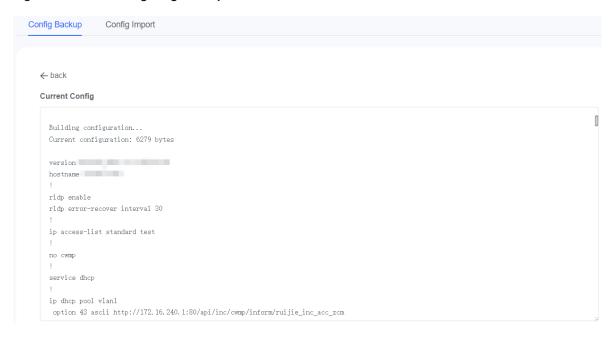(2) Config Backup

You can import or view the current configuration. The current configuration refers to **show runing-config** command output.

Figure 3-173   Config Backup page

○   Export running configuration: Click **Export Running Config** to generate a config.text text file.

○   View running configuration: Click **View Running Configuration** to access the current configuration page.

Figure 3-174   Configuring Backup
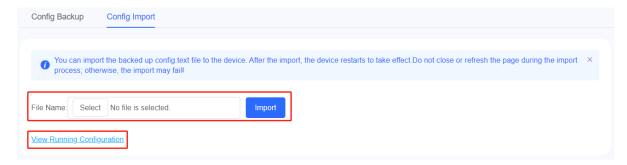

(3) Config Import

On the **Config Import** page, you can import configurations or view the current configuration. You can import an existing configuration file to the device for configuration restoration or fast configuration.

> ⚠️ **Caution**
>
> After the configuration is imported, the device restarts and the configuration takes effect. Do not close or refresh the page during the import. Otherwise, the import may fail.

Figure 3-175   Configuring Import

- **Import**: click **Import**. Select the desired file and click **Import** to import the configuration file.

- **View running configuration**: Click **View Running Configuration** to access the current configuration page.
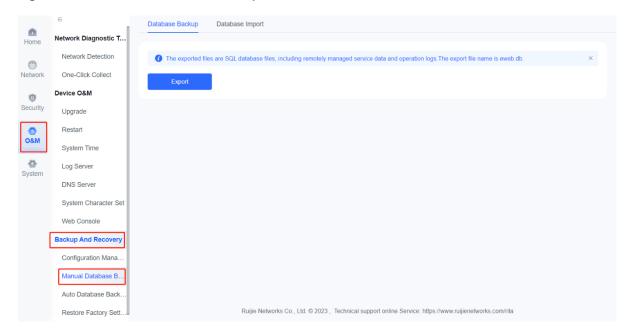
2. Manual Database Backup

Choose **O&M** > **Backup And Recovery** > **Manual Database Backup**. On this page, you can perform database backup and database import operations. The database backup and import functions are usually used before

and after an upgrade. If the device upgrade fails, you can roll back the device to the previous version to import the data.

> ⚠ **Caution**
> - The exported file is an **SQL database** file, which contains service data and operation logs for remote management. The exported file name is **eweb.db**.
> - You can import the **eweb.db** file on the **Manual Database Backup** page. After the file is imported, the configuration takes effect after the web service is restarted. Do not close or refresh the page during the import. Otherwise, the import may fail.
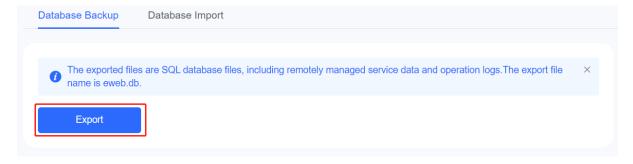
Figure 3-176   Manual Database Backup

(2) Database Backup

Click **Export** to download the database file with the file name extension of **db**. The SQL database file contains service data and operation logs for remote management.

Figure 3-177   Database Backup

(3) Database Import

The file extension of the imported database file must be **db**.

⚠ Caution

● The imported version cannot be higher than the current database version.

● After the database file is imported, the configuration takes effect after the web service is restarted. Do not close or refresh the page during the import. Otherwise, the import may fail.
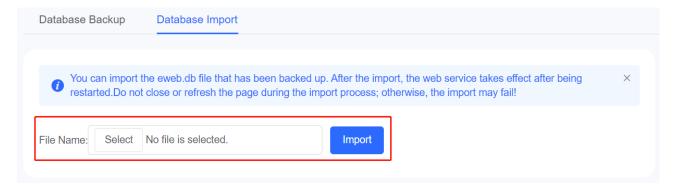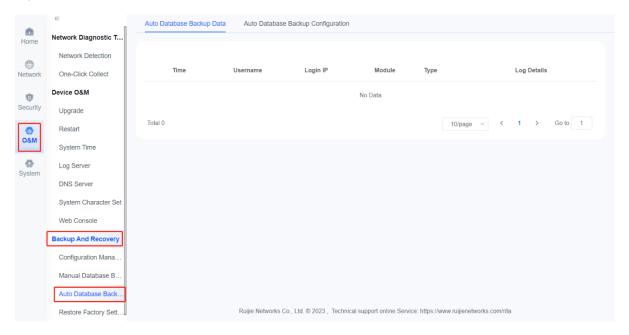
Figure 3-178   Database Import

3. **Auto Database Backup**

Choose **O&M** > **Backup And Recovery** > **Auto Database Backup**. You can view the automatic database backup data and enable automatic database backup configuration on this page.
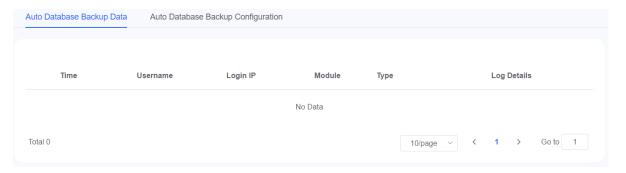
Figure 3-179   Auto Database Backup

(2) Auto Database Backup Data

This page displays historical data of automatic database backup, as shown in the following figure.

Figure 3-180   **Auto Database Backup Data**

(3) Auto Database Backup Configuration

The automatic database backup configuration function can automatically store system configuration data for disaster recovery and configuration rollback. As shown in the following figure, you can enable/disable the automatic database backup function and configure automatic database backup on this page.

a   Click **Enable** to access the **Auto Database Backup Configuration** page.

b   To enable the automatic backup function, you need to provide the SSH credential of the SFTP server, and configure the automatic backup path, frequency, and time, as shown in the following figure.

c   After the required parameters are configured, click **Save**. The automatic database backup function is enabled.

⚠ **Caution**

The SQL database files backed up here contain service data and operation logs for remote management.

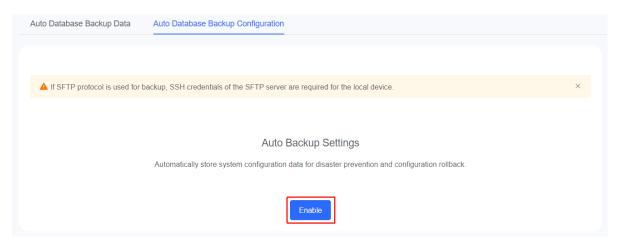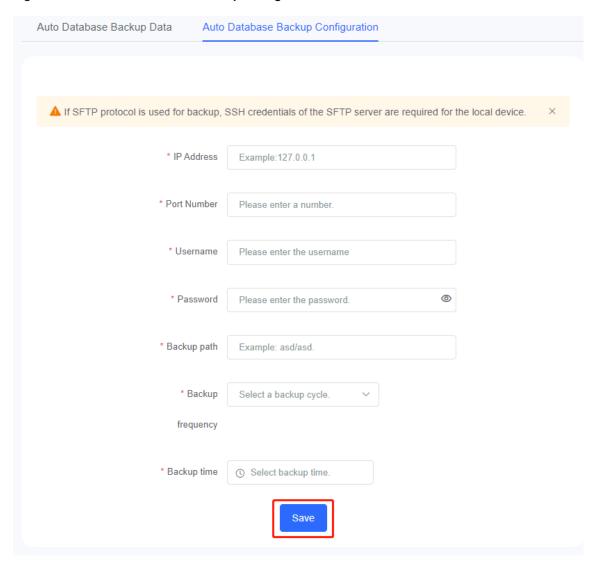**Figure 3-181**   **Auto Database Backup Configuration 1**
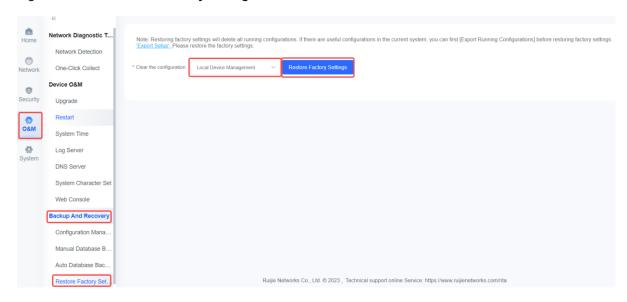
Figure 3-182   Auto Database Backup Configuration 2

4.   **Restore Factory Settings**

Choose **O&M** > **Device O&M** > **Restore Factory Settings** to access the **Restore Factory Settings** page.

To save the current configuration, you are advised to export the current configuration by clicking **Export Setup**.

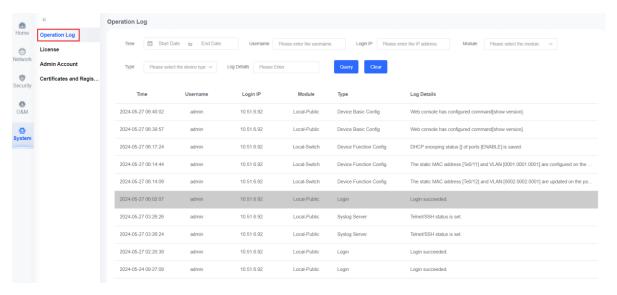**Figure 3-183   Restore Factory Settings**

⚠ **Caution**

Restoring factory settings will delete all running configurations. If there are useful configurations in the current system, you can first export running configurations before restoring factory settings. Click **Export Setup** to restore the factory settings.

3.8 System

3.8.1 Operation Log

Choose **System** > **Operation Log** to access the Operation Log **page**. The operation log records users' key operations. You can query the operation log based on the search criteria.

Figure 3-184   Operation Log

3.8.2 Licensing Procedure

You will be given a license code after purchasing a license. You must obtain the device SN on the switch by choosing **System** > **License**.

Figure 3-185   License

(1) Import License

    a   Collect license information including License code (indicated on the license) and device SN.

    b   Visit **https://pa.ruijie.com.cn/main_ca.jsf** (Ruijie Networks' PA system), and enter the license code and switch SN on the PA system to generate a license file. Enter the license SN and license code, and click **Finish** to download the license file.

    c   Choose **System** > **License**, and click **Import License**. Click **Select** and select the downloaded license file with the suffix *.lic from your local PC. Click **Import**.
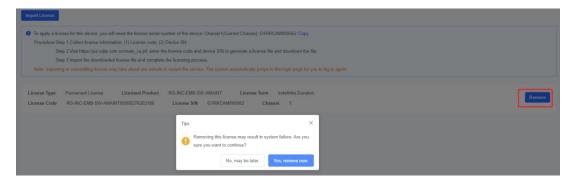
Figure 3-186   Import License

(2) Uninstalling a License

You can view or remove the imported license on the **License** page in the eWeb management system. You can view or remove other licenses in addition to the INC-EMB licenses on the **License** page.
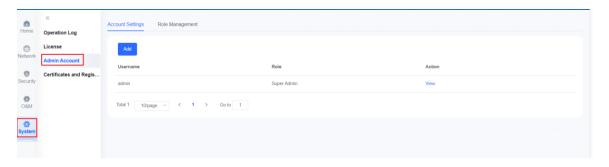
Figure 3-187   Uninstalling a License

3.8.3 Admin Account

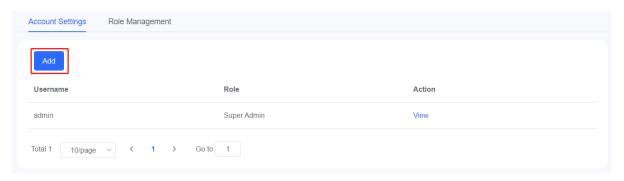Choose **System** > **Admin Account**.

Figure 3-188   **Admin Account**
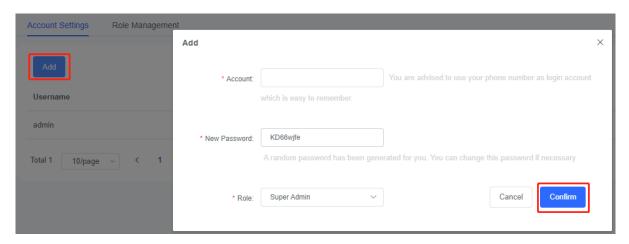

1. Account Settings

In addition to the **admin** account provided by the system, you can also create and maintain other accounts (only the **admin** account has this privilege.).
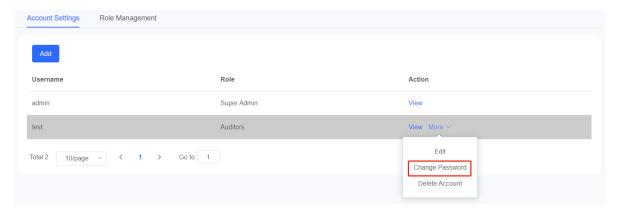
Figure 3-189   **Account Settings**

(2) Adding an account

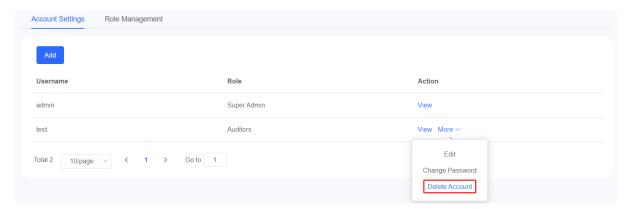**Figure 3-190**   **Adding an account**

(3) Changing the password (the admin account cannot be changed)

Figure 3-191   Changing the password

(4) Deleting an account (the admin account cannot be deleted)

Figure 3-192   Deleting an account

2. Role Management

On this page, you can view service permissions of administrators' accounts.
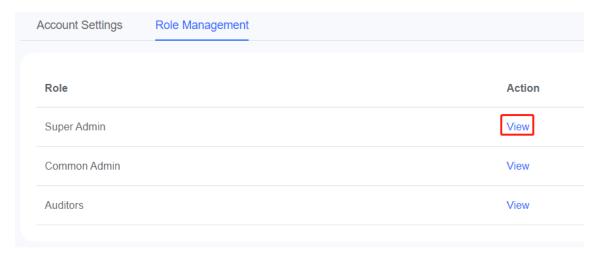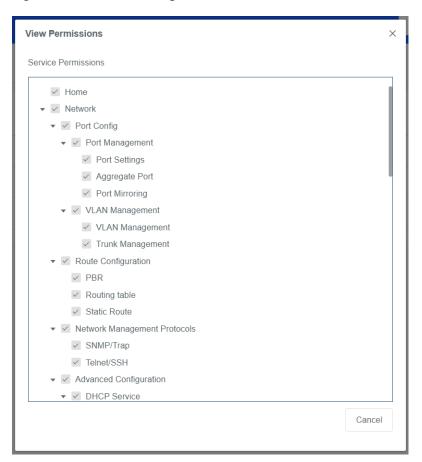
Figure 3-193   Role Management 1

Figure 3-194   Role Management 2

3.8.4 Certificates and Registration

Choose **System** > **Certificates and Registration** to access the **Certificates and Registration** page. You can upload certificate file and certificate private key or manage the ICP license in this page.

Figure 3-195   Certificates and Registration