# Ruijie RG-CS86-20XS Series Switches

# CS86_RGOS 12.6(2)B0104

## Web-based Configuration Guide

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# Preface

## Intended Audience

This document is intended for:

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

## Technical Support

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- Technical Support Website: https://ruijienetworks.com/support
- Case Portal: https://caseportal.ruijienetworks.com
- Community: https://community.ruijienetworks.com
- Technical Support Email: service_rj@ruijienetworks.com
- Skype: service_rj@ruijienetworks.com

## Conventions

### 1. Conversions

| Convention | Description |
|---|---|
| **Bold** font | Commands, command options, and keywords are in **bold** font. |
| *Italic* font | Arguments for which you supply values are in *italic* font. |
| [ ] | Elements in square brackets are optional. |
| { x \| y \| z } | Alternative keywords are grouped in braces and separated by vertical bars. |
| [ x \| y \| z ] | Optional alternative keywords are grouped in brackets and separated by vertical bars. |
| &<1-n> | The argument before the sign (&) can be input for consecutive 1- n times. |
| // | Double slashes at the beginning of a line of code indicate a comment line. |

### 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.

**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. Note**

The manual offers configuration information (including model, port type and command line interface) for indicative purpose only. In case of any discrepancy or inconsistency between the manual and the actual version, the actual version prevails.

# 1 RG-INC-EMB User Guide

## 1.1 Overview

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

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

**Note**

This document only applies to the eWeb management system of the CS86-20XS series, and is compatible with the RG-INC-EMB_1.22 version.

## 1.2 Typical Applications

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

### 1.2.1 Managing Switches Through the eWeb Management System

**Configuration Environment Requirements**

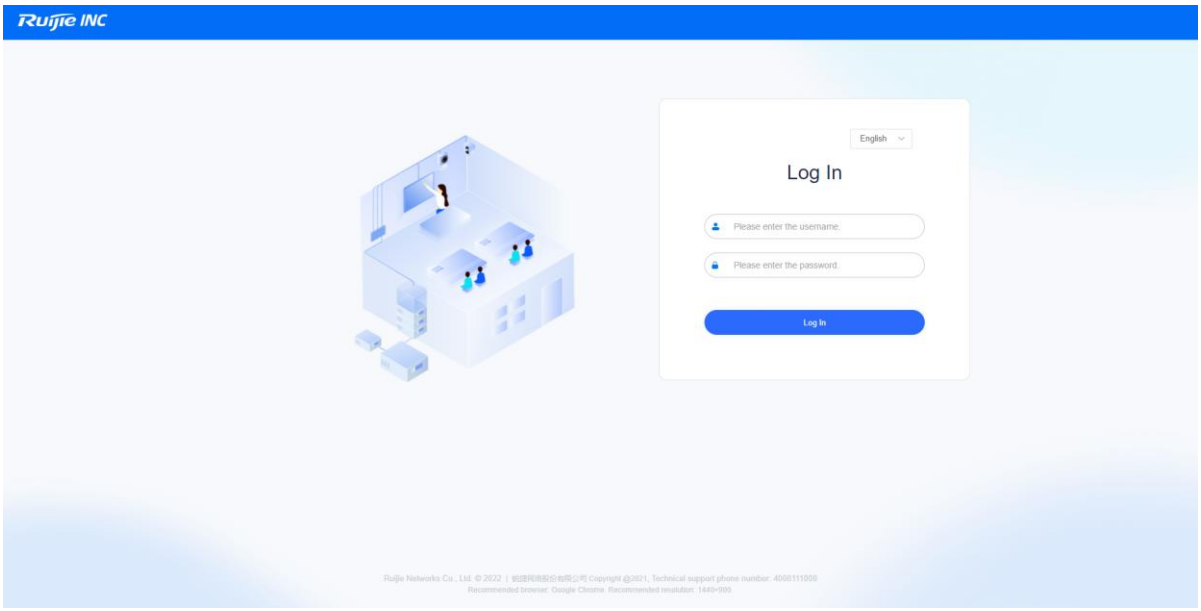
Client requirements:

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.

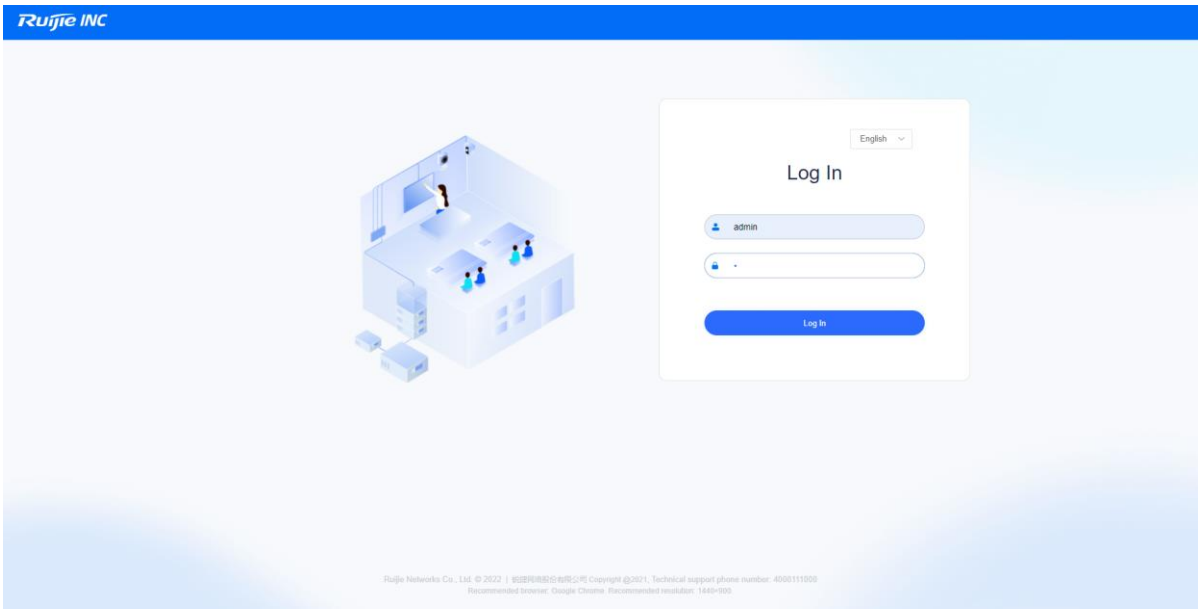
## 1.3 eWeb Management System

### 1.3.1 Logging In

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




1. Enter the username and password and click **Log In**. The main interface of the eWeb management system is displayed.
2. If you cannot remember your username or password, click **Forgot Password?**
3. If you need customer service assistance, contact local technical support.
4. 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.

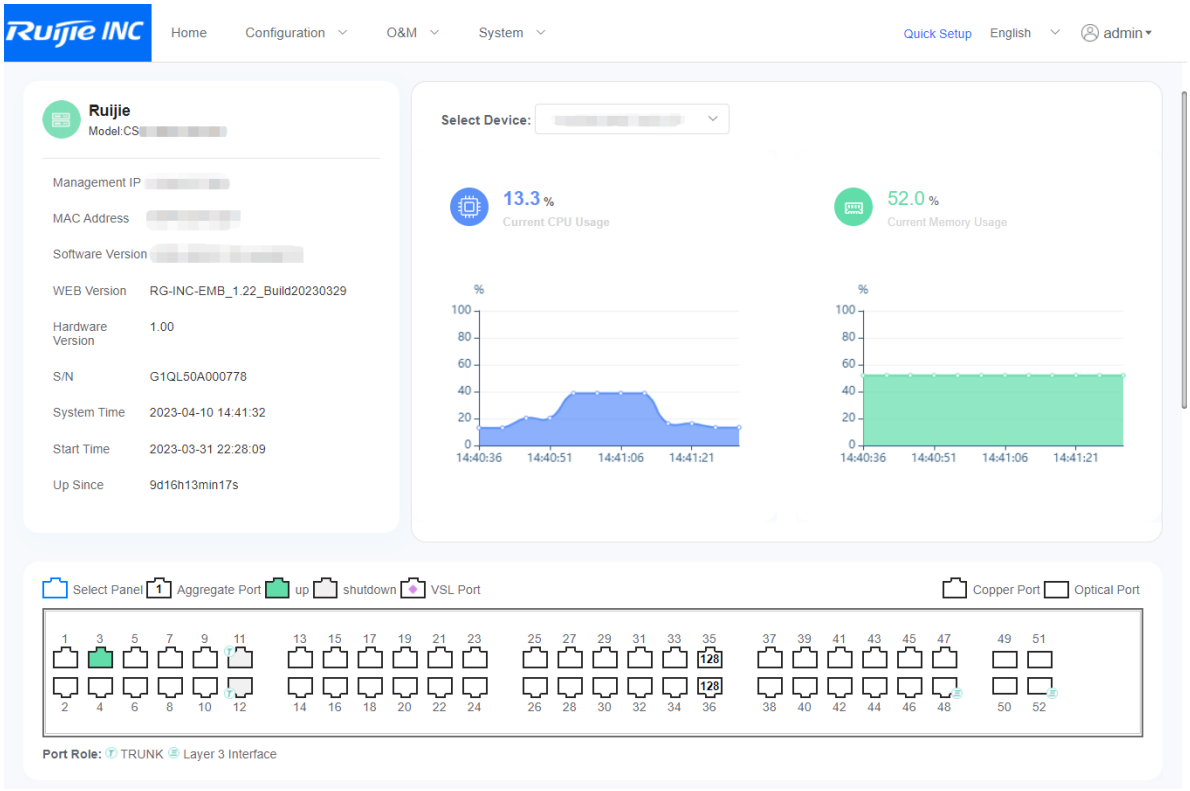



**Note**

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.

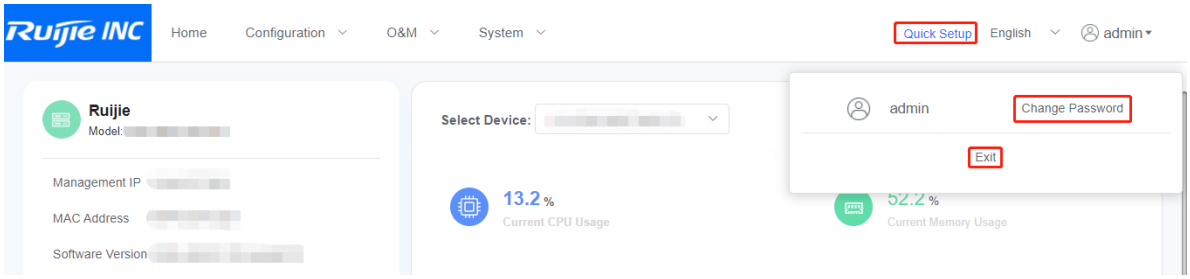
## 1.3.2 Main Interface

The main interface of the eWeb management system is displayed.




### 1. Header

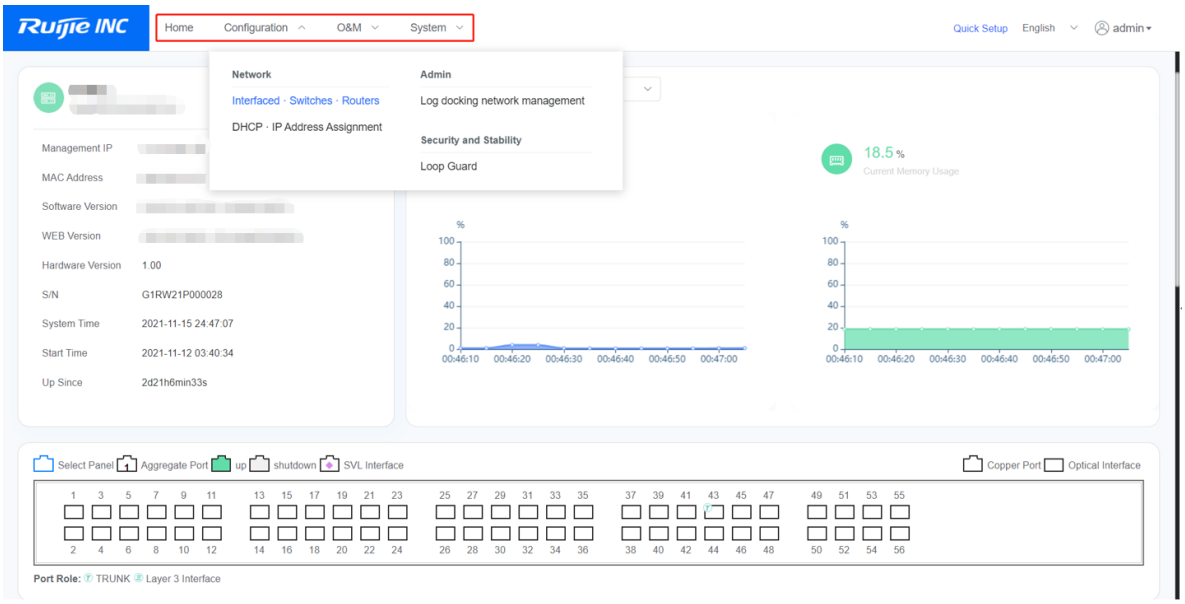
This area displays the links to common functions, including Quick Setup, Change Password, and Exit. You can click these links to switch to specific configuration pages.




- **Change Password**: After you click **Change Password**, the **Change Password** page is displayed. You can enter the old password and the new password to reset the password.
- **Exit**: When device management is complete, you can click Exit to exit the main interface and return to the login page.

### 2. Navigation Menu

This area displays main tabs of the eWeb management system.




### 3. Main Operation Area

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

## 1.3.3 Quick Setup

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**

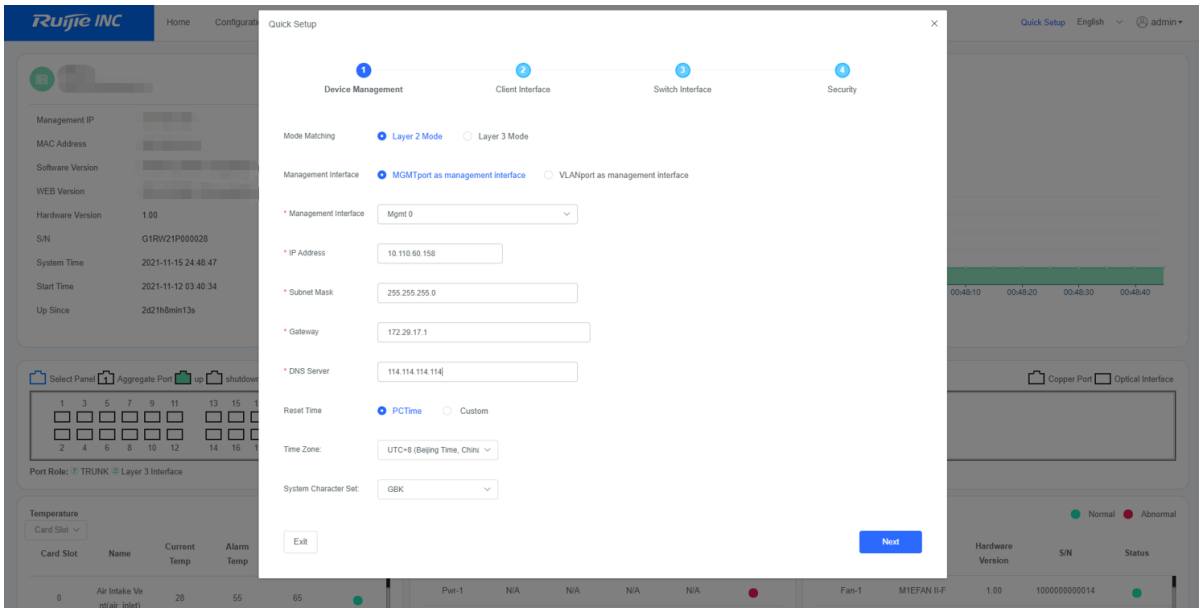
You can click **Quick Setup** in the upper-right corner of the main interface of the eWeb management system to open the **Quick Setup** wizard.

### 1. Quick Setup

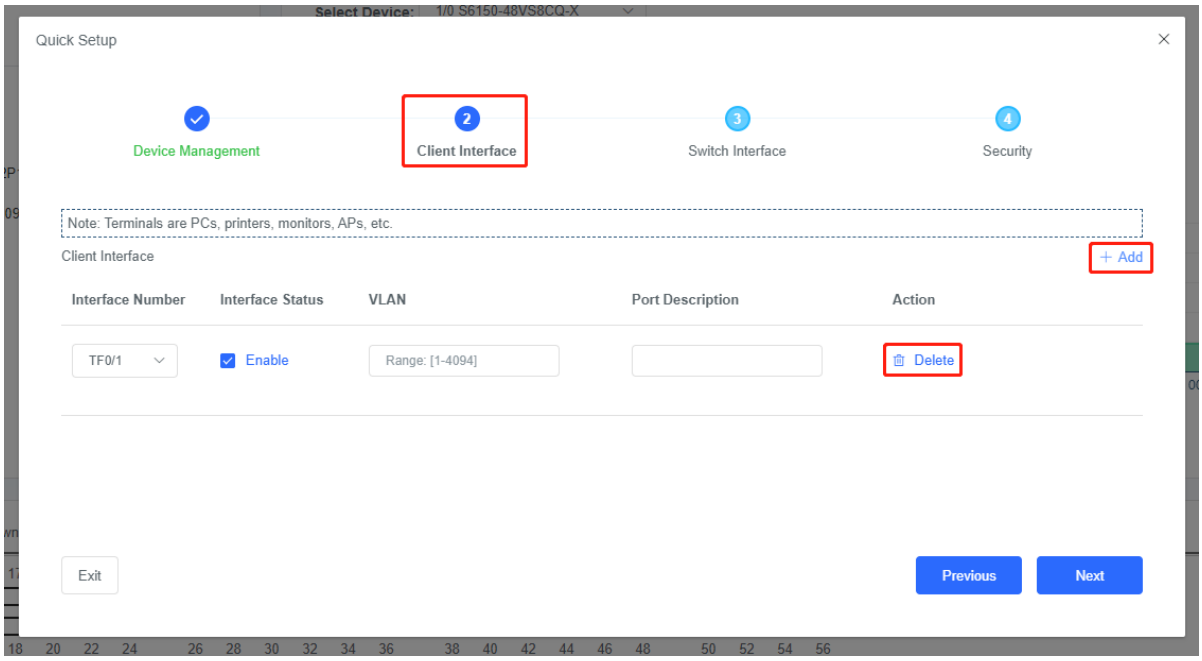
**Layer 2 Mode**

There are four steps in this mode.

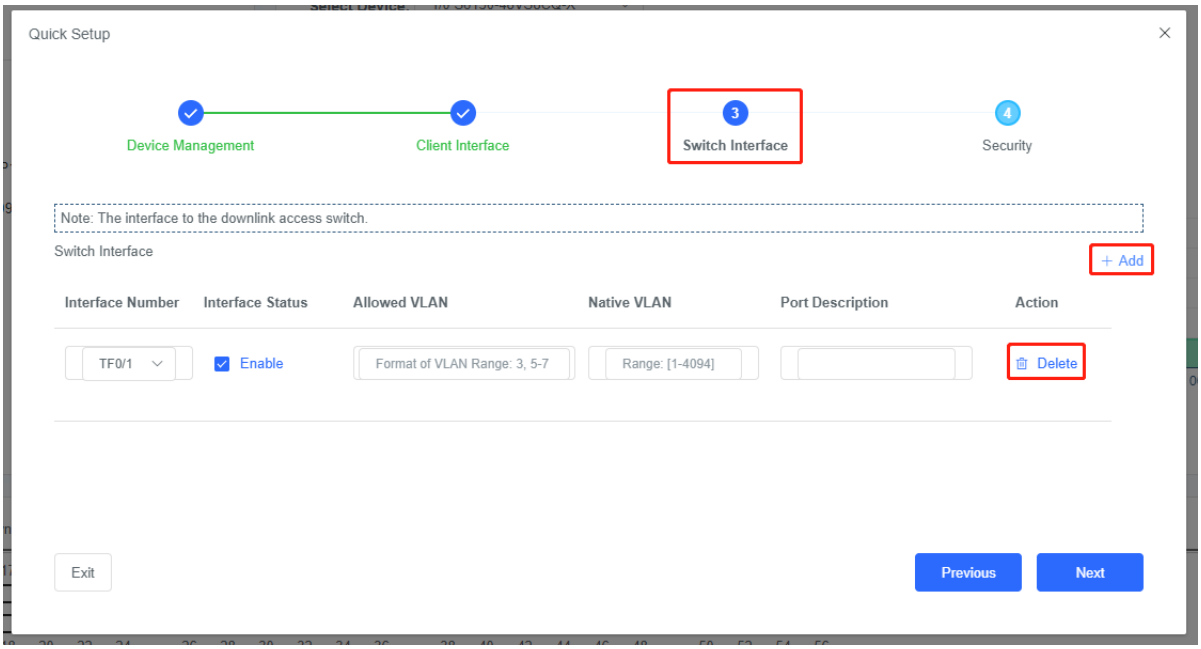
**(1) Device Management**



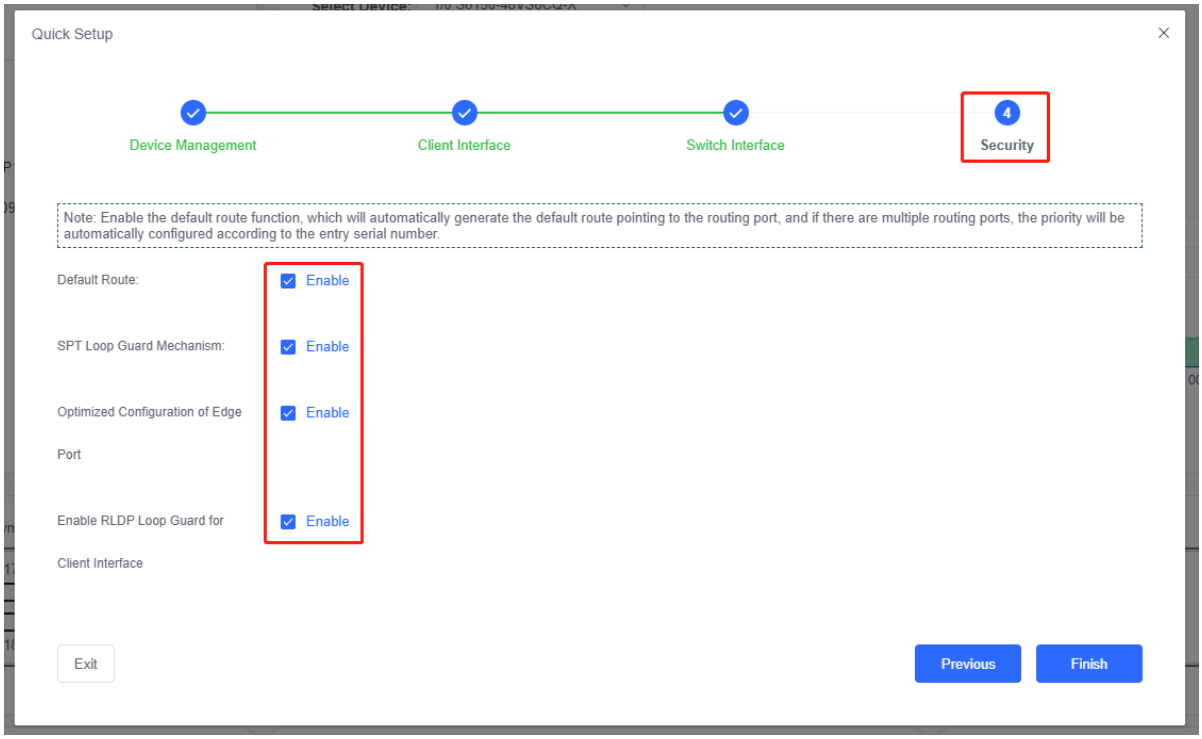

## (2) Client Interface




## (3) Switch Interface




### (4) Security

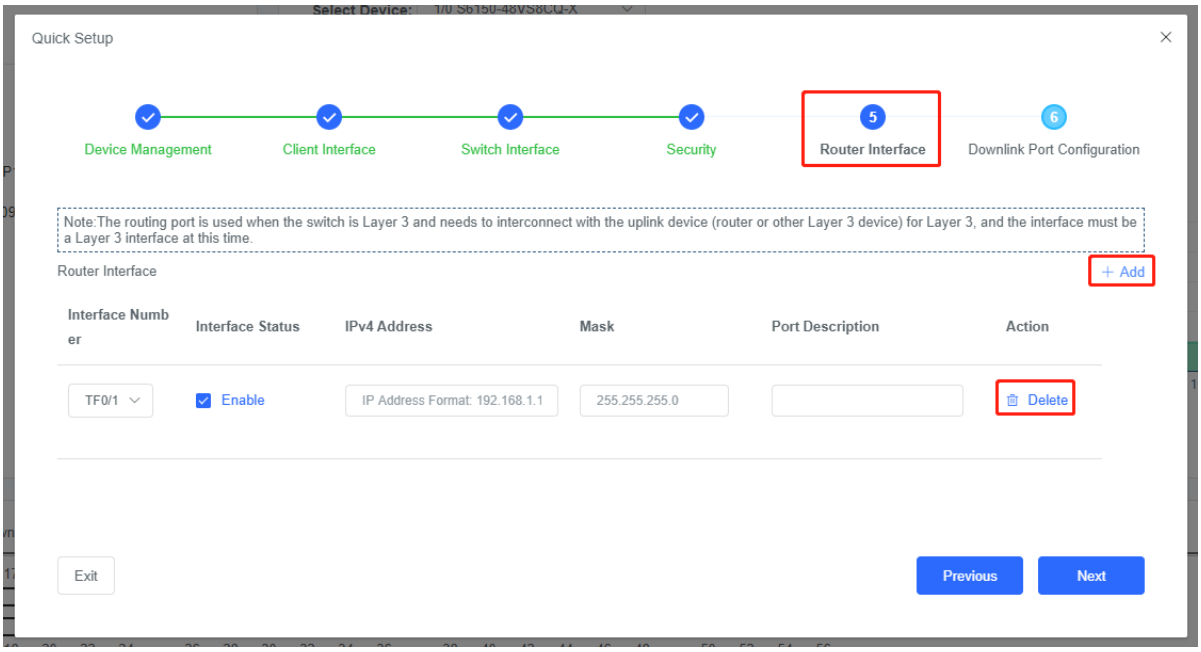



## Layer 3 Mode

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)




### (2) Downlink Port Configuration (Layer 3 Mode)



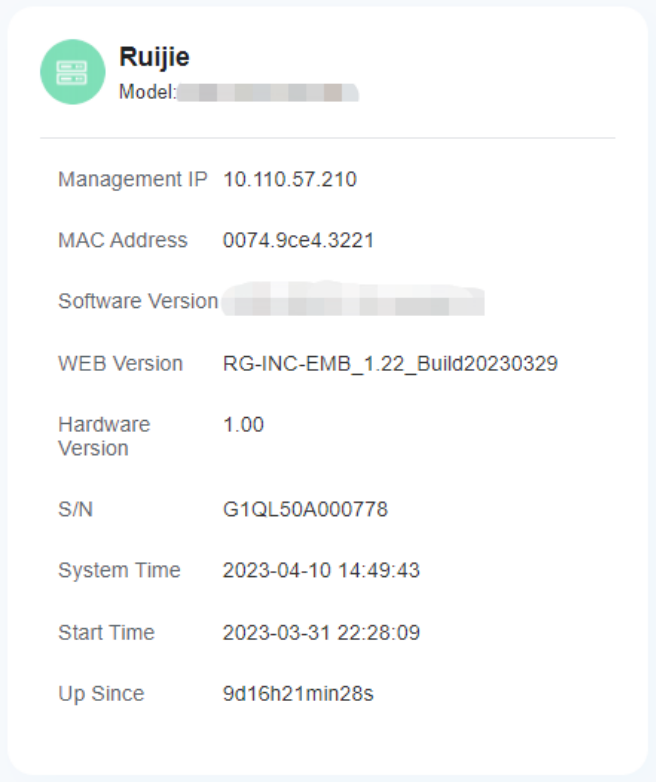

## 1.3.4 Home Page

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.

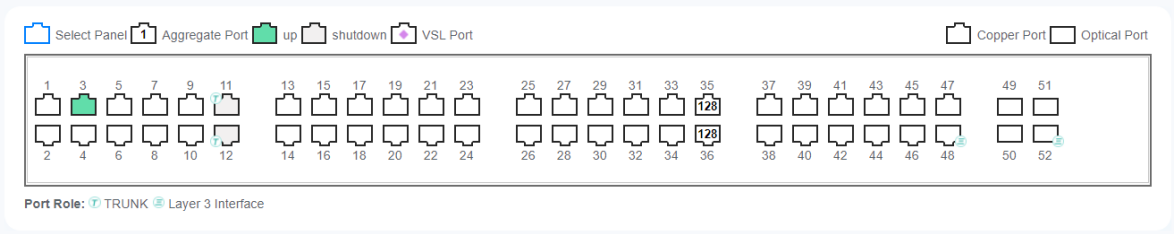
## 1. Switch Overview

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** > **Basic Configuration** > **System Time**.




## 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.

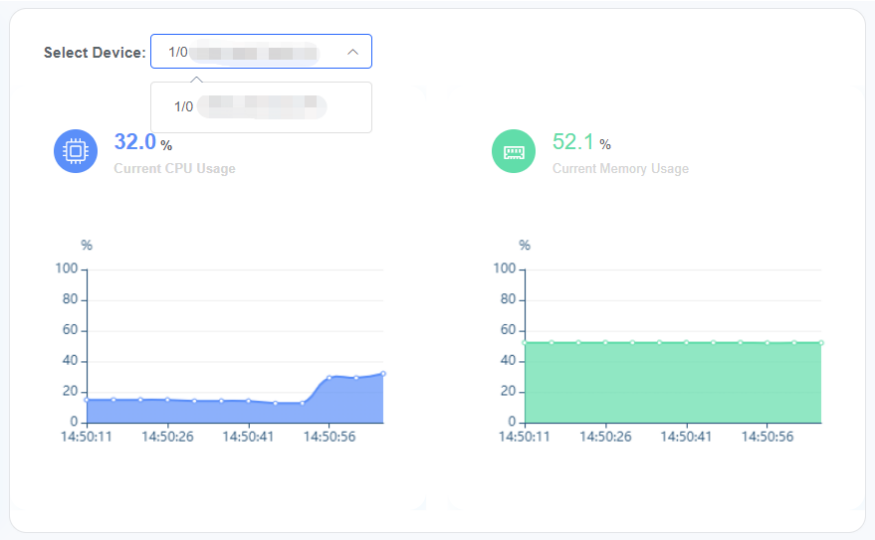



## 3. CPU/Memory Usage

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

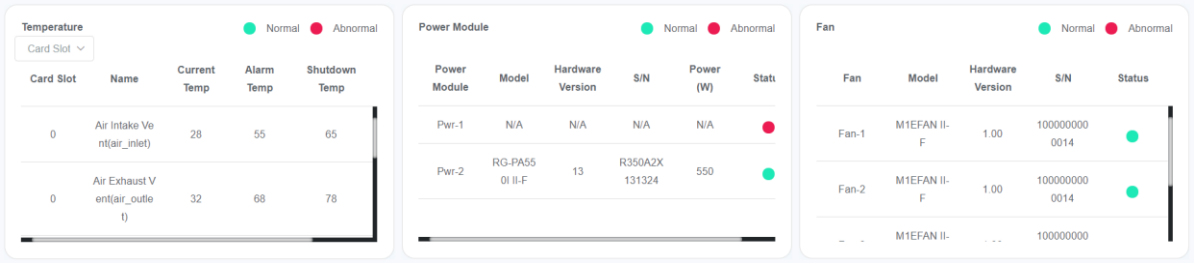
**CPU**: indicates the CPU usage of the switch service module.

**Memory**: indicates the memory usage of the switch service module.




## 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.

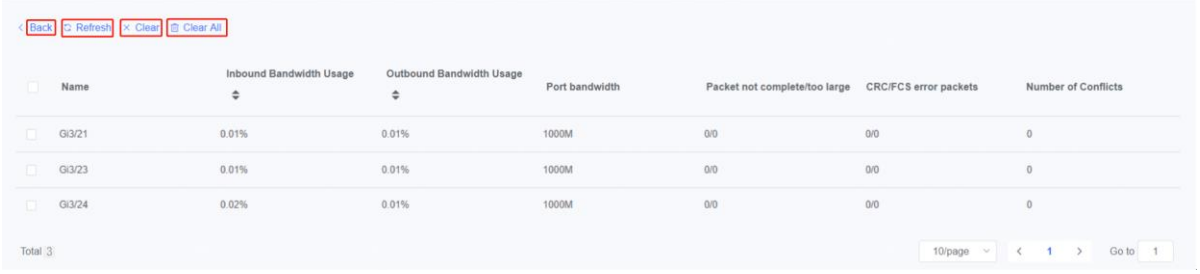



In the **Temperature** panel, you can view the temperature of a card slot by selecting a card clot from the **Card Slot** drop-down list box.

## 5. Bandwidth




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




**Back**: returns to the home page.

**Refresh**: re-queries the interface bandwidth utilization.

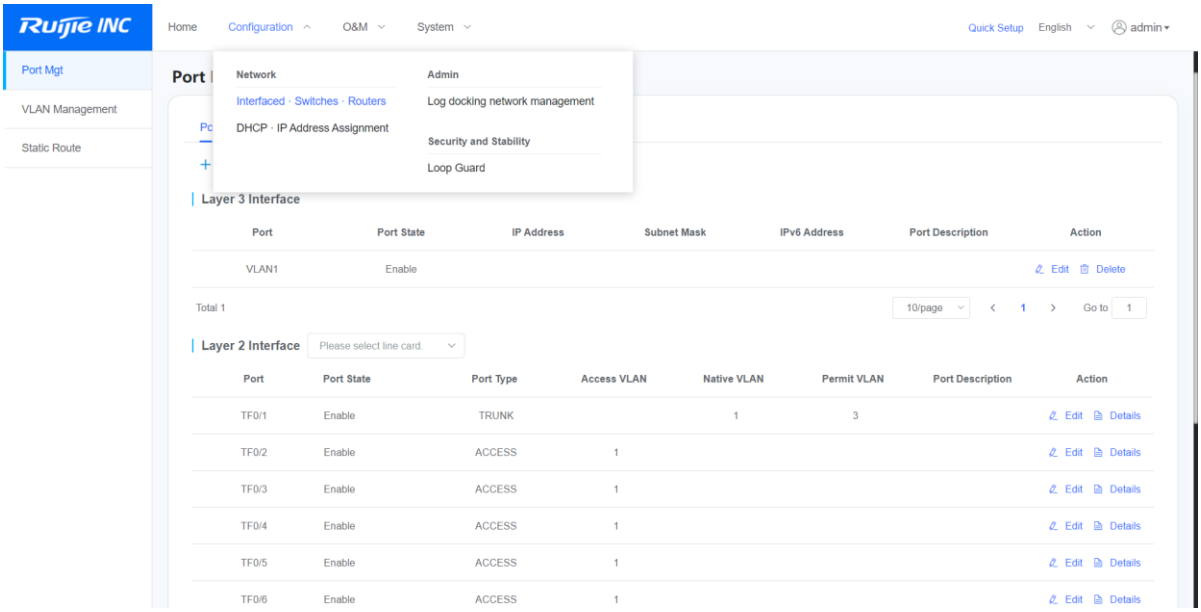
**Clear**: deletes statistics about a selected interface, such as the number of error packets and conflicting count.

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

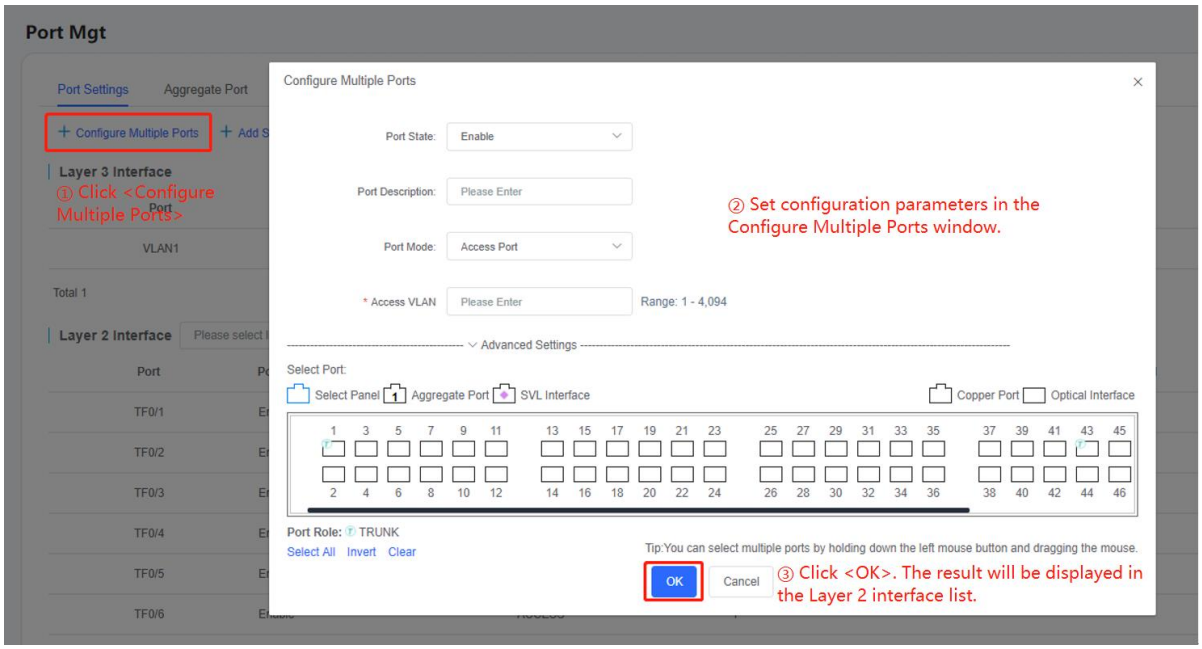
## 1.3.5 Configuration

### 1. Port Management

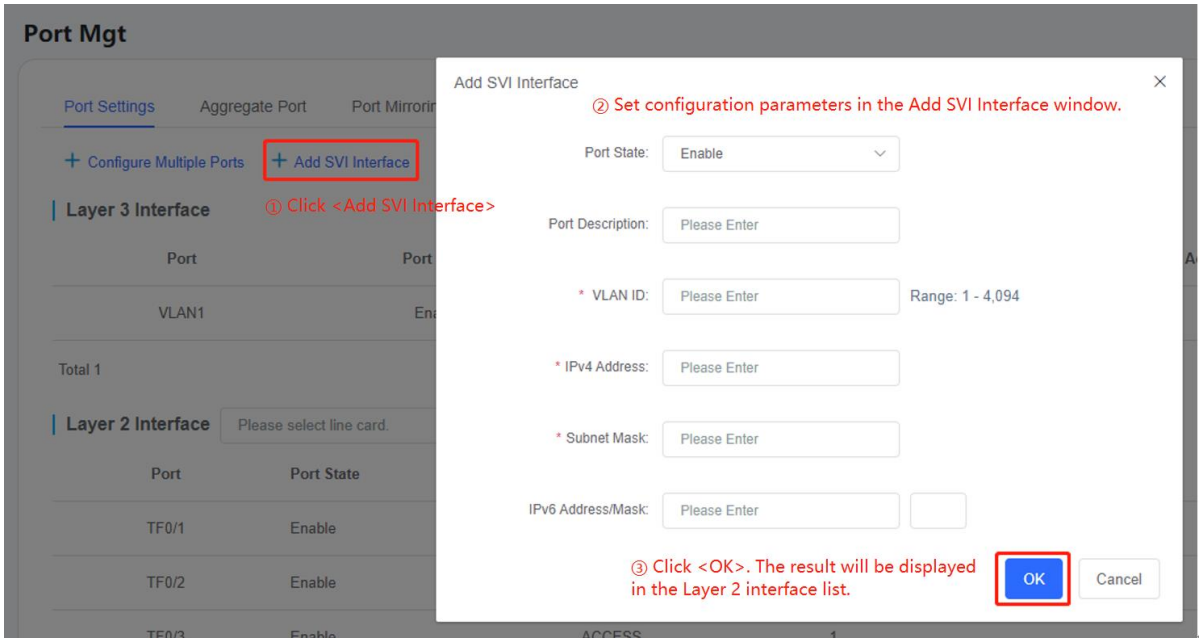
#### Port Configuration



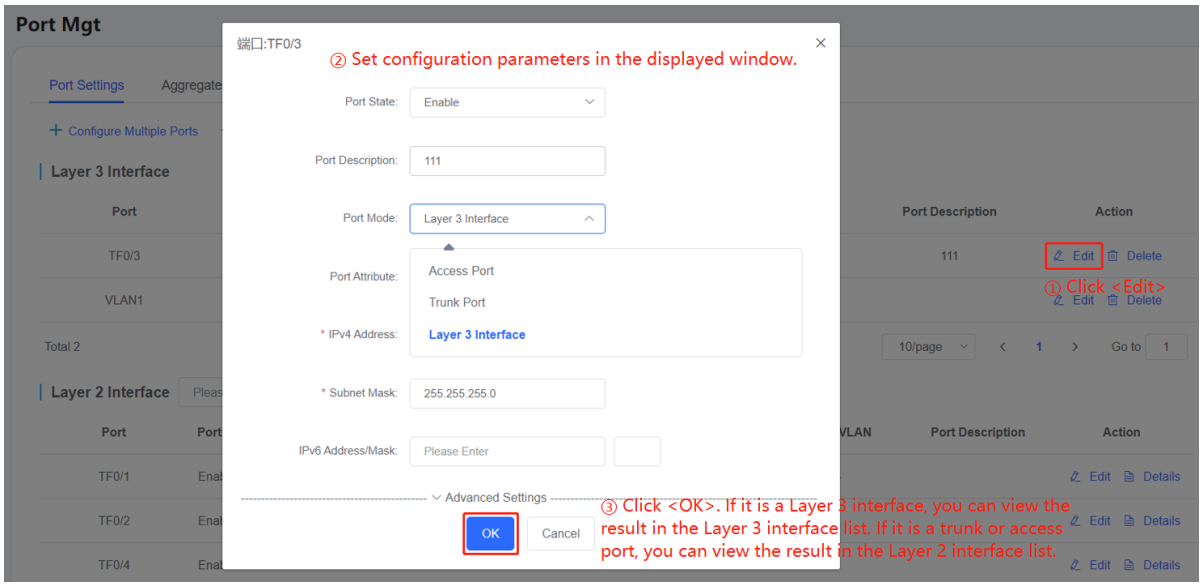

- **Configuring multiple ports**



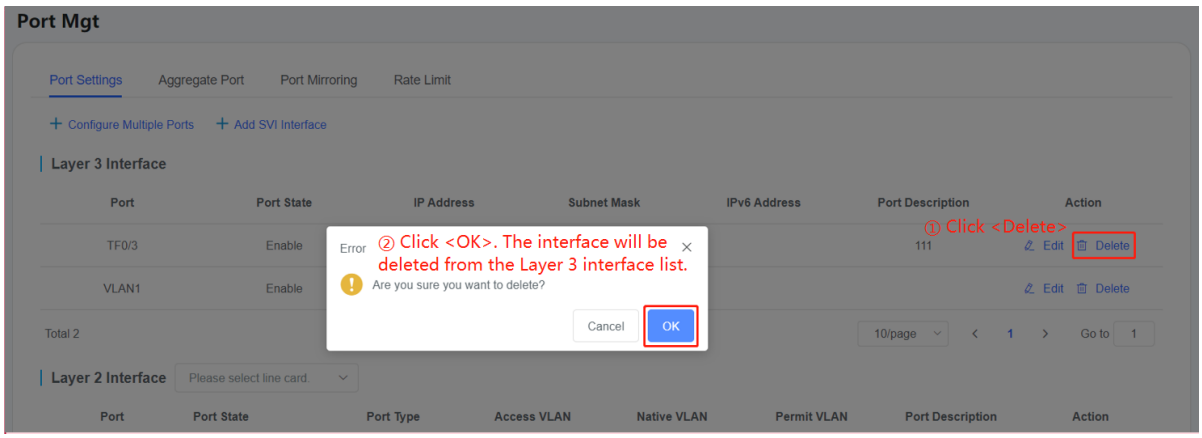

- **Adding an SVI**



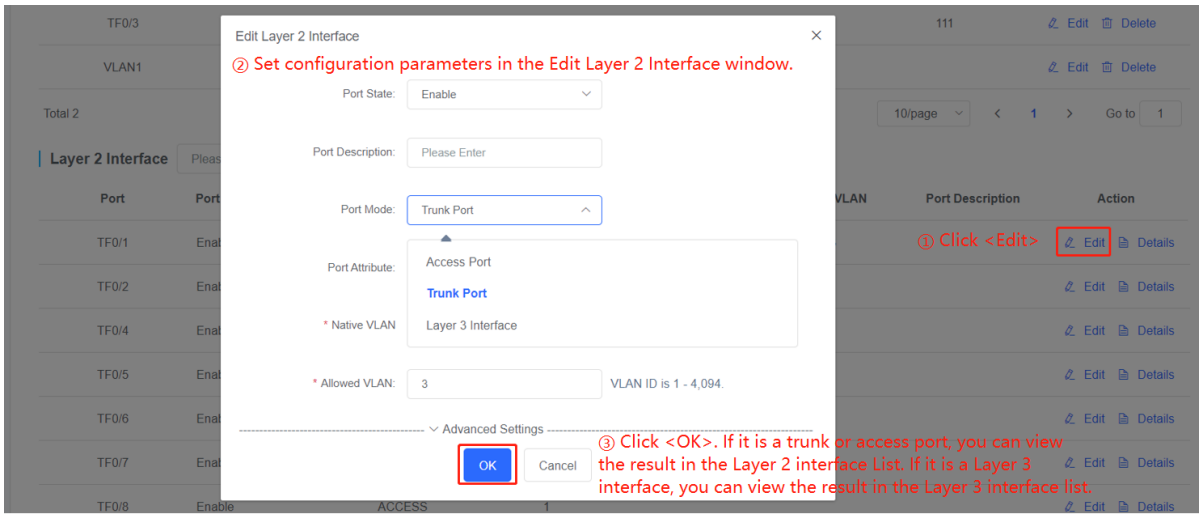

- **Editing a Layer 3 interface**



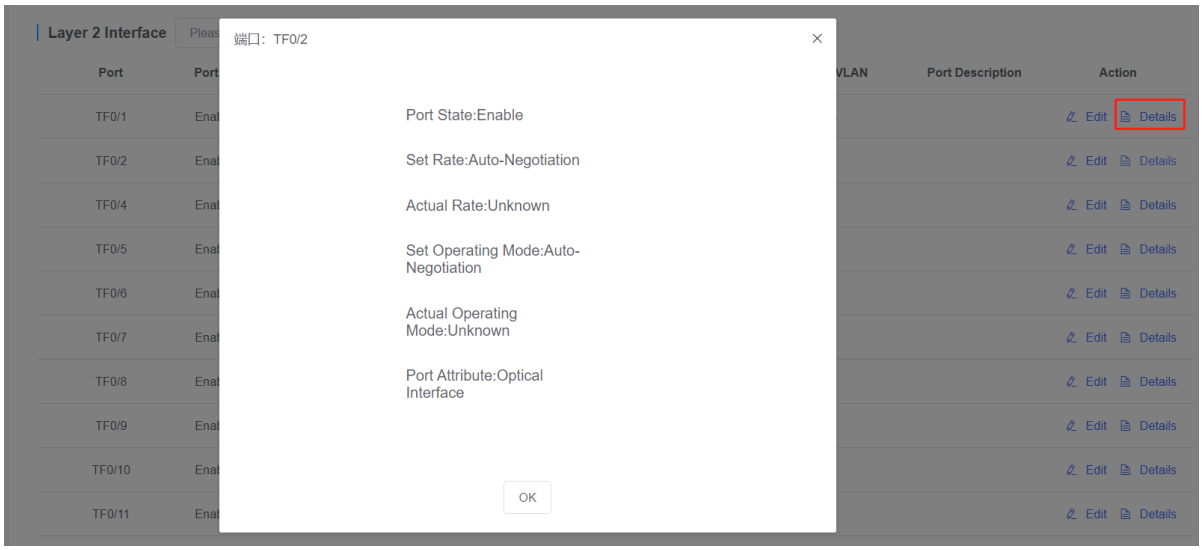

- **Deleting a Layer 3 interface**




- **Editing a Layer 2 interface**




- **A Layer 2 interface details**



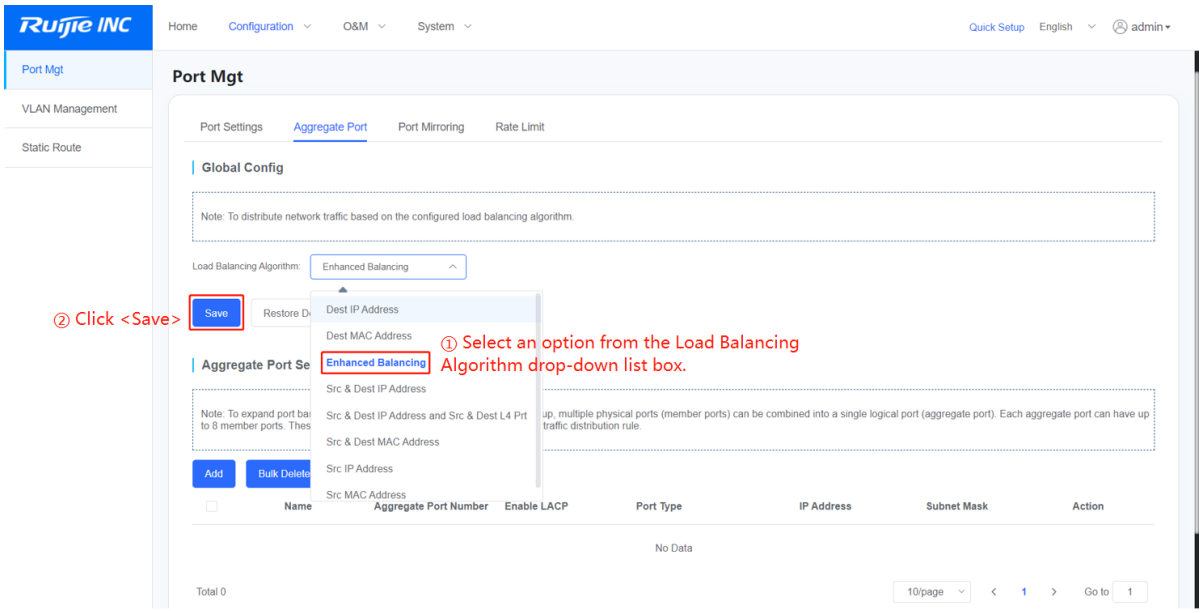

Click **Details**. You can view detailed information about a selected port.

**Port Aggregation**

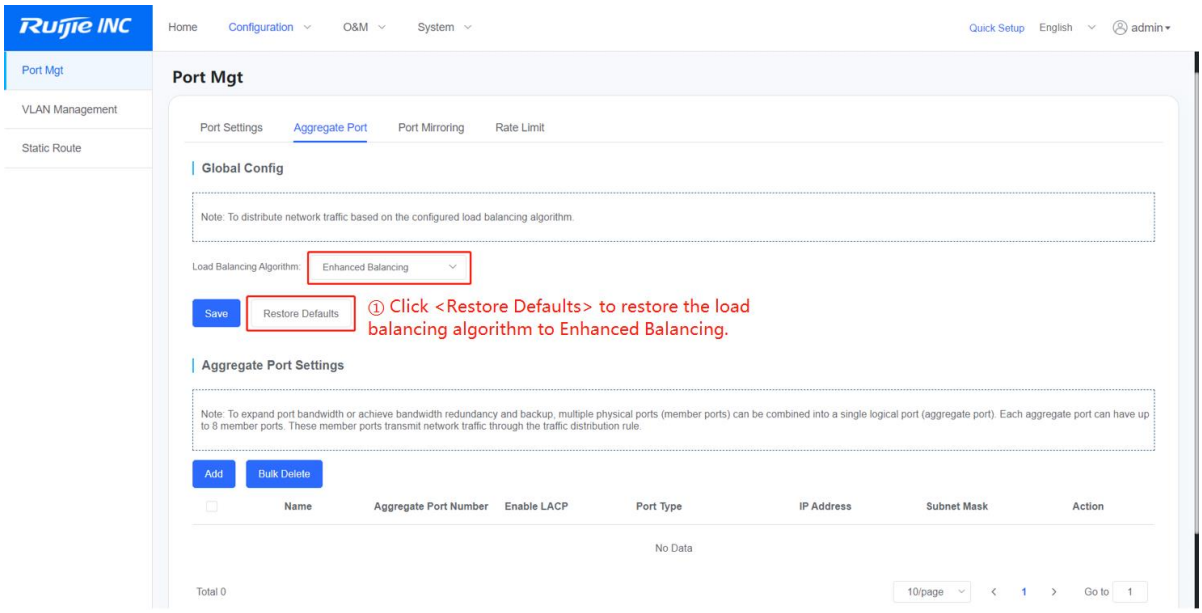
**Note**

To increase bandwidth or provide redundancy, multiple physical ports (member ports) can be combined into a single logical port (aggregated port). Each aggregated port can have up to 8 member ports. These member ports transmit network traffic based on traffic distribution rules.

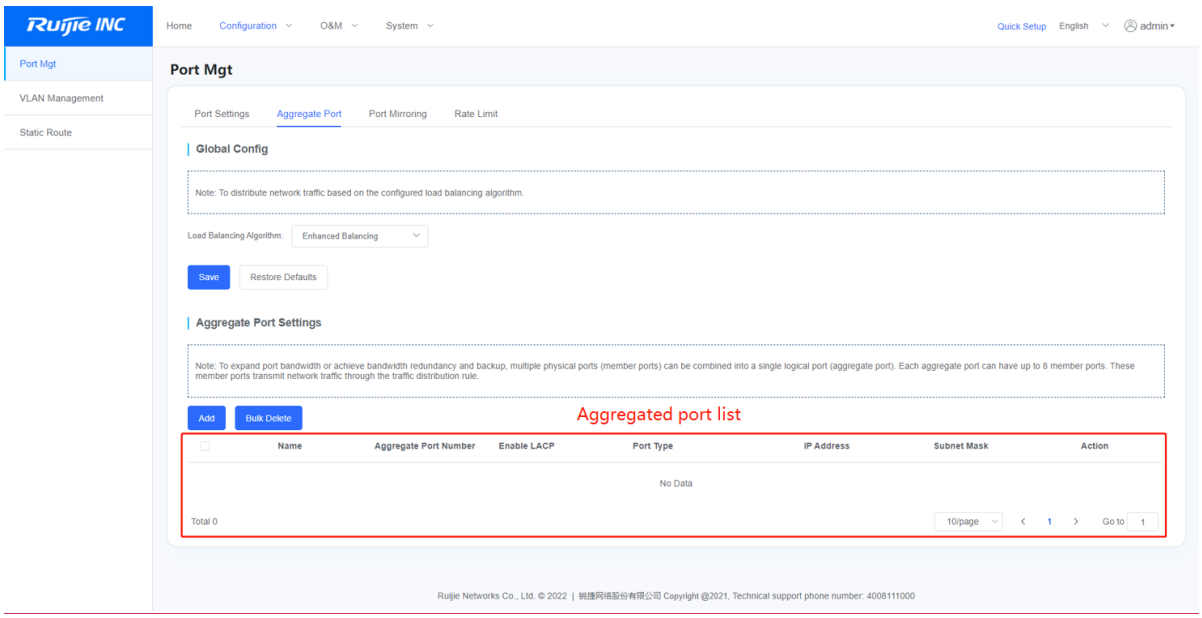
- **Saving configurations**



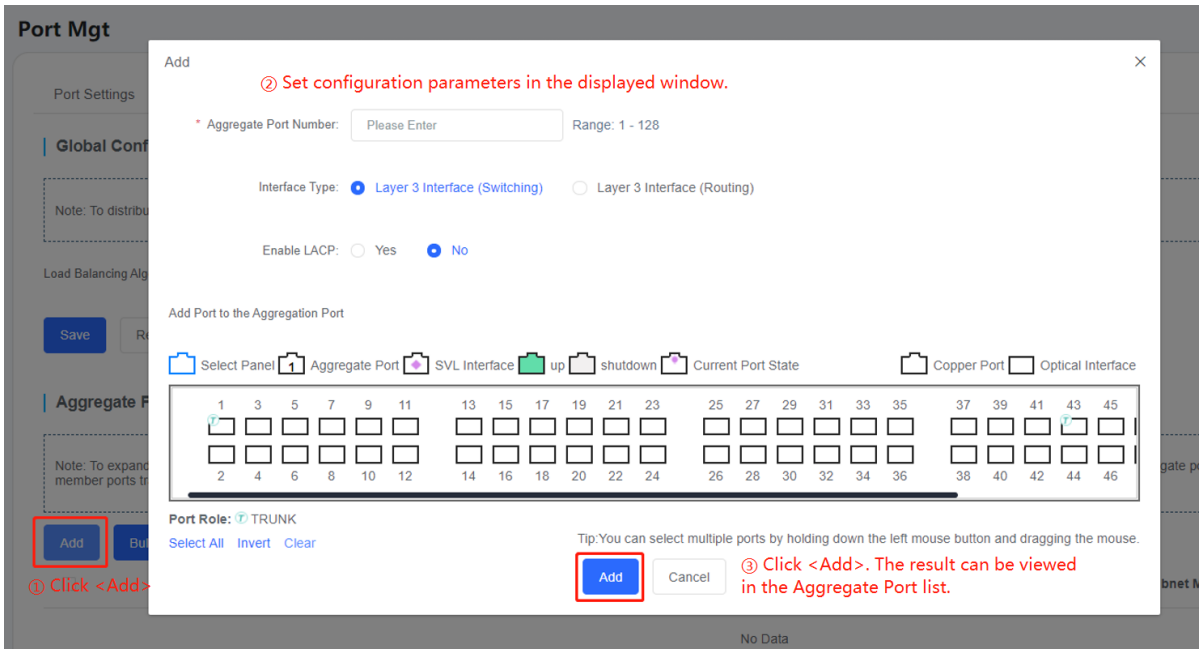

- **Restoring default settings**



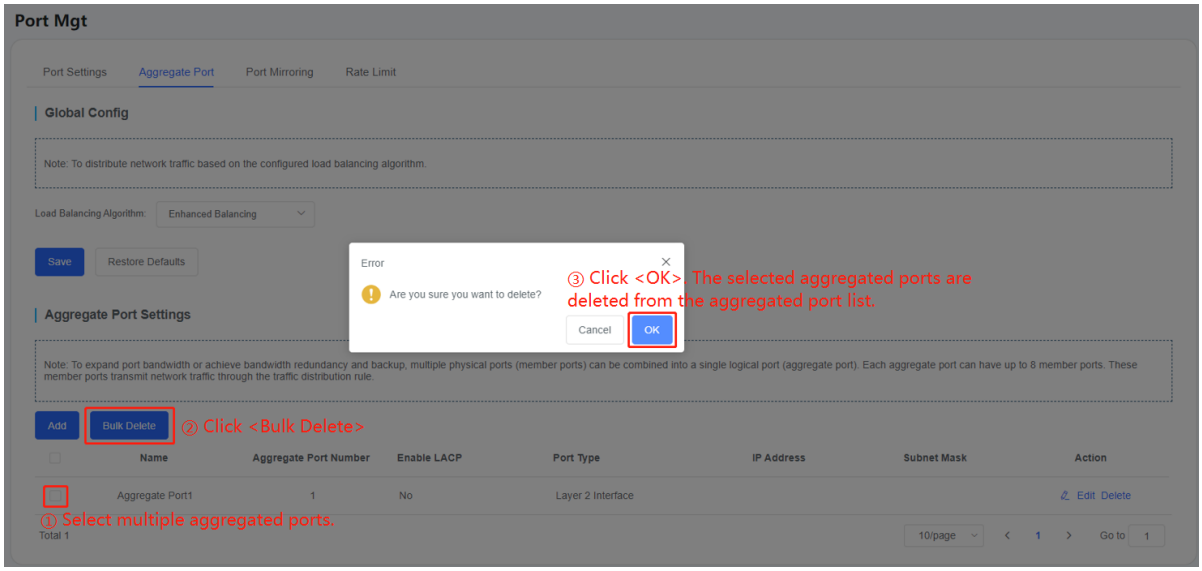

- **Querying the aggregated port list**



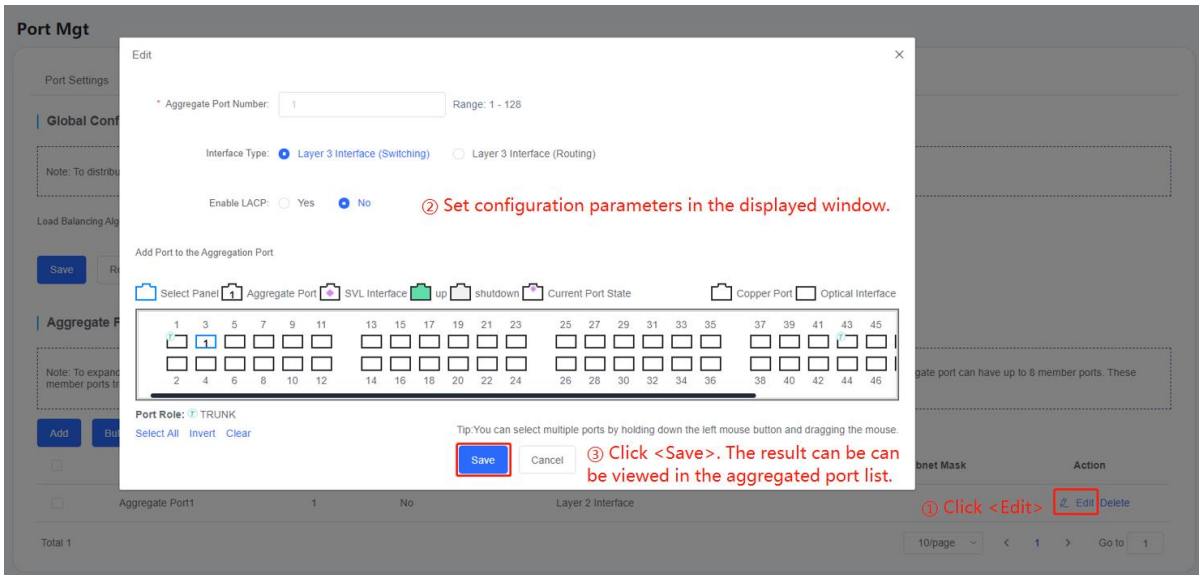

- **Adding an aggregated port**



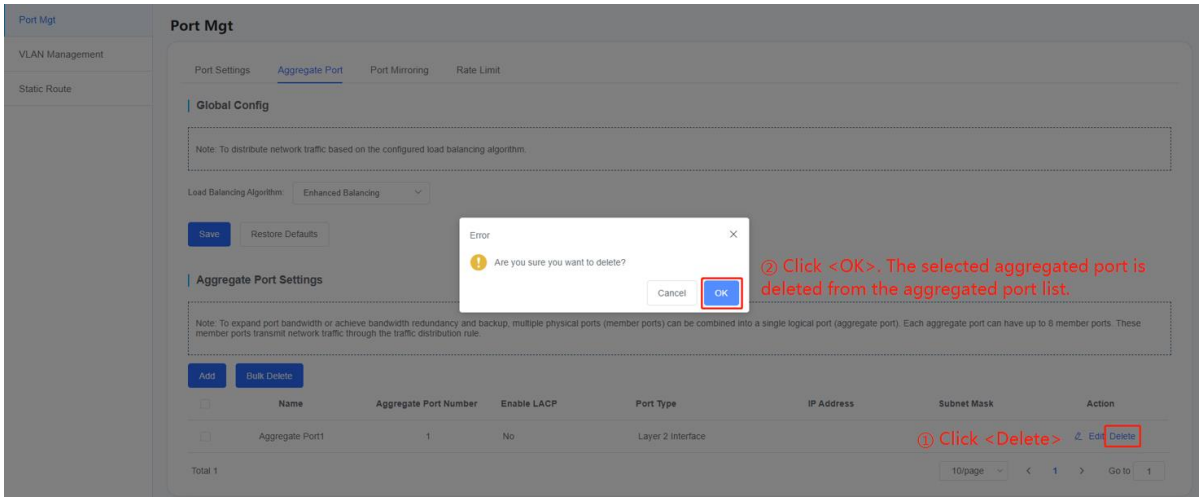

- **Deleting multiple aggregated ports**



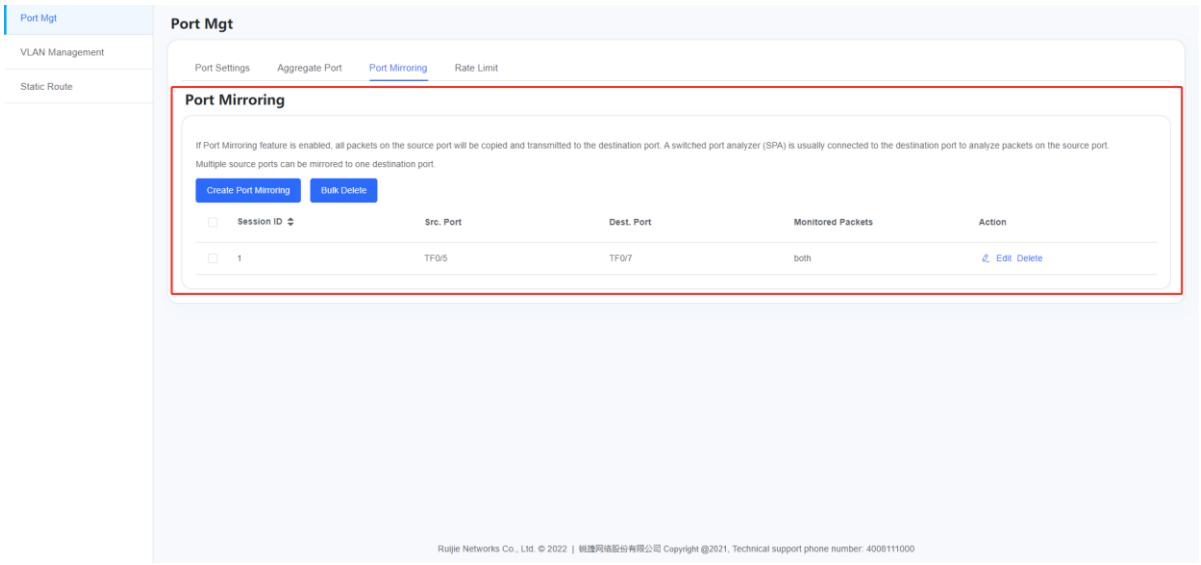

- **Editing an aggregated port**



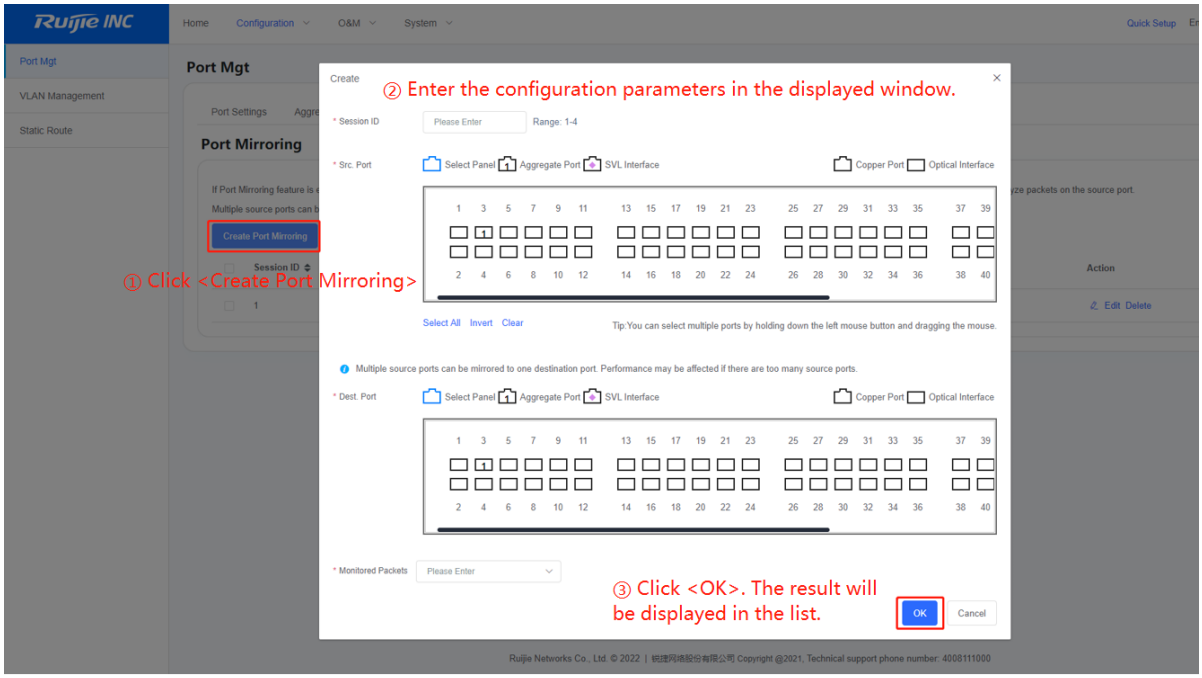

- **Deleting an aggregated port**



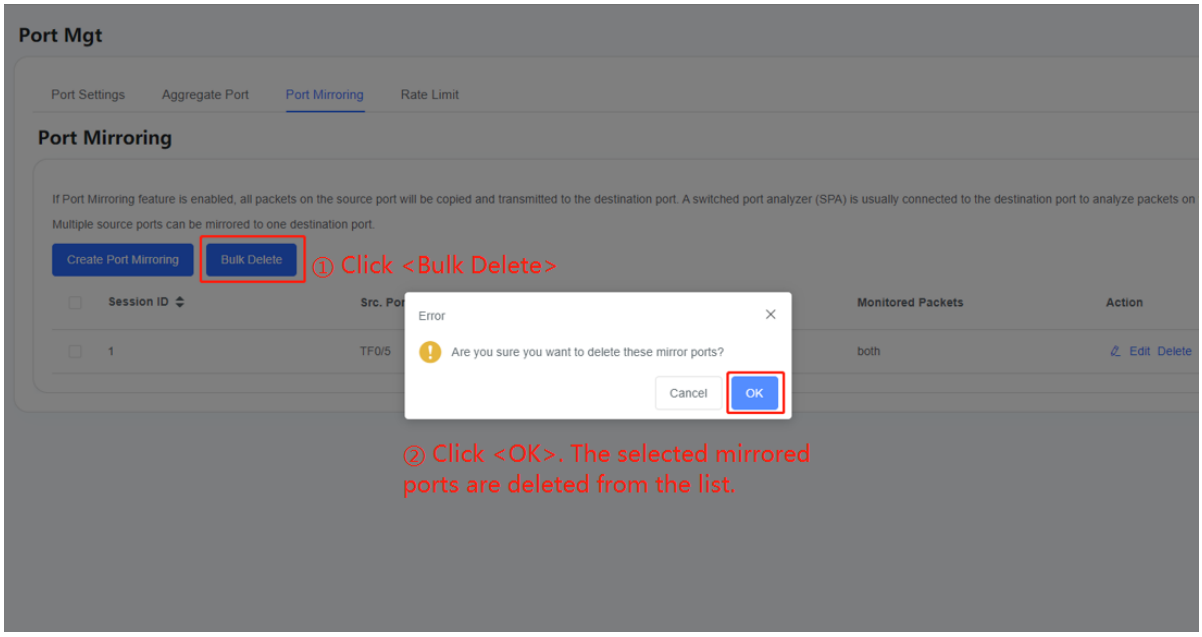

## Port Mirroring



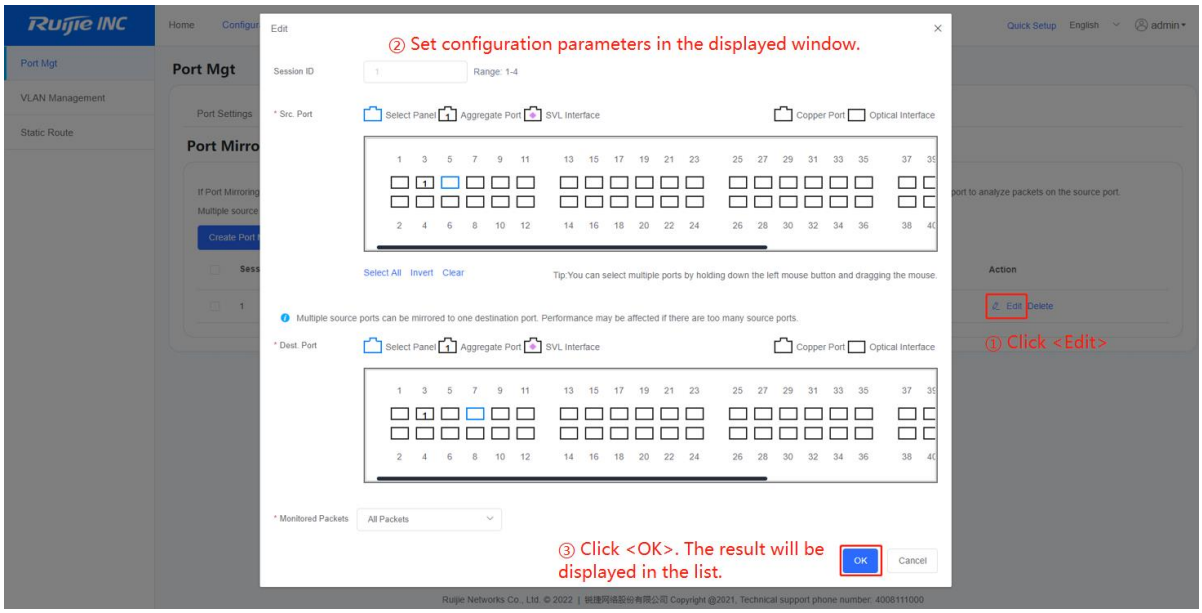
- **Creating port mirroring**



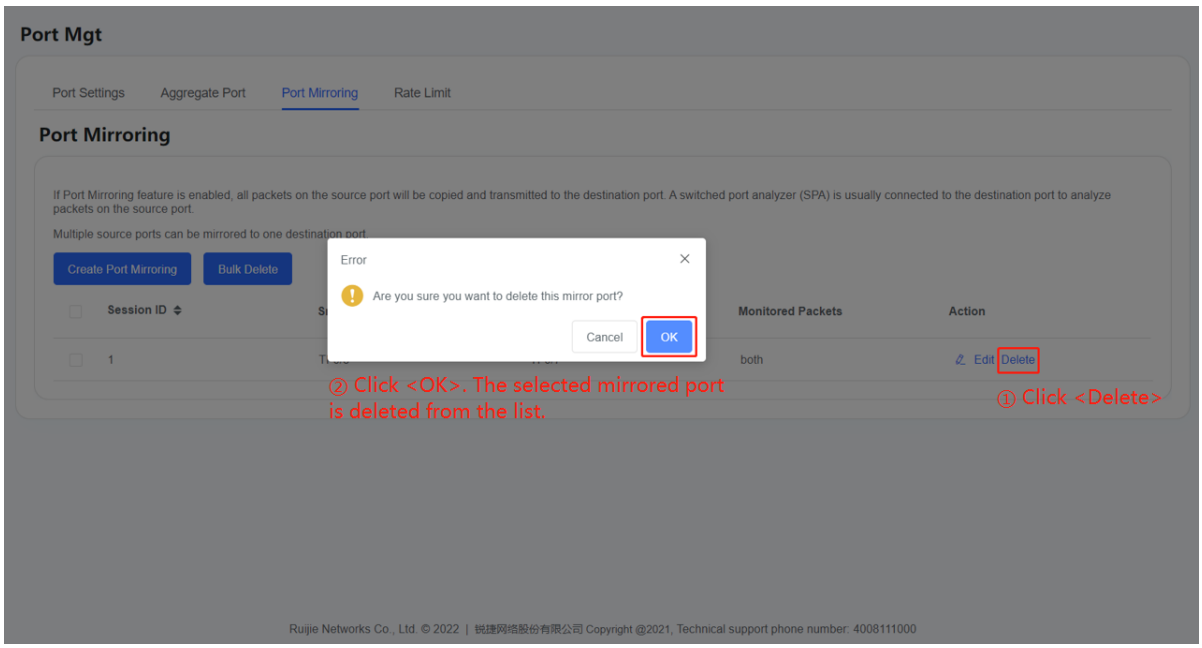

- **Deleting multiple mirrored ports**



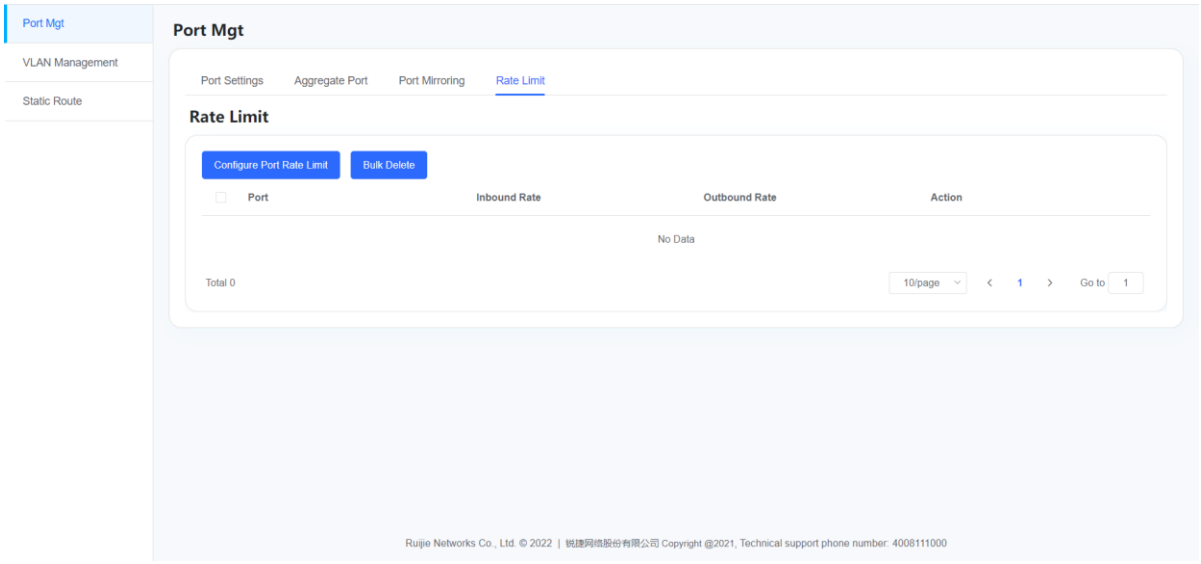

- **Editing a mirrored port**



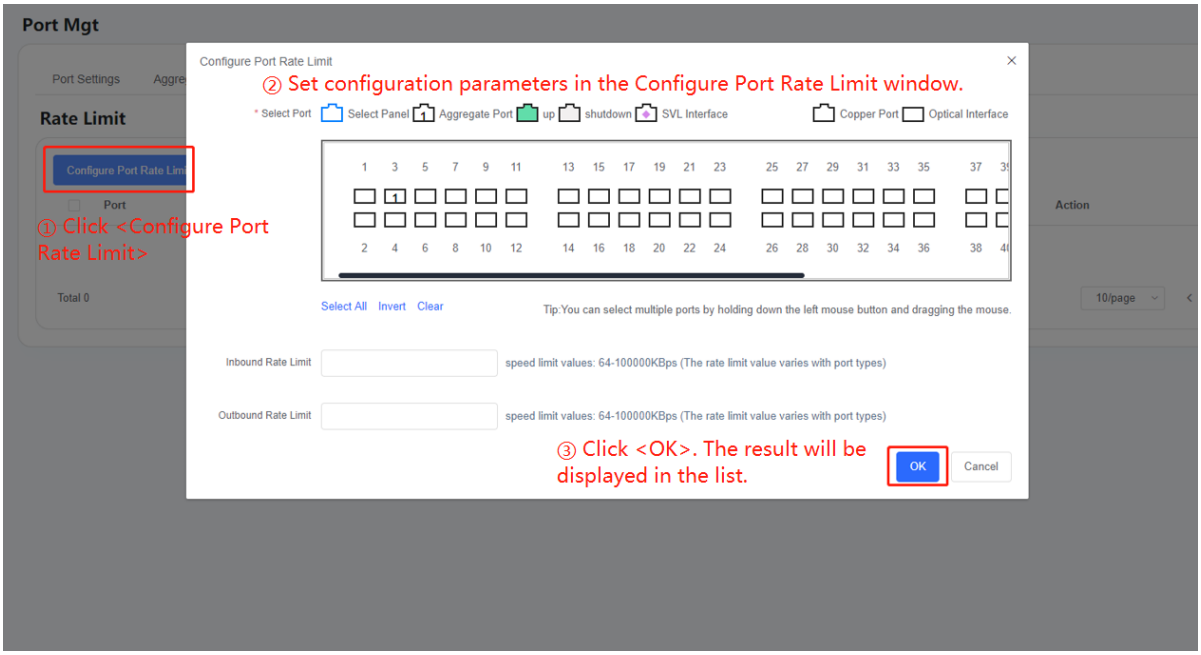

- **Deleting a mirrored port**



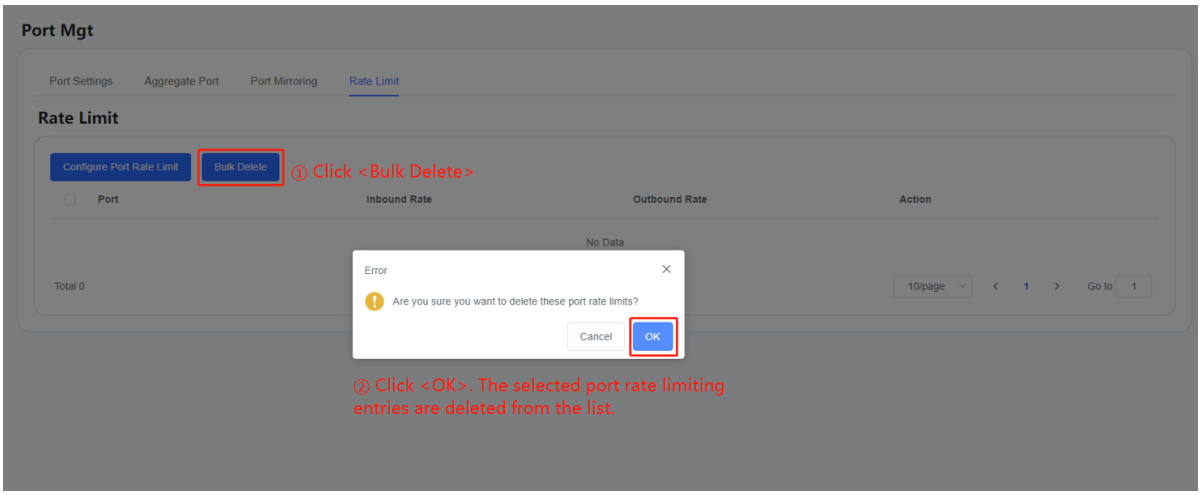
## Rate Limiting



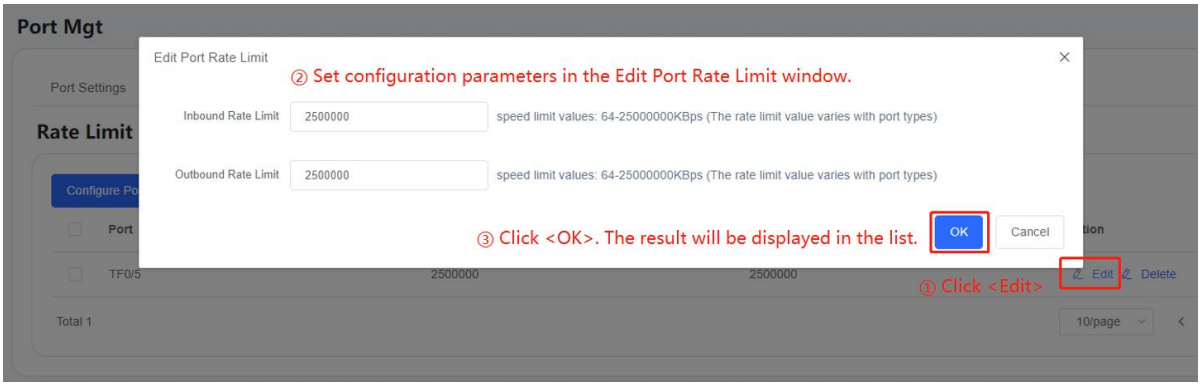

- **Configuring port rate limiting**



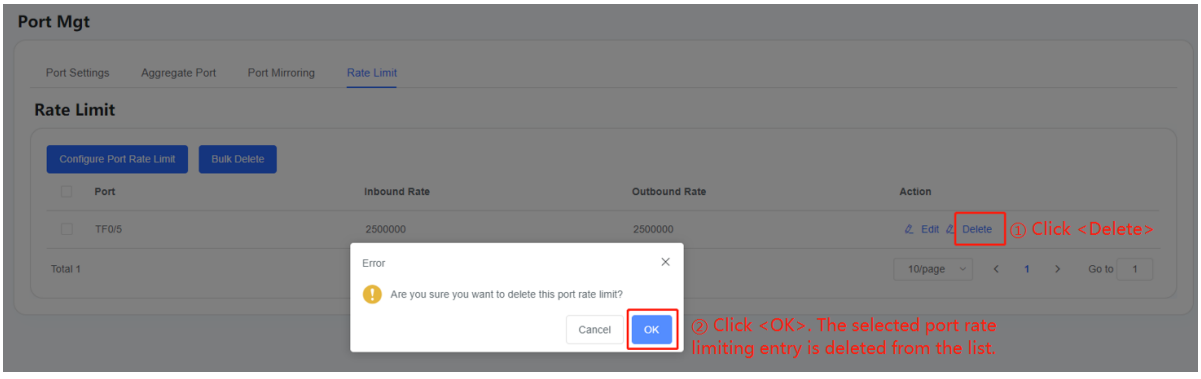

- **Deleting multiple rate limiting entries**




- **Editing a port rate limiting entry**

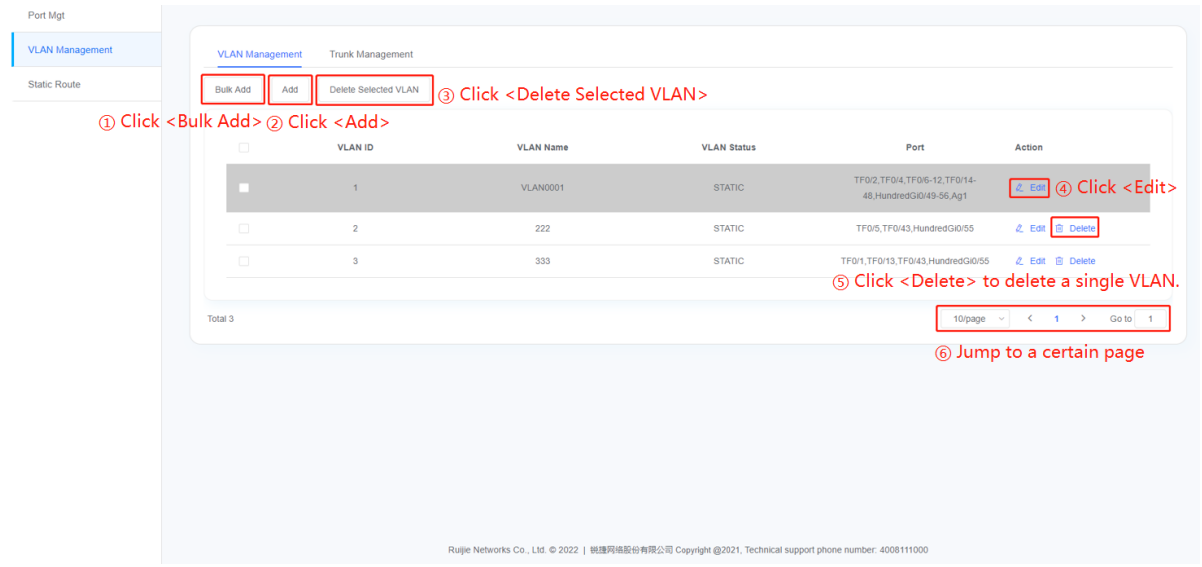



- **Deleting a port rate limiting entry**



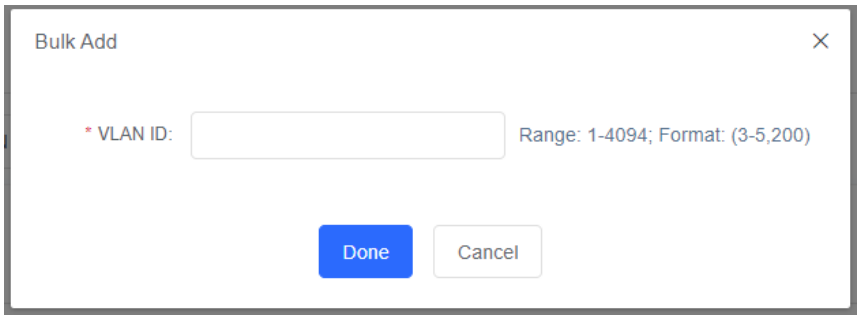
## 2. VLAN Management

### VLAN Management



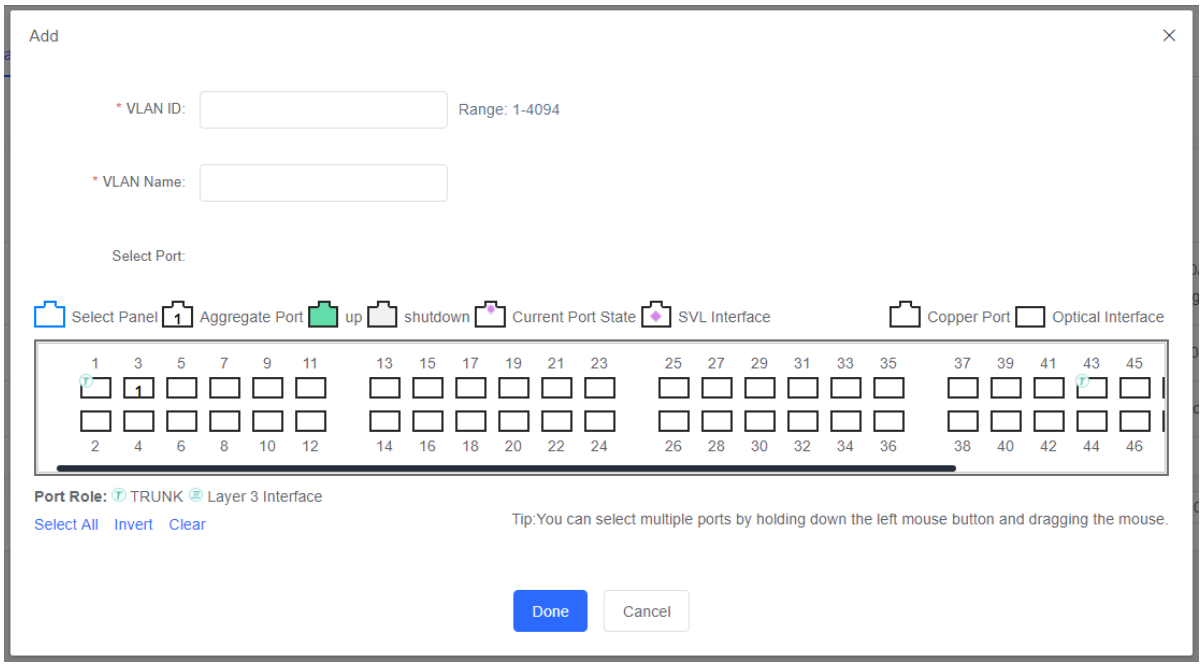

- **Adding multiple VLANs**

To add multiple VLANs, click Bulk Add and the **Bulk Add** window is displayed. Enter the VLAN ID and click Done.



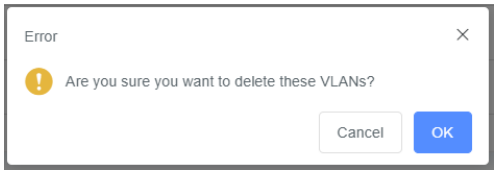

- **Adding a single VLAN**

To add a single VLAN, click Add and the **Add** window is displayed. Set configuration parameters and click Done.



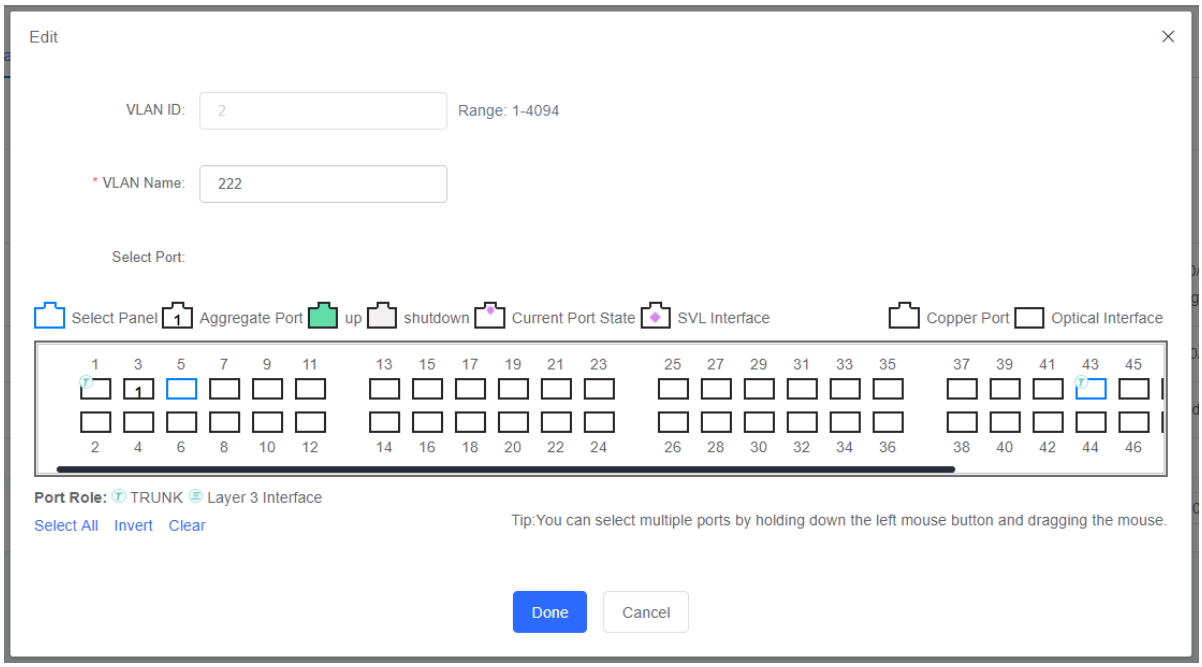

- **Deleting multiple VLANs**

To delete the selected VLANs, click ☐ before each VLAN to select multiple VLANs, then click Delete Selected VLAN. The error message is displayed. Click OK.



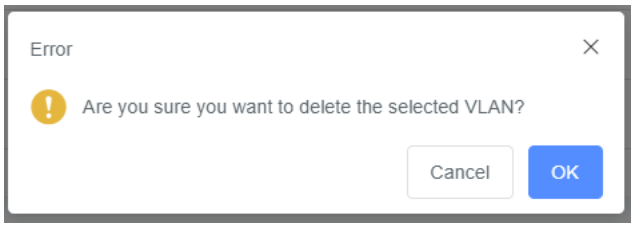

- **Editing a VLAN**

To edit a VLAN, click Edit, and the **Edit** window is displayed. Set configuration parameters and click Done.

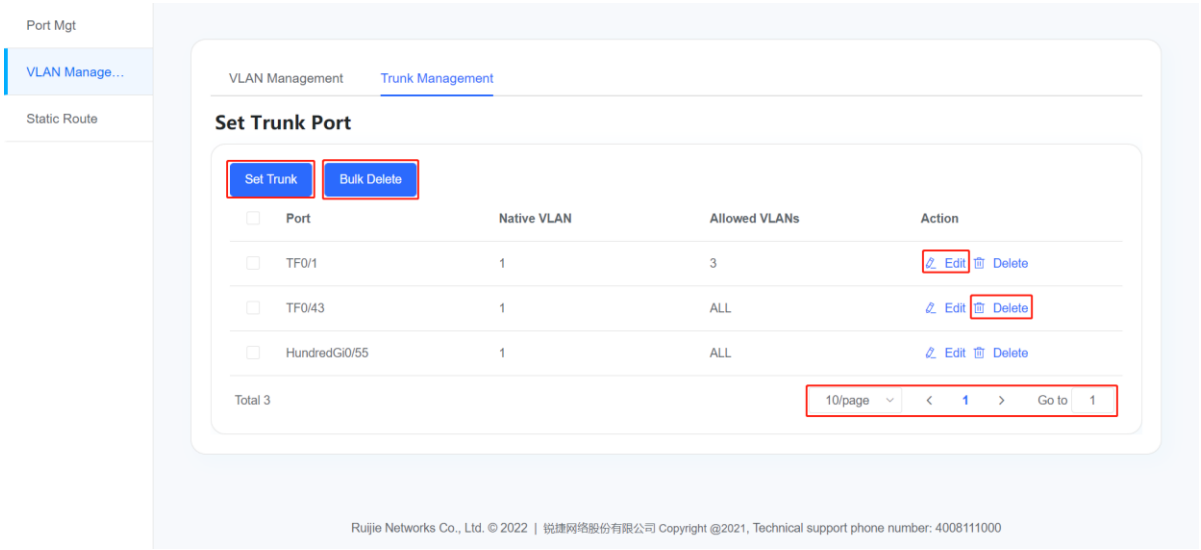



- **Deleting a VLAN**

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




### Trunk Management



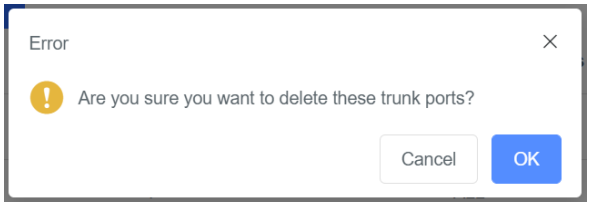

- **Setting a Trunk port**

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



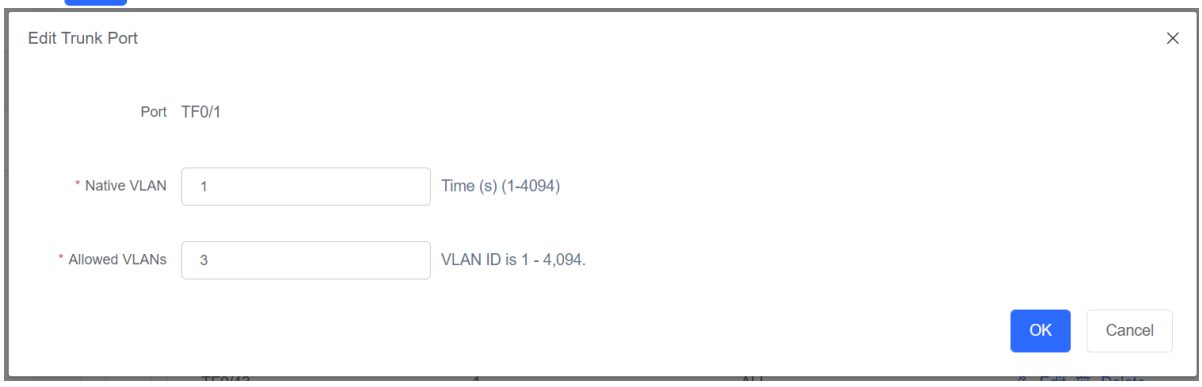

- **Deleting multiple trunk ports**

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



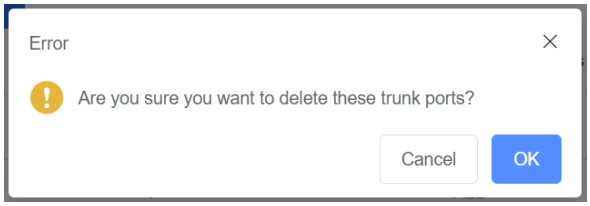

- **Editing a trunk port**

To edit a Trunk port, click Edit. The Edit Trunk Port window is displayed. Set configuration parameters and click OK.



- **Deleting a trunk port**

To delete a selected trunk port, click Delete . The **Error** dialog box is displayed. Click OK .

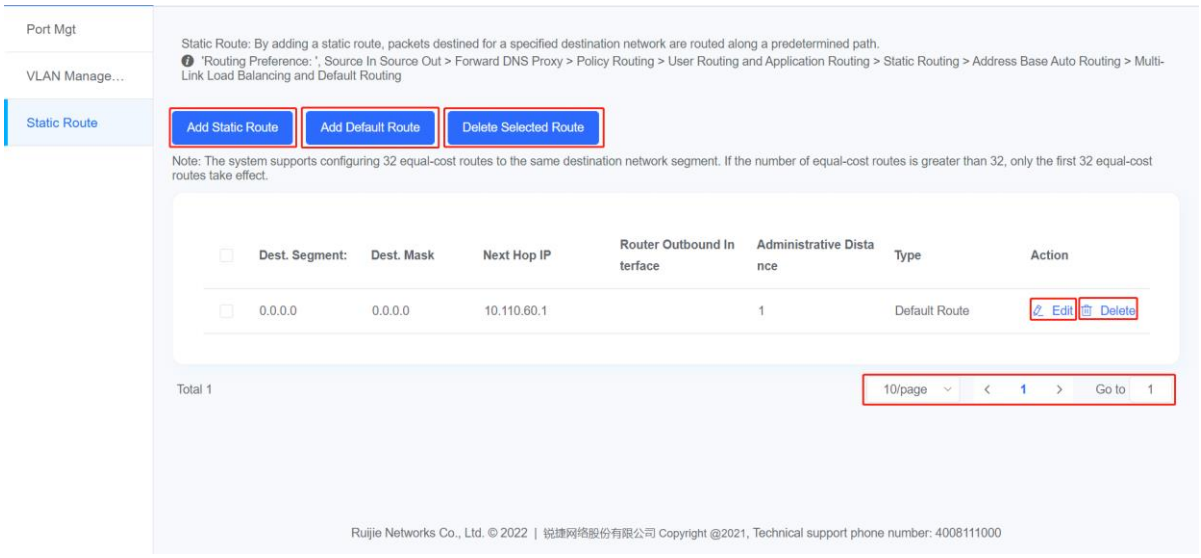



## 3. Static Route

Packets destined for a specified destination network are routed along a pre-determined path when a static route is configured. The routing priority is source in source out > forward DNS proxy > policy-based routing > user-defined routing and app-based routing > static route > auto routing > multi-link load balancing and default route.

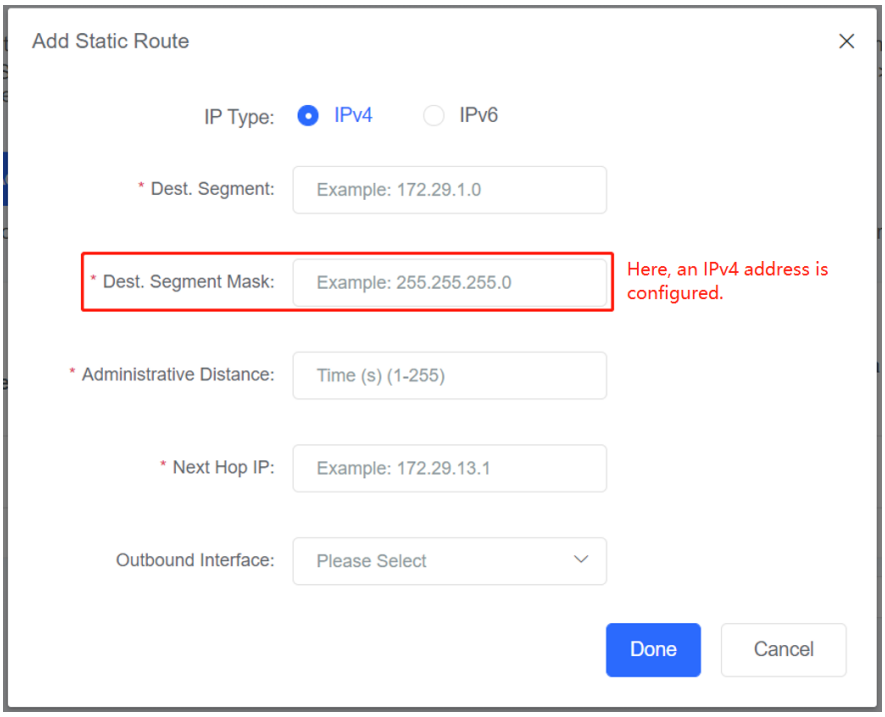
**Note**

The system supports up to 32 equal-cost routes to the same destination subnet. If over 32 equal-cost routes are configured, only the 32 equal-cost routes that are configured first will take effect.



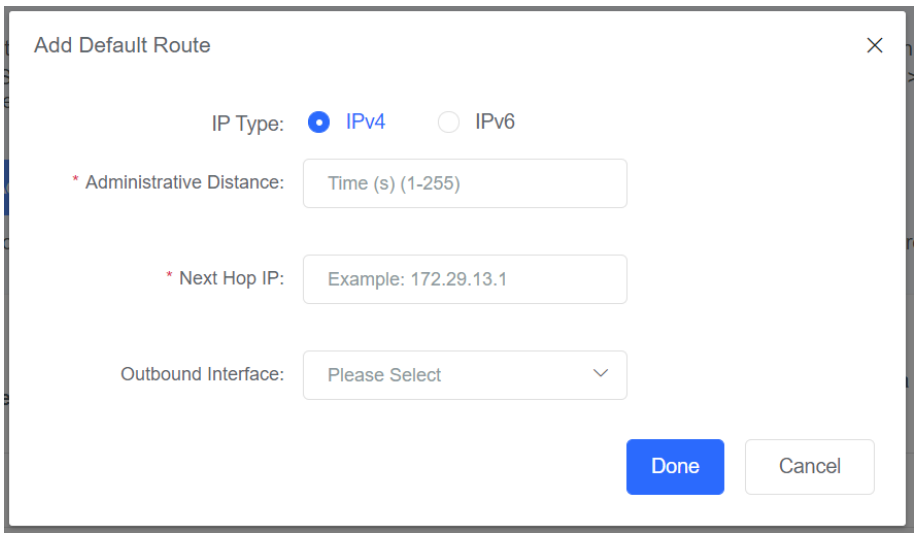

- **Adding a static route**

To add a static route, click **Add Static Route**. The **Add Static Route** window is displayed. Set configuration parameters and click Done .



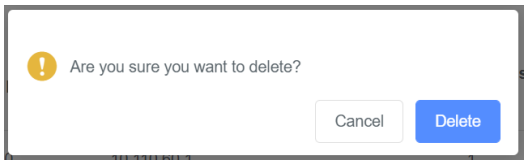

- **Adding a default route**

To add a default route, click Add Default Route. The **Add Default Route** window is displayed. Set configuration parameters and click Done.



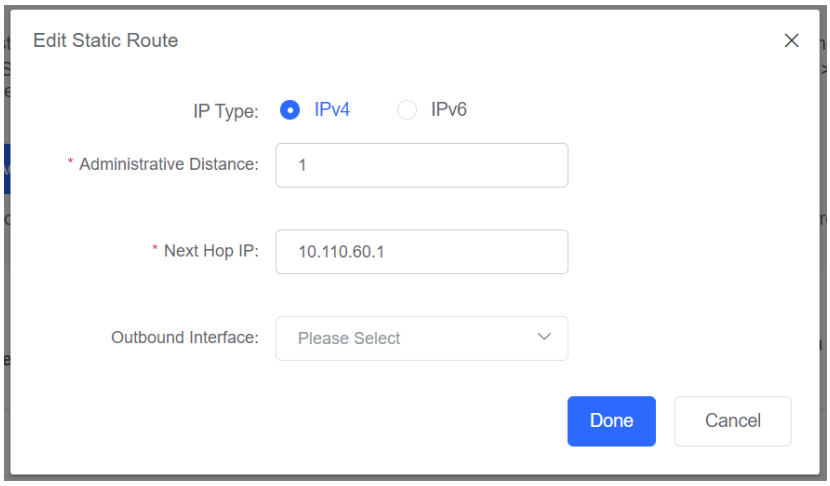

- **Deleting the selected routes**

To delete the selected routes, click next to each route to select multiple routes, and then click Delete Selected Route. A dialog box is displayed. Click Delete.



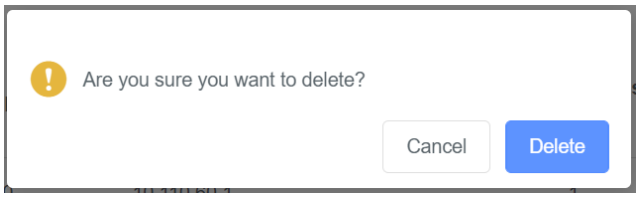

- **Editing a static route**

To edit a route, click Edit. The **Edit Static Route** window is displayed. Set configuration parameters and click Done.




- **Deleting a static route**

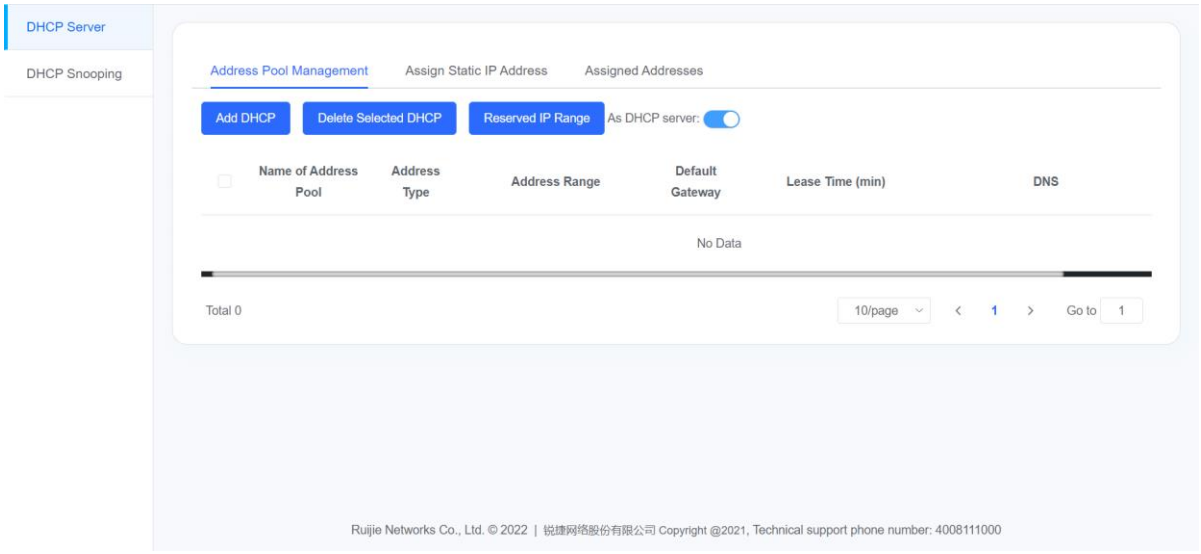
To delete a static route, click Delete. A dialog box is displayed. Click Delete.



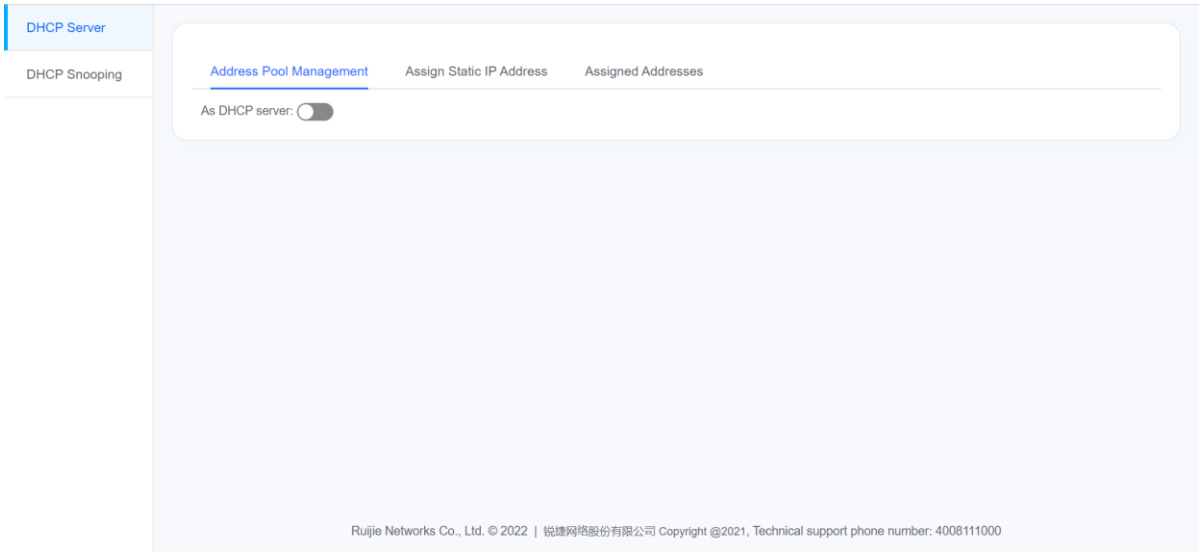

## 4. DHCP Server

### DHCP Address Pool Management

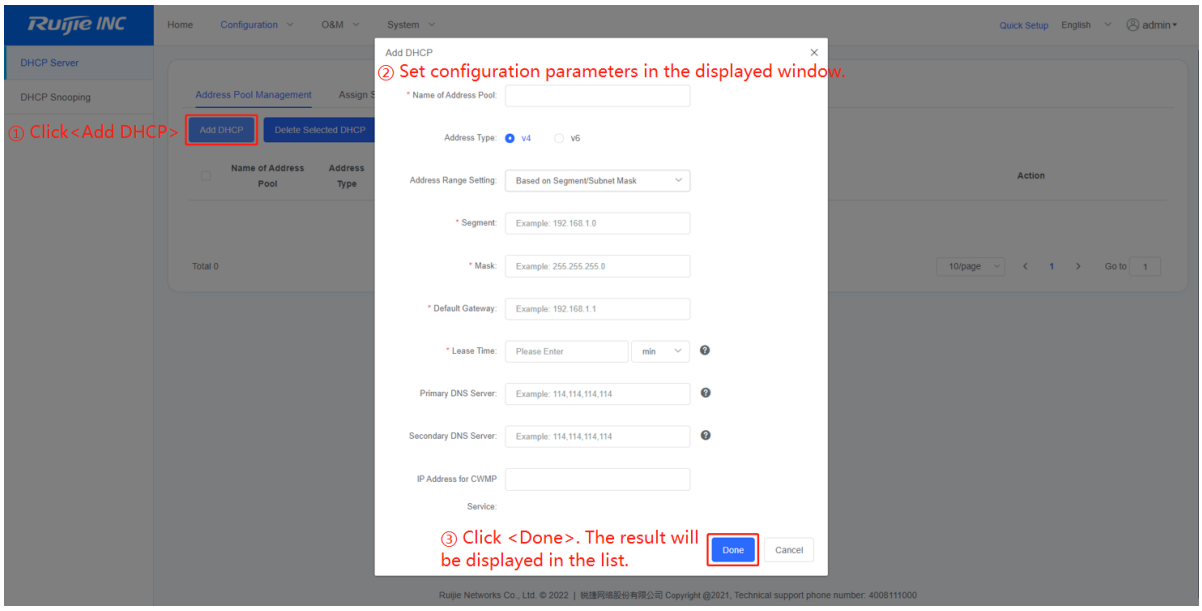
- **Enabling the DHCP server**



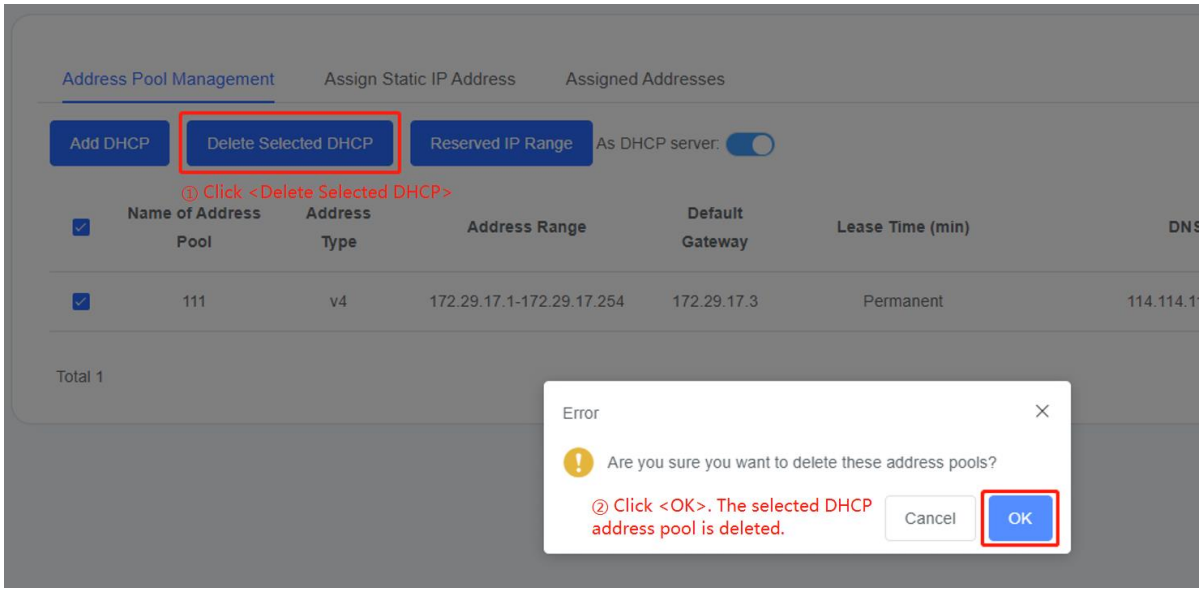

- **Disabling the DHCP server**



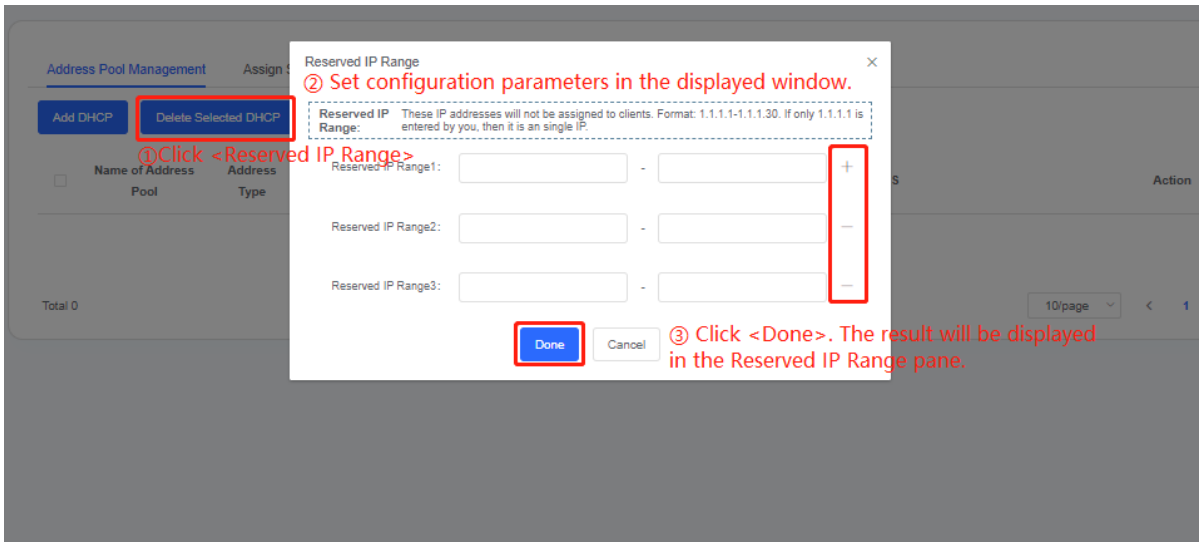

- **Adding a DHCP address pool**



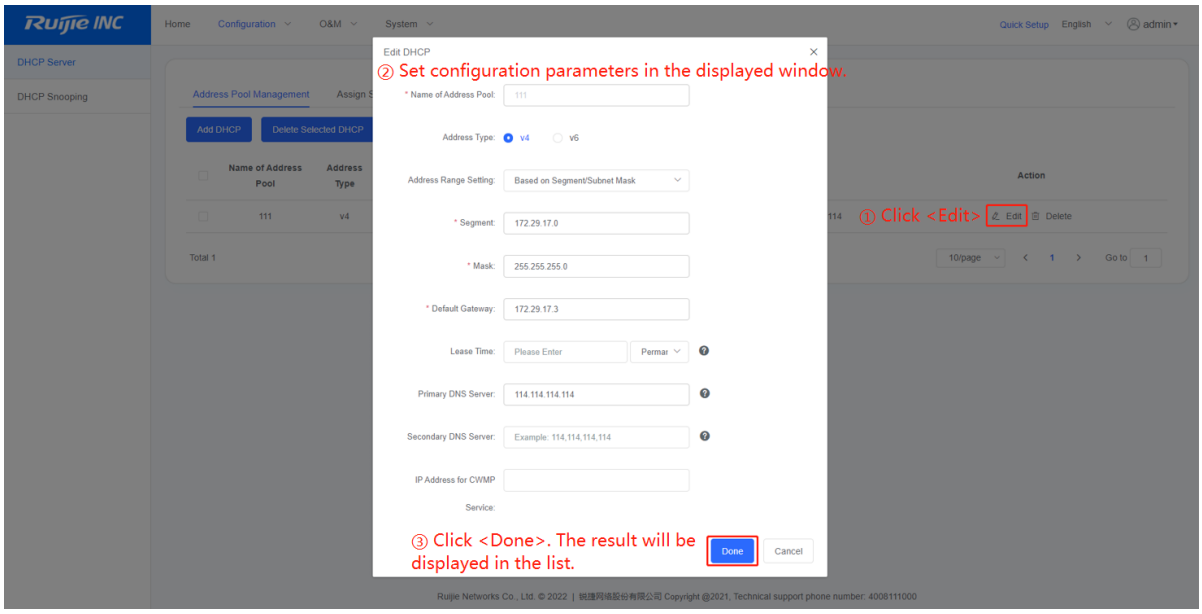

- **Deleting the selected DHCP address pool**



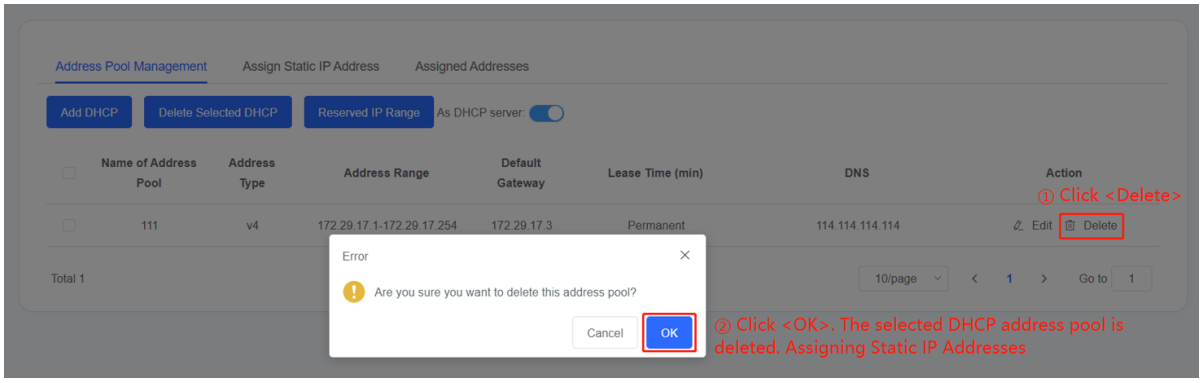

- **Configuring the reserved IP range**



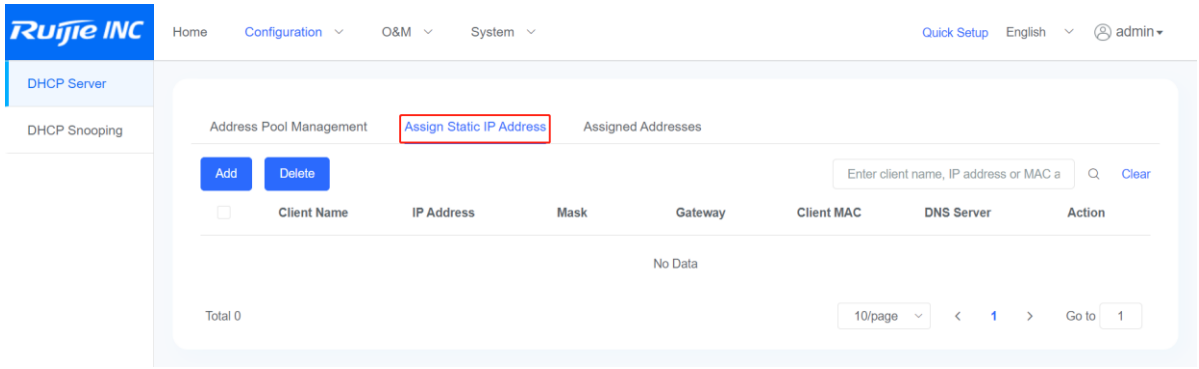

- **Editing a DHCP address pool**



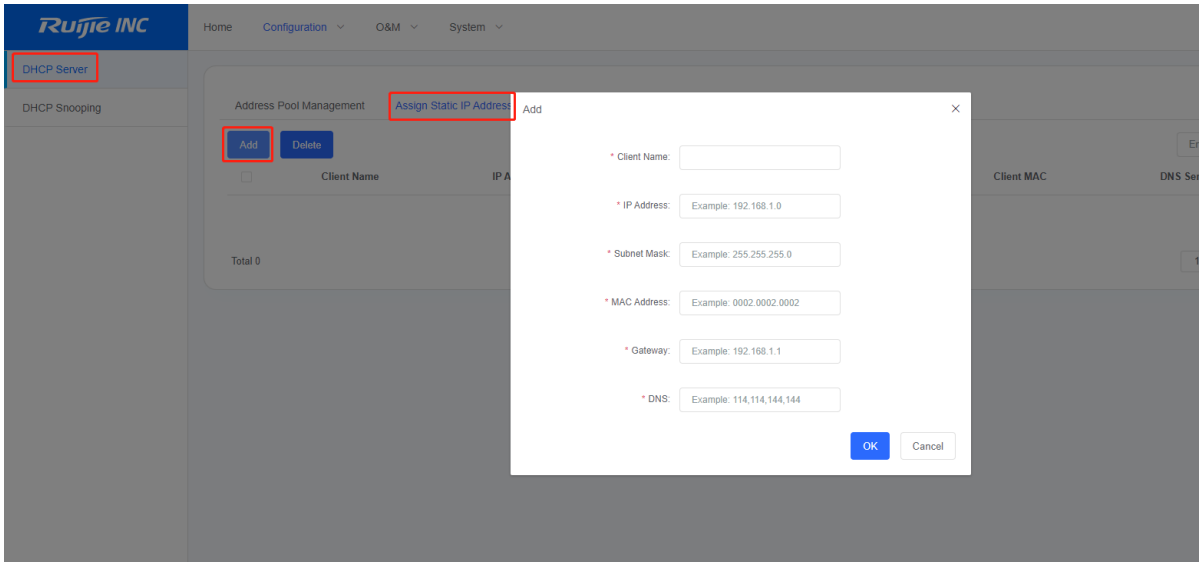

- **Deleting a DHCP address pool**



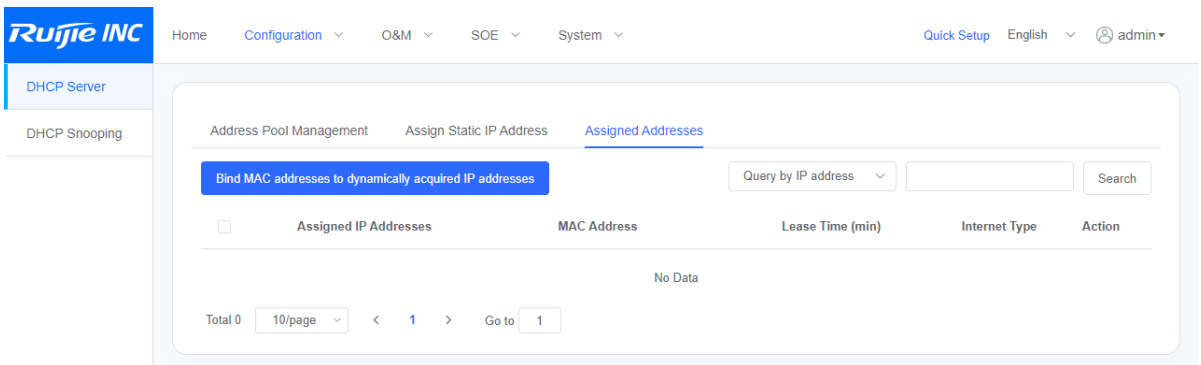
### Assigning Static IP Addresses



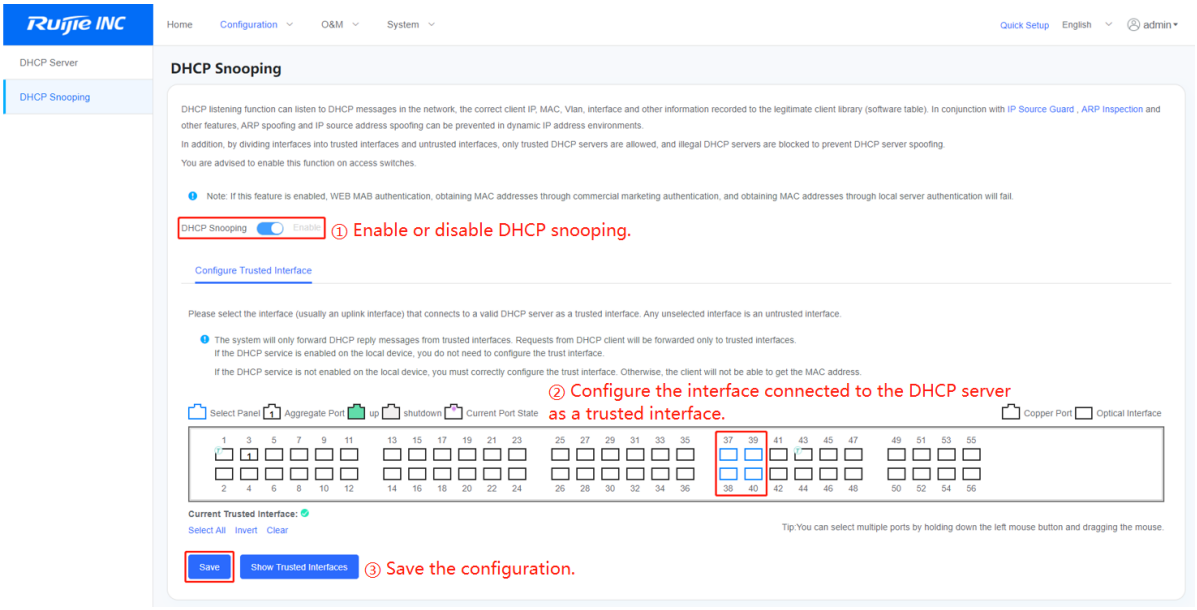

- Choose **DHCP Server** > **Assign Static IP Address** > **Add** to access the **Add static IP address** page and add a static IP address.




### The Assigned IP Addresses Page

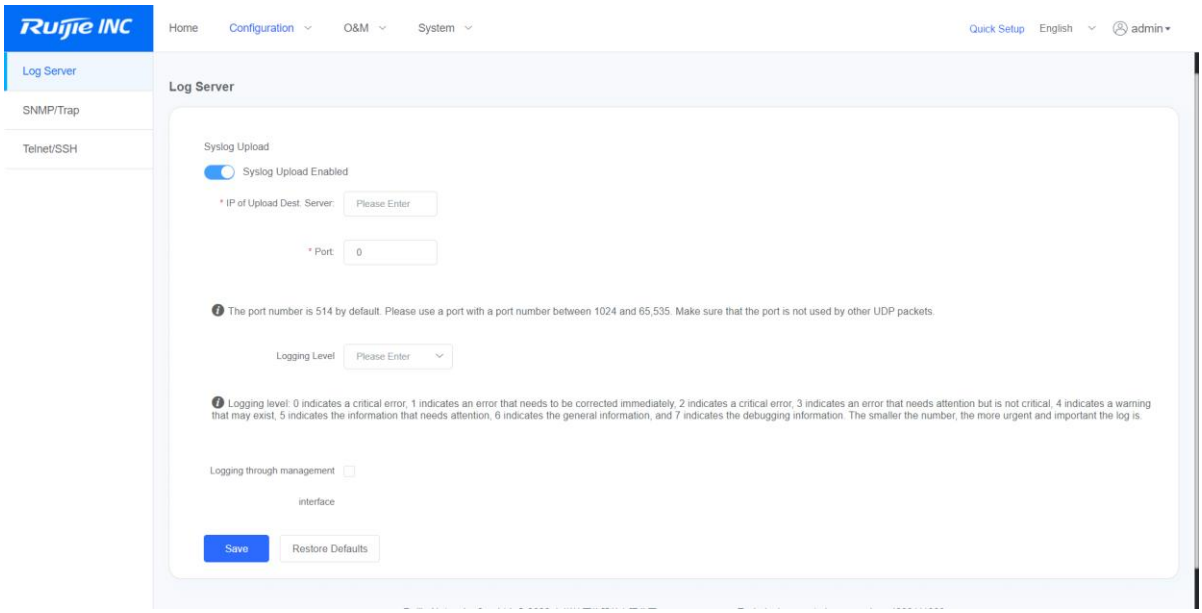


## 5. Configuring DHCP Snooping




## 6. Logs

### Configuring the Log Server




### Configuring SNMP or the Trap Function

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

- **SNMP Version**: indicates the SNMP version supported by the switch, which can be SNMPv2 or SNMPv3.
- **Location**: indicates the location the switch.
- **SNMP Community String**: is used by the management host to connect to a switch.
- **Trap Community String**: is used to connect to the management host. When an alarm is generated on a

switch, 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.

SNMPv3 is more secure than SNMPv2. The encryption password and authentication password of SNMP users need to be configured.





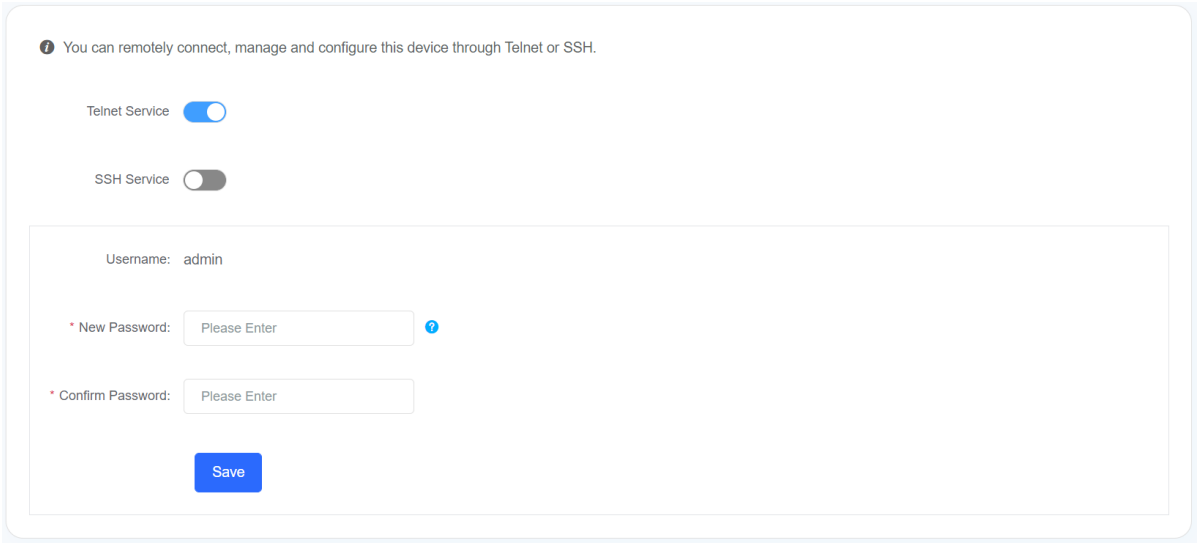


**SNMP V2**: Select V2 . Set configuration parameters and click Save to submit the configuration.

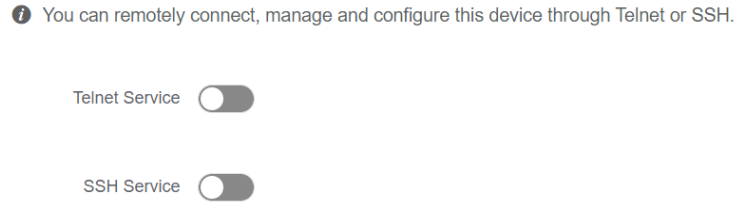
**SNMP V3**: Select V3 . Set configuration parameters and click Save to submit the configuration.

**Clear**: Click Clear to clear the SNMPv2 or SNMPv3 configuration.

### Configuring Telnet or 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.



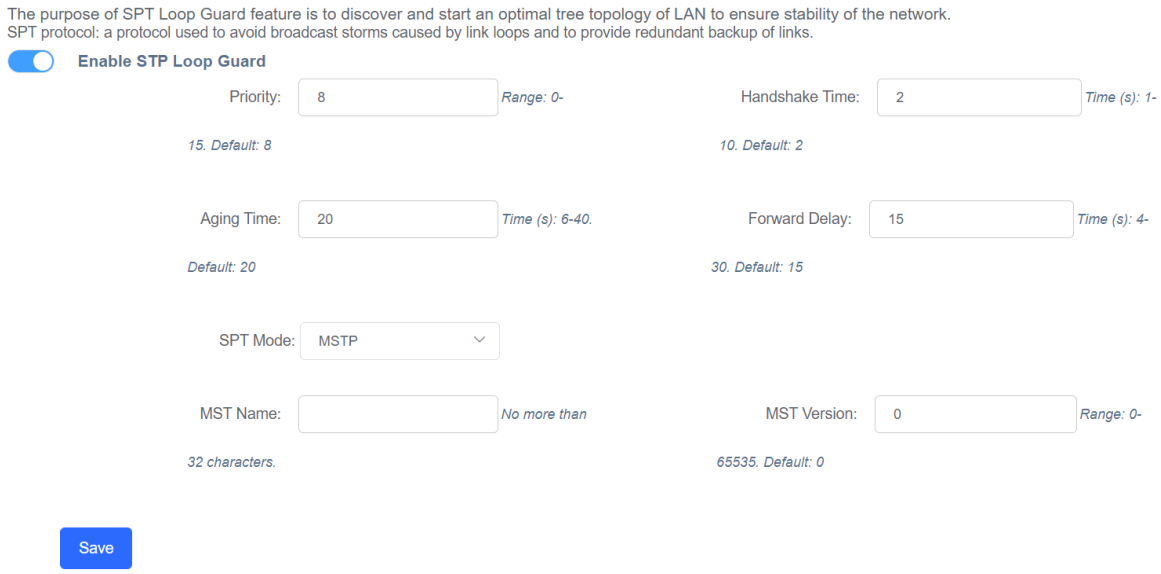

When configuring a switch through Telnet, you must log in with this password.

**Note**

Remember the new password for login next time.

## 7. STP Loop Guard

### Global Settings




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

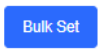
**Global Settings**: Enable **STP Loop Guard** and set configuration parameters. There are three STP modes, which are STP, RSTP, and MSTP. Click  to submit the global settings.

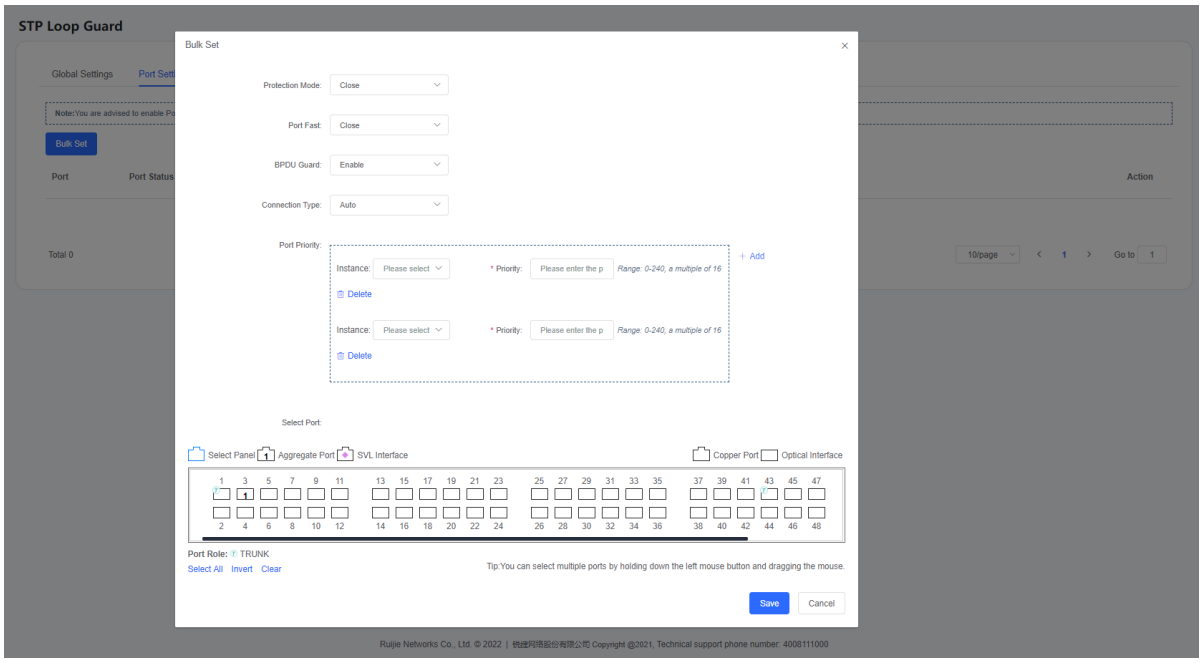
### Port Settings

**Note**

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

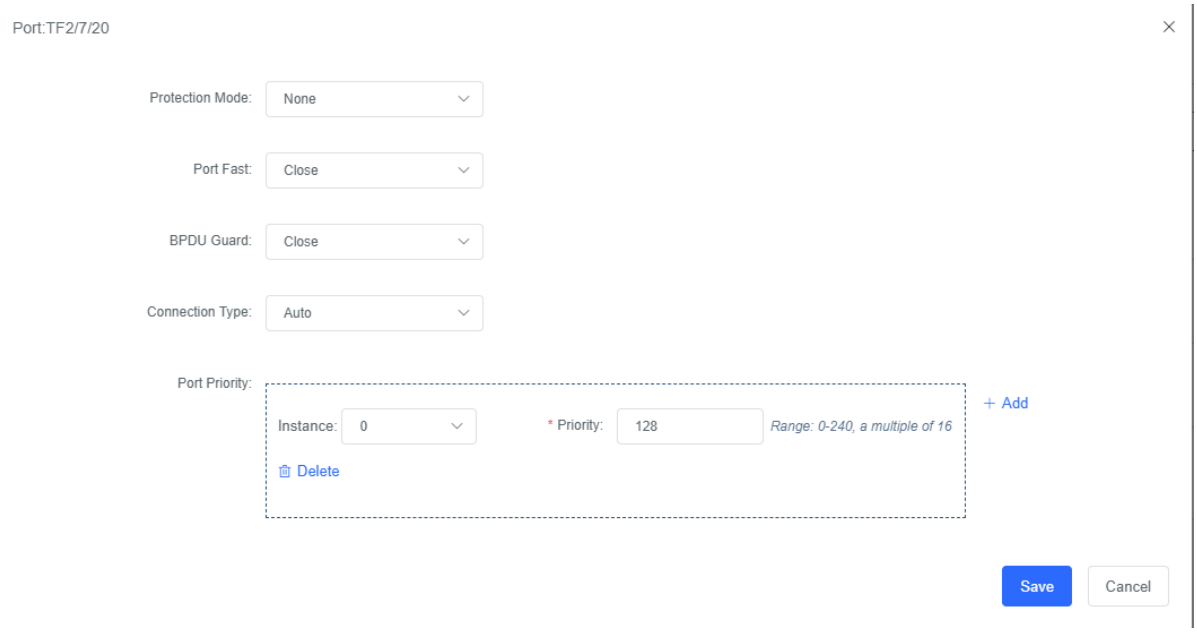
#### 1. Setting the STP loop guard function for multiple ports

Click  . The **Bulk Set** window is displayed. Set configuration parameters. Add or delete the port priority by clicking  or  . Select multiple ports, and click  to submit the configuration. Then the result will be displayed in the list.

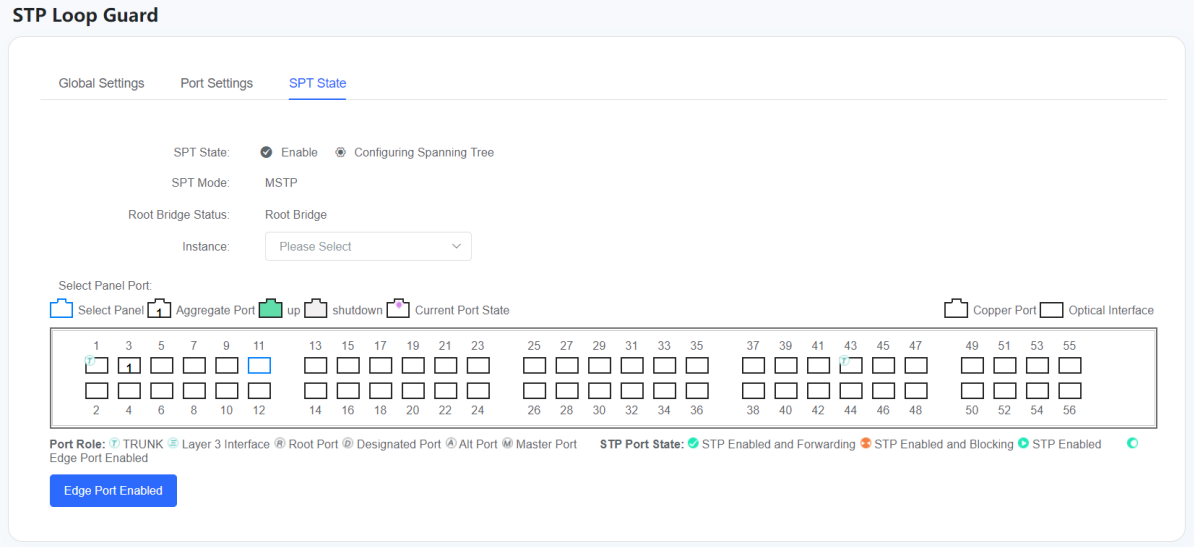



## 2. Editing the STP loop guard function for a single port

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.



### STP State




**Disable Edge Port**: Select the Up port  and click Edge Port Enabled. The icon of Port 23 is changed to .

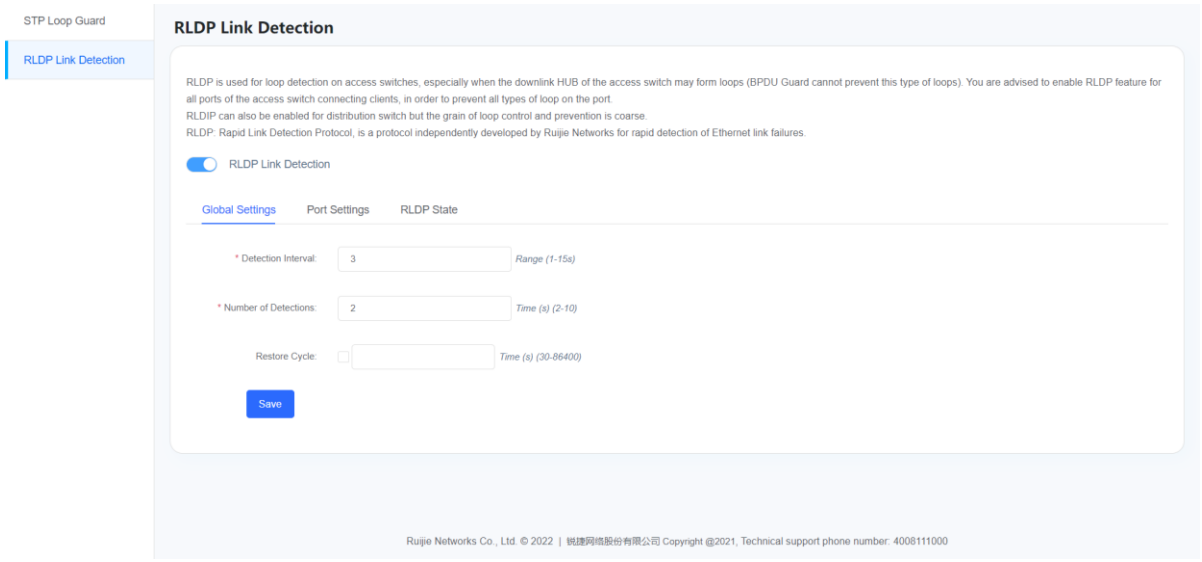
**Enable Edge Port**: Select the Up port  and click Edge Port Enabled. The icon of Port 23 is changed to .

## 8. RLDP Link Detection

The Rapid Link Detection Protocol (RLDP) is independently developed by Ruijie Networks for rapid detection of Ethernet link failures. It is used for loop detection on access switches in a specific situation where a loop occurs on the downstream hub of the access switch (BPDU guard cannot prevent this type of loops). You are advised to enable RLDP on all ports of the access switch connecting to clients, in order to prevent all types of loops on these ports.

RLDP can also be enabled for distribution switches, but the loop guard performance is coarse-grained.

### Global Settings




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

2. **RLDP Link Detection**: Click RLDP Link Detection to enable or disable RLDP.

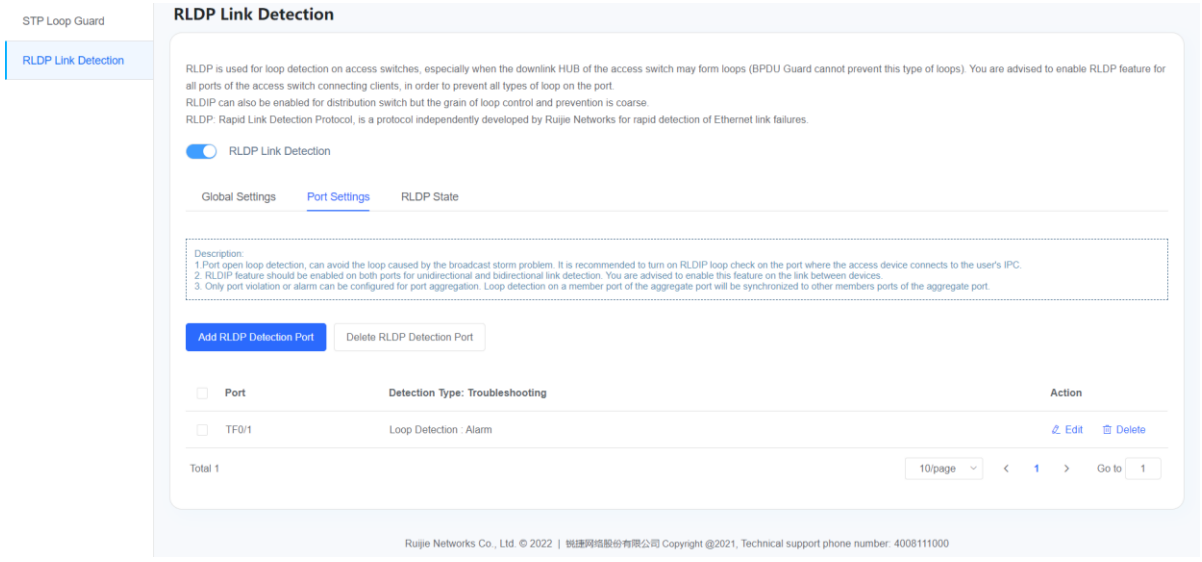
### Port Configuration

**Note**

(1) Enabling loop detection on a port can prevent broadcast storm caused by loops. You are advised to enable loop detection on ports of the access switch connecting to a client.

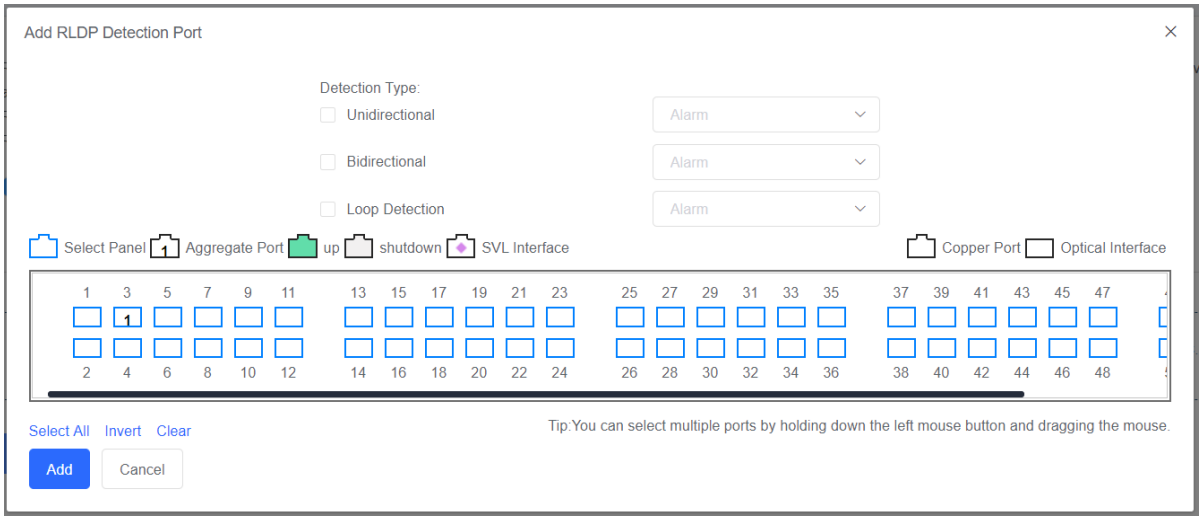
(2) RLDP must be enabled on both ports for unidirectional and bidirectional link detection. You are advised to enable RLDP on the link between switches.

(3) Only port violation or alarm detection types can be configured for aggregated ports. Loop detection on a member port of the aggregated port will be synchronized to other member ports of the aggregated port.



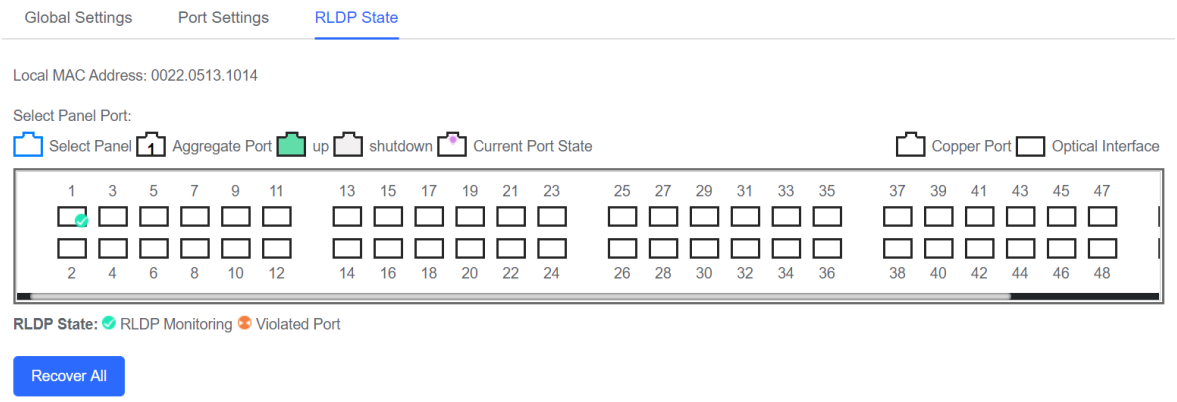

**1. Adding an RLDP-enabled port**

Click Add RLDP Detection Port. The **Add RLDP Detection Port** window is displayed.




RLDP involves unidirectional link detection, bidirectional link detection, and loop detection. Options in the drop-down list boxes corresponding to these three types include **Alarm**, **Disable port learning and forwarding**, **Port violation**, and **Disable SVI**. You can select multiple ports one by one, or using the Select All Invert Clear button. Click Add to submit the configuration. The result will be displayed in the list.

**RLDP State**



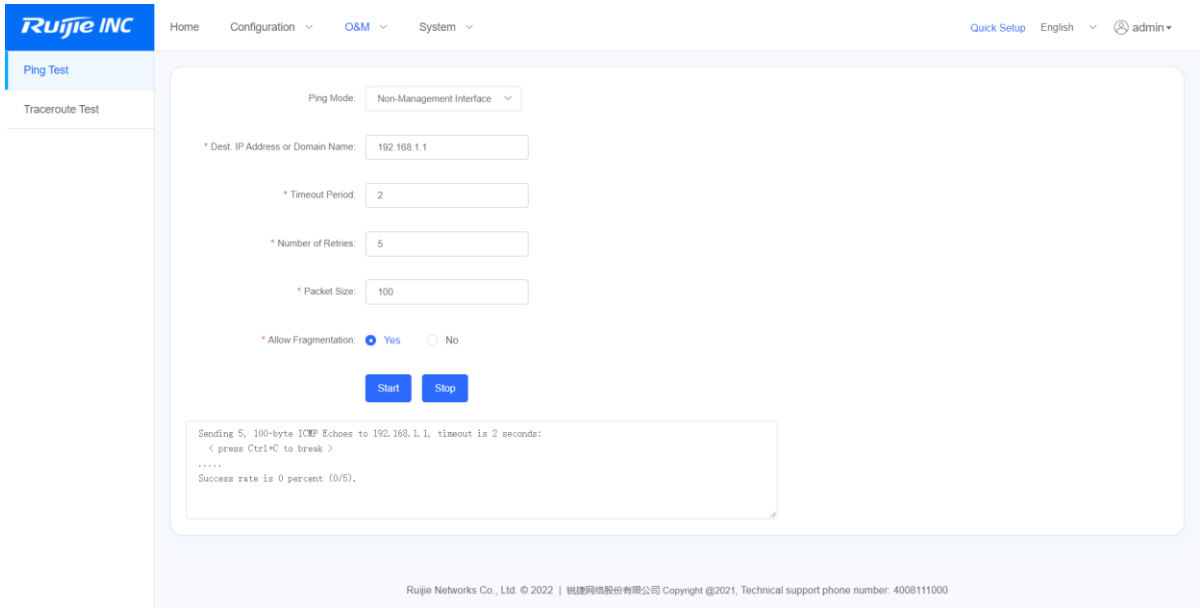

**RLDP State**: You can select RLDP Monitoring or Violated Port.

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

## 1.3.6 O&M

### 1. Ping or Tracert

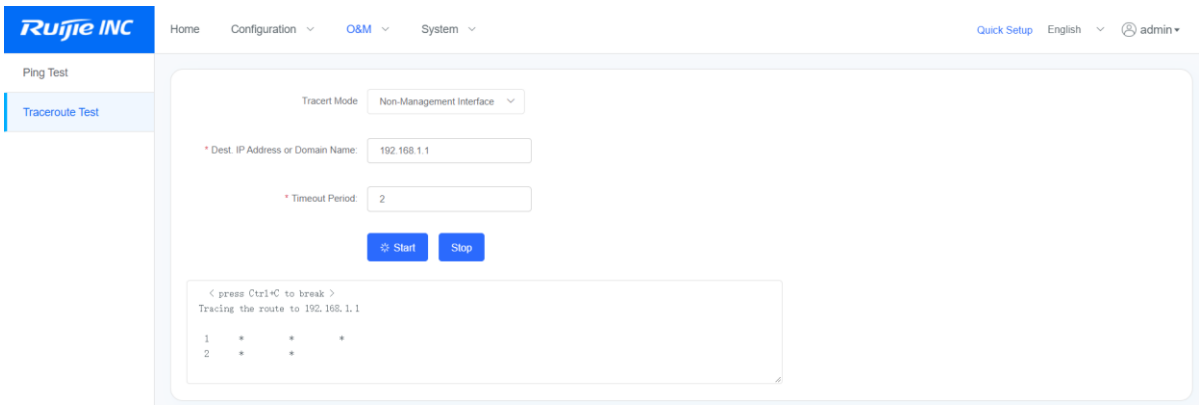
#### Performing a Ping Test




1. **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**, and there may be multiple management interfaces. Enter the destination IP address or domain name, timeout period, number of attempts, and packet size. The **Allow Fragmentation** item is displayed only when **Ping Mode** is set to **Non-Management Interface**. After setting configuration parameters, click Start to run the ping test. After the ping test is complete, the test results will be displayed.

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

#### Performing a Tracert Test



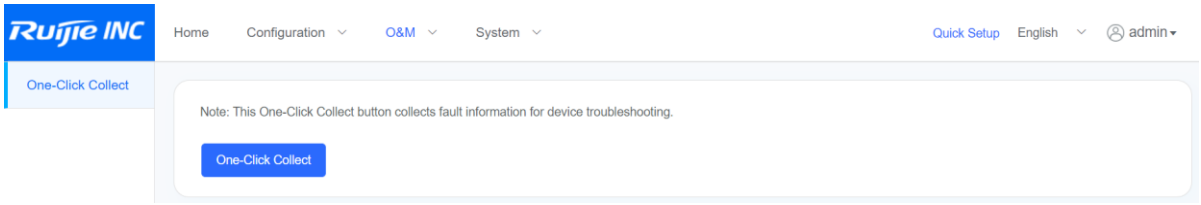

1. **Start**: Select **Non-Management Interface** from the **Tracert Mode** drop-down list box to select the tracert mode. You can select **Non-Management Interface** and **Management Interface**, and there may be multiple

management interfaces. 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.

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

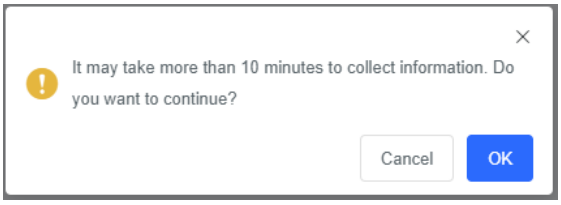
## 2. Performing One-Click Collection

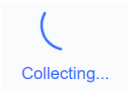
You can use the **One-Click Collect** function to collect switch fault information for troubleshooting.



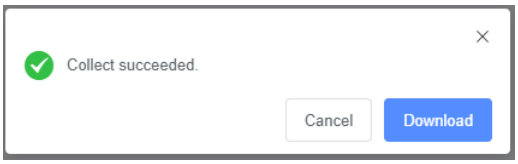

Collecting fault information may take about 10 minutes. After the collection is complete, you can download the collected fault information to a file named **tech_ vsd0_ 20210716142650.tar.gz**.

**One-Click Collect**: Click One-Click Collect. The **Error** dialog box is displayed.




Click OK. The collecting process starts, and 

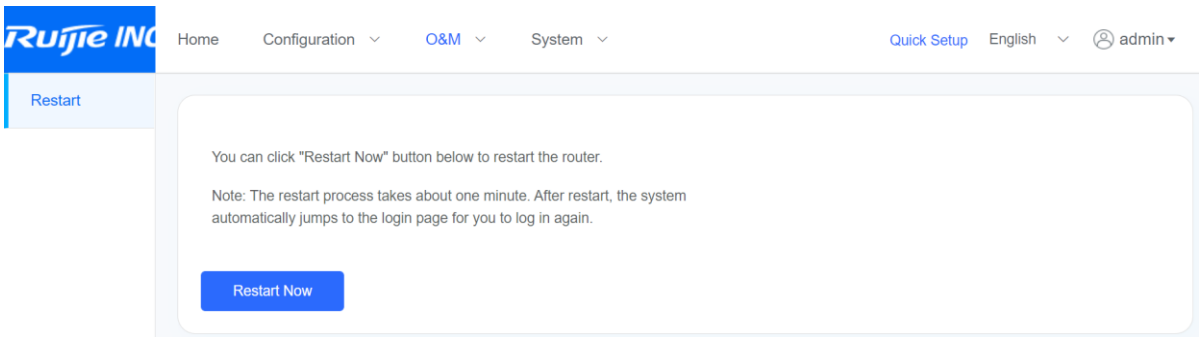
is displayed. After the collection process is complete, the **Error** dialog box is displayed.




Click Download to download the collected information in a **tar.gz** compressed file.

## 3. Restarting the Switch

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.



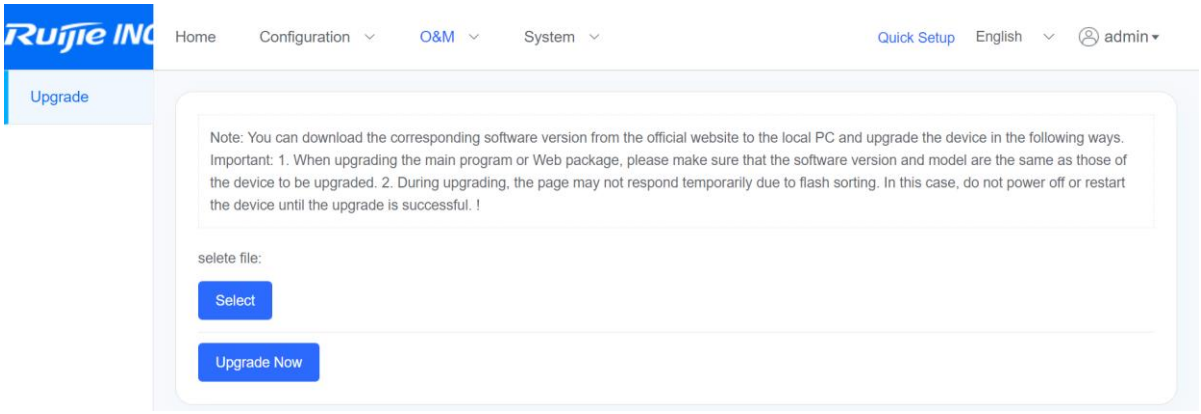
## 4. Upgrading the Switch

**Note**

You can download the required software version file from Ruijie Networks's official website to the local PC and upgrade the switch using the downloaded file.

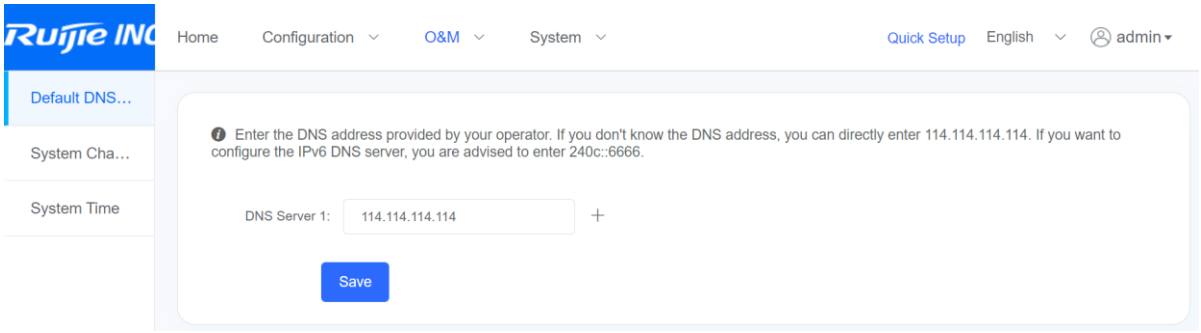
**Caution**

1. When upgrading the main program or the web package, ensure that the version and model are the same as those of the current switch.
2. 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.



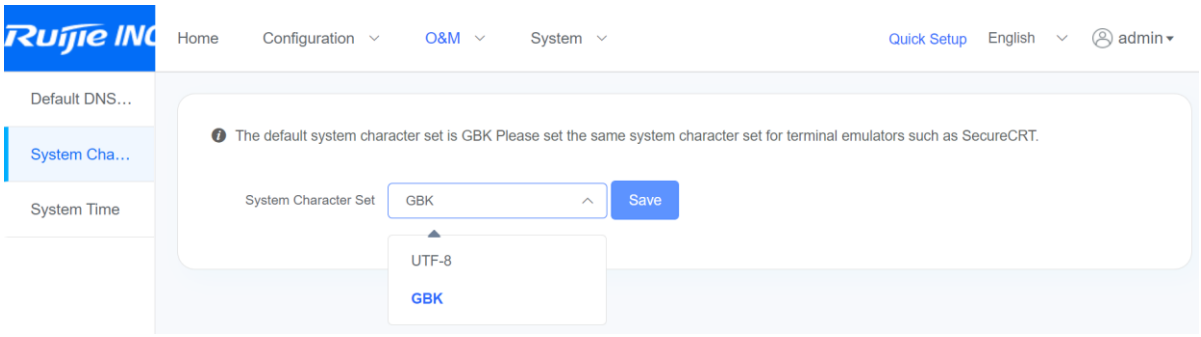

## 5. Basic Configurations

### Default DNS Server



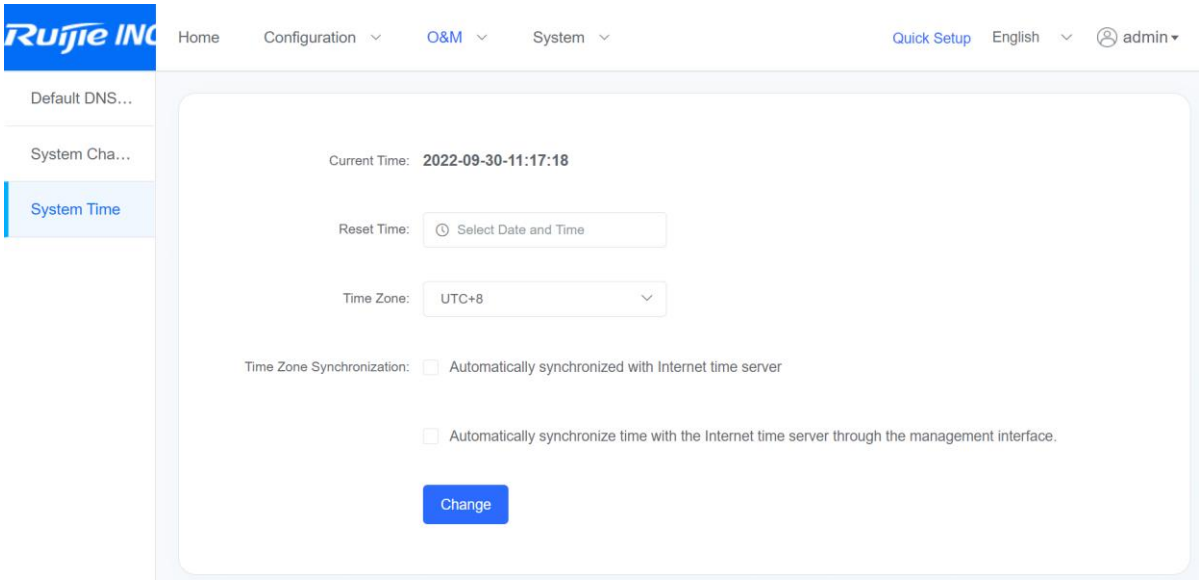

1. You can click + to add a DNS server, click × to delete a DNS server, or click Save to submit the configuration.

### System Character Set




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

### System Time

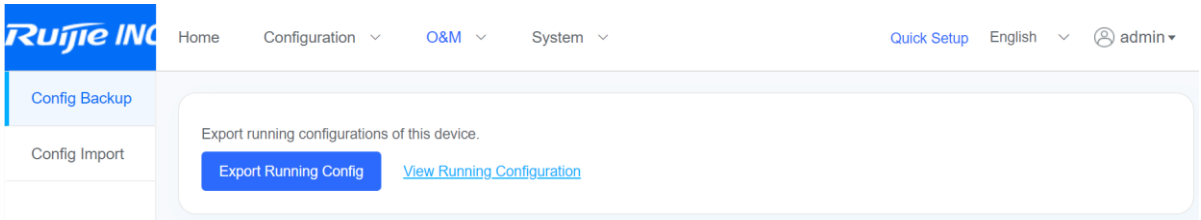



You can manually select the system time or select **Time Zone Synchronization** to automatically synchronize the switch system time with the Internet time server.

## 6. Configuration Management

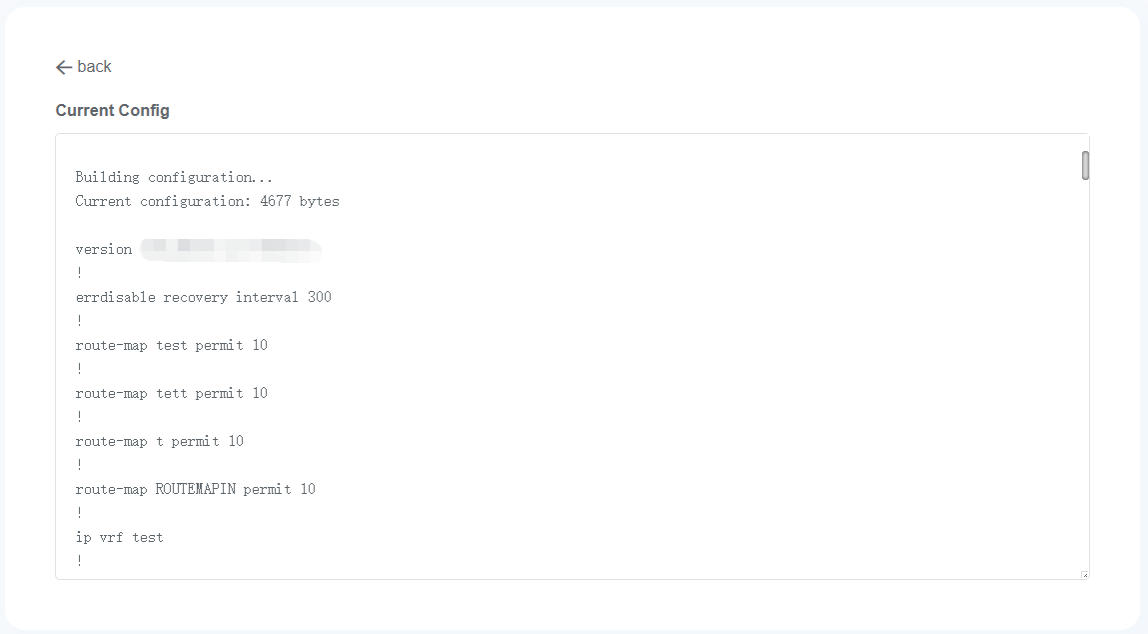
### Performing Configuration Backup

The configuration backup function enables you to import or view the running configuration of the switch.

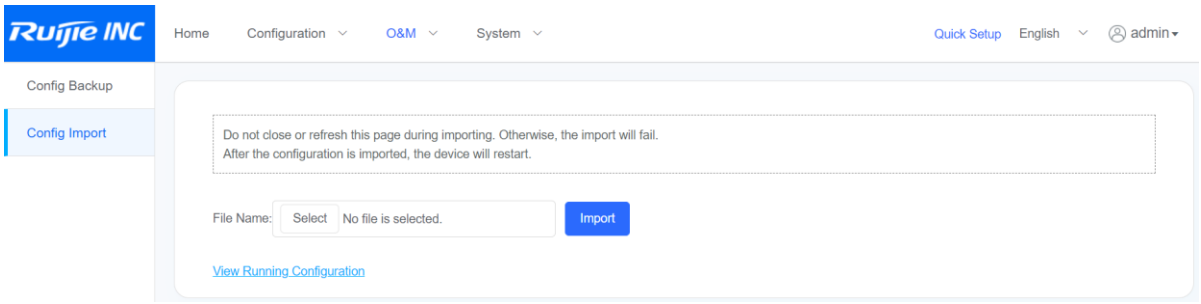



1. **Export running configuration**: You can click Export Running Config to generate the **config.text** text file.

2. **View running configuration**: You can click View Running Configuration to switch to the **Current Config** page.




### Importing Configurations

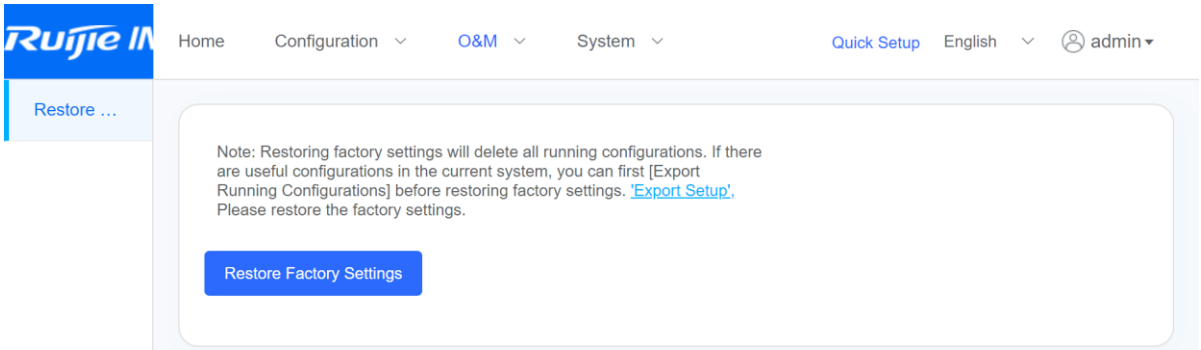



1. **Import configurations**: You can click Select to select the configuration file to be imported, and then click Import to import the configuration file.

2. **View running configuration**: You can click View Running Configuration to switch to the **Current Config** page.

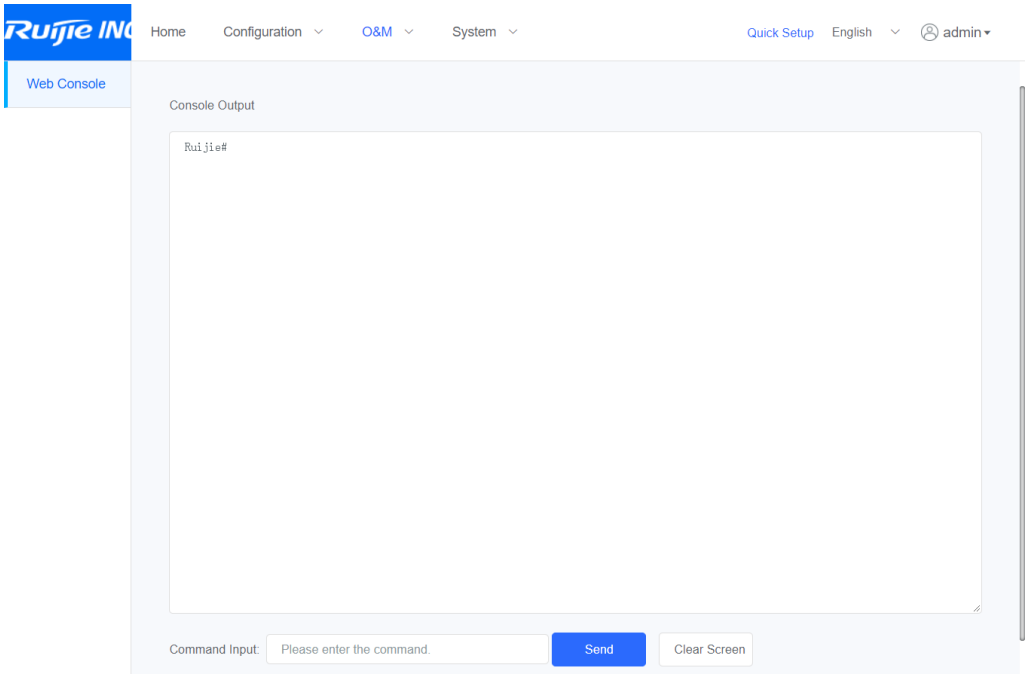
## 7. Restoring Factory Settings

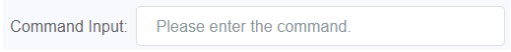
You can click **Restore Factory Settings** to delete all the configurations of the switch, and restore the switch to factory settings. To save the current configuration, you are advised to export the current configuration by clicking **Export Setup**.

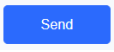


### 8. Web Console

The web console simulates the connection of a client connection tool such as xshell, rt, mobaxterm to the controller of the switch.




1. Enter a command in 

and click 

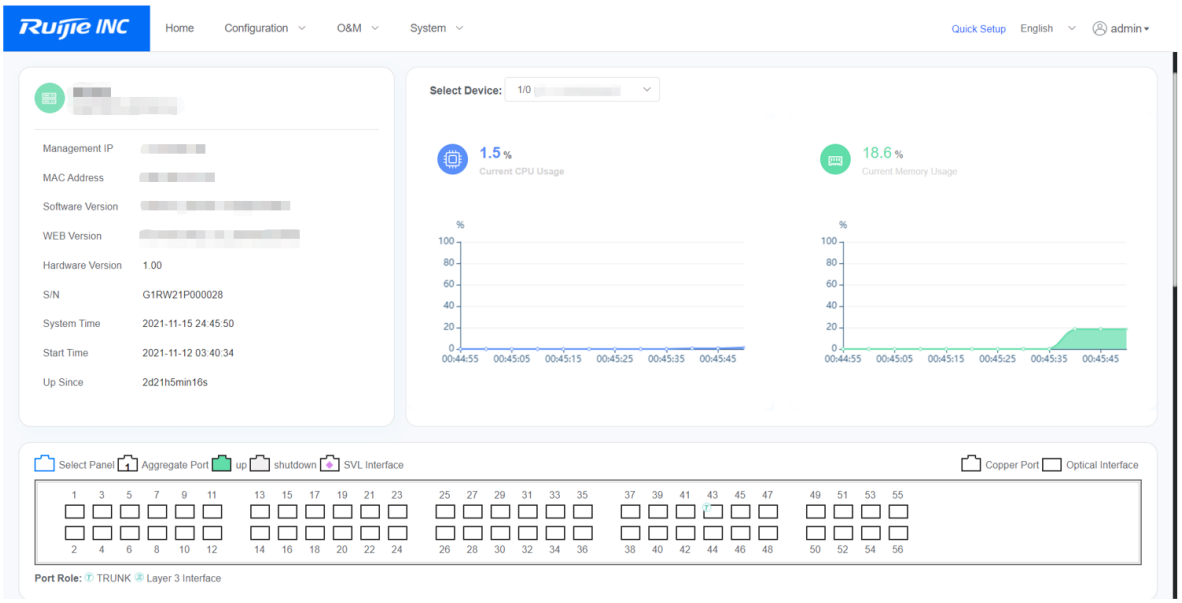
. The command execution result will be displayed in the console.

2. Click 

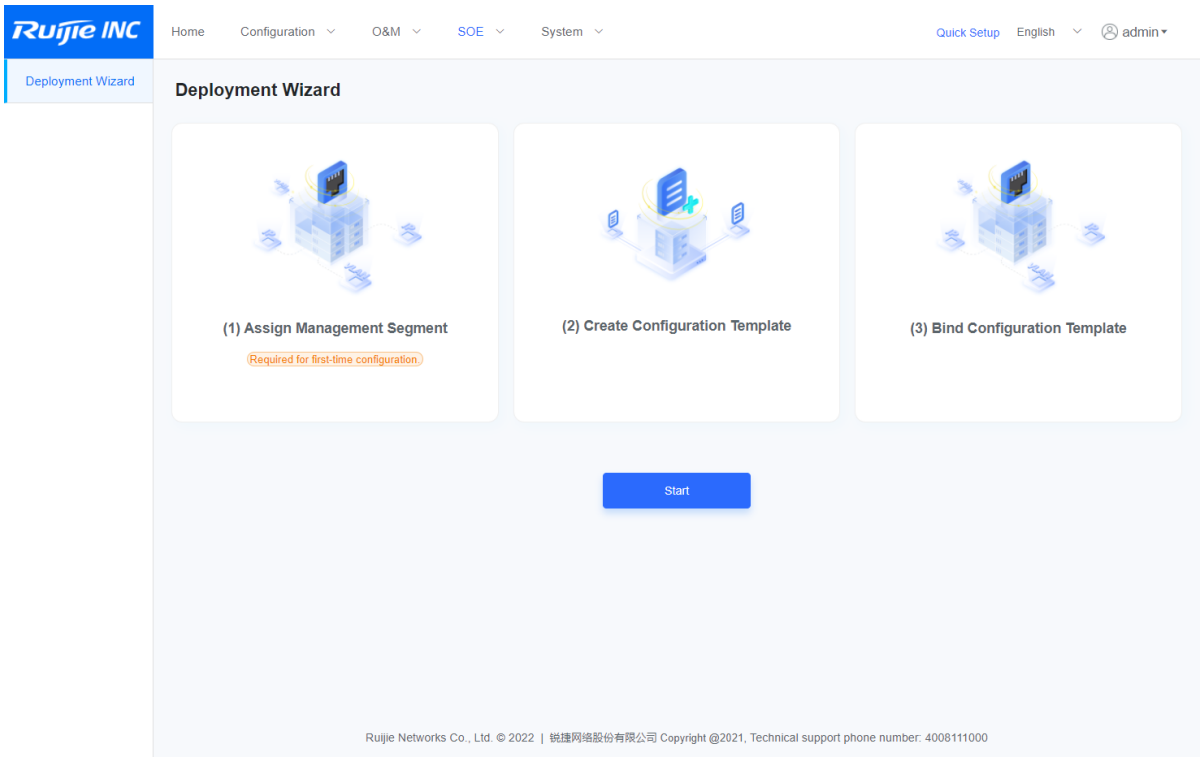
to clear the output result.

## 1.3.7 SOE (paid service)

SOE is a paid service and is available only when an RG-INC-EMB-SW-AMAINT license is imported.




Page layout before an RG-INC-EMB-SW-AMAINT license is imported



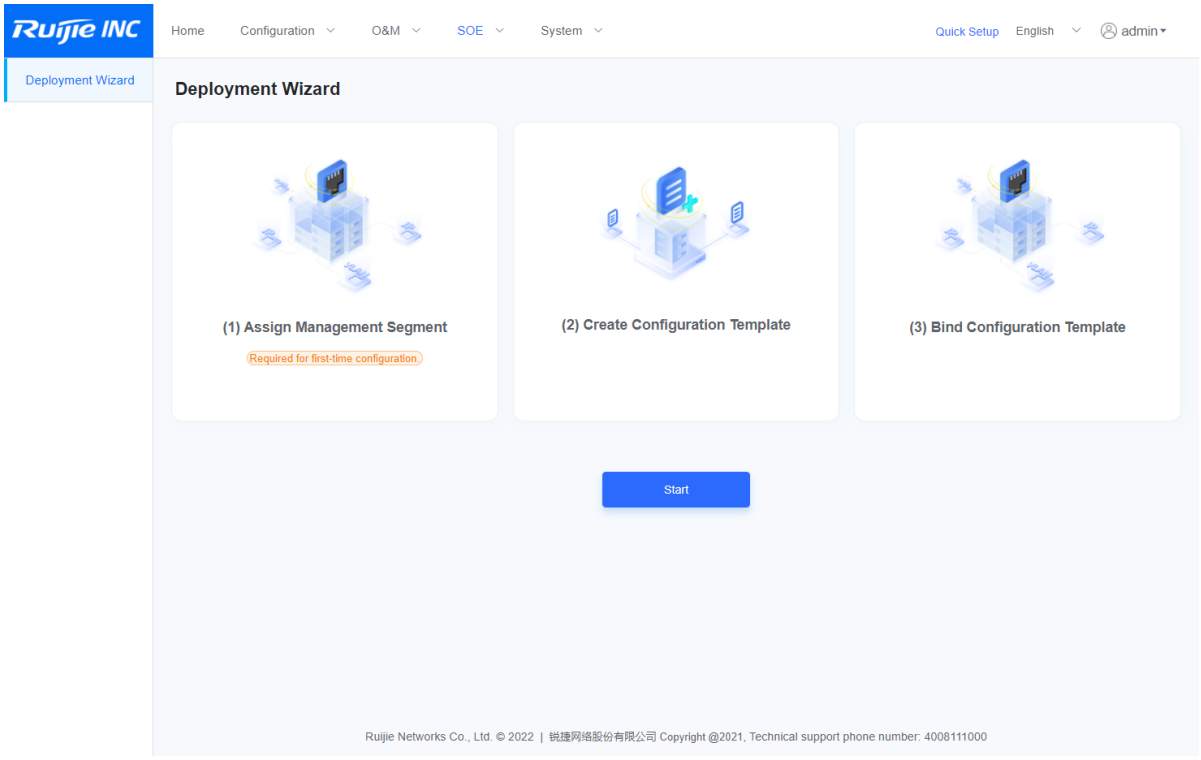

Page layout after an RG-INC-EMB-SW-AMAINT license is imported

## 1. Deployment Wizard

Step 1: Assign a management subnet.

Step 2: Create a configuration template.

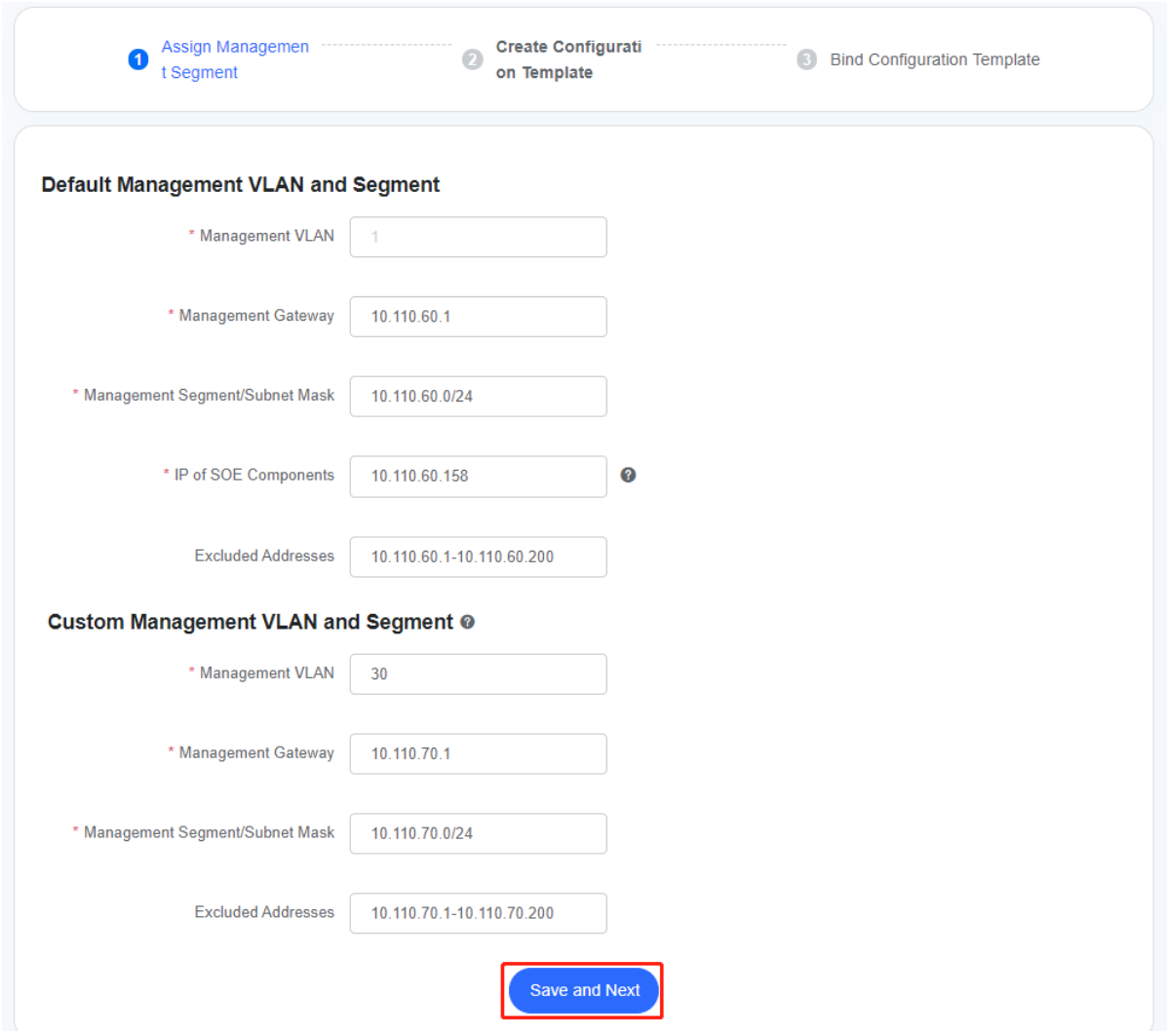
Step 3: Bind a configuration template.



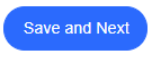
### Assigning a Management Subnet

Assigning a management subnet refers to configuring the default management VLAN and management subnet, and user-defined management VLAN and management subnet. When a management subnet is assigned for the first time, the user-defined management VLAN and management subnet are optional. The user-defined management VLAN and management subnet cannot be removed when being assigned.

A switch going online through the zero-touch provisioning (ZTP) process will be assigned with an IP address based on the default management VLAN and management subnet. If a user-defined management VLAN is configured, the switch will be assigned with an IP address based on the user-defined management VLAN and management subnet.

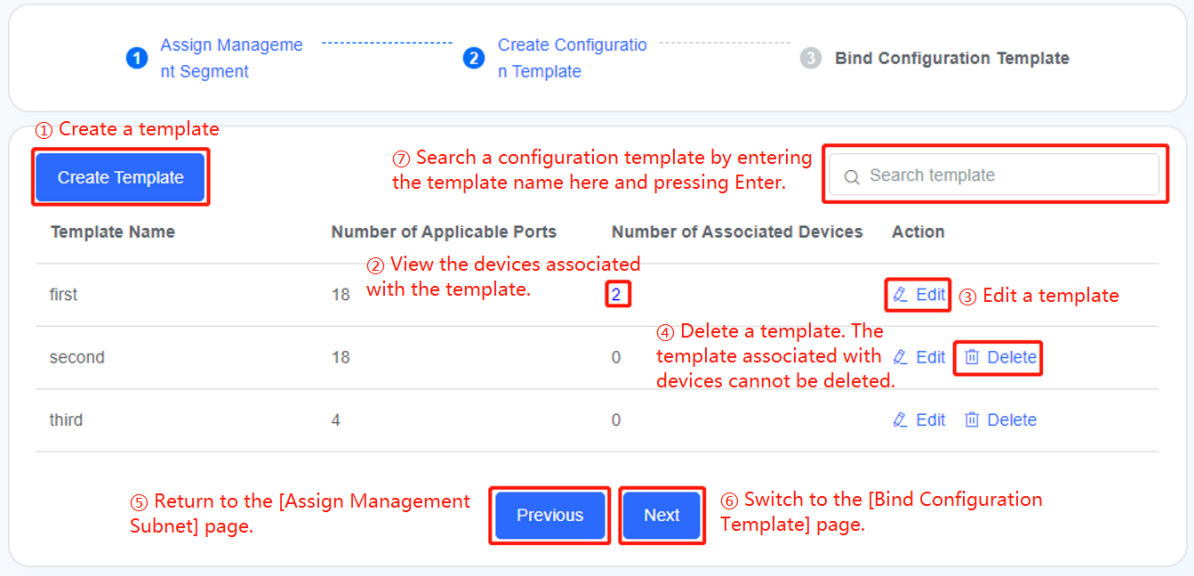



Configure User-Defined Management VLAN and Management Subnet.

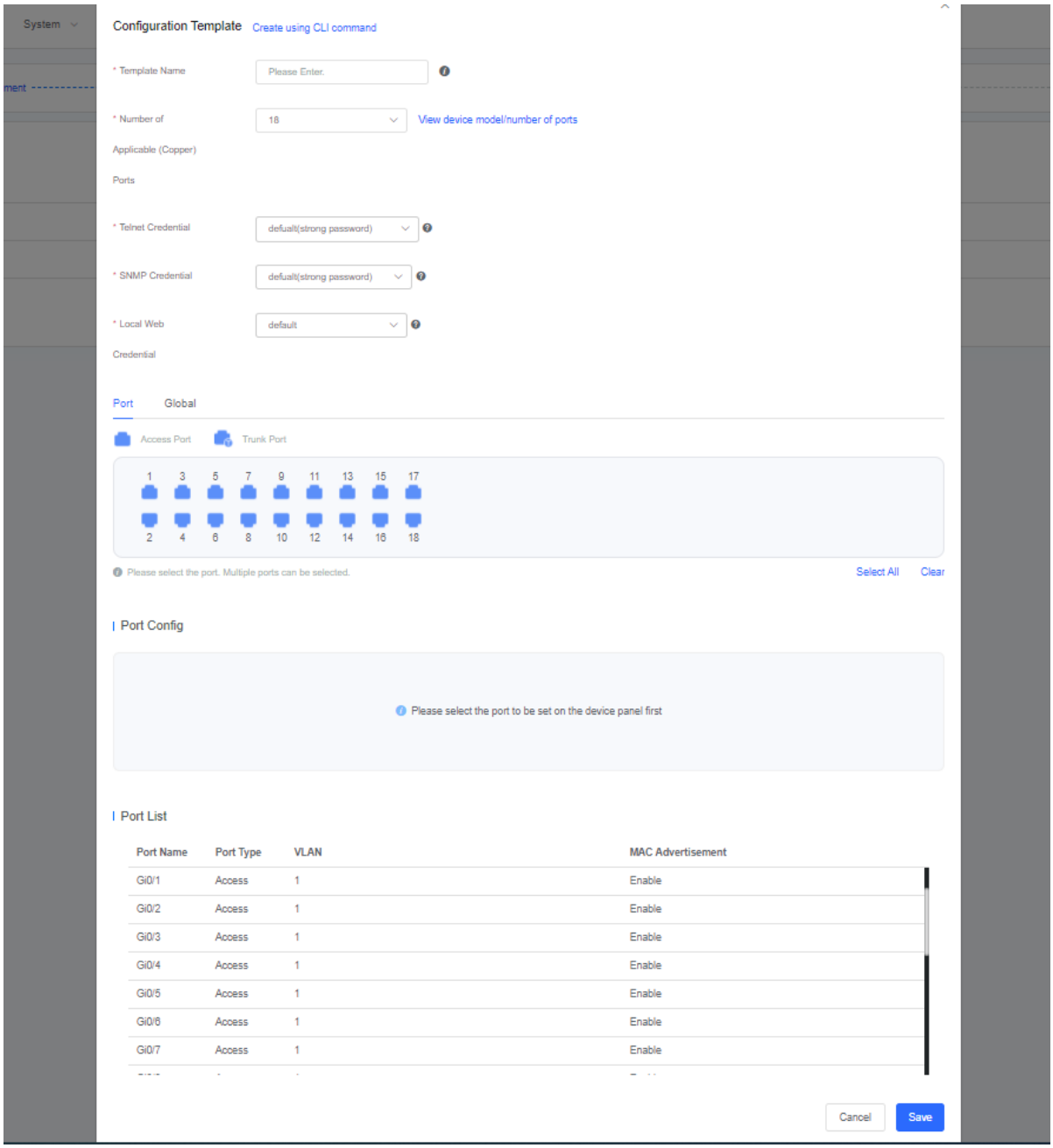
The default management VLAN and management subnet must not be on the same subnet. Click 

to save the configuration and switch to **Create Configuration Template**.

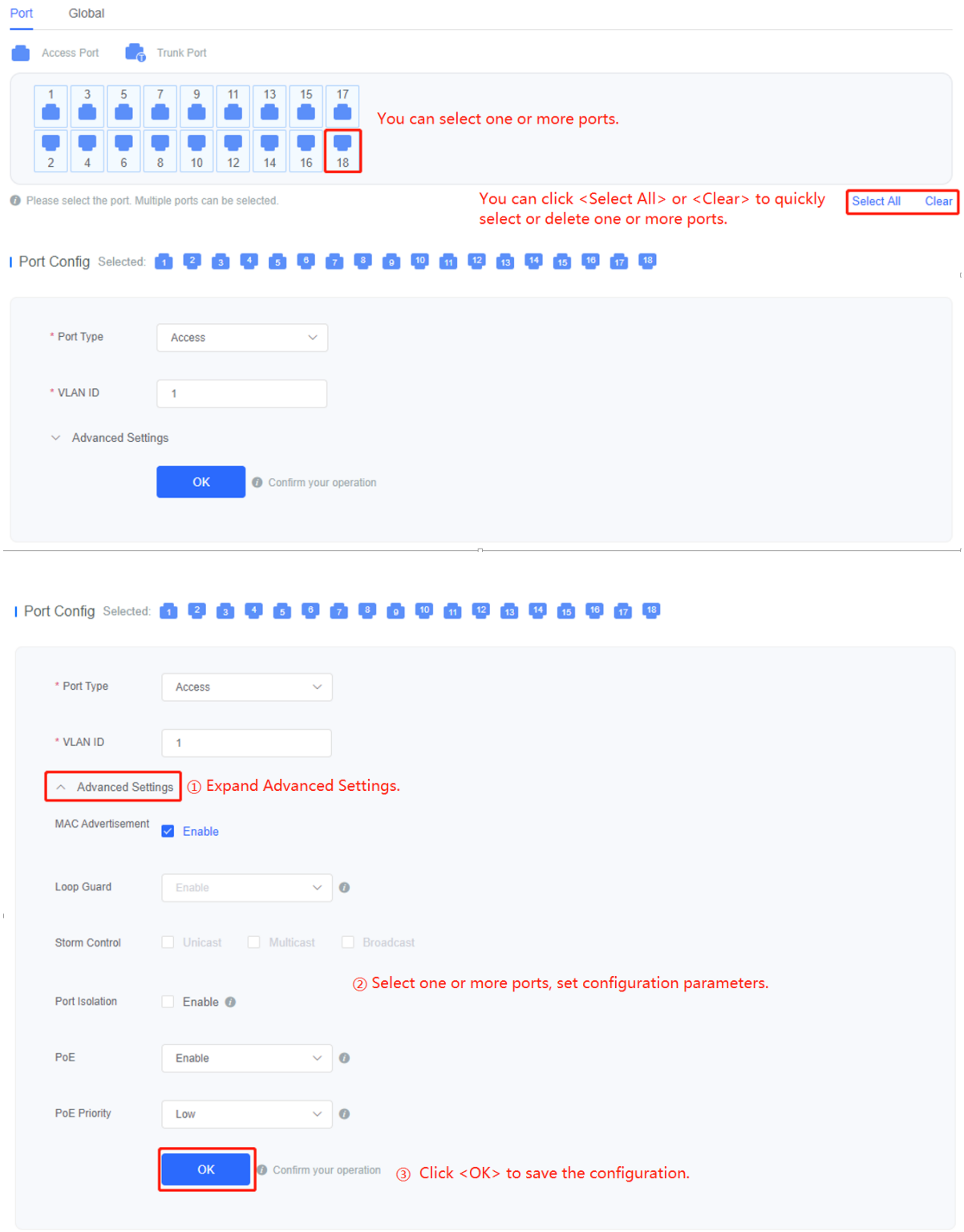
### Creating a Configuration Template

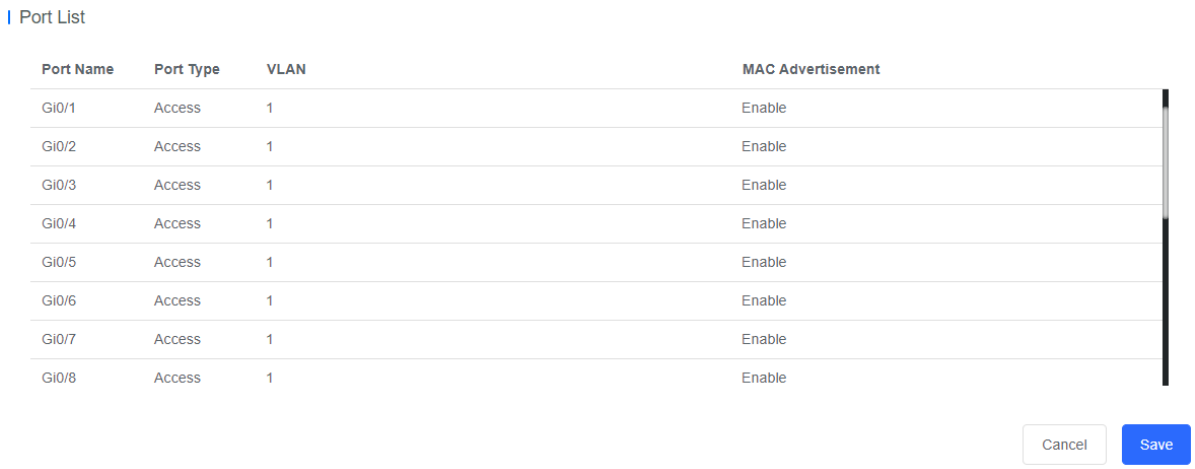



You will be redirected to the same **Configuration Template** page when you click <Create Template> and <Edit>.

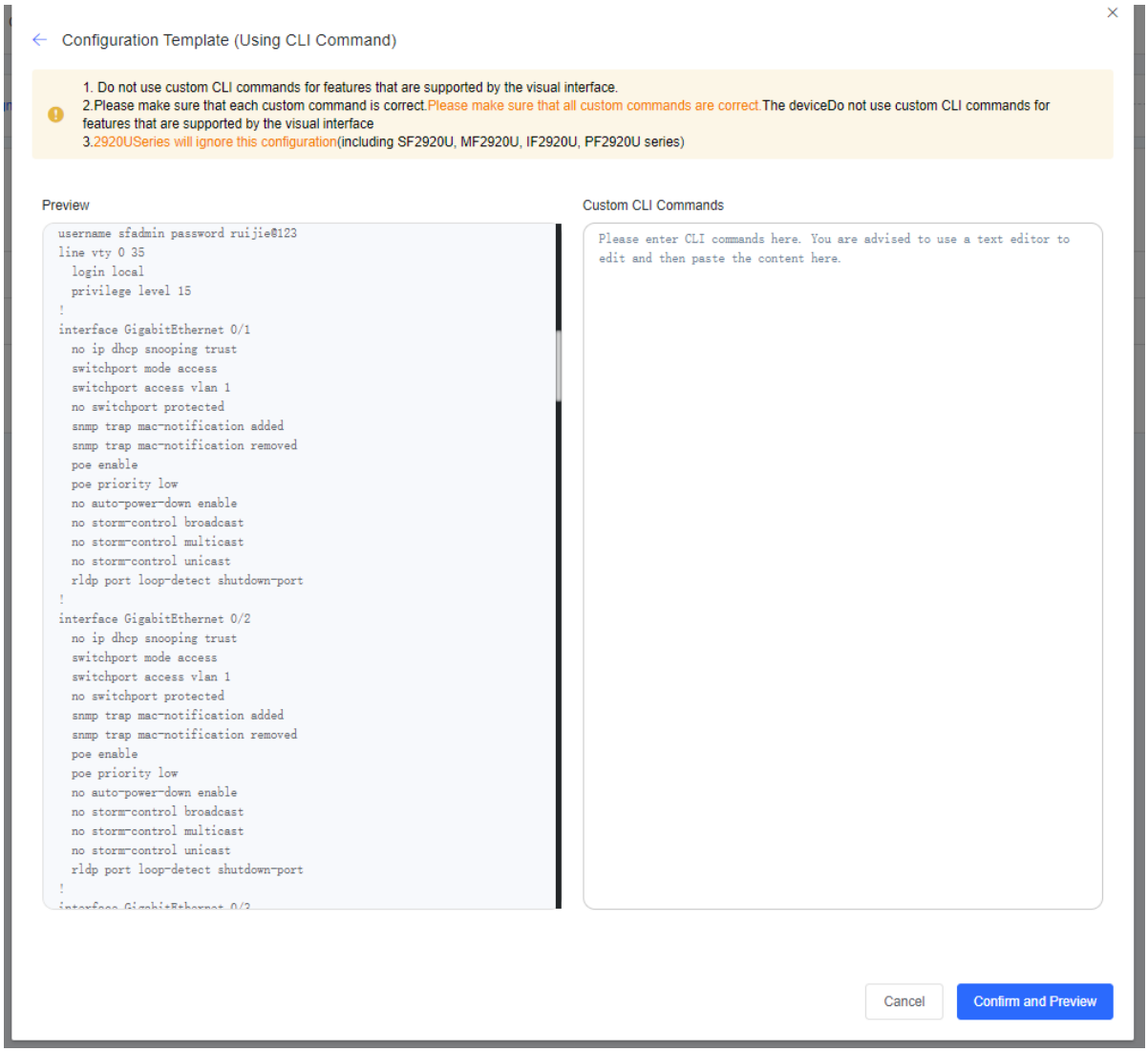



**Configuring a template**: Set configuration parameters in the displayed window. In the **Port Config** panel, select a ports, set configuration parameters in the displayed window and click **OK**. Click Save. The results can be viewed in the **Port List** panel. The port configuration or preview is displayed.


Port
Global
Access Port
Trunk Port
1 3 5 7 9 11 13 15 17
2 4 6 8 10 12 14 16 18
You can select one or more ports.
Please select the port. Multiple ports can be selected.
You can click <Select All> or <Clear> to quickly select or delete one or more ports.
Select All
Clear
Port Config Selected: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
* Port Type
Access
* VLAN ID
1
Advanced Settings
OK
Confirm your operation
Port Config Selected: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
* Port Type
Access
* VLAN ID
1
Advanced Settings
① Expand Advanced Settings.
MAC Advertisement
Enable
Loop Guard
Enable
Storm Control
Unicast
Multicast
Broadcast
② Select one or more ports, set configuration parameters.
Port Isolation
Enable
PoE
Enable
PoE Priority
Low
OK
Confirm your operation
③ Click <OK> to save the configuration.



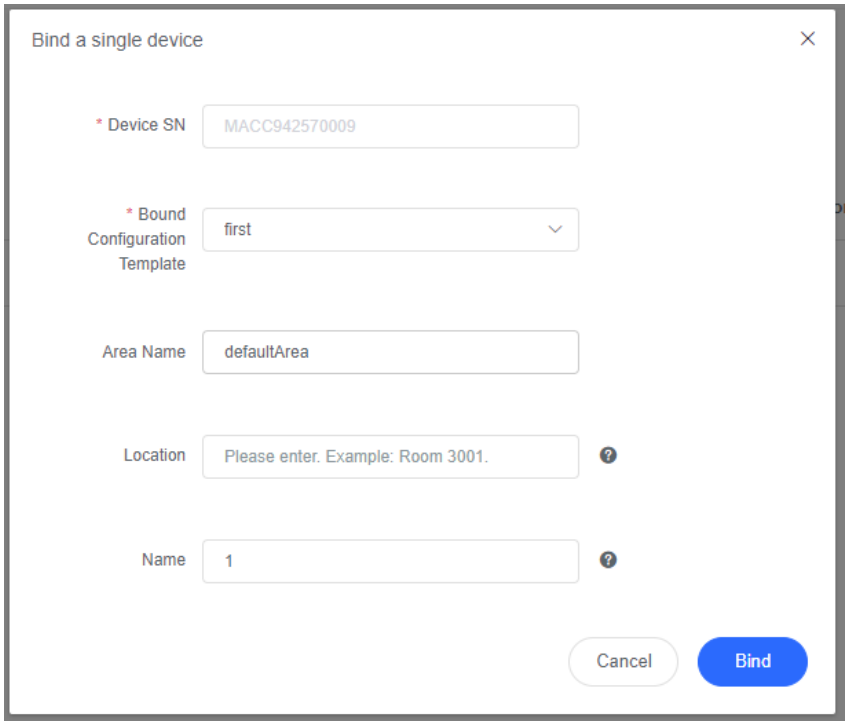

**Preview**: You can click Create using CLI command to switch to the **Configuration Template (Using CLI Command)** page. On the **Custom CLI Commands** pane, enter the customized CLI command and click Confirm and Preview to save it. You can view the parameters of the current configuration template in the **Preview** pane on the right. You can click Cancel or Configuration Template (Using CLI Command) to switch to the **Configuration Template** page.


Configuration Template (Using CLI Command)
1. Do not use custom CLI commands for features that are supported by the visual interface.
2.Please make sure that each custom command is correct.Please make sure that all custom commands are correct.The deviceDo not use custom CLI commands for features that are supported by the visual interface
3.2920USeries will ignore this configuration(including SF2920U, MF2920U, IF2920U, PF2920U series)
Preview
username sfadmin password ruijie@123
line vty 0 35
login local
privilege level 15
!
interface GigabitEthernet 0/1
no ip dhcp snooping trust
switchport mode access
switchport access vlan 1
no switchport protected
snmp trap mac-notification added
snmp trap mac-notification removed
poe enable
poe priority low
no auto-power-down enable
no storm-control broadcast
no storm-control multicast
no storm-control unicast
rldp port loop-detect shutdown-port
!
interface GigabitEthernet 0/2
no ip dhcp snooping trust
switchport mode access
switchport access vlan 1
no switchport protected
snmp trap mac-notification added
snmp trap mac-notification removed
poe enable
poe priority low
no auto-power-down enable
no storm-control broadcast
no storm-control multicast
no storm-control unicast
rldp port loop-detect shutdown-port
!
Custom CLI Commands
Please enter CLI commands here. You are advised to use a text editor to edit and then paste the content here.
Cancel
Confirm and Preview

### Configuring the Associated Device

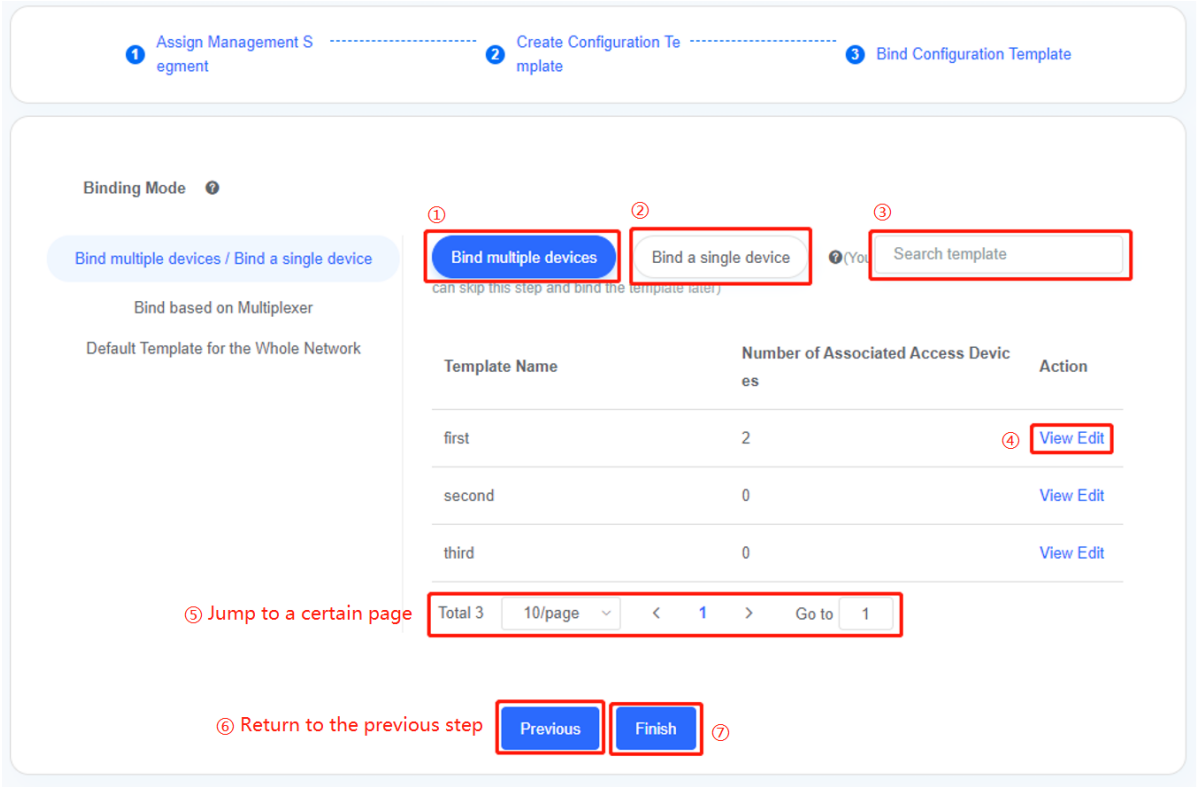



On the **Associated Device** page, click Edit. The **Bind a single device** page is displayed. After setting configuration parameters, click Bind to bind one switch.




### Binding a Configuration Template

Binding One or More Switches

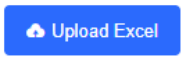



**(1) Binding multiple switches**

On the **Bind multiple devices** or **Bind a single device** page, click Bind multiple devices. The **Excel Binding** page is displayed.



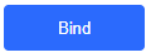

On the **Excel Binding** page, you can perform the following operations:

(1) Upload an Excel file: You can click 

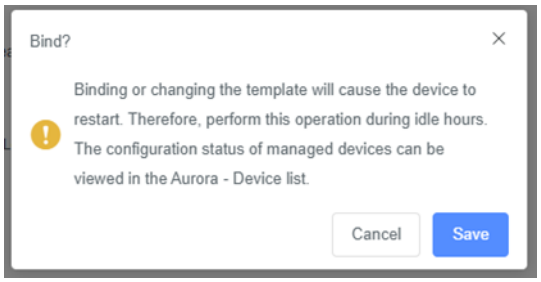
to upload the switches to be bound. The binding results will be displayed in the **Binding Result** pane.

(2) Click 

to download an Excel binding template.

(3) Click 

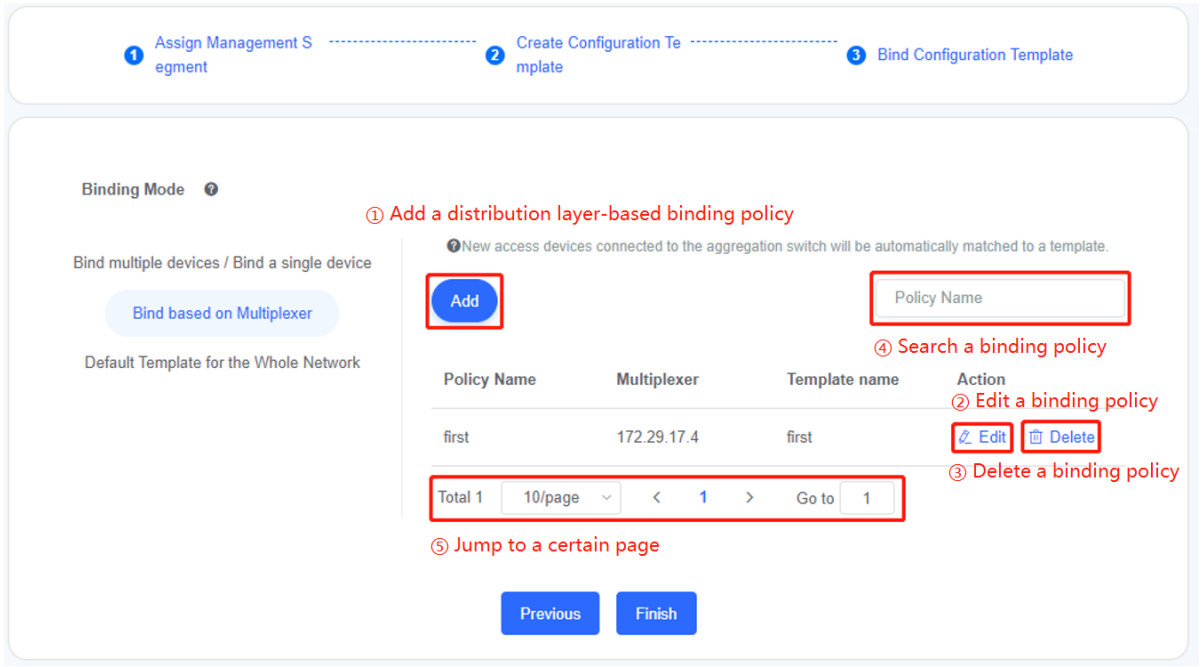
. A dialog box is displayed.




Click 

. The bound devices will be displayed in the refreshed window.

Binding Based on the Aggregation Layer

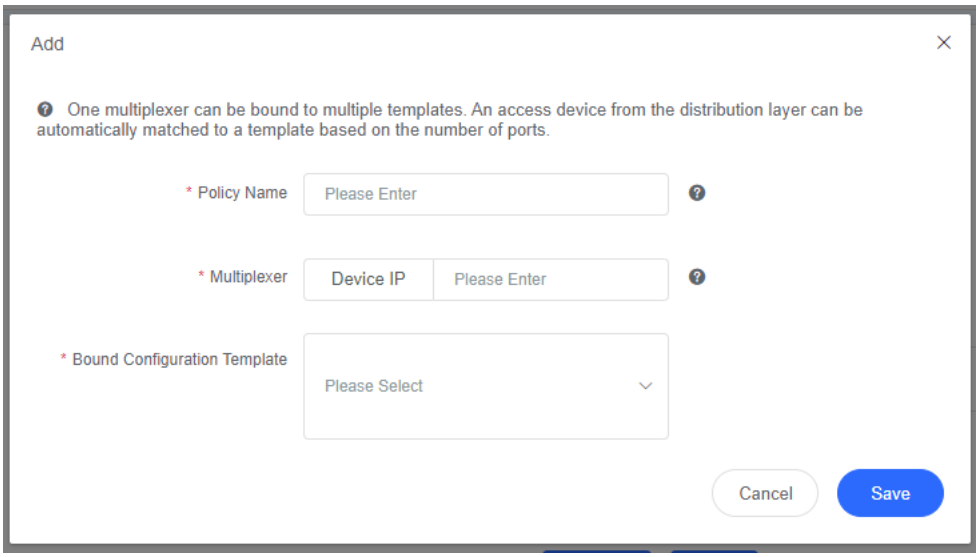



**(1) Adding or editing a binding policy based on the aggregation layer**

You can click 

to switch to the **Add** page. On the **Add** page that is displayed, set configuration parameters and click 

to save the configured policy.



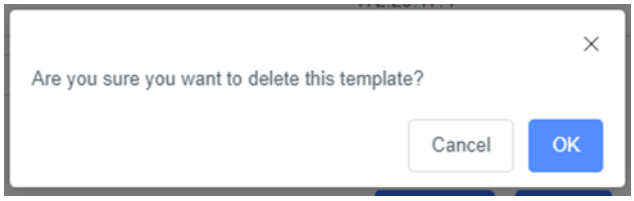

**Note**

**Device IP**: Run the **sh lldp local-information** command on the aggregation switch to check the switch's IP address.

**Bound Configuration Template**: The number of ports in the configuration template must be different so that the switch can be automatically matched to a template based on the number of ports in the configuration template.

### (2) Deleting a binding policy

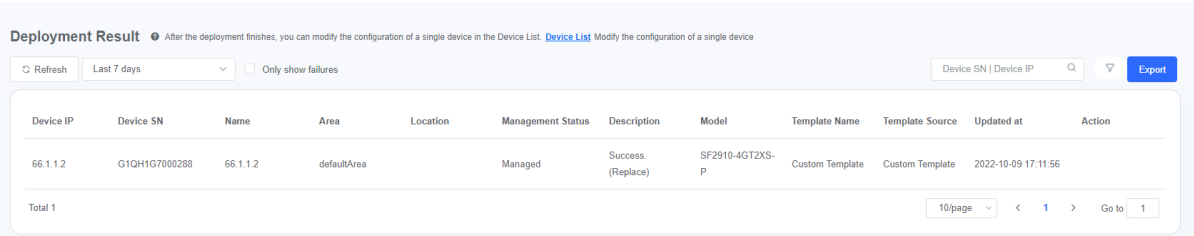
Click Delete. A dialog box is displayed.




Click OK. The selected policy is deleted.

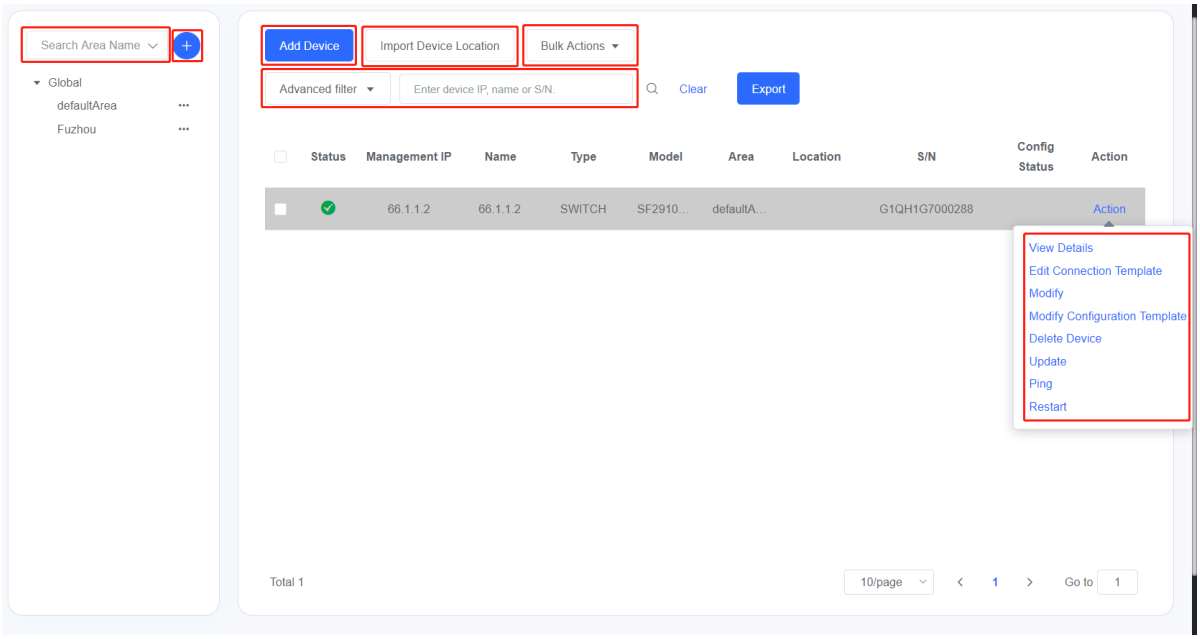
## 2. Deployment Log

The **Deployment Result** page shows the switch deployment results. You can filter and view the deployment results on this page. This page also contains the **Device List** link.



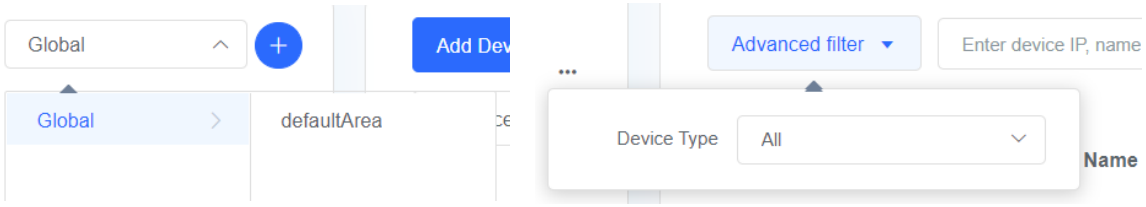

## 3. Device List

### Adding or Editing a Switch



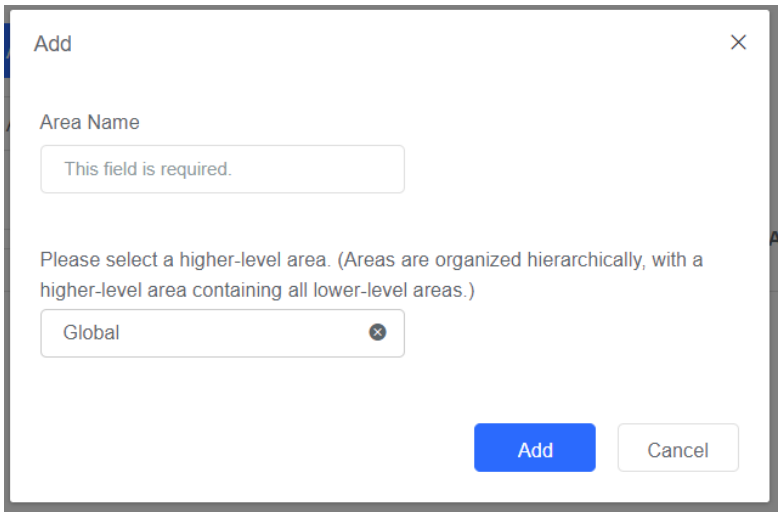

- **Querying a switch**

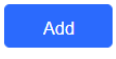
You can query a switch by area or device type, or entering the switch's management IP address, name or SN in the search box.




- **Adding an area**

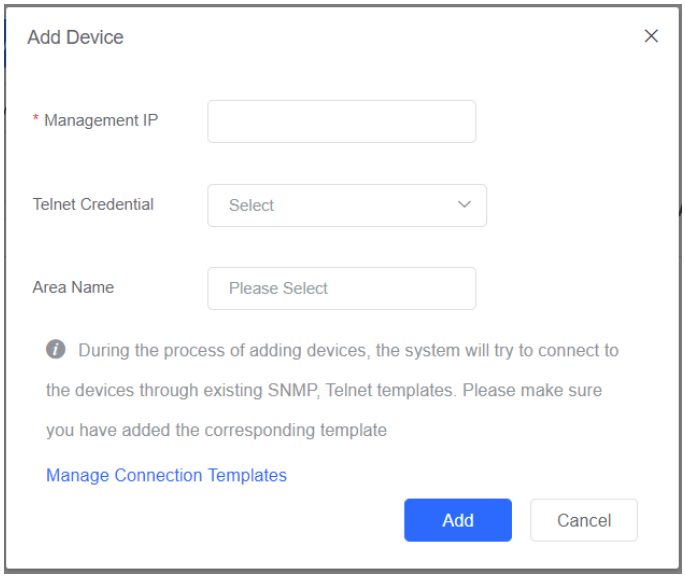
To add an area, click  in the **Area** pane. The **Add** window is displayed.




On the **Add** window, enter the area name, select a higher-level area, and click .

- **Adding a single switch**

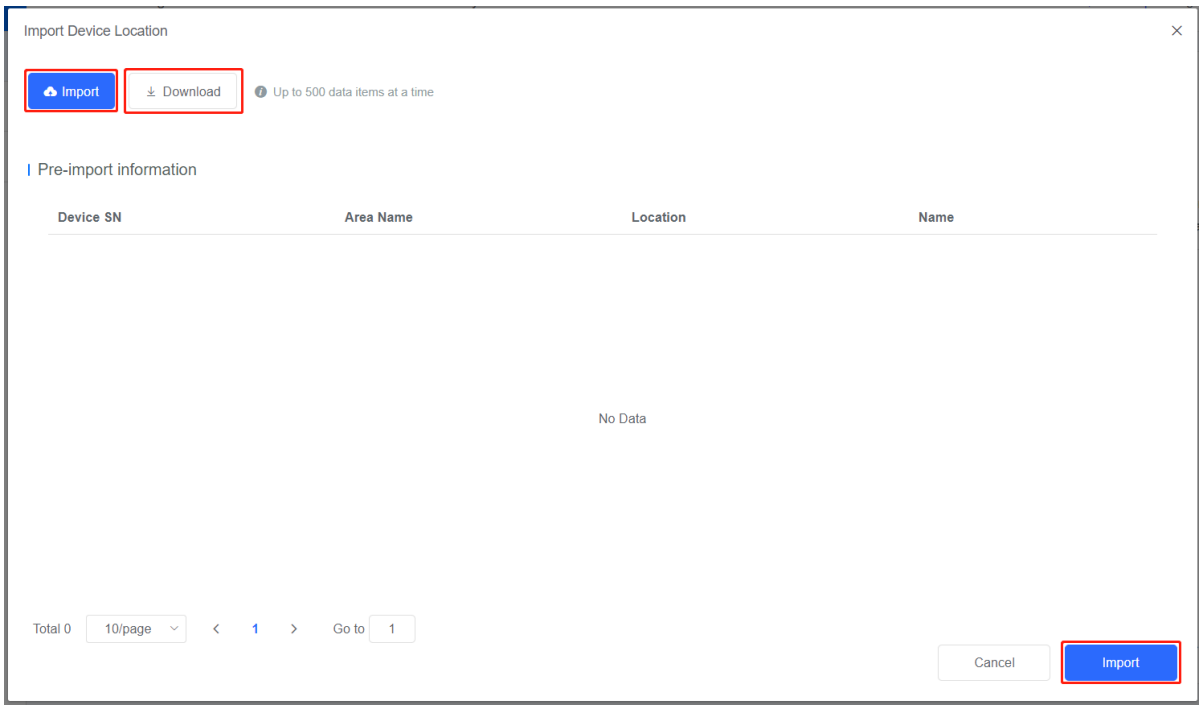
To add a single switch, click Add Device. The **Add Device** window is displayed.




Enter the switch's management IP address, select the area name, and click Add. If the switch's IP address already exists or the switch is not reachable, the switch cannot be added.

- **Importing the switch location**

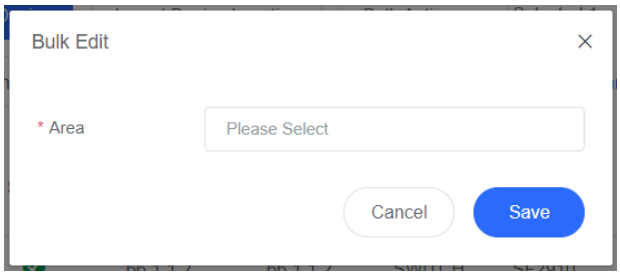
To import the location of a switch, you can click Import Device Location. The **Import Device Location** window is displayed.




Click Download to download the template (an Excel file). Set configuration parameters in the template. Click Import to import the completed Excel file, and click Import to import the switch location data.

- **Editing multiple areas**

Click  next to **Device List**, select **Bulk Edit** from the **Bulk Actions** drop-down list box. The **Bulk Edit** window is displayed.




Select an area in the window, and click .

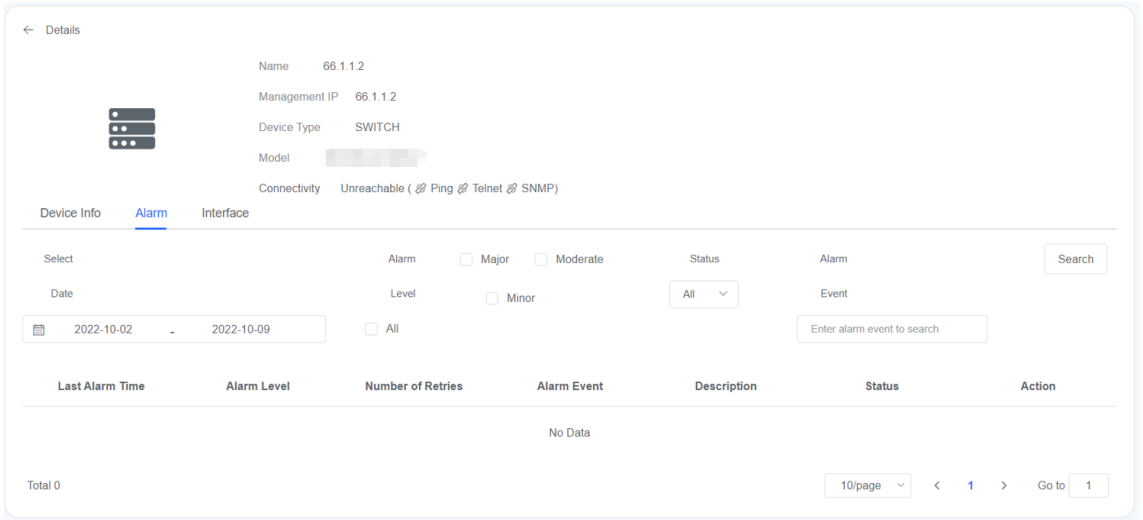


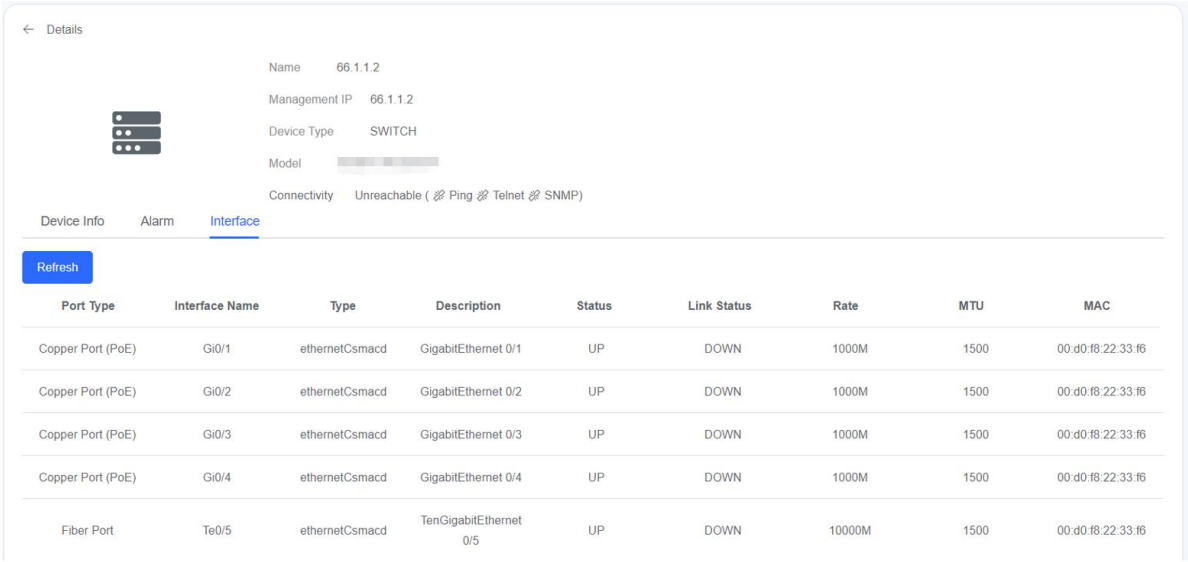
- **Querying switch details**

To query switch details, click the **Action** column of the **Device List**, and then click  to switch to the **Details** page. On the **Device Info** page, you can view basic information about a switch, and synchronize the switch by clicking **Sync**. On the **Alarm** page, you can query and set alarm details. On the **Interface** page, you can query the switch's interface data.



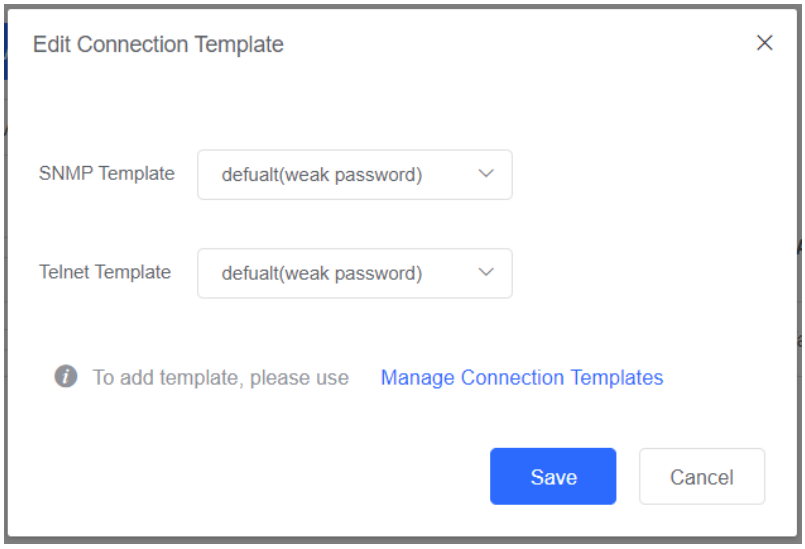




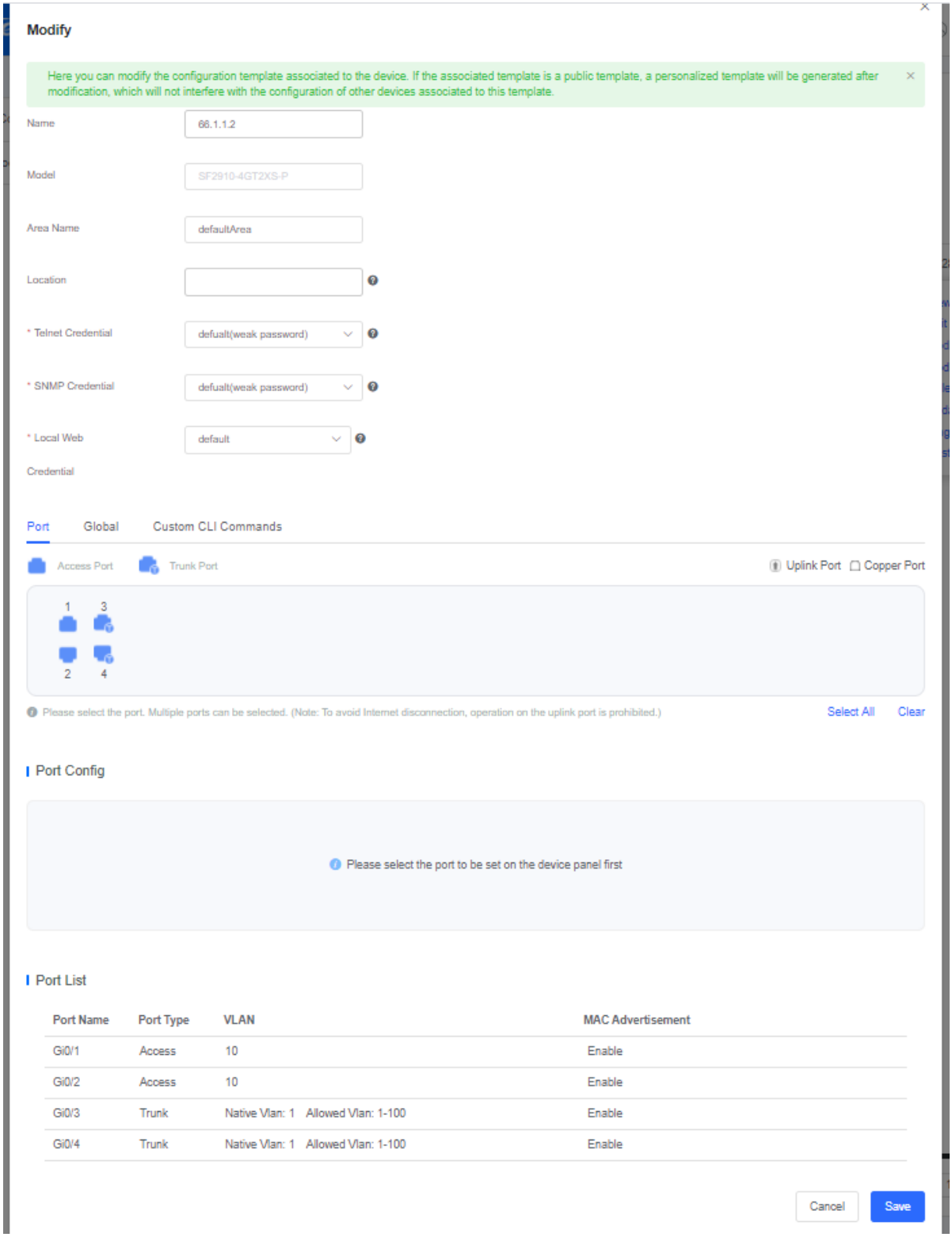

- **Editing a connection template**

To edit a connection template, click the **Action** column of **Device List**, and then click Edit Connection Template. The **Edit Connection Template** window is displayed. Select the SNMP and/or Telnet template, and click Save.



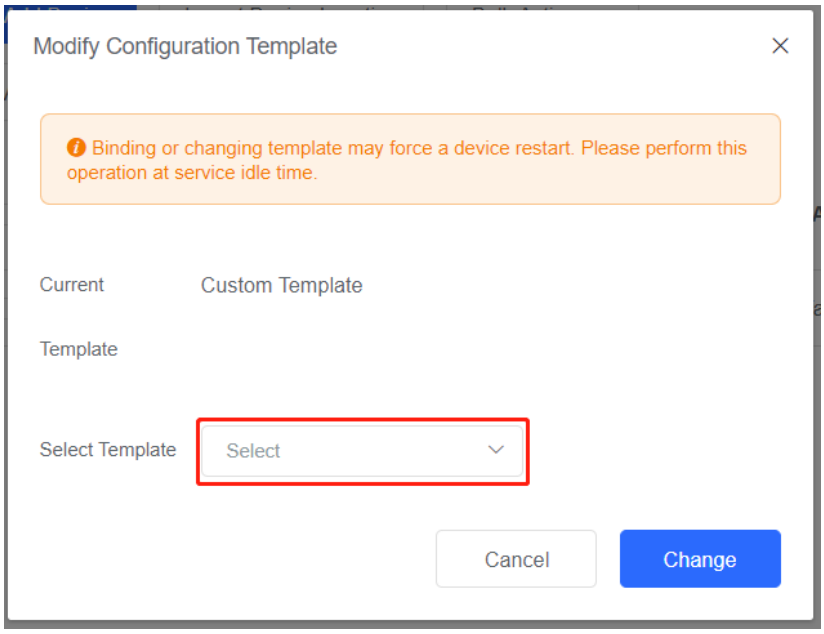

- **Editing the configuration (for switches that go online through the ZTP process only)**

To edit the configuration of a switch, click the **Action** column of **Device List**, and then click Modify. The **Modify** window is displayed. Set configuration parameters. If you change the value of **Telnet Credential** of the switch, the system displays the message “After this configuration is saved, the configuration will be delivered to this switch. This operation may force a switch restart. Please perform this operation at service idle time.” If you do not change it, the Telnet configuration will be delivered to the switch.



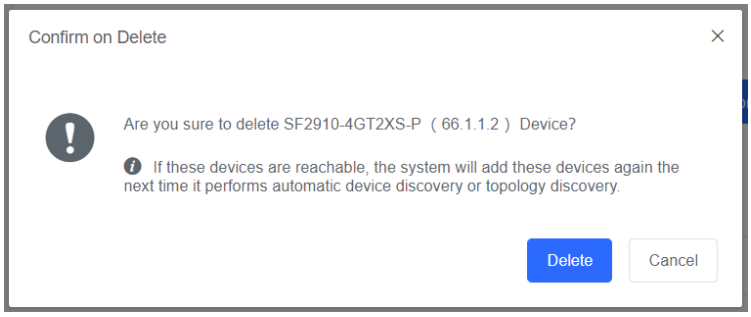

- **Modifying a configuration template (for switches that go online through the ZTP process only)**

Click the **Action** column of **Device List**, and then click Modify Configuration Template. The **Modify Configuration Template** window is displayed. After selecting a template, click Change. The switch will start the login process again.




- **Deleting a switch**

To delete a switch, you can click the **Action** column of **Device List**, and then click Delete Device. The **Confirm on Delete** dialog box is displayed. Click Delete.




- **Updating switch details**

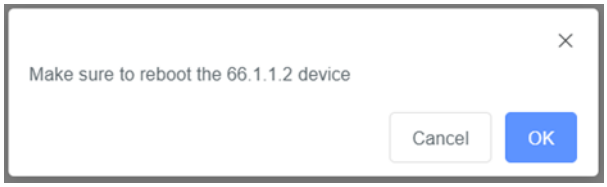
To update basic information about and interfaces of a switch, you can click the **Action** column of **Device List**, and then click Update.

- **Ping a switch**

To ping a switch, click the **Action** column of **Device List**, and then click Ping. After the ping test is successfully executed, the system displays the message "[XXX. XXX. XXX. XXX] is reachable" or "[XXX. XXX. XXX] is not reachable."

- **Restarting a switch**

To restart a switch, you can click the **Action** column of **Device List**, and then click Restart. A dialog box is displayed.

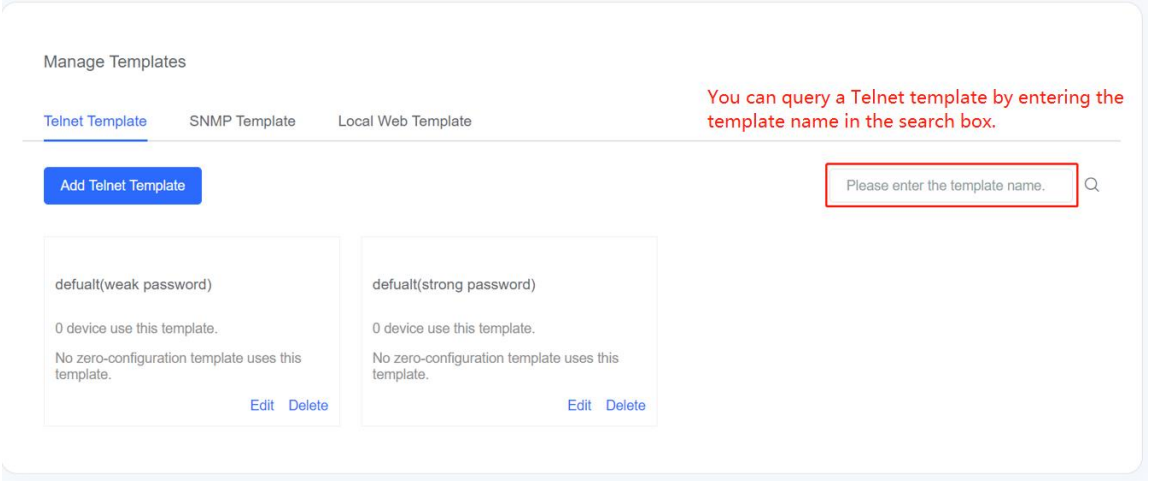


Click OK. The switch will restart successfully after 2 to 3 minutes.

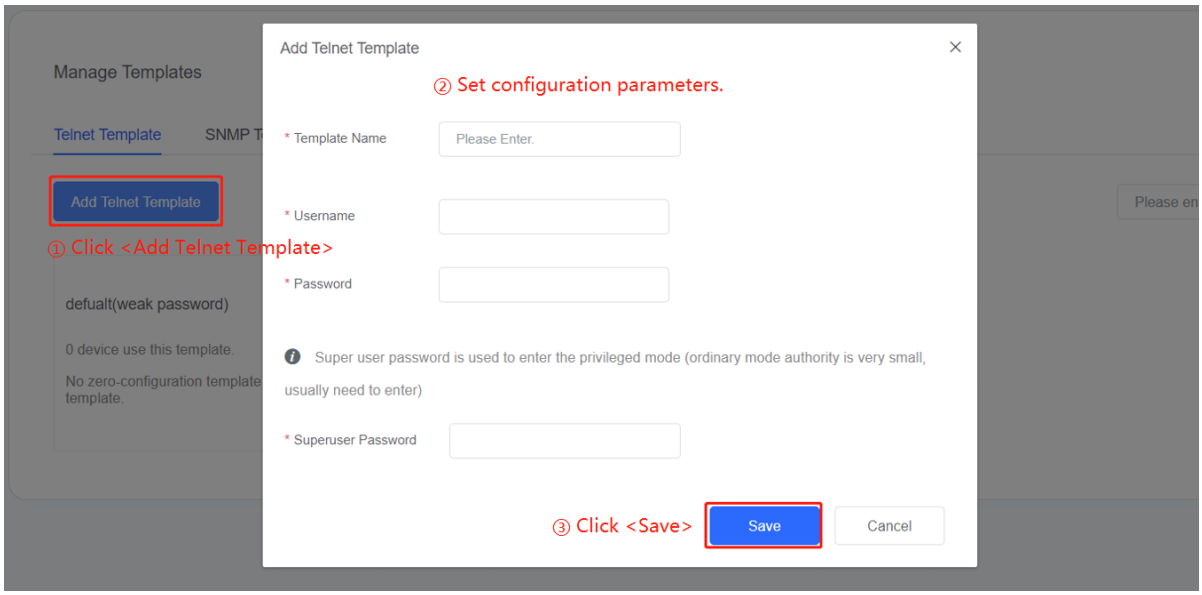
**Managing Connection Templates of a Switch**

(1) **Telnet Templates**

- **Querying a Telnet template**

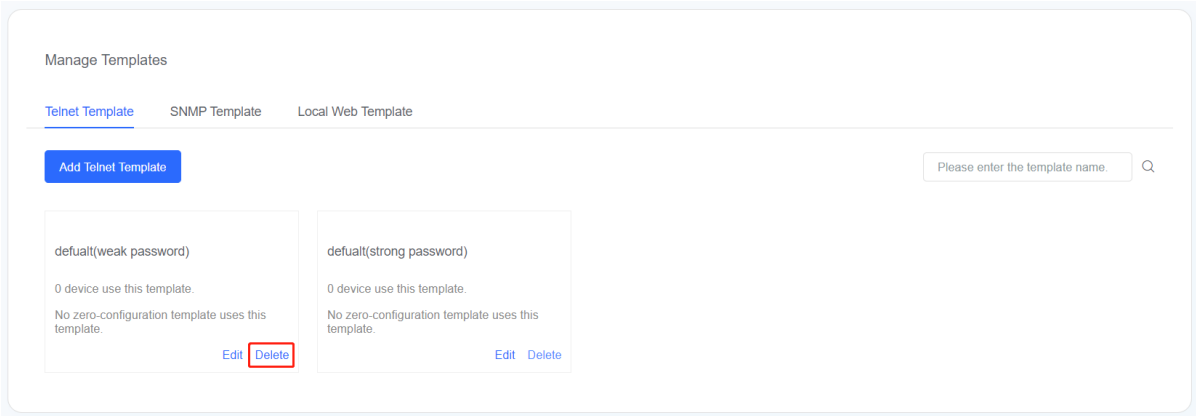



- **Adding a Telnet template** (similar to editing a Tenlet template)



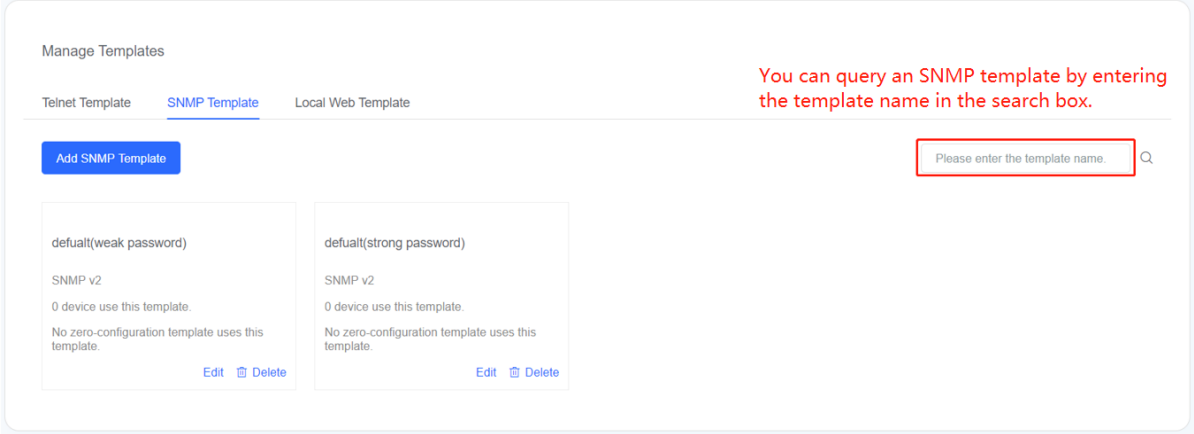

- **Deleting a Telnet template**

A referenced Telnet template cannot be deleted. You can only delete a Telnet template after you have successfully disassociated switches from the Telnet template.

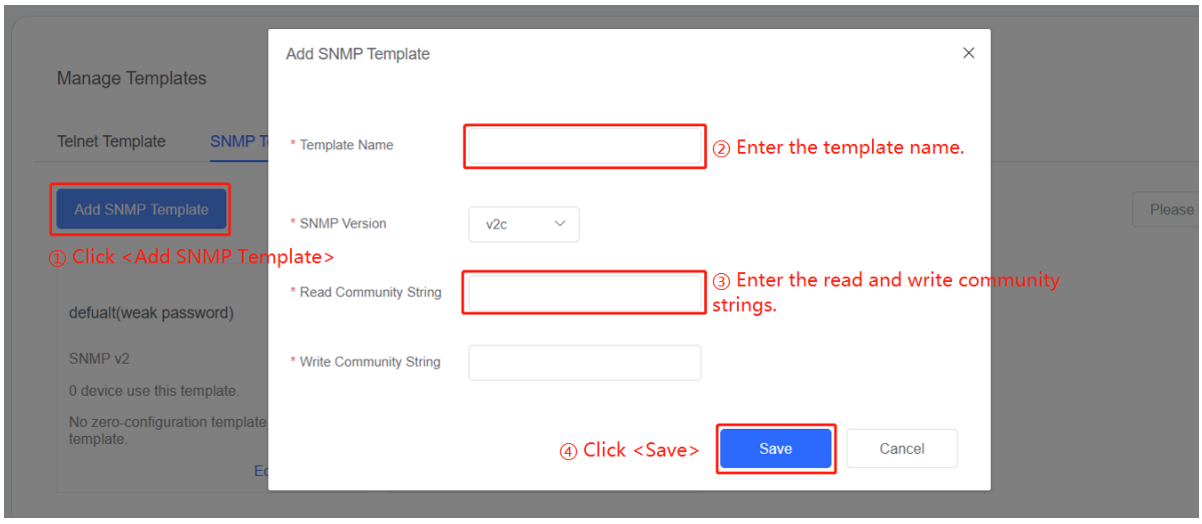



(2) **SNMP Templates**

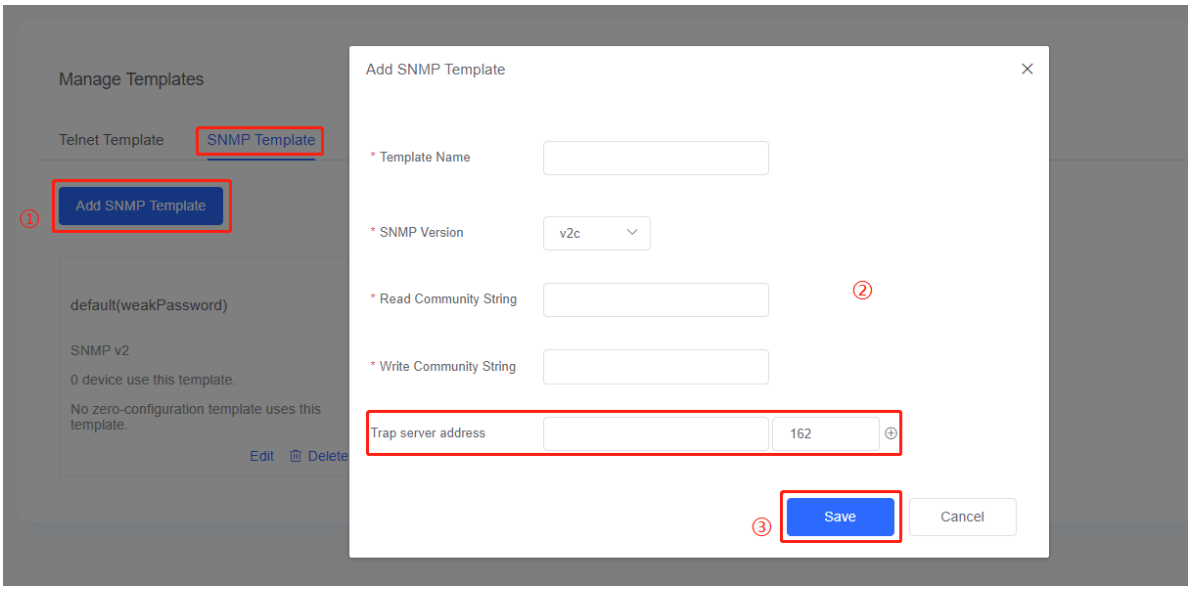
- **Querying an SNMP template**




- **Adding an SNMP template** (similar to editing an SNMP template)

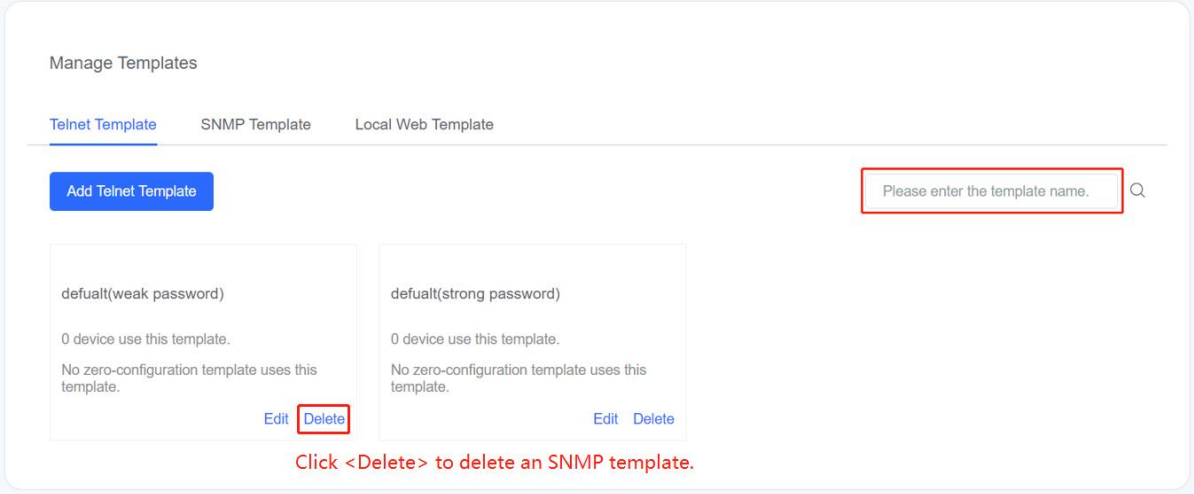



- **Configuring a Trap Server Address in the SNMP Template**




- **Deleting an SNMP Template**

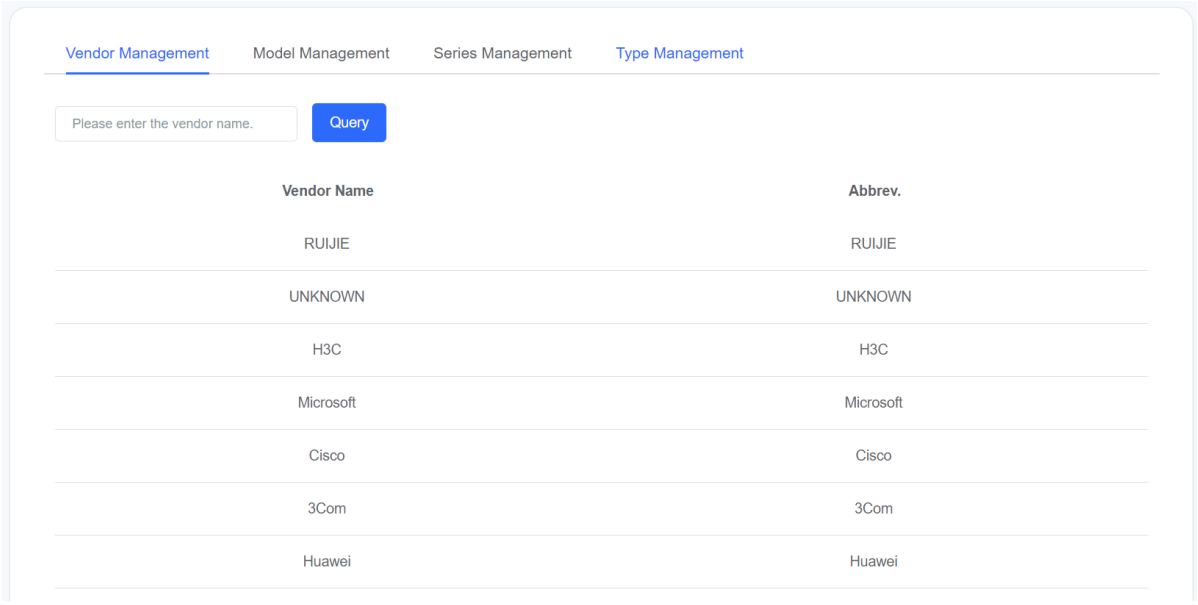
The SNMP template that is associated with a switch or is a default template cannot be deleted.




## Managing the Switch Model Library

### (1) Managing Switch Vendors

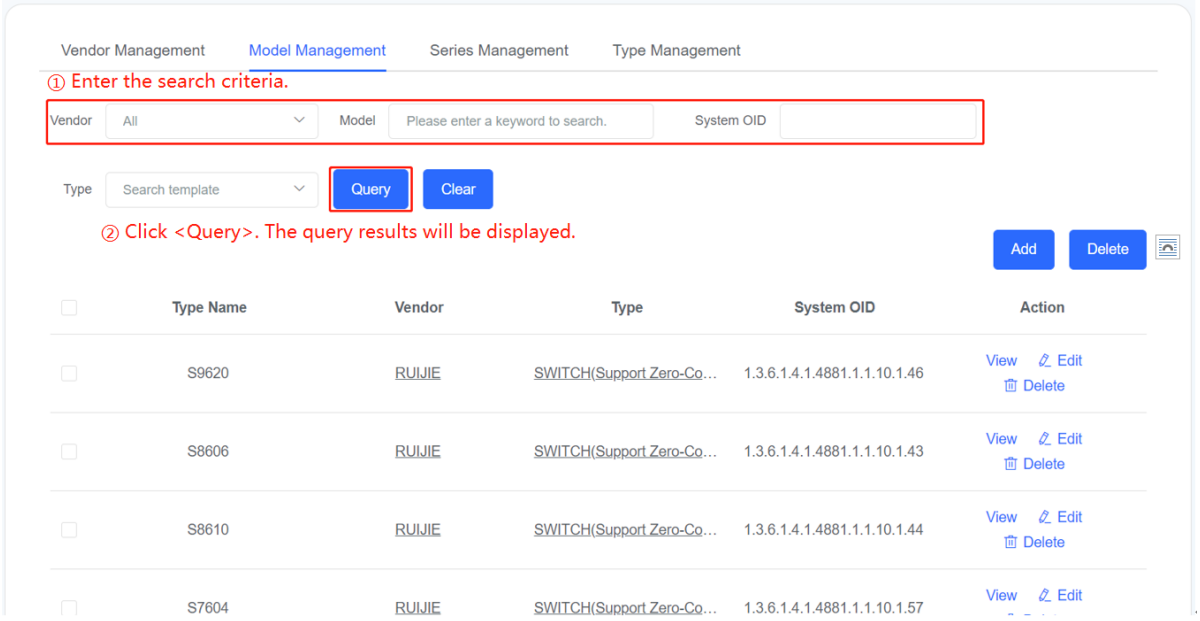
On the **Vendor Management** page, you can view vendors and their abbreviations supported in the model library supported by the system.



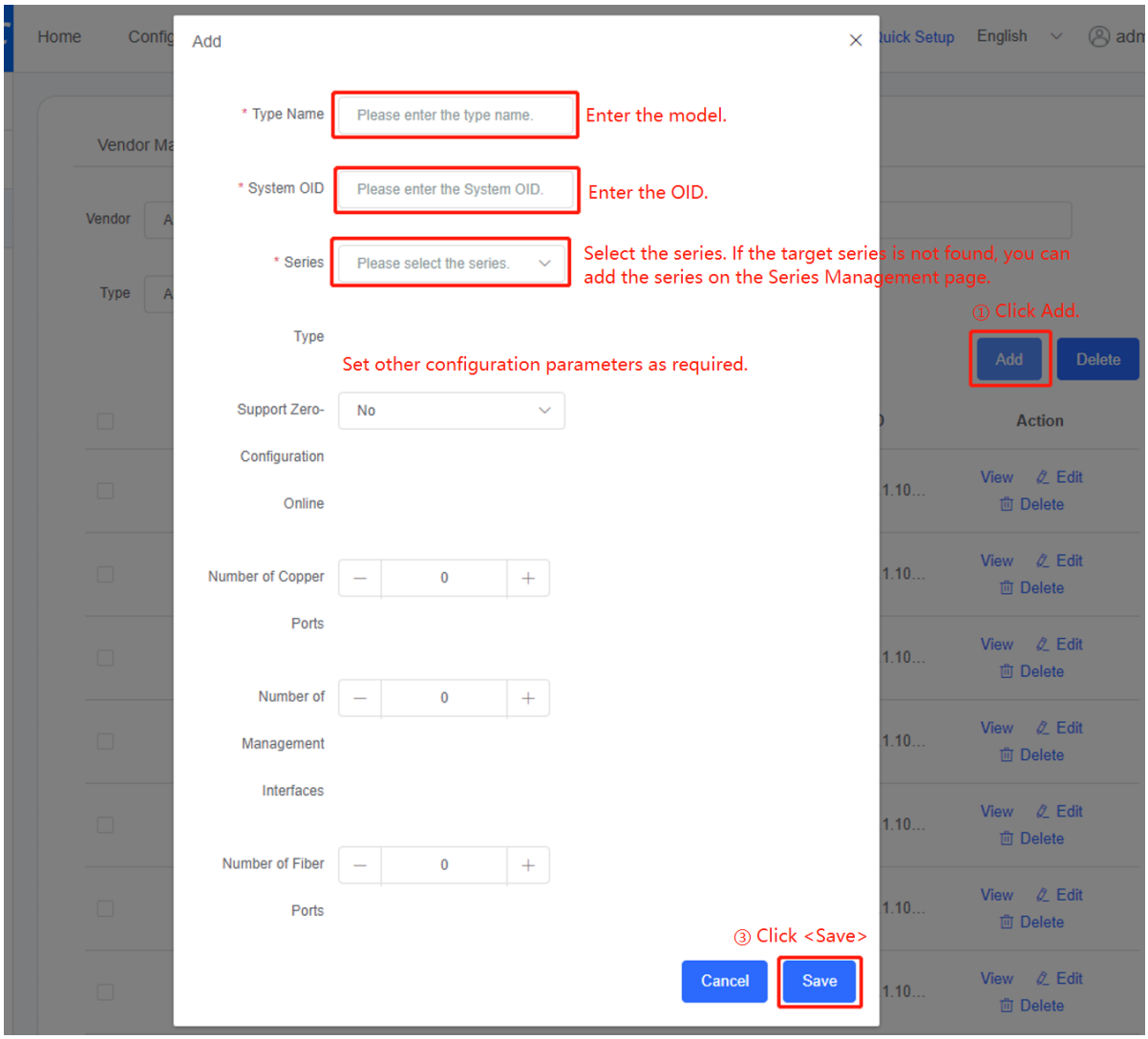

(2) **Managing Switch Models**

On the **Model Management** page, you can view the model library supported by the system. You can also add, delete, and edit switch models.

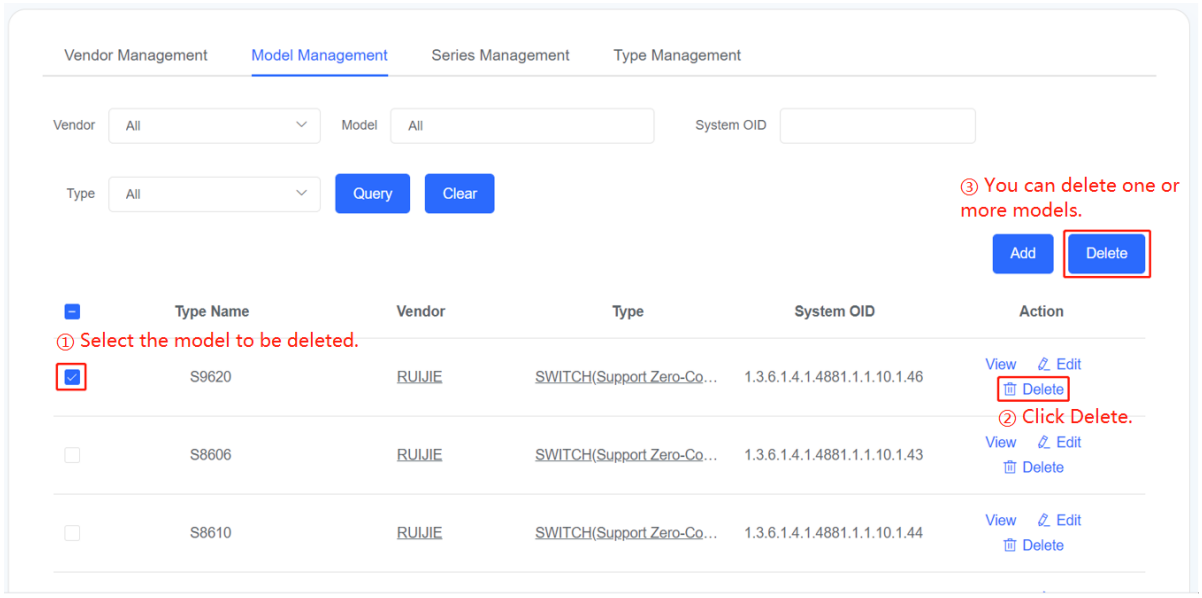
- **Querying a switch model**




- **Adding a switch model**



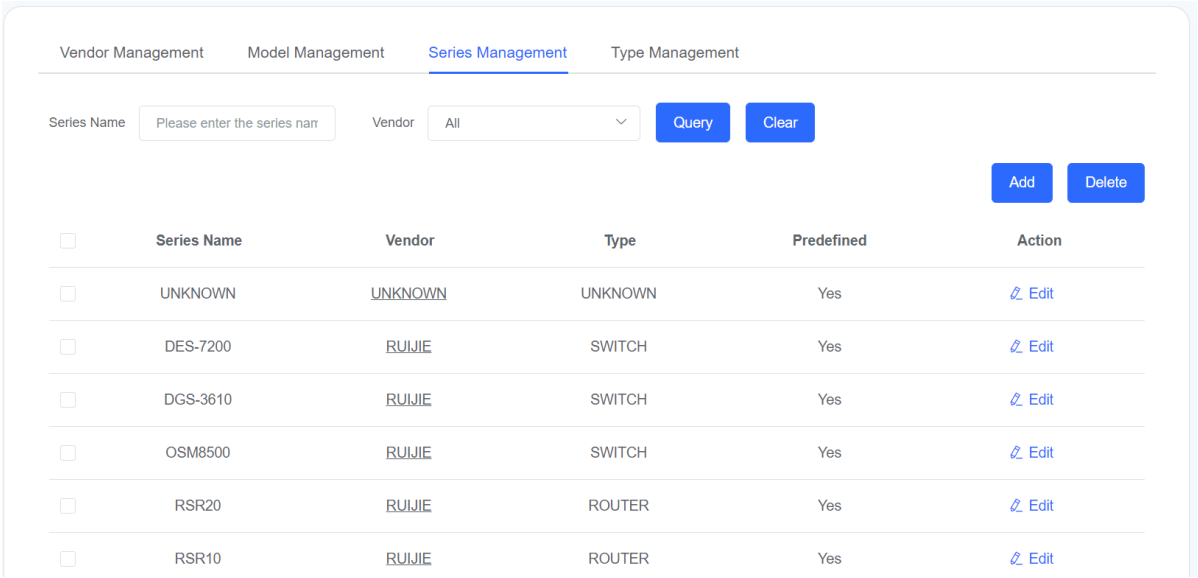

- **Deleting a switch model**



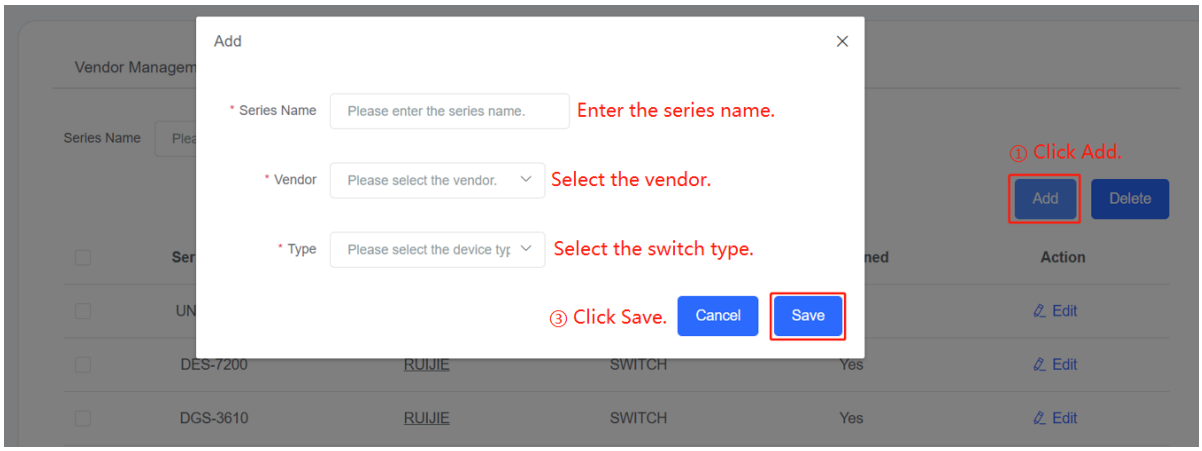
### Managing Switch Series

On the **Series Management** page, you can manage switch series, including querying, deleting, or adding a switch series.

- **Querying a switch series**

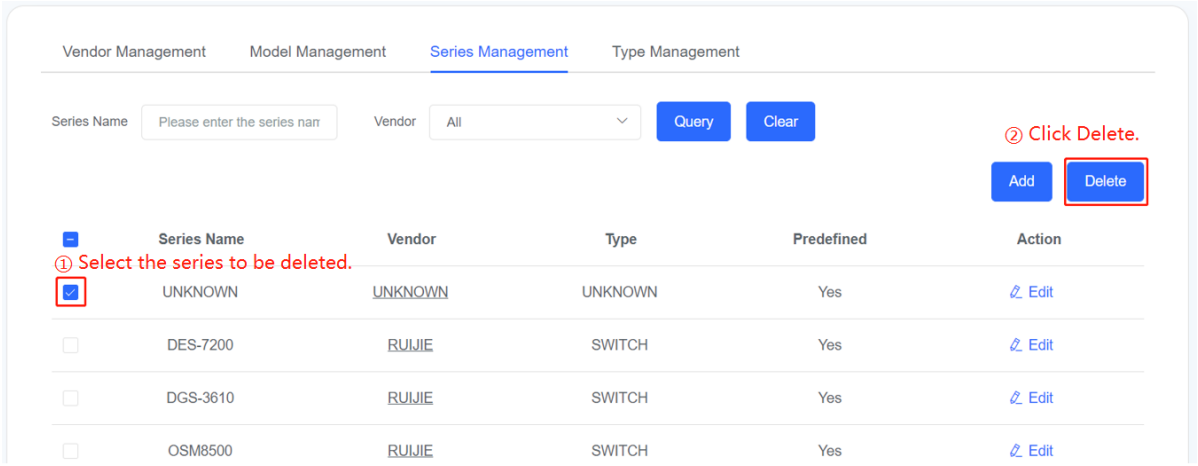



- **Adding a switch series**



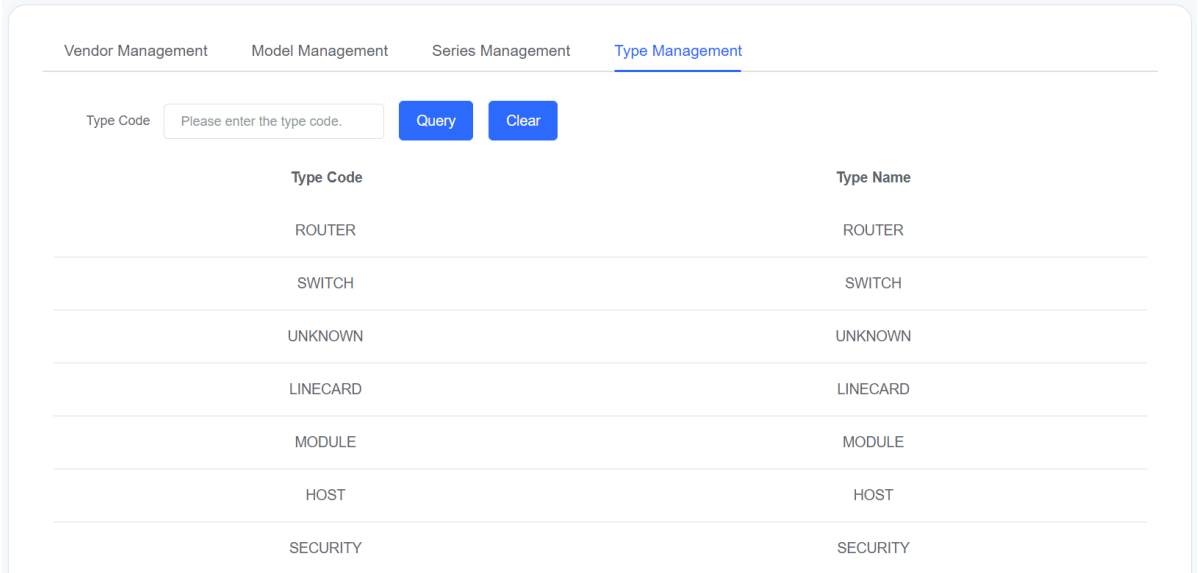

- **Deleting a switch series**

A referenced series cannot be deleted.




### Managing Switch Types

On the **Type Management** page, you can query switch types supported by the system.

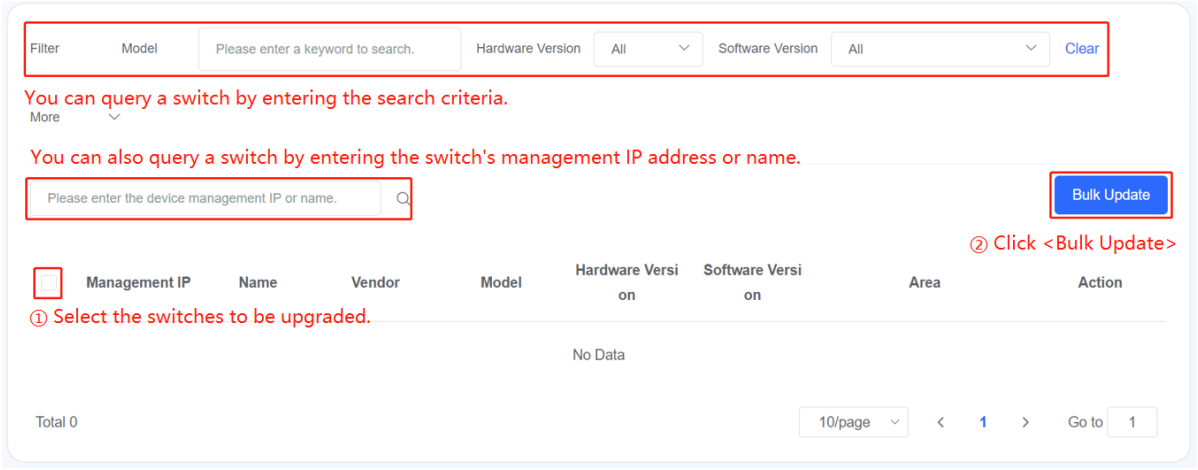



## 4. Upgrading a Switch

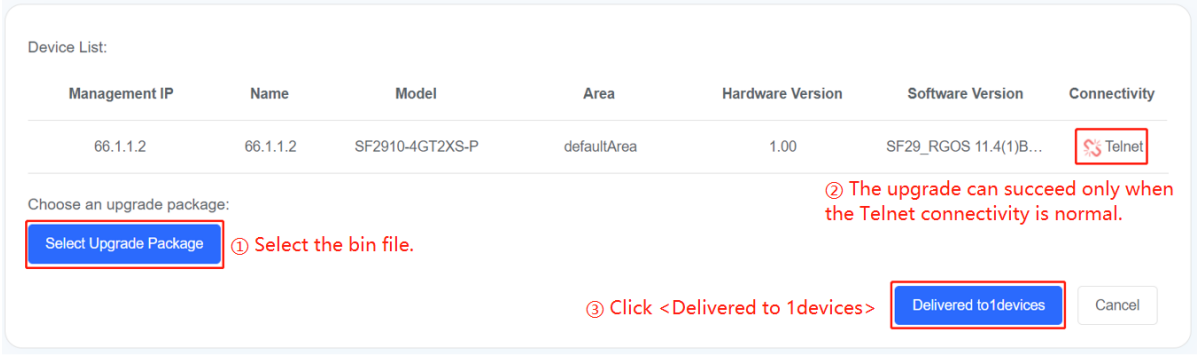
### Upgrading the Switch Software

You can upgrade the bin file of the managed switches by clicking **Bulk Update**.

- Query the switch to be upgraded by entering the search criteria, and select the switch (only switches of the same model can be upgraded in a batch).




- Upload the bin file and start upgrade. This operation has potential risks. Proceed with caution.



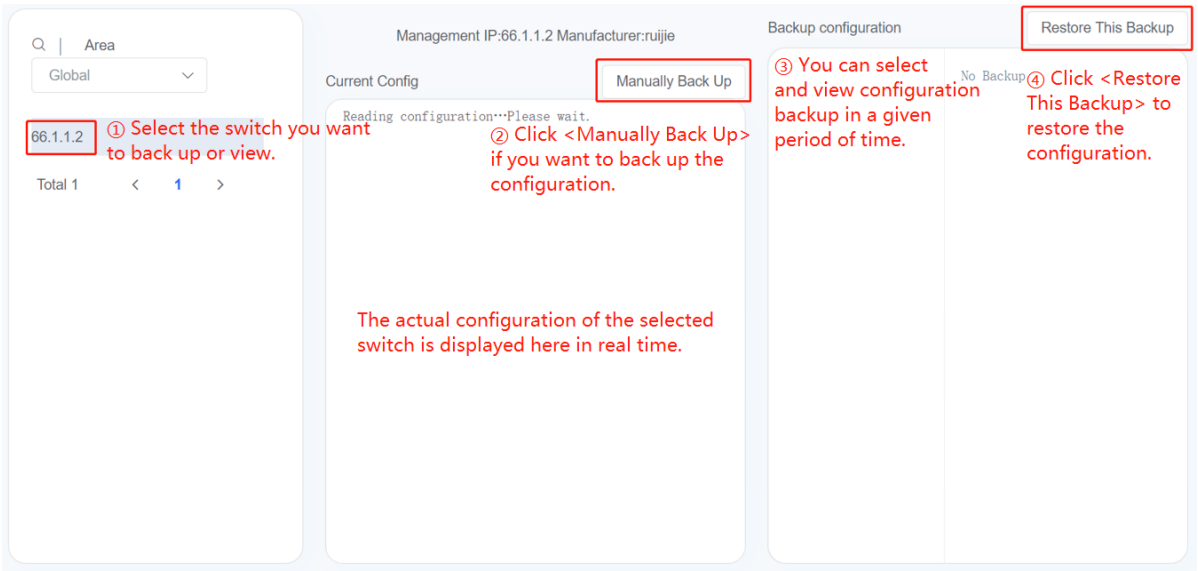

- Wait for the upgrade process to finish. If you exit the page and open the upgrade page again, you can still view the upgrade progress.

## 5. Performing Backup

### Performing Backup and Recovery

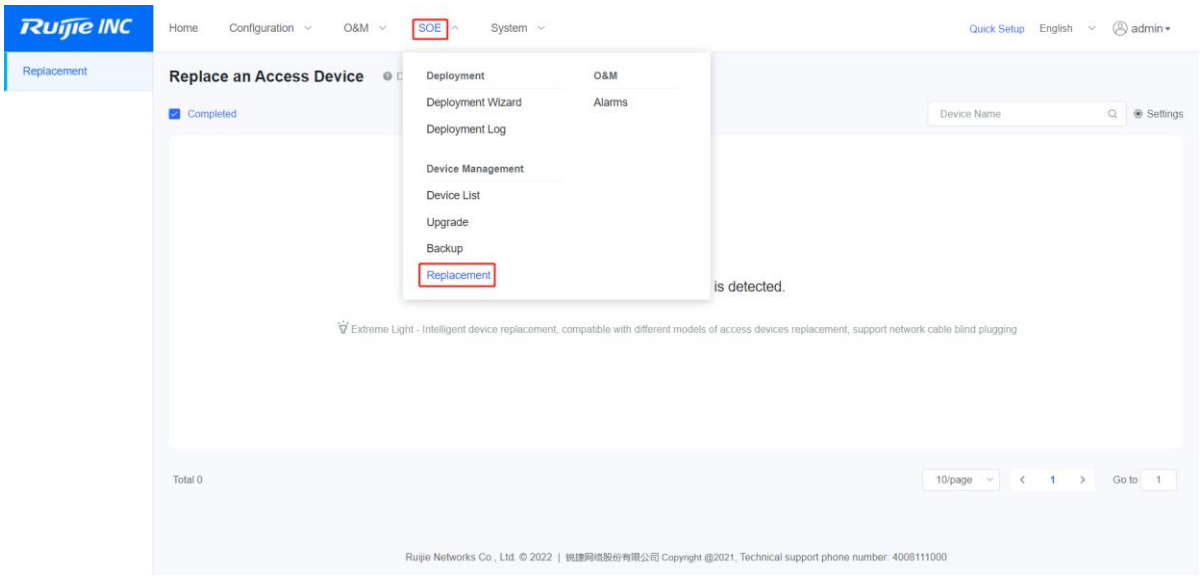
With configuration backup and recovery, you can manage the configurations of the managed switches.

Due to the limited storage space of the switch, the system allows a maximum of five records for a single switch.



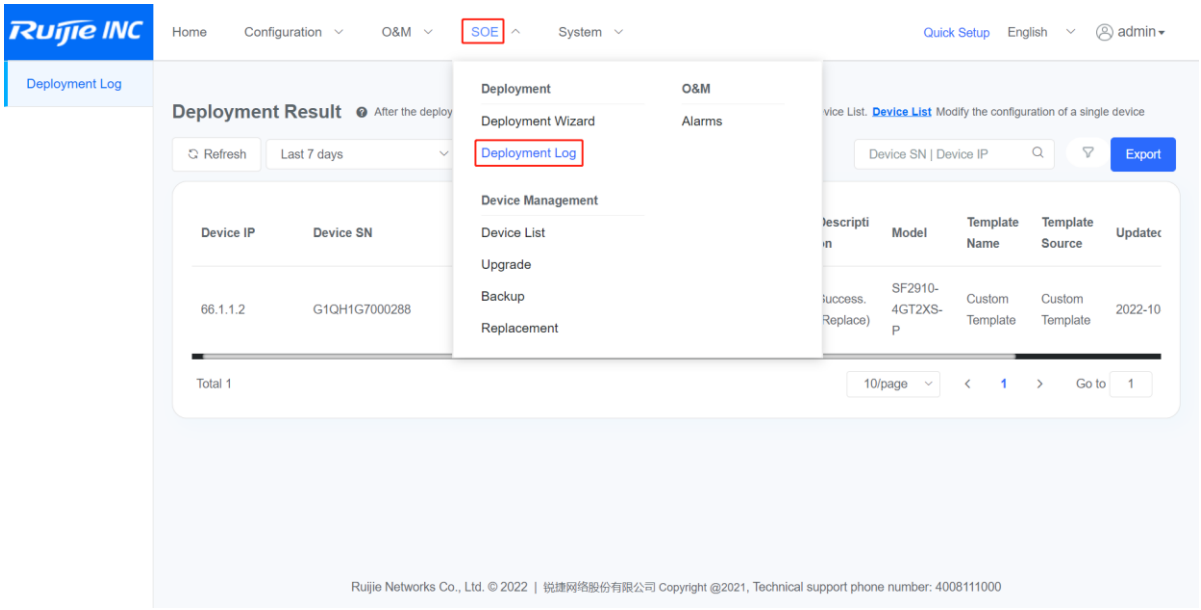
## 6. Replacing a Switch

Choose **SOE** > **Replacement**. The **Replacement** page is displayed.

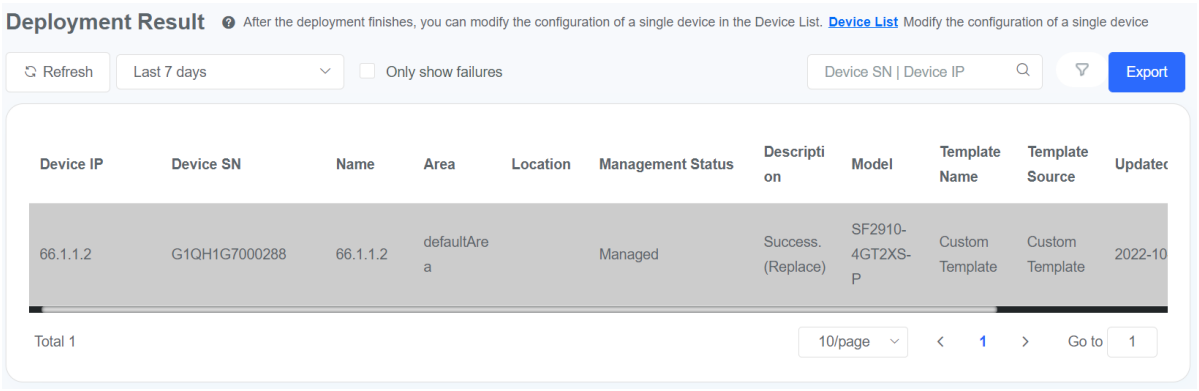



If a switch fails, an O&M engineer can replace the faulty switch with a new one by installing the optical fiber or network cable connected to the faulty switch into the new switch.

Choose **SOE** > **Deployment Log**. The **Deployment Log** page is displayed.



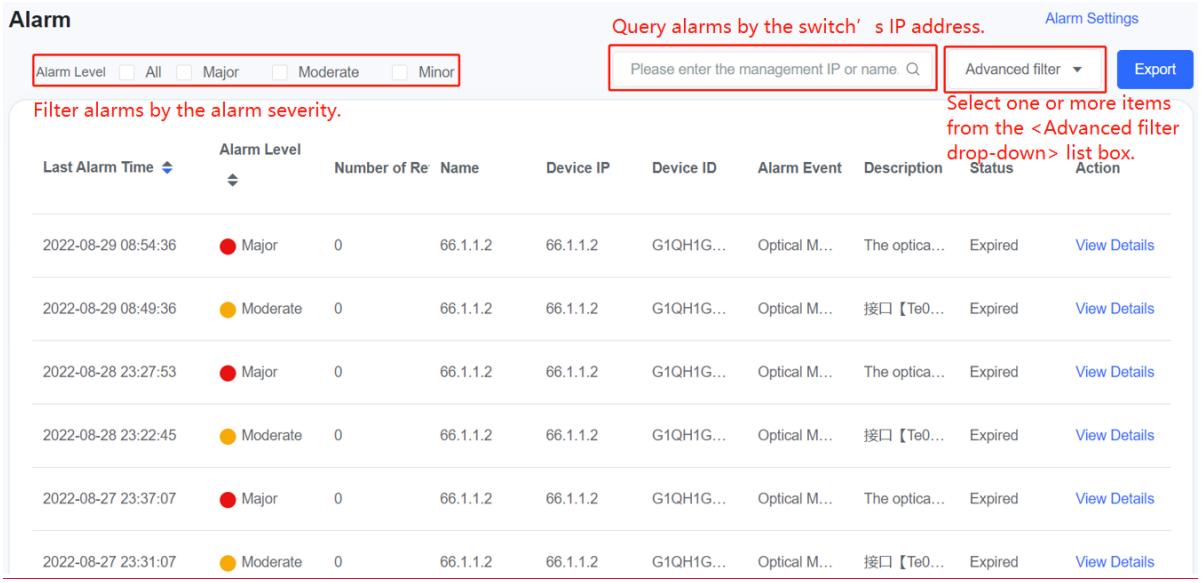

You can view the replacement results on the **Deployment Log** page.



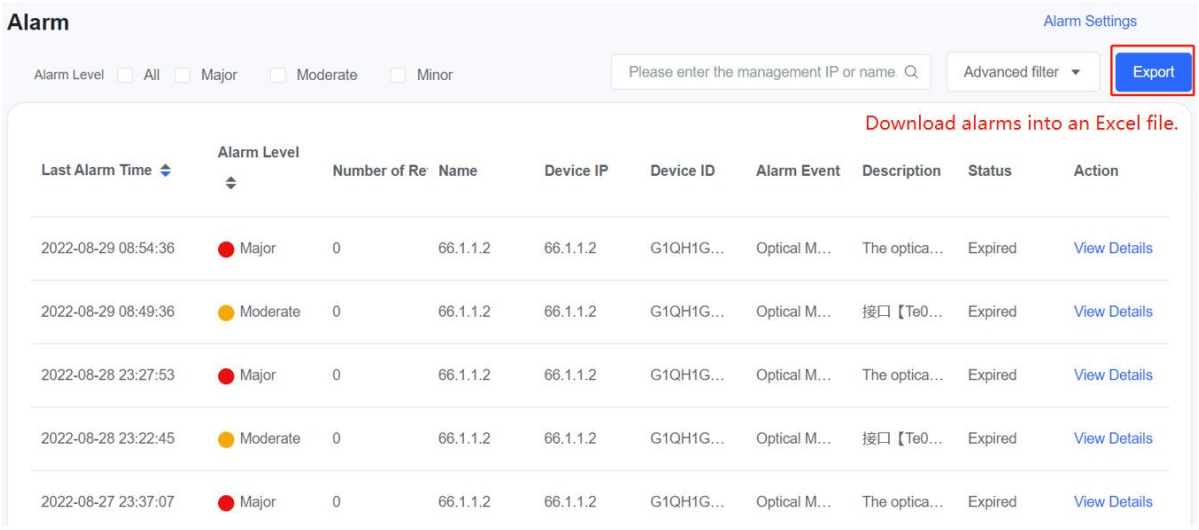

## 7. Configuring the Alarm Module

You can view, export, and handle alarms of the switches managed by the system in **Alarm Module**, and set the alarm storage time and expiration time.

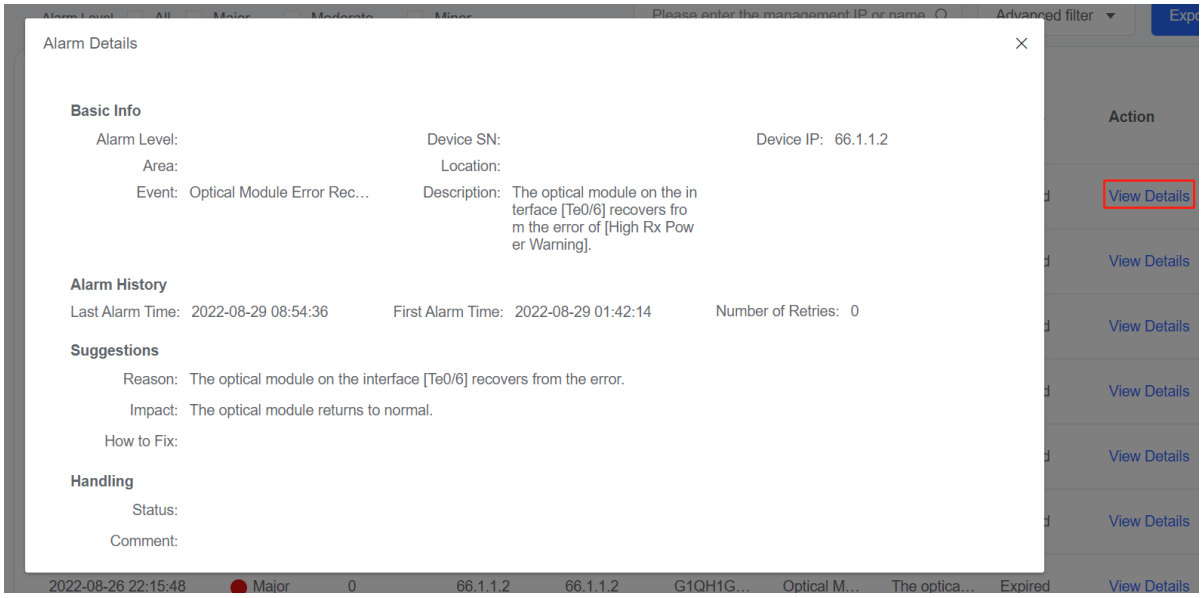
### 1. Viewing alarms




### 2. Exporting alarms

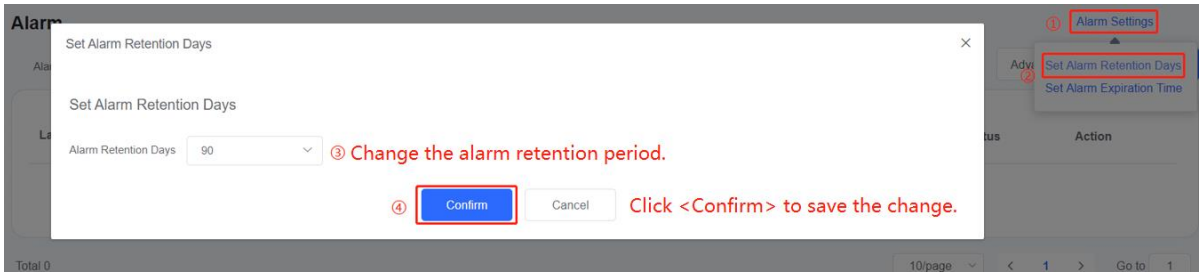


### 3. Viewing and handling alarms

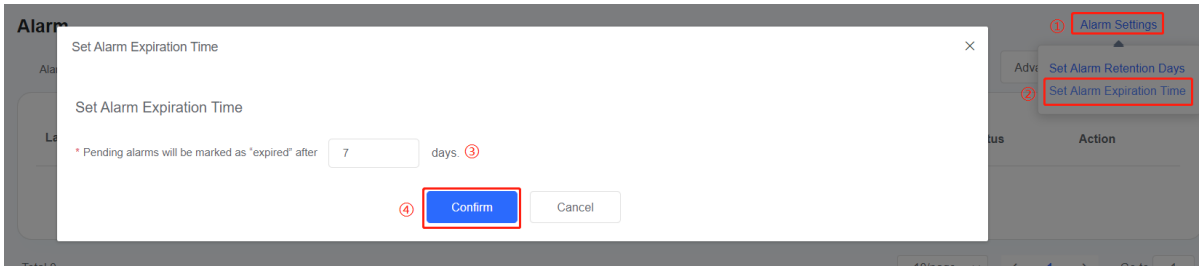



### 4. Setting the alarm retention period

To save the switch's storage space, set a proper alarm retention period.



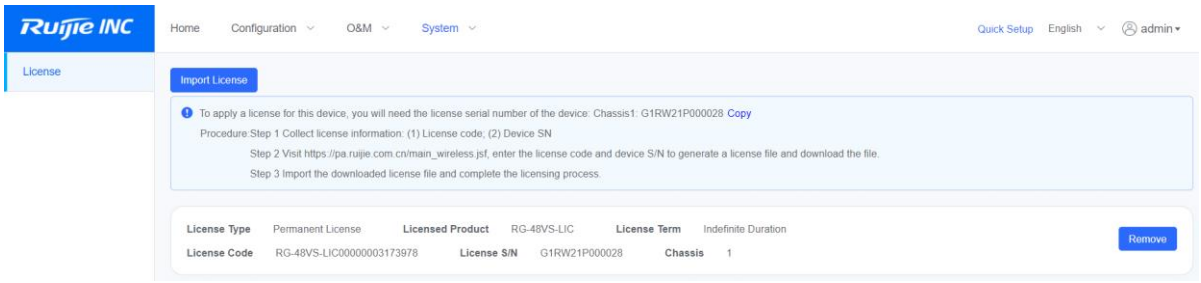

### 5. Setting the alarm expiration time




## 1.3.8 System

### 1. License

- Sample License



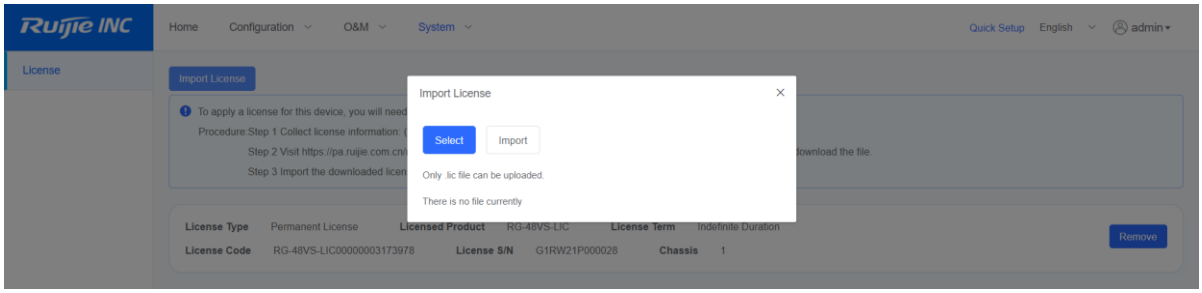

- Importing a license

Procedure:

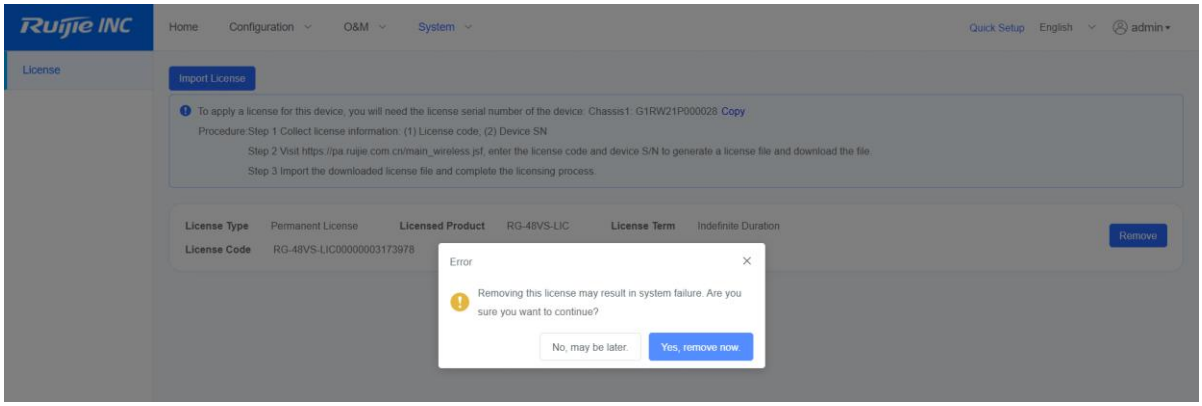
Step 1: Collect the license information, including the license code and license SN.

Step 2: Visit **https://pa.ruijie.com.cn/main_wireless.jsf**. Enter the license code and license SN to generate a license file, and download the license file.

Step 3: Import the downloaded license file.



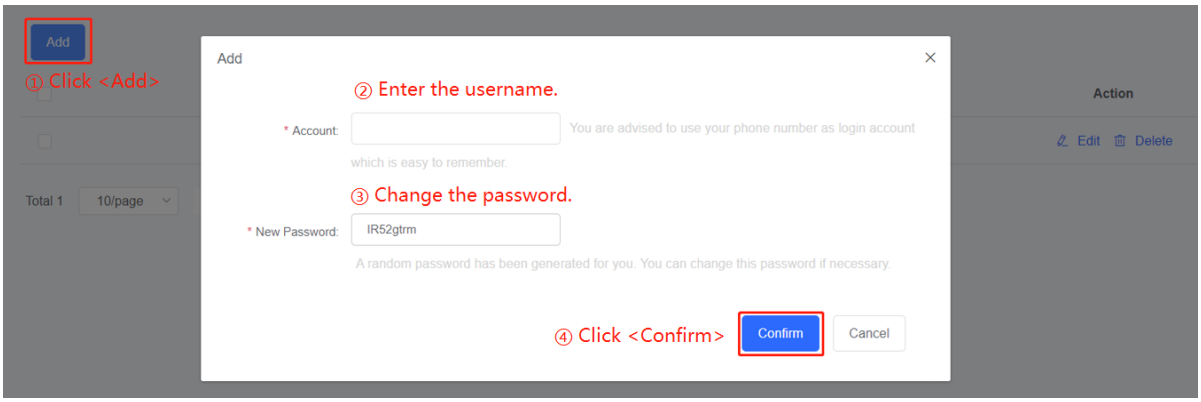

- Removing a license



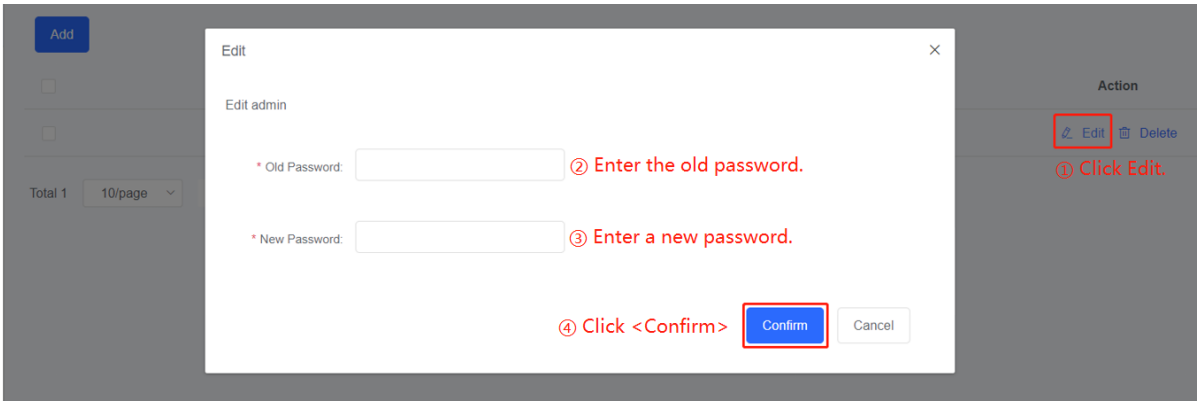

## 2. Admin Account

In addition to the admin account that comes with the eWeb management system, you can also create and maintain other accounts (only the network administrator has this privilege).

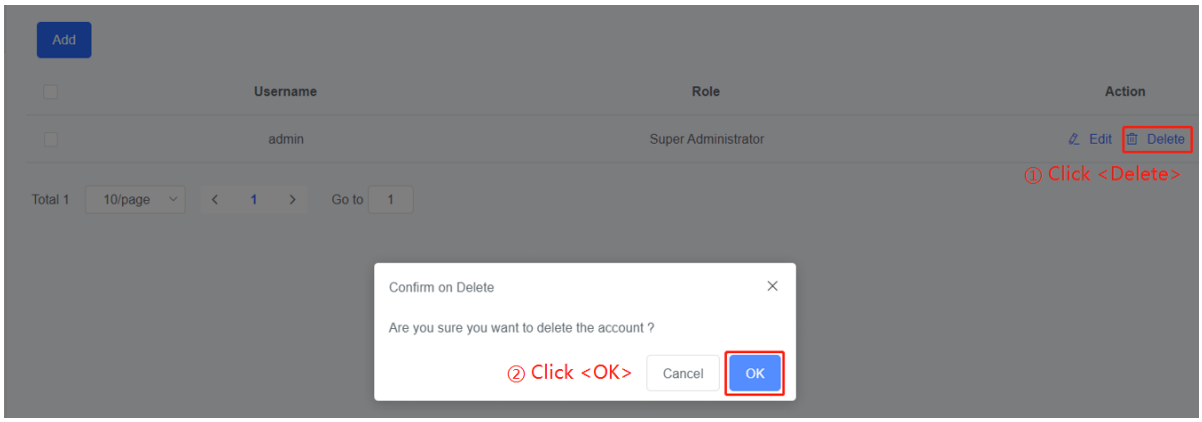
1. Adding an account



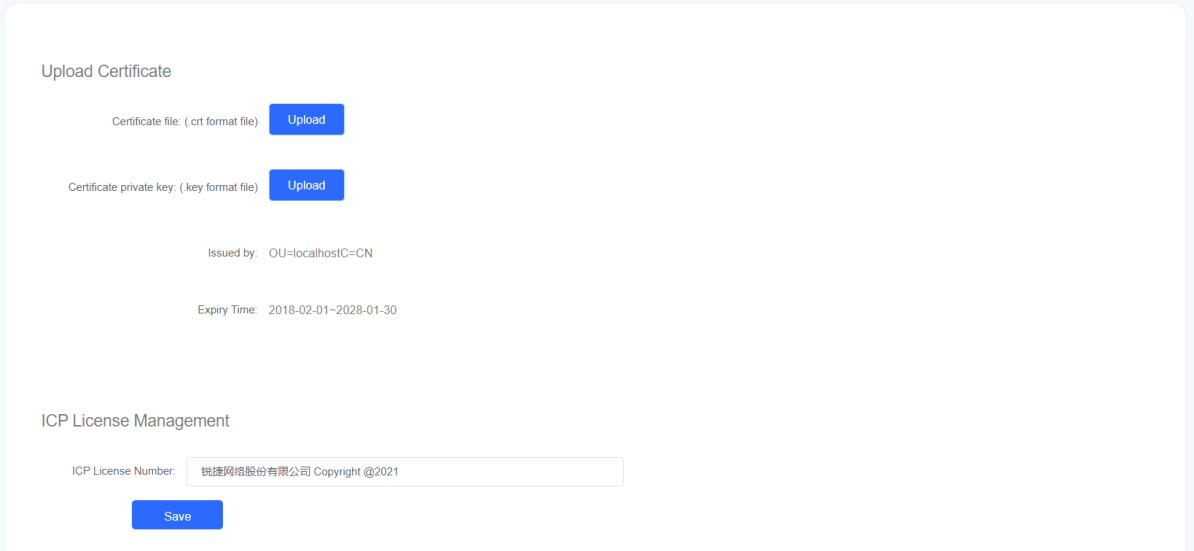

2. Changing the password




3. **Deleting an account** (the admin account cannot be deleted)

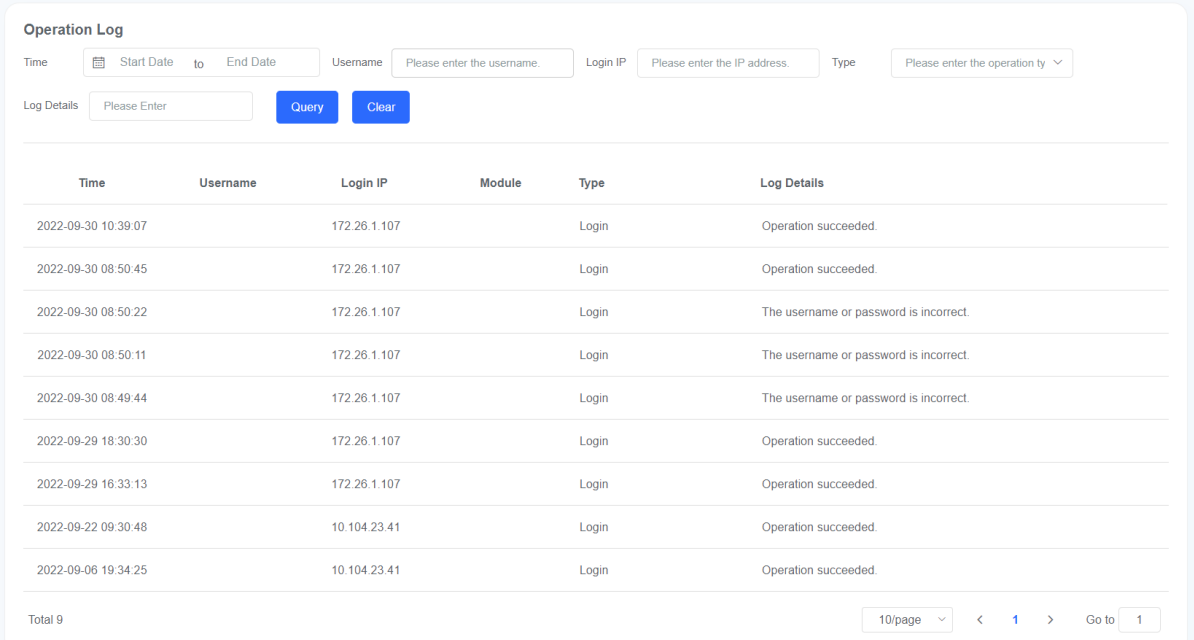


## 3. Certificates and Registration




## 4. Operation Log

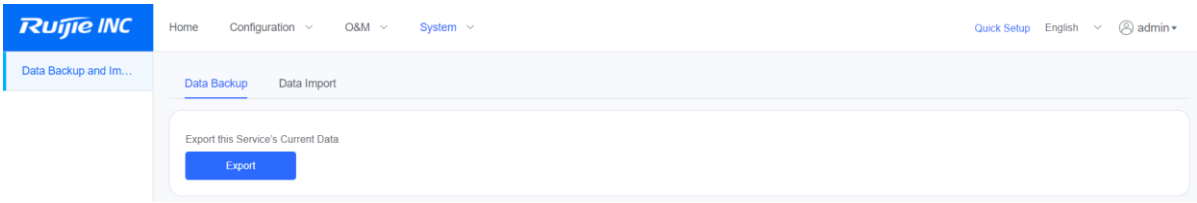
The operation log records users' key operations. You can query the operation log based on the search criteria.




## 5. Performing Data Backup and Import

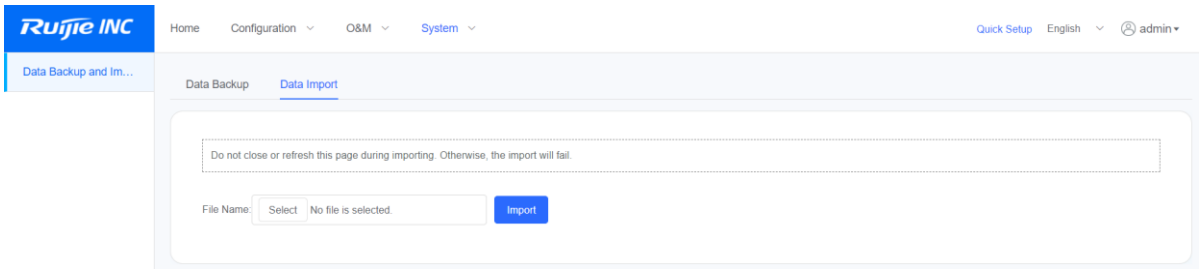
- Performing data backup

You can click **Export** to download the database file with the suffix .db.



- Importing data

The suffix of the imported database file must be .db, and the imported file version be the same as or earlier than the current database version.




## 1.4 Appendixes

### 1. About the INC-EMB License

Difference Between the INC-EMB License and the INC-STD License

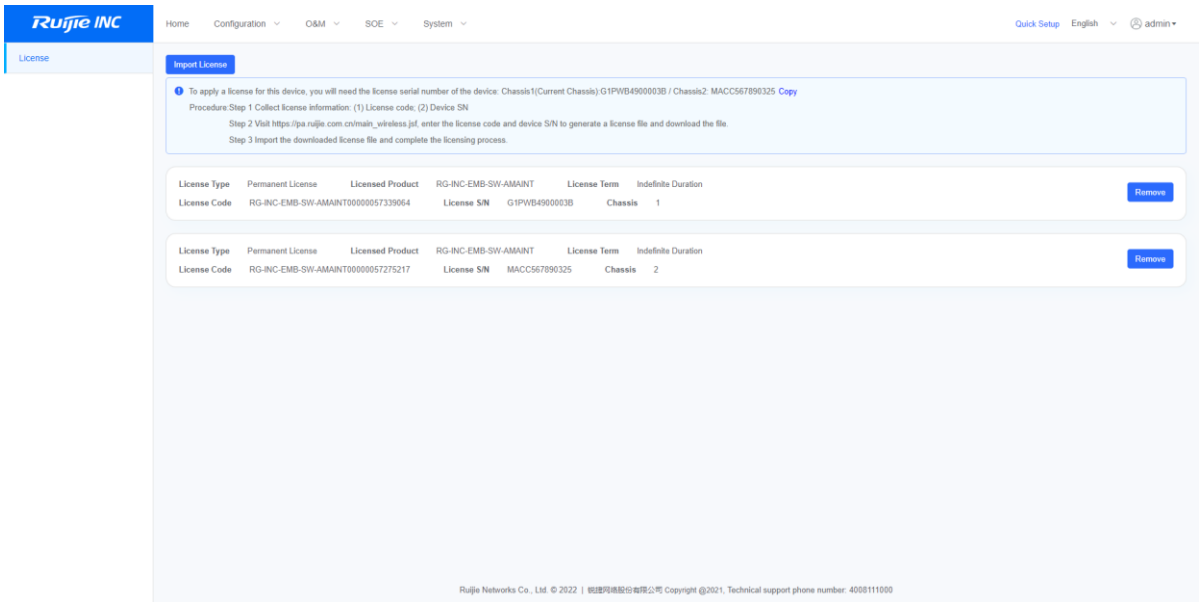
The INC-EMB license runs on the switch and is a device license, while the INC-STD license is an application software license.

Information on the License

- **Device SN**
- **License code**

**Licensing Procedure**

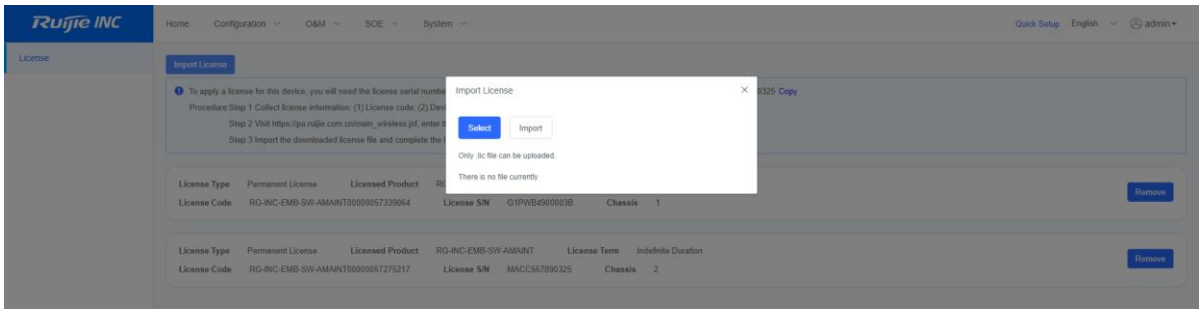
- You will be given a license code after purchasing a license.
- You must obtain the device SN on the switch by choosing **System** > **License**.




- Visit **https://pa.ruijie.com.cn/main_wireless.jsf** (Ruijie Networks's 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.
- Choose **System** > **License**, click **Select** to select the downloaded license file with the suffix *.lic from your local PC, and click **Import**.




- 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.

