

Ruijie RG-EW Series Routers Web-Based Configuration Guide

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#### **Preface**

Thank you for using our products.

#### **Audience**

This manual is intended for:

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

# Obtaining Technical Assistance

- Ruijie Networks Website: <a href="https://www.ruijienetworks.com/">https://www.ruijienetworks.com/</a>
- Technical Support Website: <a href="https://ruijienetworks.com/support">https://ruijienetworks.com/support</a>
- Case Portal: <a href="https://caseportal.ruijienetworks.com">https://caseportal.ruijienetworks.com</a>
- Community: <a href="https://community.ruijienetworks.com">https://community.ruijienetworks.com</a>
- Technical Support Email: <a href="mailto:service-rj@ruijienetworks.com">service-rj@ruijienetworks.com</a>
- Skype: <u>service\_ri@ruijienetworks.com</u>

#### **Related Documents**

Documents	Description
Command Reference	Describes the related configuration commands, including command modes, parameter descriptions, usage guides, and related examples.
Hardware Installation and Reference Guide	Describes the functional and physical features and provides the device installation steps, hardware troubleshooting, module technical specifications, and specifications and usage guidelines for cables and connectors.

### **Conventions**

This manual uses the following conventions:

Convention	Description
boldface font	Commands, command options, and keywords are in <b>boldface</b> .
italic font	Arguments for which you supply values are in italics.
[ ]	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 Overview

eWeb is a Web-based network management system that manages or configures devices. You can access eWeb via browsers such as Google Chrome.

Web-based management involves a Web server and a Web client. The Web server is integrated in a device, and is used to receive and process requests from the client, and return processing results to the client. The Web client usually refers to a browser, such as Google Chrome IE, or Firefox.

### 1.1 Conventions

In this document, texts in bold are names of buttons (for example, **OK**) or other graphical user interface (GUI) elements (for example, **ARP List**).

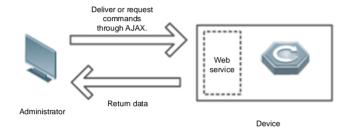
## 2 Configuration Guide

### 2.1 Preparation

### **Scenario**

As shown in the figure below, an administrator can access the device from a browser and configure the device through the eWeb management system.

Figure 2-1-1 Data Exchange Principle



#### Remarks

The eWeb management system combines various device commands and then delivers them to the device through AJAX requests. The device then returns data based on the commands. A Web service is available on the device to process basic HTTP protocol requests.

#### **Deployment**

### Configuration Environment Requirements

#### Client requirements:

- An administrator can log into the eWeb management system from a Web browser to manage devices. The client refers
  to a PC or some other mobile endpoints such as laptops or tablets.
- Google Chrome, Firefox, IE10.0 and later versions, and some Chromium-based browsers (such as 360 Extreme Explorer) are supported. Exceptions such as garble or format error may occur if an unsupported browser is used.
- 1024 x 768 or a higher resolution is recommended. If other resolutions are used, the page fonts and formats may not be aligned and the GUI is less artistic, or other exceptions may occur.
- The client IP address is set in the same LAN network as the device IP address, such as 192.168.110.X. The subnet mask is 255.255.255.0. The default gateway is device management address 192.168.110.1. Alternatively, you can set the IP assignment mode to **Obtain an IP address automatically** or enter **ruiyi.cn** into the address bar of the browser to access eWeb.

#### Server requirements:

The device is enabled with Web service (enabled by default).

• The device is configured with a management IP address (Default: 192.168.110.1).

To log into the eWeb management system, open the Google Chrome browser, and enter http://ruiyi.cn into the address bar, and press **Enter**.

Figure 2-1-2 Login Page



Google Chrome and IE browser 9, 10 or 11 are supported. Copyright©2000-2020 Ruijie Networks Co., Ltd.

Enter the password and click **Login**.

### 2.2 Wizard

You will enter the Wizard page without login at initial setup.

#### 2.2.1 Network Status

The page displays device count, client count, network status and the time it takes to go to Baidu.

Figure 2-2-1 Network Status





### **Network Status**

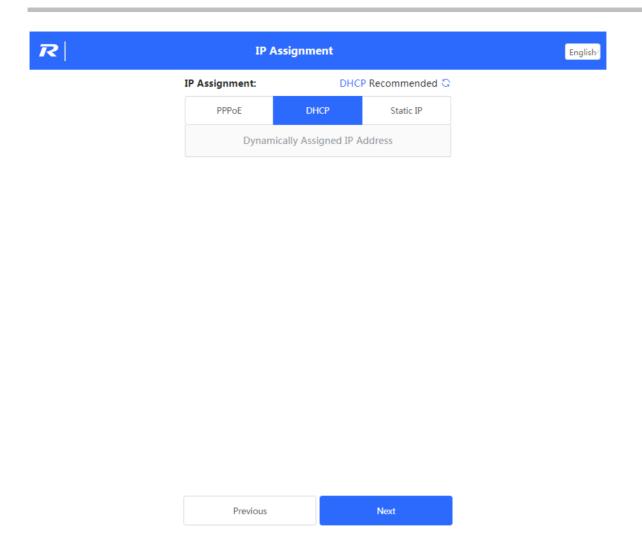
If the device fails to access the network, click **Start Setup**, and you will go to the <u>IP Assignment</u> page.

If the device has accessed the network, click **Start Setup**, and you will go to the WiFi Settings page.

### 2.2.2 IP Assignment

The system will check IP assignment automatically. It is recommended to select DHCP. If you select PPPoE, please enter the PPPoE account provided by the ISP.

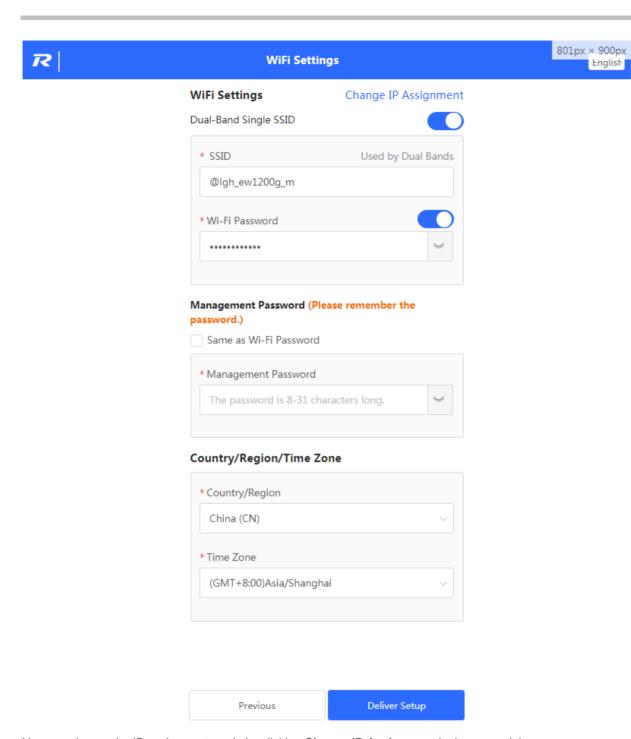
Figure 2-2-2 IP Assignment



### 2.2.3 WiFi Settings

Configure the SSID, WiFi password and management password and Click **Deliver Setup**.

Figure 2-2-3 WiFi Settings



English

You can change the IP assignment mode by clicking **Change IP Assignment** in the upper right corner.

#### **2.2.4** Finish

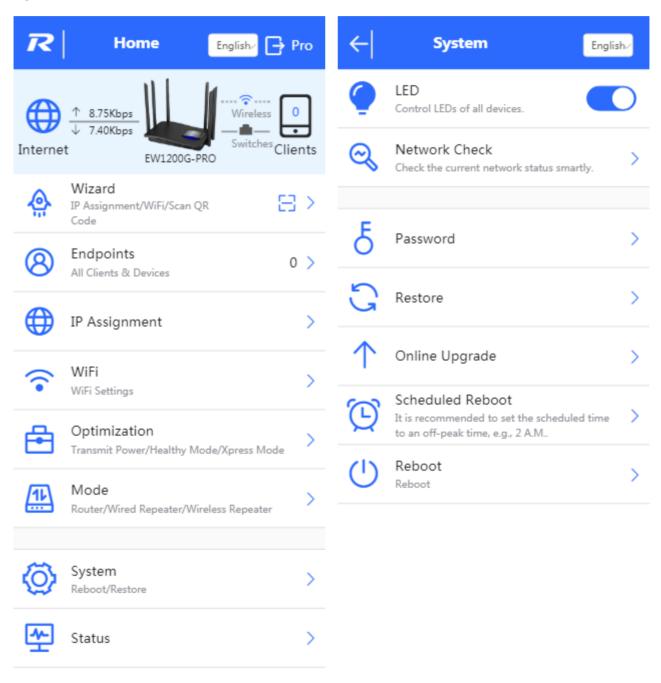
After the configuration is delivered, click **Finish** to enter the homepage.

### 2.3 **GUI**

#### 2.3.1 Phone-Based GUI

The system switches between the phone-based GUI and PC-based GUI according to the screen width and browser type. The phone-based GUI is more concise.

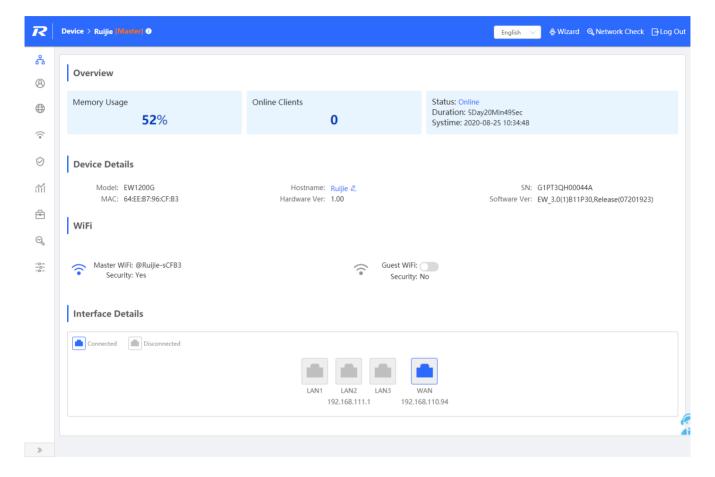
Figure 2-3-1 Phone-Based GUI



### 2.3.2 PC-Based GUI

Click **Pro** in the upper right corner of phone-based GUI to switch over to the PC-based GUI. The PC-based GUI provides more configuration items. For details, see eWeb Configuration.

Figure 2-3-2 PC-Based GUI



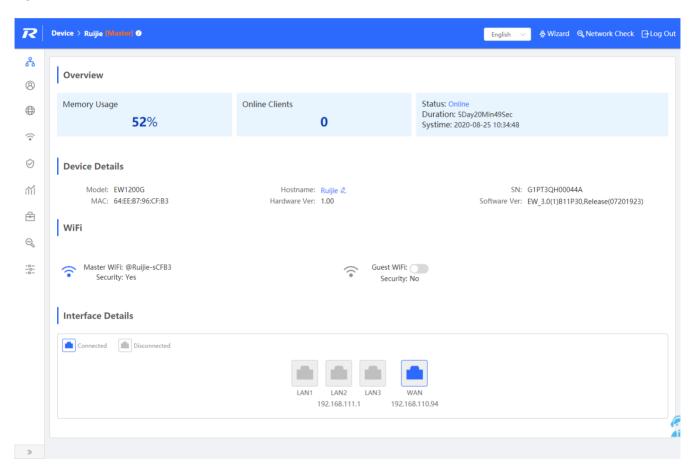
## 3 eWeb Configuration

This chapter introduces the features on the PC-based GUI.

### 3.1 Overview

The Overview page displays the device details, WiFi and interface details.

Figure 3-1 Overview



### 3.2 Online Clients

The **Online Clients** module allows you to view online clients.

Figure 3-2-1 Online Clients

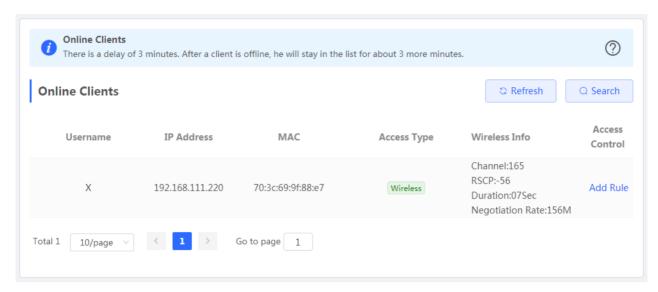
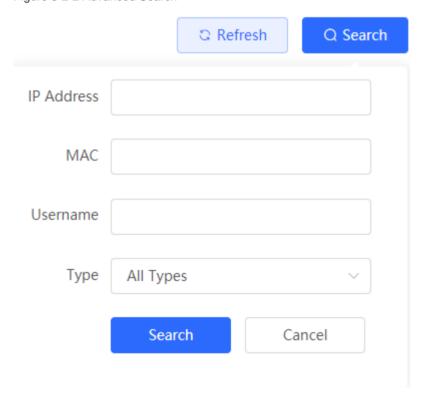


Figure 3-2-2 Advanced Search

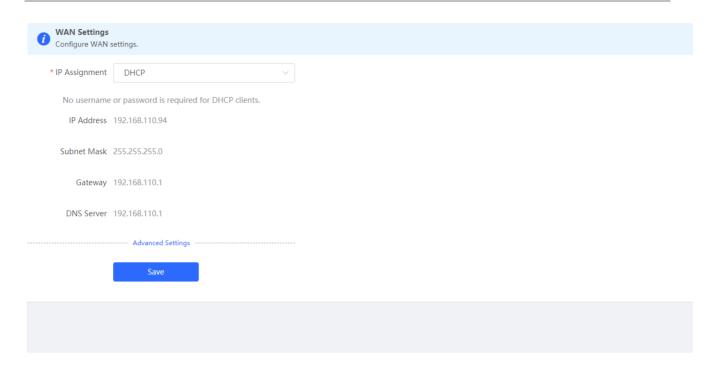


### 3.3 Basics

### 3.3.1 WAN

The **WAN** module allows you to configure WAN settings. There are three IP assignment modes available: **Static IP Address**, **DHCP** and **PPPoE**.

Figure 3-3-1 WAN Settings



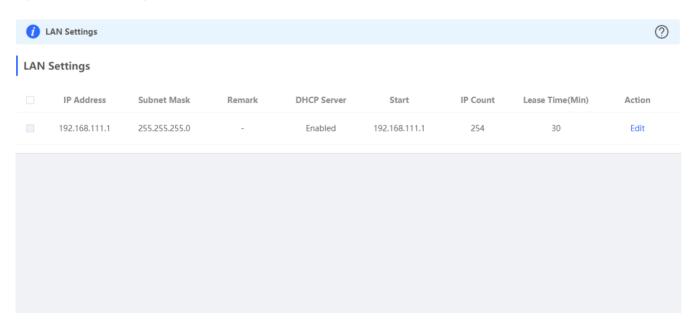
### 3.3.2 LAN

The LAN module contains LAN Settings, DHCP Clients, Static IP Addresses and DNS Proxy.

### 3.3.2.1 LAN Settings

The LAN module allows you to set the IP address of the LAN port and DHCP status.

Figure 3-3-2 LAN Settings



Click **Edit** in the **Action** column to add a VLAN. In the displayed dialog box, configure settings and click **OK**.

Figure 3-3-3 Edit

 $\times$ Edit \* IP Address 192.168.111.1 \* Subnet Mask 255.255.255.0 Remark Remark \* MAC 00:74:9c:87:6d:ab DHCP Server \* Start 192.168.111.1 \* IP Count 254 \* Lease Time(Min) 30 DNS Server 192.168.111.1

You can click in the upper right corner to see description about each configuration item.

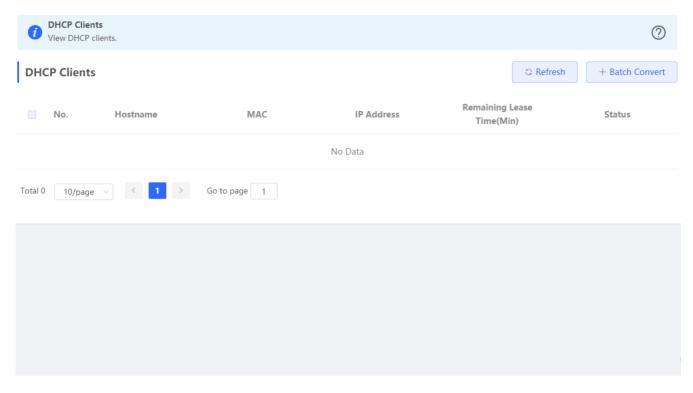
### 3.3.2.2 DHCP Clients

The **DHCP Clients** page displays DHCP clients.

Cancel

OK

Figure 3-3-4 DHCP Clients

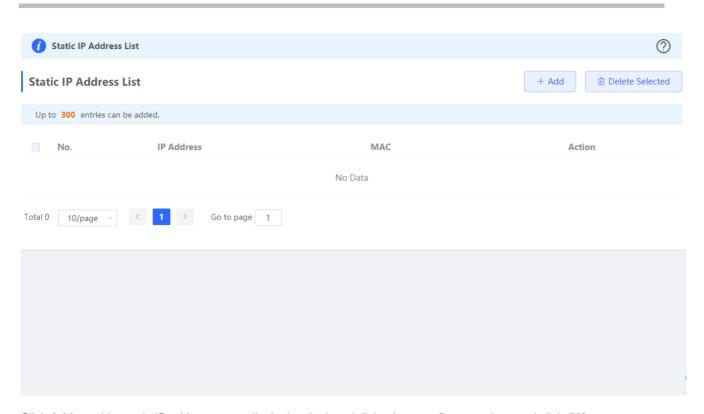


Click **Convert to Static IP** in the **Action** column to convert a DHCP-assigned IP address to a static IP address. Alternatively, select DHCP-assigned IP addresses and click **Batch Convert** to convert more than one IP address.

### 3.3.2.3 Static IP Addresses

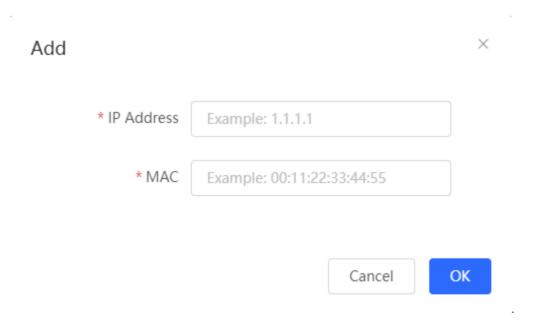
The Static IP Addresses module allows you to add, delete and edit static IP addresses.

Figure 3-3-5 Static IP Addresses



Click Add to add a static IP address manually. In the displayed dialog box, configure settings and click OK.

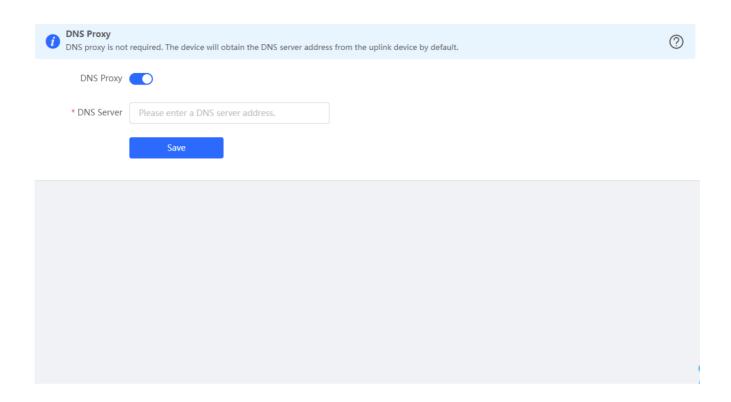
Figure 3-3-6 Add Static IP Address



### 3.3.2.4 DNS Proxy

The **DNS Proxy** module allows you to configure DNS proxy settings.

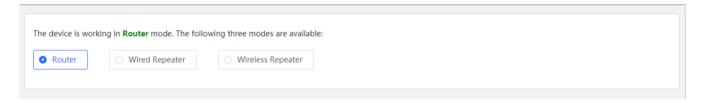
Figure 3-3-7 DNS Proxy



### 3.3.3 Work Mode

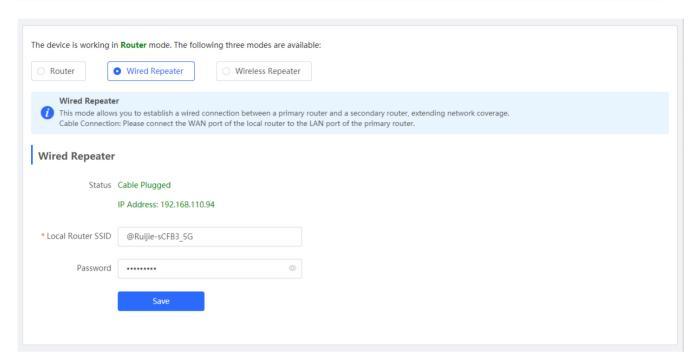
The **Work Mode** module displays the current mode and the other available modes.

Figure 3-3-8 Router Mode



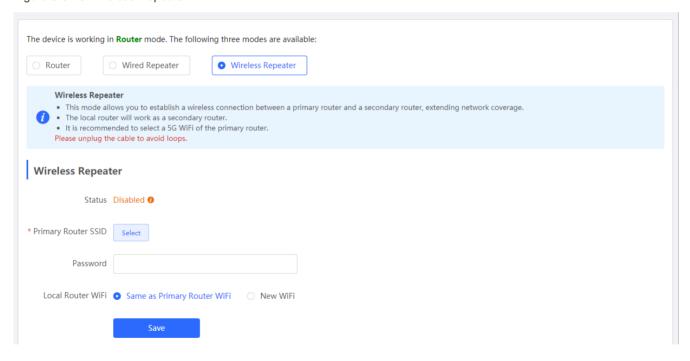
Switch the device over to the wired repeater mode.

Figure 3-3-9 Wired Repeater



Switch the device over to the wireless repeater mode.

Figure 3-3-10 Wireless Repeater



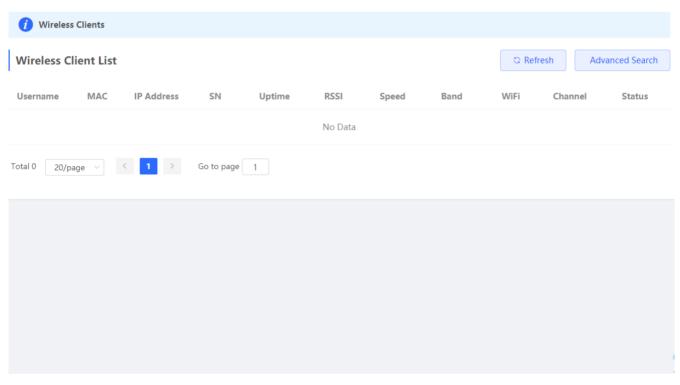
### 3.4 Wireless

### 3.4.1 Clients

### 3.4.1.1 Clients

The **Clients** module displays the wireless clients.

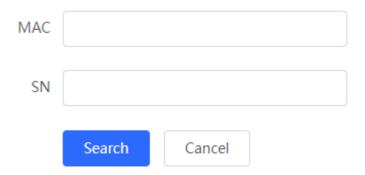
Figure 3-4-1 Wireless Clients



Click Advanced Search, and you can search clients by SN and MAC address.

This is a fuzzy search. You can enter an incomplete MAC address or part of an SN.

Figure 3-4-2 Advanced Search

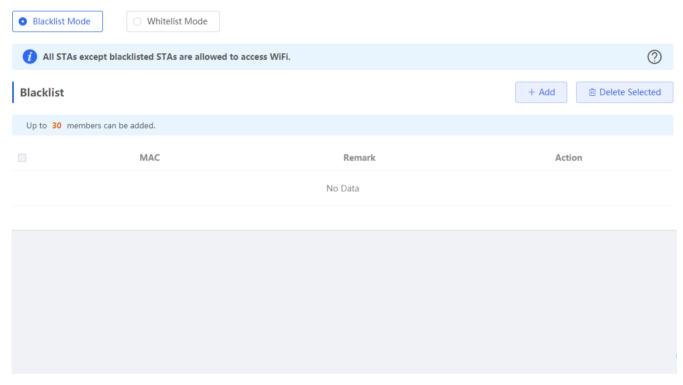


### 3.4.1.2 Blacklist/Whitelist

Blacklist Mode: All STAs except blacklisted STAs are allowed to access WiFi.

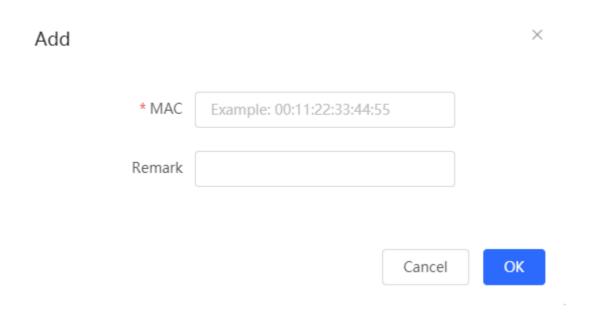
Click **Delete** in the **Action** column to delete a blacklisted STA. Alternatively, select target STAs and click **Delete Selected** to delete more than one blacklisted STAs.

Figure 3-4-3 Blacklist Mode



Click Add to add a blacklisted STA. In the displayed dialog box, configure settings and click OK.

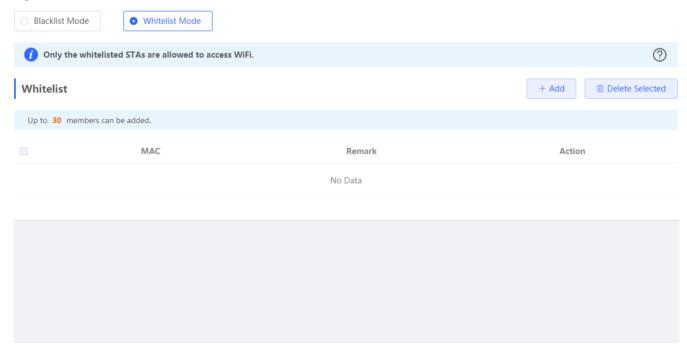
Figure 3-4-4 Add Blacklist STA



Whitelist Mode: Only the whitelisted STAs are allowed to access WiFi.

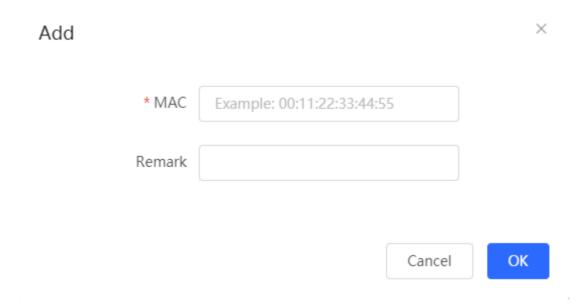
Click **Delete** in the **Action** column to delete a whitelisted STA. Alternatively, select target STAs and click **Delete Selected** to delete more than one whitelisted STAs.

Figure 3-4-5 Blacklist Mode



Click Add to add a whitelisted STA. In the displayed dialog box, configure settings and click OK.

Figure 3-4-6 Add Whitelisted STA



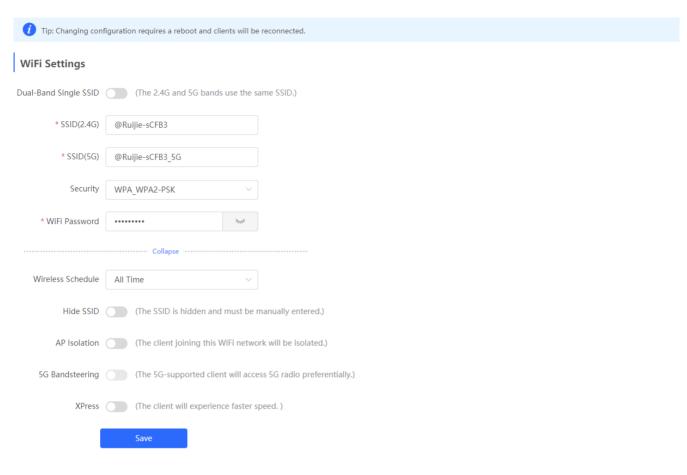
### 3.4.2 WiFi

The WiFi module allows you to configure WiFi settings for all devices.

### 3.4.2.1 WiFi Settings

The WiFi Settings module allows you to configure the primary WiFi.

Figure 3-4-7 WiFi Settings



### 3.4.2.2 Guest WiFi

The guest WiFi is disabled by default. You can enable guest WiFi on this page or homepage.

AP isolation is enabled by default and cannot be edited.

Set a schedule, and the guest WiFi will be enabled only during this period time. When the time expires, the guest WiFi will be disabled.

Figure 3-4-8 Guest WiFi

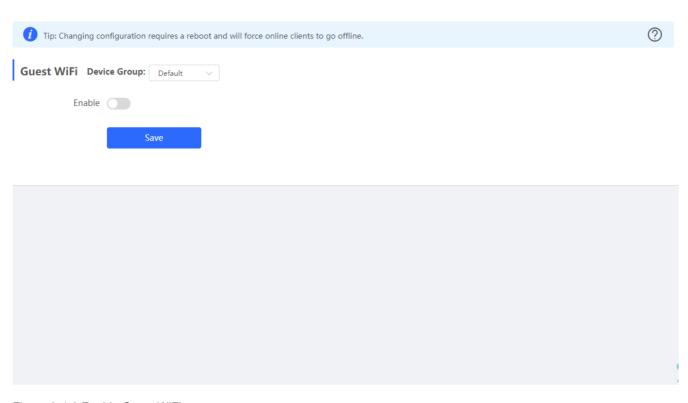
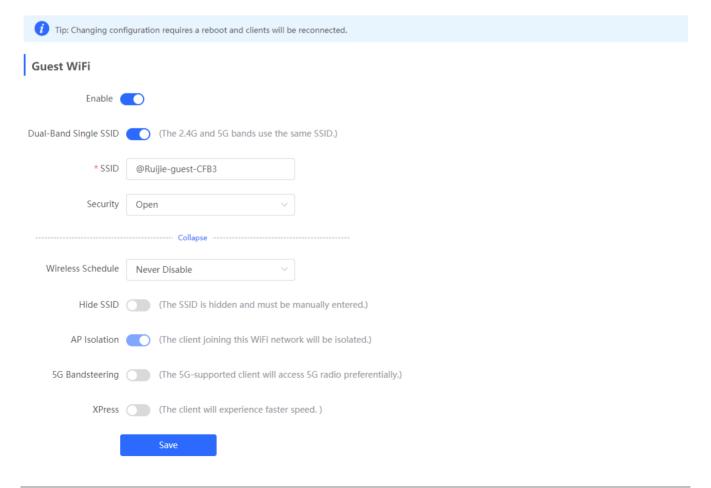


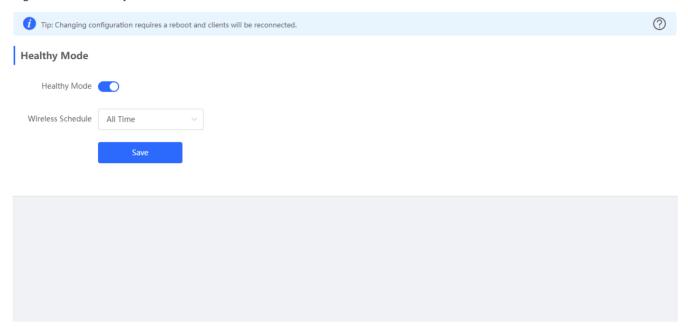
Figure 3-4-9 Enable Guest WiFi



### 3.4.2.3 Healthy Mode

The **Healthy Mode** module allows you to enable health mode and set a schedule.

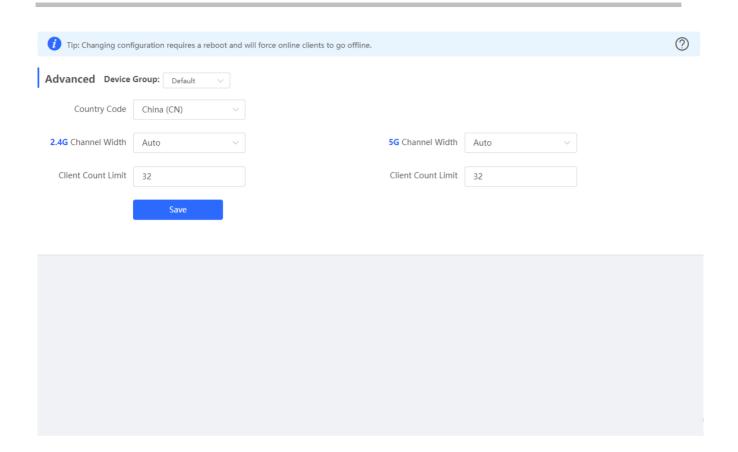
Figure 3-4-10 Healthy Mode



### 3.4.3 Advanced

The Advanced module allows you to configure client count limit and channel width.

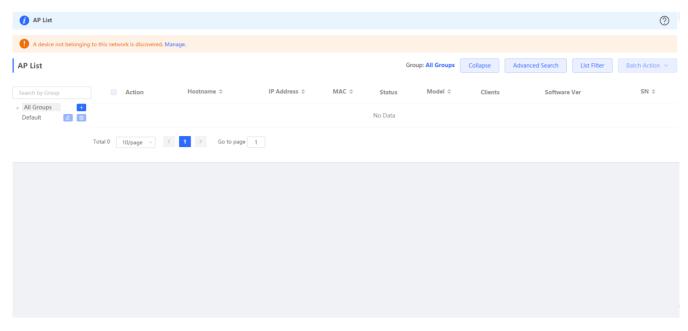
Figure 3-4-11 Advanced Settings



### 3.5 APs

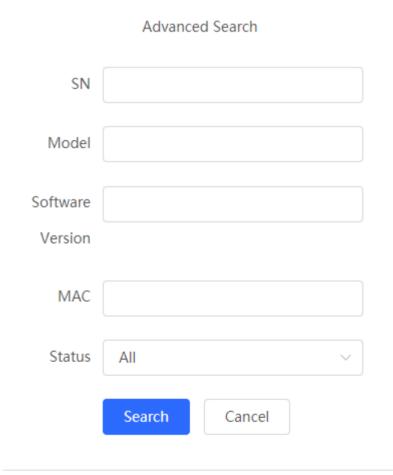
The APs module allows you to group, upgrade and delete APs.

Figure 3-5-1 AP List



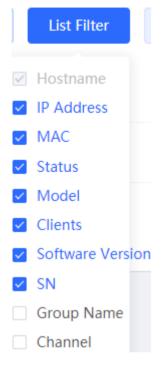
Click Advanced Search, and you can search APs by SN, model, software version, MAC address and status.

Figure 3-5-2 Advanced Search



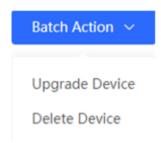
Click List Filter, and you can select columns to be displayed in the list.

Figure 3-5-3 List Filter



Select the target devices and click **Batch Action**. The following actions are available:

Figure 3-5-4 Batch Action



**Upgrade Device**: If there is a new version available, you can upgrade the APs in batches.

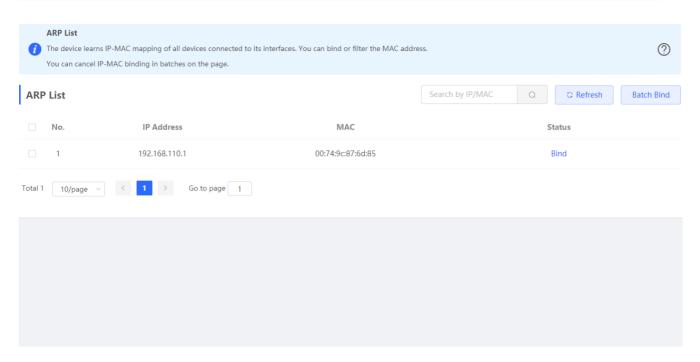
Delete Device: You can delete the APs in batches.

## 3.6 Security

### **3.6.1 ARP List**

The ARP List page displays ARP entries.

Figure 3-6-1 ARP List

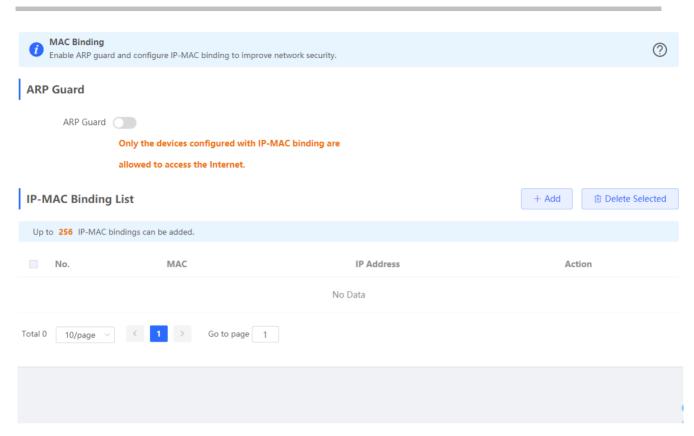


Click **Bind** in the **Action** column to bind an IP address with a MAC address. Alternatively, select ARP entries and click **Batch Bind** to bind more than one IP address. You can click <u>MAC Binding</u> to view static ARP entries.

### 3.6.2 MAC Binding

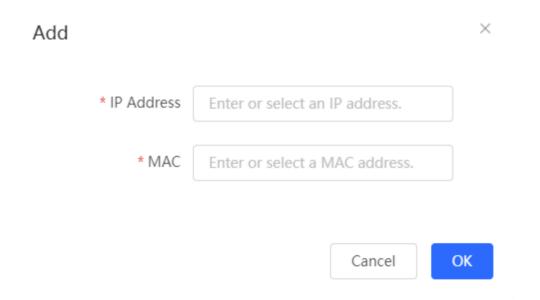
The MAC Binding module allows you to add, delete and edit IP-MAC binding entries.

Figure 3-6-2 IP-MAC Binding



Click **Add** to add an IP-MAC binding. In the displayed dialog box, enter or select an IP address and a MAC address and click **OK**.

Figure 3-6-3 Add IP-MAC Binding



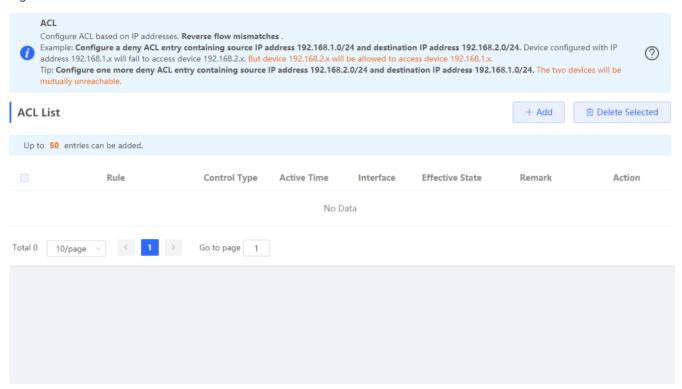
Click **Delete** in the **Action** column. The message "Are you sure you want to delete the entry?" is displayed. In the displayed dialog box, click **OK**. The message "Delete operation succeeded." is displayed.

### 3.7 Behavior

#### 3.7.1 Access Control

The Access Control module allows you to add, delete and edit access control policies.

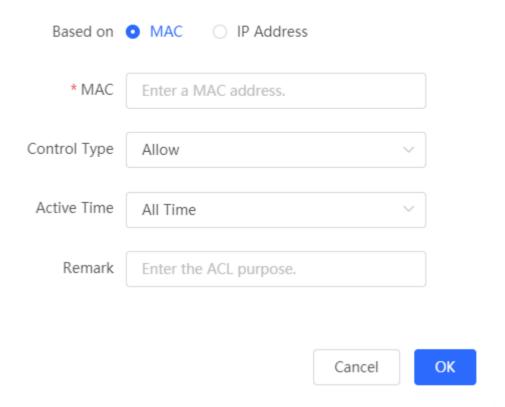
Figure 3-7-1 Access Control



Click Add to add a MAC-based policy. In the displayed dialog box, configure settings and click OK.

Figure 3-7-2 MAC-Based ACL

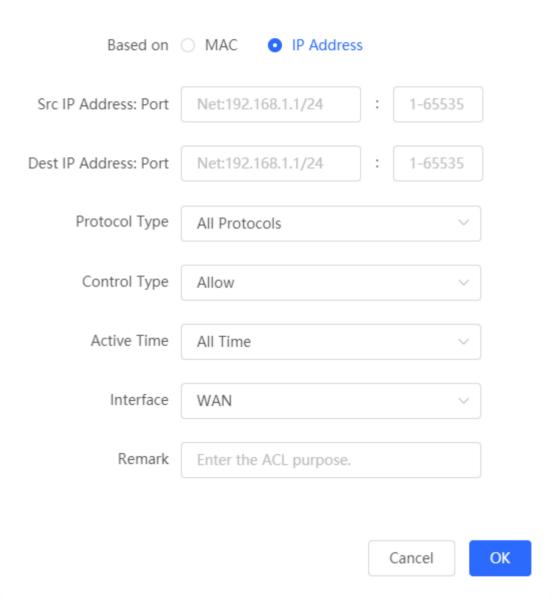
Add ACL imes



Click **Add** to add an IP address-based policy. In the displayed dialog box, configure settings and click **OK**.

Figure 3-7-3 IP Address-Based ACL

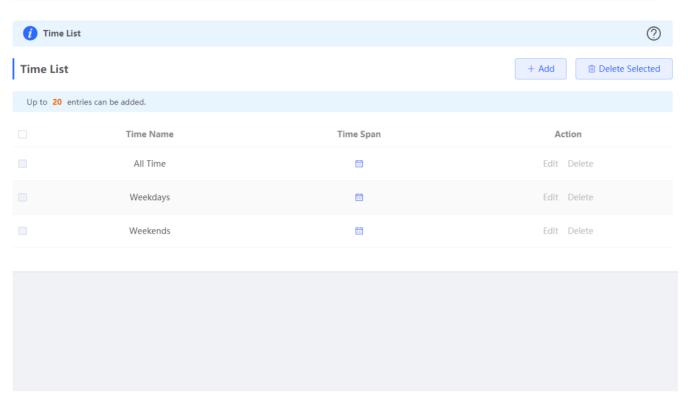
Add ACL imes



### 3.7.2 Time Management

The **Time Management** module allows you to add, delete and edit time objects.

Figure 3-7-4 Time List



Click **Add** to add a time object. In the displayed dialog box, configure settings and click **OK**.

Figure 3-7-5 Add Time Object

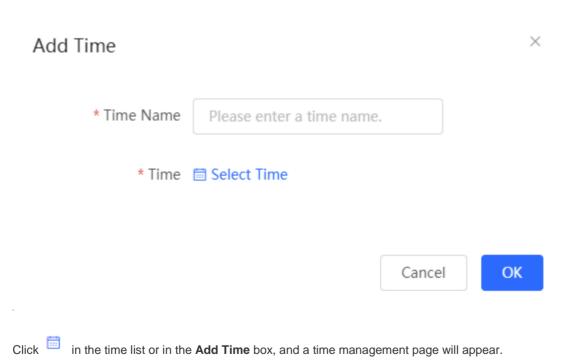


Figure 3-7-6 Select Time

 $\times$ 

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
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:00							
:00							
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:00							
:00							
:00							
:00							
59							
		Cancel	Cle	ar	OK		

Select the time and click **OK**.

# 3.8 Advanced

#### 3.8.1 Flow Control

## 3.8.1.1 Smart Flow Control

The Smart Flow Control module allows you to configure smart flow control.

Figure 3-8-1 Smart Flow Control

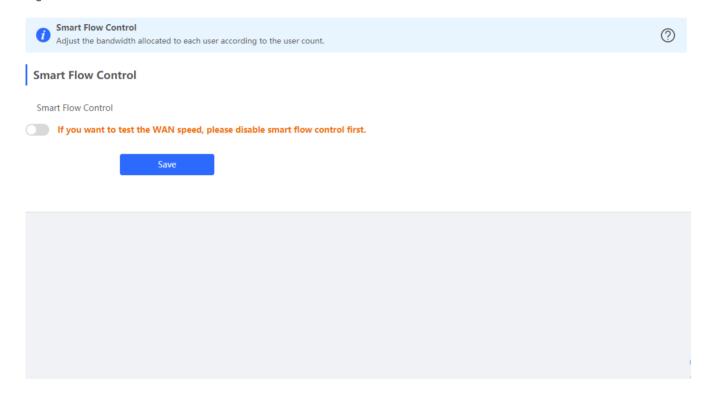
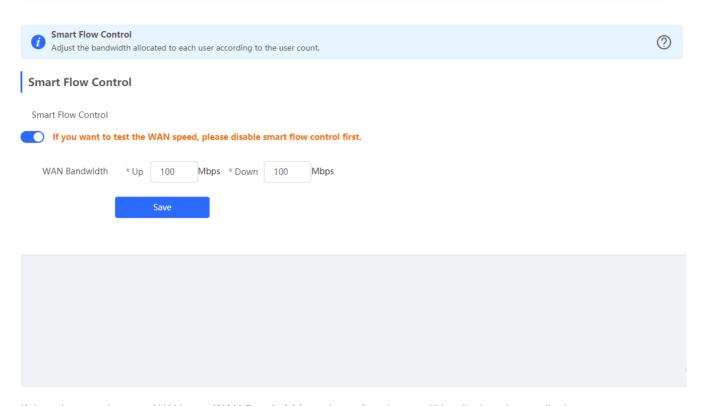


Figure 3-8-2 Enable Smart Flow Control

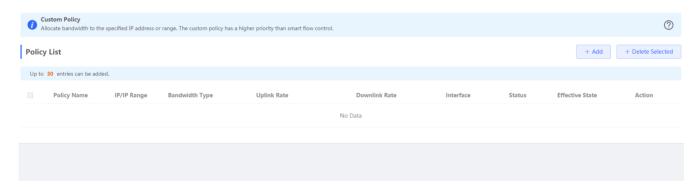


If there is more than one WAN port, WAN Bandwidth settings of each port will be displayed accordingly.

## 3.8.1.2 Custom Policy

The Custom Policy module allows you to add, delete and edit custom flow control policies.

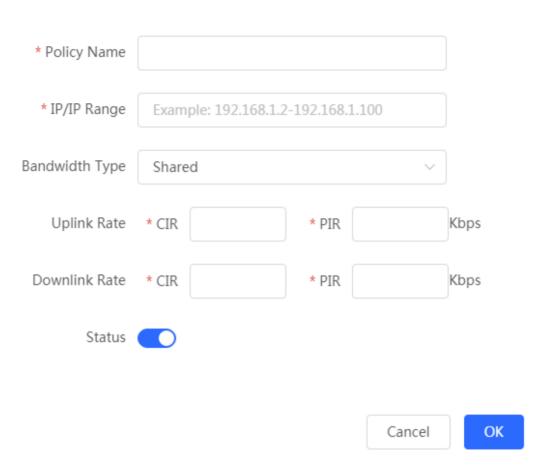
Figure 3-8-3 Custom Flow Control Policy



Click Add to add a custom flow control policy. In the displayed dialog box, configure settings and click OK.

Figure 3-8-4 Add Flow Control Policy

 $\mathsf{Add}$ 

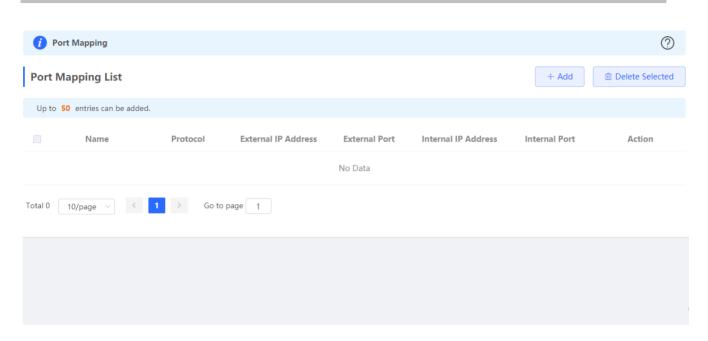


# 3.8.2 Port Mapping

# 3.8.2.1 Port Mapping

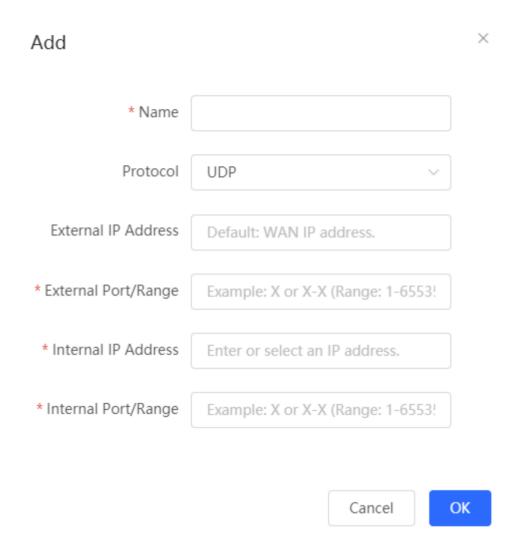
The **Port Mapping** module allows you to add, delete and edit port mapping policies.

Figure 3-8-5 Port Mapping List



Click **Add** to add a port mapping policy. In the displayed dialog box, configure settings and click **OK**.

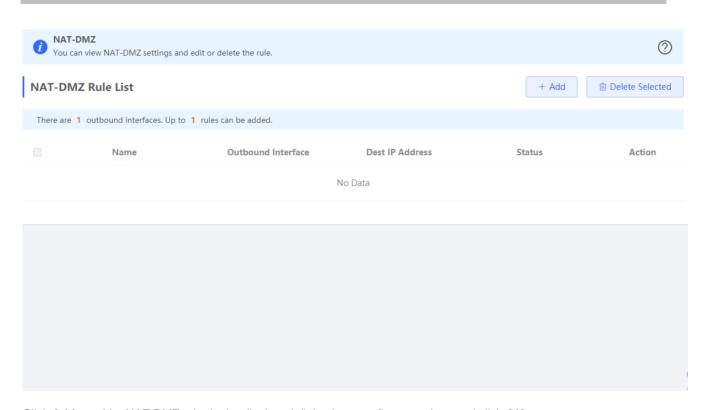
Figure 3-8-6 Add Port Mapping Policy



#### 3.8.2.2 NAT-DMZ

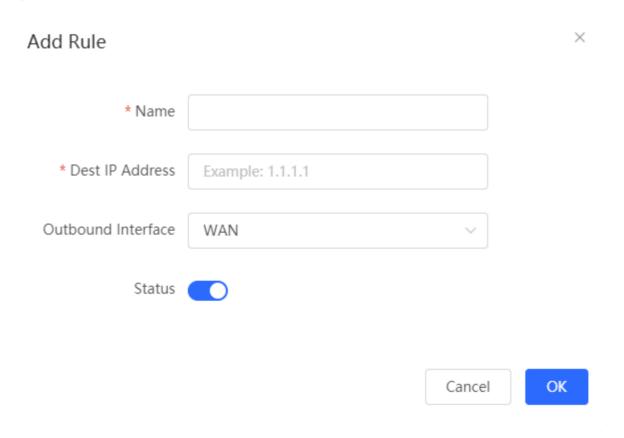
The **NAT-DMZ** module allows you to add, delete and edit NAT-DMZ rules.

Figure 3-8-7 NAT-DMZ Rule List



Click Add to add a NAT-DMZ rule. In the displayed dialog box, configure settings and click OK.

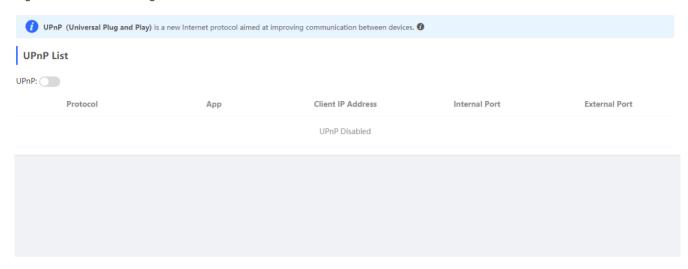
Figure 3-8-8 Add NAT-DMZ Rule



# 3.8.3 UPnP Settings

The **UPnP Settings** module allows you to enable UPnP and view UPnP settings.

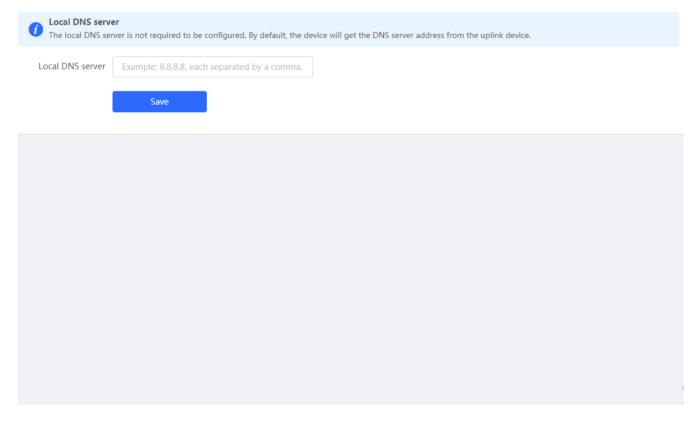
Figure 3-8-9 UPnP Settings



#### 3.8.4 Local DNS

The **Local DNS** module allows you to configure a local DNS server.

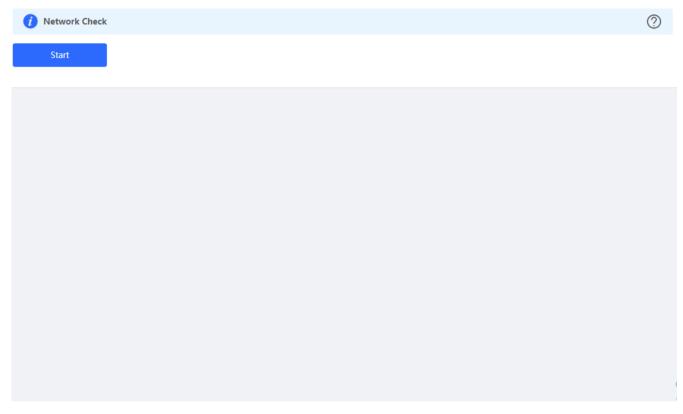
Figure 3-8-10 Local DNS



# 3.9 Diagnostics

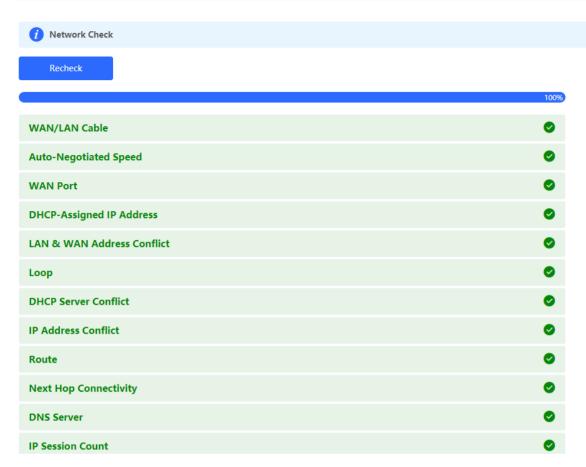
## 3.9.1 Network Check

Figure 3-9-1 Network Check



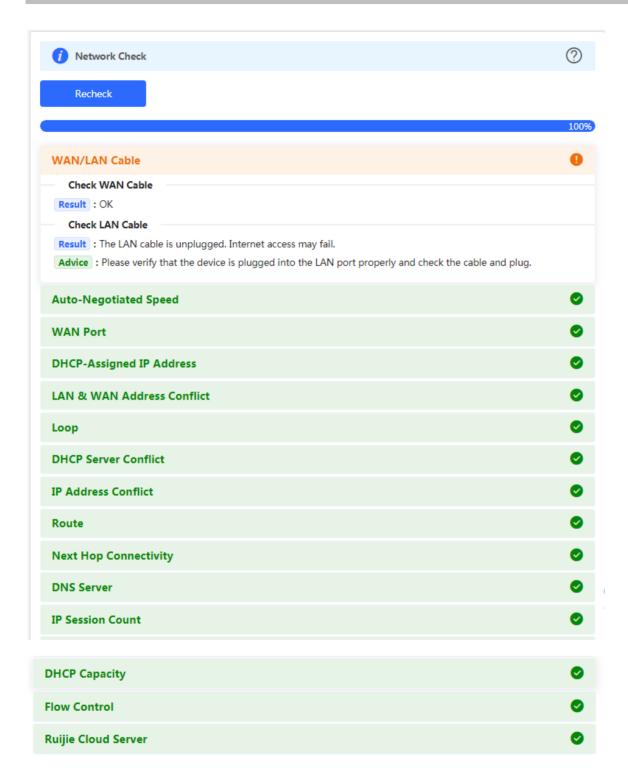
Click **Start**, and click **OK** in the confirmation box. After the test finishes, the result will be displayed.

Figure 3-9-2 Result



If any problem occurs, the result will be displayed as follows:

Figure 3-9-3 Issue & Advice



Please fix the problem by taking the suggested action.

# 3.9.2 Network Tools

The **Network Tools** module provides the following network tools to detect the network status: **Ping**, **Traceroute**, and **DNS Lookup**.

Figure 3-9-4 Ping Test and Result

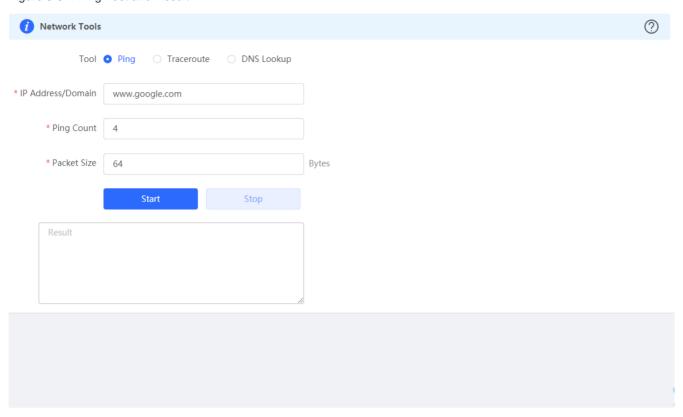


Figure 3-9-5 Traceroute Test and Result

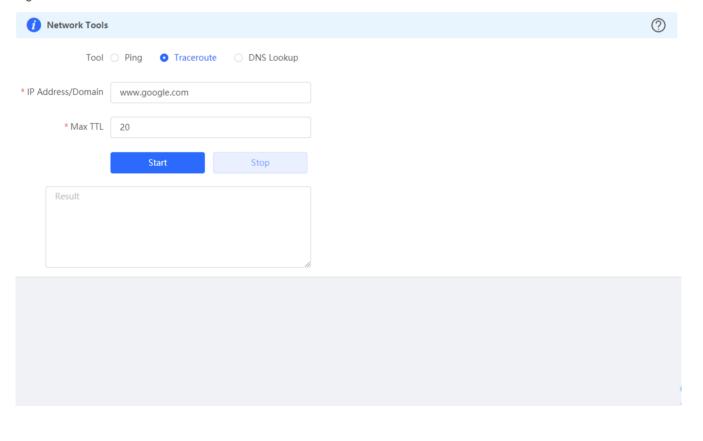
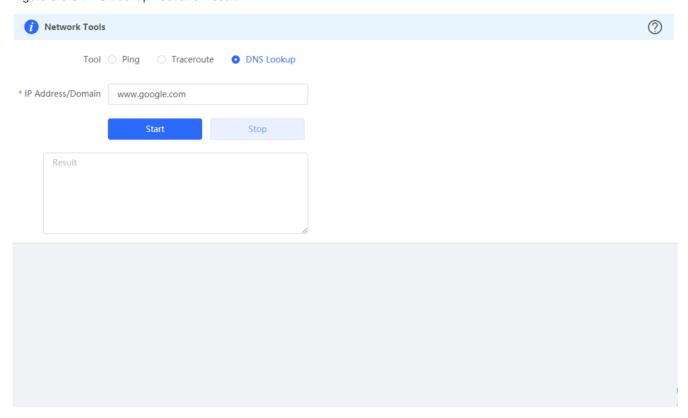


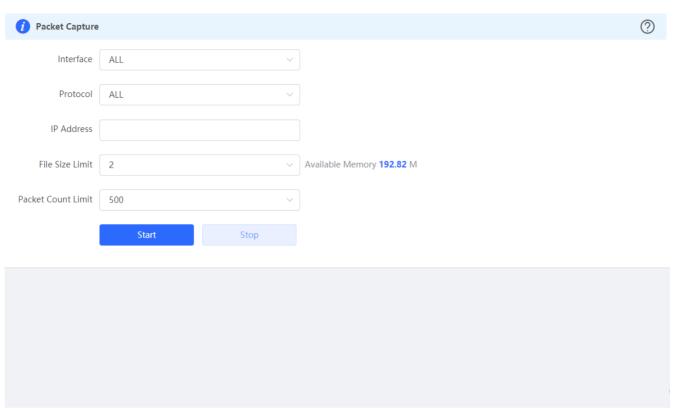
Figure 3-9-6 DNS Lookup Test and Result



# 3.9.3 Packet Capture

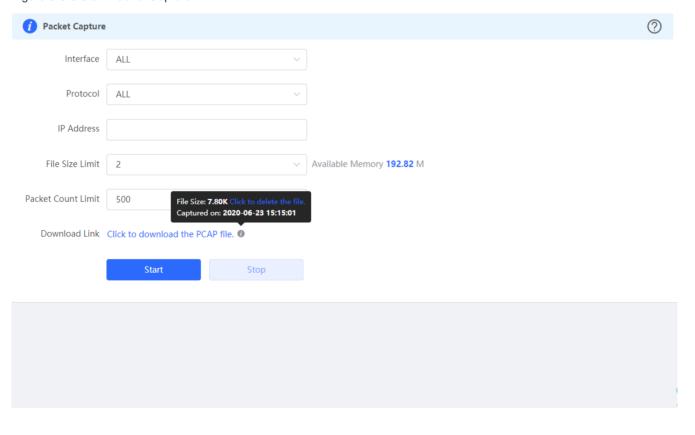
The **Packet Capture** module allows you to perform packet capture and download the result for troubleshooting.

Figure 3-9-7 Packet Capture



Specify an IP address and click **Start**. After a few seconds, click **Stop**.

Figure 3-9-8 Start Packet Capture



Click to download the packet capture result in the PCAP format.

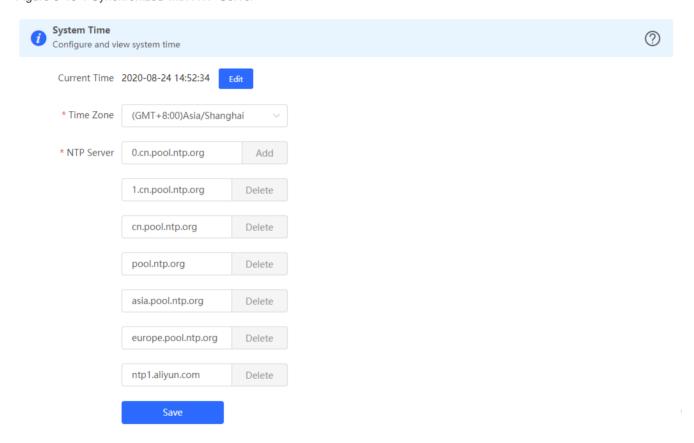
# 3.10 System

# 3.10.1 System Time

The **System Time** module allows you to set the system time. The system time is synchronized with the NTP server by default.

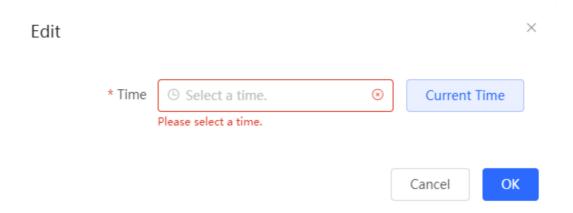
Select a time zone and set at least one NTP server, and click Save.

Figure 3-10-1 Synchronized with NTP Server



Alternatively, Click Edit, select a data and a time and click OK.

Figure 3-10-2 Manually Set Time



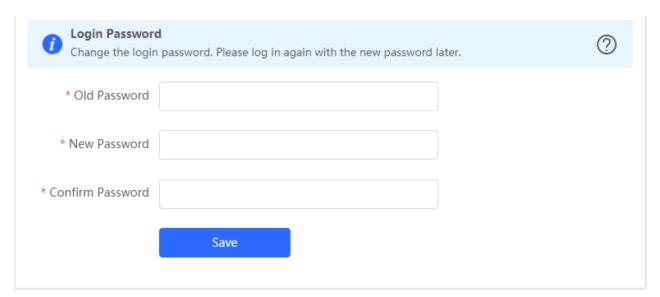
# 3.10.2 Login

The Login module contains Login Password and Session Timeout settings.

## 3.10.2.1 Login Password

The **Login Password** module allows you to set the device's login password. You need to log into the system again after changing the password.

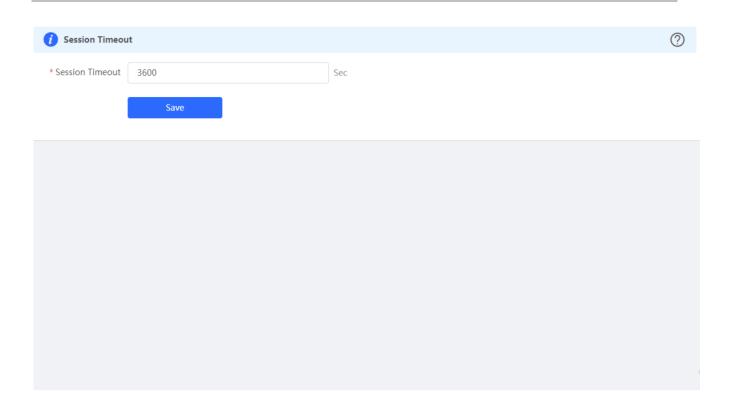
Figure 3-10-3 Login Password



#### 3.10.2.2 Session Timeout

The **Session Timeout** module allows you to set the session timeout period for login to the eWeb management system.

Figure 3-10-3 Session Timeout

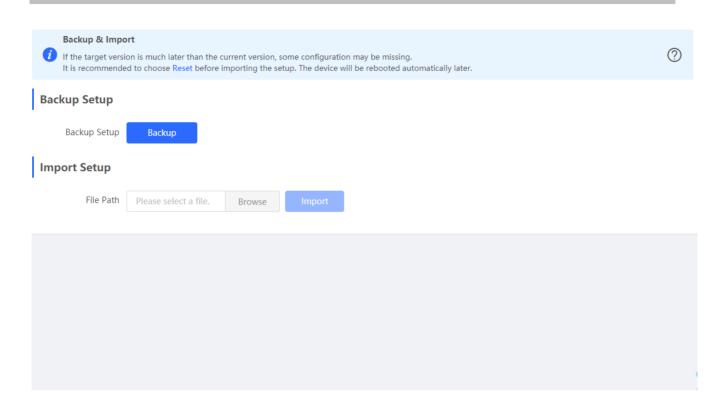


# 3.10.3 Management

# 3.10.3.1 Backup & Import

The **Backup & Import** module allows you to import a configuration file and apply the imported settings. It also allows exporting the configuration file to generate a backup.

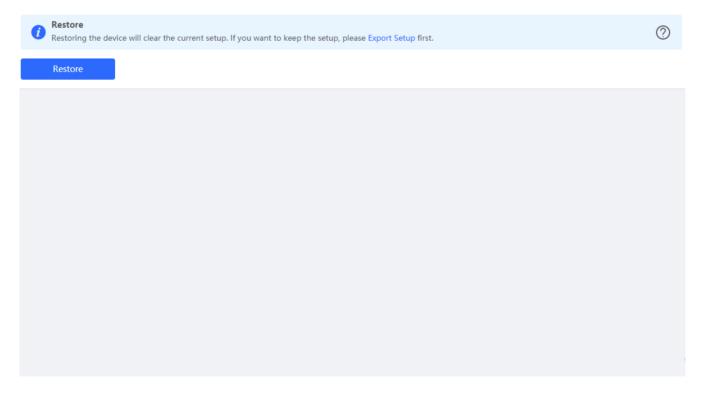
Figure 3-10-4 Backup & Import



#### 3.10.3.2 Restore

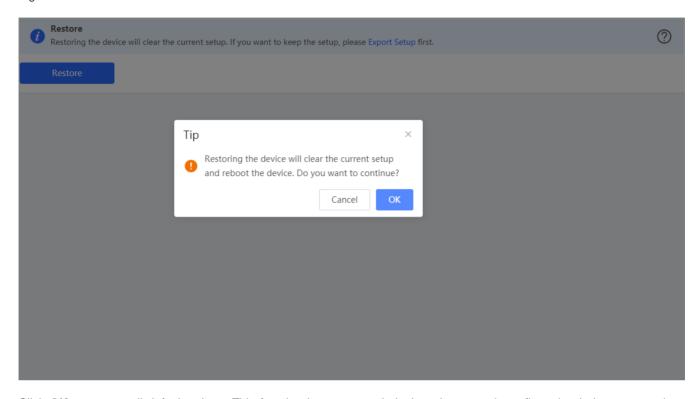
The **Restore** module allows you to restore the device to factory settings.

Figure 3-10-5 Restore



Please exercise caution if you want to restore the factory settings.

Figure 3-10-6 Confirm Restore

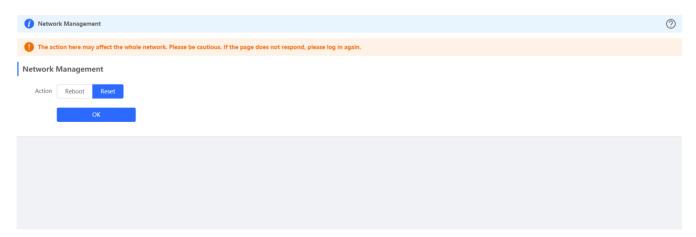


Click **OK** to restore all default values. This function is recommended when the network configuration is incorrect or the network environment is changed.

#### 3.10.3.3 Reboot & Reset

The **Reboot & Reset** module allows you to reboot or reset all devices in the network.

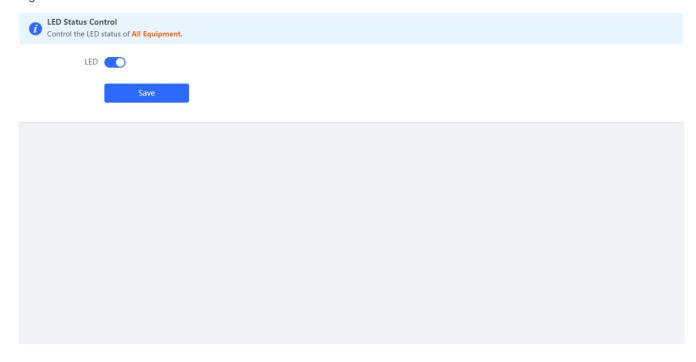
Figure 3-10-7 Reboot & Reset



#### 3.10.3.4 LED

The **LED** module allows you to enable LED.

Figure 3-10-8 LED



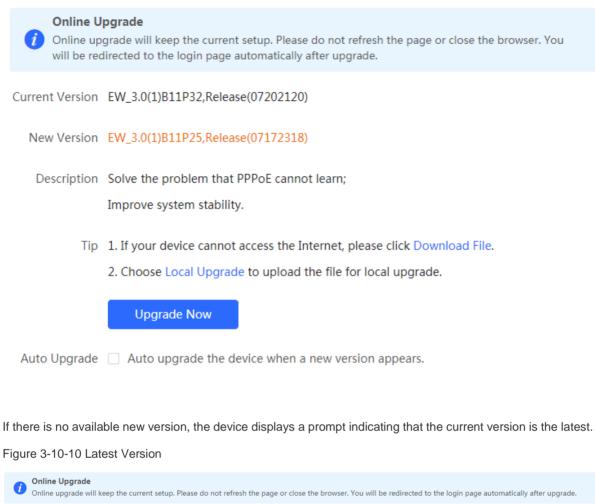
# 3.10.4 Upgrade

Both online upgrade and local upgrade are available

## 3.10.4.1 Online Upgrade

Click **Upgrade Now**. The device downloads the upgrade package from the network, and upgrades the current version. The upgrade operation retains configuration of the current device. Alternatively, you can select **Download File** to the local device and import the upgrade package on the **Local Upgrade** page.

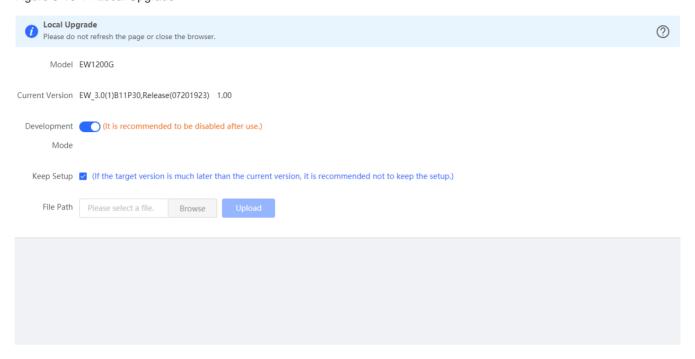
Figure 3-10-9 Online Upgrade



## 3.10.4.2 Local Upgrade

Click **Browse** to select an upgrade package, and click **Upload**. After uploading and checking the package, the device displays the upgrade package information and a prompt asking for upgrade confirmation. Click **OK** to start the upgrade.

Figure 3-10-11 Local Upgrade



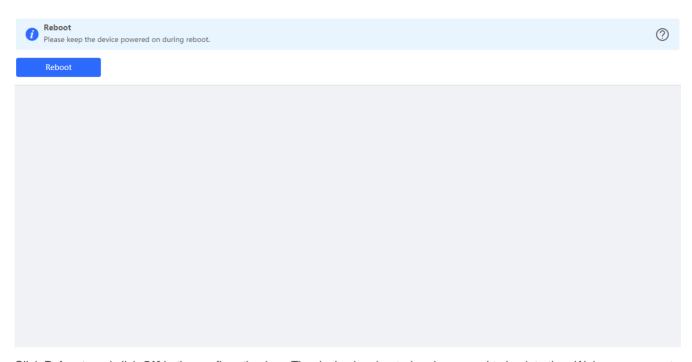
#### 3.10.5 Reboot

Both immediate reboot and scheduled reboot are available.

#### 3.10.5.1 Reboot

The **Reboot** module allows you to reboot the device immediately.

Figure 3-10-12 Reboot

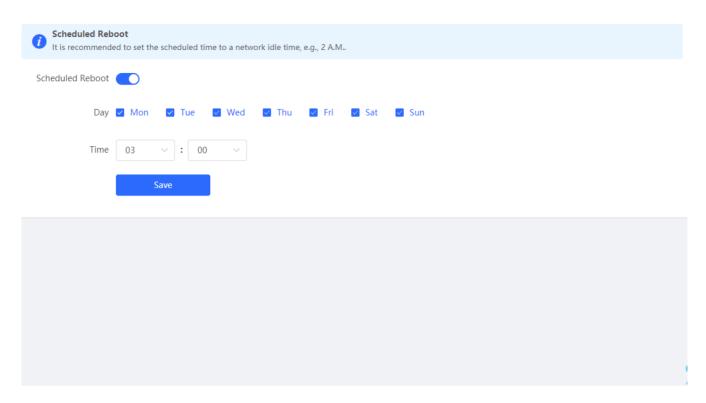


Click **Reboot**, and click **OK** in the confirmation box. The device is rebooted and you need to log into the eWeb management system again after the reboot. Do not refresh the page or close the browser during the reboot. After the device is successfully rebooted and the eWeb service becomes available, you will be redirected to the login page of the eWeb management system.

### 3.10.5.2 Scheduled Reboot

The **Scheduled Reboot** module allows you to reboot the device at a scheduled time.

Figure 3-10-13 Scheduled Reboot



Enable scheduled reboot, select the time and click Save.

# 4 FAQs

#### Q1: I failed to log into the eWeb management system. What can I do?

Perform the following steps:

- (1) Check that the network cable is properly connected to the LAN port of the device and the corresponding LED indicator blinks or is steady on.
- (2) Before accessing the configuration GUI, set the IP assignment mode to **Obtain an IP address automatically** (recommended), so that the server with DHCP enabled can automatically assign an IP address to the PC. To designate a static IP address to the PC, set the IP address of the PC in the same network segment as the IP address of the management interface. For example, if the default IP address of the management interface is 192.168.110.1 and the subnet mask is 255.255.255.0, set the IP address of the PC to 192.168.110.X (X is any integer ranging from 2 to 254), and the subnet mask is 255.255.255.0.
- (3) Run the **ping** command to test the connectivity between the PC and the device.
- (4) If the login failure persists, restore the device to factory settings.

#### Q2: What can I do if I forget my username and password? How to restore the factory settings?

To restore the factory settings, power on the device, and press and hold the **Reset** button for 5s or more, and release the **Reset** button after the system LED indicator blinks. The device automatically restores the factory settings and restarts. The original configuration will be lost after the factory settings are restored. After the restoration, the default management address is 192.168.110.1 and the default password is admin.

# Q3: The subnet mask value needs to be specified to divide the address range for certain functions. What are the common subnet mask values?

A subnet mask is a 32-bit binary address that is used to differentiate between the network address and host address. The subnet and the quantity of hosts in the subnet vary with the subnet mask.

Common subnet mask values include 8 (default subnet mask 255.0.0.0 for class A networks), 16 (default subnet mask 255.255.0.0 for class B networks), 24 (default subnet mask 255.255.255.0 for class C networks), and 32 (default subnet mask 255.255.255.255.255 for a single IP address).