

Ruijie Japan Cloud Service User Guide

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Audience

This manual is intended for:

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

Obtaining Technical Assistance

Ruijie Networks Website: https://ruijie.co.jp/

Technical Support Website: https://www.ruijie.co.jp/service

Inquiry&Repair: https://www.ruijie.co.jp/service/post-sales

Technical Support Email: support_jp@ruijienetworks.com

Symbols

Important information. Contains helpful suggestions or references.



Use caution. Could result in equipment damage or data loss.

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User Guide Summary

1 Summary

Ruijie Japan Cloud Service is Ruijie's easy and efficient cloud solutions for chain stores, small and medium-sized businesses and boutique hotels. The solutions include equipment deployment, monitoring, network optimization and operational lifecycle management; enabling customers with simple plug and play deployment and operation and maintenance; meeting the needs for automatic cloud RF planning and user experience monitoring. At the same time, it provides flexible wireless user access control features.

User Guide Supported Browser

2 Supported Browser

For browser, it is recommended to use the following versions or above.

Supported Browser	Version	
Chrome	57.0.2987.133	
Safari	10.1	
Firefox	52.0.2	

3 Addresses & Ports to be Permitted

Source IP	Destination	Src. port	Dst. port	Protocol	Description	Device using this rule
Your	devicereg.ruijienetworks.co m devreg.ruijienetworks.com	Any	80, 443	TCP	Ruijie Cloud login server	Ap/AC/Switc h/Gateway
Your network	cwmpsvr- japan.ruijienetworks.com	Any	80, 443	TCP	Ruijie Cloud server	Ap/AC/Switc h/Gateway
Your network	35.194.101.74 34.84.13.46	Any	10000- 12000	TCP	Ruijie Cloud server establishes the tunnel connection with the gateway	Gateway
Your network	cwmpsvr- japan.ruijienetworks.com devicereg.ruijienetworks.co m devreg.ruijienetworks.com	Any	3478, 3479,	UDP	Ruijie Cloud server delivers the CLI commands to the device	Ap/AC/Switc h/Gateway
Your network	cdn- japan.ruijienetworks.com	Any	80, 443	ТСР	Ruijie Cloud authentication server	STA
Your network	rylog- japan.ruijienetworks.com	Any	80, 443	ТСР	Device log upload	AP,AC, Switch, Gateway

4 Register and Login

4.1 Register

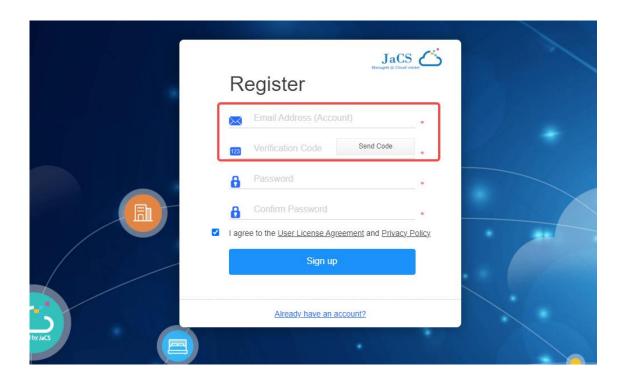
1. Visit https://cloud-japan.ruijienetworks.com.



2. Click Sign up to open the Register page.



3. Enter your Email address, click **Send Code**, and enter the verification code contained in the Email into the **Verification Code** box.



- 1 One email address can be registered once only.
- 4. Enter and confirm the password.



1 The password should be a combination of two or more items among numbers, letters and special characters in the length of 5 to 12 characters. Space is not supported.

5. Fill in the rest required information and click **Sign up**. If your information is verified and saved, the registration succeeds.

4.2 Login

1. Visit https://cloud-japan.ruijienetworks.com.



2. Enter your username and password, and click **Login**. After the information is verified, you can access the system.

4.3 Trial Account

1. Click **Trial Account** to experience Ruijie JaCS under the guide without registering accounts.



4.4 Forgot Password

1. Visit https://cloud-japan.ruijienetworks.com.



2. Click Forgot password? to open the Forgot password page.



3. Enter the Email address for retrieving the password. Click **Send Code**, and enter the verification code contained in the Email into the **Verification Code** box.



- The Email address is generally the same as the account.
- 4. Enter and confirm the new password.



- 1 The password should be a combination of two or more items among numbers, letters and special characters in the length of 5 to 12 characters. Space is not supported.
- 5. Click **Save**. If your information is verified and saved, you can use the new password to log into the system.

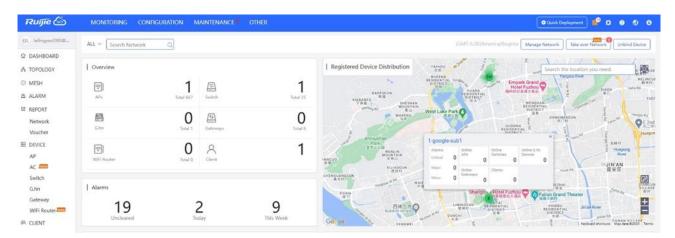
5 Monitoring

This part enables you to monitor the following items:

- DASHBOARD
- TOPOLOGY
- MESH
- ALARM
- REPORT
- DEVICE
- CLIENT

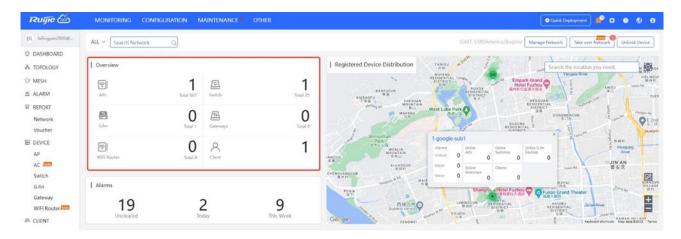
5.1 Dashboard

After logging in, the **Dashboard** appears, or you can click **Dashboard** in the menu to open the page.



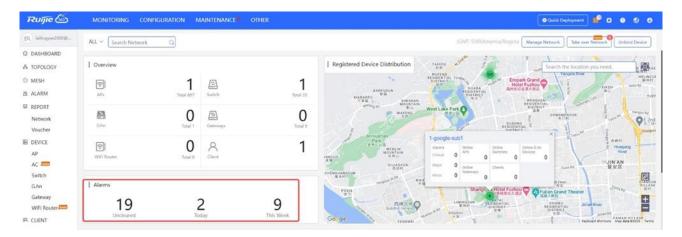
5.1.1 Overview

Overview displays the statistics of APs, switches, gateways and clients and WiFi Router. The upper number indicates the number of online devices, and the lower number indicates the total number of devices.

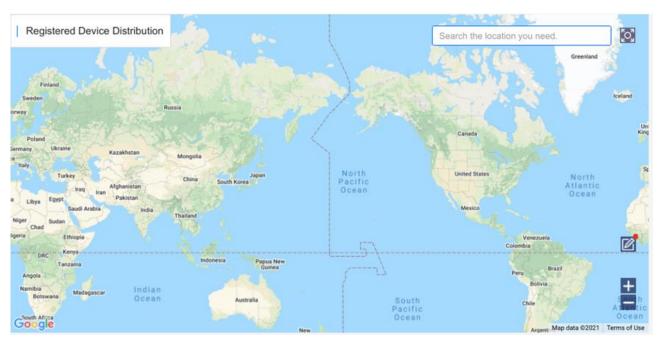


5.1.2 Alarms

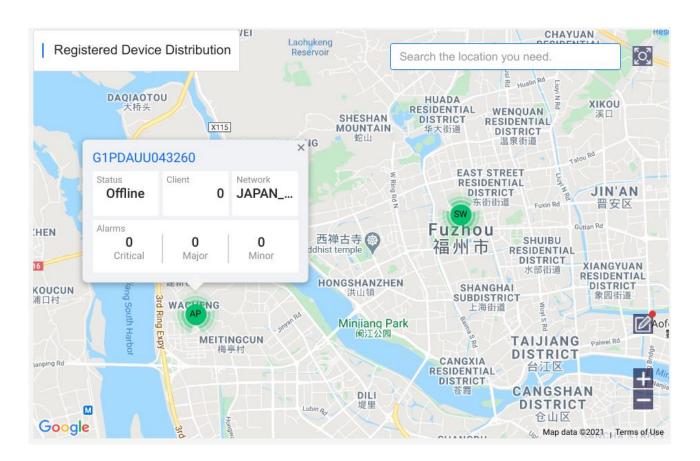
Alarms displays the number of uncleared alarms, new alarms today and total alarms generated this week.



5.1.3 Registered Device Distribution



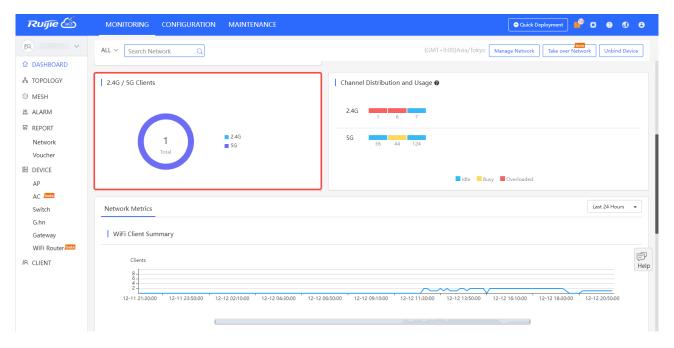
The map displays the device distribution by default. Devices are displayed in network, and the number on icon indicates the device number. Point to the icon, and the device and alarm number are displayed.



Click to bind networks. In the **Unbound Network List**, you can drag a device to the map to bind the location; on map, you can drag a network to change its location, or click **Unbind** to unbind the location.

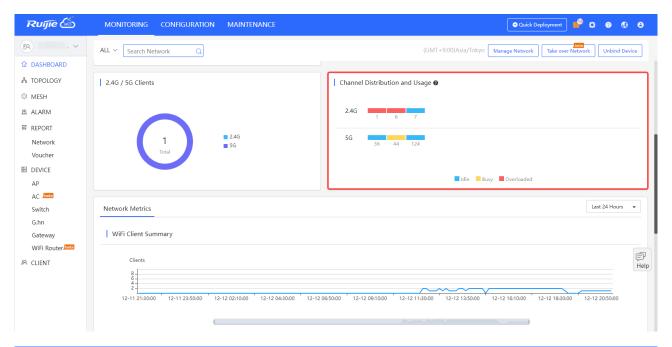
5.1.4 2.4G / 5G Clients

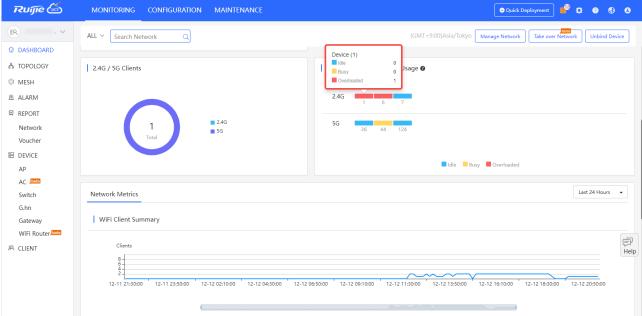
The chart displays the statistics of clients using 2.4G and 5G.



5.1.5 Channel Distribution and Usage

The chart displays the channel statistics.





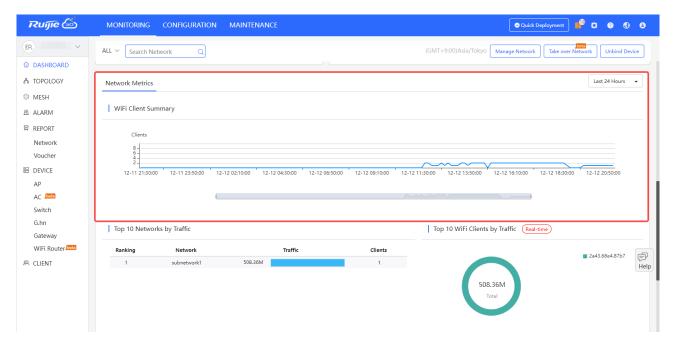
Point to a channel, and more details appear. The channel usage is graded as:

Idle: 0% to 59%

Busy: 60% to 79%

Overload: 80% to 100%

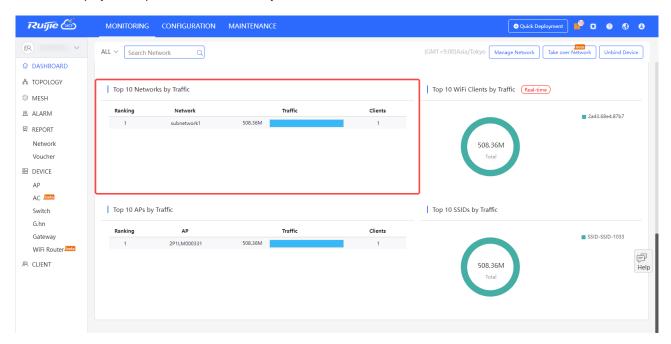
5.1.6 Client Summary



The chart displays the trend of recent clients.

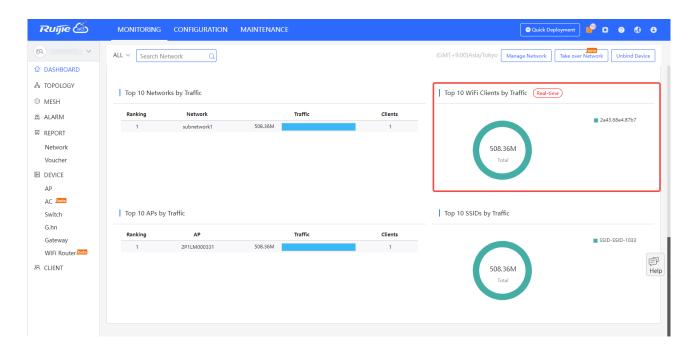
5.1.7 Top 10 Networks by Traffic

The table displays the top 10 networks ranked by traffic.



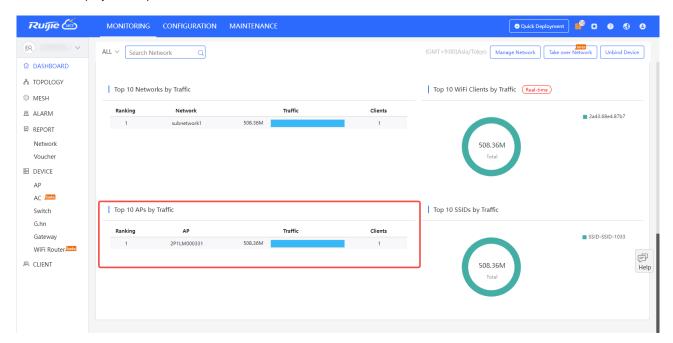
5.1.8 Top 10 Clients by Traffic

The chart displays the top 10 clients ranked by traffic.



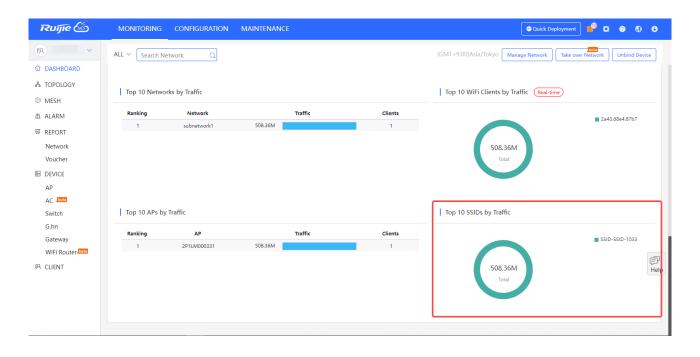
5.1.9 Top 10 APs by Traffic

The table displays the top 10 APs based on traffic.



5.1.10 Top 10 SSIDs by Traffic

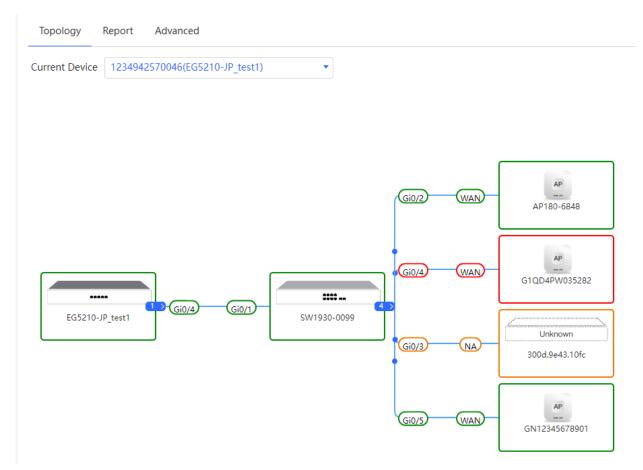
The chart displays the top 10 SSIDs based on traffic.



5.2 Topology

Topology page displays the topology of the downlink devices of an online switch in the current network. It supports to diagnose the running status of all online networks in a network, and generate diagnosis report.

5.2.1 Topology

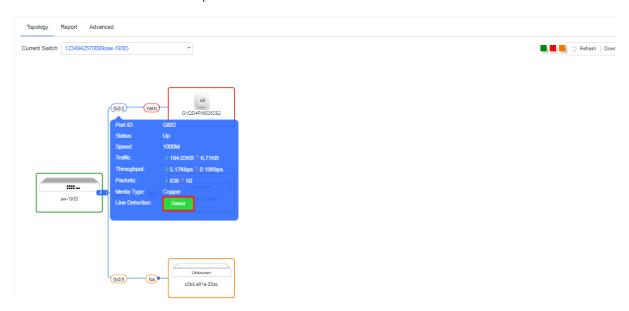


Current Switch: You can select a switch or EG5210-JP or RG-HS2310-16GH2GT1XS in the current network group to display the topology of its downlink devices.

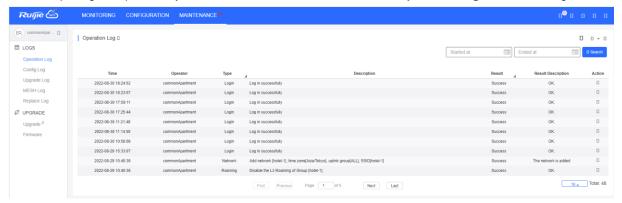
- Search: You can use a device SN or device name to search the device in the topology and check its information.
- Different colors indicate different connection status. Green indicates the device works normally. Red indicates the
 device goes offline or is disassociate from the switch. Orange indicates the device is not connected to the Cloud or it
 belongs to another account.
- Refresh: You can select a switch, and click Refresh to update the downlink topology of the switch. The fresh interval should be more than 10 minutes, otherwise a prompt message about frequent operations will appear. A topology update will be triggered when a switch is initially selected.
- Port Information Displaying: RG-HS2310-16GH2GT1XS is connected to the RG-HA3515-DG through the G.hn port using a telephone line. The G.hn ports are displayed as Ghnx/x on the page. When you click a G.hn port number, detailed information about the port is displayed. The rate displayed in the Speed item is the actual uplink and downlink rate, and the rate of other devices are displayed as 100M/1000M.

5.2.2 Physical Link Detection

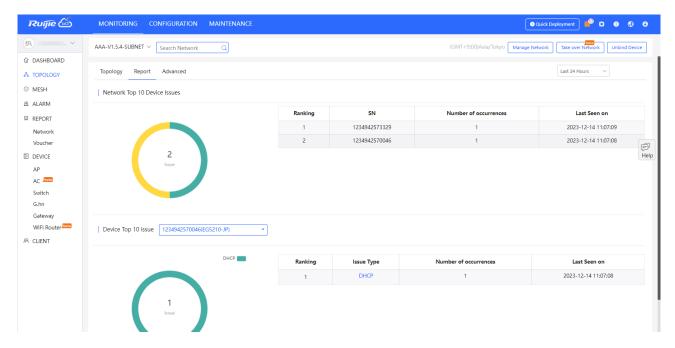
In a topology, when you hover the mouse over a switch, the detail information of the switch will be displayed in a pop-up window. In this pop-up window, you can click the **detect** button to detect the status of a link. When the link is under detection, please do not perform any operation. Three results may occur as shown follows, including normal link, link failure and no link. Detection function isn't provided for EG5210-JP.



After completing the operation, you can click MAINTENANCE > LOGS > Operation Log to check the log.



5.2.3 Report



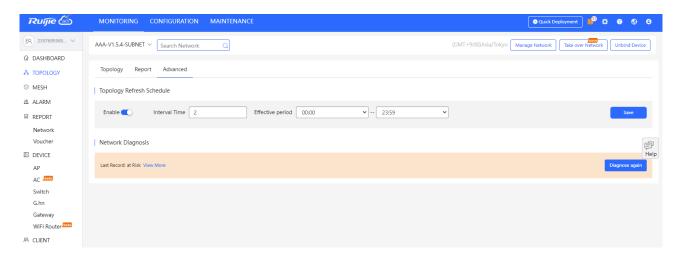
Network Top 10 Device Issues

This chart displays the top 10 faulty devices and the last time when the fault occurs in a network.

Device Top 10 issue

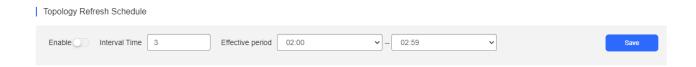
This chart displays the top 10 failure types occurring among devices and the last time when the fault occurs. You can hover the mouse over a failure to check the details.

5.2.4 Advanced

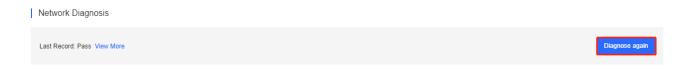


5.2.4.1 Topology Refresh Schedule

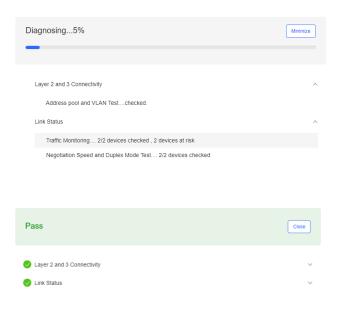
In this page, you can set the time to refresh the topology. The min interval is 2 hours. You also can set a period to refresh the topology. At the start time, the topology will be refreshed once only. If the interval between the start time and the end time is less than 2 hours, the topology will be refreshed only at the start time. If you disable this function, all the settings become invalid.



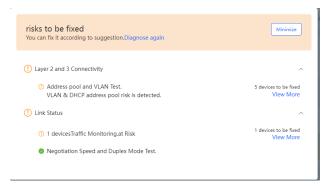
5.2.4.2 Network Diagnosis



When you click Diagnose again, the following figures will be displayed.



If a risk is detected, the following page will appear.



You can click View More to check the details of the risk.



Click Suggestion, a suggestion will be offered to help you fix the issue.

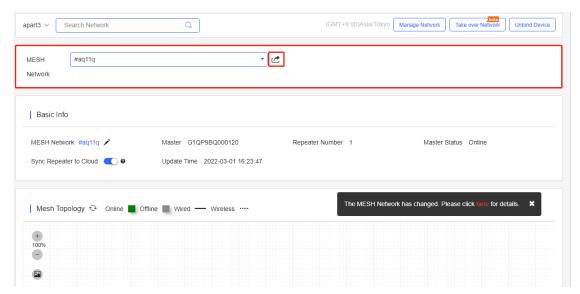


5.3 Mesh

Mesh consists of three parts: Mesh Network, Basic Info and Mesh Topology.

5.3.1 Mesh Network

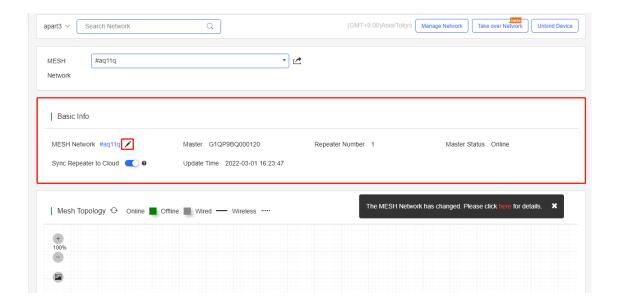
Select the specified Mesh network in the **Mesh Network** box, and click does not not network report.



5.3.2 Basic Information

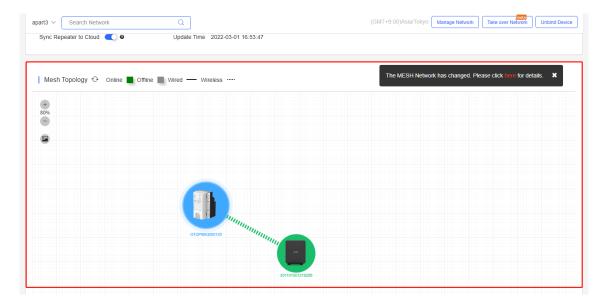
The basic information of Mesh network includes network name, SN of master device, quantity of repeaters, status of master device, and update time. You can enable/disable the function of automatically syncing repeaters to Ruijie JaCS.

To edit the network name, click ...

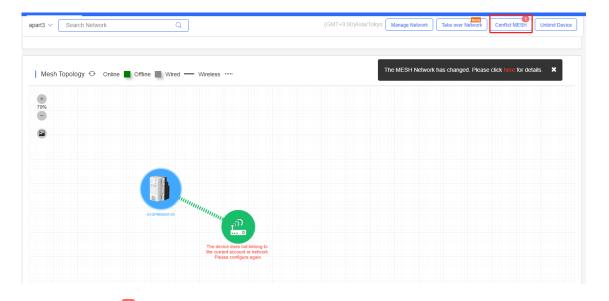


5.3.3 Mesh Topology

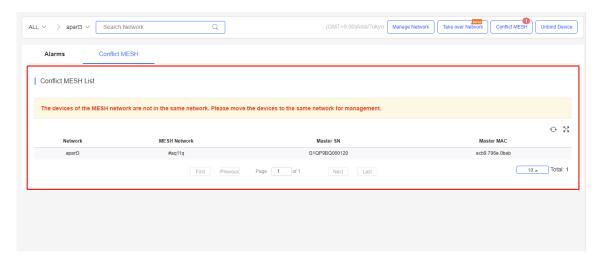
The **Mesh Topology** displays the current Mesh topology, including the information of devices and clients. If the topology changes, a prompt will be displayed and you can click the prompt to open the **Mesh Log** page.



If a device in the Mesh network does not belong to the current network or its sub-networks, the topology will be displayed as below:

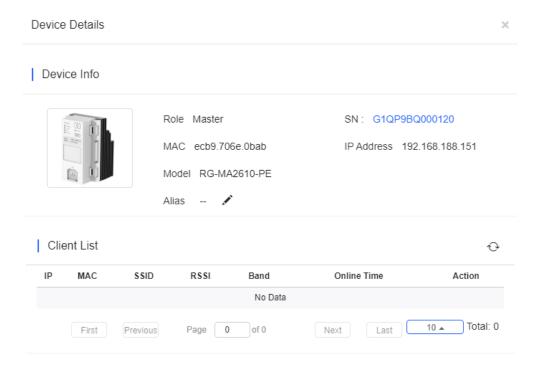


Click Conflict MESH to check the conflict Mesh network.

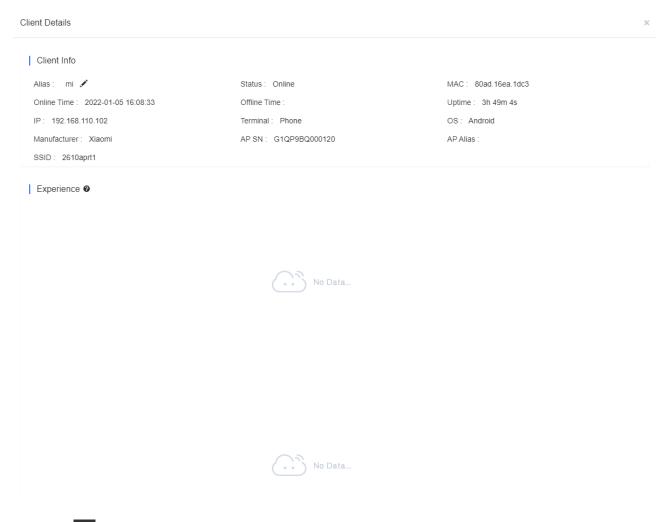


Only after the devices are added to the same network, the conflict prompt will disappear.

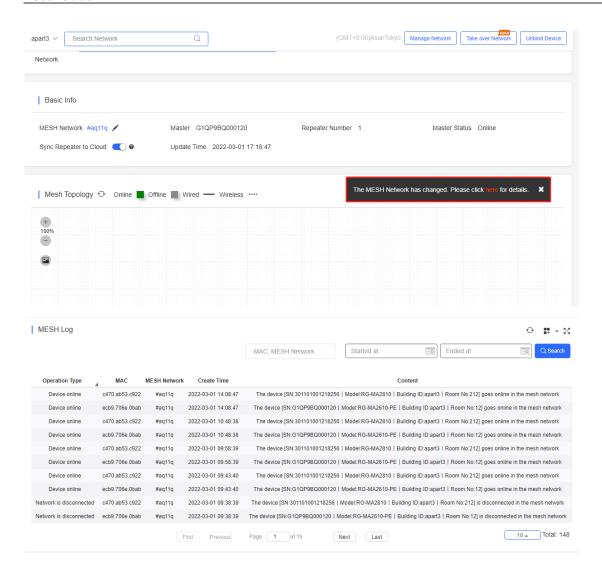
• Click a device, and the device details will be displayed.



Click a client, and the client details will be displayed.



Click to open the Mesh Log.

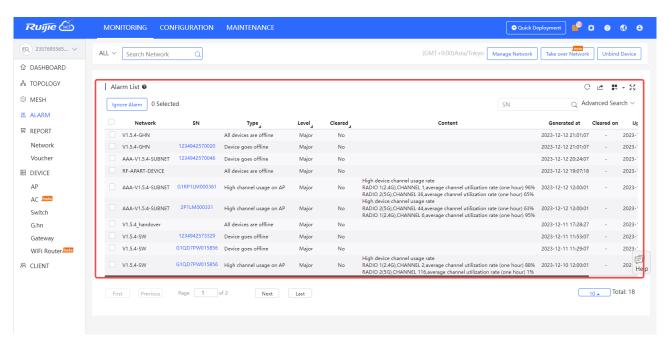


5.4 Alarm

5.4.1 Alarm List

Alarm List displays the cleared alarms. **Alarm List** supports the search based on AP serial number, alarm type, alarm level, alarm generation time and alarm updated time.

You can configure thresholds in Alarm Settings.



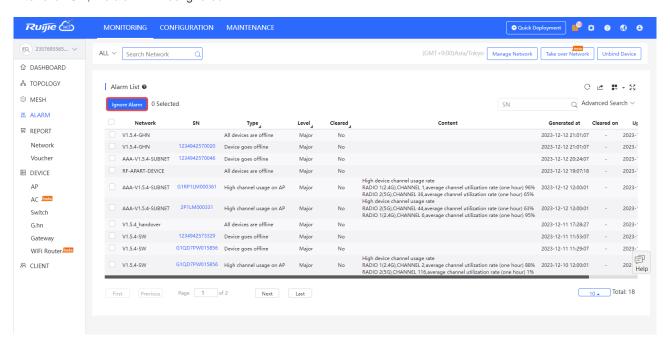
The following describes the conditions for generating alarms.

Туре	Condition	Description
Device goes offline	An AP goes offline.	The AP is disconnected from the Cloud
		Service, or the AP is powered off.
Device goes online and	The online/offline change times of an	The connection between the AP and the
offline continually	AP exceeds the default threshold within	system is unstable or the AP has a firmware
	two hours.	or hardware fault.
All devices are offline	All APs in a network go offline.	
High channel usage on AP	The RF channel utilization exceeds	RF channel utilization is high and interference
	80%.	is strong. It is recommended to change the
		channel.
System	The CPU or memory usage of	For AP, the default threshold for CUP usage
usage(CPU/memory	AP/switch/gateway exceeds the	is 85% and for memory usage is 85%.
usage) above threshold	threshold.	For switch, the default threshold for CUP
		usage is 50% and for memory usage is 65%.
		For gateway, the default threshold for CUP
		usage is 50% and for memory usage is 65%.
		Custom values are not supported.
Switch loopback detected	A loop occurs on the switch.	
(RLDP)		
Abnormal network access	The gateway port fails to ping the	When the Ping test failed for the specified
on gateway	specified domain or IP for several times.	times, the alarm is sent. The times and
		domain/IP address can be configured
		manually.
High packet loss speed on	The packet loss rate of gateway	When the packet loss rate exceeds the
gateway	exceeds the threshold.	specified percentage of threshold for several
		times in 5 minutes, the alarm is sent. The

		times and threshold can be configured manually.
Uplink speed above	The uplink rate exceeds the specified	When the uplink rate exceeds the specified
threshold on gateway	percentage of threshold for several	percentage of threshold for several times, the
	times.	alarm is sent. The threshold, times and
		percentage can be configured manually.
Downlink speed above	The downlink rate exceeds the	When the downlink rate exceeds the specified
threshold on gateway	specified percentage of threshold for	percentage of threshold for several times, the
	several times.	alarm is sent. The threshold, times and
		percentage can be configured manually.
Imported MAC, SSID	Device import	When the imported MAC and the actual MAC
and/or password check		are inconsistent, or the SSID/password
		changes, the alarm is sent.

5.4.2 Ignore Alarm

Select the alarm you want to ignore in **Alarm List**, and click the **Ignore Alarm** button. A popup window will be displayed. After click **OK**, the alarm will be ignored.



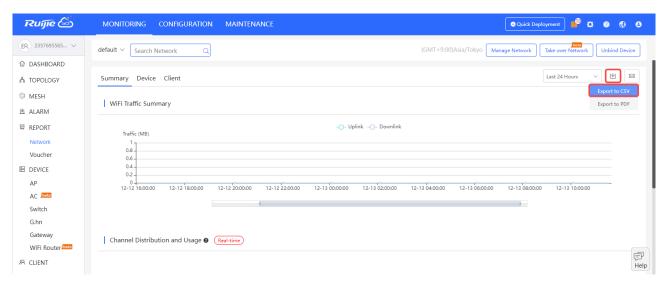
5.5 Report

5.5.1 Network

Network is divided into 3 parts: **Summary**, **Device** and **Client**. Except the statistical charts with that display real-time data and **Client** > **Experience** chart that only displays data in the last 7 days, all other charts support searching data in the last 30 days with the same query conditions. All charts automatically refresh every minute. Reports can be exported into CSV or PDF files, or sent by Email.

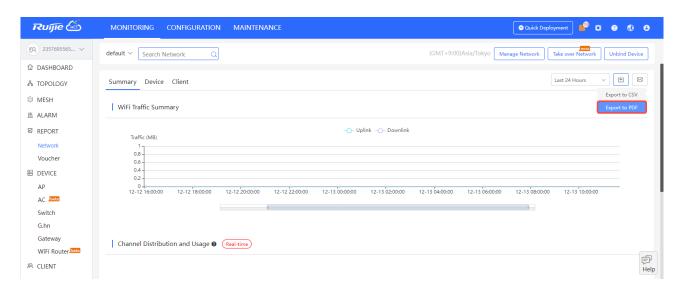
Export to CSV

Point to , and click Export to CSV.



Export to PDF

Point to , and click **Export to PDF**.



Mail

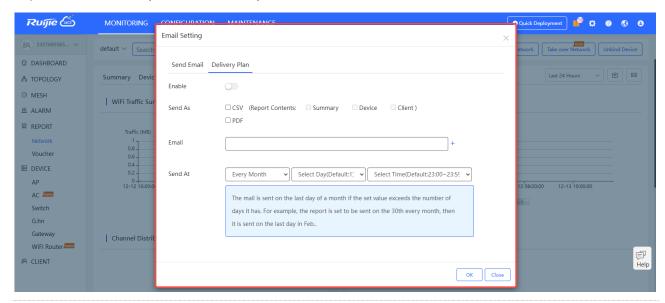
Click And select **Send Email**. Choose a file type for the report, then enter Email addresses. After click **OK**, the report will be sent immediately.



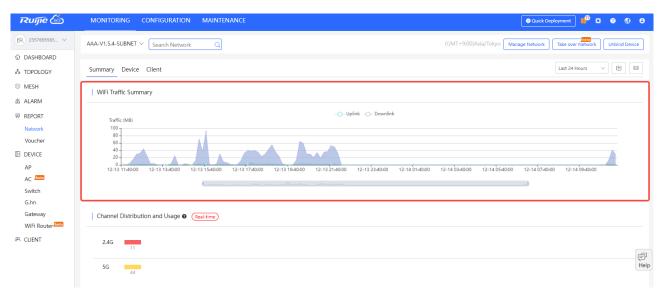
Click , and select **Delivery Plan**. Click **Enable** to send the report on the specified time.

Report includes the data of Summary, Device and Client, and supports CSV and PDF file formats.

Reports can be sent every month, week or day.



- Up to three Email addresses are supported.
- Summary > WiFi Traffic Summary

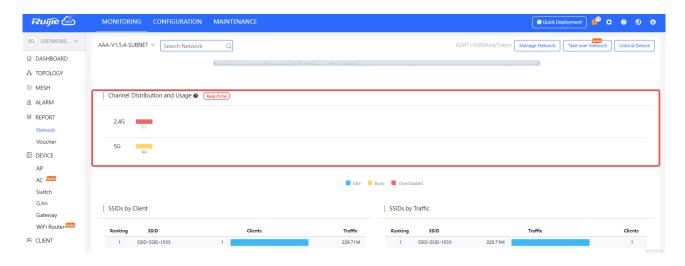


The uplink/downlink traffic summaries of the selected network during the specific period.

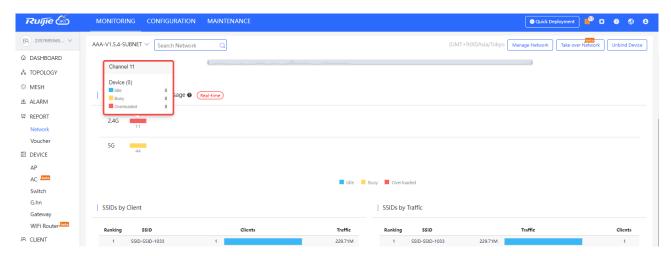
Uplink: Traffic directed from internal network to external network.

Downlink: Traffic directed from external network to internal network.

Summary > Channel Distribution and Usage



The channel distribution and usage of the selected network.



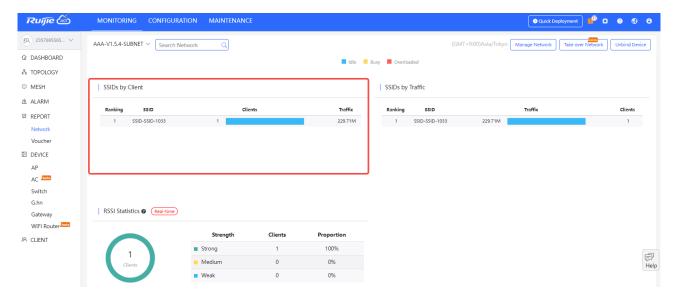
Point to a channel to view more details. The channel usage is graded as:

Idle: 0% to 59%

Busy: 60% to 79%

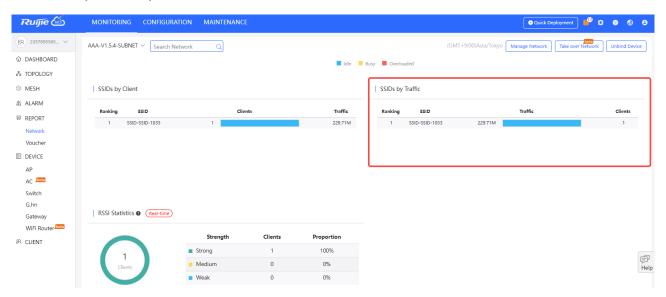
Overload: 80% to 100%

Summary > SSIDs by Client



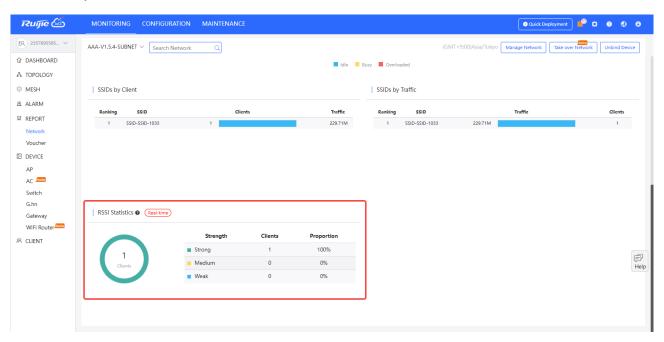
The SSIDs ranked by client number of the selected network during the specific period.

Summary > SSIDs by Traffic



The SSIDs ranked by traffic of the selected network during the specific period.

Summary > RSSI Statistics



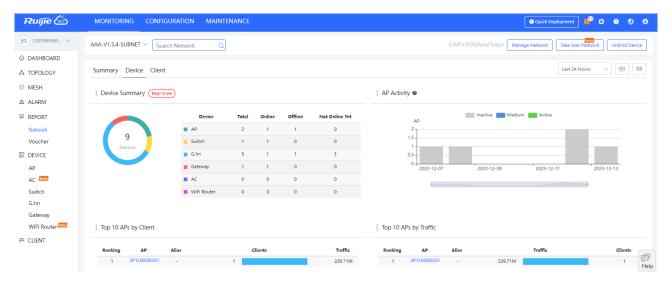
The wireless signal strength of the selected network during the specific period. The signal intensity is defined below:

Weak: RSSI ≤ -80dB

Medium: $-80dB < RSSI \le -70dB$.

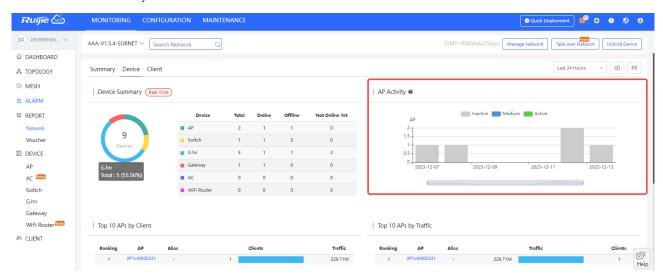
Strong: RSSI > -70dB

Device > Device Summary



The online status of devices of the selected network during the specific period.

Device > AP Activity



The AP activity of the selected network during the specific period. The chart does not support searching data in the last 24 hours.

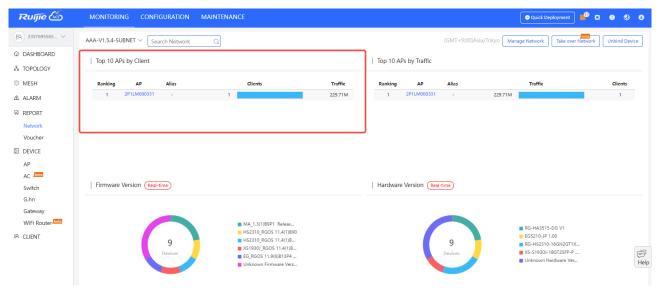
AP activity is evaluated based on the number of active clients accessing the AP in a day. APs not associated with any clients are not calculated.

Inactive: <5 active clients

Medium: 5-9 active clients

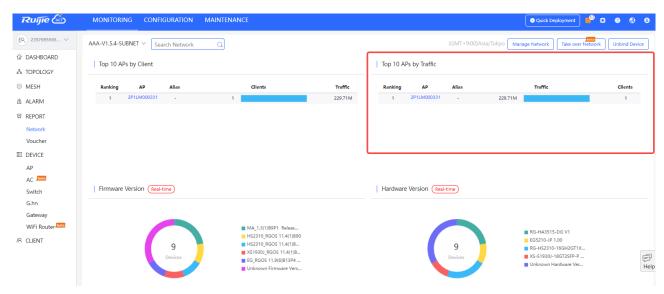
Active: ≥10 active clients.

Device > Top 10 APs by Client



The top 10 APs ranked by client number of the selected network during the specific period.

Device > Top 10 APs by Traffic



The top 10 APs ranked by traffic of the selected network during the specific period.

Device > Firmware Version

The proportion of firmware versions of the selected network during the specific period.



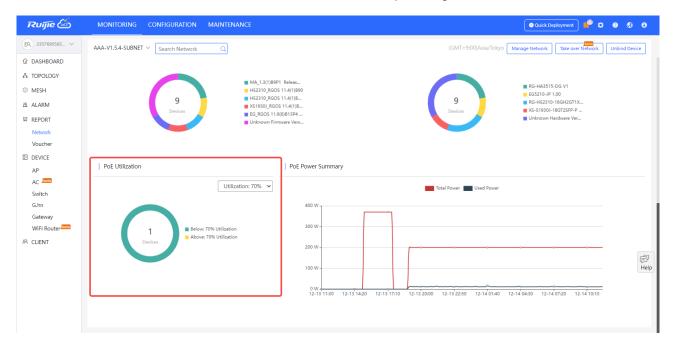
Device > Hardware Version

The proportion of hardware versions of the selected network during the specific period.



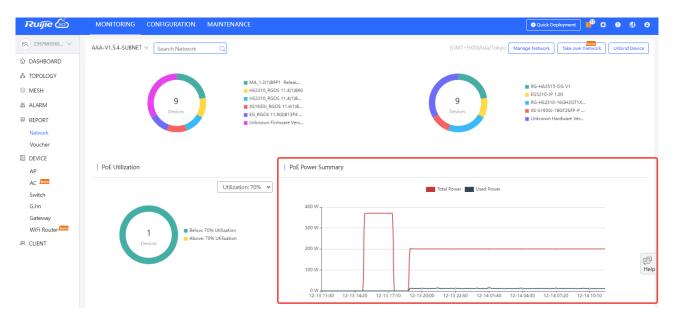
Device > PoE Utilization

The numbers of PoE switches above and below the selected utilization percentage.

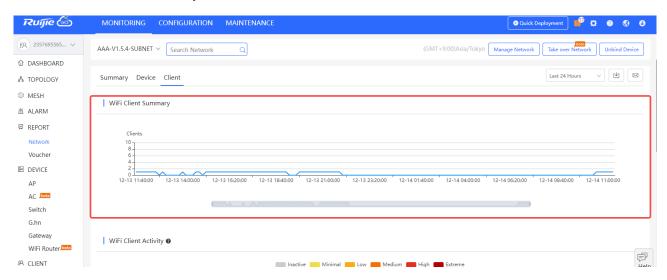


Device > PoE Power Summary

The power summary of the entire PoE device, including the total power and used power.

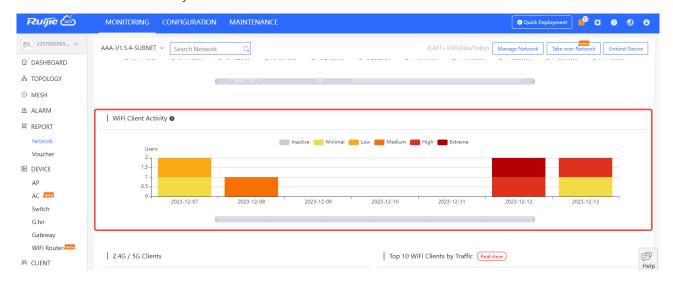


Client > WiFi Client Summary



The client summary of the selected network during the specific period.

Client > WiFi Client Activity



The client activity of the selected network during the specific period. The chart does not support searching data in the last 24 hours.

Client activity is evaluated based on online duration and traffic volume (from highest to lowest):

Inactive: ≤100KB traffic

Minimal: Any time and 100KB traffic

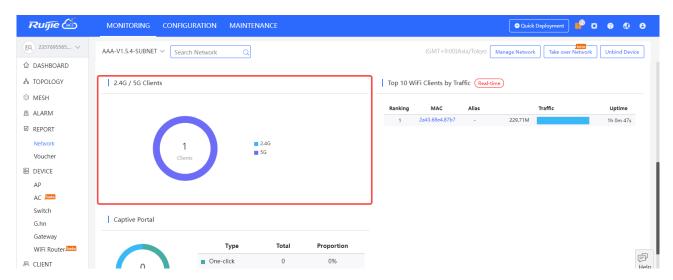
Low: 1h/d and 500K traffic

Medium: 2h/d time and 2M traffic

High: 4h/d time and 5MB traffic

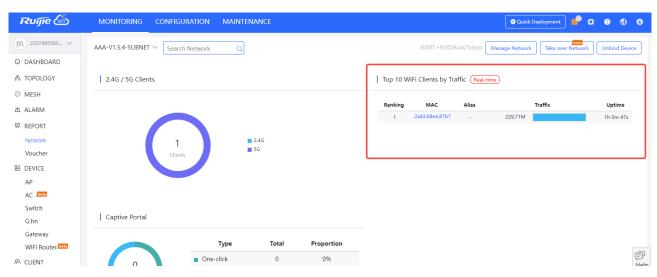
Extreme: 8h/d time and 10MB traffic

Client > 2.4G / 5G Clients



The proportion of STAs using 2.4G/5G of the selected network during the specific period.

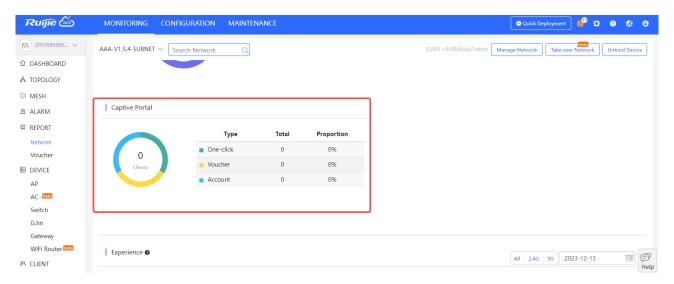
Client > Top 10 WiFi Clients by Traffic



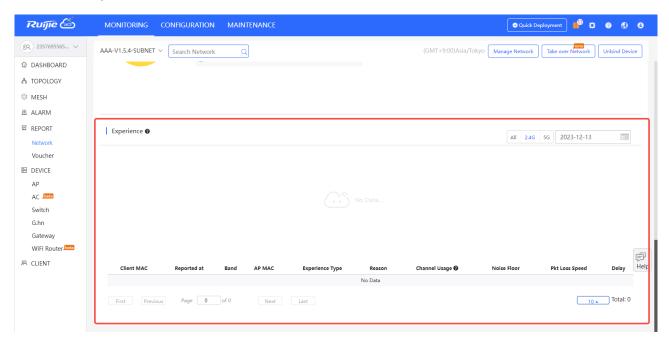
The top 10 clients ranked by traffic of the selected network during the specific period.

Client >Captive Portal

The numbers and proportions of different portal authentication methods in the network. The statistics are refreshed every hour. Now 3 authentication methods (One-click, Voucher and Account) are supported.



Client > Experience



The experience status during the specified time and collects data every 5 minutes. You can switch between 2.4GHz and 5 GHz.

Client information: Click an indicator bar to display more information.

Excellent: HDV and online game are available.

 $\label{thm:condition} \mbox{Good: communication application, Web page and VoIP are available.}$

Poor: go offline frequently or hard to go online.

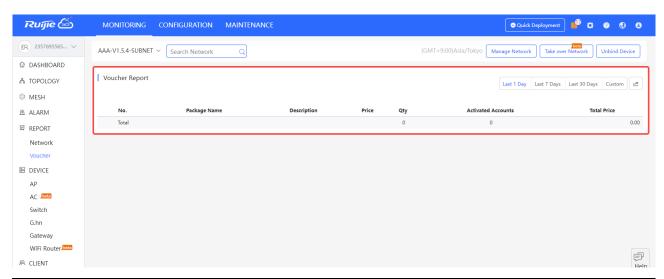
Inactive: check whether a client is inactive according to the traffic and power usage.

Score: Take the parameters of client delay, client packet loss, signal strength and so on as the reference, and then use the SVM algorithm to get the score.

5.5.2 Voucher

The Voucher Report records the sales of voucher during the specified period.

Click do export the **Voucher Report** in PDF format.



Item	Description					
Qty	Number of vouchers generated by each package in the specified period.					
Activated Accounts	Number of vouchers activated by each package in the specified period.					
Total Price	Total price of vouchers activated by each package in the specified period.					
Total	Number of vouchers generated by all packages, number of vouchers activated by all packages and total amount of vouchers activated by all packages.					

5.6 Device

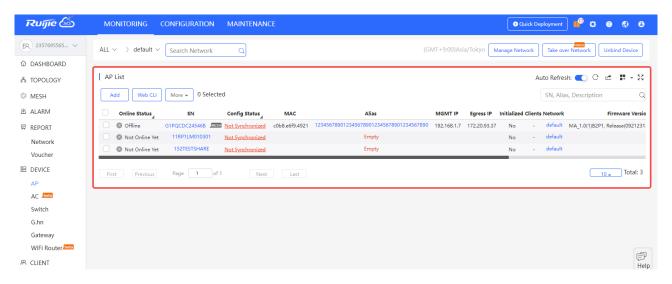
Choose MONITORING > DEVICE to display the Devices page, and select a network on the top to filter devices.

5.6.1 AP

5.6.1.1 AP List

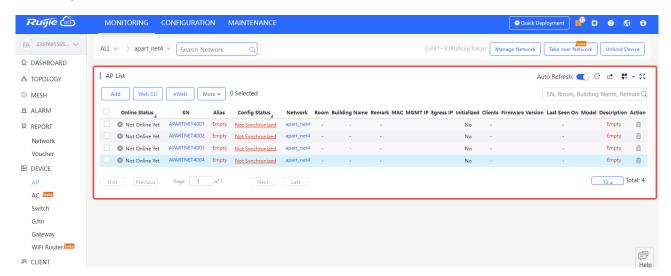
Non-apartment Scenario

The **AP List** displays basic device information, including online/offline status, SN, configuration status, MAC, alias, management IP, Egress IP, client quantity, network, firmware version, offline time, model and description.



Apartment Scenario

The **AP List** displays basic device information, including the online/offline status, SN, configuration status, MAC, alias, management IP, Egress IP, client number, network, firmware version, offline time, model, building name, room, remark and description.



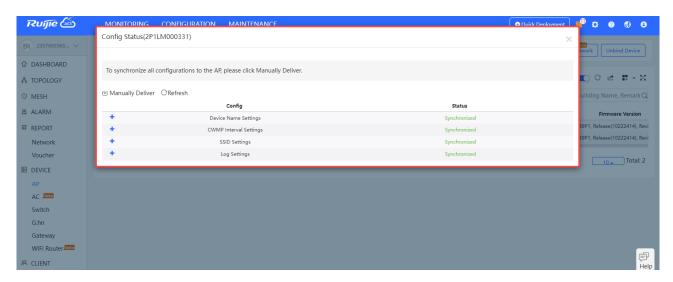
The **AP List** automatically refreshes every minute. Click

Auto Refresh: to enable/disable the auto refresh function.

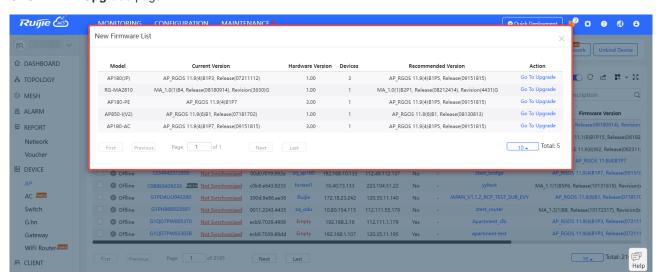
Above the list is the **Add AP**, **Web CLI and eWeb** functions. Click to display the **Move to**, **Delete**, and **Reboot** functions. For more information, refer to **Basic AP Operations**.

In non-apartment scenario, the **Search** function supports fuzzy queries based on the serial number, alias and description, while in apartment scenario, it supports queries based on the serial number, room, building name and remark. It also supports queries based on online/offline status and configuration status in both scenarios.

Click the record in the **Config Status** column to open the **Config Status** page. On this page, you can deliver one or all configurations.

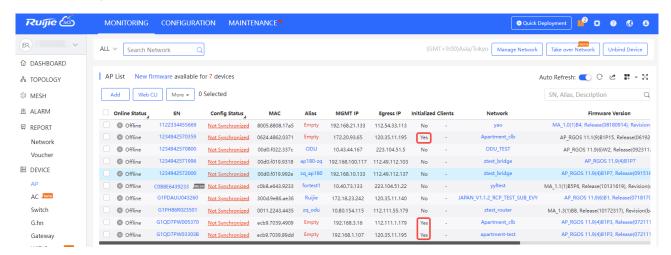


The number of devices which have available firmware for upgrade is displayed on the upper-left corner of the AP List page. Click New Firmware to display the New Firmware List. Then click Go To Upgrade to enter the MAINTENANCE > UPGRADE > Upgrade page.



For more information, refer to Device Details.

If an initial configuration template has been applied to the device, Yes will be shown in the initialized column.

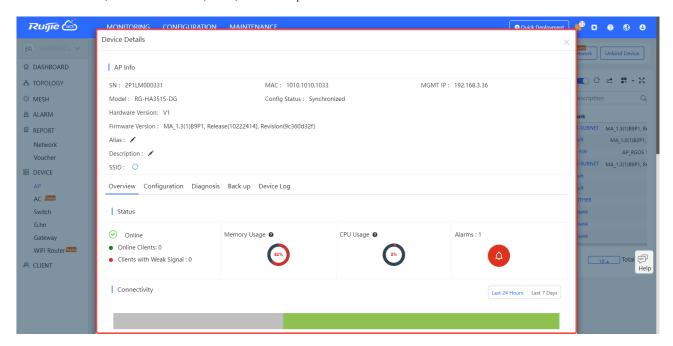


5.6.1.2 Device Details

Click the serial number in the AP list to open the details page for a single device. The page includes AP Info, Overview, Configuration, Diagnosis, Back up and Device Log.

AP Info

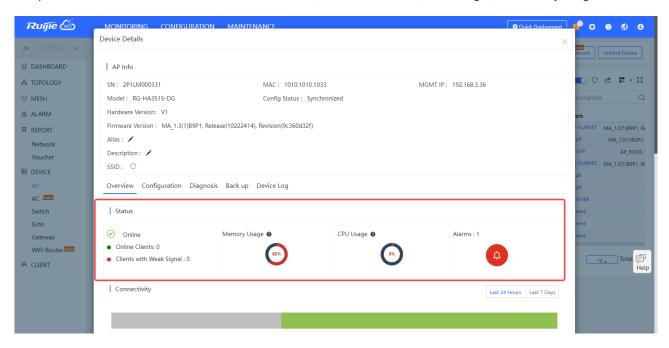
The basic information includes serial number, MAC address, management IP address, device model, configuration status, firmware version, hardware version, alias, and description.



Overview

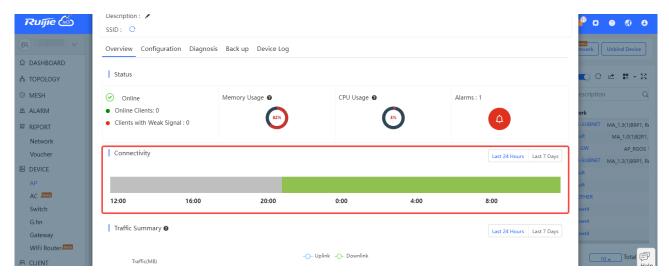
(1) Status

The performance data includes the AP connection status, online client count, CPU usage, and memory usage.



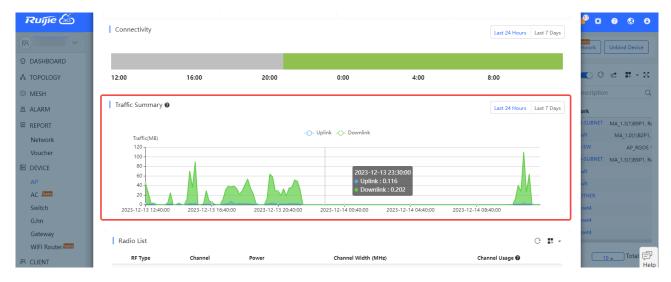
(2) Connectivity

AP connectivity refers to the connectivity (online status) between AP and Cloud Service within a period (1 day or 7 days).



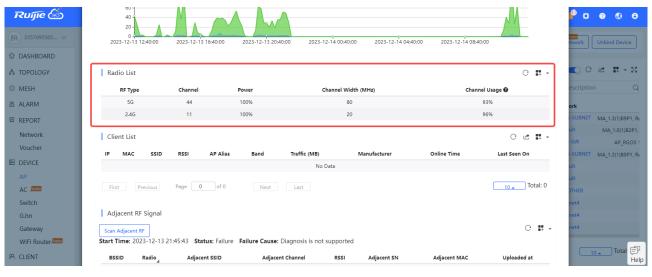
(3) Traffic Summary

You can select to view the AP traffic statistics in the last 24 hours or the last 1 week



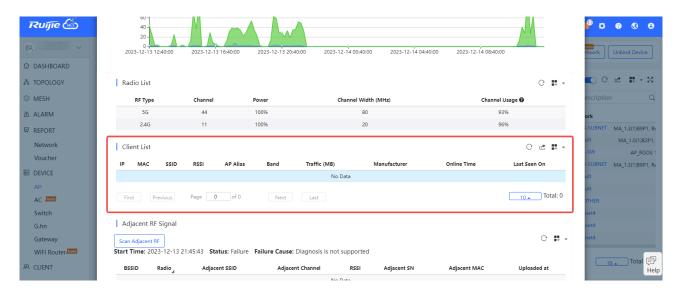
(4) Radio List

The **Radio List** page displays the RF information, including the RF type, current channel, power (percentage), channel bandwidth, channel usage.



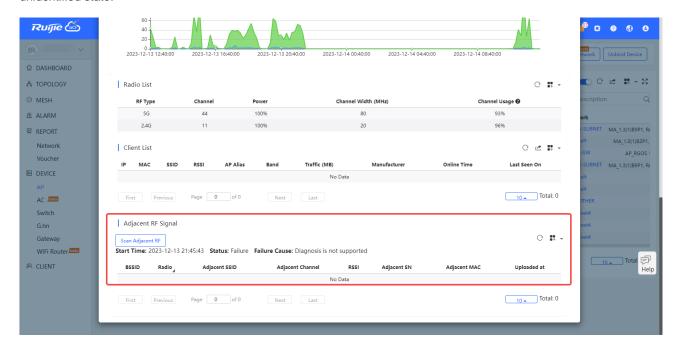
(5) Client List

The client list displays information about clients currently associated with the APs, including the IP address, MAC address, SSID, RSSI, traffic, online/offline status, terminal type and so on.



(6) Adjacent RF Signal

The **Adjacent RF Signal** page displays the RF signals (scanned BSSID) emitted by adjacent APs. The **Radio**, **Adjacent Channel**, and **RSSI** in the list are scanned information. If a signal comes from the AP managed by the cloud controller, the adjacent AP SN and adjacent MAC address will be identified and displayed; otherwise, these two items are in an unidentified state.

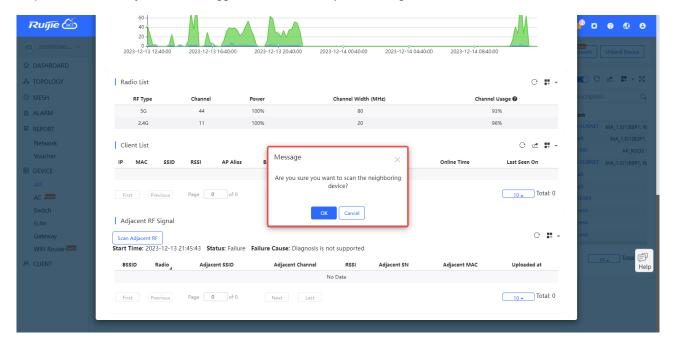


You can trigger APs to scan adjacent RF signals, and identified and unidentified RF signals can be observed. There are two known scenarios:

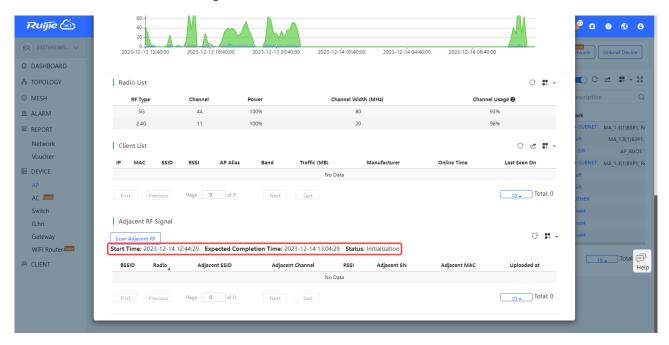
- Testing the number and strength of RF signals emitted by neighboring APs that are not managed by the system to predict a degree of RF interference.
- Identifying RF signals emitted by neighboring APs managed by the system to diagnose the RF functions and poweredon status of neighboring APs.

On the device details page, you can perform adjacent RF scanning and check the scanning result. The following steps describe the method for scanning the adjacent RF signals:

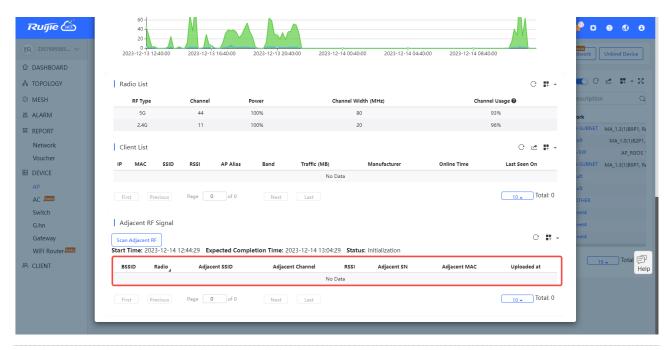
Step 1: Click Scan Adjacent RF to trigger an AP to scan adjacent RF signals.



Step 2: After the AP is triggered, the trigger time, expected completion time, and status are displayed in the status bar. Then wait for the AP to finish scanning and send the results to the cloud controller.

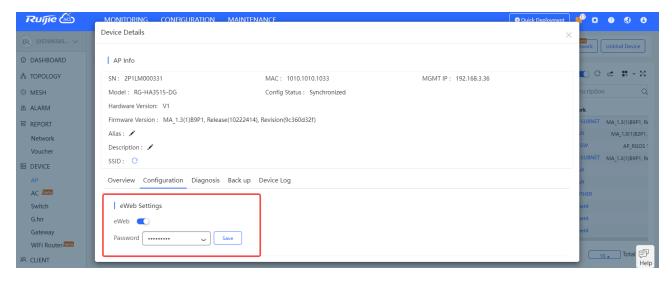


Step 3: A list of RF signals scanned by the AP is displayed after the scanning. The list supports a filtering function based on the RF type (2.4 GHz/5 GHz).



- The system stores the latest scanning results, which overwrites earlier data.
- if the adjacent AP SN and MAC address are unidentified, it indicates that the RF source is not managed by the system; otherwise, the RF signal is emitted by an AP.
- Configuration
- (1) eWeb Settings

Support to enable and disable the entrance of a device's Web, and to configure the password of the Web admin account.

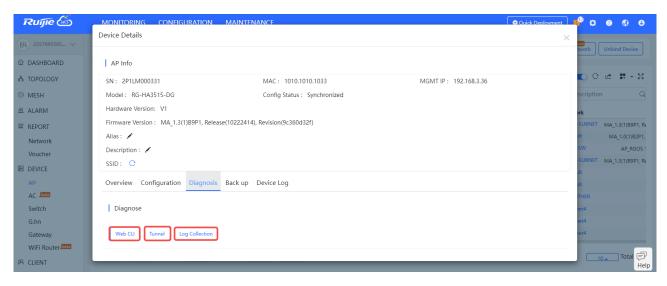


Diagnose

Click Web CLI to open the CLI page of device.

Click **Tunnel** to create different types of tunnels, and check records and more information.

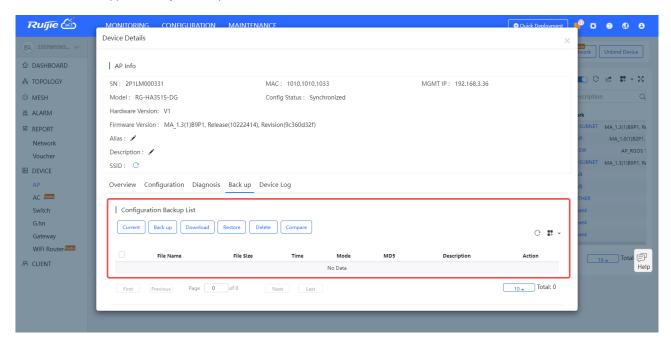
Click Log collection to export the logs of the devices. (Log collection is available only for MA series access points.)



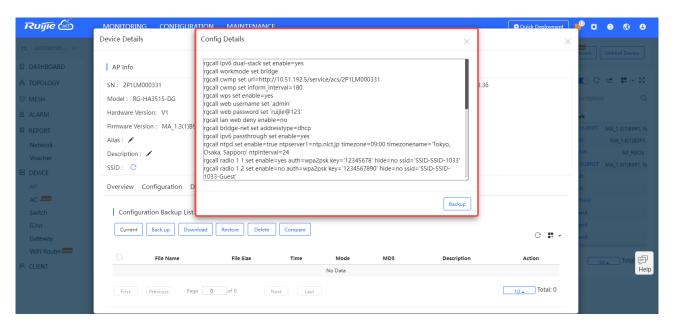
- Back up
- (1) Configuration Backup List

The backup records include configuration file name, size, time, mode and MD5.

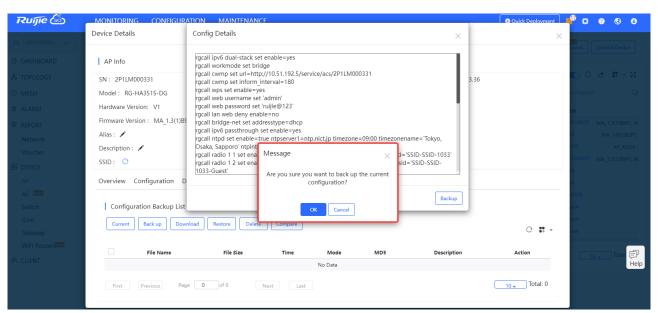
The function is supported only in the apartment scenario.



Click **Current** to display the current configuration. Click **Backup** in the **Config Details** page to back up the current configuration.



Click **Back up** and then click **OK** in the message box to back up the current configuration.

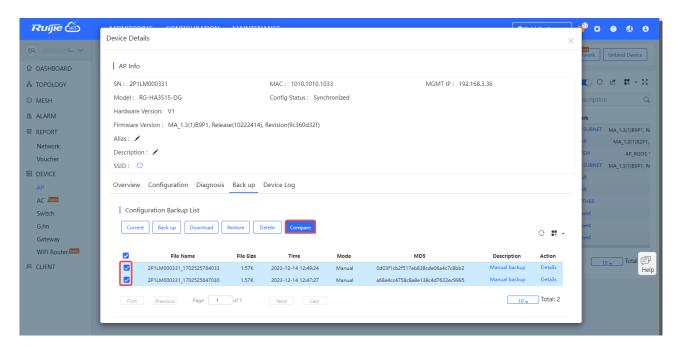


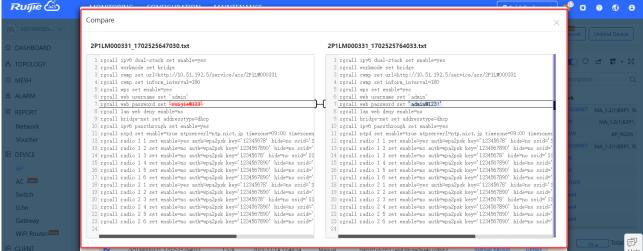
Select one record, and click **Download** to download the configuration file.

Select one record, and click **Restore** to restore the current configuration.

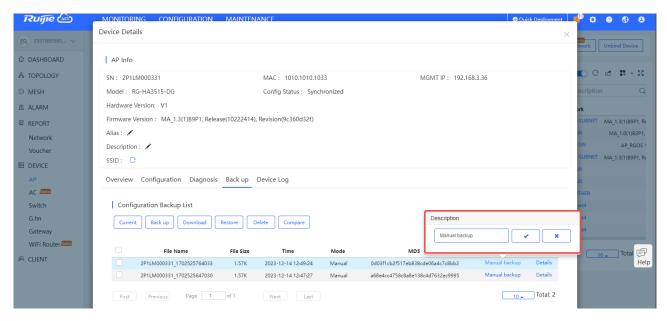
Select one or multiple records, and click **Delete** to delete the backup record.

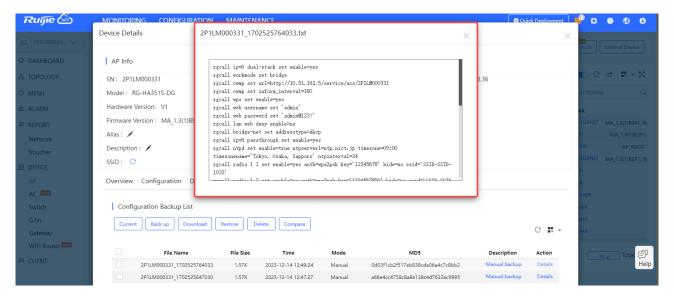
Select two records, and click **Compare** to compare the differences.





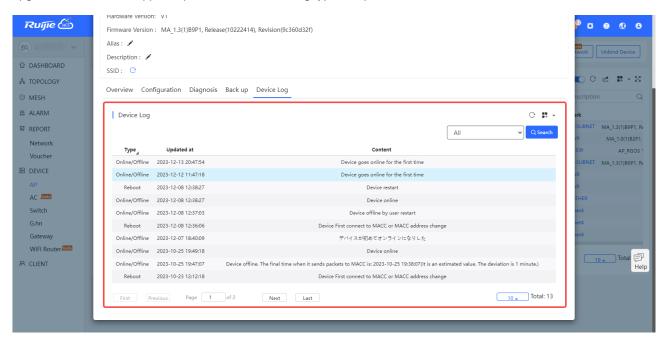
Description can be edited. Click Details in the Action column to check the backup configuration.





Device Log

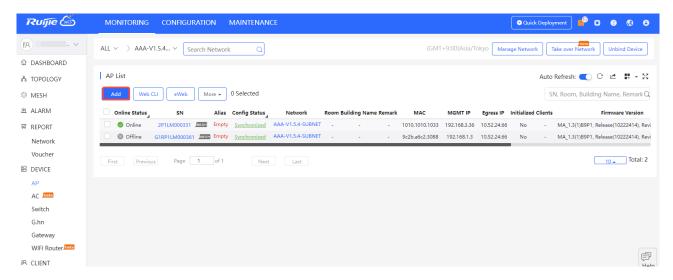
The device log records the historical operations, and currently supports the online/offline records, restart records, and upgrade records, and supports queries based on the log type and period.



5.6.1.3 Basic AP Operations

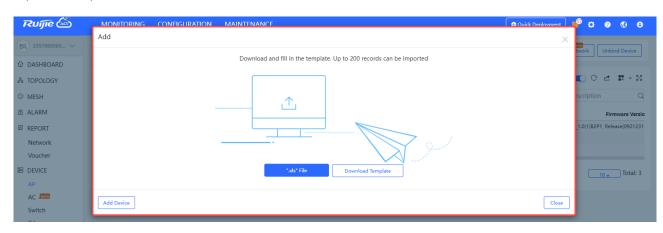
Add AP

Select the network, and click Add. Both batch import and manual add are supported.



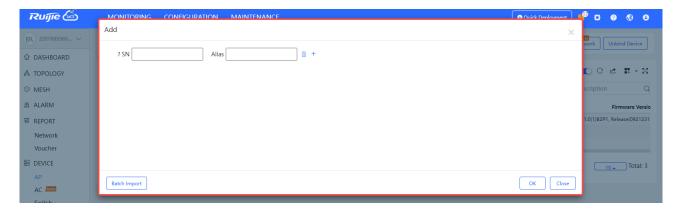
Non-apartment Scenario

To batch import APs, click **Download Template** to download the template, enter AP information, and click '.xls' File to import the template.



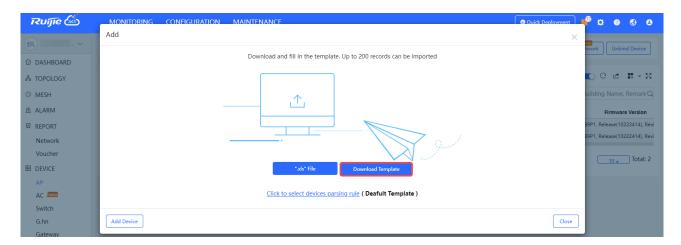


To manually add APs, click **Add a Device**, enter SN and alias of the AP, and click **OK**. Click to add multiple APs.



Apartment Scenario

To batch import APs, click **Download Template** to download the template, enter AP information, and click '.xls' File to import the template.



Model	SN	MAC	PN	SSID	SSID Password	Alias	Room	Building Name	Remark

Model: device model, optional

SN: device serial number, mandatory

MAC: device MAC address, optional

PN: device part number, optional

SSID/SSID Password: support up to 4 SSIDs/SSID passwords, and each SSID and password need to be separated by

",", optional

Alias: device alias, optional

Room: the room that installs the device, optional

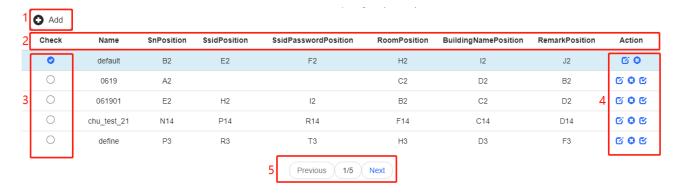
Building Name: the building that installs the device, optional

Remark: device remark, optional

You can also customize the template in EXCEL file to import devices. In order to parse the EXCEL file correctly, you should first create and specify the parse role.

Step 1: Click Click to select devices parsing rule, and a new window pops up.

There will be one default rule.



1. Add button: Add a new rule

2. Menu bar: Display rule content

Name: User defined name

• snPosition: Specify the starting position of SN in template

ssidPosition: Specify the starting position of SSID in template

ssidPasswordPosition: Specify the starting position of SSID's password in template

roomPosition: Specify the starting position of room number in template

buildingNamePosition: Specify the starting position of building name in template

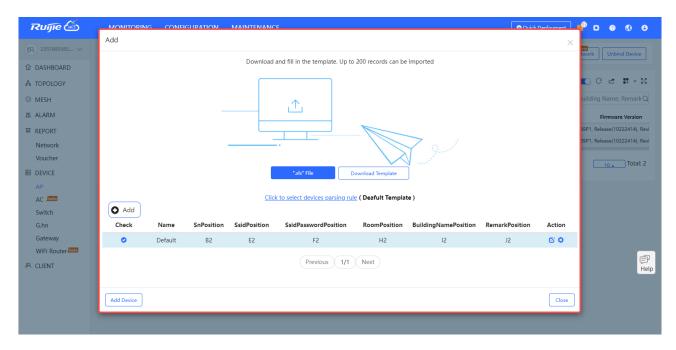
RemarkPosition: Specify the starting position of remark in template

if an entry is left empty, it will not be imported when importing the template.

*X*User can customize the EXCEL parsing rule from columns A to Z and rows 1 to 15.

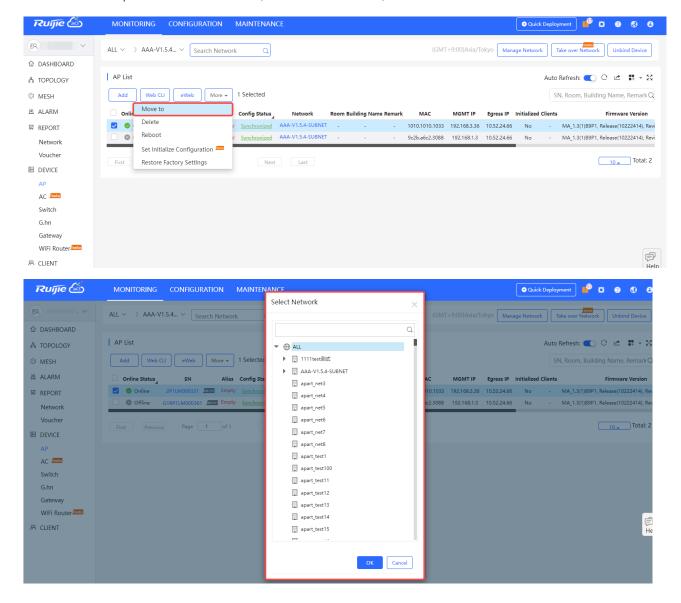
- 3. Check box: Only one rule can be selected at a time
- 4. Rule control button:
 - : Edit the rule
 - : Delete the rule
 - Set the rule as default rule
- 5. Page up and down button

Step 2: Import device by custom EXCEL file.



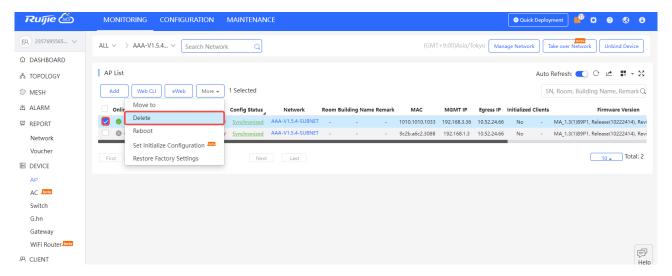
Move to

Select one or multiple devices in the AP List, click More > Move to, select the new network and click OK.



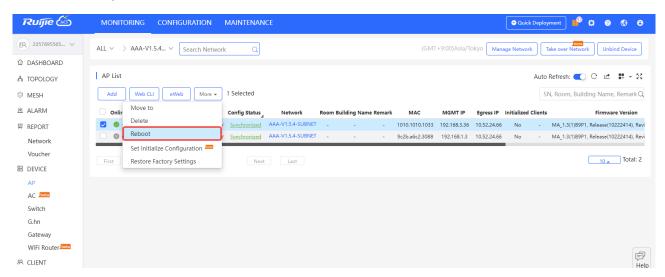
Delete

Select one or multiple devices in the AP List, click More > Delete and click OK.



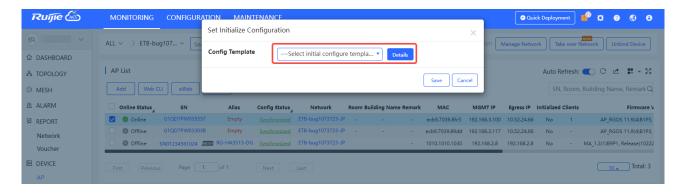
Reboot

Select one or multiple devices in the AP List, and click Reboot.



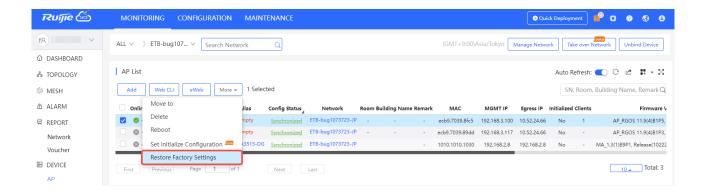
Set Initial Configuration (Only available for AP180 series access points)

Click Set Initial Configuration to apply an initial configuration template to the device.



Restore Factory Settings (Only available for AP180 series access points)

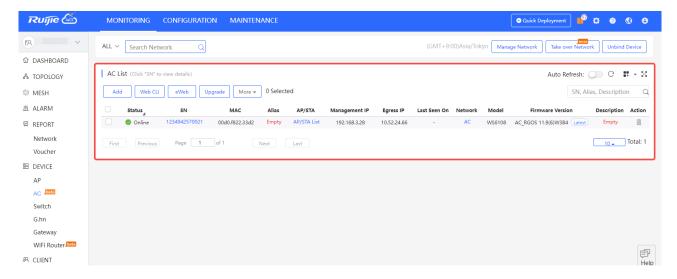
Click Restore Factory Settings to restore the device to factory settings.



5.6.2 AC (beta)

5.6.2.1 AC List

The **AC List** displays basic device information, including online/offline status, SN, MAC, alias, management IP, egress IP, offline time, network, model, firmware version, and description.



The **AC List** automatically refreshes every minute. Click

Auto Refresh: to enable/disable the auto refresh function.

Above the list are the **Add**, **Web CLI**, **eWeb** and **Upgrade** functions. Click to display **Reboot**, **Export** and **Delete** functions. For more information, refer to **Basic AC Operations**.

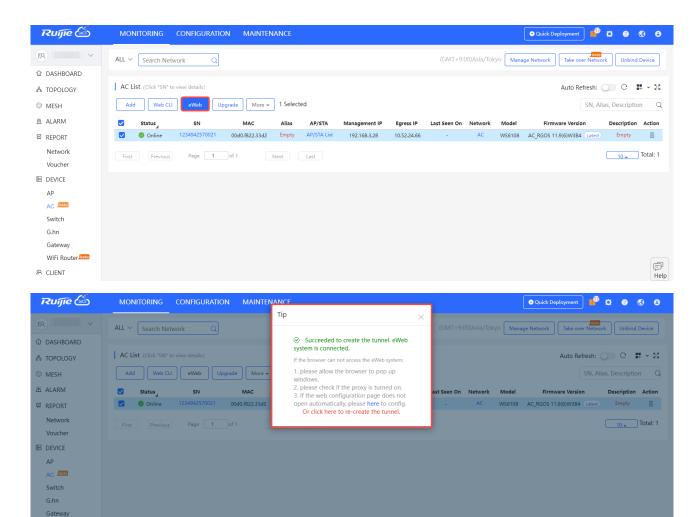
The Search function supports fuzzy queries based on the serial number, alias and description.

5.6.2.2 Device Details

Click the serial number in the device list to open the details page for a single device.

eWeb

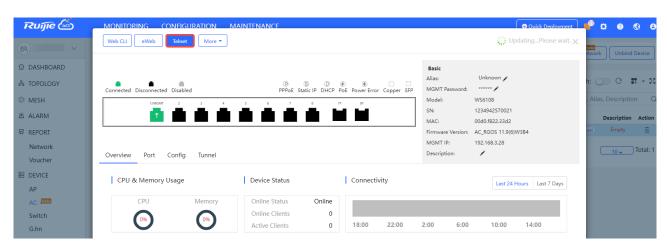
Click eWeb to open the eWeb system in a new window.

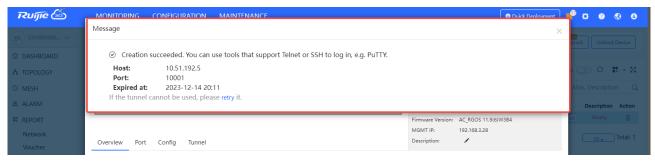


Telnet

A CLIENT

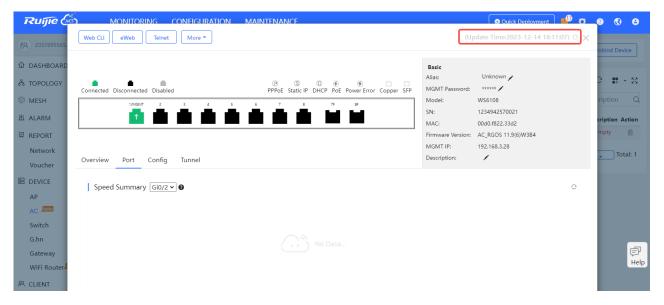
WiFi Router beta



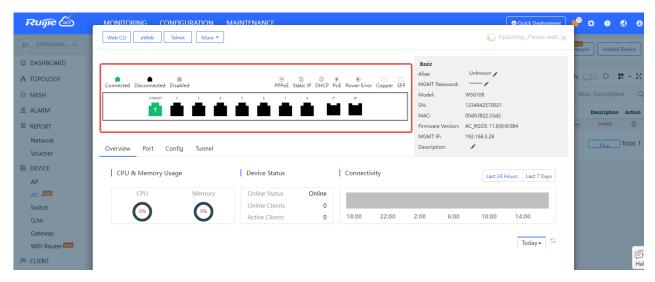


Refresh

Click to refresh all data in the page.

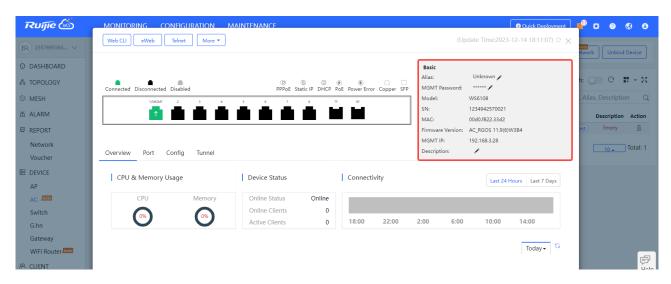


Port Panel



The port panel imitates the actual AC panel, displaying the port type and status.

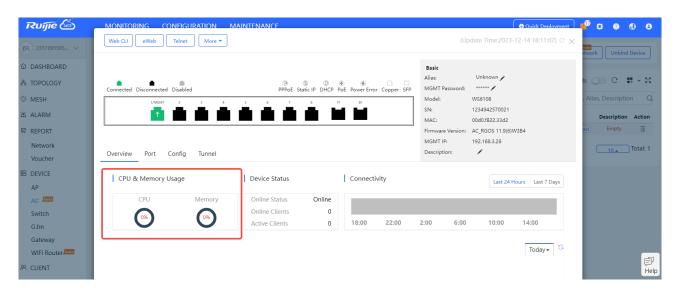
Basic



Basic information includes the alias, model, SN and other information. Alias, MGMT Password and Description can be edited.

Overview > CPU & Memory Usage

CPU & memory usage are displayed here.



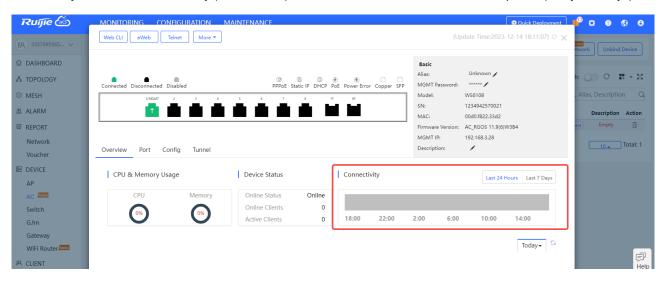
Overview > Device Status

Device status includes online status, online clients and active clients.



Overview > Connectivity

Connectivity refers to the connectivity (online status) between AC and Cloud Service within a period (1 day or 7 days).

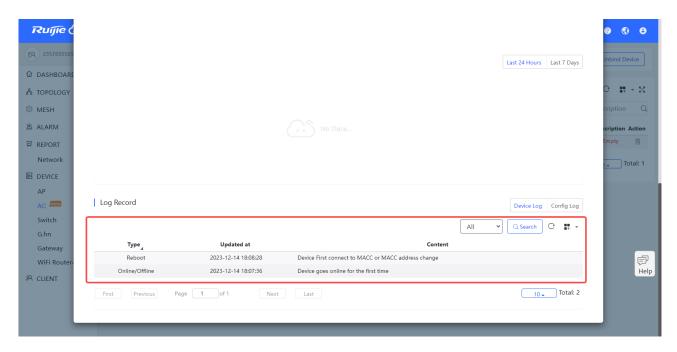


Overview > CPU/Memory Summary

CPU/memory summary over the 24 hours are displayed.

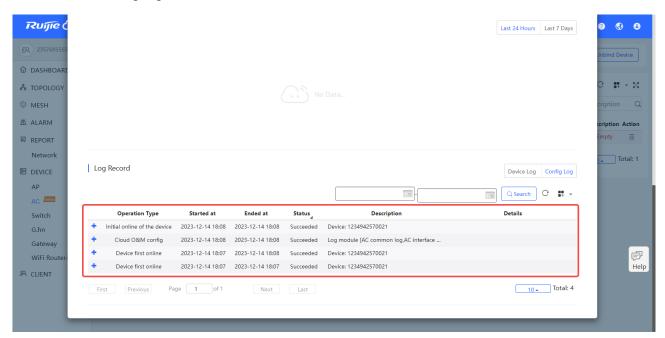


Overview > Device Log



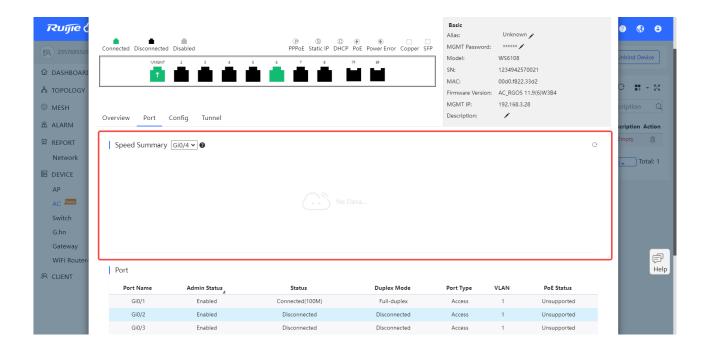
The device log records the historical operations, including online/offline, restart, upgrade and VLAN change, and supports queries based on log type and time.

Overview > Config Log



The Config log records the historical configuration delivery, and supports queries based on status and time.

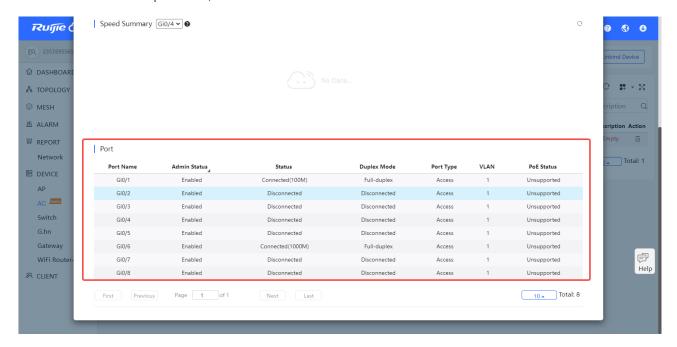
Port > Speed Summary



Uplink & downlink speed of port are displayed. This page supports queries based on day, week and month. Click refresh the summary.

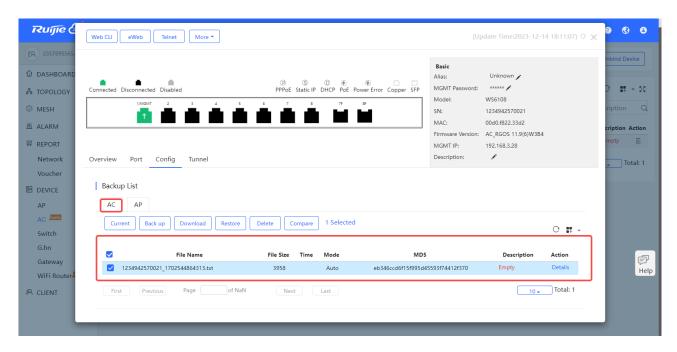
Port > Port Status

Port information includes port name, VLAN etc.

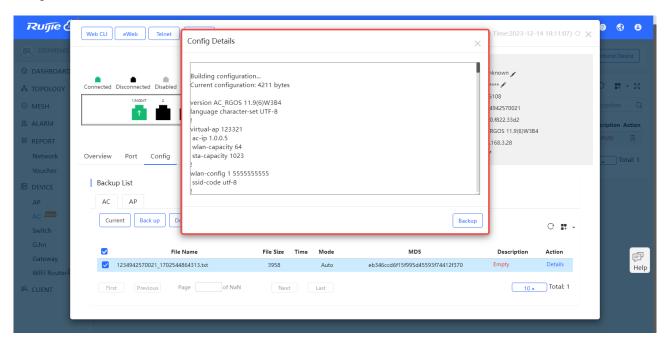


Config > AC Configuration Backup List

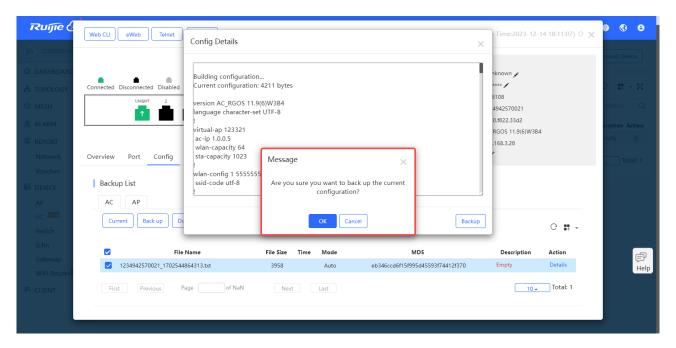
The backup records include configuration file name, size, time, mode and MD5.



Click **Current** to display the current configuration. Click **Back up** in the **Config Details** page to back up the current configuration.



Click **Back up** and then click **OK** in the message box to back up the current configuration.

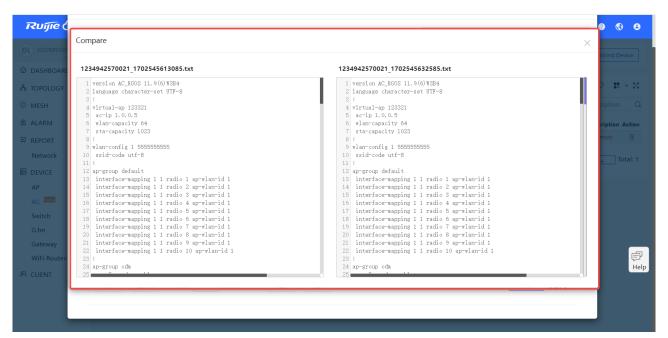


Select one record, and click **Download** to download the configuration file.

Select one record, and click **Restore** to restore the current configuration.

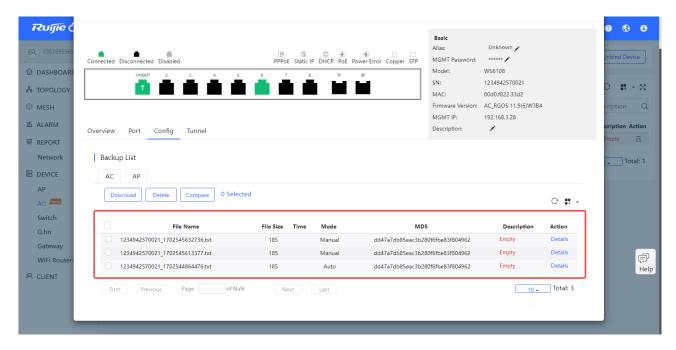
Select one or multiple records, and click **Delete** to delete the backup record.

Select two records, and click Compare to compare the differences



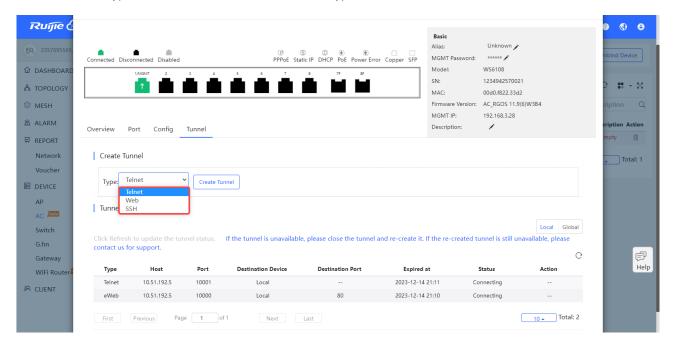
Config > AP Configuration Backup List

The backup records include configuration file name, size, time, mode and MD5.



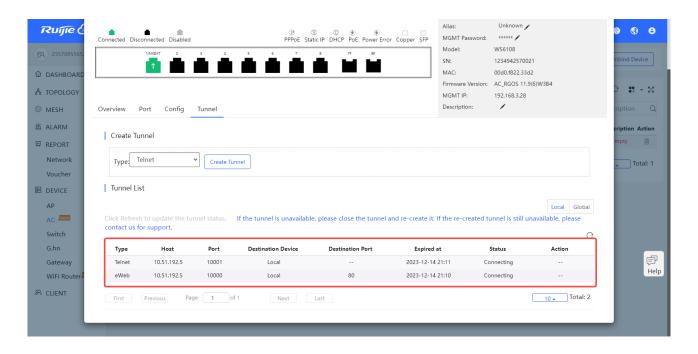
Tunnel > Create Tunnel

Select the tunnel type and click Create Tunnel. The tunnel types include Telnet, Web and SSH.



Tunnel > Tunnel List

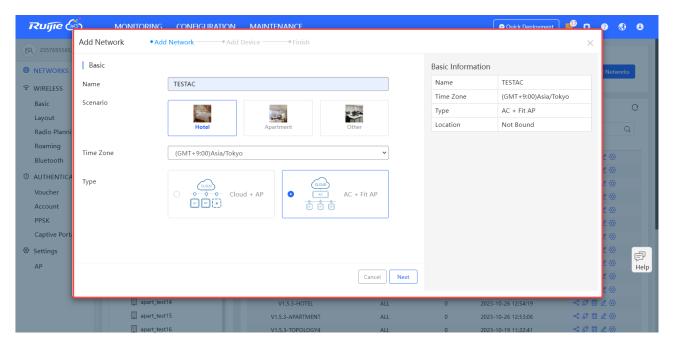
Tunnel information includes tunnel type, host, port, destination device, destination port, expiration time and status. Click **Re-create** in the **Action** column to re-create a tunnel.



5.6.2.3 Basic AC Operations

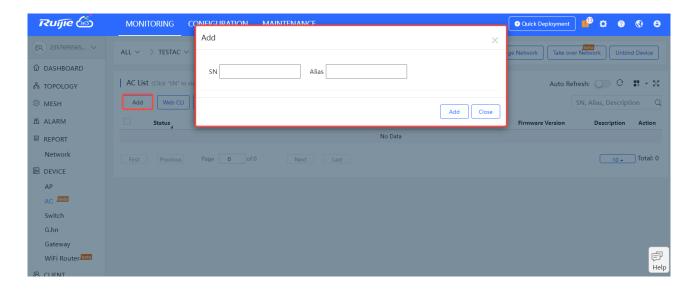
Add AC Network

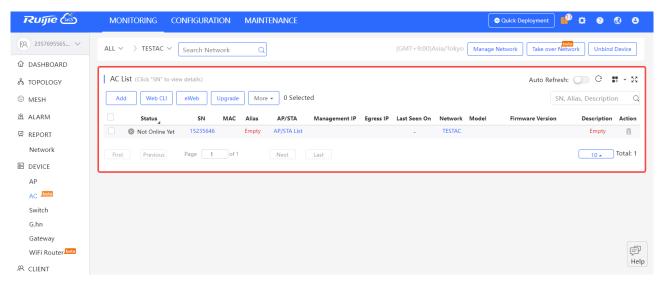
Click CONFIGURATION > NETWORKS > Add Network to add AC network.



Add

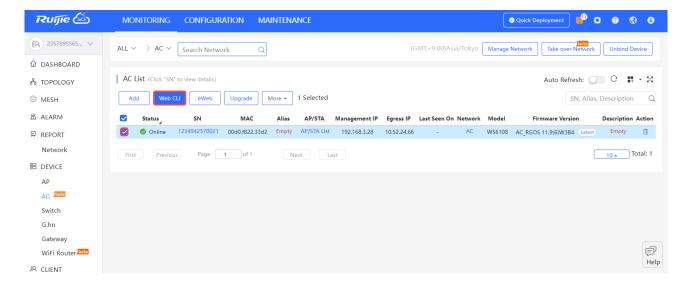
Click Add, enter the SN and Alias, and click OK to add an AC to the network. Only one AC can be added to a network.



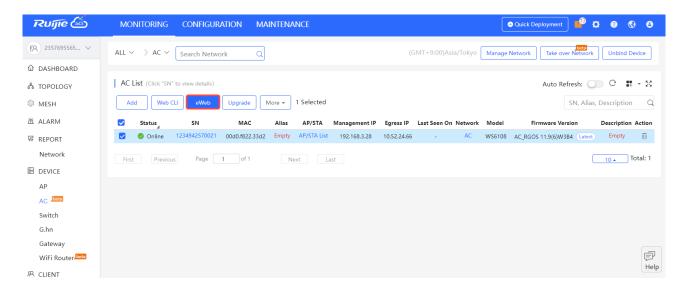


Web CLI

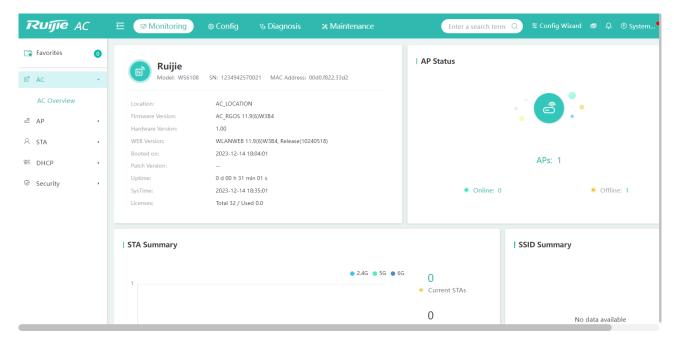
Select the device to be managed by CLI command, click **Web CLI**. The **Web CLI** page provides commonly-used CLI commands on the left. Click the command, or manually enter the command and click **Send**. Only one AC can be configured at a time.



eWeb



Select the device and click eWeb. The system will connect to AC and automatically open the eWeb page in a new window.

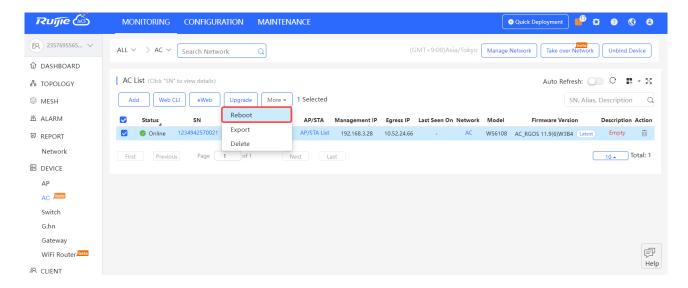


If a tunnel is created successfully but the eWeb page does not automatically open, a message is displayed as below. The user can manually click the link to open the page.



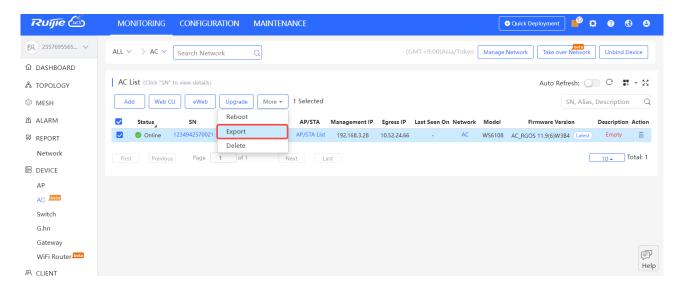
More > Reboot

Select the device in the AC List, click More > Reboot and click OK.



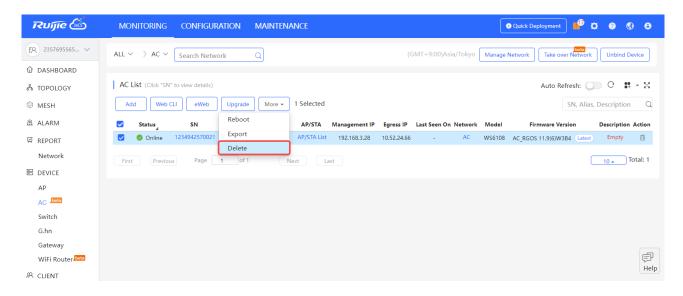
More > Export

Select the device in the AC List, click More > Export.



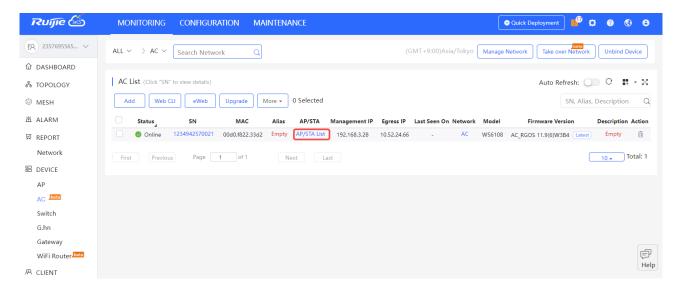
More > Delete

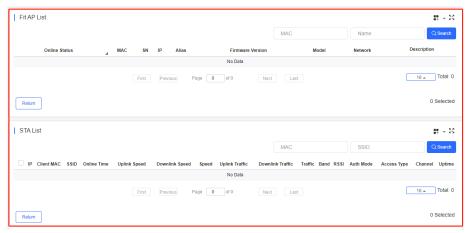
Select the device in the AC List, click More > Delete and click OK.



5.6.2.4 AP / STA List

Click AP/STA List to display AP and STA list.

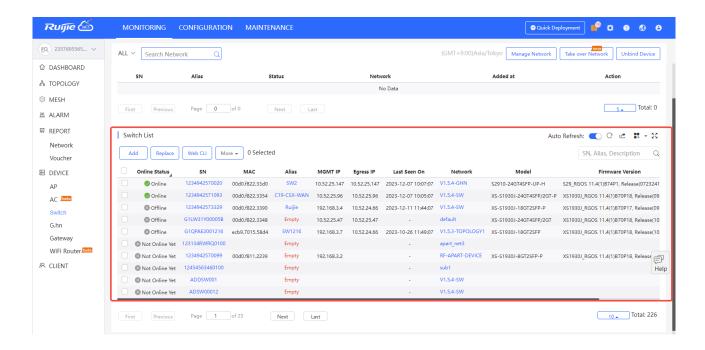




5.6.3 Switch

5.6.3.1 Switch List

The **Switch List** displays basic device information, including the online/offline status, SN, MAC, alias, management IP & public IP, offline time, network, model, firmware version and description.



The **Switch List** automatically refreshes every minute. Click

Auto Refresh: to enable/disable the auto refresh function.

Above the list is the **Add Switch**, **Replace** and **Web CLI** function. Click to display the **Move to**, **Delete**, and **Reboot** functions. For more information, refer to **Basic Switch Operations**.

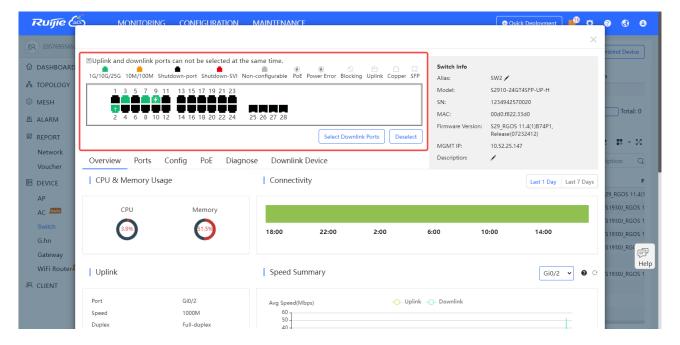
The **Search** function supports fuzzy queries based on the serial number, alias and description, and also supports queries based on online/offline status.

5.6.3.2 Device Details

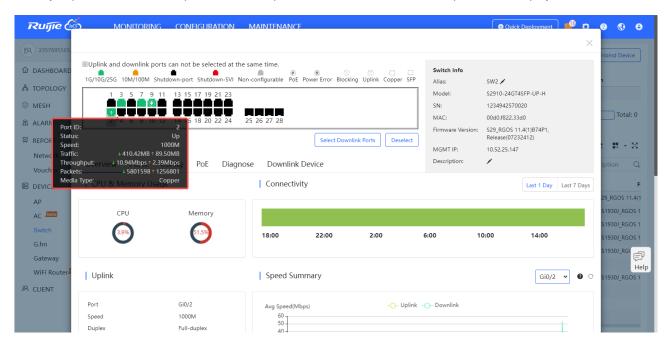
Click the serial number in the device list to open the details page of a single device. The page displays detailed device information, including the port panel, basic information, overview, ports, config, PoE and diagnosis.

Port Panel

The port panel imitates the actual switch panel, displaying the port type, status and speed.

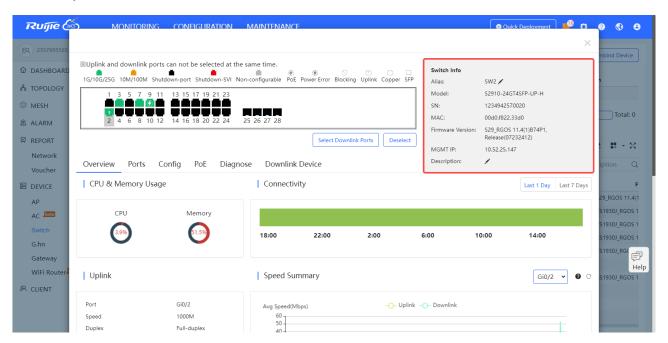


When you point the mouse to a port, the traffic, speed and other information of the port will be displayed.

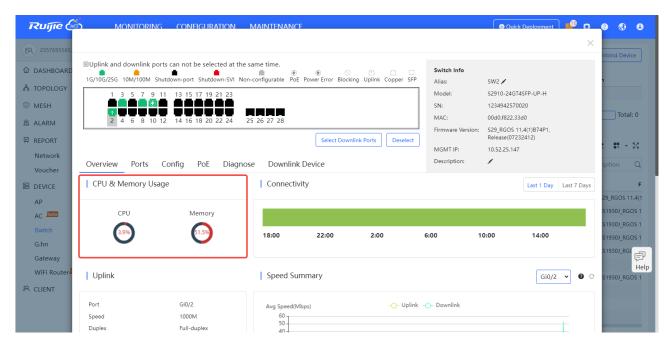


Switch Info

Switch information includes the alias, model, SN, MAC address, firmware version, management IP and description. **Alias** and **Description** can be edited.

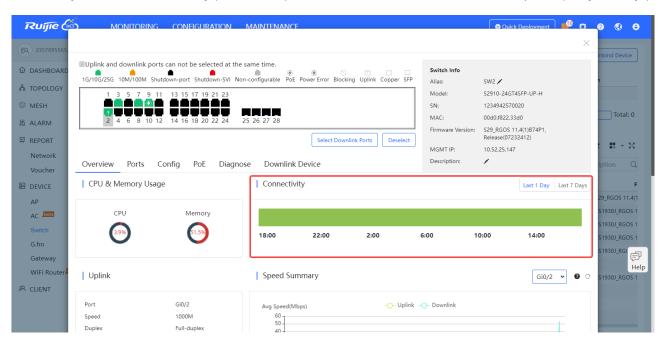


Overview > CPU & Memory Usage

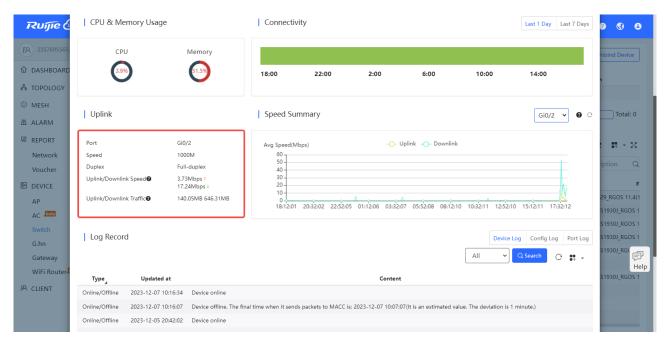


Overview > Connectivity

Connectivity refers to the connectivity (online status) between Switch and Cloud Service within a period (1 day or 7 days).



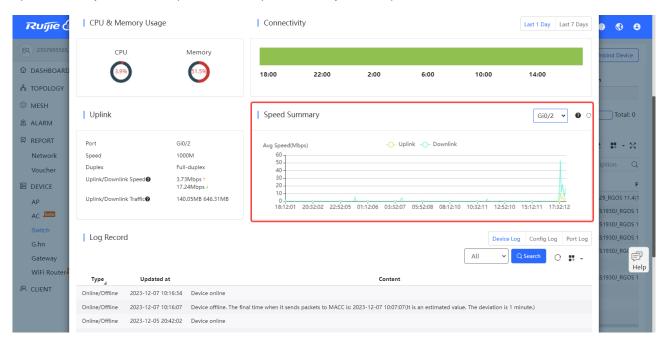
Overview > Uplink



Uplink information includes the port, speed, duplex, uplink/downlink speed and uplink/downlink traffic.

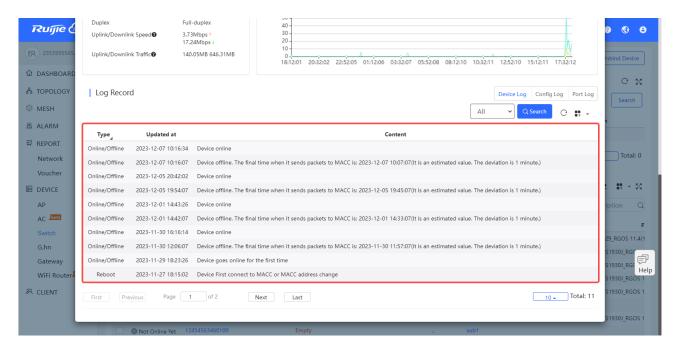
Overview > Speed Summary

Speed summary includes the uplink/downlink speed summary over the past 24 hours.



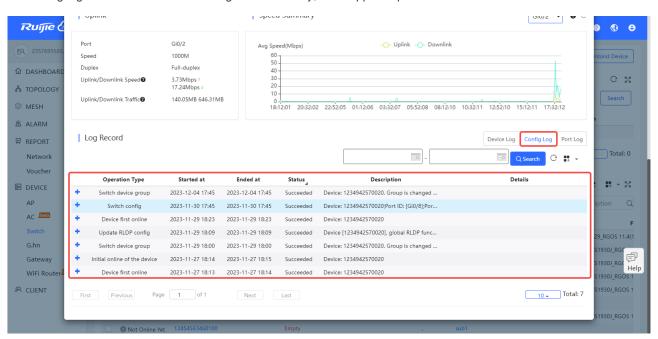
Overview > Device Log

The device log records the historical operations, including online/offline, restart, upgrade, and VLAN change, and supports queries based on log type and time.



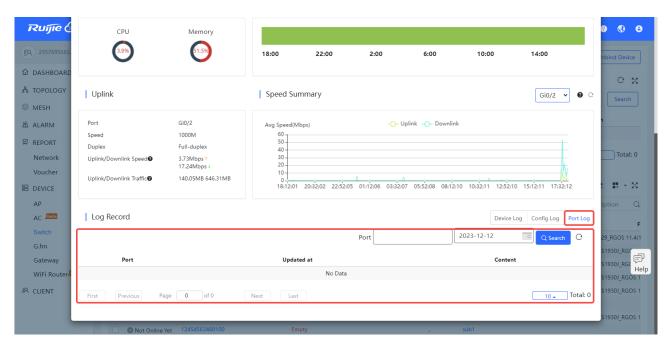
Overview > Config Log

The config log records the historical configuration delivery, and supports queries based on status and time.



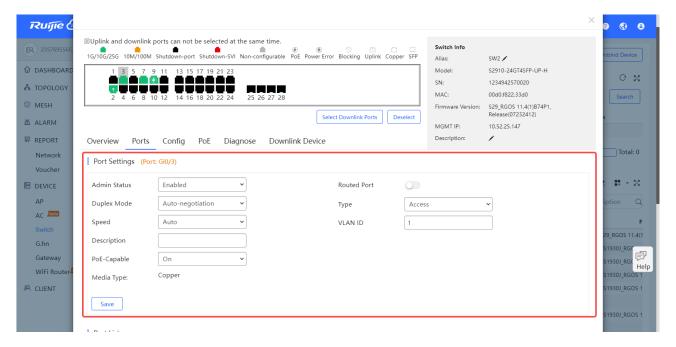
Overview > Port Log

The port log records the changes of port configuration, and supports queries based on port ID and time.



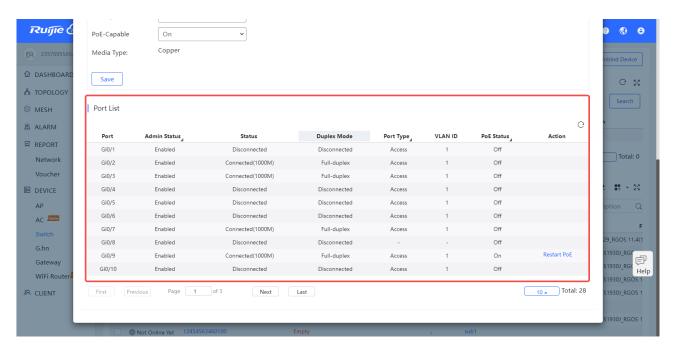
Ports > Port Settings

Select one or multiple ports in the port panel to display and edit the port configuration, including admin status, duplex mode and speed.



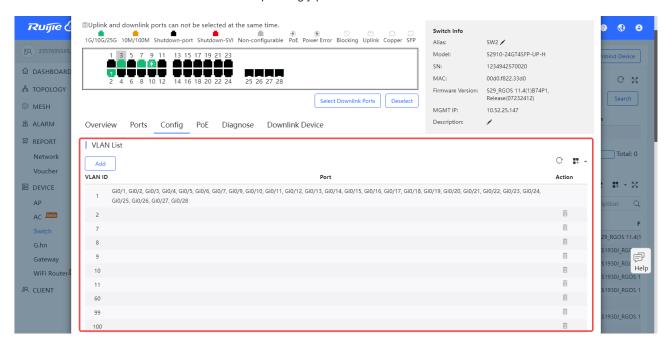
Ports > Port List

Port list includes the information of all ports, including port ID, admin status, port status, duplex mode, port type, VLAN ID and PoE status, and support queries based on admin status, port type and PoE status.



Config > VLAN List

VLAN list includes the VLAN ID and the correspondingly ports.



Click Add to add VLAN IDs in batches.



If a VLAN ID you add exists, it will be ignored.

You can use the following two methods to add VLAN IDs in batches:

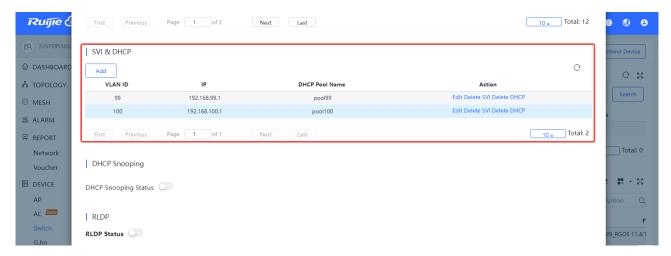
(1) Use commas (,) to separate multiple VLANs. Up to 10 VLANs are supported.

(2) Use an end dash (-) to indicate a VLAN range. No limit.

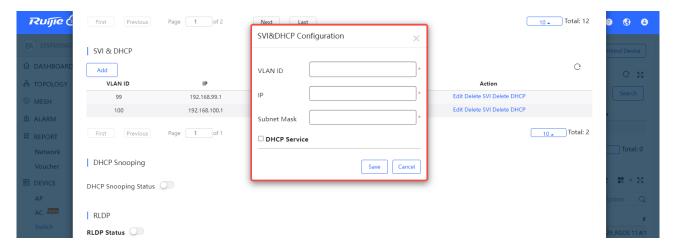
Note: Do not support using commands and end dashes at the same time.

Config > SVI & DHCP

SVI & DHCP information includes VLAN ID, SVI and DHCP pool name. You can add, edit or delete the SVI or DHCP configuration.

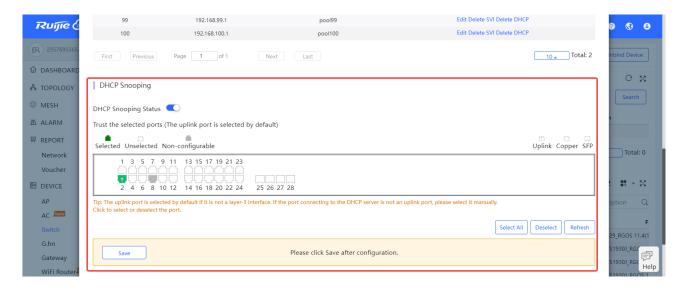


Click **Add** to configure the IP and subnet mask of a VLAN, and configure the name, IP segment, subnet mask and gateway of DHCP service.



Config > DHCP Snooping

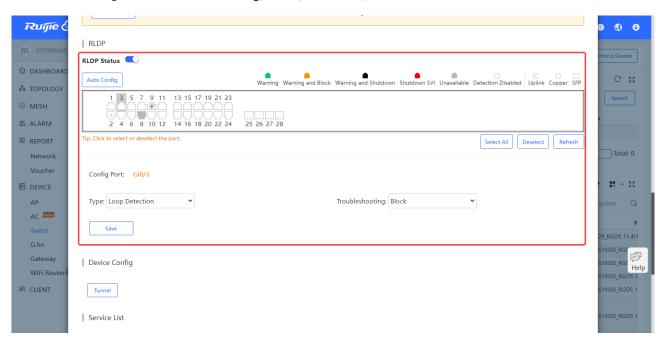
Enable **DHCP Snooping Status**, select ports and click **Save**. The uplink port is selected by default if it is not routed port. If the port connecting to the DHCP server is not an uplink port, please select it manually.



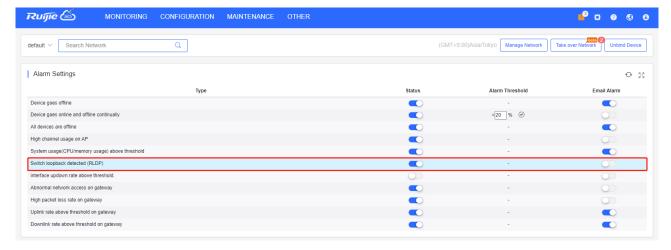
Config > RLDP

Enable RLDP Status, select one or multiple ports, choose the troubleshooting method for a loop, and click Save.

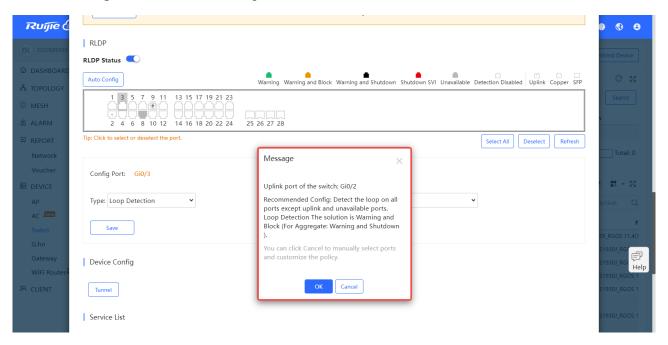
The troubleshooting methods include Warning, Block, Shutdown, and Shutdown SVI.



If Warning is chosen, the Switch loopback detected (RLDP) alarm should be enabled in the Alarm Settings page.



Click Auto Config to enable the default configuration.



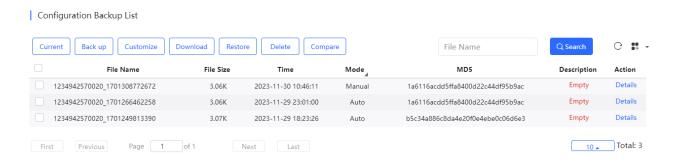
Config > Service List

Configure the admin status and login password of the eWeb service.



Config > Configuration Backup List

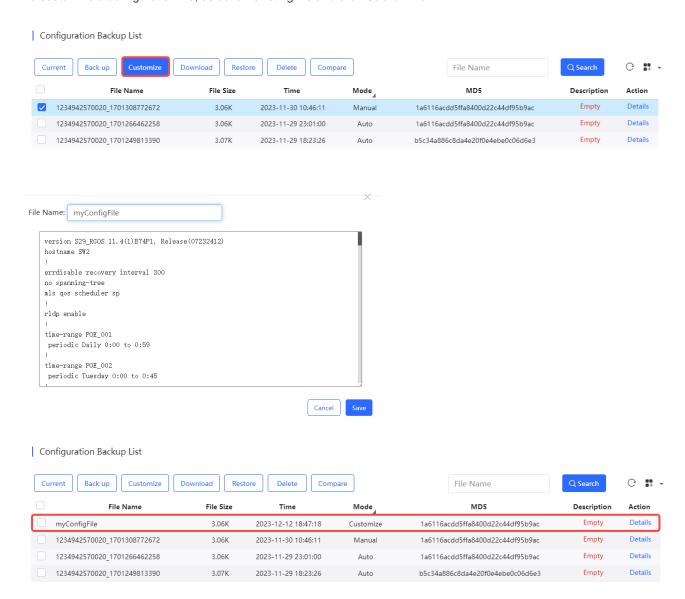
The backup records include configuration file name, size, time, mode and MD5.



Click **Current** to display the current configuration. Click **Backup** in the **Config Details** page to back up the current configuration.



To customize a configuration file, select an existing file and click **Customize**.

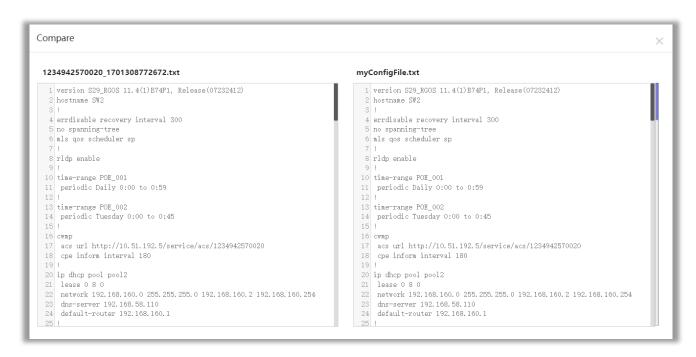


Select one record, and click **Download** to download the configuration file.

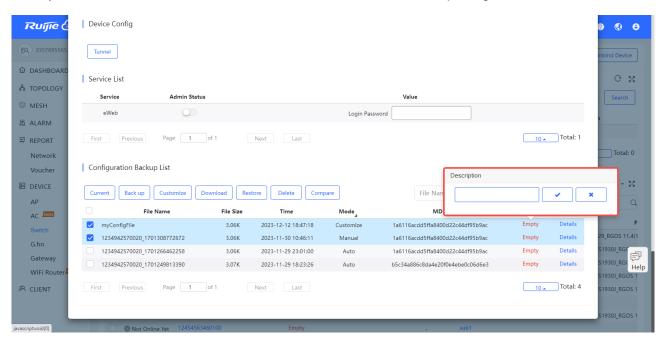
Select one record, and click **Restore** to restore the current configuration.

Select one or multiple records, and click **Delete** to delete the backup record.

Select two records, and click **Compare** to compare the differences.



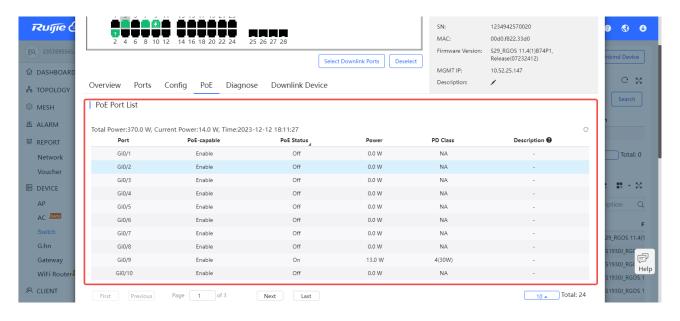
Description can be edited. Click Details in the Action column to check the backup configuration.



PoE > PoE Port List

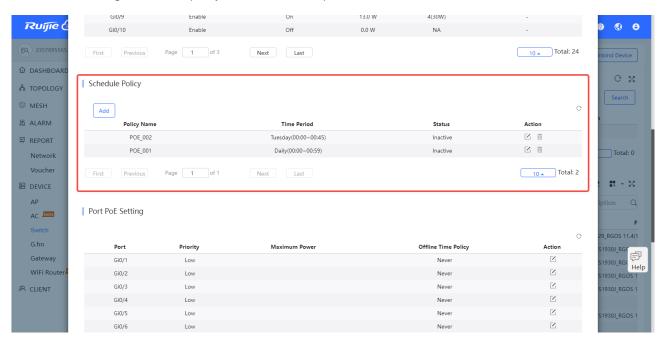
PoE statistics are displayed above **PoE Port List**, including the total power, current power and time.

PoE configuration includes the port, PoE-capable, PoE status, power, PD class and description.



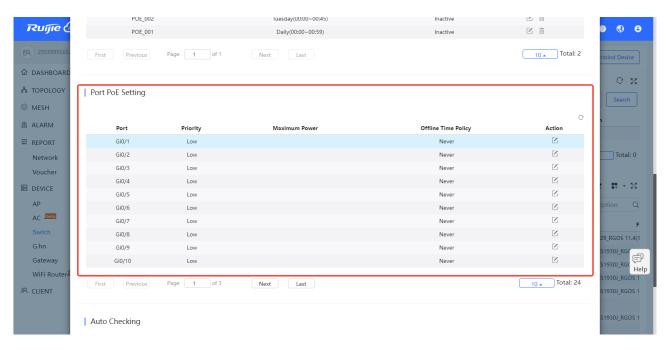
PoE > Schedule Policy

The **Schedule Policy** displays the time period policy for powering off PoE ports, including the policy name, time period, and status indicating whether the policy has been used on ports.



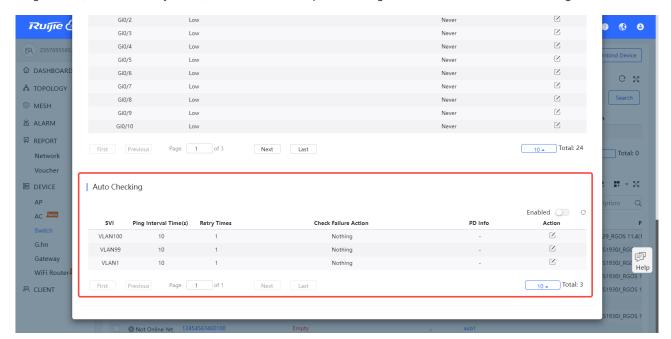
PoE > Port PoE Setting

The **Port PoE Setting** displays effective port PoE settings, including port name, the power supply priority, maximum power and power supply stop policy.



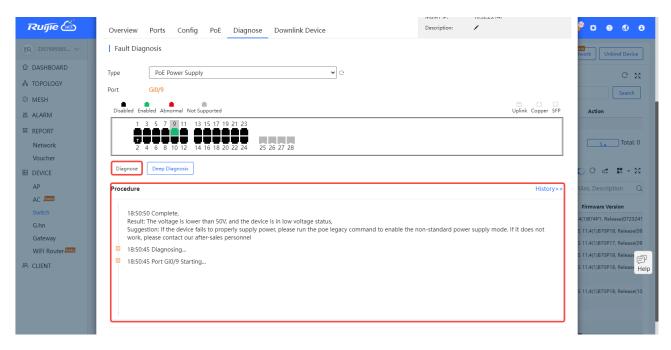
PoE > Auto Checking

The **Auto Checking** displays the policy for checking the working status of a PD connected to a PoE port, including the Ping interval, number of retry times, action to be taken upon checking failure and IP address for checking PDs.

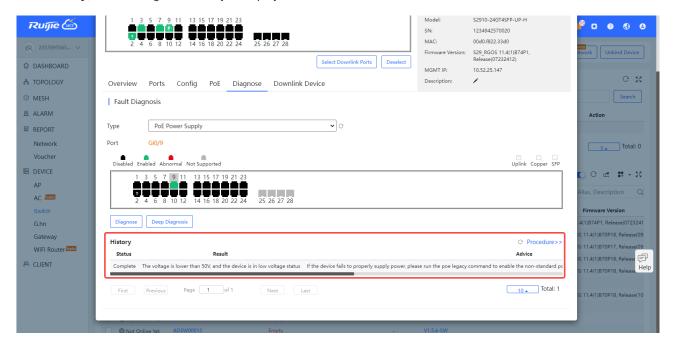


Diagnose > Fault Diagnosis

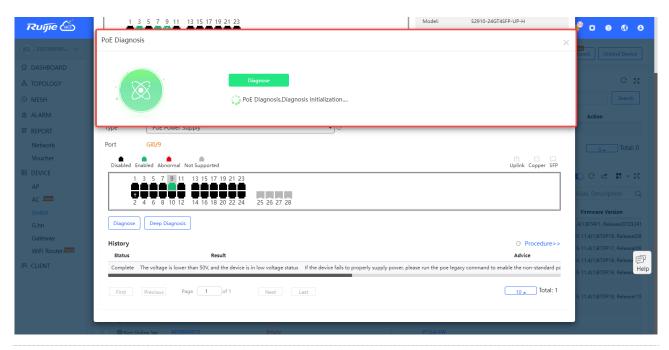
There are two types of fault diagnosis: **PoE Power Supply** and **SFP Port**. Select a port in the panel, click **Diagnose**, and the diagnosis procedure is displayed as below.



Click **History**, and the diagnosis history is displayed.



Select a port in the panel, click **Deep Diagnose**, and click **Diagnose** in the **PoE Diagnosis** page.



- Normal diagnosis: The Cloud server delivers CLI commands to collect the switch information, and the diagnosis occurs on the Cloud server.
- 1 Deep diagnosis: The diagnosis occurs on the switch, and the results are reported to the Cloud server.
- Downlink Device

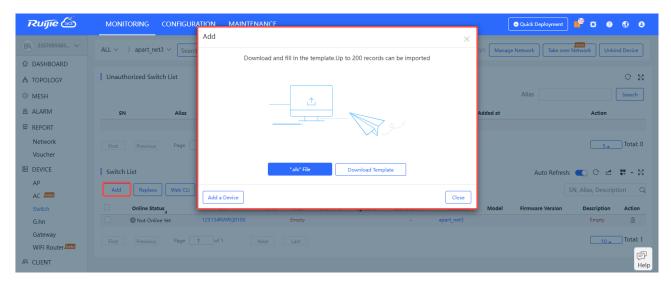
The **Downlink Device** displays the information of the downlink devices of the switch.



5.6.3.3 Basic Switch Operations

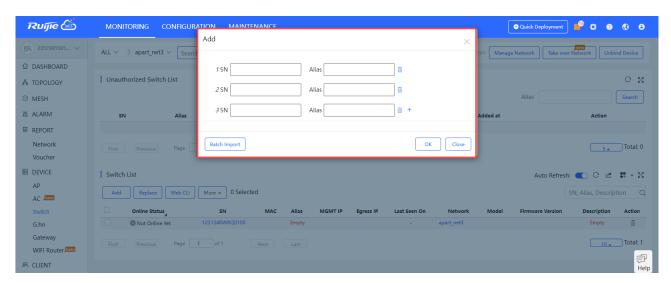
Add Switch

Select the network, and click Add. Both batch import and manual add are supported.



Click Download Template to download the template, enter switch information, and click '.xls' File to import the template.

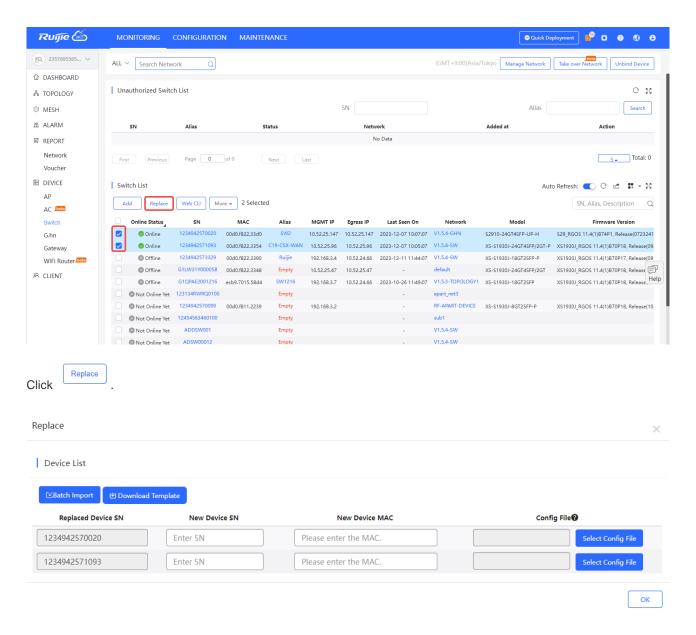
Click **Add a Device**, enter SN and alias of the switch, and click **OK**. Click to add multiple switches.



Replace Switch

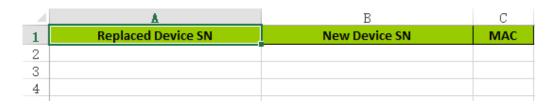
The configuration of old device can be synced to the new device. After the new device goes online, the configuration file of the old device will be delivered.

Select an existing device.

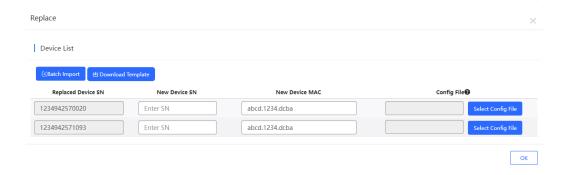


By default, the configuration file of the old device is the latest automatic configuration file, or you can select the history configuration file manually. The MAC of new device is required. The SN and the MAC of device should be consistent, and the models of old device and new device should be the same; otherwise, the replacement cannot be performed.

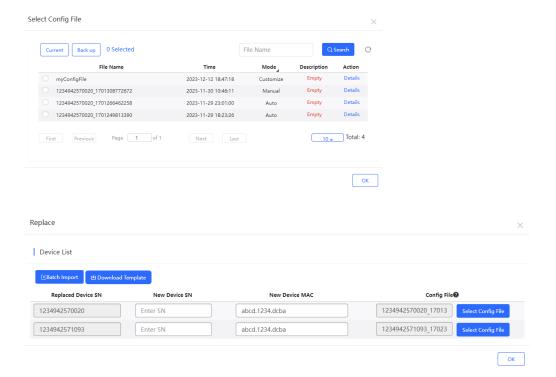
To batch replace switches, click to download the template and enter the device information.



Click to import the template.

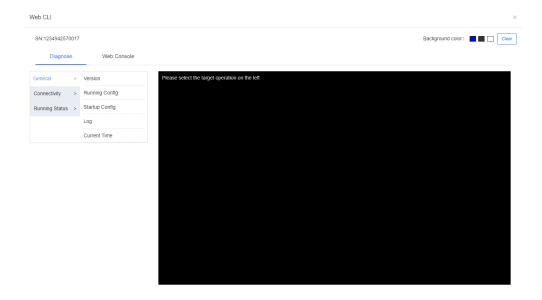


To replace the configuration with the configuration of an existing device, click

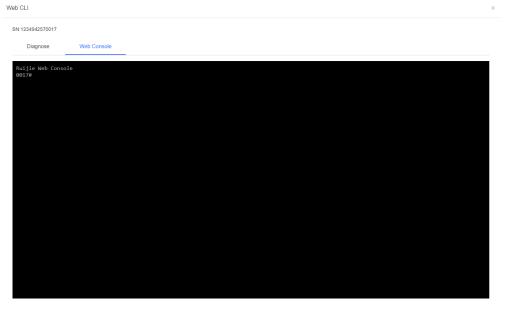


Web CLI

Select one or multiple devices in the **Switch List**, and click **Web CLI**. The **Web CLI** dialog box is displayed, and device information can be queried via the menus in this dialog box. The menus vary with the products.

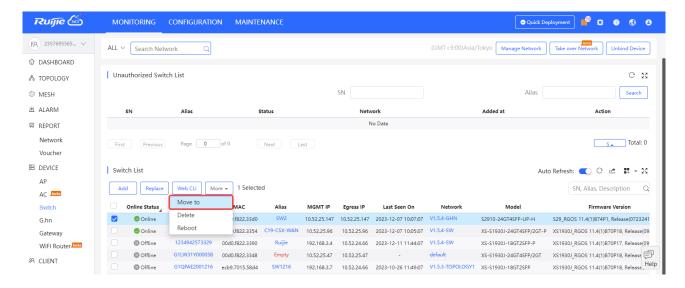


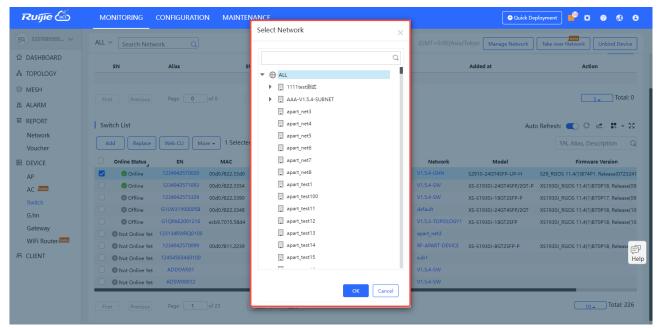
In addition, in the command entry box, the TAB key and question mark (?) both can complete a command.



More > Move to

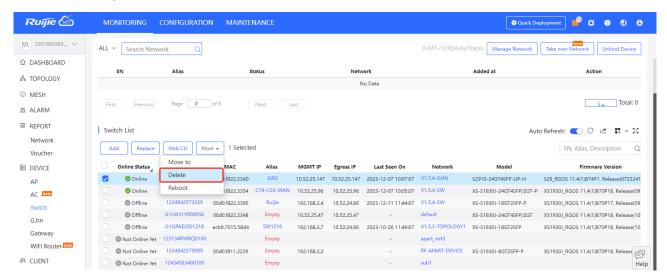
Select one or multiple devices in the $\mathbf{Switch}\ \mathbf{List}$, click $\mathbf{More} > \mathbf{Move}\ \mathbf{to}$, select the new network and click \mathbf{OK} .





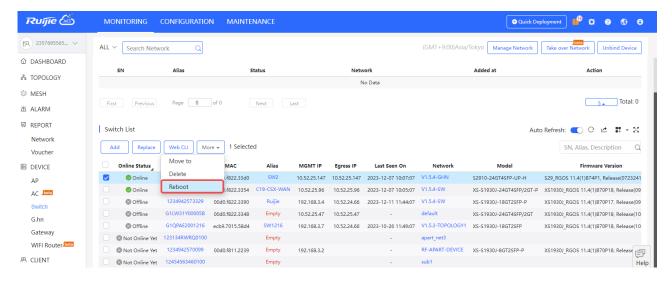
More > Delete

Select one or multiple devices in the Switch List, click More > Delete and click OK.



More > Reboot

Select one or multiple devices in the Switch List, and click Reboot.

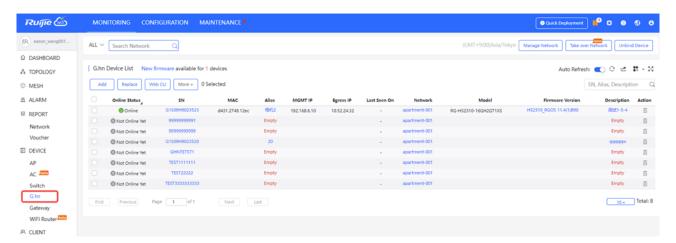


5.6.4 G.hn

G.hn telephone line products including the main telephone line unit HS2310-16GH2GT1XS and the child telephone line unit RG-HA3515-DG. The main telephone unit RG-HS2310-16GH2GT1XS is a telephone line switch, and the child telephone line unit is an access point. After being connected to Ruijie JaCS, the main telephone unit can be managed via the G.hn page, and the child telephone line unit can be managed via the **DEVICE** > **AP** page. In addition, the information of a child telephone line unit can be displayed on the detailed page of the main telephone line unit.

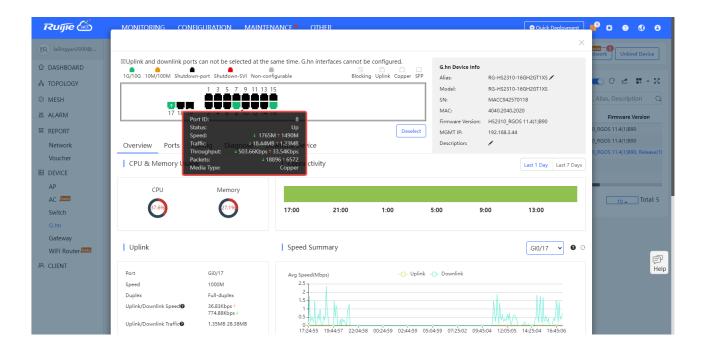
5.6.4.1 G.hn List

The **G.hn Device List** displays basic device information, including the online/offline status, SN, MAC, alias, management IP, egress IP, offline time, network, model, firmware version and description.



5.6.4.2 Device Details

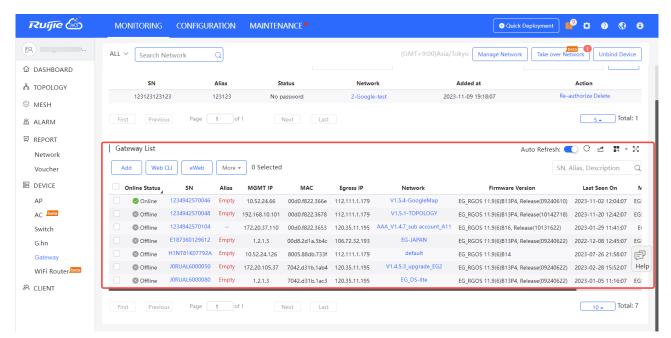
The details pages of switches and G.hn devices are similar. For the introduction, refers to the section 5.6.3.2. The main difference on details page between G.hn devices and switches is that ports 1-16 of HS2310-16GH2GT1XS are G.hn ports. When moving the cursor to a G.hn port, the port information is displayed, including the port ID, port status, speed, traffic, throughput, etc.



5.6.5 Gateway

5.6.5.1 Gateway List

The **Gateway List** displays basic device information, including the online/offline status, SN, alias, management IP, MAC, egress IP, network, firmware version, offline time, model and description.



The **Gateway List** automatically refreshes every minute. Click Auto Refresh: to enable/disable the auto refresh function.

Above the list are the **Add Gateway**, **Web CLI** and **eWeb** functions. Click to display the **Move to**, **Reboot**, **Tunnel** and **Delete** functions. For more information, refer to **Basic Gateway Operations**.

The **Search** function supports fuzzy queries based on the serial number, alias and description, and also supports queries based on online/offline status.

5.6.5.2 Device Details

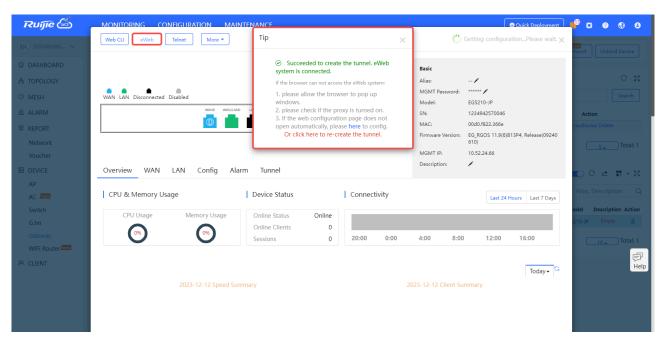
Web CLI

Click **Web CLI**, and the **Web CLI** page is displayed. The **Web CLI** page provides commonly-used CLI commands on the left. Click the command, or manually enter the command and click **Send**.



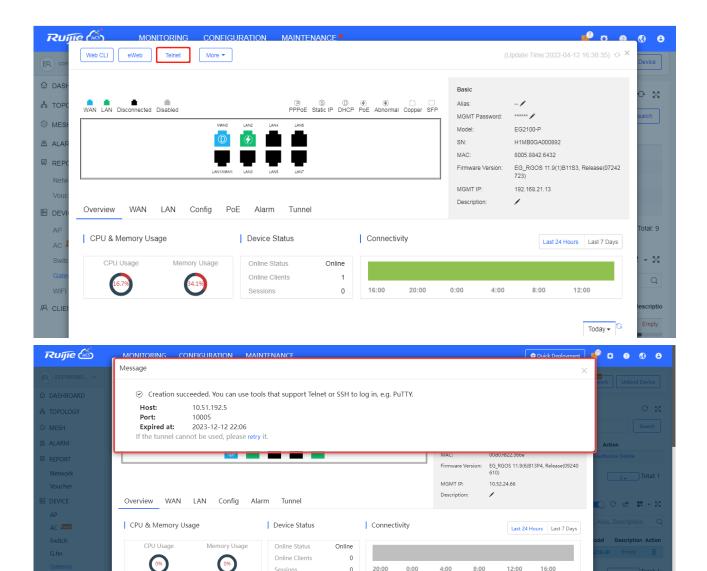
eWeb

Click eWeb to open the eWeb system in a new window.



Telnet

Click **Telnet**, and a window is opened to connect to the gateway by Telnet protocol. Enter CLI commands to configure the gateway.



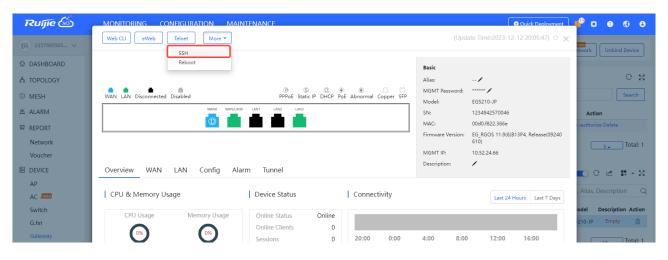
More > SSH

Click More > SSH, and a window is opened to connect to the gateway by SSH protocol. Use other SSH tools to connect to the gateway.

0

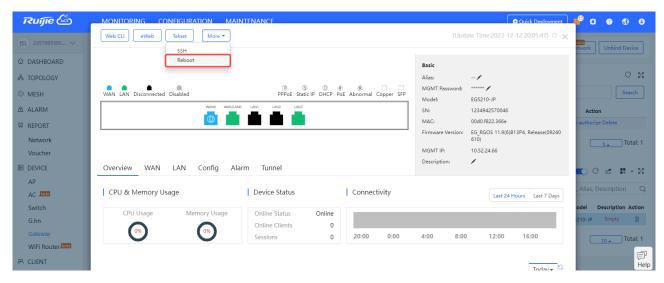
Sessions

12:00



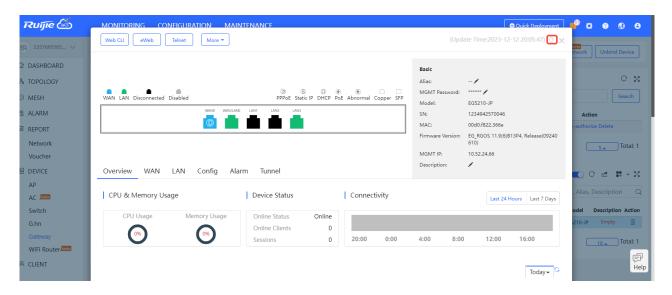
More > Reboot

Click **More** > **Reboot** to restart the gateway.



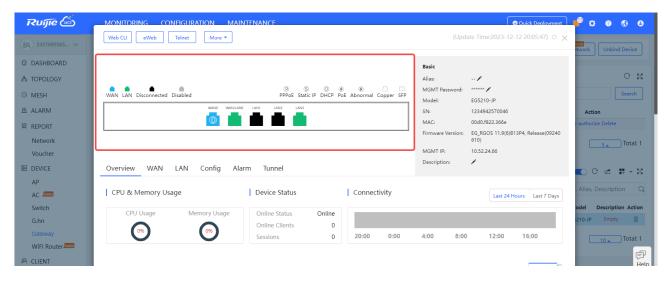
Refresh

Click to refresh all data in the page.



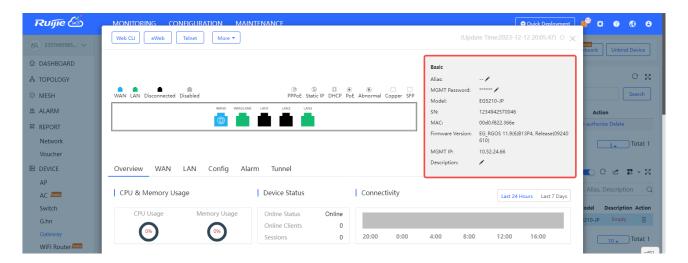
Port Panel

The port panel imitates the actual gateway panel, displaying the port type and status.



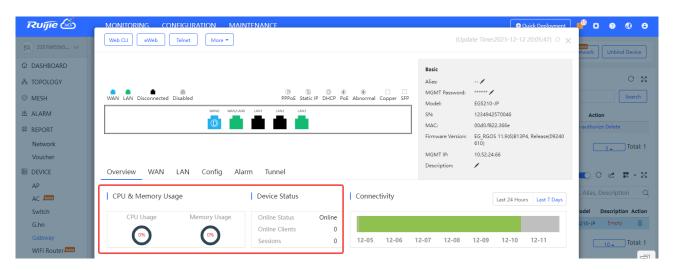
Basic

Basic information includes the alias, model, SN and other information. **Alias, MGMT Password** and **Description** can be edited.



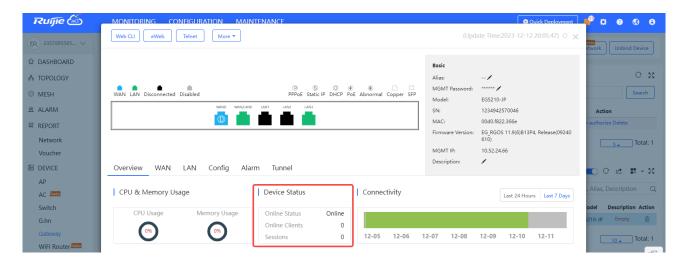
Overview > CPU & Memory Usage

CPU & memory usage are displayed here.



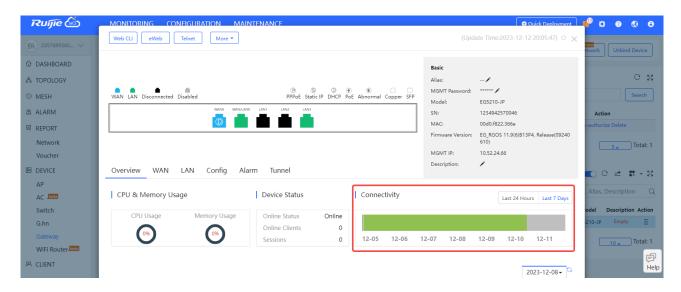
Overview > Device Status

Device status includes online status, online clients and sessions.



Overview > Connectivity

Connectivity refers to the connectivity (online status) between Gateway and Cloud Service within a period (1 day or 7 days).



Overview > Speed Summary

The uplink/downlink speed summary over the 24 hours is displayed.



Overview > Client Summary

The client statistics over the 24 hours are displayed.



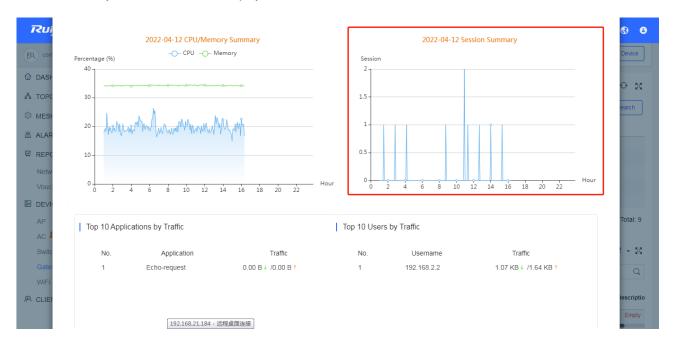
Overview > CPU/Memory Summary

CPU/memory summary over the 24 hours are displayed.



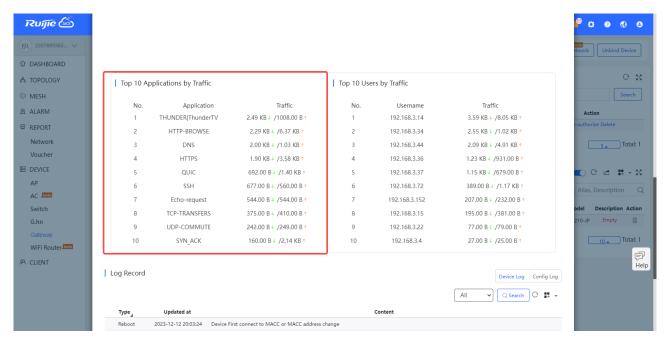
Overview > Session Summary

Session summary over the 24 hours is displayed.



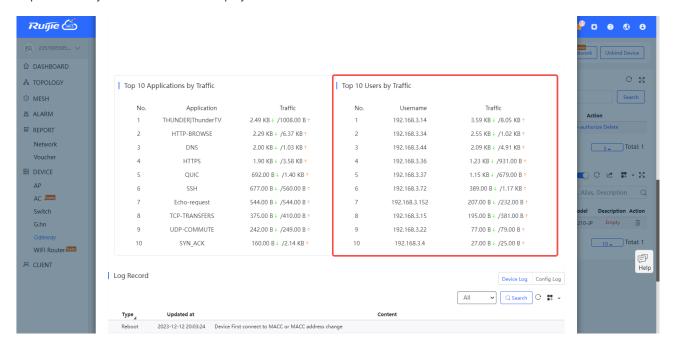
Overview > Top 10 Applications by Traffic

Top 10 applications by downlink traffic are displayed.



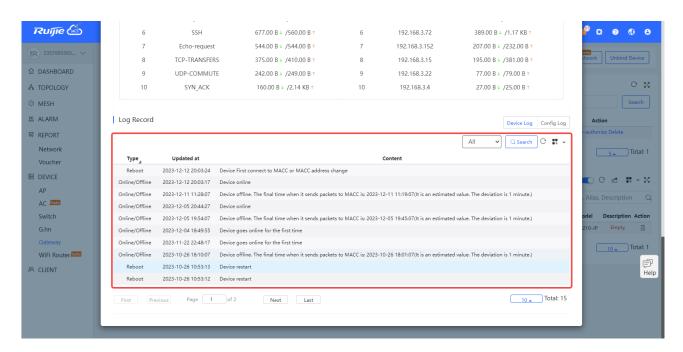
Overview > Top 10 Users by Traffic

Top 10 users by downlink traffic are displayed.



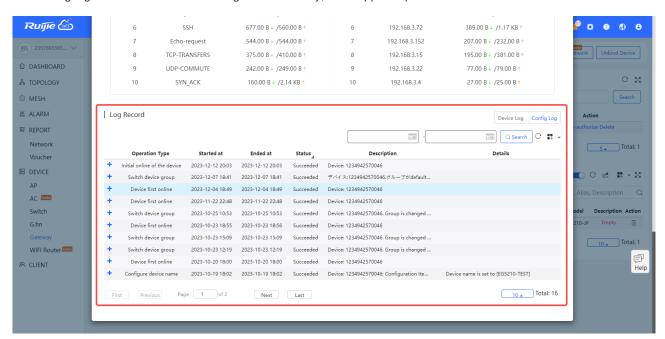
Overview > Device Log

The device log records the historical operations, including online/offline, restart, upgrade and VLAN change, and supports queries based on log type and time.



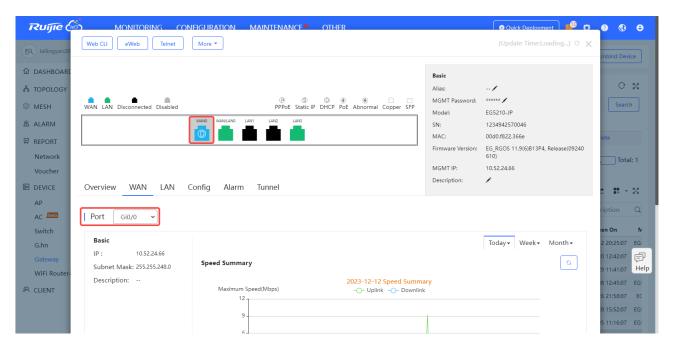
Overview > Config Log

The Config log records the historical configuration delivery, and supports queries based on status and time.



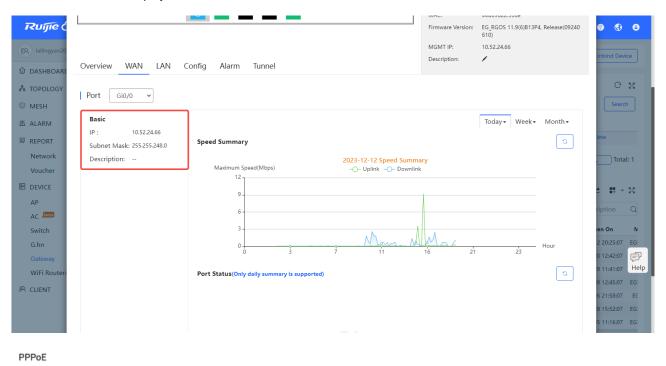
WAN > Port

Select one WAN port to display the corresponding port information and rate summary.



WAN > Basic

Basic information includes the IP, subnet mask and description. If PPPoE is enabled and dialing port is configured, the PPPoE information is displayed.



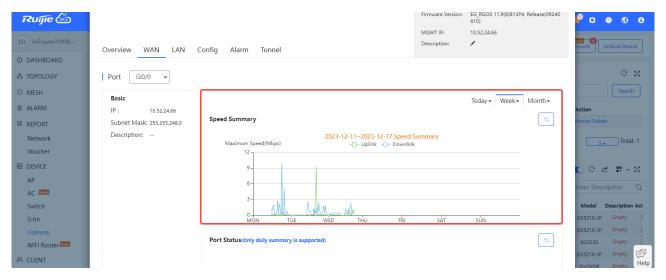
Port:

di2 IP Type: adsl Uplink Bandwidth: Downlink Bandwidth:

WAN > Speed Summary

Uplink & downlink rate of WAN port are displayed. This page supports queries based on day, week and month. Click

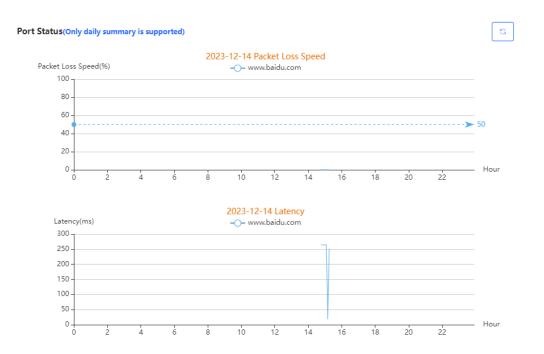
to refresh the summary.



WAN > Port Status

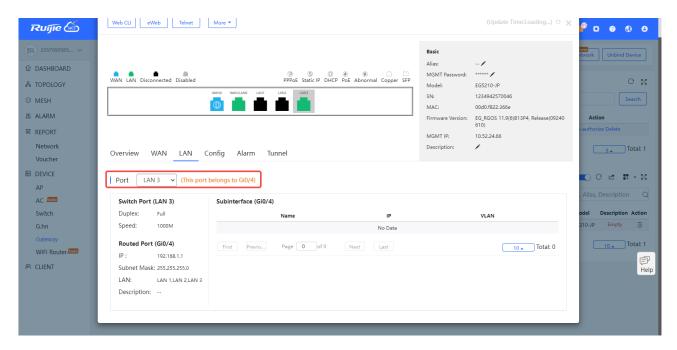
Packet loss rate and latency summary are displayed. This page supports queries based on day, week and month. Click

to refresh the summary.



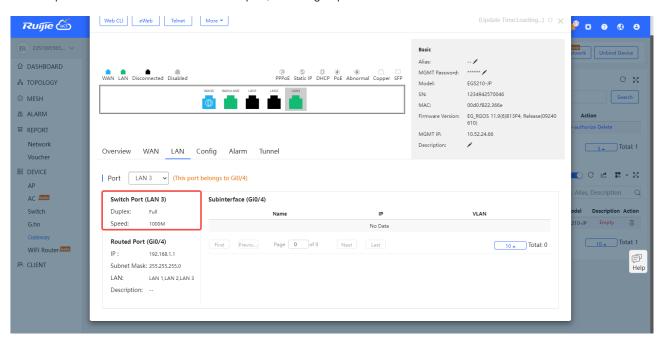
LAN > Port

Select a LAN port to display the corresponding information of its switch port, routed port and subinterface.



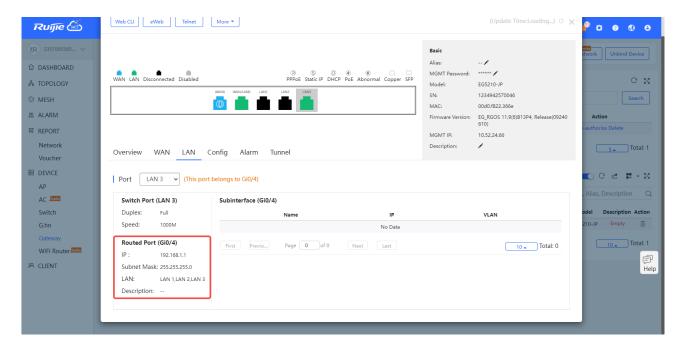
LAN > Switch Port

Switch port information includes the switch port, including duplex and rate.



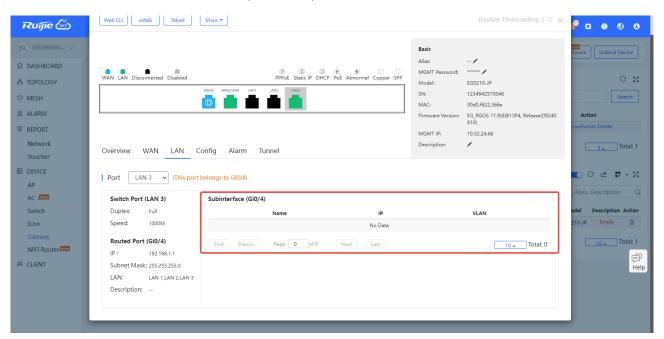
LAN > Routed Port

Routed port information includes the IP address, subnet mask, LAN and description.



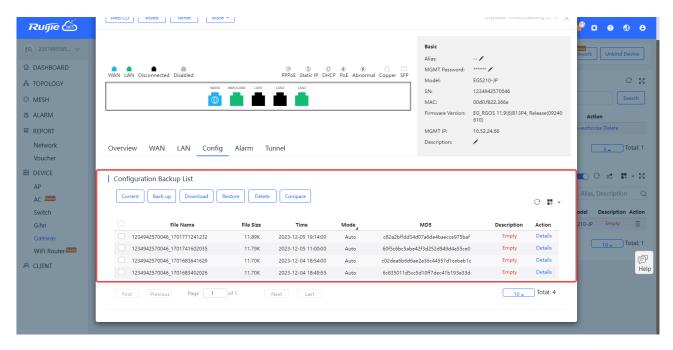
LAN > Subinterface

Subinterface information includes the name, IP address, and VLAN.

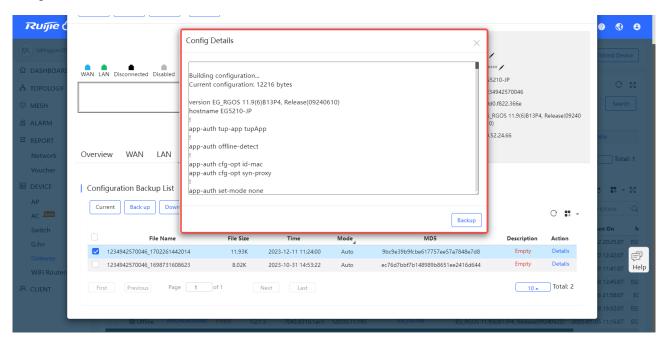


Config > Configuration Backup List

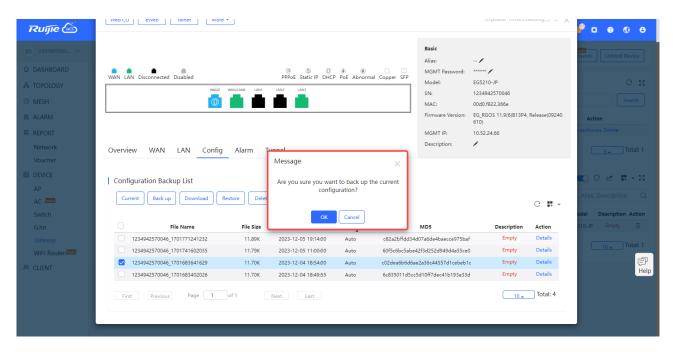
The backup records include configuration file name, size, time, mode and MD5.



Click **Current** to display the current configuration. Click **Backup** in the **Config Details** page to back up the current configuration.



Click **Backup** and then click **OK** in the message box to back up the current configuration.

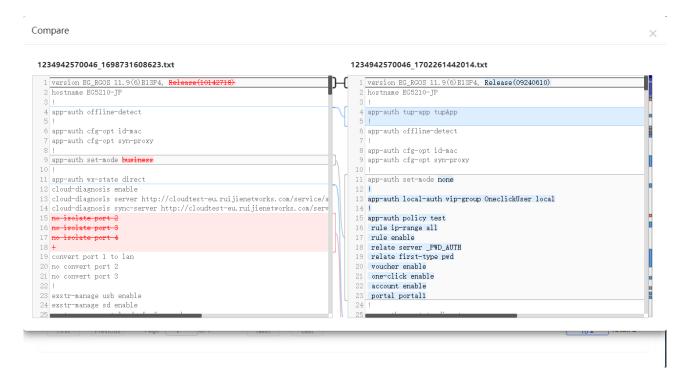


Select one record, and click **Download** to download the configuration file.

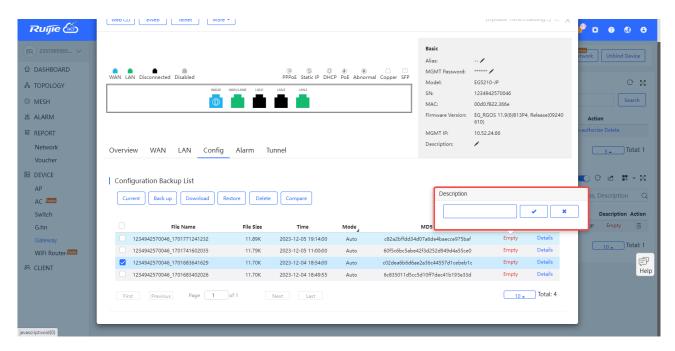
Select one record, and click **Restore** to restore the current configuration.

Select one or multiple records, and click **Delete** to delete the backup record.

Select two records, and click Compare to compare the differences

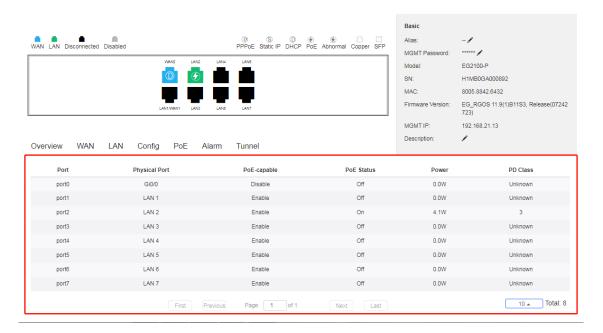


Description can be edited. Click Details in the Action column to check the backup configuration.

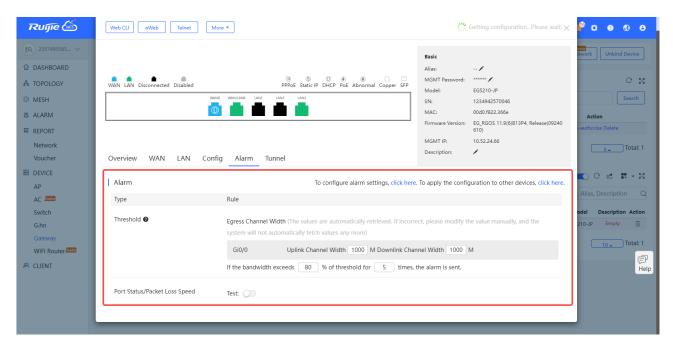


PoE > PoE List (Only available for PoE gateways)

PoE configuration includes the port, physical port, PoE-capable, PoE status, power and PD class.



Alarm

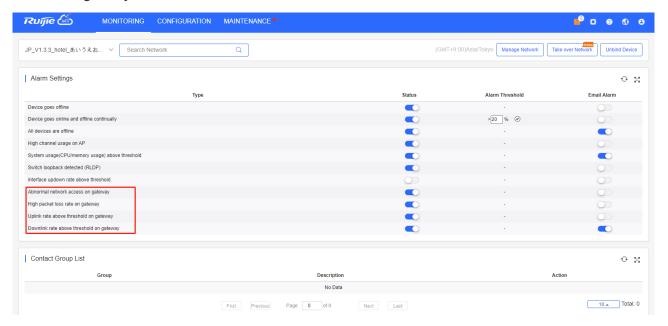


Insufficient bandwidth: When the bandwidth exceeds the specified percentage of threshold for several times, the alarm is sent. The threshold, times and percentage can be configured manually.

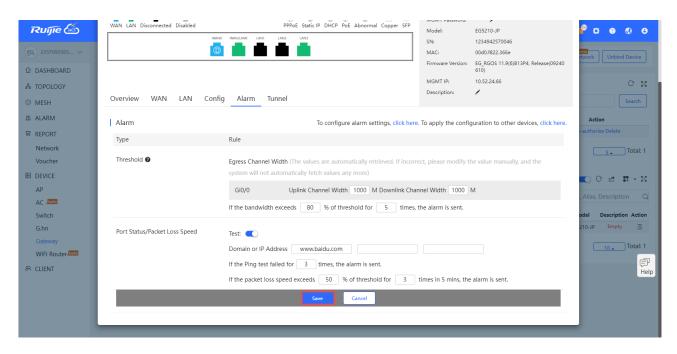
Ping failure: When the Ping test failed for the specified times, the alarm is sent. The times and domain/IP address can be configured manually.

High packet loss rate: When the packet loss rate exceeds the specified percentage of threshold for several times in 5 minutes, the alarm is sent. The times and threshold can be configured manually.

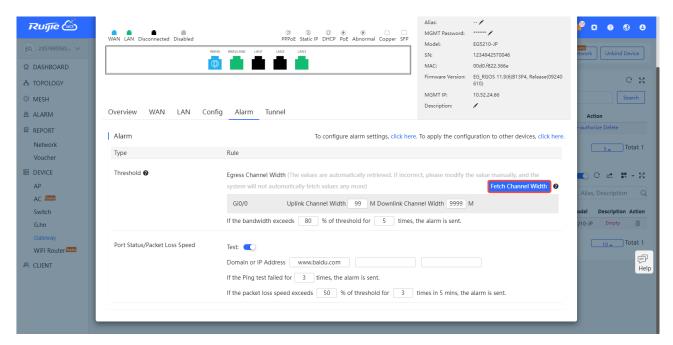
Besides, the corresponding alarm should be enabled in the **Alarm Settings** page. For insufficient bandwidth, the alarm types are **Uplink rate above threshold on gateway** and **Downlink rate above threshold on gateway**; for Ping failure, the alarm type is **Abnormal network access on gateway**; and for high packet loss rate, the alarm type is **High packet loss rate on gateway**.



After changing the configuration, click Save below.

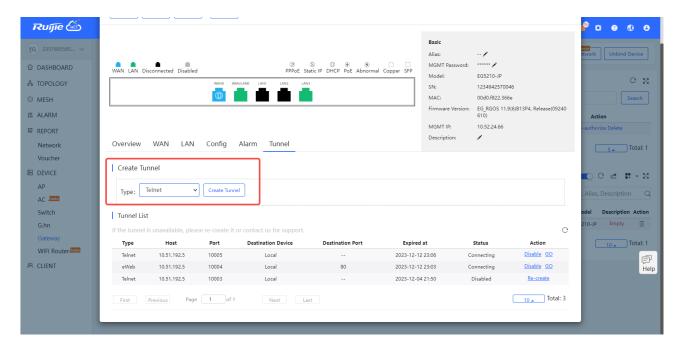


When the modified bandwidth and the actual bandwidth do not match, click **Fetch Bandwidth** to check the actual bandwidth which will then be set as the threshold.



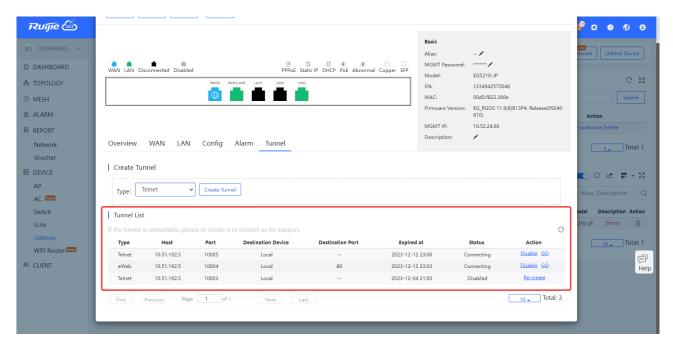
Tunnel > Create Tunnel

Select the tunnel type and click Create Tunnel. The tunnel types include Telnet, eWeb and SSH.



Tunnel > Tunnel List

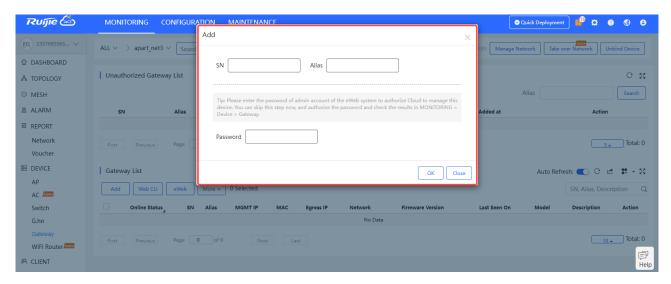
Tunnel information includes tunnel type, host, port, destination device, expiration time and status. Click **Re-create** in the **Action** column to re-create a tunnel.



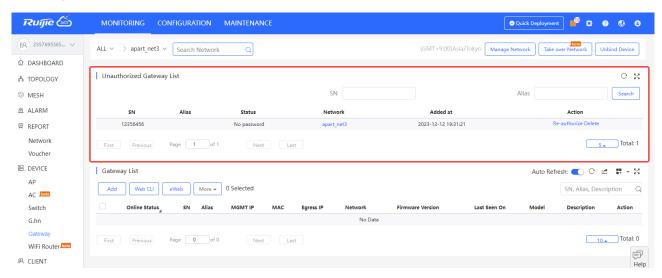
5.6.5.3 Basic Gateway Operations

Add Gateway

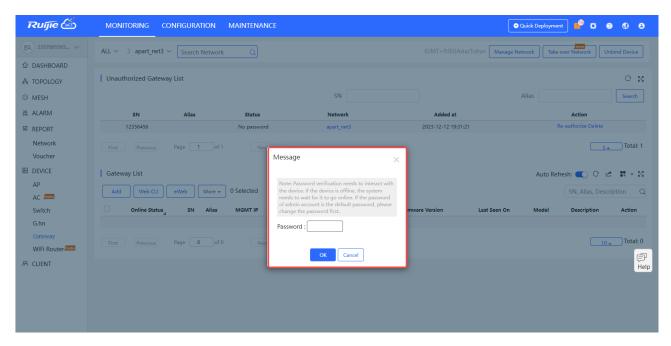
Click **Add**, enter the SN, Alias and eWeb Password, and click **OK** to add a gateway to the network. Only one gateway can be added to a network.



Before a gateway is authorized, it is displayed in the **Unauthorized Gateway List**.

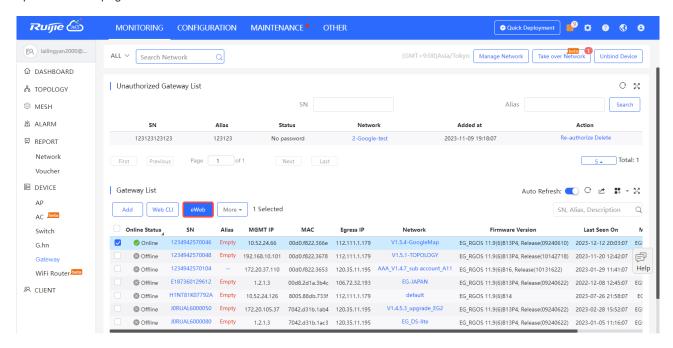


If authorization fails, you can click **Re-authorize** in the **Action** column to re-enter the Web password to re-authorize the device.

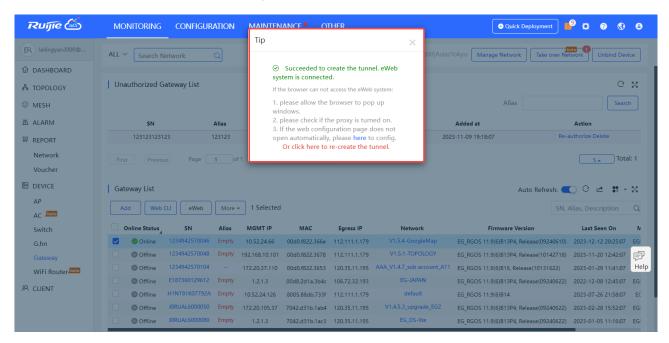


eWeb

Select the device to be managed by eWeb, and click **eWeb**. The system will try to connect the gateway and automatically open the eWeb page in a new window.

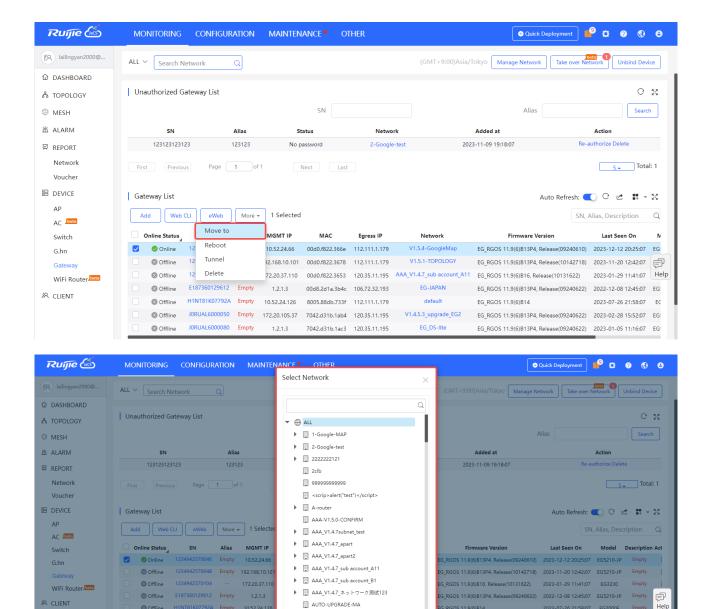


If a tunnel is created successfully but the eWeb page does not automatically open, the system will pop up a message. The user can manually click the link to open the page.



More > Move to

Select the device in the **Gateway List**, click **More** > **Move to**, select the new network and click **OK**. Only one gateway can be moved at a time.



G_RGOS 11.9(6)B13P4,

2023-02-28 15:52:07 EG5210-JP

10 Total: 7

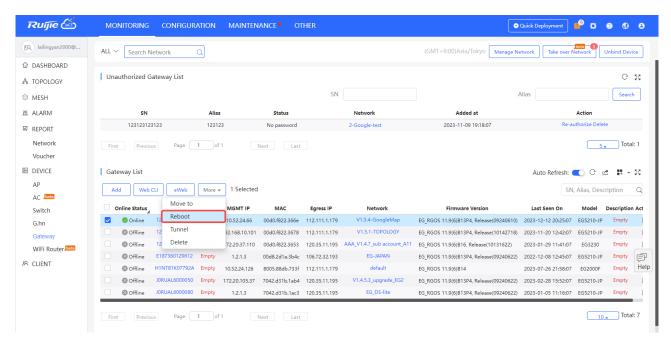
More > Reboot

Offline

Offline

Select the device in the Gateway List, click More > Reboot and click OK.

ORUAL6000050 Empty 172.20.105.3

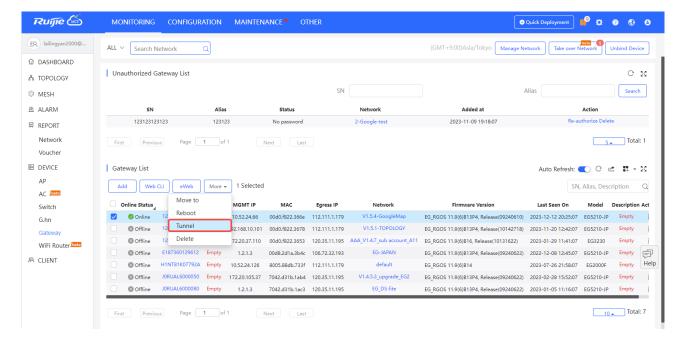


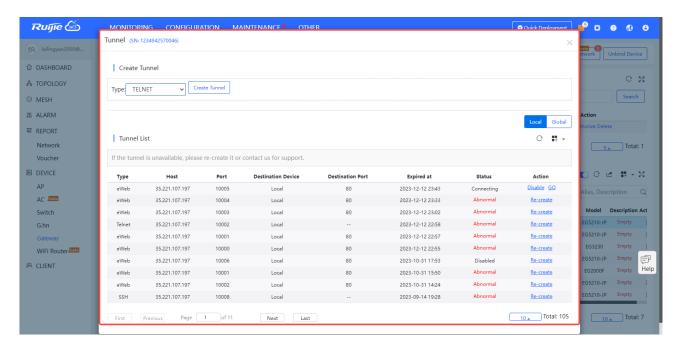
More > Tunnel

The user can create a Web-based tunnel to enter the eWeb system of a gateway for more monitoring and management functions.

i If any security system exists in the network, such as a firewall, the traffic of destination TCP port 10000-12000 should be permitted.

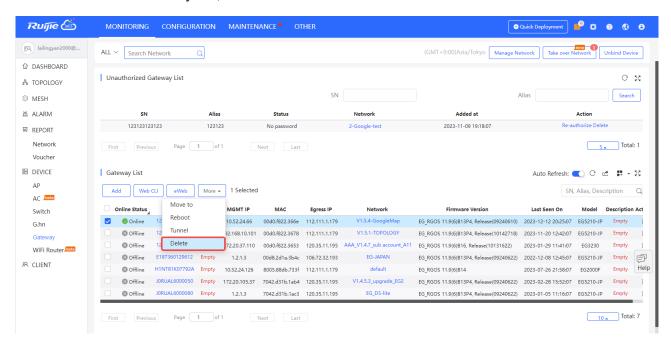
Select the device for tunnel management, and click **More** > **Tunnel**. On the **Tunnel Management** page, **WEB**, **Telnet** and **SSH** types (the tunnel types vary with products) can be selected or you can customize the tunnel configuration. The **Tunnel List** displays the tunnels already created.





More > Delete

Select the device in the **Gateway List**, click **More** > **Delete** and click **OK**.



5.6.6 WiFi Router (beta)

5.6.6.1 WiFi Router List

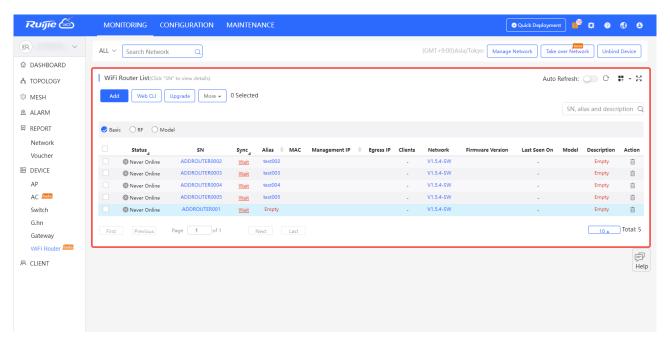
The **WiFi Router List** displays basic device information, including the online/offline status, SN, sync status, alias, MAC, management IP & public IP, clients, network, firmware version, offline time, model and description.

The **WiFi Router List** automatically refreshes every minute. Click

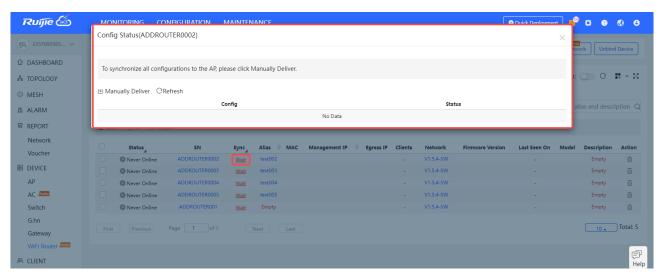
Auto Refresh:
to enable/disable the auto refresh function.

Above the list are **Add**, **Web CLI** and **Upgrade** functions. Click to display the **Move to**, **Delete**, **Export**, and **Reboot** functions. For more information, refer to **Basic Router Operations**.

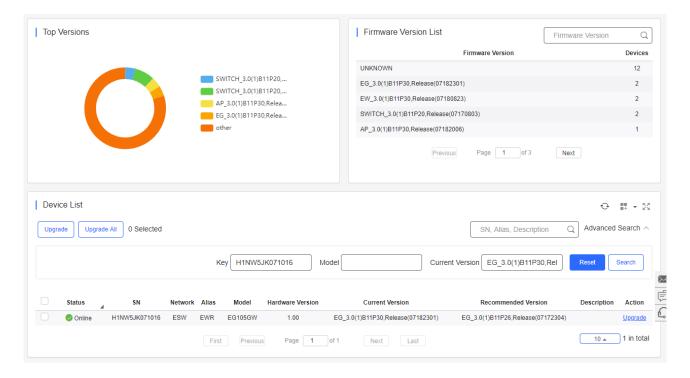
The **Search** function supports fuzzy queries based on the serial number, alias and description, and also supports queries based on sync status and online/offline status.



Click the record in the **Sync Status** column to open the **Config Status** page. On this page, you can deliver one or all configurations.



The number of devices which have available firmware for upgrade is displayed on the upper-left corner of the **WiFi Router** List page. Click **New Firmware** to display the **New Firmware List**. Then click **Go To Upgrade** to enter the **MAINTENANCE** > **Upgrade** page.



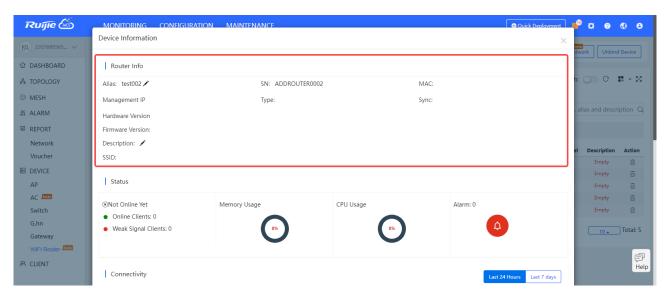
For more information, refer to Device Details.

5.6.6.2 Device Details

Click the serial number in the device list to open the details page for a single device. The page displays detailed device information, including basic information, performance data, speed data, client data, online/offline status, and device logs.

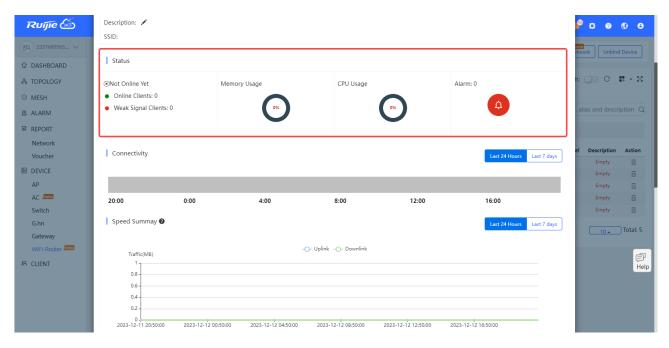
Router Info

The basic information includes serial number, MAC address, management IP address, SSID, sync status, firmware version, hardware version, alias, and description.



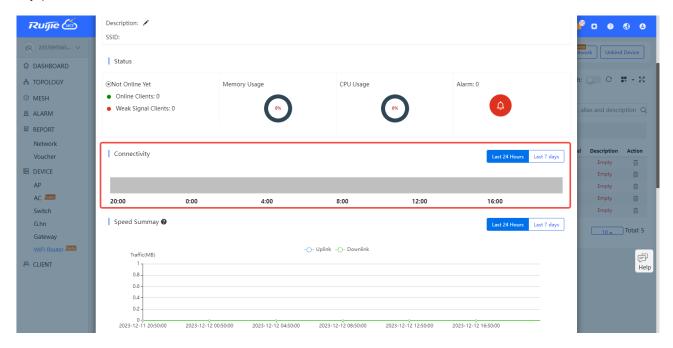
Status

The performance data includes the router connection status, online client count, CPU usage, memory usage and alarm count.



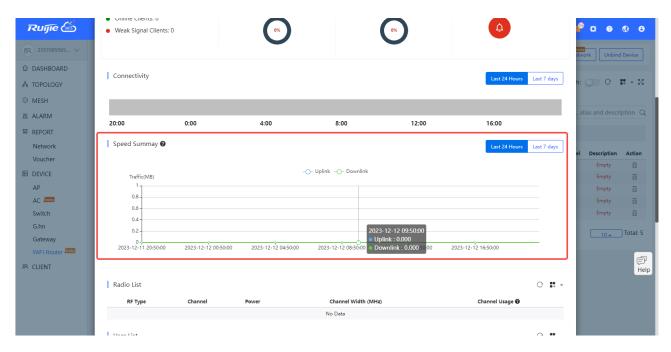
Connectivity

Router connectivity refers to the connectivity (online status) between router and Cloud Service within a period (1 day or 7 days).



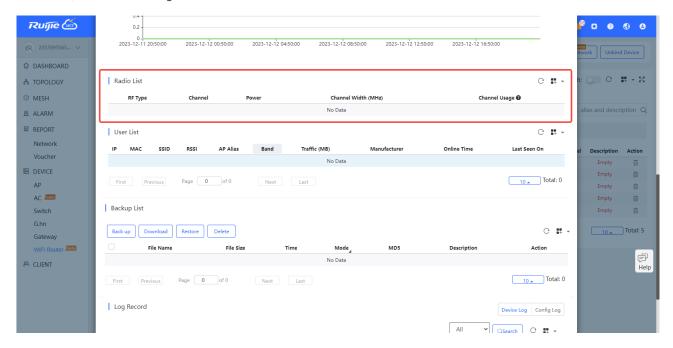
Speed Summary

You can choose to view the router speed statistics in the last 24 hours or the last 1 week.



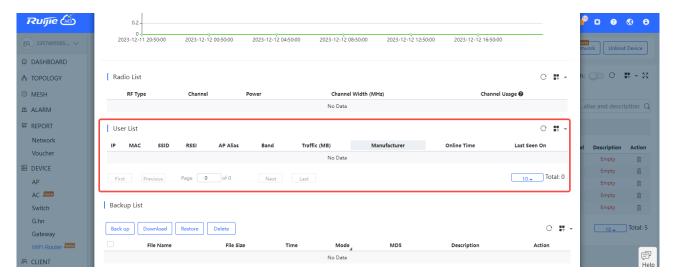
Radio List

The **Radio List** page displays the RF information, including the RF type, current channel, power (percentage), channel bandwidth, and channel usage.



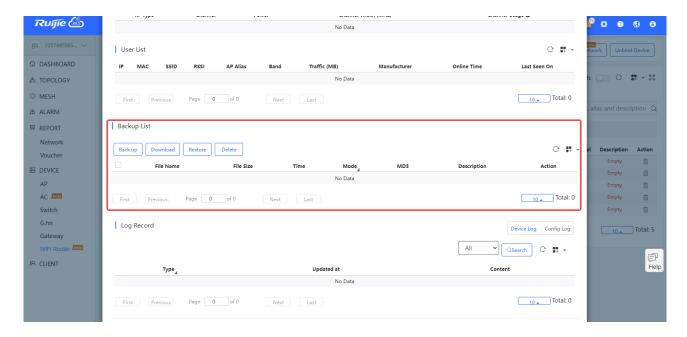
User List

The **User list** displays information about clients currently associated with the routers, including the IP address, MAC address, SSID, RSSI, traffic, online/offline status, terminal type and so on.



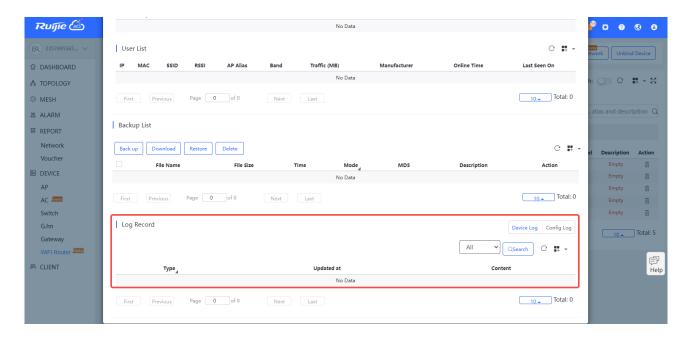
Backup List

The backup records include configuration file name, size, time, mode, MD5 and description.



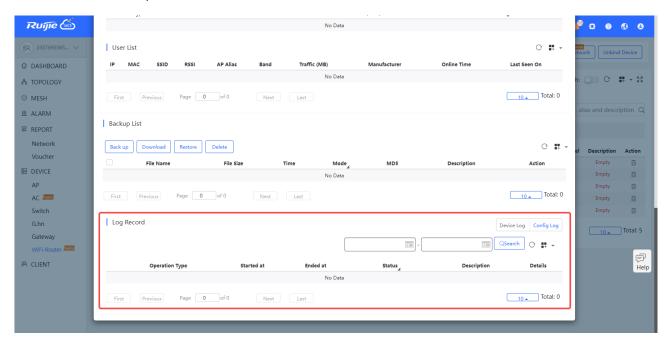
Device Log

The Device Log records the device type, update time and content.



Config Log

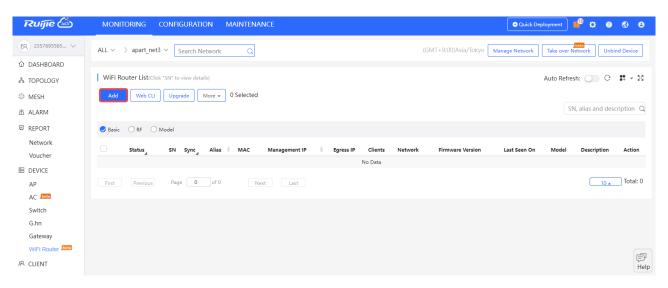
The Config Log records the historical operations, including online/offline, restart and upgrade records, and supports queries based on the status and period.



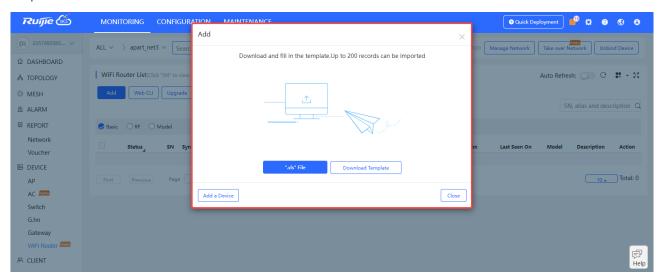
5.6.6.3 Basic Router Operations

Add Router

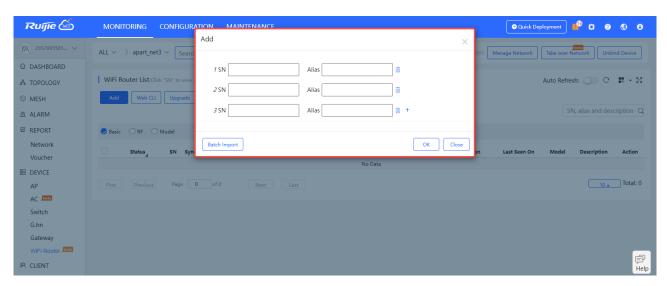
Step 1: Select the network, and click **Add**. Both batch import and manual add are supported.



Step 2: Click **download template** to download the template, enter router information, and click **'.xls' File** to import the template.

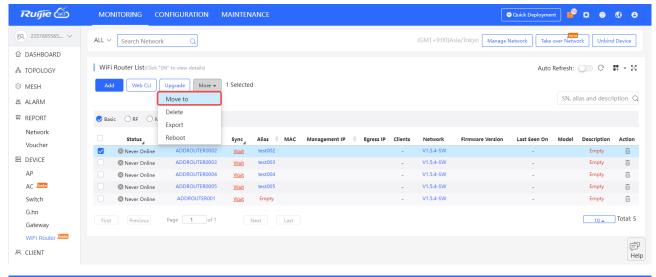


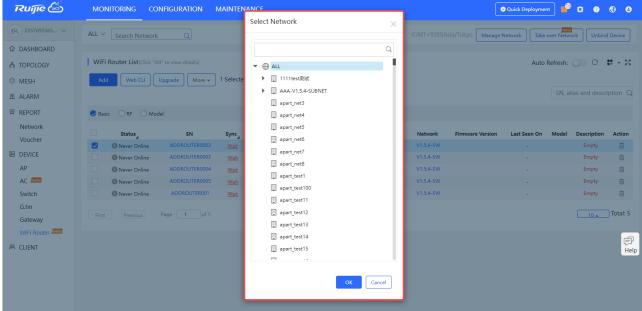
Or you can click **Add a Device**, enter SN and alias of the AP, and click **OK**. Click to add multiple APs.



More > Move to

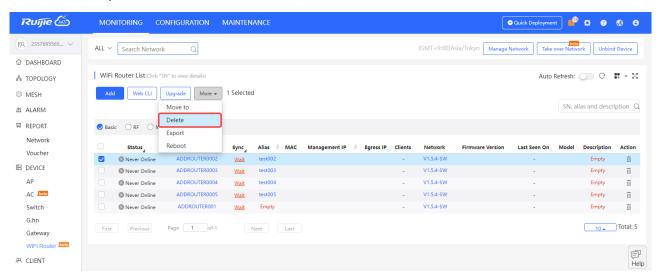
Select one or multiple devices in the WiFi Router List, click More > Move to, select the new network and click OK.





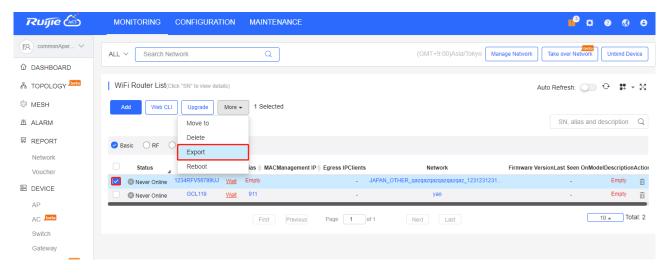
More > Delete

Select one or multiple devices in the WiFi Router List, click More > Delete and click OK.



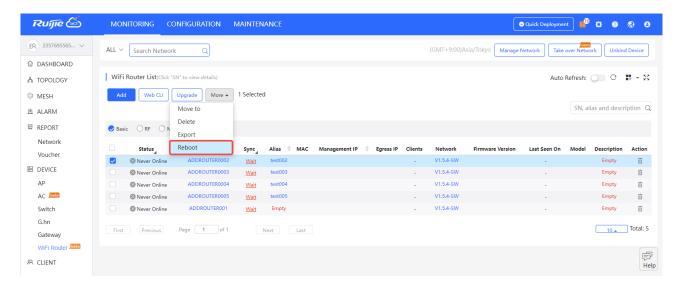
More > Export

Select one or multiple devices in the WiFi Router List, and click Export.



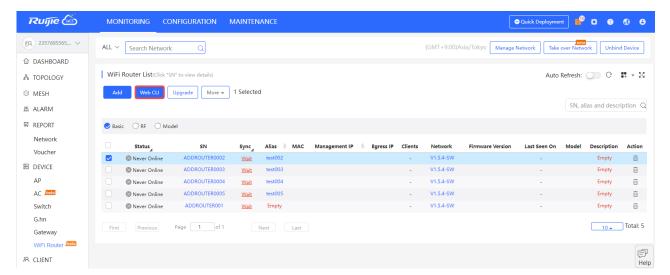
More > Reboot

Select one or multiple devices in the WiFi Router List, and click Reboot.



Web CLI

Select one or multiple devices in the **WiFi Router List**, and click **Web CLI**. The **Web CLI** dialog box is displayed, and device information can be queried via the menus in this dialog box. The menus vary with the products.



5.7 Client

Select MONITORING > CLIENT to open the Client page.

5.7.1 Client List

This page displays the information about online clients and historical clients of the current network.

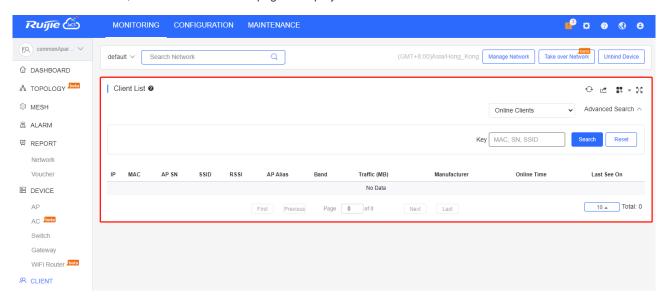
Click the drop-down list next to Advanced Search to switch between Online Clients and History Clients.

The client information includes basic information, band, and online time.

Search for user data by online status, MAC, SN or SSID.

5.7.2 Client Details

Click the device MAC, and the Client Details page is displayed.



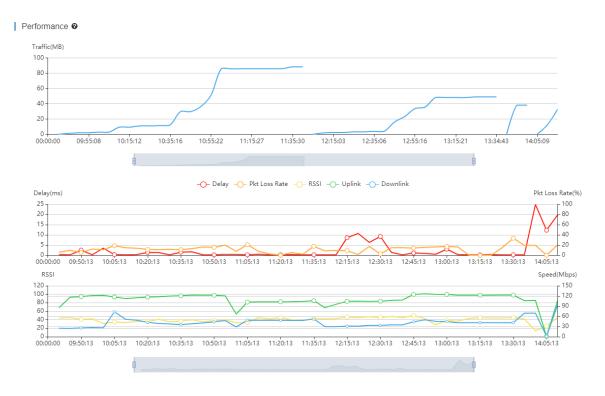
Client Info

Client Info includes alias, status, MAC address, online/offline time, uptime, IP address, terminal, operation system, manufacture, AP serial number, AP ailas and SSID.

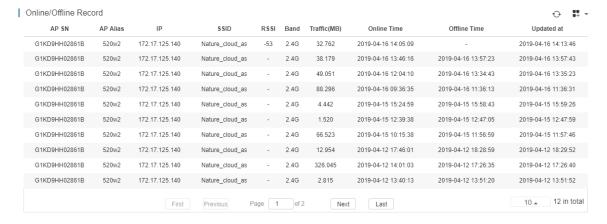


Performance

Performance displays the traffic summary etc.

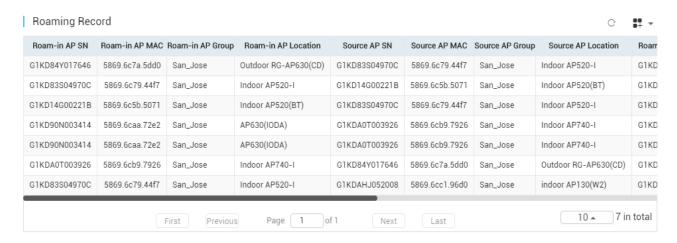


Online/Offline Record



Online/Offline Record displays AP SN, AP alias, IP, SSID etc.

Roaming Record



Roaming Record displays roam-in AP, source AP, SSID etc.

6 Configuration

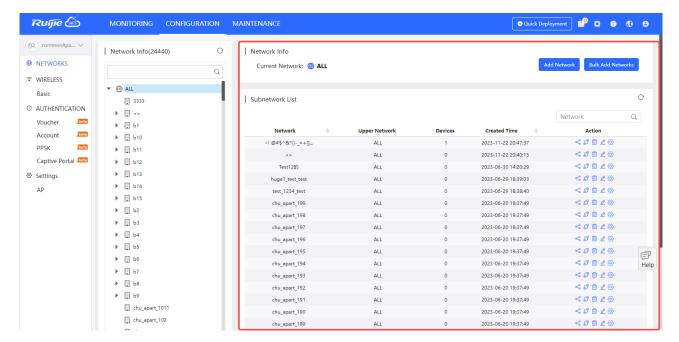
The Configuration module includes two parts: NETWORKS and WIRELESS and AUTHENTIFICATION.

6.1 Networks

6.1.1 Basic

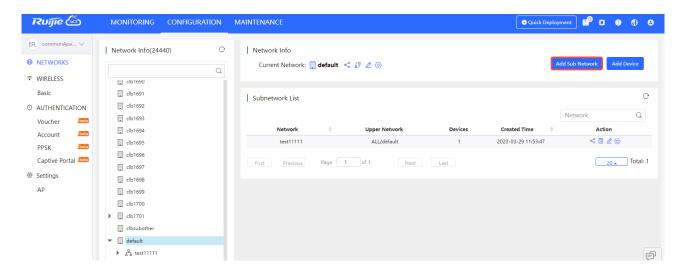
Select **CONFIGURATION** > **NETWORKS** to open the **NETWORKS** page. Then, all detailed information about the sub networks is displayed on the **Subnetwork List**, including the network name, its upper network, the number of connected devices and created time.

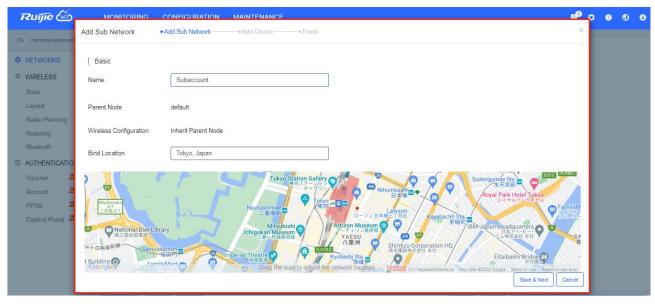
Additionally, five operation icons are provided in the **Action** column of a network for adding a sub network, sharing the network, handing over the network, deleting the network and configuring the network. You can click these icons to perform operations on the network.



6.1.1.1 Add Sub Networks

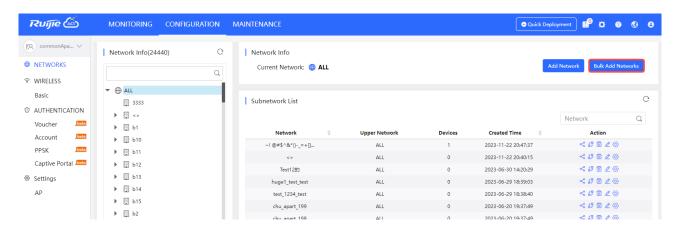
Select the network and click Add Sub Network.



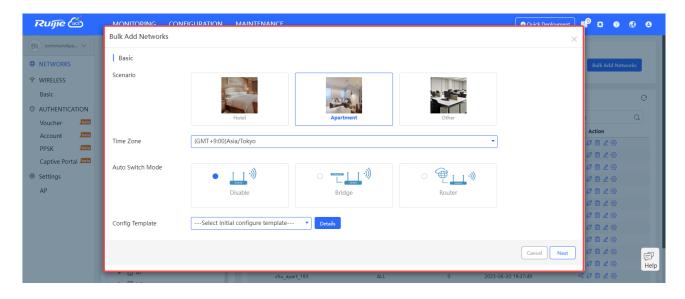


6.1.1.2 Bulk Add Networks

Step 1 Click Bulk Add Networks to enter the setting page.

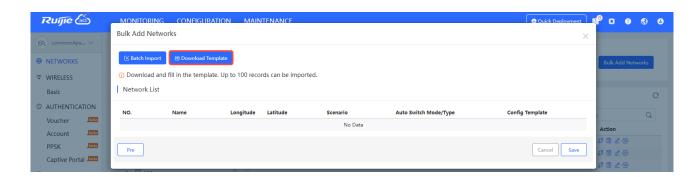


Step 2 Specify the Scenario, Time Zone, Auto Switch Mode and Configuration Template (optional).

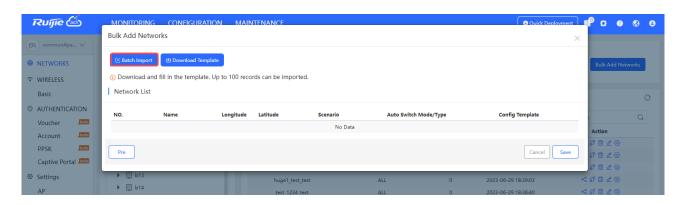


(i) When an initial configuration template is selected, the **Enabled** button appears. By default, the function is disabled. When it is enabled, the configurations in the template will be delivered to all devices in the network when they go online for the first time.

Step 3 Click Download Template to download and fill in the template.

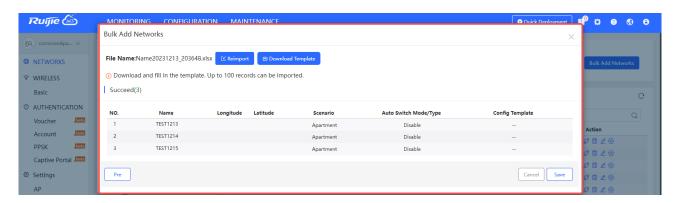


Step 4 Click **Batch Import** to import the filled template.

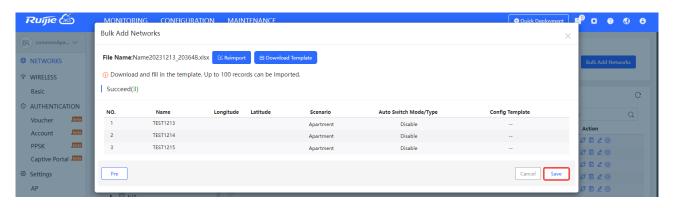


- i If a wrong file is imported, an error prompt appears for 3s.
- if a correct file is imported, a confirmation box appears. Click **OK** in the confirmation box to import the file.

When the file is imported, the created networks will be displayed in the **Succeed** list. The networks of which parameters are consistent with other networks will be displayed in the **Failed** list.



Step 5 Click Save to complete the import. All the networks created will be displayed in the CONFIGURATION > NETWORKS page.

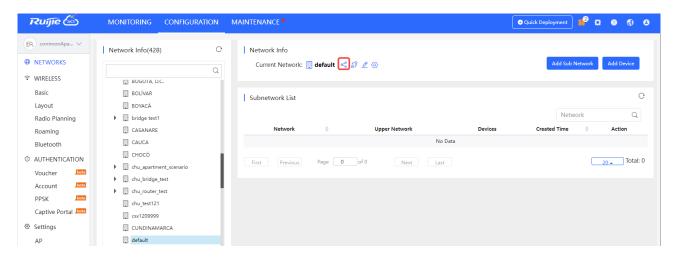


i If several users import a same file at the same time, the file imported by the user who clicks **Save** first will be saved, and error prompt will be sent to the rest of the users.

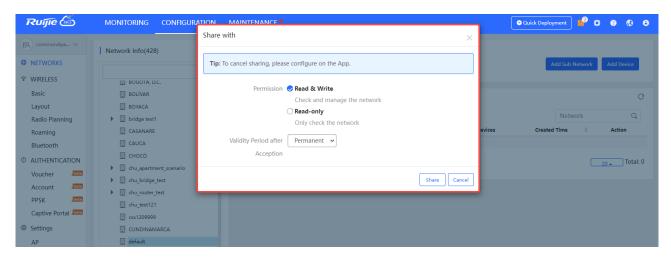
6.1.1.3 Share with

A network can be shared to other users for check and management. You can set the validity so that the network sharing will be canceled after the specified time.

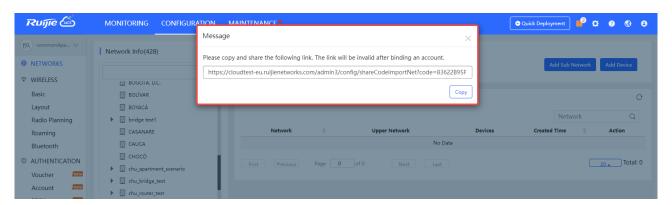
Step 1 Select a network and click the sicon.

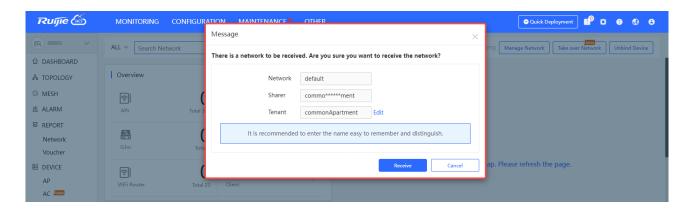


Step 2 Specify the permission and validity period.

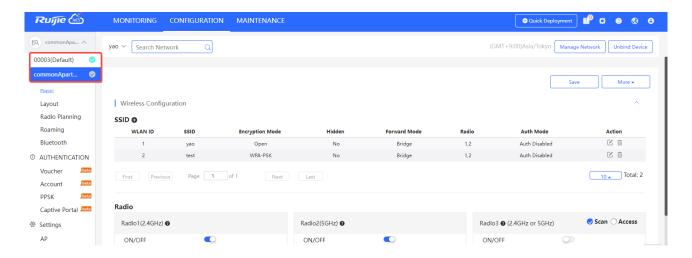


Step 3 Copy the link and send to the receiver. The receiver can visit the URL and log in to receive the network.





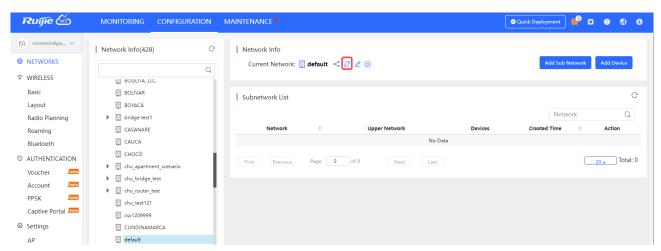
Step 4 Click the on the upper left corner to switch tenant and check the shared network.



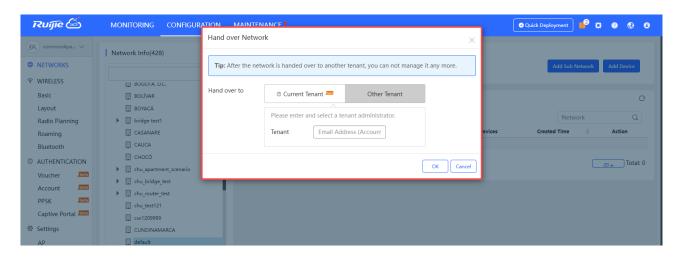
6.1.1.4 Hand over

The network can be handed over to another tenant.

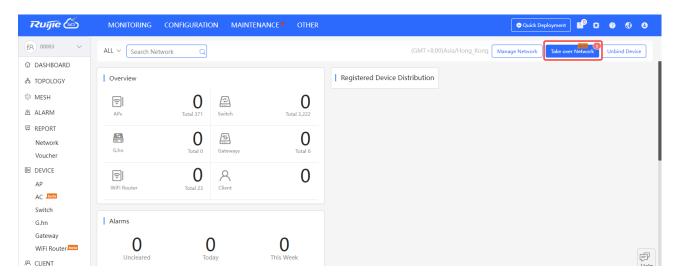
Step 1 Select a network and click the icon to hand over the network to another tenant.



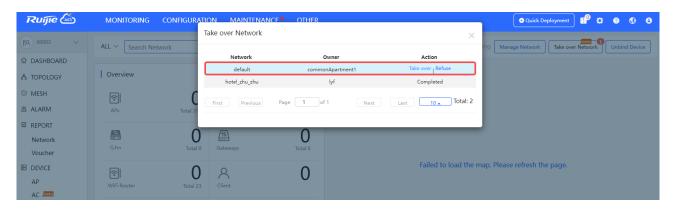
Step 2 Click **Other Tenant** and enter the Email address of tenant, and click **OK**. After the receiver takes over the network, you cannot manage the network anymore.



Step 3 As the receiver logs in to Ruijie JaCS, an icon is displayed on the upper right corner.



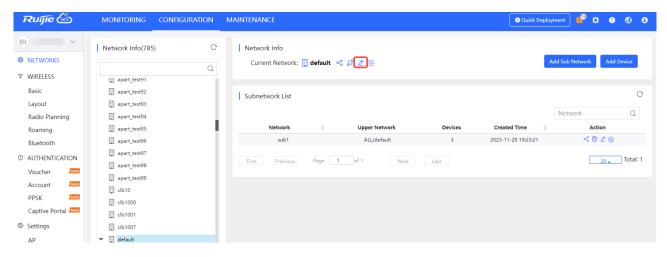
Step 4 Click **Take over Network** to take over or refuse the network.



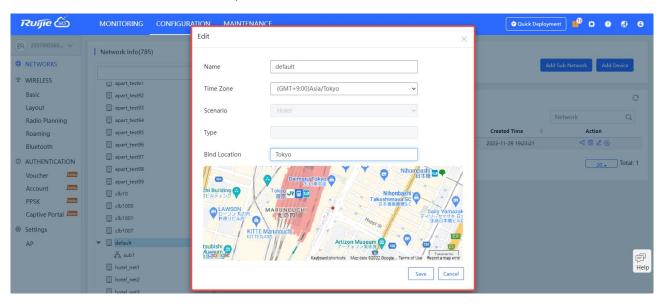
6.1.1.5 Edit

Select the network and click the ² icon to edit the network.

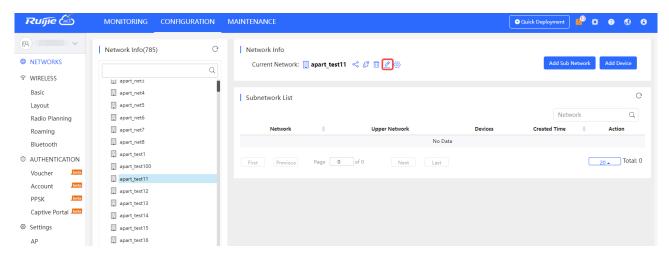
Non-apartment Scenario



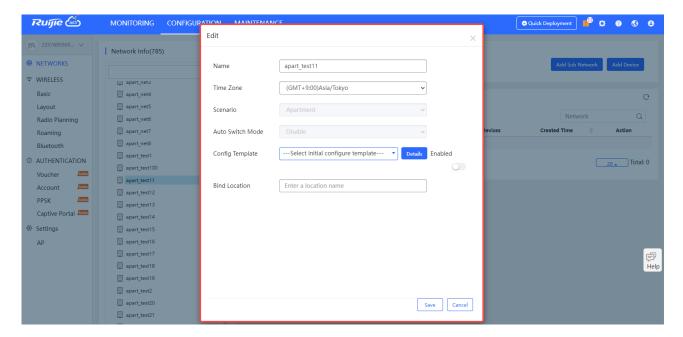
You can edit network name and time zone, and bind location here.



Apartment Scenario

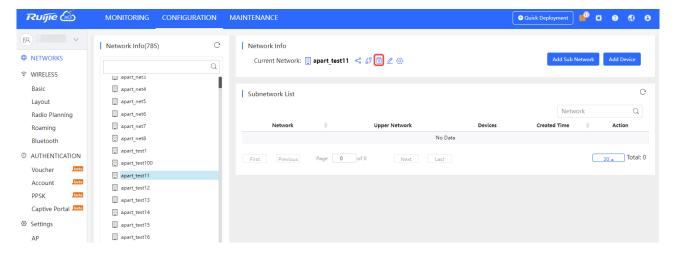


You can edit network name and time zone, bind location and select an initial configuration template here.



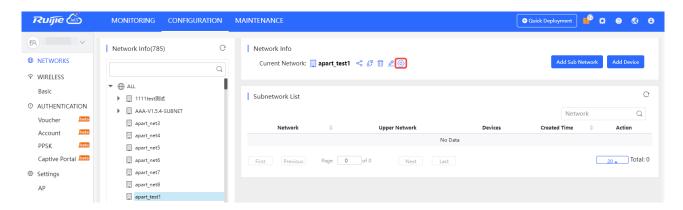
6.1.1.6 Delete

Select the network and click the icon to delete the network.



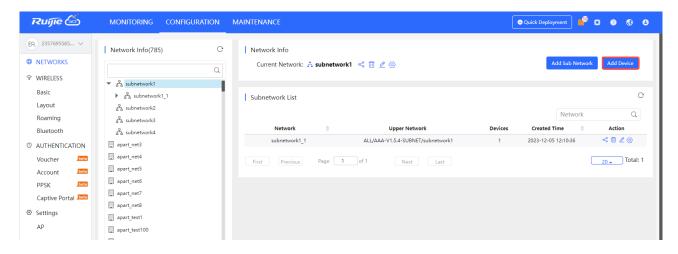
6.1.1.7 Configuration

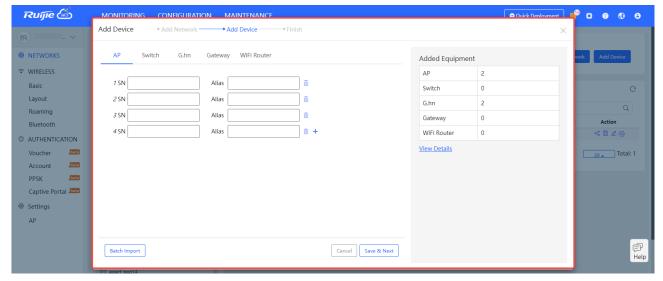
Select the network and click the icon on the **Action** column to configure it.



6.1.1.8 Add Device

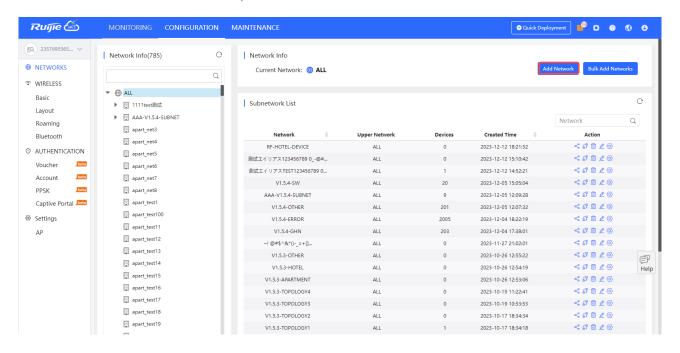
Click **CONFIGURATION** > **NETWORKS** to open the page. Choose a network, and click **Add Device** to add APs, switches, gateways, and WiFi routers.





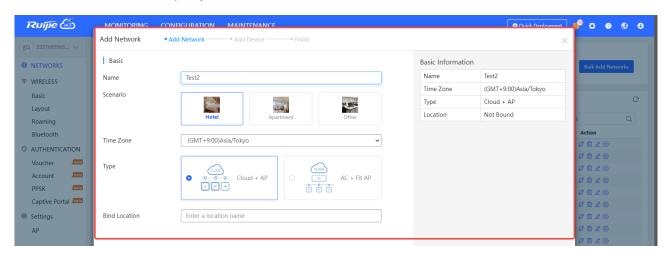
6.1.2 Add Network

Select CONFIGURATION > NETWORKS, and click Add Network.

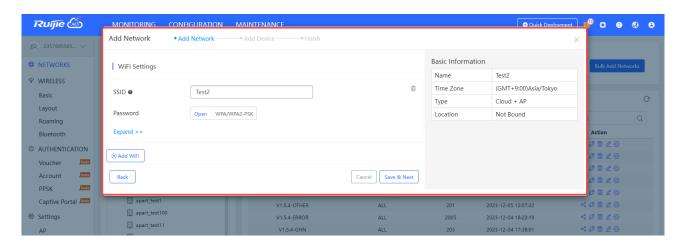


Non-apartment Scenario

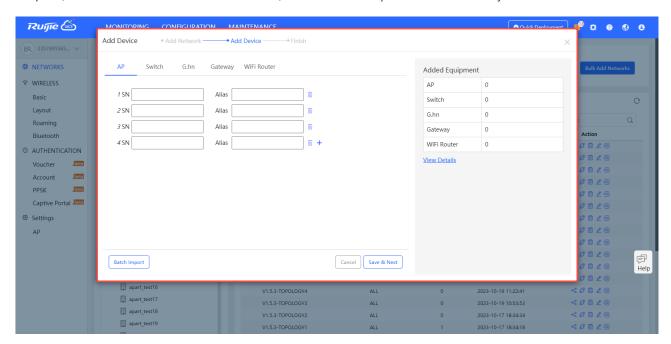
Enter the network name and specify the network location.



Enter the Wi-Fi information as required, and click Save & Next.

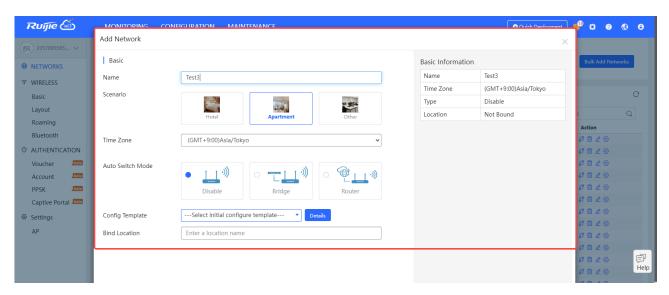


Enter the information of APs, switches and gateways, and click **Save & Next**. Or click **Batch Import** to download the template, enter the device information in the table, and then batch import devices into the system.



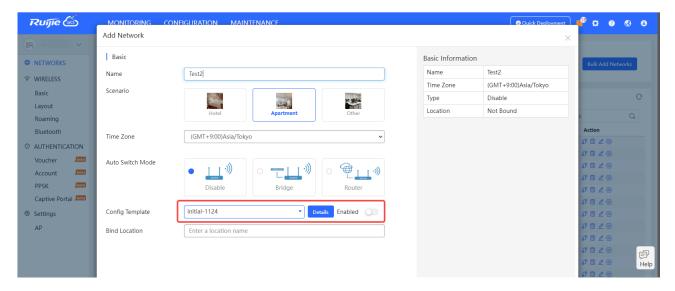
Apartment Scenario

Enter the network name, select the scenario and bind the location.



6.1.3 Initial Configuration Template

When adding or editing an Apartment network, you can decide whether to apply an initial configuration template to the devices in the network. If you select a template and enable it, its configurations will be automatically applied to all AP180 series devices in the network when they are connected to the JaCS for the first time. It should be noticed that the configurations are automatically applied to the devices once only.

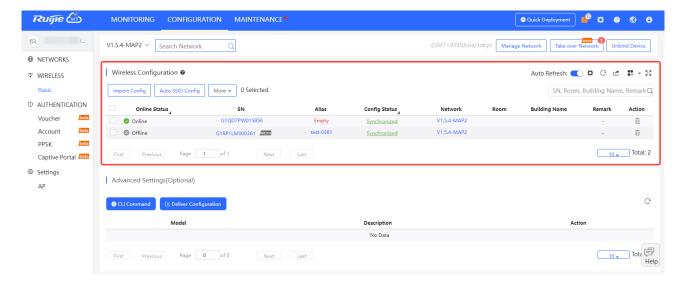


- When an Apartment network is edited, the last-applied initial configuration template is selected automatcially. In this
 case, you need to manually enbale or disable it.
- If a device is moved to an Apartment network to which an initial configuration template has been applied, the configurations of the template will automatically be applied to it.

6.2 Wireless

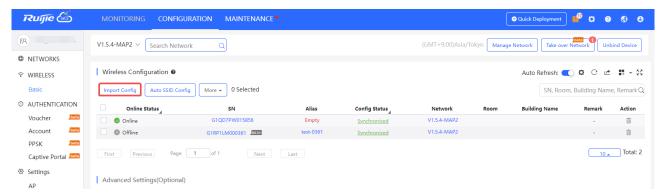
6.2.1 Basic (Apartment Scenario)

Select **CONFIGURATION > WIRELESS > Basic** to configure SSID and password of AP, and to run CLI commands to deliver configurations to the devices in the Apartment scenario.

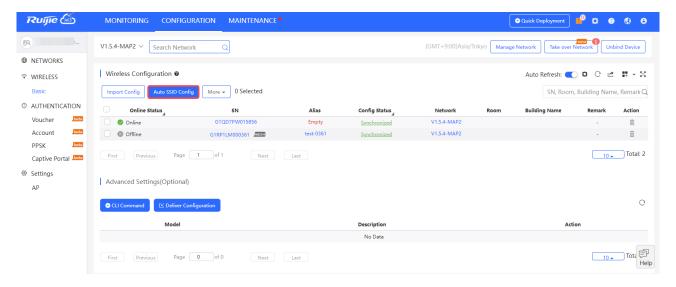


In the apartment scenario, SSID and password can be configured in 2 ways.

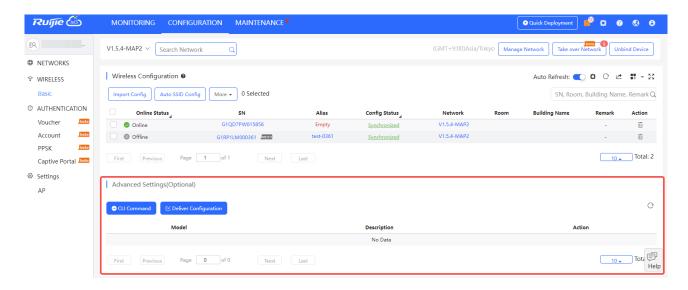
Option 1: Click Import Config to manually import SSIDs and passwords in an EXCEL file.



Option 2: Select Auto SSID Config. In this way, you don't need to manually configure the SSID and password.

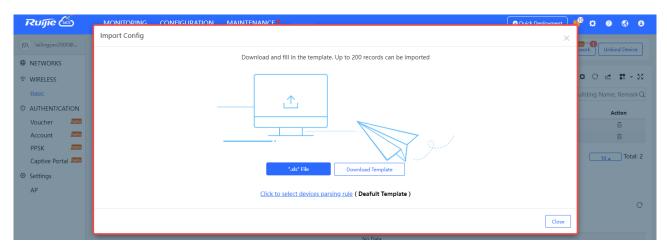


You also can run CLI commands in the **Advanced Settings** to deliver the configurations to the devices in the Apartment scenario.



6.2.1.1 Customize Template Rules

 $\label{thm:continuous} To \ batch \ import \ devices \ or \ change \ SSIDs/passwords, \ you \ can \ customize \ the \ importing \ template.$



Click Click to select devices parsing rule, the rule customizing page appears.

There will be one default rule.



1. Add button: Add a new rule

2. Menu bar: Display rule content

Name: User defined name

• SnPosition: Specify the starting position of SN in template

SsidPosition: Specify the starting position of SSID in template

SsidPasswordPosition: Specify the starting position of SSID's password in template

RoomPosition: Specify the starting position of room number in template

BuildingNamePosition: Specify the starting position of building name in template

RemarkPosition: Specify the starting position of remark in template

If an entry is left empty, it will not be imported when importing the template.

**User can customize the EXCEL parsing rule from columns A to Z and rows 1 to 15.

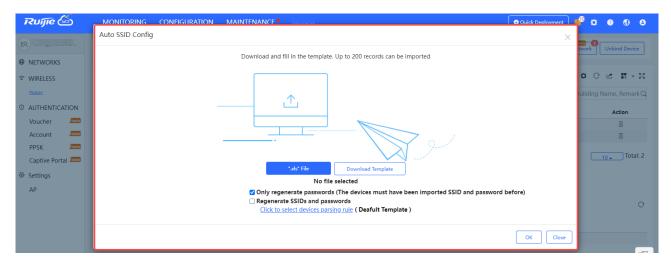
- 3. Check box: Only one rule can be selected at a time
- 4. Rule control button:
 - Edit the rule
 - Delete the rule

- Set the rule as default rule
- 5. Page up and down button

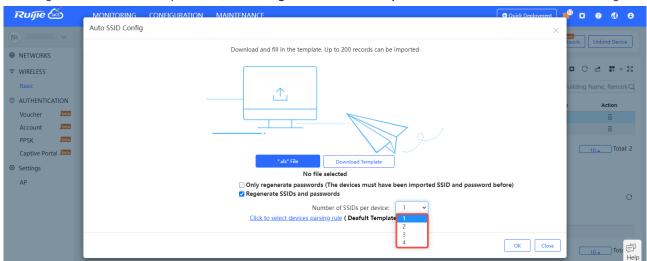
6.2.1.2 Auto SSID Config

Click Auto SSID Config to configure the SSID and password automatically.

To configure the password only, select **Only regenerate passwords**.



To configure both the SSID and password, select Regenerate SSIDs and passwords. At most 4 SSIDs can be configured.



You can use either custom template or the default template.

Use Customized Template to Configure SSID/Password

The customized template need to include SN, Building Name, Room Number, SSID, SSID Password, and Remark. The following is an example to change the SSID and password only:

A	В	C	D	E	F	G
Building Name	Room					
100001	203					
100001	204					
100001	205					

The custom rule may be set as below:

Name: ModifySSID

- snPosition:
- ssidPosition:
- ssidPasswordPosition:
- roomPosition: B2
- buildingNamePosition: A2
- RemarkPosition:

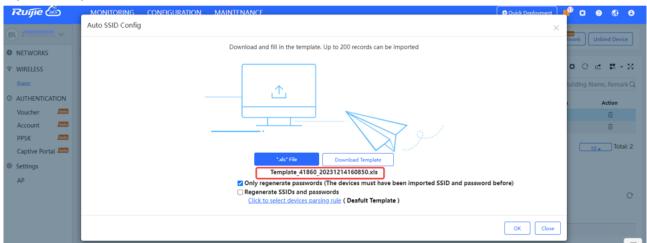
XIf Remark is filled in EXCEL file, the former remark saved in the Cloud will be overwritten.

Use Cloud's Default Template to Configure SSID/Password

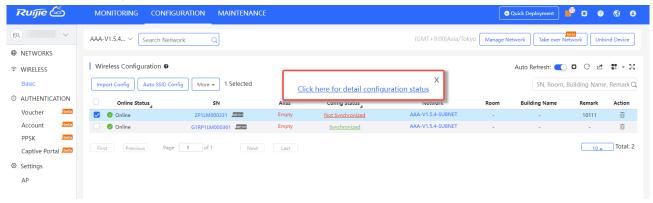
Download the template and fill the information as below:



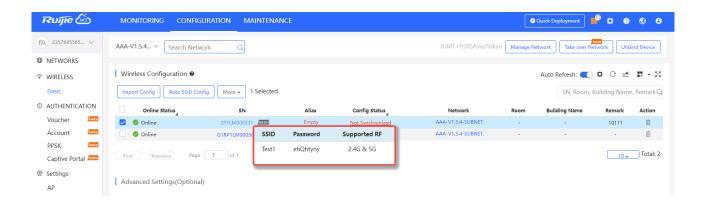
Import the template.



After the template is successfully imported, a prompt will be displayed. Click the prompt to open the Config Log page, and export the SSID configuration result.



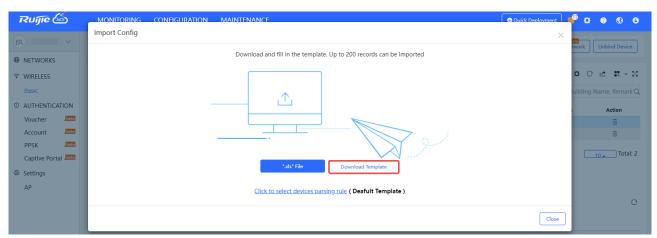
To view the configuration result of the specified device, you can also point to the device **SN** to check the SSID/password. You also can view the supported RF of the device.



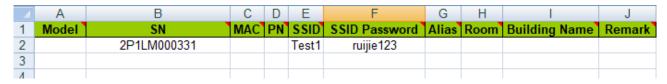
6.2.1.3 Import Config

Use Default Template to Import SSID and Password

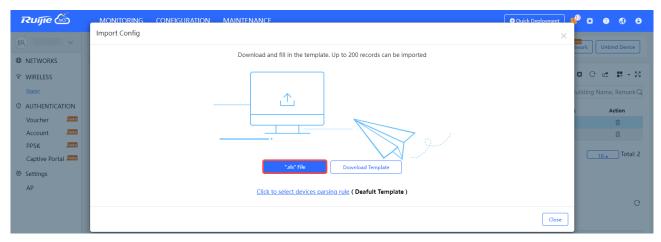
Click Download Template.



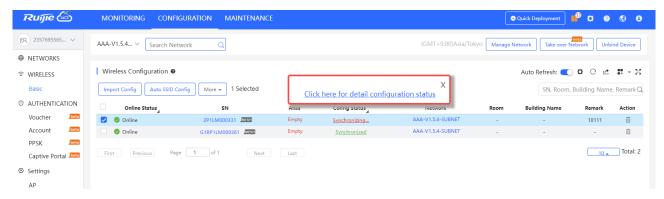
Enter SSID and password. Each AP supports at most 4 SSIDs, and SSIDs and passwords need to be separated by ','.



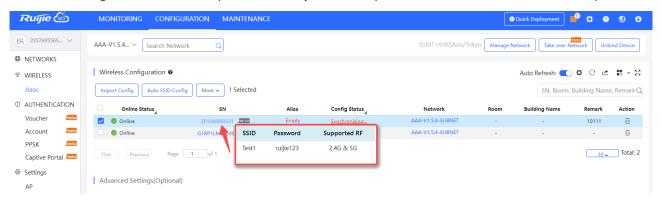
Click "xls" File to import the template.



After the template is successfully imported, a prompt will be displayed. Click the prompt to open the Config Log page, and export the SSID configuration result.



To view the configuration result of the specified device, you can also point to the device SN to check the SSID/password.



Use Customized Template to Import SSID and Password

The operation is almost the same with that in **Auto SSID Config**. The only difference is that you need to fill in the SSID and password to be changed in the template.

The custom rule may be set as below:

Name: ModifySSID

snPosition:

ssidPosition: G3

ssidPasswordPosition: H3

roomPosition: C3

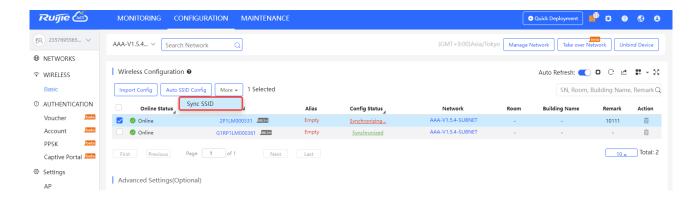
buildingNamePosition: B3

remarkPosition: D3

XIf Remark is filled in EXCEL file, the former remark saved in the Cloud will be overwritten.

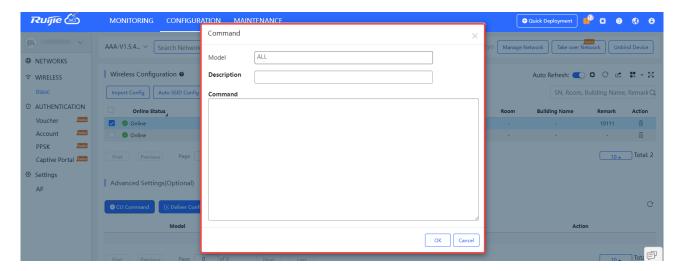
6.2.1.4 More > Sync SSID

Select devices to be synchronized, and click **More** > **Sync SSID** to synchronize the SSIDs and passwords of the devices. A maximum of 100 devices can be selected. After the synchronization, synchronized SSIDs and passwords are displayed.

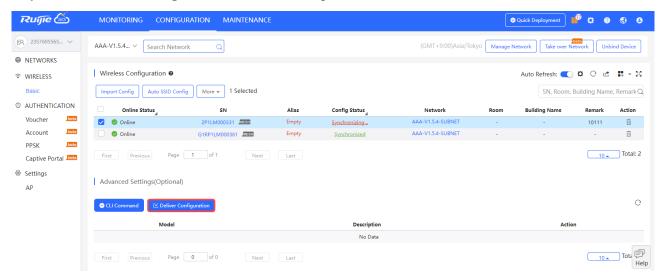


6.2.1.5 CLI Command

- **Step 1** Click **CLI Command** to open the setting page.
- **Step 2** Specify the device model. You can select **All** to deliver the configuration to all devices or select a specific device module.
- Step 3 Edit CLI commands. Then, click OK.

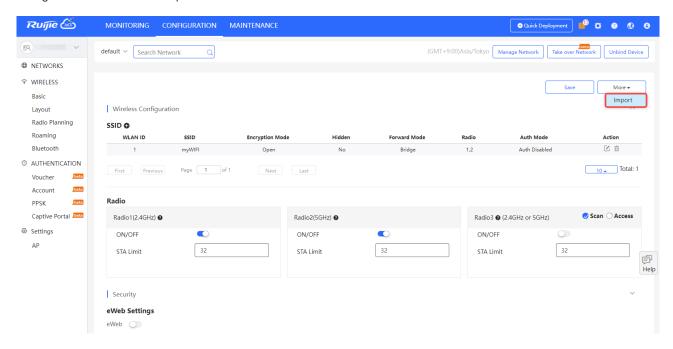


Step 4 Click **Deliver Configuration** to deliver the configuration to the device.

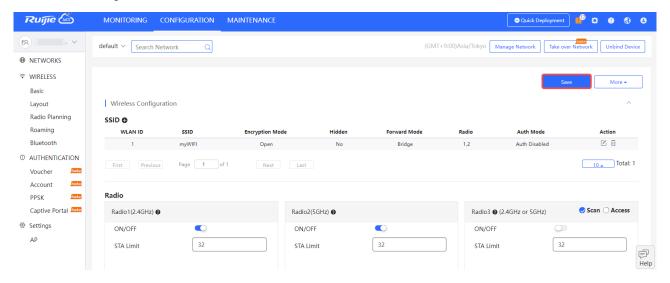


6.2.2 Basic (Non-apartment Scenario)

If a network is not configured, it will inherit configuration from its parent network by default. You can create or import a configuration file from other networks. Note that if there is any captive portal template unavailable for the network, the configuration file cannot be imported.



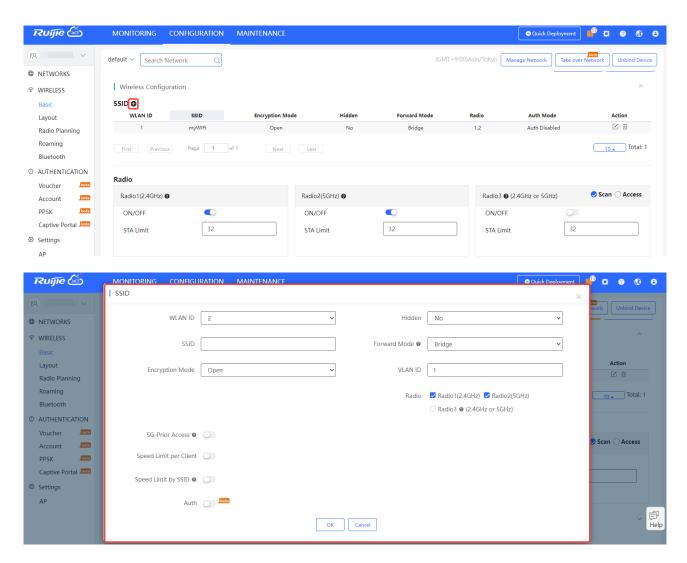
Click Save to configure the network.



On the Basic page, Wireless, Security, and Advanced Settings can be configured.

6.2.2.1 SSID

Click + in the upper left corner to add an SSID. In addition, the **SSID** page further enables you to configure the rate limit and the authentication function.



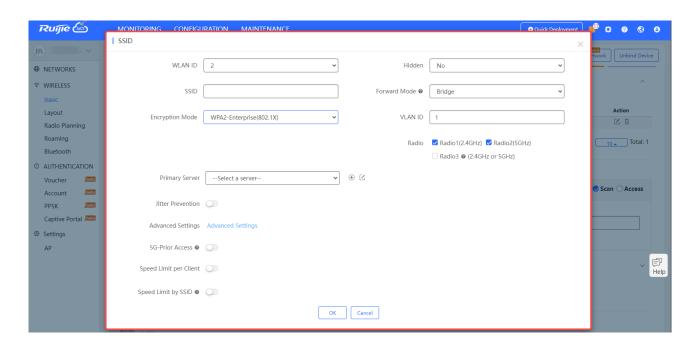
Parameters on the SSID page are defined as follows.

WLAN ID: Select a WLAN ID. An SSID matches a WLAN ID one-to-one. The WLAN ID can be specified only when an SSID is added and cannot be changed subsequently. The maximum value of **WLAN ID** is 16.

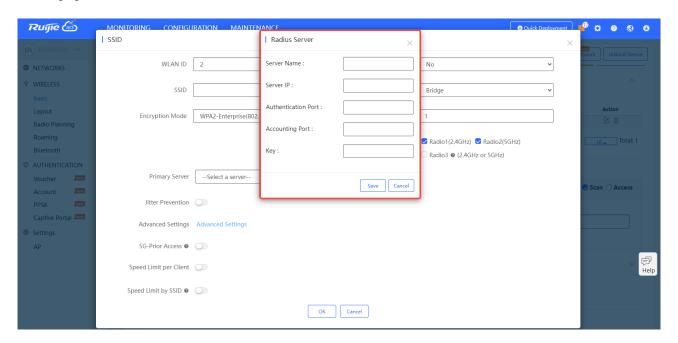
SSID: Enter an SSID name.

Encryption Mode: Open, WPA-PSK, WPA2-PSK, WPA/WPA2-PSK, WPA2-ENTERPRISE (802.1X), WPA3-PERSONAL, WPA2/WPA3-PERSONAL and PPSK. Open indicates that no password needs to be configured; WPA-PSK or WPA2-PSK indicates that a password needs to be configured. WPA2-Enterprise(802.1x) indicates that the 802.1x authentication mode is adopted for the SSID. PPSK indicates that each terminal device is bound with a unique WiFi account and key. After the **PPSK** mode is selected, configure you need your account CONFIGURATION>AUTHENTICATION>PPSK.

If you select the WPA2-Enterprise(802.1x) mode, the following page is displayed.



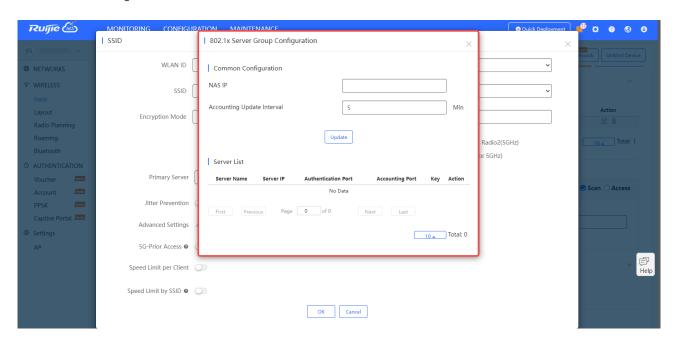
Click to add an authentication server. A dialog box for a Radius server configuration is displayed, as shown in the following figure.



Server Name, Server IP, Authentication Port, Accounting Port, and Key can be configured for a RADIUS server. Authentication Port and Accounting Port are optional, and respectively set to the default values 1812 and 1813 if no values are entered.

The jitter prevention function can be configured in 802.1x authentication mode, as shown in the SSID configuration page with **Encryption Mode** set to **WPA2-Enterprise(802.1x)**. In case of jitters: after the jitter prevention function is enabled (the jitter prevention duration range is 0–600), clients will not go offline within the duration of jitter prevention. The default jitter prevention duration of an AP is 2 seconds. Note that the jitter prevention function may not be supported in earlier AP versions.

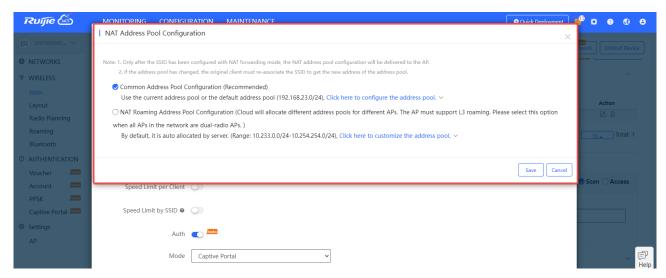
In addition, the **Advanced Settings** function is provided for 802.1x authentication. In **Advanced Settings**, the NAS IP address (available in the NAT environment) and accounting update period can be configured and the added authentication server can be managed.



Hidden: Specify whether to hide the SSID, which can be set to Yes or No.

Forward Mode: Select a forward mode of a wireless AP. **NAT** indicates that an IP address is allocated to a client by an AP; **Bridge** indicates that an IP address is allocated to a client by an AP's upstream device. A VLAN ID must be configured when the **Bridge** mode selected.

NAT Address Pool Configuration: Click the NAT Address Pool Configuration link to display the window.



5G-Prior Access: It is enabled when the SSID is associated with Radio 1 and Radio 2 for dual-band APs (2.4 GHz and 5 GHz) to ensure that clients supporting dual bands access the 5 GHz frequency band preferentially. This reduces the load in the 2.4 GHz frequency band and improves user experience.

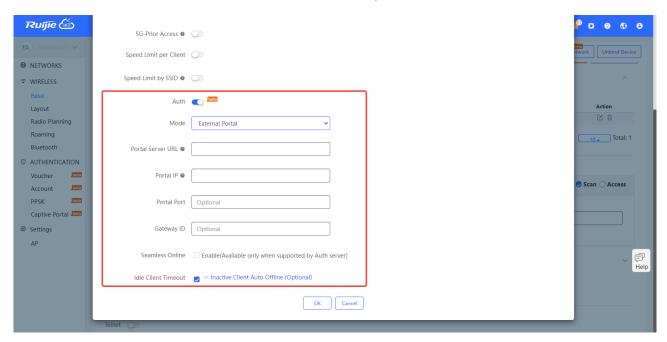
Speed Limit per Client: Specify whether to enable the speed limit function for a client. When this function is enabled, uplink and downlink speeds must be configured.

Speed Limited by SSID: Specify whether to enable the speed limit function for the SSID. When this function is enabled, uplink and downlink speeds must be configured.

Auth: Common APs support External Portal and Captive Portal authentication.

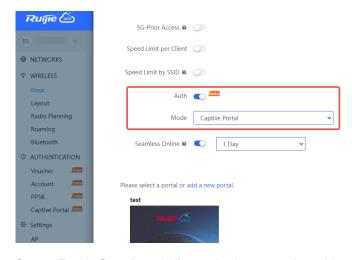
6.2.2.2 External Portal

To edit SSID, enable Auth and select External Portal. Enter the required information and click OK.



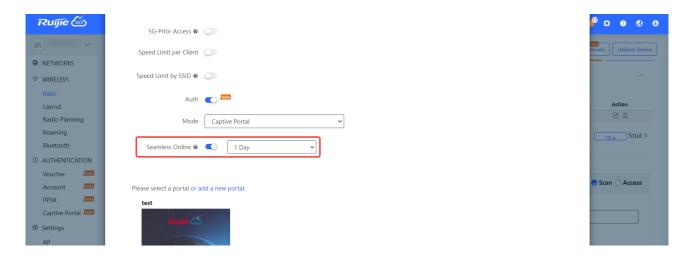
6.2.2.3 Captive Portal

Step 1: On the SSID page, enable Auth and select Captive Portal.



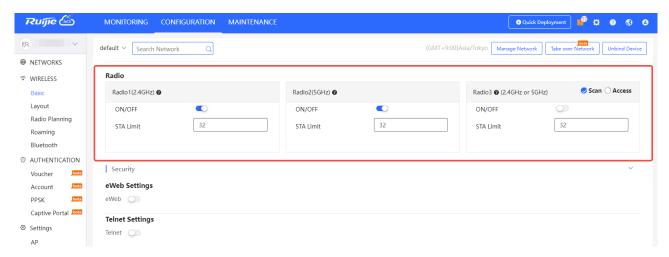


Step 2: Enable Seamless Online and select a portal or add new portal.



6.2.2.4 Radio

The Radio page enables you to configure the AP radio ports. As shown in Figure 4-4, the **Radio** page provides the **On/Off** and **Max Clients** items.



Parameters on the Radio page are defined as follows:

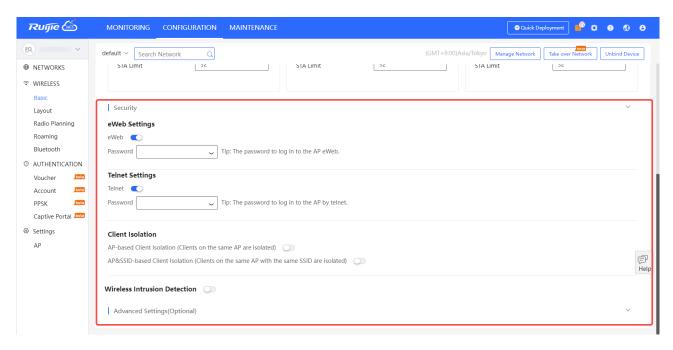
On/Off: Specify whether to enable the radio function. When it is set to **Off**, the SSID is invalid; the corresponding SSID can be used properly only when this function is set to **On**.

Max Clients: Enter the upper limit of associated clients in a frequency band.

Deletion of radio configurations indicates that the system preserves the current configurations.

6.2.2.5 Security Configuration

As shown in the preceding figure, **eWeb Settings**, **Telnet Settings**, **Client Isolation**, and **Wireless Intrusion Detection** can be configured.



eWeb Settings: Enter the Web login password of an AP. When the password is empty, the system does not push the password to AP.

Telnet Settings: Enable the Telnet service of AP. When the Telnet service is enabled, the password is required.

Client Isolation: Clients are isolated without affecting their network access to ensure that they cannot communicate with each other, thereby ensuring client service security. AP-based client isolation or AP&SSID-based client isolation can be selected. If AP-based client isolation is enabled, all layer-2 clients associated with the same AP cannot communicate with each other. If AP&SSID-based client isolation is enabled, clients in the same WLAN on the same AP cannot communicate with each other.

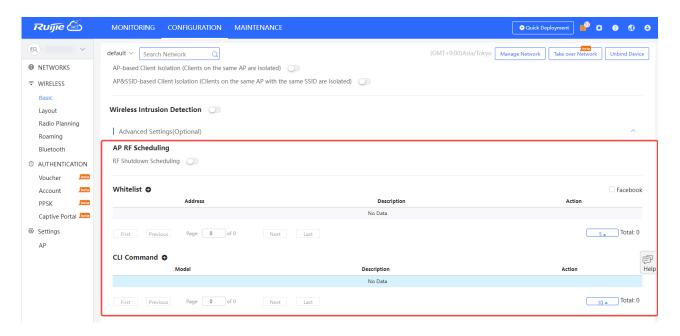
Wireless Intrusion Attack Detection: Include DDOS attack detection, flooding attack detection, AP spoof attack detection, and weak IV attack detection. If this function is enabled, at least one of the preceding four detection functions needs to be enabled.

6.2.2.6 Advanced Settings

AP RF Scheduling

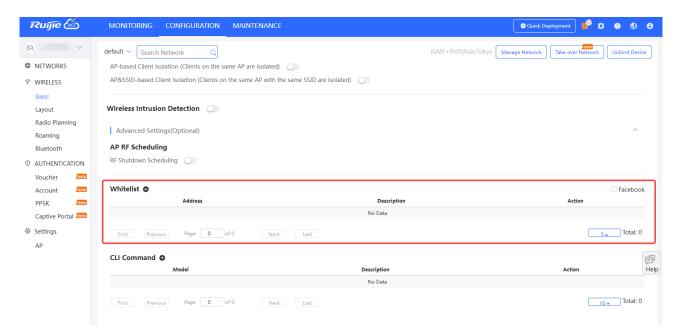
If AP RF Scheduling is disabled, AP will broadcast the SSID.

To specify the time of turning on/off WiFi, enable RF Shutdown Scheduling and configure the period.



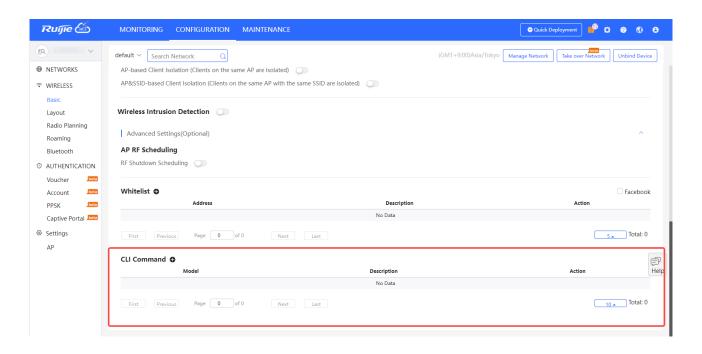
Whitelist

Enter whitelisted websites, and websites that can be accessed directly without authentication. For Facebook social login, you need check on Facebook Whitelist so that clients can access Facebook API before authentication.



CLI Command

Enter commands to be pushed to APs. This function allows you to perform some configurations unsupported via CLI commands.

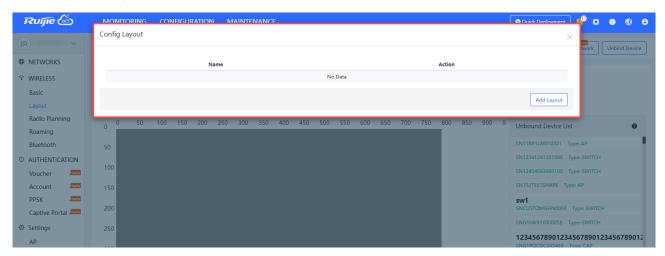


6.2.3 Layout (Non-apartment Scenario)

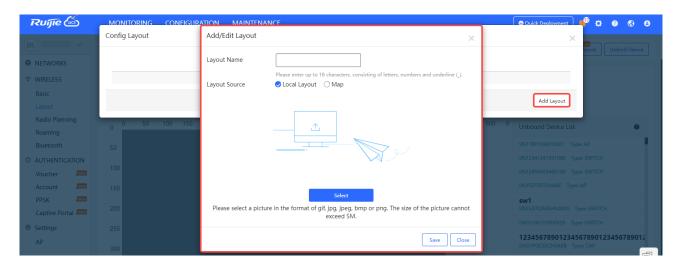
On the Layout page, you can bind an AP to a specific location after importing it to a network.

Step 1: Select a network.

The **Unbound Device List** on the right displays APs that have been imported to the network, but are not bound to a location. Click **Config Layout** to display the list.



Step 2: Click **Add Layout** to add the local layout or map layout. The local layout can be used to bind the location of indoor APs and the map layout can be used to bind the location of outdoor APs.



Step 3: Select an AP from in the unbound AP list and drag it to the target location.



6.2.3.1 Unbind APs

AP unbinding is different from AP deletion. AP unbinding removes the binding relation between an AP and a location, but the AP still exists in the network and can be controlled. AP deletion deletes an AP from a network and the AP cannot be controlled after being deleted.

The unbinding methods are:

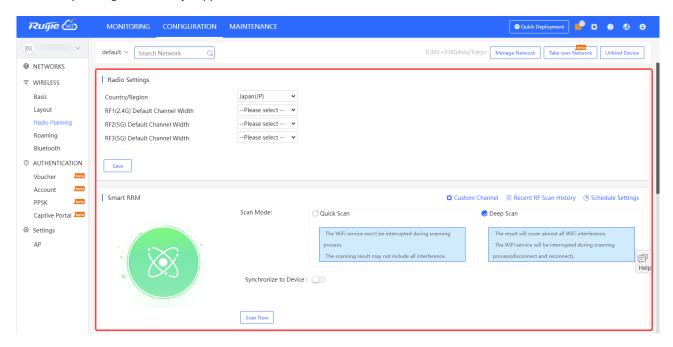
Method 1: Select an AP, and click Remove Device to unbind the AP from a location. An unbound AP will then be moved from a network to its parent network.

Method 2: If a location is already bound to an AP, you can drag another AP to the location to replace the old AP.

6.2.4 Radio Planning (Non-apartment Scenario)

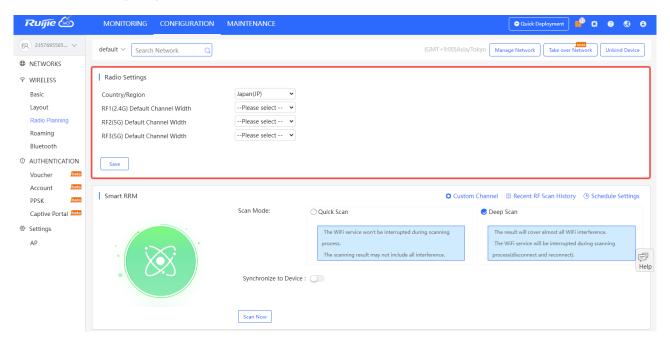
Radio planning can adjust channels and power of APs in a same area network to optimize the channel allocation and power of the APs. Proper RF configuration planning can reduce channel interference, increase channel utilization and improve overall wireless network performance and capacity.

Choose **CONFIGURATION** > **WIRELESS** > **Radio Planning** to open the **Radio planning** page. Both manual and automatic planning are currently supported.



6.2.4.1 Radio Settings

On the Radio Settings page, select the country and bandwidth.



For 2.4G channels, the bandwidth can be 20 or 40 MHz. For 5G channels, the bandwidth can be 20, 40, 80, or 160 MHz.

6.2.4.2 Automatic RF Planning

The automatic RF planning function allows the cloud to calculate the optimal channel configurations and power values for APs by using the radio resource management (RRM) algorithm according to RF information collected by each AP. Optimal recommended configurations can be applied to the APs.

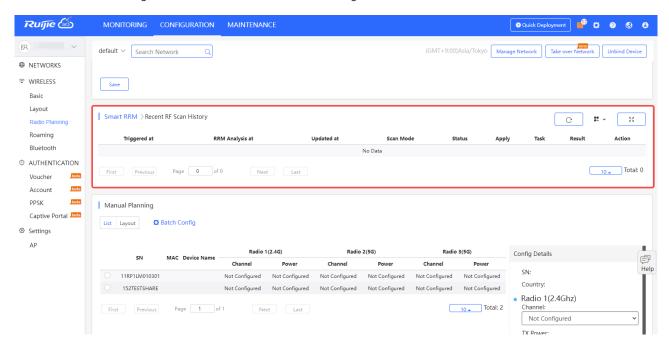
The entire process of the automatic RF planning includes three parts:

- The cloud triggers APs to scan and upload RF information.
- The cloud calculates the optimal recommended configurations.
- The optimal recommended configurations are applied to the APs.

The automatic RF planning supports network-based planning only.

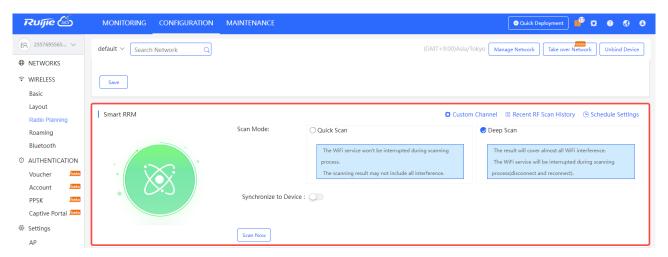
The AP RF channel optimization algorithm staggers RF channels of neighboring APs respectively based on the 2.4 GHz frequency band and the 5 GHz frequency band while ensuring as much as possible that original configurations are unchanged. To reach optimal power, The AP power optimization algorithm automatically increases or decreases the RF power for an AP according to the co-channel interference.

After a network is selected on the RF planning page, a page for automatic RF scanning and planning of the network is displayed. On this page, the APs of a network can be triggered to scan the RF, display recommended RF configurations calculated after scanning, and save the recommended RF configurations to APs.



The **Recent RF Scan History** page displays historical records of automatic RF scanning and planning. Each record shows triggering information got each time, including the automatic RF planning status, the start time, the end time, the status (Initializing/Scanning/RRM analysis/Finish/Failure), whether to apply to the APs, and the running logs.

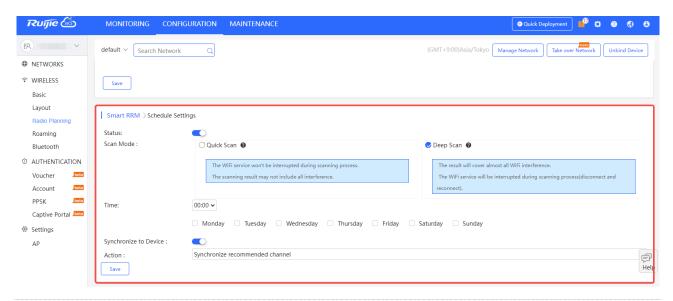
Smart RRM



There are two execution modes: immediate and periodic. Click **Scan Now**, and the cloud triggers RF scanning. Data will be uploaded after scanning.

Schedule Settings

On the Schedule Settings page, Periodic Execution can be enabled.



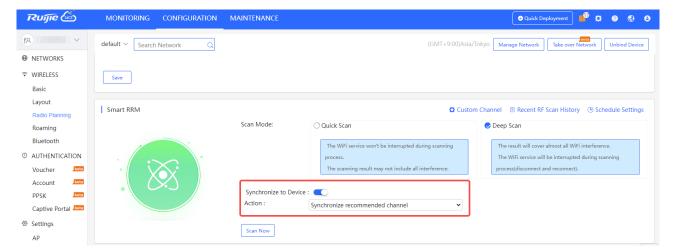
- (i) When a periodic task is triggered, this periodic task is automatically canceled if the network is already in a scanning triggered state (for example, immediate execution is being triggered).
- Related parameters
- (1) Scan Mode

Quick Scan: This mode enables APs to provide the WiFi service properly during scanning. However, data acquired in this mode is not as accurate as that in the **Deep Scan** mode. The calculation result based on the data in this mode is less accurate than that in the **Deep Scan** mode. This mode is applied when it is expected that the current network is not affected.

Deep Scan: This mode is also referred to as the enhanced mode, and causes wireless clients to go offline at the beginning and ending of the scanning. Data acquired in this mode is more accurate than that in the **Quick Scan** mode, and the automatic RF planning based on the data is more accurate. This mode shall be applied at the initial stage of the overall network planning or when disadvantages of this mode are tolerable.

(2) Synchronize to Device

If this function is enabled, the RF scanning result will be automatically pushed to the AP. In this case, skip step 3.

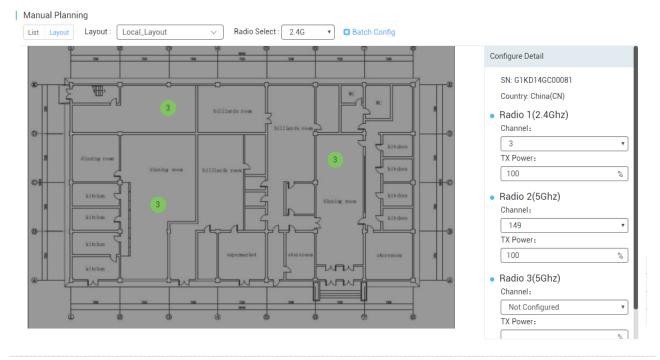


0

If an AP has been bound to a location and has been synchronized with RF configurations of the location. This operation will remove the RF synchronization between the location and the AP, and push the selected recommended optimization configurations to the AP.

6.2.4.3 Manual Planning

Click a network on the left to open the manual RF planning page. The **Radio Select** drop-down list above the diagram lets you select an RF type (2.4 GHz/5 GHz) to display. The number inside the location icon indicates the current channel, and a range displayed when the cursor stays on the location icon indicates a power percentage.



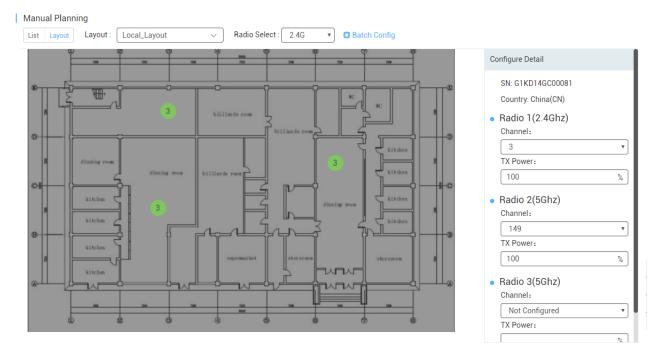
1 The RF channel or power data is not displayed during configuration.

You can click a location icon to display the RF channel and power configurations on the right. If the location is bound to an AP, the SN of the bound AP is also displayed.

To perform manual RF planning:

- 1. Set the RF configurations of a location in one of the following ways:
- Configure one location

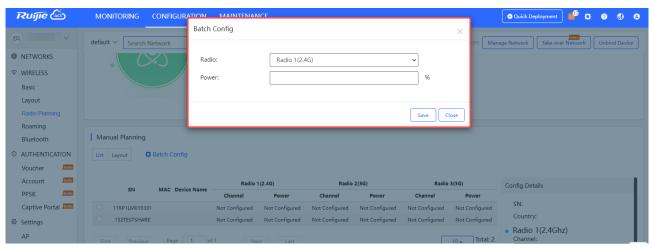
Click a location icon, enter configurations on the right, and click Apply.



Configure locations in batches

This function is used to configure the RF channel and power for a large batch of locations, and is suitable for a scenario with many locations on a network.

Click Batch Config above the location diagram to uniformly configure the power percentage for all locations on a network.



2. Synchronize the RF configurations of the location to a bound AP.

Click Apply above the location diagram to synchronize the RF configurations of the corresponding location to the bound AP.

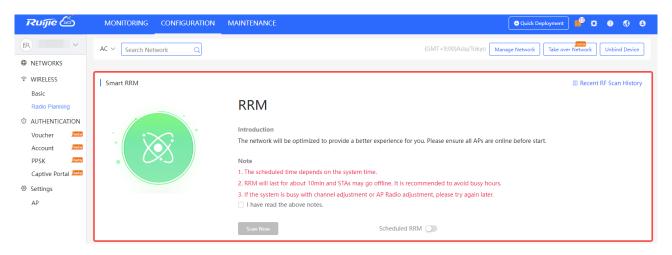
Batch operations for multiple locations can be select before clicking Apply.

After the synchronization is successful, is displayed in the lower right corner. At this point, the configurations of the location are synchronized to the bound AP.

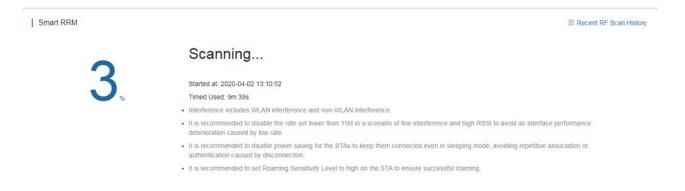
if an unbind or bind operation is performed, RF configurations are removed from or synchronized to the AP.

6.2.4.4 AC Smart RRM

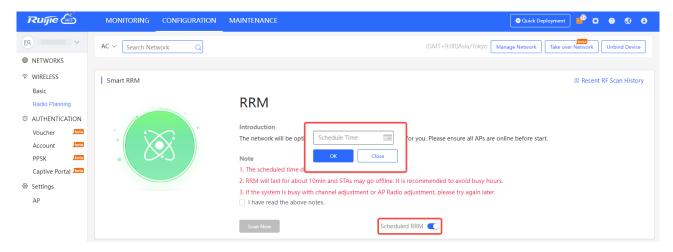
In the AC network, click Radio Planning to open the Smart RRM page.



Check the note, click to start RRM. The whole process takes about 10 to 15 minutes.



Enable Scheduled RRM to configure the time, and RRM will start at the set time.

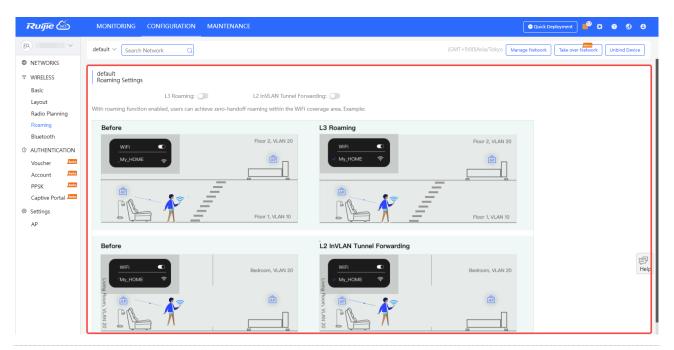


6.2.5 Roaming (Non-apartment Scenario)

Roaming planning refers to enabling network-based roaming.

L3 Roaming: Specify whether to enable Layer3 Roaming. It is enabled by default.

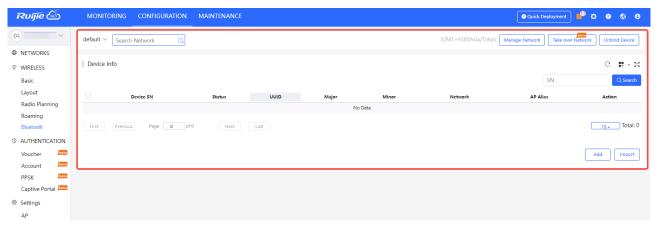
L2 InVLAN Tunnel Forwarding: Specify whether to enable Layer2 Roaming. It is enabled by default.



for wireless roaming, SSID signals must be consistent; otherwise, roaming may fail.

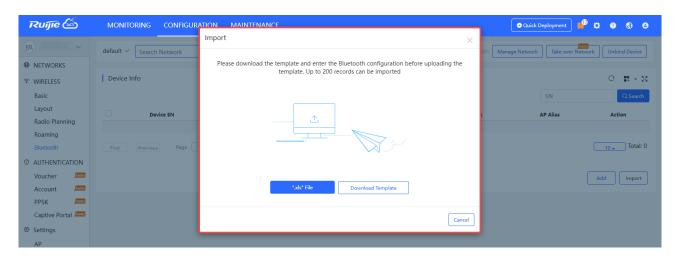
6.2.6 Bluetooth (Non-apartment Scenario)

You can batch import, add, change and delete the Bluetooth configuration.



Bluetooth configuration import

Click **Import**. The **Import** dialog box is displayed. For initial use, you can click **Download Template** in the lower right corner to download an EXCEL file corresponding to APs in the current network and set corresponding parameters in the file.



Requirements for the UUID, Major, and Minor parameters are:

UUID: Enter a string of 32 characters in hexadecimal format.

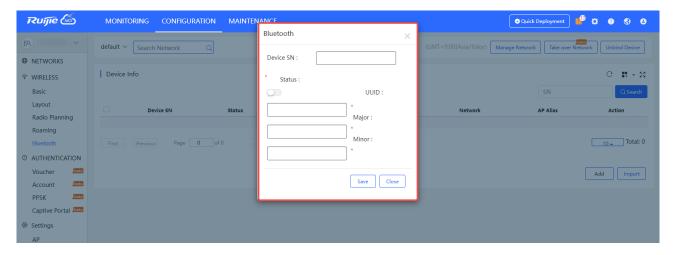
Major: Enter a string of 4 characters in hexadecimal format.

Minor: Enter a string of 4 characters in hexadecimal format.

After the parameters in the EXCEL file are configured, click '.xls' File to import the file. A prompt will be displayed if an exception occurs during the import.

Bluetooth configuration adding for a single AP

Click **Add**. The Bluetooth dialog box is displayed, as shown in the following figure. Specify the parameters as required to add a Bluetooth configuration for one AP and click Save. If a Bluetooth configuration is already configured for the AP, the existing Bluetooth configuration will be updated.



Bluetooth configuration modification for a single AP

Click the icon. The **Bluetooth** dialog box is displayed, as shown in the preceding figure. Modify the required parameters and click **Save**.

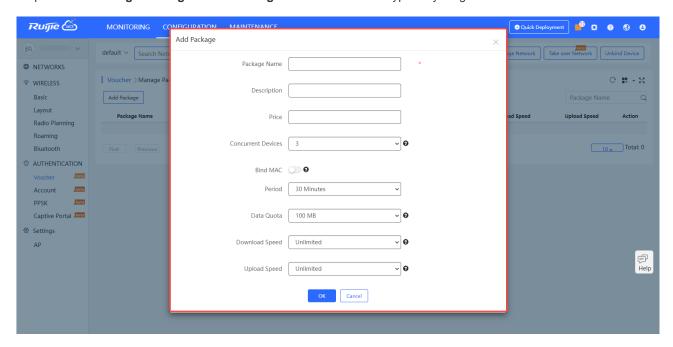
6.3 Authentication

6.3.1 Voucher Authentication

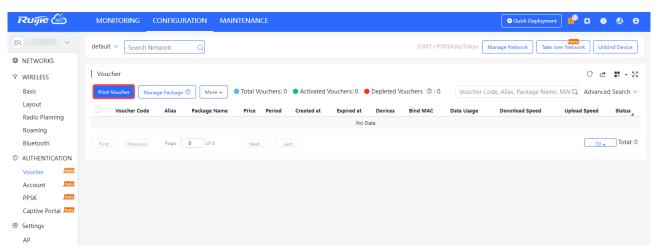
Voucher authentication on Ruijie JaCS allows you to charge users for wireless network access using access codes. Concurrent users, time period and data quota limit can be customized and offered to your guests.

6.3.1.1 Configuration Steps

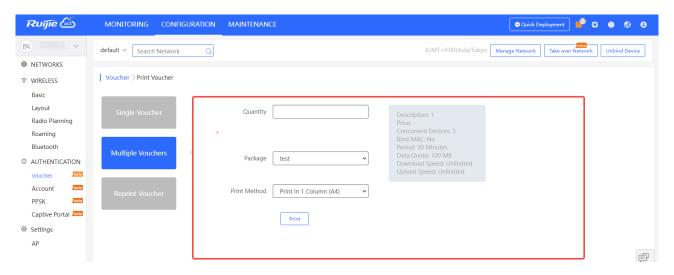
- Step 1: Enable Voucher function in the Captive Portal mode of SSID under the corresponding network.
- Step 2: Select CONFIGURATION > AUTHENTICATION > Voucher.
- Step 3: Select Manage Package > Add Package to define a voucher type for your guests.



Step 4: Click **OK** and go back to the **Voucher** page and click **Print Voucher**.



Step 5: Select the way you want to print voucher codes and enter the quantity if you select Multiple Vouchers.

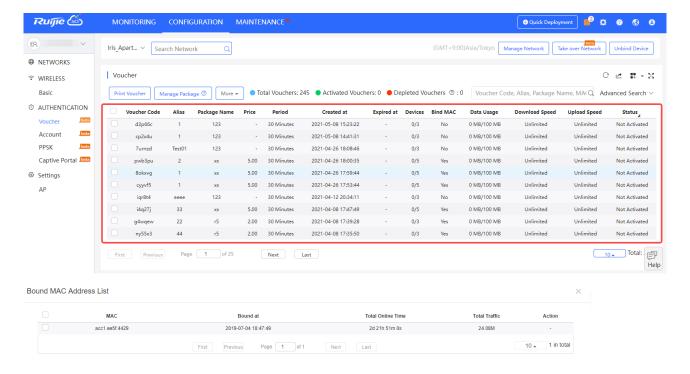


Step 6: Click the Print button.

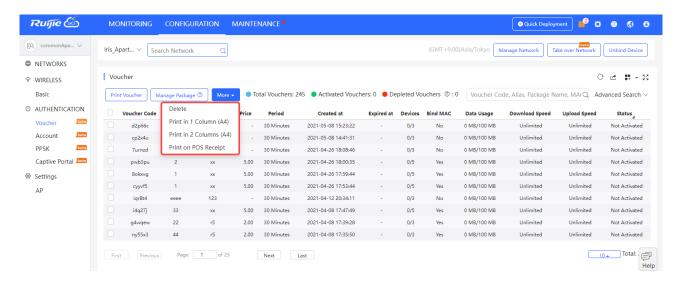
6.3.1.2 Bind/Unbind MAC

If **Bind MAC** is enabled for the package, the voucher code used by a device will be bound with its MAC address. The number of bound MAC can be set in **Max Concurrent Devices**. When the **Status** is **Activated** or **Depleted**, you can click

in the **Bind MAC** column to unbind MAC addresses.



6.3.1.3 More



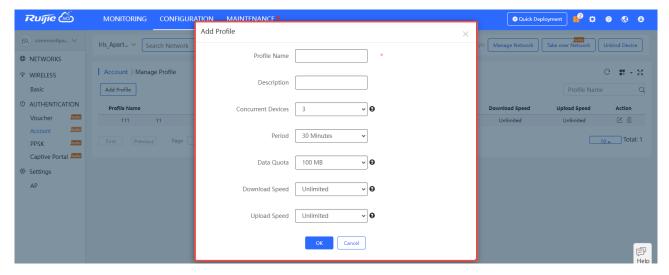
Item	Description	
Delete	Delete the selected Vouchers	
Print in 1 Column(A4)	Printed Vouchers will be displayed in the same column	
Print in 2 Columns(A4)	Printed Vouchers will be displayed in two columns	
Print on POS Receipt	Suitable for printing on POS receipts	

6.3.2 Account Authentication

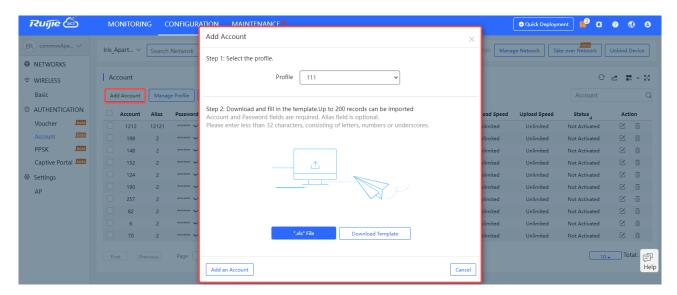
Account authentication requires the valid account and password. Concurrent users, time period and data quota limit can be customized and offered to your guests.

6.3.2.1 Configuration Steps

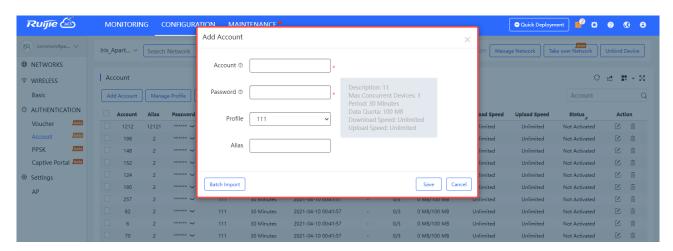
- Step 1: Enable Captive Portal in the SSID page, and select a template with Account Authentication.
- Step 2: Select CONFIGURATION > AUTHENTICATION > Account.
- Step 3: Select Manage Profile > Add Profile to define an account type for your guests.



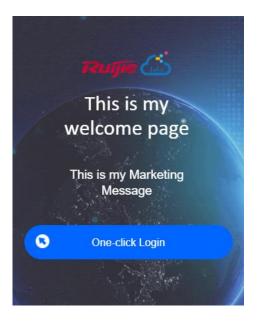
Step 4: Click OK and go back to the Account page and click Add Account.



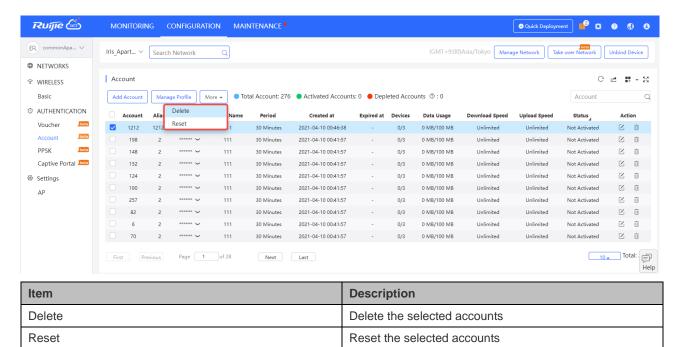
Step 5: Click Add an Account to enter the account, password and select the profile, and then click Save.



Step 6: Connect to the SSID, select **Account Login** in the pop-up page, enter the account and password created in the last step, and click **Login**.



6.3.2.2 More



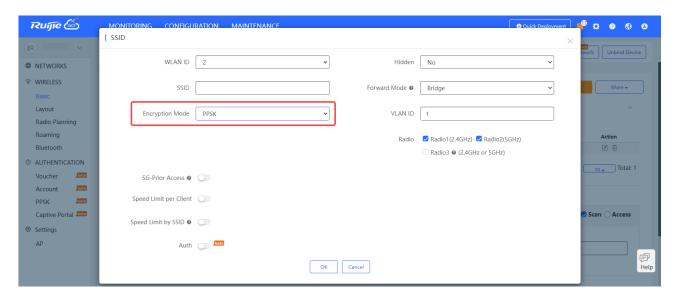
6.3.3 PPSK Authentication

PPSK combines the advantages of PSK and 802.1x. It prevents the network from being stolen. Each terminal device is bound with a unique WiFi account and key so that the key will not be shared. This can also be called "One Client, One Password".

- 1. The main tasks of the PPSK administrator:
 - Log in to Ruijie JaCS and deploy the network, so that APs can access the Ruijie JaCS.
 - Set the authentication mode of SSID to PPSK (the administrator can configure it directly).
 - On the PPSK Configuration page, an enterprise can enable the PPSK function and choose the network.
 - Open account for staffs in batch.
- 2. Staffs can connect to the SSID with a unique WiFi key allocated by the administrator and access the Internet.

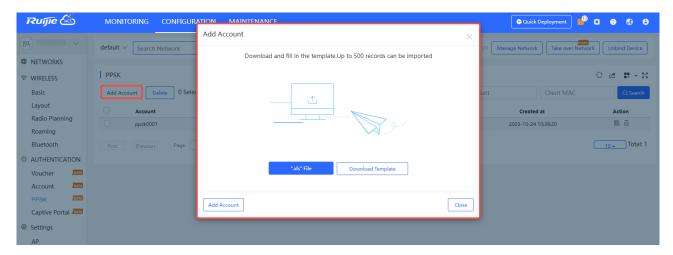
Configuration Steps

Step 1: Choose CONFIGURATION > WIRELESS > Basic, click beside SSID, and set the Encryption Mode as PPSK.

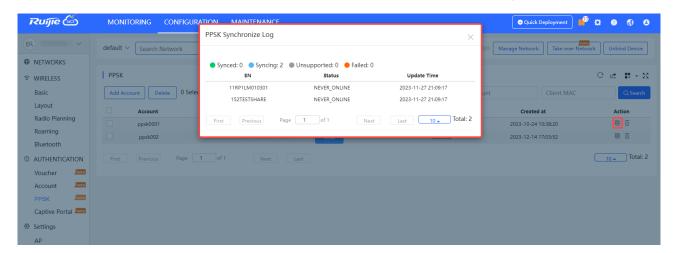


Step 2: Choose CONFIGURATION > AUTHENTICATION > PPSK.

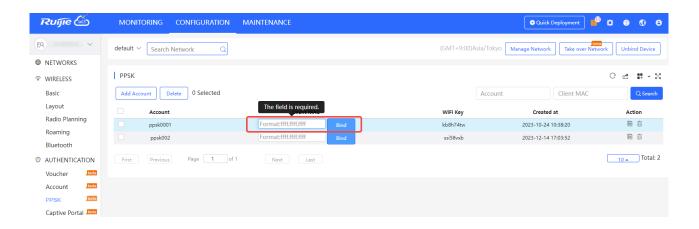
Step 3: Click Add Account to batch import or manually add new accounts.



Step 4: Click the view button on the Action column of the PPSK list to check PPSK Sync Log.



Step 5: Bind MAC address for accounts in the PPSK list.



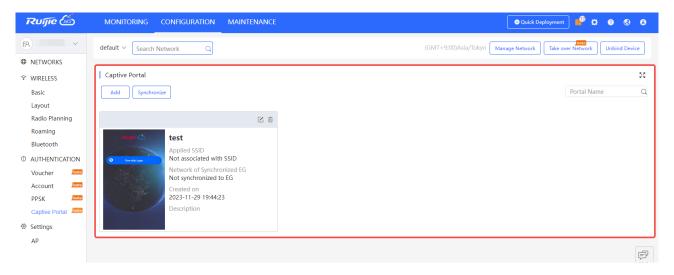
6.3.4 Captive Portal

Select CONFIGURATION > AUTHENTICATION > Captive Portal to display the Captive Portal page, and select a network on the top to filter captive portals.

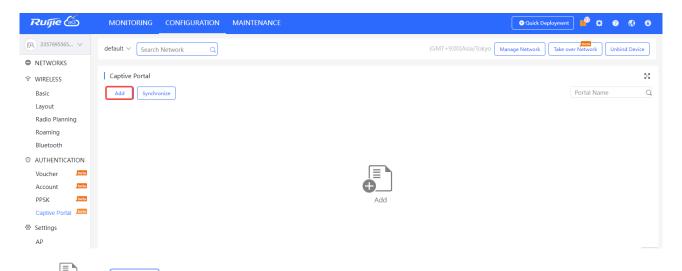
When **Captive Portal** is enabled, SSID can associate with the templates. You can manage templates under a network, but only use or associate templates under a sub-network.

6.3.4.1 Captive Portal List

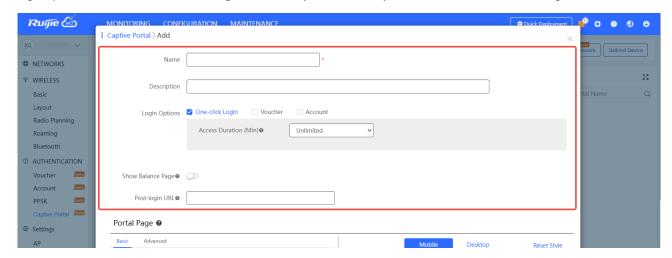
The list displays all captive portal templates, including thumbnails, name, association status, creation time and description.



Add Captive Portal

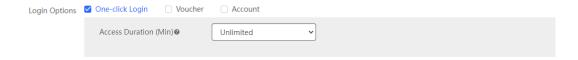


Click or to open the **Add Captive Portal** page. Enter name, description and post login URL, and select login options. After **Status Balance Page** is enabled, you can check your balance information after login.

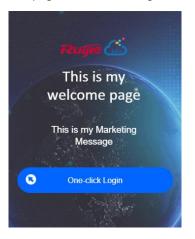


There are three login options: One-click Login, Voucher, and Account.

One-Click Login: You can set Access Duration and Access Times Per Day.



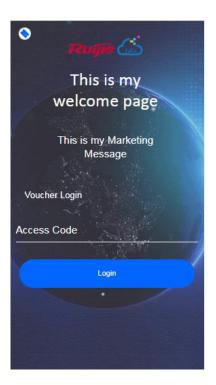
The page for One-click Login:



Voucher: You can log in with the voucher code.



The page for Voucher:



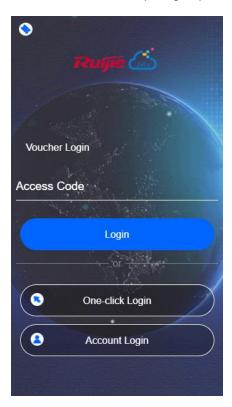
Account: You can log in with the account and password.



The page for Account:

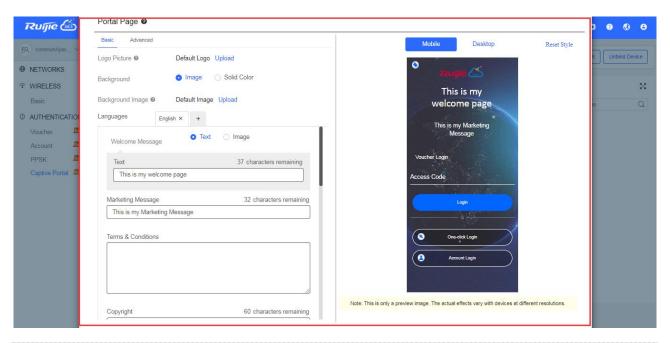


You can also select multiple login options. The page for One-click Login, Voucher, and Account Login:



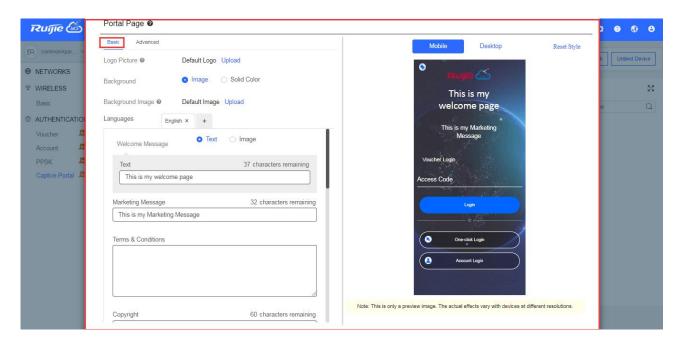
Portal Page

You can customize the content and style of the login page. The previews on the mobile phone and PC are displayed on the right.

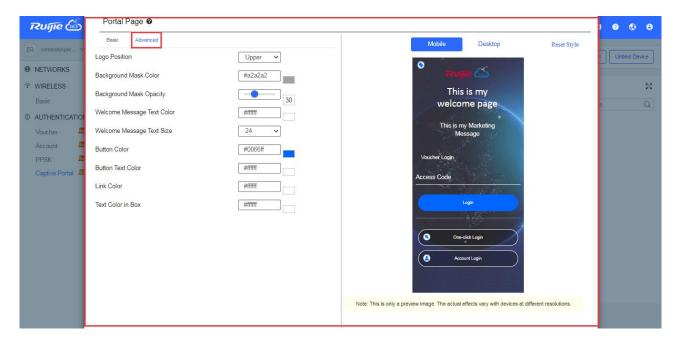


Each type of authentication supports a maximum of three languages. During authentication, users can select a language switching icon in the upper right corner of the authentication page to switch the language.

In the **Basic** tab, set the logo picture, background color or image, welcome massage, marketing message, terms & conditions and copyright.



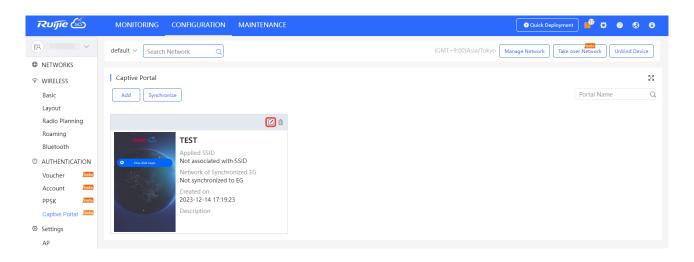
In the **Advanced** tab, set the Logo position, background mask color/opacity, text color/size. Click **Reset Style** to restore the default style.



Click on the bottom to save.

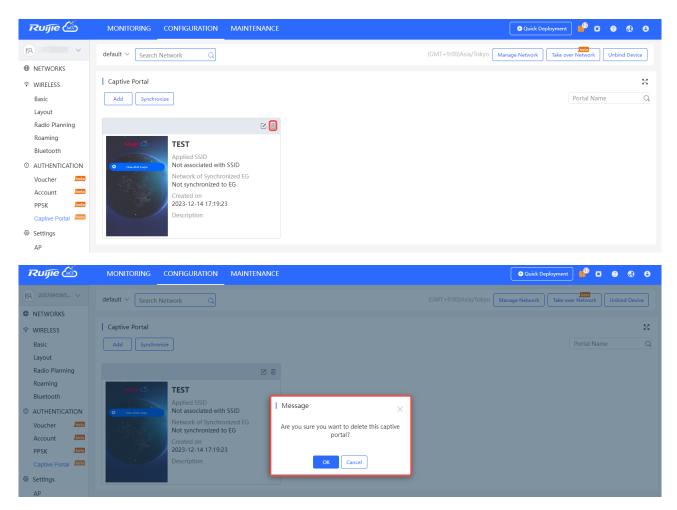
6.3.4.2 Edit Captive Portal

Click to edit a template, and click to save.

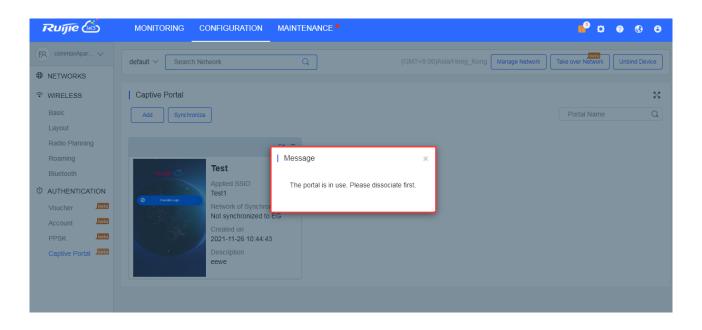


6.3.4.3 Delete Captive Portal

Click and then click in the confirmation window to delete a template.



If the template is associated to an SSID or applied to the EG, then you need to dissociate it before delete.



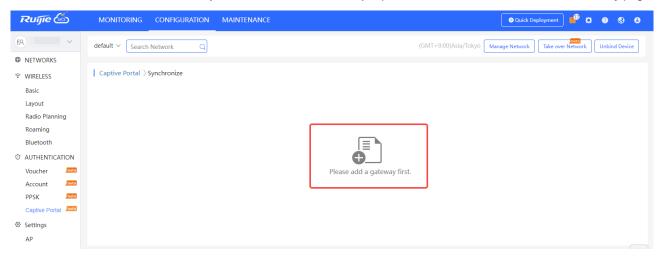
6.3.4.4 Apply to EG

Click synchronize to synchronize the captive portal template to the EG.

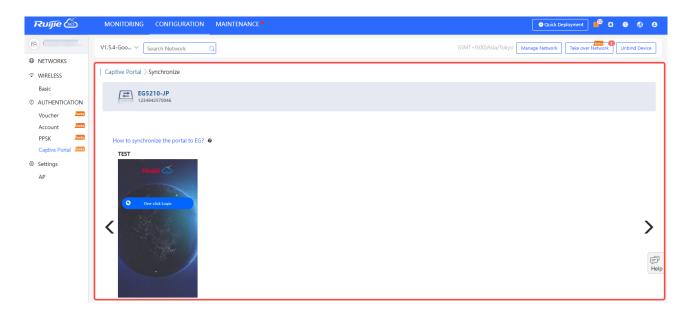
If no EG exists in the current network, you can click



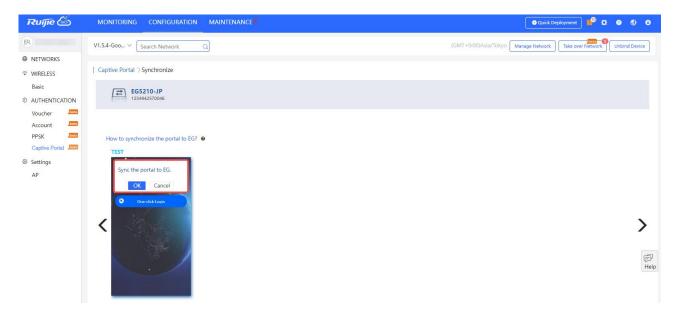
to jump to the **MONITORING** > **DEVICE** > **Gateway** page.



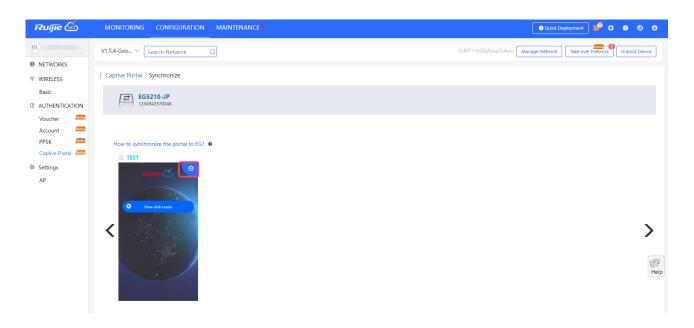
If there is an EG in the current network, the page is displayed as below:



Only one template can be synchronized to an EG. Select a template and click \mathbf{OK} .



After the template is applied, the date of last synchronization will be displayed above.



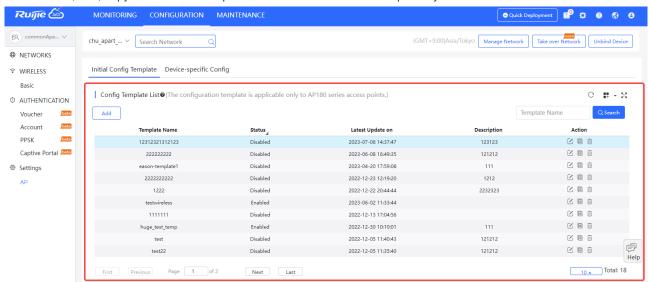
6.4 Settings

6.4.1 AP

6.4.1.1 Initial Configuration Template

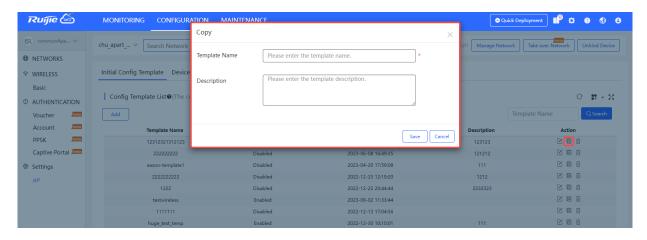
Click **Configuration** > **Settings** > **AP** to open the setting page. In this page, you can configure initial configuration template and device-specific config.

In the **Initial Config Template** page, a **Config List** is displayed, and all templates are shown in the order of update time. You can add, edit, copy and delete a template. You can also search a template by name.



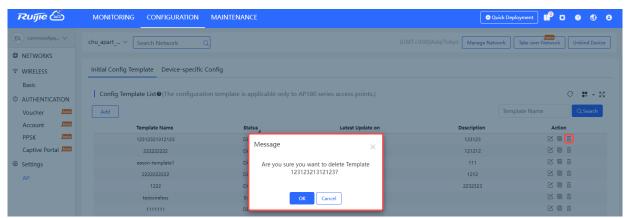
■ Copying a Template

After clicking in the **Action** column, a prompt will appear. Enter a new template name and description, then click **Save** to form a new template. Except the name and description, other configurations of the new template remain the same with the previous one.



■ Deleting a Template

Click in the **Action** column to delete a template. If the following prompt message appears, it means the template cannot be deleted as it is already in use.

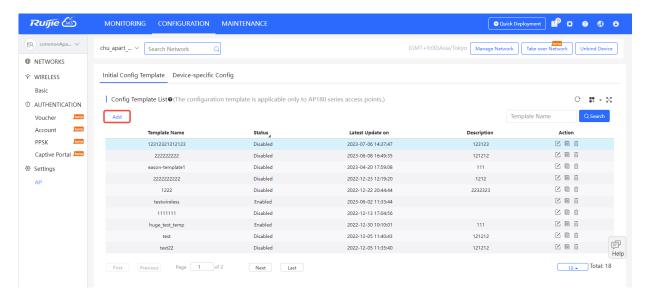


■ Editing a Template

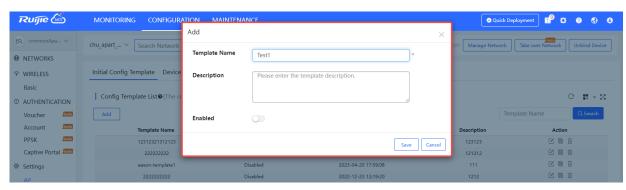
Click in the **Action** column to edit a template. You can edit all the configurations of the template, but if the template is in used, it cannot be edited.

Adding a Template

Click Add to open the setting page.



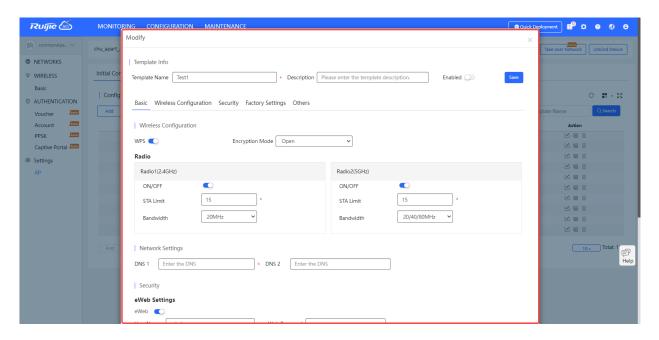
Specify the Template Name (required) and Description (optional), and then click Save.



When the "Save succeeded" appears, the operation is complete.



Click Edit to modify the basic information of the template.

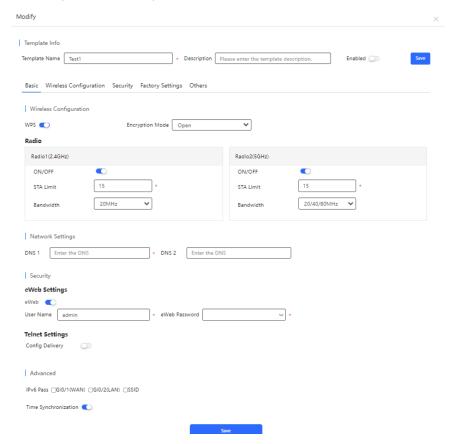


In the **Modify** page, you can change the settings of the template name, the description and the enabled status. When a change is made, click **Save** in the right side.

You also can specify the parameters in the four Tab pages: **Basic**, **Wireless Configuration**, **Security** and **Others**. After modifying the parameters, click **Save**.

Basic

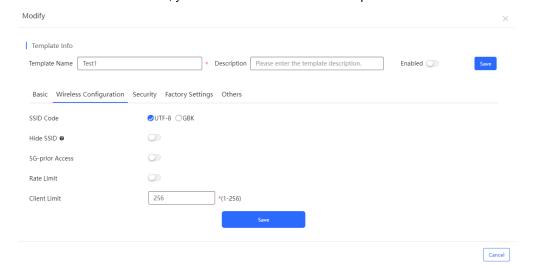
In this page, you can configure radios, DNS, the password of eWeb and IPv6.



Wireless Configuration

You can hover you mouse on ot view the notes of **Hide SSID**.

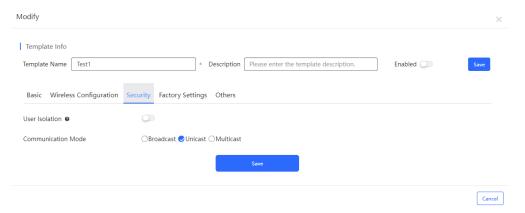
When **Rate Limit** is enabled, you need to set the downlink and uplink rate.



Security

In this page, you can configure user isolation and communication mode.

When the user isolation is enabled, inter-SSID, intra-SSID and LAN-WAN are enabled simultaneously. You can hover the mouse over of to check more details about this function.

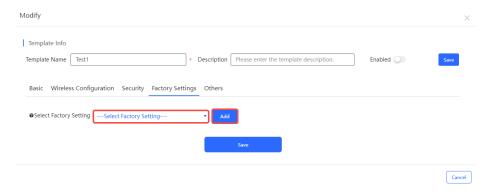


Factory Setting (Optional)

You can click the down arrow to select an existing template, or click **Add** to create a new one. If you select an existing template, the configurations of the template will be displayed below the selection box. If you need to add a new template, you can click **Add** to go to the **Factory Configuration** page.

(i) When the factory settings are applied to a device, you need to press the reset button of the device to reset the device to make them take effect, and all global configurations and other configurations will be cleared.

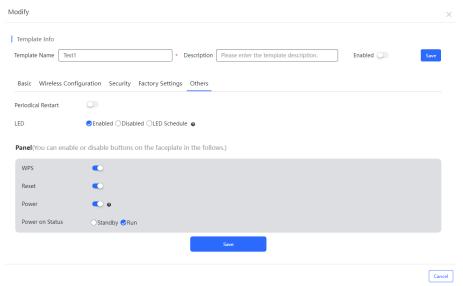
In the **Factory Configuration** page, you can add a new factory setting, and edit or delete an existing one. When a new factory setting is added, it will be displayed in the drop-down list box. If a factory setting is changed, it will take effect in all templates to which the factory settings are applied. Only an unused factory setting can be deleted.



Others

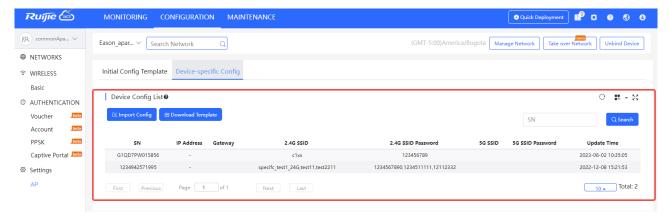
The **Periodical Restart** is disabled by default. When it is enable, you can choose **Simple Policy** and **Sophisticated Policy** to schedule the reboot of the device to take effect in a specific time.

When LED schedule is enabled, you should specify the start time and the end time.



6.4.1.2 Device-specific Configuration

In the **Device Config List**, the information of all devices with specific configuration is displayed, including SN, IP, 2.4G SSID, 2.4G PASSWORD, 5G SSID, 5G PASSWORD and Update Time. In the 2.4G/5G SSID and 2.4G/5G PASSWORD columns, commas (,) are used to separate multiple SSIDs and passwords. And the SSIDs and passwords are one-to-one correspondence. Up to 3 SSIDs or passwords are supported.



■ Downloading the Template

Click **Download Template** to download the template. The parameters and their description are shown as follows:



The SN is required. The IP address and subnet mask should be filled in or not filled in together (when they are left empty, the device will obtain IP address and subnet mask via DHCP). The other four fields are optional.

Multiple SSIDs and passwords are supported. Use commas (,) to separate them.

■ Importing Configuration

Click **Import Config** to import the template. Up to 200 templates are supported. When a template is imported, the system will verify the parameters filled in the template. The import process will be stopped when one of the following situations occurs:

- The SN is not available in the current network.
- The format of IP address is incorrect.
- The number of SSIDs and passwords are different.

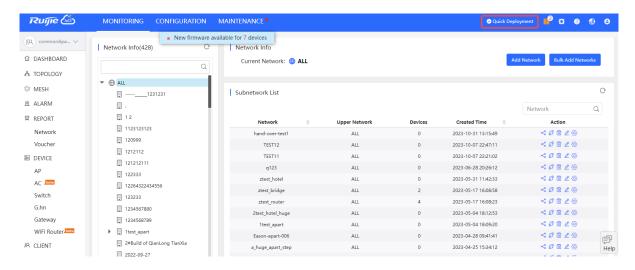
■ Search

You can enter the SN of a device in the search box in the upper right corner to search the device.

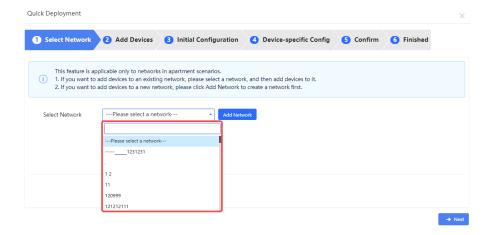
6.5 Quick Deployment

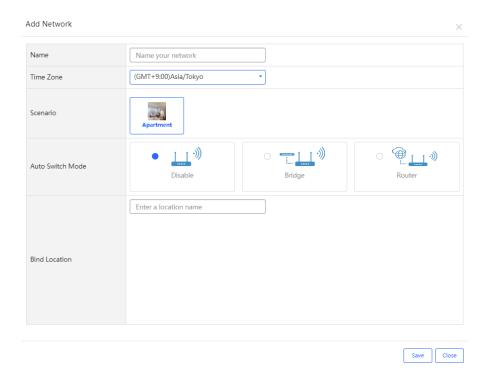
You can click **Quick Deployment** in the upper corner of the navigation bar to configure your devices quickly. You only This feature is applicable only to AP180 series access points in apartment networks.

Step 1 Click Quick Deployment.

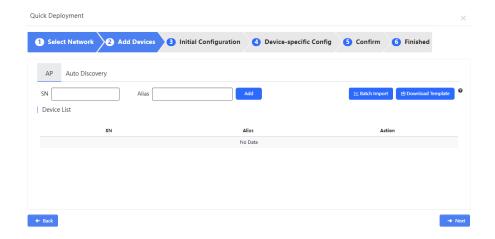


Step 2 Select an existing network, or click **Add Network** to create a new one. After clicking **Add Network**, a setting page pops up. Please specify the network name, the time zone, the mode and bind the location. Then, click **Next**.



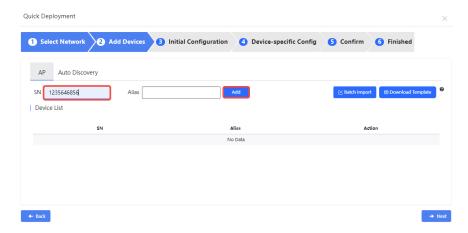


Step 3 Add APs to the network.



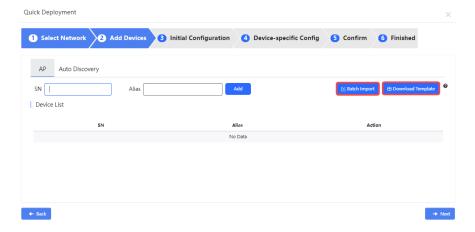
Three methods are available here.

1) Manually enter the serial numbers of devices, then click Add.

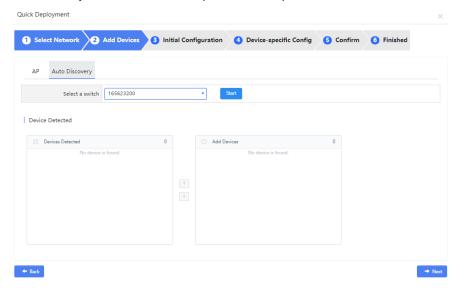


2) Click Download Template to download and fill in the template. After that, click Batch Import to add

devices in batches.



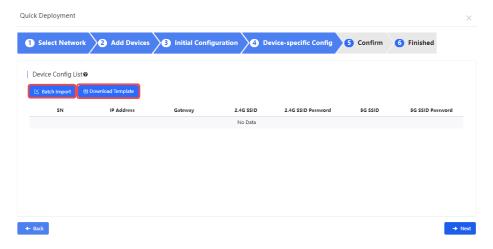
3) Click Auto Discovery. Select a switch to be used for detecting devices. Then, click Start to detect the devices. Only AP180 series access points that are powered on and access WAN can be detected.



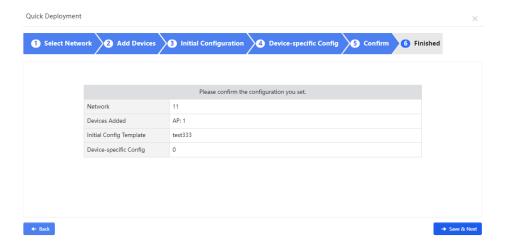
Step 4 (Optional) Select an existing initial configuration template or add a new one. If you want to view or change the configurations of an existing configuration template, click **Details**. If you don't want to apply an initial configuration template to devices, click **Next** directly to skip this step.



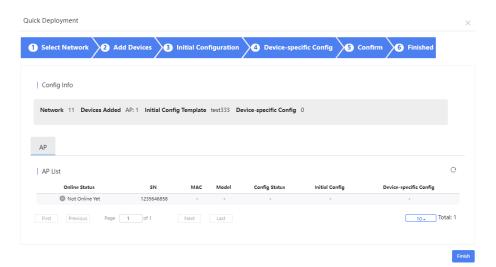
Step 5 (Optional) Click **Download Template** to download and fill in the device-specific configuration template, and then click **Batch Import** to import the configurations. If you don't want to configure this, click **Next** directly to skip this step.



Step 6 Confirm the configurations. If all the configurations are right, click **Save & Next**, otherwise you can click **Back** to modify the configurations.



Step 7 After saving the configurations, all the configurations you set will be displayed. The configuration status of devices is refreshed every 6 seconds.



7 Maintenance

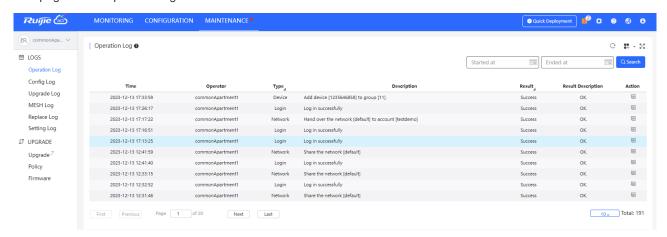
The **Maintenance** module mainly provides the following functional services:

- LOGS
- UPGRADE

7.1 Logs

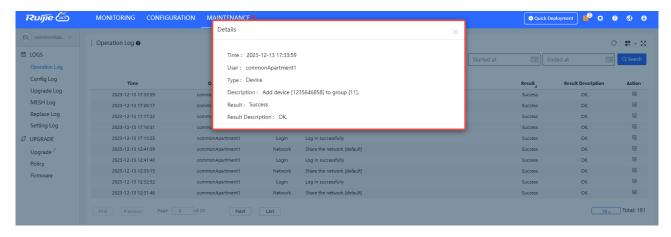
7.1.1 Operation Log

This page shows operation logs.



Click in **Action** column to check log details.

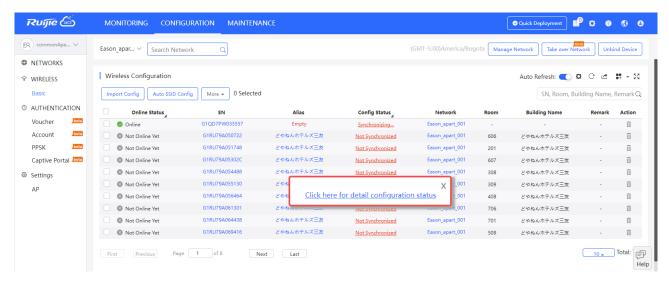
General operation log details are shown as follows:



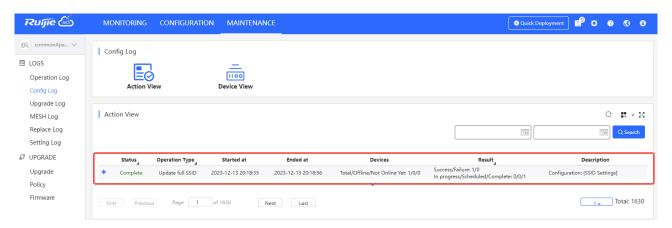
7.1.2 Config Log

7.1.2.1 Action View

When the device configuration is imported, a prompt will pop up. Click the prompt to open the log page and export the SSID result.



On the log page, the latest record will be displayed by default



Status: View the status of the configuration

Complete: Configuration completes

In progress: Configuration is in progress Scheduled: Configuration is scheduled

Result: View configuration results

Success: Number of devices configured successfully Failure: Number of devices whose configuration fails

Devices

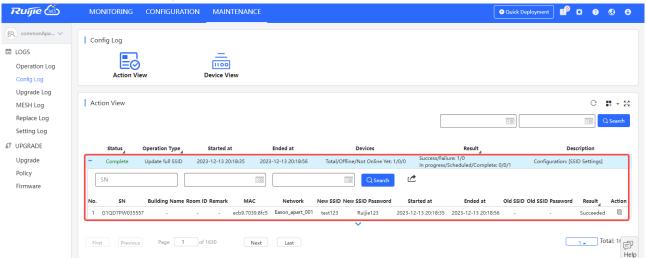
Total: Total devices in the network Offline: Number of offline devices

Not Online Yet: Number of devices that never go online

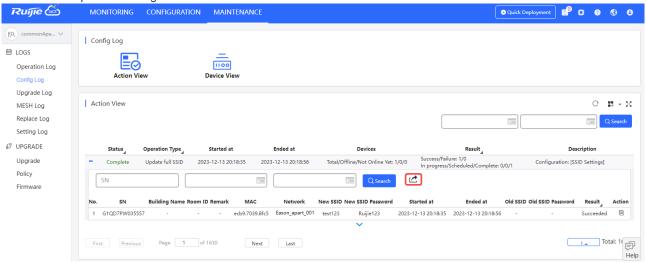
Cloud will give priority to the online devices, and will actively apply the configuration after the offline devices go online.

- Description: View configuration command
- Refresh: As it takes a while to complete the configuration, you can click this button to refresh the configuration progress.

Click to display more configuration information.



Click do export the configuration result.



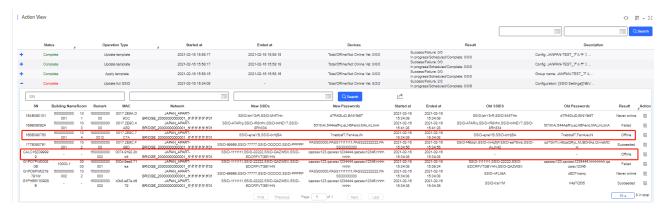
The exported file is shown as the figure below.



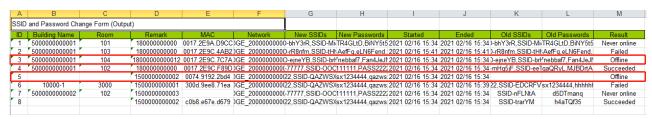
You can check the result in the Result column which may be "Succeeded" or "Failed".

7.1.2.2 End SSID and Password Configuration of Offline Device Immediately (Apartment Scenario)

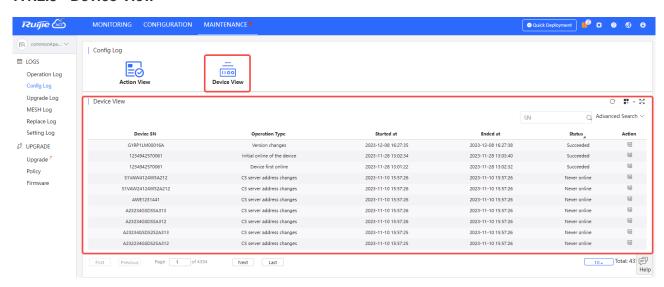
Suppose the operator changes the SSIDs and passwords of two rooms and exports the result.



Although there are offline devices waiting for SSID and password configuration, the overall configuration is completed. The operator can export result and send new SSIDs/passwords to the tenant. When the offline devices go online, the new SSIDs and passwords will be synchronized to the devices automatically.

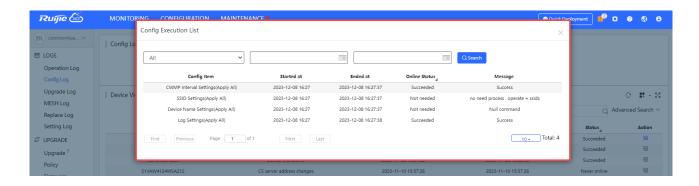


7.1.2.3 Device View



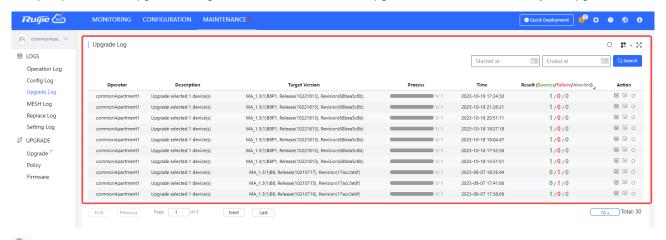
Click in the **Action** column to check the push status of each configuration item.

The following figure shows an example of full configuration, including the configuration execution status of SSID, Radio and so on.

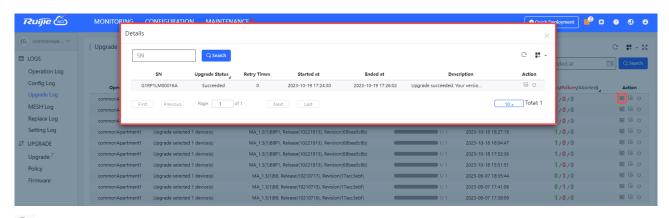


7.1.3 Upgrade Log

This part provides the upgrade tracing function. You can check the upgrade status, and abort or retry the upgrade.



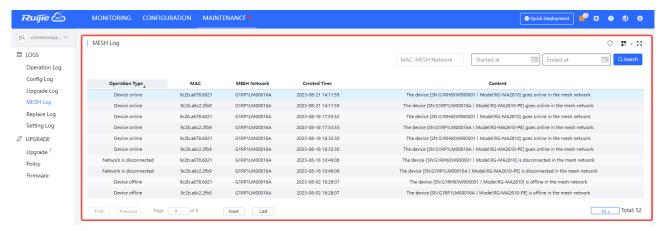
- Retry: Restarts the upgrade task that failed or was aborted.
- Abort: Stops the upgrade task if the upgrade command has not been pushed.
- Click to check log details.



- Retry: Restart the upgrade task.
- Abort: Stop the upgrade task.
- Abort: You cannot stop the upgrade task if the upgrade command has been pushed to the AP.
- Retry: You can only restart the failed or aborted upgrade task.

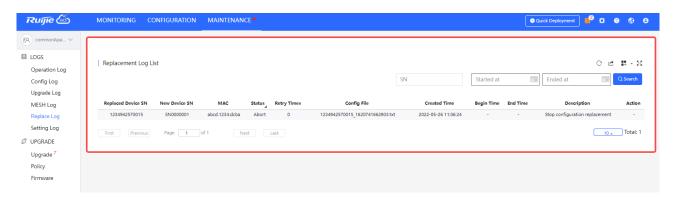
7.1.4 Mesh Log

The page displays the Mesh logs.



7.1.5 Replace Log

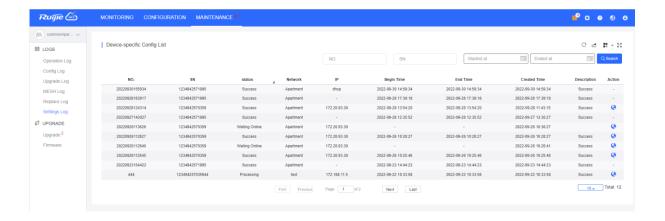
The page displays the replacement log of switches.



7.1.6 Settings Log

This page displays the information of device-specific configuration, including imported batch number, SN, Status, Network, IP address, Begin Time, End Time, Created Time, Description and Actions.

- Configuration status is displayed in the Status column:
- Processing: The configuration is in progress.
- Failed: The configuration failed to be applied to the device.
- Succeeded: The configuration has been applied to the device.
- Waiting online: The device is waiting to go online.
- The batch number and SN can be used for search.
- You can click in the Action column to jump to the Web of the device.



7.2 Upgrade

The following tab pages are provided for device firmware management:

- Upgrade
- Upgrade Policy
- Firmware

7.2.1 Upgrade

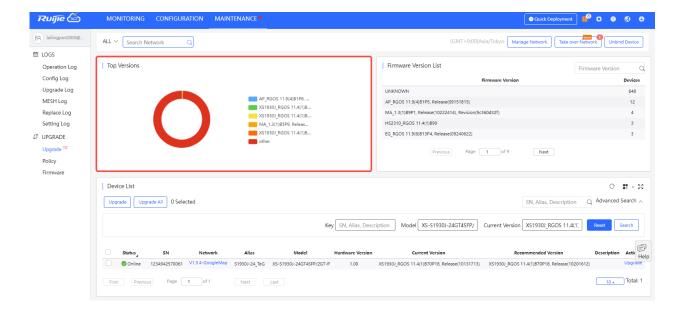
Ruijie JaCS supports the online upgrade of device firmware, and it allows network administrators to utilize the latest features and security enhancement for their Ruijie devices. Online upgrade allows administrators to easily arrange the firmware upgrade on their networks and view firmware releases.

The **Upgrade** page includes two modules:

- Version statistics
- Firmware upgrade
- Device List

7.2.1.1 Check Version Information

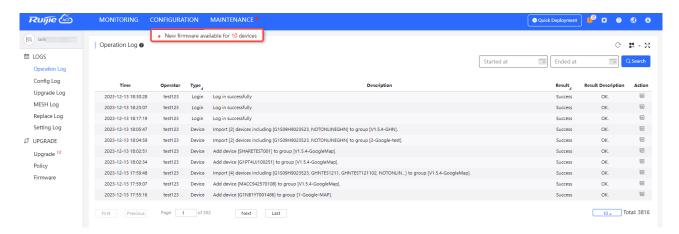
Select **Maintenance** > **Upgrade** to display the top 5 versions in pie chart form and a list for each network.



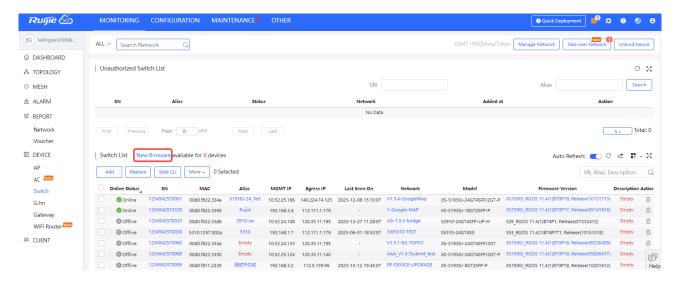
7.2.1.2 Upgrade

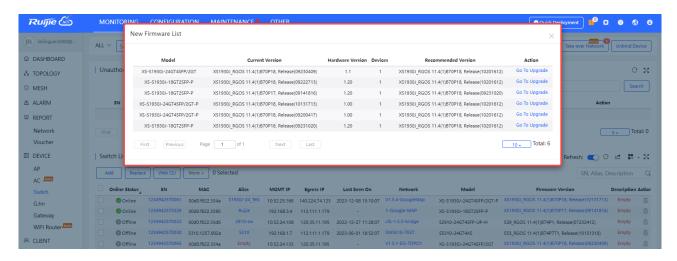
You can enter the **Upgrade** page in either of the following ways.

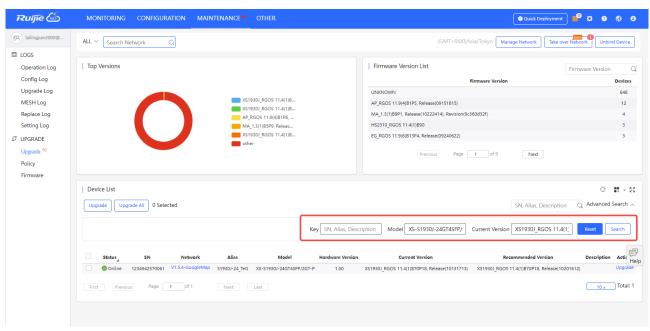
Method 1: Hover the mouse over **MAINTENANCE**, a link will appear. Click the link to enter the **Upgrade** page. The default network information is **AII**.



Method 2: On the AP List, Switch List or Gateway List, click New firmware to open New Firmware List window. Then click Go to Upgrade to enter the Upgrade page, and select and upgrade devices via Search.







7.2.1.3 Upgrade Devices

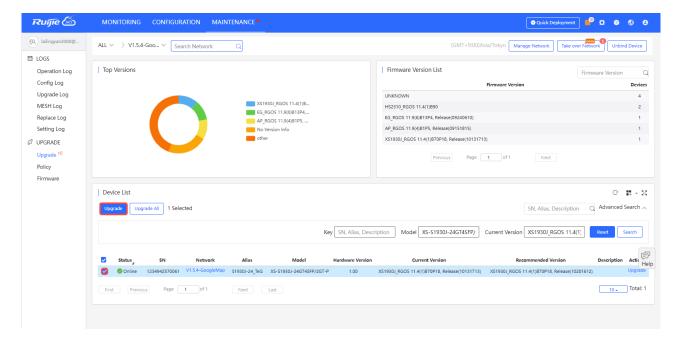
For convenience, two upgrade modes are provided:

Upgrade Selected: This mode enables you to upgrade a selected AP, and is suitable for a scenario with a few APs to be upgraded.

Upgrade All: Selects all the devices in the list, and applies to the status when multiple devices require upgrading, and implements a quick upgrade with selected networks and version numbers. This mode enables upgrading of all APs in the list, and is suitable for a scenario with a large number of APs. A network or a firmware version number can be specified to perform fast upgrades.

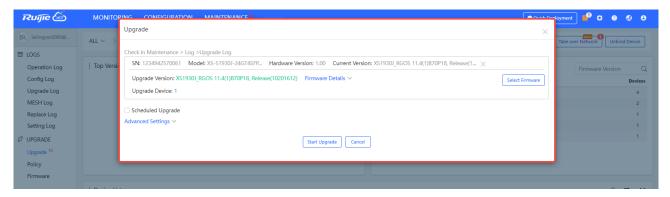
Upgrade Selected

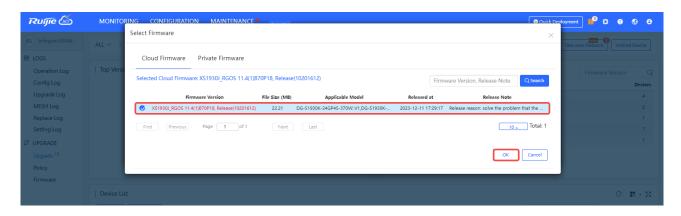
Step 1: Select a network on the left, select a target AP, and click Upgrade.



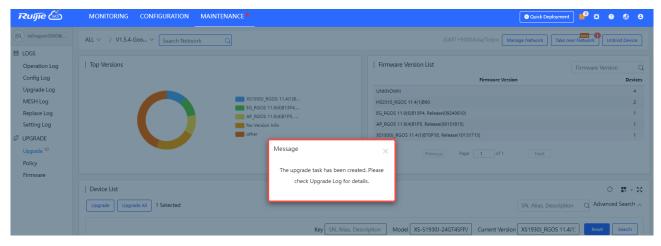
Step 2: Select a firmware version.

On the **Upgrade** page, you can check the device information and the details of versions, choose a version (the recommended version is the latest one), enable scheduled upgrade and set retry times if the upgrade fails.



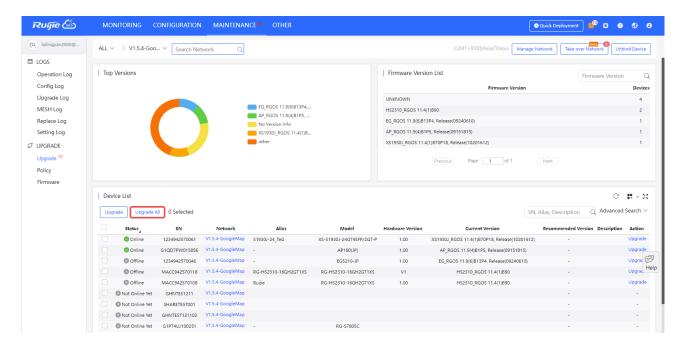


Step 3: Click Start Upgrade to upgrade the device.

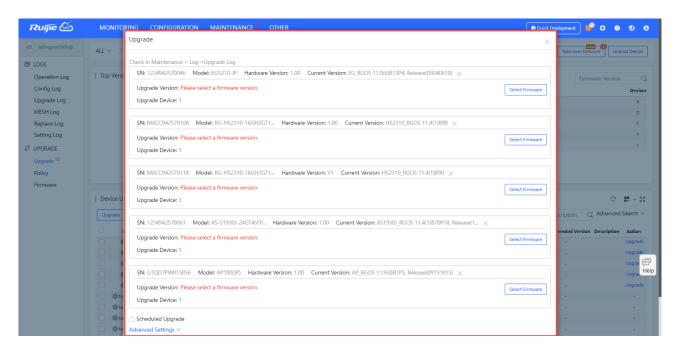


Upgrade All

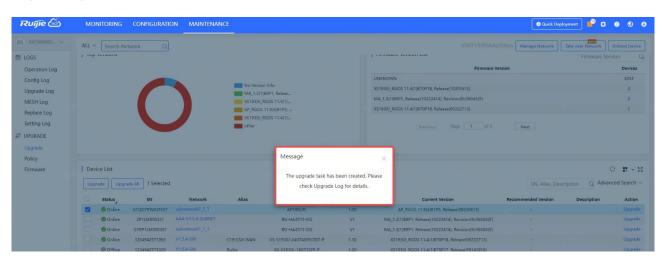
Step 1: Check the devices list based on a condition, and click Upgrade All.

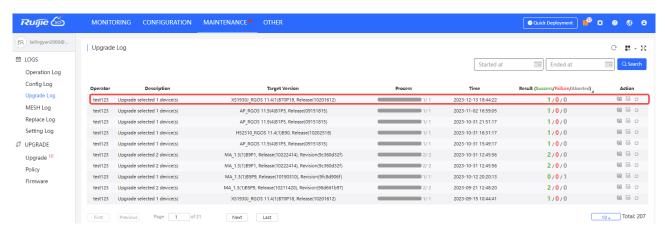


Step 2: Select the version and click Start Upgrade

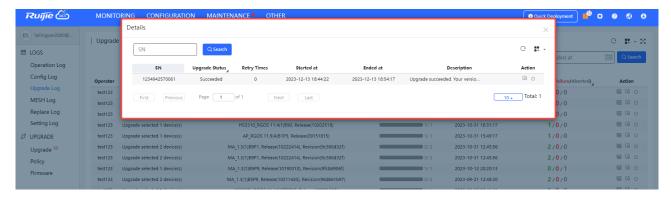


Set the update criteria and click **Start Upgrade**, and a message box will pop up. Users can check details in **LOGS > Upgrade Log**.

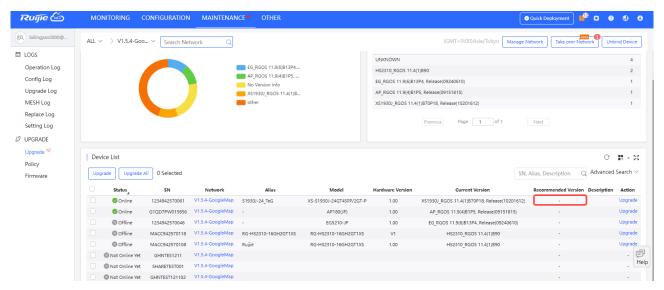




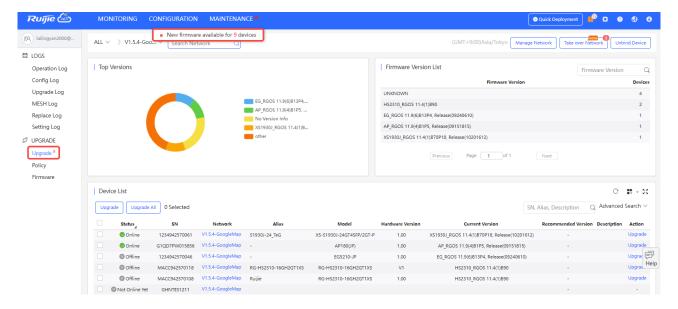
If the upgrade is successful, log will show Upgrade succeeded.



Check the results in the Recommend Version of Device List.



The numbers of devices which have available firmware for upgrade in **MAINTENANCE** Menu and **Upgrade** in Navigation Bar will change accordingly.



7.2.2 Upgrade Policy

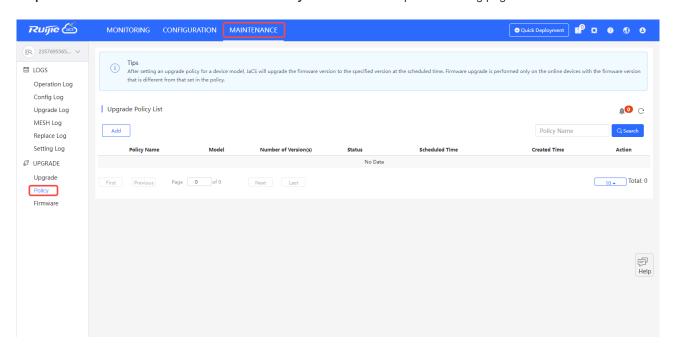
In **Upgrade Policy** page, you can create an upgrade policy for devices in a network to upgrade their firmware at a specific time.

0

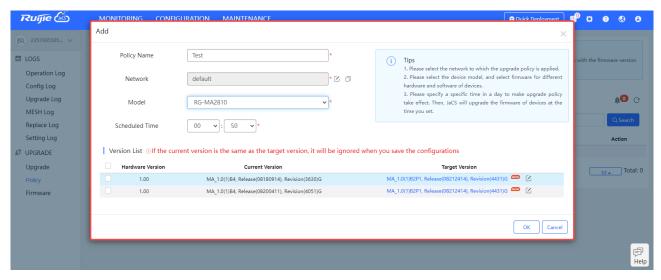
This feature is applicable only to MA and AP180 series access points, and cannot be used in sub accounts and configured for a network shared by another account.

7.2.2.1 Adding an Upgrade Policy

Step 1: Go to MAINTENANCE > UPGRADE > Policy and click Add to open the setting page.



Step 2: Specify the policy name, network and model and scheduled time, and select a hardware version in the Version List.

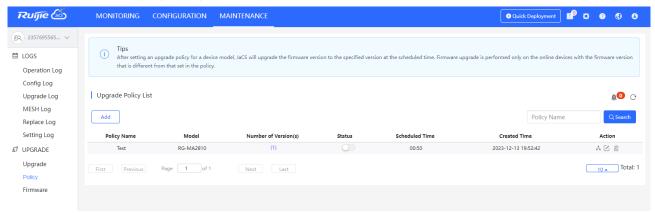


Items	Description	
Policy Name	Specify a unique policy name.	

	Specify one or several network(s) to which the upgrade policy is applied to. Then, the policy will	
Network	be applied to all devices in the network(s). You can click 🗹 to select networks or click 🗇 to use	
	the network configured in an existing network.	
Model	Specify a device model. Only one upgrade policy can be configured for a device model. (Only for	
	MA and AP180 series access points.)	
Scheduled Time	Specify an upgrade time so that the firmware of specified devices in the network will be upgraded	
	to the target version at the time you set.	
Version List	Specify the target firmware version. The versions shown in the target firmware version column	
	are recommended versions. If you don't want the recommended version, you can click 🔼 icon	
	to change it.	

7.2.2.2 Upgrade Policy List

In the **Upgrade Policy List**, you can check the details about configured upgrade policies, including their names, models, number of available versions, status, scheduled time and created time.

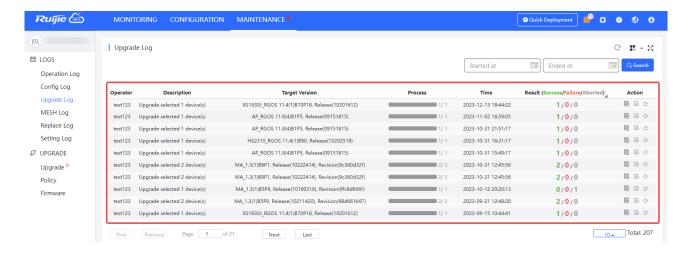


In the Action column, three icons are provided.

Icons	Description	
4	Change the network.	
	Edit the upgrade policy.	
並	Delete the upgrade policy.	

7.2.2.3 Upgrade Logs

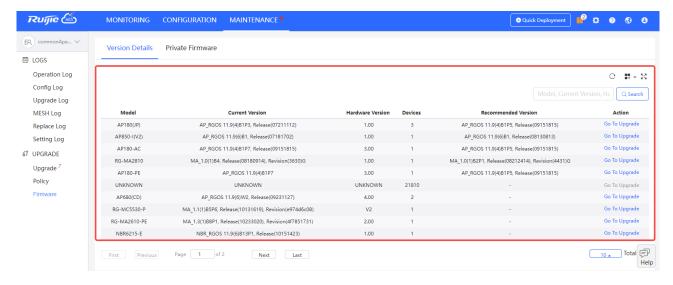
Click MAINTENANCE > LOGS > Upgrade Log to display upgrade results.



7.2.3 Firmware

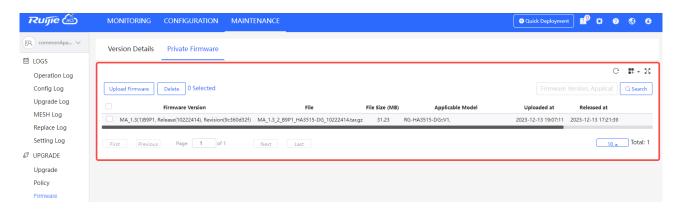
7.2.3.1 Version Details

The **Version Details** list displays the versions of firmware installed on all devices. Click **Go To Upgrade** in the **Action** column to open the **MAINTENANCE** > **Upgrade** page.

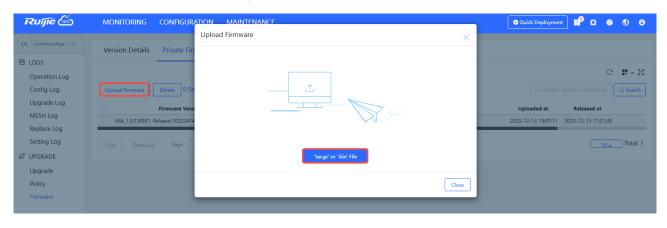


7.2.3.2 Private Firmware

The Private Firmware list displays the private firmware uploaded by all accounts under a tenant.



Click Upload Firmware, and then click 'tar.gz' or '.bin' File to upload a private firmware.

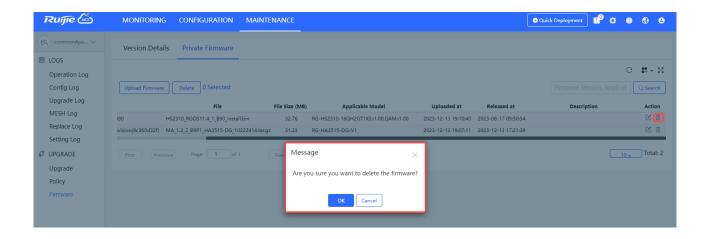




Click in the **Action** column to edit the **Description** of firmware.



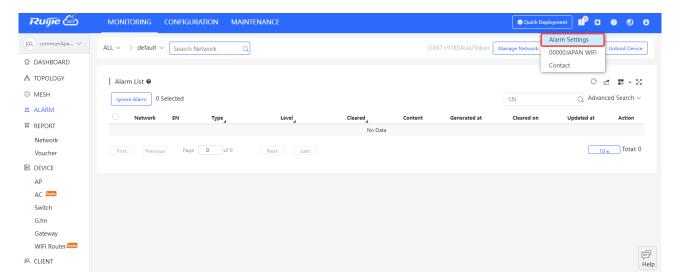
Click **Delete** or in the **Action** column to delete private firmware.



8 System Settings

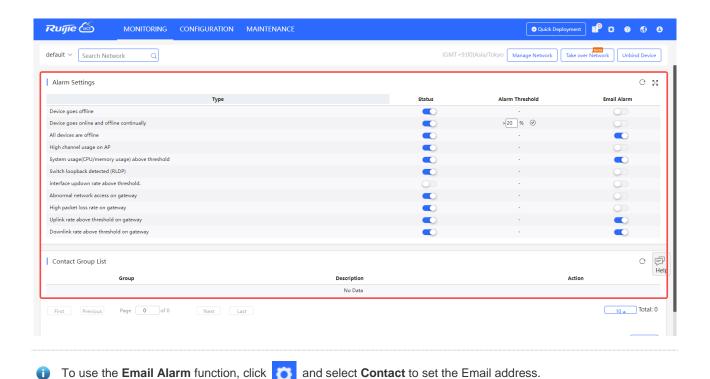
8.1 Alarm Settings

Click in the upper right corner and select **Alarm Settings**. The **Alarm Settings** page is displayed for alarm parameter configuration.



Alarm settings are configured by network. If no alarm settings are configured, the global settings are adopted.

On the **Alarm Settings** page, you can configure to receive alarms or not and in which way. When the **Status** is enabled, alarm information is displayed on the **Alarm** page. Alarms can be pushed via Email only when the **Status** is enabled. When the **Email Alarm** is enabled, alarms will be pushed via Email to the contacts in the **Contact List** of the network.

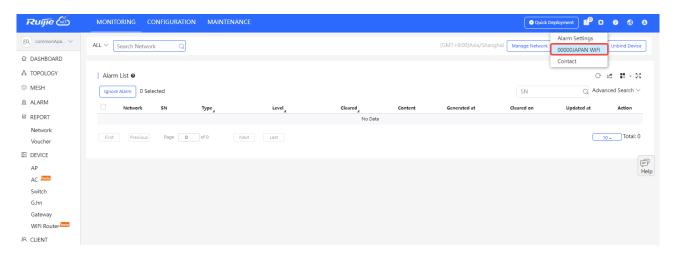


8.20000JAPAN WiFi

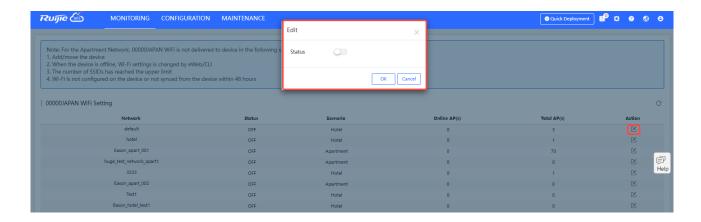
00000JAPAN WiFi is a free Wi-Fi with no requirement for authentication. In disaster, it can be quickly enabled and deployed to provide Internet access.

00000JAPAN WiFi can be enabled by one click. As long as the layer-1 network is enabled, the devices of this network and its sub networks will be turned on as well. When the layer-1 network is disabled, the devices will be turned off.

Click in the upper right corner, and select **00000JAPAN WiFi** to open the configuration page.



Click in the **Action** column to edit the 00000JAPAN WiFi setting.

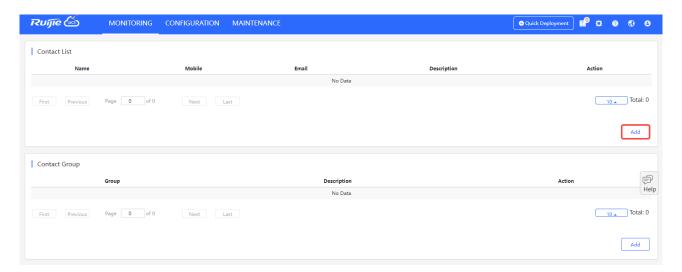


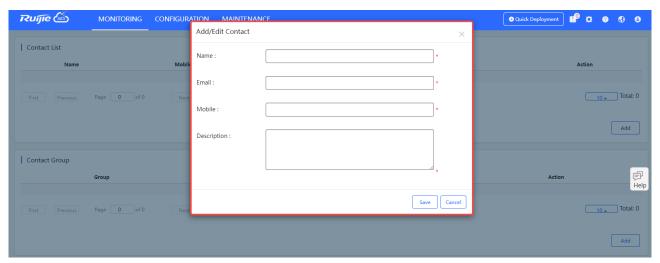
8.3 Contact

On the **Contact** page, you can create contact groups, and add contacts to contact groups.

8.3.1 Contact List

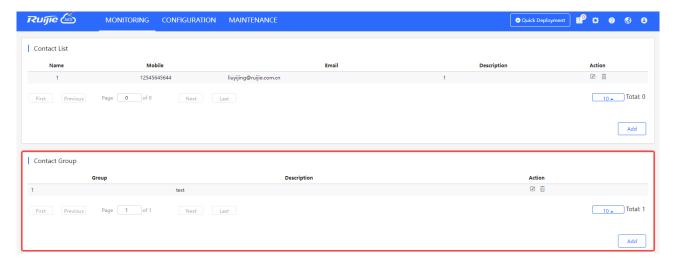
Add a contact as the Email recipient.

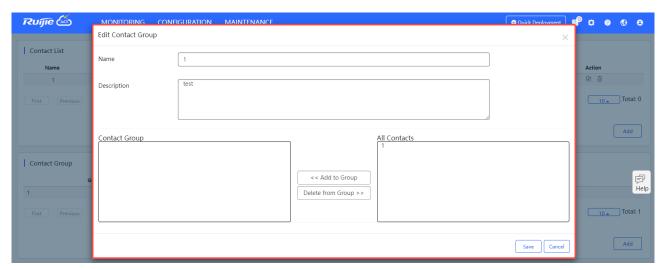




8.3.2 Contact Group

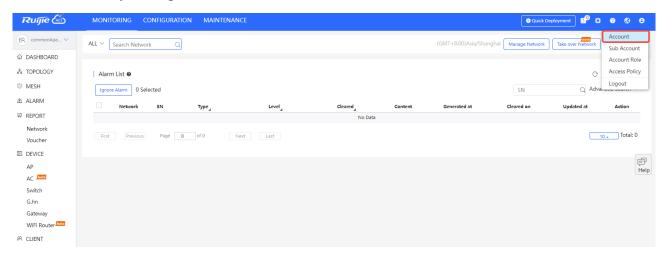
Add a group and move the contacts to the group.





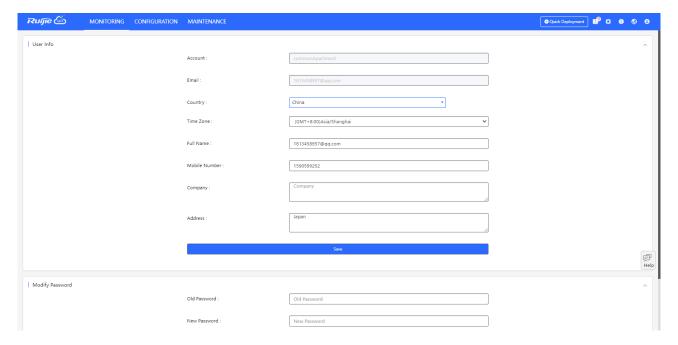
9 Account

Point to on the upper right corner, the **Account** menu is displayed, which includes **Account**, **Sub Account**, **Account**, **Role**, **Access Policy** and **Logout**.



9.1 Account

The **Account** page is divided into the **User Info** area and **Modify Password** area. In the **User Info** area, you can edit the basic information of user (**Username** and **Email** is not allowed to be changed); In the **Modify Password** area, you can change the login password.



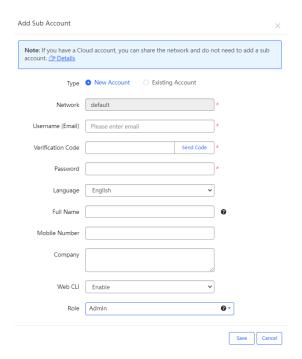
9.2 Sub Account

The **Sub Account List** displays the information of sub accounts. Click in the **Action** column to edit the sub account. Click in the **Action** column to delete the sub account.

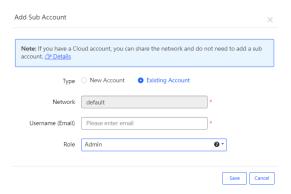


Click **Add Sub Account** to add a new sub account. Select the network, enter the Email in the **Username** box and click **Send Code**. Enter the security code contained in the Email, set the password, language, full name, mobile number and role, and click **Save**.

Role: **Admin** owns the permissions to create an account. **Employee** owns the permissions to edit data. **Operator** owns the permissions to print voucher and view account data. **Guest** owns the permissions to view data. For the custom role, you can customize its read and write permissions.

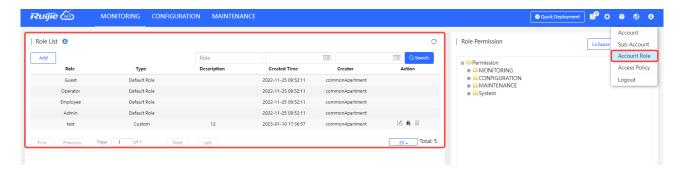


The existing sub account can be added to the network so that a sub account can manage multiple networks.

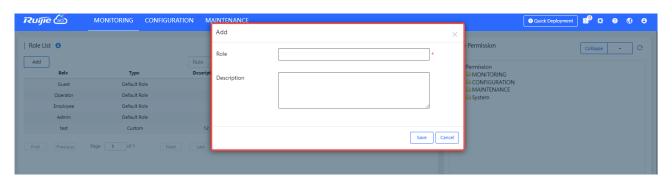


9.3 Account Role

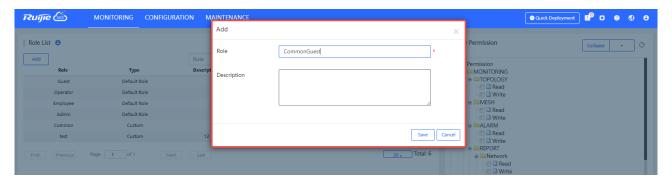
The Role List displays all default roles and custom roles of the tenant.

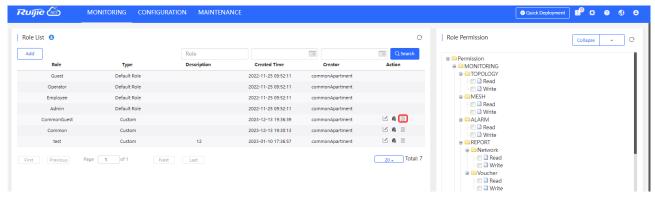


Click Add to add a custom role.



Click to edit the role; click to configure the role permissions.





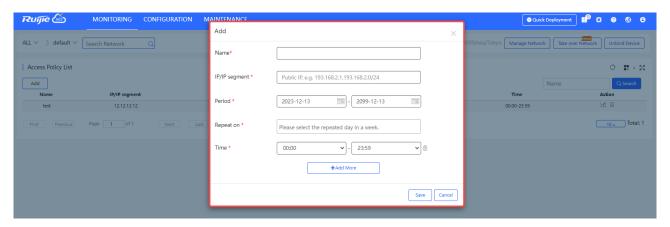
Click to delete the custom role.

9.4 Access Policy

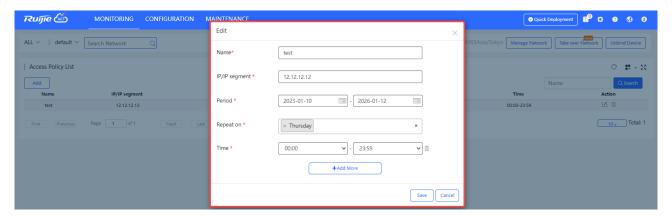
The Access Policy List displays all access policies of the tenant.



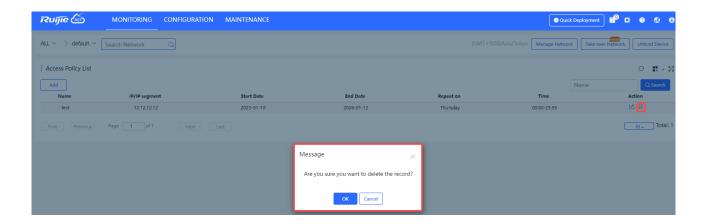
Click Add to add a new access policy.



Click do edit the existing policy.

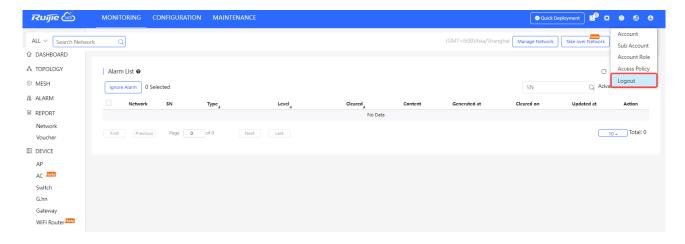


Click to delete the access policy.



9.5 Logout

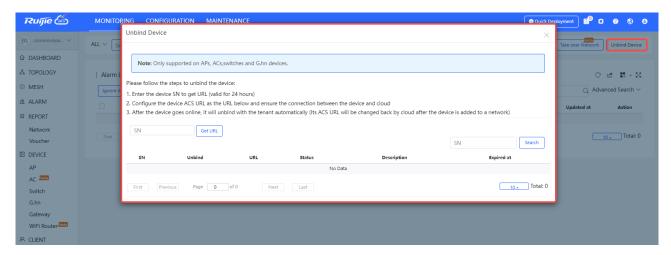
Click **Logout** to exit the system and return to the login page.



User Guide Unbind Device

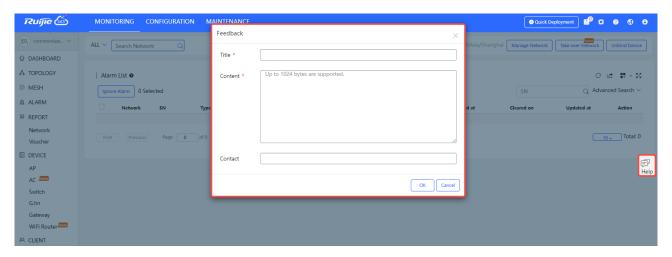
10 Unbind Device

Click **Unbind Device**, enter the device SN to get URL. Configure the ACS URL as the URL on device, and the device will automatically unbind on Cloud.



11 Feedback

You can click the Help icon to give feedbacks on the issues you meet or offer suggestions to us.



User Guide Appendix

12 Appendix

12.1 Acronyms and Abbreviations

Acronyms and	Full Name	
Abbreviations		
AP	Access Point	
AC	Access Controller	
BOSS	Business & Operation Support System	
DHCP	Dynamic Host Configuration Protocol	
DNS	Domain Name Server	
EAP	Extensible Authentication Protocol	
EAPOL	EAP over LAN	
EAP AKA	Extensible Authentication Protocol Method for 3rd Generation Authentication and Key Agreement	
ESSID	Extended Service Set Identification	
FTP	File Transfer Protocol	
HLR/AuC	Home Location Register	
HTTP	Hypertext Transfer Protocol	
IMSI	International Mobile Subscriber Identification	
MSISDN	Mobile Subscriber ISDN	
NAT	Network Address Translation	
PAT	Port Address Translation	
Radius	Remote Authentication Dial In User Service	
SNMP	Simple Network Management Protocol	
SSID	Service Set Identifier	
UDP	User Datagram Protocol	
VPN	Virtual Private Network	
WEP	Wired Equivalent Privacy	
WPA	Wi-Fi Protected Access	
WAPI	Wireless LAN Authentication and Privacy Infrastructure	
WLAN	Wireless Local Access Network	

12.2 Glossary

Term	Definition
Cloud	Specify the cloud center management end, supports private and public clouds, allows separate
	deployment of a system of a private cloud version, and provides cloud services of the public
	cloud version.
Network	Enable the device grouping for easy management of a large quantity of devices. It is
	recommended that networks be added by geographical location or device use.

12.3 Limitations

No.	Module	Description
1	Device	Up to 200 devices can be imported each time. To import more than 200 devices, users need to do it in batches.
2	Configuration	Configurations of up to 200 devices can be imported each time. To import configurations of over 200 devices, users need to do it in batches.
3	EXCEL template	For the Excel template, only the XLS format is supported.
4	SSID	SSIDs can be made up of numbers, English letters, and "-".
5	Custom excel template	In an Excel template for customization, A to Z columns and 1 to 15 rows are supported.
6	AP	Account-based policies may fail on some models, such as AP680(CD), where they are disabled by default. In this case, users need to batch apply from the Cloud the web-auth acct-update-interval 1 command to enable those policies.
7	SSID reverse sync	The Cloud does not support SSIDs containing special characters. If such SSIDs are set on end devices, the Cloud will fail to deliver them after they are synchronized to the Cloud.
8	00000JAPAN WiFi	In the Apartment Scenario, if the device goes offline after 00000JAPAN Wi-Fi is enabled, and then goes online after 00000JAPAN Wi-Fi disabled, Cloud will not re-configure the Wi-Fi settings on device. You need to clear 00000JAPAN Wi-Fi configuration manually.
9	AP	In non-apartment Scenario, please clear the configuration on devices except AP180 before bring them online; otherwise, the configuration on devices may be conflict with that on Cloud, and the client may not be able to access the Internet.
10	AP	In non-apartment Scenario, if the working mode (bridge mode or routing mode) of AP180 is different from that on Cloud, the client may not be able to access the Internet.
11	TOPOLOGY	 Only devices connected to the downlink port of the switch can be detected. Only EG5210-JP, XS-1930J series switches, Aps, RG-HS2310-16GH2GT1XS and RG-HA3515-DG can be displayed in the topology. Only the devices in the same network and subnetwork can be displayed in the topology. DHCP Diagnosis: only supports dynamic IP; the IP address of device can be recognized correctly only after four hours when its address pool range is changed.

		 When the downlink devices of EG5210-JP are offline, they still can be displayed in the topology for 1 hour, but the traffic information of interfaces cannot be displayed. Loop detection is not supported. RG-HS2310-16GH2GT1XS and RG-HA3515-DG are displayed in the Topology page only when the root node is RG-HS2310-16GH2GT1XS or when the RG-HS2310-16GH2GT1XS is directly connected to EG5210-JP.
12	TOPOLOGY	The uplink ports of some switches cannot be shielded in the topology as the Cloud fails to identify them. Included: XS-S1930J-8GT2SFP, XS-S1930J-8GT2SFP-P XS-S1930J-18GT2SFP, XS-S1930J-18GT2SFP-P XS-S1930J-24GT4SFP/2GT, XS-S1930J-24GT4SFP/2GT-P XS-S1930J-48GT4SFP
13	Initial Configuration Template	The template can only be applied to AP180 series access points in Apartment networks.
14	CLI Command	Only for AP and CAP series products.
15	WPA3-SAE	Only for MA2610 and MA2810 access points in hotel networks.
16	Device Details-Back Up	Only for apartment networks.
17	Network Management	Level 5 subnetwork group is supported.
18	Upgrade Policy	 Not supported in sub accounts and networks shared by another networks. Only for MA and AP180 series access points. Only one upgrade policy can be configured for a device model.
19	Quick Deployment	 This feature is applicable only to AP180 series access points. Switches only can detect the APs that can access wide area networks.
20	RG-HS2310- 16GH2GT1XS	Ruijie JaCS doesn't support displaying the configurations of G.hn ports as well as delivering configurations to them.