

Ruijie Reyee RG-RAP Series Access Points ReyeeOS 2.262

Web-based Configuration Guide



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Preface

Audience

This document is intended for:

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

Technical Support

- Official website of Ruijie Reyee: <u>https://www.ruijienetworks.com/products/reyee</u>
- Technical support website: <u>https://ruijienetworks.com/support</u>
- Case portal: <u>https://caseportal.ruijienetworks.com</u>
- Community: <u>https://community.ruijienetworks.com</u>
- Technical support Email: service_rj@ruijienetworks.com

Conventions

1. GUI Symbols

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

2. Signs

The signs used in this document are described as follows:

U Warning

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

A Caution

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

Note

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

Specification

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

3. Note

This manual introduces the product model, port type and CLI for your reference. In case of any discrepancy or inconsistency between the manual and the actual version, the actual version prevails.

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1 Fast Internet Access

1.1 Configuration Environment Requirements

1.1.1 PC

- Browser: Google Chrome, Internet Explorer 9.0, 10.0, and 11.0, and some Chromium/Internet Explorer kernel-based browsers (such as 360 Extreme Explorer) are supported. Exceptions such as garble or format error may occur if an unsupported browser is used.
- Resolution: 1024 x 768 or a higher resolution is recommended. If other resolutions are used, the page fonts and formats may not be aligned, the GUI is less artistic, or other exceptions may occur.

1.2 Default Configuration

Item	Default
IP address	10.44.77.254
Username/Password	A username is not required when you log in for the first time. The default password is admin .

Table 1-1 Default Web Configuration

1.3 Login to Eweb

1.3.1 Connecting to the Access Point

You can open the management page and complete Internet access configuration only after connecting a client to the access point in either of the following ways:

Wired Connection

Connect a local area network (LAN) port of the access point to the network port of the PC, and set the IP address of the PC. See <u>Configuring the IP Address of the Management Client</u>.

Wireless Connection

On a mobile phone or laptop, search for wireless network **@Ruijie-S***XXXX* (XXXX is the last four digits of the MAC address of each device). In this mode, you do not need to set the IP address of the management Client, and you can skip the operation in <u>Configuring the IP</u> <u>Address of the Management Client</u>.

1.3.2 Configuring the IP Address of the Management Client

Configure an IP address for the management client in the same network segment as the default IP address of the device (The default device IP address is 10.44.77.254, and the subnet mask is 255.255.255.0.) so that the management client can access the device. For example, set the IP address of the management client to 10.44.77.100.

A Caution

- Make sure that the client can access the Eweb system as long as it can ping the access point.
- The IP address of the management client cannot be set to 10.44.77.253, because this IP address is reserved by the device. If the management client uses this IP address, it cannot access the device.

1.3.3 Logging in to the Web Page

(1) Enter the IP address (10.44.77.254 by default) of the access point in the address bar of the browser to open the login page.

Note

If the static IP address of the device is changed, or the device obtains a new dynamic IP address, the new IP address can be used to access the web management system of the device as long as the management client and the device are in the same network segment of a LAN.

(2) On the web page, enter the password and click **Log In** to enter the web management system.

Reyce	
Password Lo Forgot Password?	> _{bes} t og In English マ
Google Chrome and IE browser 9, 10 or 11 are supp	orted. Copyright@2000-2023 Ruijje Networks Co., Ltd. WEB

You can use the default password **admin** to log in to the device for the first time. For security purposes, you are advised to change the default password as soon as possible after logging in, and to regularly update your password thereafter.

If you forget the IP address or password, hold down the **Reset** button on the device panel for more than 5 seconds when the device is connected to the power supply to restore factory settings. After restoration, you can use the default IP address and password to log in.

A Caution

Restoring factory settings will delete the existing configuration and you are required to configure the device again at your next login. Therefore, exercise caution when performing this operation.

1.4 Work Mode

The device can work in the router mode, AP mode or wireless repeater mode. The displayed system menu page and function ranges vary with the work mode. The RAP works in the AP mode by default. If you want to switch the work mode, see <u>Switching Work Mode</u>.

1.4.1 AP Mode

The device performs L2 forwarding and does not support the DHCP address pool function. In AP mode, the device often networks with devices supporting the routing function. IP addresses of downlink wireless clients are assigned and managed by the uplink device (supporting the DHCP address pool) of the AP in a unified manner, and the AP only transparently transmits data.

1.4.2 Router Mode

The device supports NAT routing and forwarding. The addresses of wireless clients can be assigned by the AP and wireless network data is routed and forwarded by the AP. NAT is supported in this mode. When an AP works in the router mode, it supports device networking, network-wide configuration, and AP-specific radio functions.

There are three Internet types available: PPPoE, DHCP mode and static IP address mode. You can connect the device to an Ethernet cable or an upstream device.

A Caution

After switching to the router mode, the device's LAN IP address will change to 192.168.120.1. Please obtain an IP address automatically for your management client and enter 10.44.77.254 into the address bar of the browser to log in to Eweb again.

1.4.3 Wireless Repeater Mode

The device does not support the routing and DHCP server functions in the wireless repeater mode. IP addresses of the clients are assigned and managed by the primary router. On an available network, the device can be connected to the primary router through wireless connection to expand the Wi-Fi coverage and increase the number of LAN ports and wireless access devices.

1.5 Configuration Wizard (Router Mode)

Upon first login, you can perform quick configuration procedures to configure the Internet type, Wi-Fi network and management password.

1.5.1 Getting Started

- (1) Connect the device to a power supply and connect the port of the device to an upstream device with an Ethernet cable. Or you can connect an Ethernet cable to the device.
- (2) Configure the Internet connection type according to requirements of the local Internet Service Provider (ISP). Otherwise, the Internet access may fail due to improper configuration. You are advised to contact your local ISP to confirm the Internet connection type:
 - Figure out whether the Internet connection type is PPPoE, DHCP mode, or static IP address mode.
 - o In the PPPoE mode, a username, a password, and possibly a service name are needed.
 - In the static IP address mode, an IP address, a subnet mask, a gateway, and a DNS server need to be configured.

(3) The device works in the AP mode by default. If you want to switch the work mode to the router mode, perform the configuration on the work mode setting page. See <u>Switching</u> <u>Work Mode</u> for more details.

Work Mode: AP 🖉
Description:
 The device IP address may change upon mode change.
Change the endpoint IP address and ping the device.
 Enter the new IP address into the address bar of the browser to access EWEB.
4. The system menu varies with different work modes.
Work Mode Router 🗸 ⊘
Self-Organizing 🔵 🕐
Network
AC 🕜 🕐
Save

1.5.2 Configuration Steps

1. Add a Device to Network

You can manage and configure all devices in the network in batches by default. Please verify the device count and network status before configuration.

Note

New devices will join in a network automatically after being powered on. You only need to verify the device count.

If a new device is detected not in the network, click **Add to My Network** and enter its management password to add the device manually.

Ruíji	e Rcycc	Discover Device					English 🗸 🕞	Exit
	Total Devid	ces: 1. Ire that the device count an	d topology are corr	ect. The unmanage	ed switch will not appear	r in the list.	0	
	Net Status (Online Devices / Total)	Route 0 Route		Switch 0 / 0 Switches	- (〒) 1/1 APs	Refresh ©	
	My Netv	work						
	test (1 devi	ces)					~	
		Model	SN	IP	MAC	Software Ver		
	SCAP RA	[Master] C	61Q 0477	19).2	AA:1)4:77	ReyeeOS 1.		
			Red	iscover	Start Setup			

2. Creating a Network Project

Click **Start Setup** to configure the Internet connection type, Wi-Fi network and management password.

- (1) Network Name: Identify the network where the device is located.
- (2) **Internet**: Configure the Internet connection type according to requirements of the local Internet Service Provider (ISP).
 - DHCP: The access point detects whether it can obtain an IP address via DHCP by default. If the access point connects to the Internet successfully, you can click Next without entering an account.
 - PPPoE: Click PPPoE, and enter the username, password, and service name. Click Next.
 - o Static IP: Enter the IP address, subnet mask, gateway, and DNS server, and click Next.
- (3) **SSID and Wi-Fi Password**: The device has no Wi-Fi password by default, indicating that the Wi-Fi network is an open network. You are advised to configure a complex password to enhance the network security.
- (4) Management Password: The password is used for logging in to the management page.

- (5) **Country/Region**: The Wi-Fi channel may vary from country to country. To ensure that a client searches for a Wi-Fi network successfully, you are advised to select the actual country or region.
- (6) **Time Zone**: Set the system time. The network time server is enabled by default to provide the time service. You are advised to select the actual time zone.

Ruíjie RCYCC C Create Network	E	nglish ~	🕒 Exit
* Net	Vork Name Example: XX hotel.		
Netwo	< Settings		
	Internet OPPOE ODHCP Static IP		
* N	anagement Please remember the management pass %* Password		
Country	/Region/Time Zone V		
	try/Region China (CN) ~ Time Zone (GMT+8:00)Asia/Shanghai ~		
	Previous Create Network & Connect		

Click **Create Network & Connect**. The device will deliver the initialization and check the network connectivity.

Network Name: demo SSID: @Ruijie-s0477 Redirecting	* Not		Operation succeeded.		
		Name	e: demo @Ruijie-s0477	7	

The device can access the Internet now. Bind the device with a Ruijie Cloud account for remote management. Follow the instruction to log in to Ruijie Cloud for further configuration.

🚺 Note

- If your device is not connected to the Internet, click **Exit** to exit the configuration wizard.
- Please log in again with the new password if you change the management password.

1.6 Configuration Wizard (AP Mode)

1.6.1 Getting Started

- Power on the device and connect the device to an upstream device.
- Make sure that the device can access the Internet.

1.6.2 Configuration Steps

The device obtains the IP address through the DHCP by default. Configure the SSID, Wi-Fi password and management password. The default Internet connection type is DHCP mode. You are advised to use the default value.

Ruíjie Rcycc	Create Network			English 🗸 🕞 Exit
	* Network Name	Example: XX hotel.		
	Network Setting	5		
	Internet	• DHCP O Static IP		
	* SSID	@Ruijie-s0477		
	Wi-Fi Password	• Security Open		
		•••••	***	
	Management Pas	ssword (Please remember the pas	sword.)	
	* Management Password	Please remember the management pas:	>74	
	Country/Region/	Time Zone	~	
	* Country/Region	China (CN)	~	
	* Time Zone	(GMT+8:00)Asia/Shanghai	~	
		Create Network & Connect		

1.7 Configuration Wizard (Wireless Repeater Mode)

1.7.1 Getting Started

- Before configuring the wireless repeater mode, configure the primary router and test that the primary router can access the Internet.
- Place the device where it can discover at least two-bar Wi-Fi signal of the primary router.

A Caution

No Ethernet cable is required in the wireless repeater mode. The wireless network stability can be affected by many factors. Therefore, the wired connection is recommended.

1.7.2 Configuration Steps

(1) Connect the device to a power supply without connecting an Ethernet cable to the uplink port, and click **Start Setup**.

Ruffe Rcycc Discover Device					English 🗸 🕞 Exit
Total Devices: 4. Other Devic Please make sure that the device count a	-		will not appear in the li	st. View Topology	0
Net Status (Online Devices / Total)	Router 0 Router	Switch 0 / 0 Switches	つう つ	3 Other Devices	Refresh Q
My Network					
Unnamed Network (1 devices)					~
Model	SN	IP	MAC	Software Ver	
AP RA [Master]	G1QI 610	1 ? EC:	8 4:BF	ReyeeOS 1.	
Other Devices ()					
New Device (1 devices)	Add to My Netw	ork			>
EWEB ECB970F24902 (1 devices)	Add to My Netw	ork			>
	Rec	discover Start	Setup		

(2) If you see a dialogue box indicating that the Ethernet cable is not connected to the WAN port, click **Wireless Repeater**.

WAN port is not connected with network cable				
Ethernet status				
Connected Please connect the WAN port to the Internet.				
WAN LAN 172.26.1.32				
Cancel Wireless Repeater Check Ag	ain			

(3) Select the primary router SSID that requires expanding the Wi-Fi coverage, enter the Wi-Fi password of the primary router, and click **Next**.

R	Wireless Repeate	r				English \sim	🕞 Exit
		Qssi	D		G		
		5G	@Ruijie-s1577_5G		A 🛜	•	
		5G	xiaoxi_5G		A 🛜		
		5G	ruijie-guest		(î~		
		5G	ruijie-802.1x		A 🛜		
		_					
R	Wireless Repeate	r				English \sim	🕞 Exit
		Confir	m SSID and Wi-Fi Key:				
		Prim	ary Router SSID				
		@	Ruijie-s1577_5G				
		* Pas	ssword				
		Ple	ase enter a password.		0		
			Previous	Next			

(4) Set the SSID and password and click Save. Then, the Wi-Fi network will be restarted.

R Wireless Repeater	English 🗸 🕞 Exit
Local Router Wi-Fi	
• New Wi-Fi O Same as Primary Router Wi-Fi	
* SSID (2.4G)	
@Ruijie-s1577_5G_plus	
* SSID (5G)	
@Ruijie-s1577_5G_plus_5G	
* Wi-Fi Password	
12345678 💿	
Previous Save	

1.8 Introduction to the Eweb GUI

To facilitate flexible device management, the Web page displays different system configuration menus in different work modes. For details about the work mode, see <u>Switching Work Mode</u>.

As to the RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-RAP6262 models, please refer to Dual Management Webpages.

As to other RAP models, please refer to Single Management Webpage.

🚺 Note

When the self-organizing network is enabled, the Eweb GUI is subject to the master device in the network. If the master device supports the dual management webpages, the slave device also displays the dual management webpages.

1.8.1 Single Management Webpage

1. Network-wide Management

The device works in self-organizing network mode by default. The Web page displays the network-wide management menu on the left side, in which you can check the current status of all devices in the network, and modify network-wide configuration, including global Wi-Fi network management configuration (APs and Wi-Fi), routing management configuration (if

routers exist in the network), switch management configuration, and network-wide management configuration (time, password, network-wide reboot, and other system settings).

[®] Online Clients [®] Router [®] Wireless [®] Switches [®] Network [®] Network [®] Real-Time Flow (Kbps) [¶] Call [¶] Real-Time Flow (Kbps) [¶] Real-Time Flow (Kbps) [¶] Plow → Downlink Flow	Ruíjie Royco	test > Ruijie (@twei) • English ~ 〇 闘 会 @ 茁 [}
Net Status (Online Devices / Total) Refresh Image: Control in the status of the status	⑧ Online Clients	Hostname: Ruijie SN: G1QHE IP: 192.16 MAC: EC:89: RAP	
50 - Uplink Flow - Downlink Flow 40 30 20			
0 2322301 232321 232341 2324101 232421 232441 232501 232521 232541 232551 232602 232613 232624 232645		Uplink Flow Downlink Flow	(A)

2. Standalone Management

• If a device is in self-organizing network mode, click the name of the currently logged in device or click **Manage** of a specified device in the device list to configure and manage the device.

Ruíjie Rcycc	est > Ruijie (Slave) Ø	English - 〇 顓 👌 @ 直
중 Overview	() AP List	0
A Router	AP List Group: All Groups Expand	IP/MAC/hostname/SN/SoftWare Ver Q List Filter Batch Action ~
ি®Wireless ∧	Action Hostname \Rightarrow IP \Rightarrow	$\begin{array}{ccc} MAC \ \Leftrightarrow & Status \ \Leftrightarrow & Model \ \Leftrightarrow & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & &$
APs Wi-Fi	Manage ⁽¹⁾ Reboot Ruijie 192 24	0 EC:E 4:BF Online RAP2260(E) 0
Clients Blacklist/Whitelist	☐ [@] Manage ⁽¹⁾ Reboot Ruijie 19 2	9 AA:1 4:77 Offline RAP6262(G) 1

test > Ruijie (Sir (AP List	RAP2260(E) I Overview Basics × Wirelet	P: 192.168.110.240 M	SN: G1QH6WX000610 AC: EC:B9:70:23:A4:BF ics ~ System ~	(1) Reboot
AP List G	Overview			
T T Ma	Memory Usage 56%	Online Clients 0	Status: Online Duration: 2 days 3 hours 25 minutes 33 seconds Systime: 2022-03-31 23:30:09	
→	Device Details Model: RAP2260(E) SN: G1()06 Work Mode: AP & Hardware Ver: 1,00	10	Hostname: Ruijie & MAC: EC: 4:BF Role: Slave AP (Master AC: 192.168 Software Ver: ReyeeOS 1.	s.110.1)

• If a device is in standalone mode, you can configure and manage only the currently logged in device. The Web page displays the function configuration menu of a single device on the left side.

Ruijie Rcycc	test 👌 Ruijie 🕖		English - 🛆 鼹 🛕 🔍 酋 🕞
	Overview		
⊕ Dasics ~	Memory Usage 57%	Online Clients	Status: Online Duration: 2 days 3 hours 29 minutes 50 seconds Systime: 2022-03-31 23:34:26
Advanced ∨ Q Diagnostics ∨	Device Details		
System V	Model: RAP2260(E) SN: G1QH6WX000610 Work Mode: AP 2 Software Ver: ReyeeOS 1.		stname: Ruijie & MAC: EC:B9:70:23:A4:BF are Ver: 1.00
	Wi-Fi		
	Primary Wi-Fi: @Ruijie-s1234 Security: No		st Wi-Fi:
	Interface Details		
		WAN LA 192.168.110.240	N
«Collapse			

1.8.2 Dual Management Webpages

1. Introducing the Management Mode

If the self-organizing network is disabled (The function is enabled by default. See <u>Switching</u> <u>Work Mode</u> for details.), the device works in the local device mode displayed on the Web page.

If the self-organizing network is enabled, the device can work in the network mode and the local device mode. The two modes can be switched on the Web page.

- Network mode: View the management information of all devices in the network, and configure all devices based on network management.
- Local Device mode: Only configure the currently logged in devices.

Ruíjie Rcycc Currently in Network mode ______ Q English → ____ Remote O&M 🔮 Network Configuration @ Network Check 👸 Alert 🕞 Log Ou Navigation Q Navigation Status Clients 0 > List Topol 3/1 Online ☆ Overview Alert Center All (1) 옮 Network The network contains different types o. Devices A device (MACCEG2 Olients Managemén Olients Common Functions :8: System WIO WIO will help optimize ... Disabled Not in SON Network Planning Wi-Fi VLAN (1): Add RAP2260E (por Wired VLAN (1): VLAN1 Not in SON AP Gro RG-ES205GC Undated on:2023-06-08 16:36:55 «Collapse

Network mode webpage

Local Device mode webpage

Ruíjie Royco		English ~ ∩ Remote O	&M 좋 Network Configuration @ Network Check
Device Overview Online Clients	Device Info		
Network WLAN	Memory Usage 56%	Online Clients 0	Connection Status: Online Uptime: 5 hours 15 minutes 45 seconds System Time: 2023-06-08 16:53:17
 Advanced Advanced Qoliagnostics System System 	Device Details Device Model: RAP2260(E) MAC Address: 9C; :85 Hardware Version: 1.00 Wi-Fi	Device Name: Ruijie & Working Mode: AP & Software Version: ReyeeOS	SN: Role: Master AP @
	Primary Wi-FI: RAP2260E Security: No Ethernet status	Guest Wi-Fi: Security: No	
«Collapse	Connected		

2. Switching the Management Mode

Click the current management mode in the navigation bar, and select the mode in the dropdown box to switch the work mode of the device.

Ruíjie Rcycc Networkwide		Navigation Q	English ~	☐ Remote O&M	A Network Configuration	Network Check	濟 Alert	🕞 Log Out
			_					
Ruíjie Rcycc	ide Management A	ntly in Network r	node.					
Q Navigation	Networkwide Management	ents	Topology	y List				
1 Overview	Local Device(R/	>						
움 Network ~	Alert Center	All (1)						
	1							

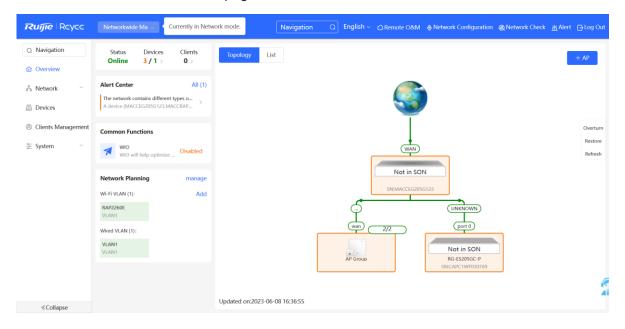
2 Network Monitoring

A Caution

The functions mentioned in this chapter are supported by only RG-RAP2260(G), RG-RAP6260(G), RG-RAP6260(G), RG-RAP6260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2260, RG-RAP2266, RG-RAP1261, RG-RAP1260, and RG-RAP6262.

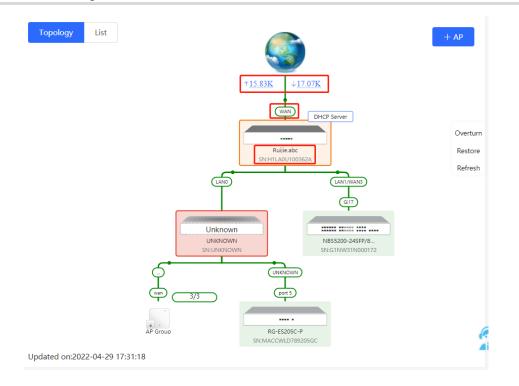
In Network mode, select Overview.

The **Overview** webpage displays the current network topology, real-time uplink and downlink flow, networking status, and the number of users. The quick access to network and device settings is also provided on the **Overview** webpage. Users can monitor, configure and manage the network status on the current page.

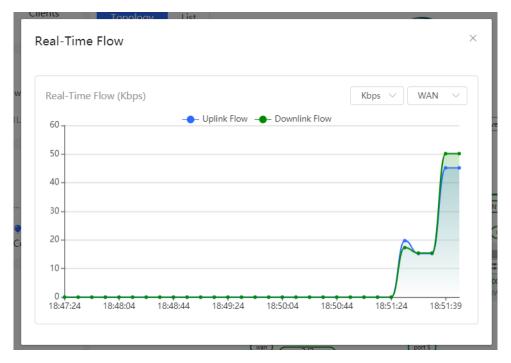


2.1 Viewing the Network Information

You can view the online device, port ID, device SN as well as the real-time uplink and downlink flow in the network topology.



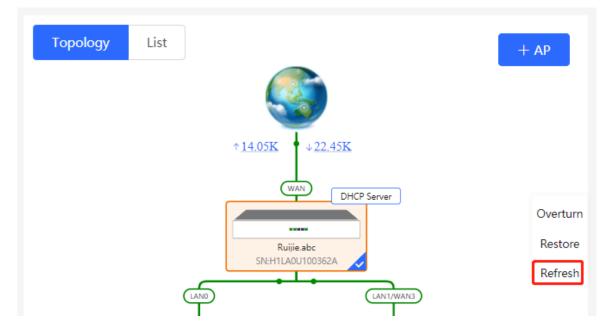
• Click the flow data and view the real-time flow.



Click the device in the topology to view the operating status and configuration of the device and configure the device functions. The hostname is set to the product model by default.
 You can click to modify the hostname.

Topology List	EGW	Hostname <mark>Ruijie.abc</mark> Model:EG205G SN:H1L/ 62A	<u>e</u>	Software Ver:ReyeeOS MGMT IP:192,168.110.1 MAC: 00:7 d:85)
PIESSING I LEASE PIESSING I LEASE Overtum PIESSING Restore Refresh	 ▶ Port Status VLAN Info Port More 	Port Status	LANO LAN1 LA	anz wani wan	
		VLAN			Edit 🕲
Ar Berner Re Exact P DesMCCMEDMODE		Default VLAN	IP	IP Range	Remark
Updated on:2022-04-29 17:31:18		LAN0,1	192.168.110.1	192.168.110.1- 192.168.110.254	

• The update time of the topology is displayed at the bottom left corner. Click **Refresh** to update the topology to the latest status. Please wait for a few minutes for the update.



2.2 Adding Network Devices

2.2.1 Wired Connection

(1) If a new device is connected to the device in the network through wired connection, a prompt message will pop up, indicating that a device not in SON (Self-Organizing Network) is discovered. The number (in orange) of devices that are not in SON is displayed under the **Devices** at the top left corner of the page. Click **Manage** to add the device to the current network.

App 🔮 Network	Tip × ^t A devices not in SON is discovered.Manage
	evices Clients 1 / 5 > 4 > Topology List
Unknown:	1 ⑦ { A non-Ruijie device or a Ruijie device not enabled with SON.
Not in SON:	1 Manage>>
In SON:	5
Gateway:	1
AP:	2
Switch:	2
AC:	0
Router:	0
אנטיי 🐺 עו	HCP 🐺 Balch

(2) Go to the **Network List** page, click **Other Network** to select the target device and click **Add to My Network**.

<i>Network List</i> Every network varies in devices ar	nd configuration. You can add devices o	f Other Network to My Netw	/ork.		?
My Network					
AA (1 devices)					~
Device Model	SN	IP Address	MAC Address	Software Version	
AP RAP2260(E) [Master]	G1QI 705B	192.168.125.187	9C:2 B:85	ReyeeOS 7	
Other Network					
111 (1 devices)	+ Add to My Network				~
Device Model	SN	IP Address	MAC Address	Software Version	
A P RAP2200(E)	MAC)0E0	192.168.125.210	00:E 8:48	ReyeeOS	
Ihf (1 devices)	+ Add to My Network				>
Unnamed Network (1 devices)	+ Add to My Network				>

If the target device is not configured yet, you can add the device directly without a password. If the device is configured with a password, please enter the management password of the device. If the password is incorrect, the device cannot be added to the network.

Add Device to My Network						
* Password	* Password Please enter the management passwo					
	Forgot Password Add					

2.2.2 AP Mesh

(i) Note	
This function is not supported by RG-RAP1200(F) and RG-RAP2200(F).	

1. Overview

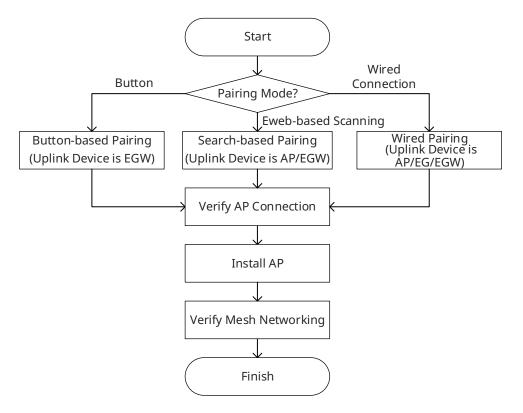
After being powered on and enabled with Mesh (see 3.19____ for details), a Mesh-capable new AP can be paired with other Mesh-capable wireless devices on the target network through

multiple ways. Then the AP will be synchronized its Wi-Fi configuration with other devices automatically. Mesh networking addresses pain points such as complex wireless networking and cabling. A new AP can be connected to any uplink wireless device among AP, EG router, and EGW router in the following ways:

- Button-based pairing: Short press the Mesh button on the EGW router on the target network to implement fast pairing of the AP with the EGW router.
- Search-based pairing: Log in to the Eweb of a device on the target network. Search and add APs to be paired.
- Wired pairing: Connect the new AP to a wireless device on the target network using an Ethernet cable. The new AP will go online on the target network.

After pairing finishes, the new AP obtains the wireless backhaul information from network-wide neighboring APs. Install the new AP as planned, and it will connect to the optimal neighboring AP.

2. Configuration Procedure



3. Configuration Steps for Button-based Pairing (Uplink Device is an EGW Router)

A Caution

- Only EG105GW-X and EG105GW(T) support button-based pairing and each router can be paired with up to 15 new APs.
- The new AP must be in factory status.

- It can be scanned only when the live network is enabled with Mesh (see <u>3.19 Enabling</u> <u>Revee Mesh</u> for details).
- Place the new AP no more than 2 meters away from the uplink device to ensure that the new AP can receive the Wi-Fi signal from the uplink device. The new AP may fail to be scanned due to the long distance or obstacles between it and the uplink device.
- (1) Power on the new AP and place it near the EGW router on the target network.
- (2) Press and hold the Mesh button on the EGW router for no more than two seconds to start pairing. The pairing process takes about one minute.
- (3) Check the topology on the **Overview** page to make sure that the new AP has connected to the uplink device in wireless mode.



- (4) Power off the new AP and install it as planned.
- (5) Log in to the Eweb of a device on the target network. In Network mode, choose Devices > AP. Make sure that the new AP is online and the corresponding entry contains icon

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in the **Relay Information** column. The icon indicates that wireless backhaul is performed through the 5 GHz radio.

Q Navigation	All (3) Gateway (0) AP (2) Switch (0) AC (0) Router (1)
☆ Overview	Device List
Network 🗸	A devices not in SON is discovered. Manage
🖴 Devices	Device List 🗞 Group: All Groups Expand Change Group Easic Info RF Information Model
	IP/MAC/hostname/SN/S Q To Delete Offline Devices Batch Upgrade
8 Clients Management	SN © Status © Hostname © MAC Address © IP Address © Clients © Device Group ©
System 🗸	G1NQCAM001084 Online Ruijie ℓ 80.0558.5f0:19:90 192.168.110.31 ℓ 0 egw8/±/Default Details
	□ G1QH2LV000084 Online Ruijie & C4/70.AB.A8.67.CF 192.168.110.152 & 0 egw機注/Default Details

device and RSSI.

Click View Details following the

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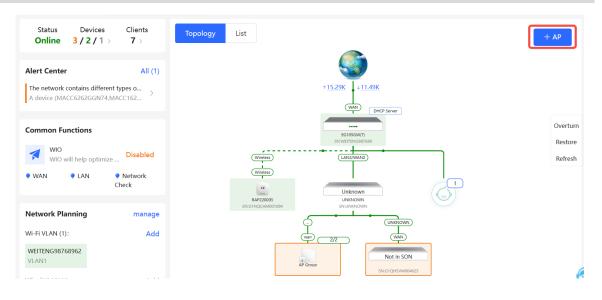
icon to obtain information about the uplink

All (3)	Gateway (0)	AP (2)	Switch (0)	AC (0)	Router (1)					
	devices not in SON	is discovered.	Manage							
Devic	ce List ີ Group:	All Groups	Expand Ch	ange Group	Basic Info	RF Information Model IP/MAC/hostname/SN	J 1/S Q	🗇 Delete Offline [Devices	Batch Upgrade
	SN ≑	Status 🌲	Hostname 🌲	MAC A	Address \$	Noise Floor: -86 dl Channel Utilization: 13 %			Relay Inform \$	nation
	G1NQCAM001084	Online	Ruijie 🖉	80:05:8	88:F0:19:90	RSSI: - 37 df Negotiation Rate: 866 M Uptime: 4 minutes 4 sec	1bps		ि 奈 5G Details	
	G1QH2LV000084	Online	Ruijie 🖉	C4:70:A	AB:A8:67:CF	Uplink]	Local	奈 5G Details	
<	1 > 10/pag	je 🗸				Ruijie	-	Ruijie		Total 2
						Model: EG105GW(T) SN: WEITENG987689 IP: 192.168.110.1	SN: G1	RAP2260(G) QH2LV000084 2.168.110.152		

4. Configuration Steps for Search-based Pairing (Uplink Device is an AP or EGW Router)

A Caution

- The new AP must be in factory status.
- It can be scanned only when the live network is enabled with Mesh (see 3.19____ for details).
- Place the new AP no more than 2 meters away from the uplink device to ensure that the new AP can receive the Wi-Fi signal from the uplink device. The new AP may fail to be scanned due to the long distance or obstacles between it and the uplink device.
- (1) Power on the new AP and place it near the AP or EGW router on the target network.
- (2) Log in to the Eweb of a device on the target network. In Network mode, click +AP in the upper right corner of the Overview page to scan the APs in other networks not plugged in with Ethernet cables.



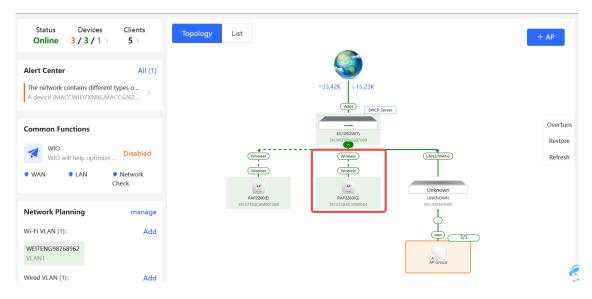
(3) Select the APs to be added and click **Add to My Network**. No more than eight APs are allowed at a time. Wait until network merging finishes.

Model	y Network SN 51QH2LV000084	BSSID c4:70:ab:a8:67:cf e-scan	RSSI	Cevice Location ③
RAP2260(G) G	51QH2LV000084	c4:70:ab:a8:67:cf	ŀ	lostname Ruijie
Other Device	_			
	R	e-scan		
New Device (1 devices) Add to My Netwo	가는 The networks are men	rging.		
	ork			
✓ Model	SN	BSSID	RSSI	Device Location \oslash
Z A P RAP2260(G)	G1QH2LV000084	c4:70:ab:a8:67:cf		Hostname Ruijie MAC 00:D0:F8:14:5C:C3 Address

Network Monitoring

Other Device				
New Device (1 devices)	Add ti 📀 Network merging succeeded.	×		
Model		ОК	RSSI	Device Location (2)
A P RAP2260(G)	G1QH21V000084	c4:70.ab:a8:67:cf	¢	Hostname Ruijie MAC 00:D0:F8:14:5C:C3 Address
	Resc	an I		

(4) Check the topology on the **Overview** page to make sure that the new AP has connected to the uplink device in wireless mode.



- (5) Power off the new AP and install it as planned.
- (6) Log in to the Eweb of a device on the target network. In Network mode, choose Devices > AP. Make sure that the new AP is online and the corresponding entry contains icon



in the **Relay Information** column. The icon indicates that wireless backhaul is performed through the 5 GHz radio.

Q Navigation	All (3) Gateway (0) AP (2) Switch (0) AC (0) Router (1)
Overview Network ✓	Device List A devices not in SON is discovered. Manage
Devices	Device List 🕃 Group: All Groups Expand Change Group Basic Info RF Information Model
 Gateway Clients Management 	SN \$ Status \$ Hostname \$ MAC Address \$ IP Address \$ Clients \$ Device Group \$
-a- 	G1NQCAM001084 Online Ruijie 2 80.05.88.f0:19:90 192.168.110.31 2 0 egw独主/Default Details
	G1QH2LV000084 Online Ruijie 之 C4:70:AB:A8:57:CF 192.168.110.152 之 0 egw做主/Default Details
	Total 2

Click View Details following the

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------	---

device and RSSI.

All (3)	Gateway (0)	AP (2)	Switch (0)	AC (0)	Router (1)					
	Device List A devices not in SON i	is discovered.	Manage							
Devi	ce List 🕃 Group:	All Groups	Expand	Change Group	Basic Info	RF Information Model IP/MAC/hostname/SI	N/S Q	n Delete Offline [Devices Batcl	n Upgrade
	SN 🔶	Status 🌲	Hostname		Address 🌲	Noise Floor: -86 d Channel Utilization: 13 %			Relay Informatio	'n
	G1NQCAM001084	Online	Ruijie 🖉	80:05:	88:F0:19:90	RSSI: -37 d Negotiation Rate: 866 N Uptime: 4 minutes 4 sec	Лbps		중 5G View Details	
	G1QH2LV000084	Online	Ruijie 🖉	C4:70:	AB:A8:67:CF		G	Local	후 5G View Details	
<	1 > 10/pag	e 🗸				Ruijie Model: EG105GW(T)	Model:	RAP2260(G)		Total 2
						SN: WEITENG987689 IP: 192.168.110.1		1QH2LV000084 2.168.110.152	J	

- 5. Configuration Steps for Wired Pairing (Uplink Device is an AP, EG Router, or EGW Router)
- A Caution
- The new AP must be in factory status.
- It can be scanned only when the live network is enabled with Mesh (see <u>3.19 Enabling</u> <u>Reyee Mesh</u> for details).
- (1) Plug one end of the Ethernet cable to the uplink port of the new AP, and the other end to the downlink port of an AP, EG router, or EGW router on the target network. Mesh networking takes one to three minutes. When the system status LED is steady on, it indicates that Mesh networking finishes.
- (2) Log in to the Eweb of a device on the target network. In **Network** mode, choose **Devices** and make sure that the new AP is online.

Q Navigation	All (2)	Gateway (0)	AP (1)	Switch (0) AC	C (0) Router (1)			
Overview		Device List A devices not in SON i	s discovered	Manage				
Network Devices		ce List 🔾		manage		IP/MAC/hostname/SN/S	Delete Offline Devices	Batch Upgrade
🗄 Gateway		SN 🔶	Status ≑	Hostname 🌲	MAC Address 🗢	IP Address ≑	Software Ver	Model ≑
8 Clients Management	Ista	WEITENG987689	Online	Ruijie [Master] 🖉	00:D0:F8:14:5C:C3	10.18.108.1 Ø	ReyeeOS	EG105GW(T
-B- -B- -B- System		G1NQCAM001084	Online	Ruijie 🖉	80:05:88:F0:19:90	192.168.110.31 🖉	ReyeeOS 1	RAP2200(E)
	<	1 > 10/pag	e v					Total 2

- (3) Unplug the Ethernet cable, power off the new AP, and install it as planned.
- (4) Log in to the Eweb of a device on the target network. In Network mode, choose Devices > AP. Make sure that the new AP is online and the corresponding entry contains icon

```
奈 5G
```

in the **Relay Information** column. The icon indicates that wireless backhaul is performed through the 5 GHz radio.

Q Navigation	All (3)	Gateway (0)	AP (2)	Switch (0)	AC (0)	Router (1)				
) Overview		Device List A devices not in SON	is discovered	Manage						
Network 🗸		A devices not in 30N	is discovered.	Manage						
Devices	Devi	ce List 😋 Group	All Groups	Expand	Change Group	Basic Info	RF Information	Model	Delete Offline	Devices Batch Upgrade
🗄 Gateway										
Clients Management		SN ≑	Status ≑	Hostname	⇔ MA	C Address 💠	IP Address ≑	Clients ≑	Device Group	Relay Information
E System 🗸 🗸		G1NQCAM001084	Online	Ruijie 🖉	80:	05:88:F0:19:90	192.168.110.31 🇶	0	egw做主/Default	SG View Details
		G1QH2LV000084	Online	Ruijie 🖉	C4:	70:AB:A8:67:CF	192.168.110.152 🖉	0	egw做主/Default	হি SG View Details
										Total 2

icon to obtain information about the uplink

Click **View Details** following the **5G** device and RSSI.

All (3)	Gateway (0)	AP (2)	Switch (0)	AC (0)	Router (1)					
	Device List A devices not in SON i	s discovered.	Manage							
Devi	ce List 😋 Group:	All Groups	Expand Cha	ange Group	Basic Info	RF Information Model	J/S Q	ffline Devices	Batch Up	grade
	SN ≑	Status \$	Hostname 🌲	MAC A	ddress \$	Noise Floor: - 86 dl Channel Utilization: 13 %		Relay	Information	
	G1NQCAM001084	Online	Ruijie 🖉	80:05:8	38:F0:19:90	RSSI: - 37 dl Negotiation Rate: 866 M Uptime: 4 minutes 4 sec	lbps		5G View Details	
	G1QH2LV000084	Online	Ruijie 🖉	C4:70:A	\B:A8:67:CF	Uplink		local	5G View Details	
<	1 > 10/pag	e 🗸				EWR Ruijie	Ruijie		Т	otal 2
						Model: EG105GW(T) SN: WEITENG987689 IP: 192.168.110.1	Model: RAP2260(SN: G1QH2LV000 IP: 192.168.110.1	084		

6. Enabling WAN Port

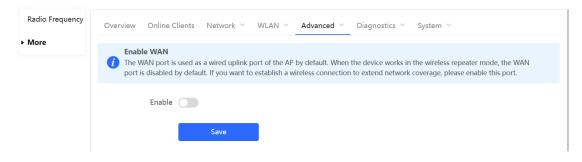
The WAN port works as the wired uplink port of the AP by default. For the AP added to the target network through Mesh pairing, the WAN port is disabled by default. If you want to connect the Mesh AP to other downlink device in wired mode to expand the network, enable this port.

Log in to the Eweb of a device on the target network. In Network mode, choose Devices > AP and click the serial number of the Mesh AP with the WAN port to be enabled.

奈 5G

Q Navigation	All (3)	Gateway (0)	AP (2)	Switch (0)	AC (0)	Router (1)					
Overview		Device List									
Network 🗸	•	A devices not in SON i	is discovered.	Manage							
Devices	Devi	ice List 😋 Group:	All Groups	Expand	Change Grou	Basic Info	RF Information	Model	Delete Offline	Devices Batch Up	arado
🖽 Gateway								unanic/ships Q		butter op	gruuc
Ø Clients Management		SN \$	Status 🌲	Hostname	e≑ Ma	AC Address 💠	IP Address $\mbox{$\ddagger$}$	Clients 💲	Device Group	Relay Information	
-⊕- -⊕- ∋- System ∨		G1NQCAM001084	Offline	Ruijie	80	0:05:88:F0:19:90	192.168.110.31	0	egw做主/Default	No data 😋	
		G1QH2LV000084	Online	Ruijie	د C4	I:70:AB:A8:67:CF	192.168.110.152 🖉	0	egw做主/Default	For SG View Details	
	<	1 > 10/pag	e ~							Те	otal 2

(2) Choose More > Advanced > Enable WAN, toggle on Enable, and click Save.



7. Querying Mesh APs and Mesh Details

- (1) Log in to the Eweb of a device on the target network.
- (2) Query Mesh APs.
- Method 1: In **Network** mode, check the topology on the **Overview** page. The AP that connects to the uplink device in wireless mode is a Mesh AP.

Status Devices Online 3 / 3 / 1 >	Clients Topo	logy List			+ AP
Alert Center	All (1)		<u></u>		
The network contains different type A device (MACCWIFI7XN86,MACC6			+18.24K + 23.13K	r	
Common Functions			EG105GW(7)		Overtur
WIO will help optimize	Disabled	(Wireless)	SNUWEITING987689 Wireless	(LAN2/WAN2)	Restor
• WAN • LAN • N Chec	etwork :k	Wireless) T	Mirreless)	Unknown	
Network Planning	manage	RAP2200(E) SPEGTNQCAM001084	RAP2260(G) SN:G1QH2LV000084		
Wi-Fi VLAN (1):	Add			(wan) 3/3	
WEITENG98768962 VLAN1				AP Group	
Wired VLAN (1):	Add				

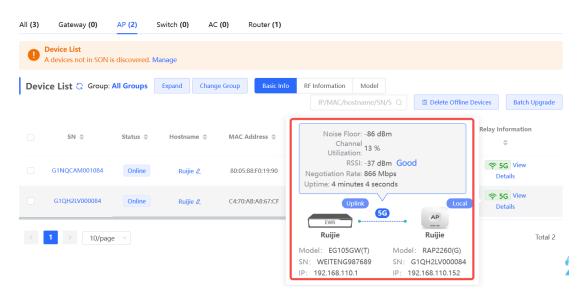
• Method 2: In **Network** mode, choose **Devices** > **AP**. If an entry contains icon

in the Relay Information column, the corresponding AP is a Mesh AP.

Q Navigation	All (3)	Gateway (0)	AP (2)	Switch (0)	AC (0)	Router (1)				
) Overview		Device List A devices not in SON is	s discovered.	Manage						
Devices	Devi	ice List 😋 Group:	All Groups	Expand	hange Group	Basic Info	RF Information	Model		
Gateway								tname/SN/S- Q	Delete Offline	Relay Information
) Clients Management		SN \$	Status ≑	Hostname 🗧	¢ MAC	Address 💠	IP Address 💠	Clients 🗇	Device Group	¢
System 🗸		G1NQCAM001084	Online	Ruijie 🖉	80:0	5:88:F0:19:90	192.168.110.31 🖉	0	egw做主/Default	The second secon
		G1QH2LV000084	Online	Ruijie 🖉	C4:7	0:AB:A8:67:CF	192.168.110.152 🖉	0	egw做主/Default	중 5G View Details
	4	1								Total 2

(3) Query Mesh networking details.

In **Network** mode, choose **Devices** > **AP**. Select the target AP, and click **View Details** in the **Relay Information** column to obtain the Mesh networking details.



2.3 Managing Network Devices

Click **List** at the top left corner of the topology or click **Devices** in the menu bar to switch to the device list view, and view the information of all devices in the self-organizing network (SON). You can perform configurations and management on all devices by logging in to only one device in the network.

Network Monitoring

	avigation	Status Online	Devices Clients	Topology	List		+ AP
°a Ne	verview etwork ×	Alert Center No Alerts Yet	All (O)		*84.26K 440.67K	
🛾 Ga	ateway ients	Common Funct WIO WIO WIO will h	ions help optimize Disabled			DHCP Server	Overt Resto
Горс	blogy List				IP/MAC	Chostname/SN/S Q	Batch Upgrad
	SN \$	Status ≑	Hostname 🌩	$MAC\ \Leftrightarrow$	IP ≑	Software Ver	Model ≑
	MACCWLD789205G	Online	ruijie 🖉	78:11:22:33:44:55	192.168.110.226	ESW_	RG-ES205C-P
	H1LA0U100362A	Online	Ruijie.abc [Master] 🖉	00:74:9C:87:6D:85	192.168.110.1 🌊	ReyeeOS	EG205G
	G1NW31N000172	Online	Ruijie 🖉	00:D3:F8:15:08:5B	192.168.110.89 🖉	ReyeeOS	NBS5200- 24SFP/8GT4XS
	1234942570021	Online	RAP2200e 🖉	00:D0:F8:15:08:48	192.168.110.152 🖉	AP	RAP2200(E)
	G1QH2LV00090C	Online	Ruijie 🖉	C4:70:AB:A8:69:17	192.168.110.102 🖉	ReyeeOS	RAP2260(G)
<	1 > 10/pa	ge 🗸					Total

• Click **SN** to configure the specified device.

		×	MSW	Hostname: Ruijie Software Ver:ReyeeOSModel:NBS5200-24SFP/8GT4XSMGMT IP:11.1.1.89SN:G1NW31N000172MAC: 00:D3:F8:15:08:5B	
Тор	ology List		 Port Status 		
	SN \$	Status ≑	VLAN Info	Port Status	
	MACCWLD789205GC	Online	Port		Panel View
Local	H1LA0U100362A	Online	Route Info	1 3 5 7 9 11 13 15 17 19 21 23 17 19 21 1 1 1 1 1 1 1 1 1 1	23
	G1NW31N000172	Online	RLDP More	2 4 6 8 10 12 14 16 18 20 22 24 18 20 22	2 24 25 26 27
		Offline			
	1234942570021	Online		VLAN	Edit 🛞
	MACC522376524	Online			
	1 > 10/page			VLAN1 VLAN33 VLAN88	
				Interface IP IP Range	Remark
				Gi2,Gi4,Gi6,Gi17- 24,Te25-28,Ag1-4,Ag8 11.1.1.89	
				1 3 5 7 9 11 13 15 17 19 21 23 17 19 21	23

• Select the offline device and click **Delete Offline Devices** to remove the device from the list and the topology.

Тор	ology List				IP/MAC	/hostname/SN/S Q	Batch Upgrade
	SN \$	Status ≑	Hostname 🌲	MAC \$	IP ≑	Software Ver	Model 🌩
	MACCWLD789205GC	Online	ruijie 🖉	78:11:22:33:44:55	192.168.110.226		RG-ES205C-P
Local	H1LA0U100362A	Online	Ruijie.abc [Master] 🖉	00:74:9C:87:6D:85	192.168.110.1 🖉		EG205G
	G1NW31N000172	Online	Ruijie 🖉	00:D3:F8:15:08:5B	11.1.1.89 🖉		NBS5200- 24SFP/8GT4XS
	G1QH2LV00090C	Offline	Ruijie	C4:70:AB:A8:69:17	192.168.110.102	Teach State	RAP2260(G)
	1234942570021	Online	RAP2200e 🖉	00:D0:F8:15:08:48	192.168.110.152 🖉		RAP2200(E)
	MACC522376524	Online	Ruijie 🖉	00:10:F8:75:33:72	192.168.110.200 🖉		EAP602

2.4 Configuring Network Planning

The **Overview** page displays the configuration of **Network Planning** at the bottom left corner, including **Wi-Fi VLAN** and **Wired VLAN**.

Status Devices Clients Online 10 / 2 > 0 >	Topology List	_
Alert Center All (2) The network contains different types o > A device (H1C)H92(Y00775,12345678 > The uplink link cannot be configured > The uplink link port of device G1PD3A870 >		_
Common Functions		Overturn Restore Refresh
WIO WIO will help optimize Disabled • RLDP • DHCP Snooping • Batch Config	(WAR) Not in SON Skielichregestra	
Network Planning manage Wi-Fi VLAN (1): Add	Curricovin C	
@Ruijie-s0830 VLAN1 Wired VLAN (3): Add	An adoup Sec. 121 (add 1990) 123 Sec. 01/01/04/07/7716 Sec. 01/01/04/04/07/7716 Sec. 01/01/04/04/04/04/04/04/04/04/04/04/04/04/04/	
VLAN0001 VLAN1 VLAN2 VLAN2 VLAN3	Updated on:2022-12-12 10:19:51	(e Ai

- Click manage to go to the Network Planning page for configuration (Network > Network Planning). You can add or edit the Network Planning configuration for the live network.
- Click Add to configure Wi-Fi VLAN or Wired VLAN for the live network.
- Click the SSID to edit the Wi-Fi configuration. For details, see Chapter 3 <u>Wi-Fi Network</u> <u>Settings.</u>

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Online 10 / 2 > 0 >		×
Alert Center All (2) The network contains different types o	* SSID @Ruijie-s0830	
A device (H1QH9QY007751,12345678 >	Band • 2.4G + 5G 2.4G 5G	
The uplink port of device G1PD3AB70	Security Open ~	
Common Functions	Expand	
WIO WIO will help optimize Disabled		
RLDP OHCP Batch Config Snooping	Cancel	ОК
		UNKNOWN
Network Planning manage	wan 7/7 (port0	Gi23
Wi-Fi VLAN (1): Add @Ruijie-s0830 VLAN1	AB Group Not in SON R0-552160C-P GN12234567690123	NB55100-24GT4SFP SN:G1PD3AB707716

2.4.1 Configuring Wired VLAN

- (1) Go to the Wired VLAN page for configuration.
- Method 1: Click Add beside Wired VLAN in the Network Planning area on the Overview page to add the wired VLANs.
- Method 2: Click manage in the Network Planning area on the Overview page to go to the Network Planning page for configuration (Network > Network Planning). Click Add Wired VLAN to add the wired VLANs to the live network or select the available wired VLANs. Click Setup to configure the wired VLANs.



(2) Configure the VLAN ID, address pool server, and DHCP pool. The gateway is configured as the address pool server by default to assign IP addresses to clients. If an access switch exists in the network, you can select the access switch as the address pool server. Click Next after VLAN parameters are configured.

Configure Network Planning/Add Wired VLAN				\times
1 Configure VLAN Parameters	2 Configure Wire	ed Access	3 Confirm Config Delivery	
Description:				
* VLAN ID:	33			
Address Pool	• Gateway			
Server Gateway/Mask:	192.168.33.1	/ 255.255.255.0		
DHCP Pool:				
IP Range:	192.168.33.1	- 192.168.33.254		
				e
	Next			4

(3) Select the target switch in the topology and all member ports in the VLAN, and click **Next**.

Configure Network Planning/Add Wired VLAN		×
<u><</u>	gure VLAN Parameters Configure Wired VLAN	
Unknown UNKNOWN SILINACIOUN SILINACIOUN SILINACIOUN SILINACIOUN SILINACIOUN SILINACIOUN SILINACIOUN SILINACIOUN SILINACIOUN SILINACIOUN SILINACIOUN SILINACIONACION SILINACIONACION SILINACIONACION SILINACIONACIONACIONACIONACIONACIONACIONACI		e

(4) Please confirm the delivered configurations and click **Save**. The configurations will take effect after a few minutes.

Configure Network Planning/Add Wired VLAN	×
1 Configure VLAN Parameters	2 Configure Wired Access
Overtur Restore DHCP Server EG210G-P SN:1234567891234	
	Previous Save

2.4.2 Configuring Wi-Fi VLAN

- (1) Go to the **Wired VLAN** page for configuration.
- Method 1: Click Add beside Wi-Fi VLAN in the Network Planning area on the Overview page to add the Wi-Fi VLANs.
- Method 2: Click manage in the Network Planning area on the Overview page to go to the Network Planning page for configuration (Network > Network Planning). Click Add Wi-Fi VLAN to add the Wi-Fi VLANs to the live network or select the available Wi-Fi VLANs. Click Setup to configure the Wi-Fi VLANs.

etwork Planning(3)	All \sim		
dd Wired VLAN Add Wi-Fi VI	LAN	Overturn	
VLAN1 Wi-Fi VLAN VLAN1	>	Restore	
VLAN10 VLAN10	>		↑ 0.00 ↓ 0.00
VLAN12 Wi-Fi VLAN VLAN12			EG105GW-E
SVI Address: (Gateway) 192.168.12.1			SN:MACCR16277F22
DHCP Pool (Enable) 192.168.12.1/255.255.255.0 IP Count: 254 Lease Time(Min): 480			Unknown
Ξ.	Setup		
		Not in SOU RAP2260(E) SNGT(2H6WA000	R6

(2) Configure the SSID, Wi-Fi password and band. Click **Expand** to expand the advanced settings and set the parameters. Then, click **Next**.

Configure Network Planning/Add Wi-Fi VLAN		\times
1 Configure Wireless Access	2 Configure VLAN Parameters 3 Confirm Config Delivery	
0	The configuration will take effect after being delivered to AP.	
	* SSID	
	Band • 2.4G + 5G • 2.4G • 5G	
	Security Open ~	
	Collapse	
W	Aireless Schedule All Time \lor	
	Hide SSID (The SSID is hidden and must be manually entered.)	
	Client Isolation Prevent wireless clients of this Wi-Fi from communicating with one another.	
	Band Steering (The 5G-supported client will access 5G radio preferentially.)	
	XPress (The client will Next faster speed.)	

(3) Configure the VLAN ID, address pool server and DHCP pool. The gateway is configured as the address pool server by default to assign IP addresses to clients. If an access switch exists in the network, you can select the access switch as the address pool server. Click Next after VLAN parameters are configured.

Configure Network Planning/Add Wi-Fi VLAN				×
1 Configure Wireless Access	2 Configure VLAN	Parameters	3 Confirm Config Delivery	
Description:				
* VLAN ID:	13			
topo.addressPool	• Gateway			
Gateway/Mask:	192.168.13.1	/ 255.255.255.0		
DHCP Pool:				
IP Range:	192.168.13.1	- 192.168.13.254		
	Previous	Next		(? Ai

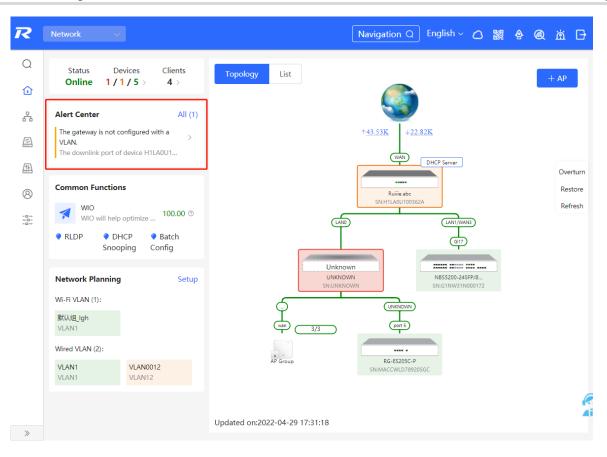
(4) Please confirm the delivered configurations and click **Save**. The configurations will take effect after a few minutes.

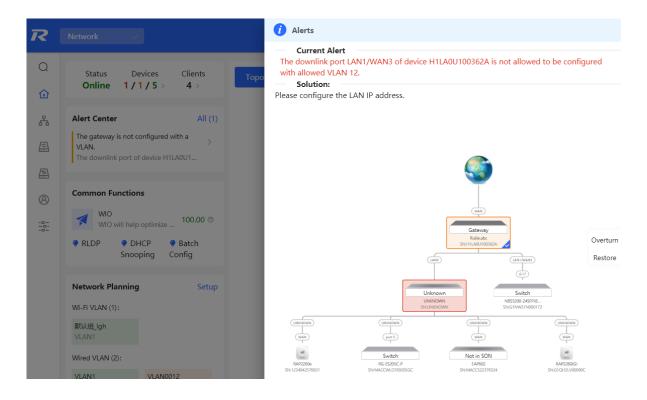
Configure Network Planning/Add Wi-Fi VLAN		×
1 Configure Wireless Access	2 Configure VLAN Parameters	3 Confirm Config Delivery
Overturn Restore	To configure (VLAN13) with IP range 192.168. device(s). The following configuration will be delivered:	13.1 - 192.168.13.254, configuration will be delivered to
	Add VLAN 131P. 192.168.13.1 Subnet DHCP Pool. Start: 192.168.13.1 East Time{Mini480 MACCR16277F22	Address:192.168.13.254
Not in SON R452250E Strict()HeWX000610	Previous Save	

2.5 Troubleshooting Fault Alerts

The **Overview** page displays the fault alerts and handling suggestions if faults occur in the network. Click the fault alert in **Alert Center** to view the faulty device, fault details and handling suggestions, and troubleshoot device faults by referring to the handling suggestions.

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3 Wi-Fi Network Settings

Note

Wi-Fi network settings covers the Wi-Fi settings of the currently logged in devices and the management of all wireless devices in the network. In **Network** mode, the Wi-Fi network settings are synchronized to all wireless devices in the network. You can configure device groups to limit the synchronization range. For details, see <u>Configuring AP Groups</u>.

3.1 Configuring AP Groups

3.1.1 Overview

After the self-organizing network is enabled, the device can act as the master AP/AC to perform batch configuration and management on the downlink APs in groups. Group the APs before the configurations are delivered.

Note

If you specify a group when setting up a wireless network, the corresponding configuration will take effect on the wireless devices in the specified group.

3.1.2 Procedures

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260

and RG-RAP6262 models: In Network mode, choose Devices > AP

For other RAP models, choose 🛜 WLAN > APs

(1) View the information of all APs in the current network, including the basic information, RF information and models. You can click **SN** to configure the device.

	Device List A devices not in SON i	is discovered. I	Manage						
Devic	ce List ۞ Group:	All Groups	Expand Change	e Group Basic Info	RF Information	Model			
					IP/M	AC/hostname/	SN/S Q 🖄 Delete Off	fline Devices	Batch Upgrad
	SN ≑	Status ≑	Hostname 🚔	MAC ≑	IP ≑	Clients 🌲	Device Group	Relay Informatio	n

(1) Click Expand to view all groups on the left part of the Device List page. Click + to create a new group. Up to 8 groups can be added. You can click to edit the group name and click it to delete the group. The default group cannot be deleted and its name cannot be edited.

Devi	ce List ۞ Group:	All Groups	Expand Change	Group
	SN ≑	Status ≑	Hostname 🌲	MAC
Local	G1QH6WX000610	Online	Ruijie [Master] 🖉	EC:B9:70:
Devi	ce List 읍 Group:	All Groups	Collapse	
	by Group		SN 崇	
✓ All G Defa	Groups +	ustal G1	QH6WX00061	

(2) Click the group name on the left part to view all devices in this group. A device can only belong to a group. By default, all devices belong to the default group. Select an entry in the list and click **Change Group** to move the target device to a specified group, and then the device will apply the configurations of this group. Click **Delete Offline Devices** to remove the offline device from the list.

Device List 😋 Group: All Groups	Collapse	Change Group	Basic Info RF I	information Model	IP/MAC/hostna	me/SN/S Q	📋 Delete Offline Devi	Batch Upgrade
Search by Group	sn \$	Status ≑	Hostname 🌲	MAC \$	IP 🔶	Clients ≑	Device Group	Relay Information \$
Default 🖉 💼 🚑	1QH6WX000610	Online	Ruijie [Master] 🖉	EC:B9:70:23:A4:BF	172.26.1.32 🖉	0	test/默认组	Wired View Details

Change Group				
Select Group	Select ^			
	test	əl		

3.2 Configuring SSID and Wi-Fi Password

- (1) Go to the page for configuration.
- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose Retwork (WLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (1) Click the target Wi-Fi network, change the SSID and Wi-Fi password of the Wi-Fi network, and click **Save**.

A Caution

After the configuration is saved, all online clients will be disconnected from the Wi-Fi network. You have to enter the new password to connect to the Wi-Fi network.

Wi-Fi Settings Device Group: Default ~							
Up to 8 SSIDs can be added.							
Default rtk-11111 Default VLAN Band:2.4G+5G	+ Add Guest Wi-Fi	+ Add Wi-Fi					
* SSID rtk-11111							
Band 🗹 2.4G 🗹 5G							
Encryption O	Open Oscurity 802.1x	(Enterprise)					
* Security	OPEN(Open) ~						
Expand							
	Save						

Table 3-1 Wireless network configuration

Parameter	Description
SSID	The name displayed when a wireless client searches for a wireless network.
Band	The frequency band used for wireless data transmission. 2.4GHz and 5GHz frequency bands are supported. The 5GHz frequency band offers a faster transmission rate and less interference compared to the 2.4GHz frequency band, but it has weaker signal coverage and wall penetration. The frequency band can be selected according to actual needs. The default band is 2.4GHz+5GHz, on which Wi-Fi transmits on both the 2.4GHz and 5GHz bands.
	The encryption methods for wireless network connection. The following three encryption methods are supported:
Encryption	• Open: A password is not required to connect to the Wi Fi network. There are two options: "OPEN (Open)" and "OWE (Enhanced Open)".
	 Security: Options include WPA-PSK, WPA/WPA2-PSK, WPA2-PSK, WPA2-PSK/WPA3-SAE, and WPA3-SAE
	• 802.1X (Enterprise): Options include WPA-802.1X, WPA/WPA2-802.1X,

Parameter	Description
	and WPA2-802.1X
Wi-Fi	When the encryption method is Encrypt, a Wi-Fi password needs to be entered.
Password	The password for connecting to the wireless network, consisting of 8-16 characters.
Server group	When the encryption method is 802.1x (Enterprise), a wireless server group needs to be selected.
	The server group for user authentication, authorization, and accounting is usually a RADIUS server.

3.3 Hiding the SSID

3.3.1 Overview

Hiding the SSID can prevent unauthorized clients from accessing the Wi-Fi network and enhance network security. After this function is enabled, the mobile phone or PC cannot search out the SSID. Instead, you have to manually enter the correct SSID and Wi-Fi password. Remember the SSID so that you can enter the correct SSID after the function is enabled.

3.3.2 Configuration Steps

(1) Go to the page for configuration.

- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose Retwork (WLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (2) Click Expand, turn on Hide SSID in the expanded settings and click Save.

A Caution

After the configuration is saved, you have to manually enter the SSID and Wi-Fi password before connecting any device to the Wi-Fi network. Therefore, exercise caution when performing this operation.

Wi-Fi Settings Device Group: Default ~							
Up to 8 SSIDs can be added.							
Default rtk-11111 Default VLAN Band:2.4G+5G	+ Add Guest Wi-Fi	+ Add Wi-Fi					
* SSID	rtk-11111						
Band 🗹 2.4G 🗹 5G							
Encryption	Open Security 802.1x (E	nterprise)					
* Security OPEN(Open) ~							
	Collapse						
Wireless Schedule	All Time \vee						
VLAN	The same VLAN as AP $\qquad \lor$						
Hide SSID	(The SSID is hidden and must be r	nanually entered.)					

3.4 Checking Wireless Clients

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-RAP6262 models:

If the self-organizing network is disabled, choose **WLAN** > Clients

If the self-organizing network is enabled, in **Network** mode, choose **Olients** > **Online Clients** > **Wireless**

For other RAP models:

Choose **WLAN** > Clients

Check information about all wireless clients connected to the Wi-Fi network. Click **Add to Blocklist** to disconnect a client and ban the client from accessing the Wi-Fi network.

NULL 5	MAC 2. 58: 52 40	IP 192.168. 110.194	SN G1QH6 W	Duratio n 2022- 04-01 09:40:36	RSSI -66	Rate	Band 5G	SSID @Ruijie-	Channel	Action
NULL 5				04-01	-66	24M	FG	@Ruijie-		
							96	s1234	64	Add to Blacklis
All (1) Wired (0) Wireless (1) Online Clients The client going offline will not disappear immediately. Instead, the client will stay in the list for three more minutes.										
Online Clie	ents						Se	earch by IP/MA	AC/Username Q	C Refresh
Usern	ame/Type		Access Loo	cation		IP/MAC		Current R	ate	Wi-Fi
হ 2.46			G1QH6WX(000610		172.26.1.73 :cf:2f:84:bd:d0		Up:0.00bp Down:0.00		Channel:13 RSCP:-87 Duration:7 minutes 55 seconds Negotiation Rate:1M

Table 3-2 Description of Wireless Client Information

Item	Description
Username	Name of a client
MAC	MAC address of the client
IP	IPv4 address of the client
SN	SN of the device associated with the client
Duration	Time when the client connects to the Wi-Fi network
RSSI	RSSI of the Wi-Fi network associated with the client
Rate/Negotiation Rate	Association rate of the client and AP
Band	Band type of the Wi-Fi network, to which the client connects
SSID	Name of the Wi-Fi network associated with the client
Channel	Channel of the Wi-Fi network associated with the client

Item	Description
Current Rate	Uplink and downlink data rate.

3.5 Configuring Wi-Fi Band

(1) Go to the page for configuration.

- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose Retwork (WLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (2) Set the band of Wi-Fi signals. The device supports the 2.4 GHz and 5 GHz bands. Compared with the 2.4 GHz band, the 5 GHz band supports a higher network transmission rate and is less susceptible to interference, but is inferior in signal coverage and throughwall penetration. You can select an appropriate signal band based on actual requirements. The default Wi-Fi band is **2.4G+5G**, indicating that Wi-Fi signals are emitted in both 2.4 GHz and 5 GHz bands.

Wi-Fi Settings Device Group: Default V							
Up to 8 SSIDs can be added.							
Default rtk-11111 Default VLAN Band:2.4G+5G	+ Add Guest V	Ni-Fi	+ Add Wi-Fi				
* SSID rtk-11111							
Band 🗹 2.4G 🗹 5G							
Encryption • Open							
* Security	* Security OPEN(Open) ~						
Expand							
Save							

3.6 Configuring Band Steering

🛕 Caution

This function can be enabled only after the dual-band integration (**Band** is set to **2.4G+5G**) is enabled on the Wi-Fi network. A client automatically selects a band only when the SSIDs of the 2.4 GHz and 5 GHz bands are the same.

(1) Go to the page for configuration.

- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose Retwork (WLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (2) Click **Expand**, turn on **Band Steering** in the expanded settings, and click **Save**. After the function is enabled, the client supporting 5 GHz selects the 5G Wi-Fi network preferentially.

Wi-Fi Settings Devi	ce Group: Default \vee						
Up to 8 SSIDs can be added.							
Default rtk-11111 Default VLAN Band:2.4G+5G	+ Add Guest Wi-Fi	+ Add Wi-Fi					
* SSID rtk-11111							
Band 2.4G 2 5G							
Encryption	Open Security 802.1x	(Enterprise)					
* Security OPEN(Open) ~							
	Expand						
	Save						

3.7 Configuring Wi-Fi 6

A Caution

The function takes effect only on APs supporting the IEEE 802.11ax protocol. In addition, access clients must support IEEE 802.11ax so that clients can enjoy high-speed Internet access experience brought by Wi-Fi 6. If clients do not support Wi-Fi 6, you can disable this function.

(1) Go to the page for configuration.

- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose A Network (TWLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (2) Click **Expand**, turn on **Wi-Fi6** in the expanded settings, and click **Save**. After this function is enabled, wireless clients can enjoy faster Internet access service.

		Collapse
Wireless Schedule	All T	ime ~
VLAN	The	same VLAN as AP
Hide SSID		(The SSID is hidden and must be manually entered.)
Client Isolation		Prevent wireless clients of this Wi-Fi from communicating with one another.
Band Steering		(The 5G-supported client will access 5G radio preferentially.)
XPress		(The client will experience faster speed.)
Layer 3 Roaming		(The client will keep the IP address unchanged on the Wi-Fi network.)
Wi-Fi6		(802.11ax high-speed wireless connectivity.) ⑦

3.8 Configuring Layer-3 Roaming

(1) Go to the page for configuration.

Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.

- Method 2: Choose A Network (TWLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (2) Click **Expand**, turn on **Layer 3 Roaming** in the expanded settings and click **Save**. The client will keep the IP address unchanged in this Wi-Fi network, improving roaming experience across VLANs.

		Collapse
Wireless Schedule	All T	ime v
VLAN	The	same VLAN as AP
Hide SSID		(The SSID is hidden and must be manually entered.)
Client Isolation		Prevent wireless clients of this Wi-Fi from communicating with one anothe
Band Steering		(The 5G-supported client will access 5G radio preferentially.)
XPress		(The client will experience faster speed.)
Layer 3 Roaming		(The client will keep the IP address unchanged on the Wi-Fi network.)
Wi-Fi6		(802.11ax high-speed wireless connectivity.) ⑦

3.9 Configuring AP Isolation

(1) Go to the page for configuration.

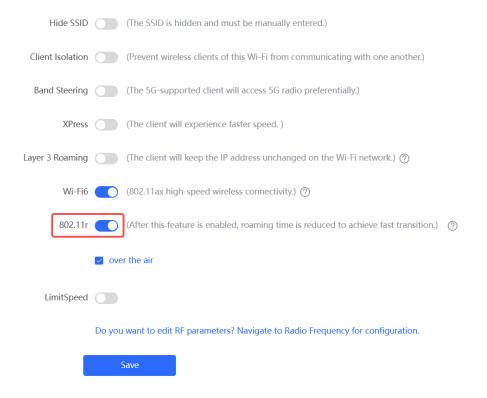
- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose A Network (WLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (2) Click **Expand**, turn on **AP Isolation** in the expanded settings and click **Save**. The clients joining in this Wi-Fi network will be isolated. The clients associated with the same access point cannot access each other.

	Collapse	
Wireless Schedule	All Time	~
VLAN	The same VLAN as AP	~
Hide SSID	(The SSID is hidden and r	must be manually entered.)
Client Isolation	Prevent wireless clients o	f this Wi-Fi from communicating with one an

3.10 Configuring 802.11r

The 802.11r feature is supported only when the encryption type is either WPA2-PSK or WPA2-802.1X.

- (1) To access the configuration page, perform the following operations:
- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose Retwork (WLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (2) Click to expand Advanced Settings. Enable **802.11r**, and click **Save**. After this feature is enabled, roaming time is reduced to achieve fast transition.



3.11 Adding a Wi-Fi Network

(1) Go to the page for configuration.

- Method 1: Choose A Network (TWLAN) > Wi-Fi > Wi-Fi Settings.
- Method 2: Choose Retwork (WLAN) > Wi-Fi > Wi-Fi List.
- (2) Click Add, enter the SSID and Wi-Fi password and click OK to add a Wi-Fi network. Click Expand to configure more Wi-Fi features in the expanded settings. After the Wi-Fi network is added successfully, it will be displayed in the list. The client will be able to scan the new Wi-Fi network.

					×
* SSID					
Band	✓ 2.4G	5G			
Encryption	• Open	 Security) 802.1x (Ei	nterprise)	
* Security	OPEN(O	pen)	~		
	E	xpand			
				Cancel	ОК

3.12 Configuring a Guest Wi-Fi

3.12.1 Overview

This Wi-Fi network is provided for guests and is disabled by default. It supports client isolation, that is, access clients are isolated from each other. They can only access the Internet via Wi-Fi, but cannot access each other, improving security. The guest Wi-Fi network can be turned off as scheduled. When the time expires, the guest network is off.

3.12.2 Configuration Steps

Choose A Network (TWLAN) > Wi-Fi > Wi-Fi Settings.

Click **Add Guest Wi-Fi** to configure the SSID and password of the Guest Wi-Fi. Click **Expand** to configure the effective time period and other Wi-Fi features in the expanded settings. Click

Save, and the guest Wi-Fi network will be created. Guests can access the guest Wi-Fi network by entering the SSID and Wi-Fi password.

Wi-Fi Settings	Device Gr	oup: Defaul	t v		
Up to 8 SSIDs can	be added.				
Default @Ruijie-s0 Default VL Band:2.4G -	AN	+ Add	d Guest Wi-Fi		+ Add Wi-Fi
					×
* SSID	@Ruijie-gi	uest-21E1			
Band	✓ 2.4G	✓ 5G			
Encryption	Open	 Security 	0 802.1x (Ente	erprise)	
* Security	OPEN(Ope	en)	~		
	Ехр	band			
				Cancel	ОК

3.13 Configuring Wireless Rate Limiting

A Caution

This function is supported by only RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP1261, RG-RAP1260, RG-RAP2266, RG-RAP2260, and RG-RAP6262.

3.13.1 Overview

The device supports four rate limiting modes: client-based rate limiting, SSID-based rate limiting, AP-based rate limiting, and packet-based rate limiting. For the same client, if multiple rate limiting modes are configured, the priority order is as follows: client-based rate limiting > SSID-based rate limiting > AP-based rate limiting > Packet-based rate limiting.

- Client-based rate limiting: This function allows you to limit the rate based on the MAC address of the client, so as to limit or guarantee the bandwidth required by specific clients.
- SSID-based rate limiting: This function provides two rate limiting modes for a specified SSID: Rate Limit Per User and Rate Limit All Users. Rate Limit Per User means that all clients connected to the SSID use the same rate limit. Rate Limit All Users means that the configured rate limit value is evenly allocated to all clients connected to the SSID. The rate

limit value of each client dynamically changes with the number of clients connected to the SSID.

- AP-based rate limiting: This function limits the client rates based on the whole network. All clients connected to the network will work according to the configured rate limit value.
- Packet-based rate limiting: This function limits the client rates based on the downlink broadcast and multicast packets. The device supports rate limiting for specific broadcast packets (such as ARP and DHCP), multicast packets (such as MDNS and SSDP), or all types of broadcast and multicast packets. If network stalling remains during network access and there is no client with large traffic, you are advised to adjust the rate between 1 kbps and 512 kbps.

3.13.2 Configuration Steps

1. Configuring Client-based Rate Limiting

Choose http://www.choose Choose http://www.choose Choose http://www.choose.choose http://www.choose.choose http://www.choose.choose.choose http://www.choose

- (1) Enable Wireless Rate Limiting.
- (2) Click **Add**. In the dialog box that appears, set the MAC address and uplink and downlink rate limit values of the client, and click **OK**.

Wireless Rate Limiting					
Client-based Rate Limiting	Wi-Fi-based Rate Limiting	AP-based Rate Limiting	Packet-based Rate Limiting		
Client-based Rate The rate limiting mo	Limiting de based on wireless clients can limit	or provide the bandwidth for sp	pecific clients.		
Client-based Rate	Limiting				+ Add 🗇 Delete Selected
Up to 512 entries can b	pe added.				
Client MAC	U	plink Rate Limit	Downlink Rate Limit	Remarks	Action
			No Data		
< 1 > 10/pa	age \vee				Total 0
Add			×		
* Client MAC	Example: 00:11:22:33:4	44:55			
Uplink Rate	No Limit by Default.	Kbps 🗸			
Limit	Current: Kbps. Range: 1	1-1700000 Kbps			
Downlink Rate	No Limit by Default.	Kbps 🗸			
Limit	Current: Kbps. Range: 1	1-1700000 Kbps			
Remarks					
		Cancel	К		

2. Configuring SSID-based Rate Limiting

Method 1: Choose http://www.communication.com/www.communication.com/www.communication.com/www.cow/www.com/www.com/www.com/www.com/www.com/www.

- (1) Enable Wireless Rate Limiting.
- (2) Click **Edit** in the **Action** column of the target SSID. In the dialog box that appears, set the uplink and downlink rate limit modes and values, and click **OK**.

Wireless Rate Limiting 🗾				
Client-based Rate Limiting	SSID-based Rate Limiting AP	P-based Rate Limiting	Packet-based Rate Limiting	
Users indicates that all clier	•	rate limit in average.	ate Limit per User indicates that all clients connected to the S	SID use the same rate limit. Rate Limit All
SSID-based Rate Limiti	ng Device Group: Default	\sim	Are	you sure you want to add a Wi-Fi? Click to go.
SSID	Uŗ	olink Rate Limit	Downlink Rate Limit	Action
333	Rate Lim	it All Users 1111K bps	No Limit	Edit Disable
111		No Limit	No Limit	Edit Disable
wbctest		No Limit	No Limit	Edit Disable
@Ruijie-guest-6D8	85 Rate Lin	nit All Users 111K bps	Rate Limit Per User 2M bps	Edit Disable
Edit			×	
Uplink Rate Limit	• • Rate Limit Per User	Rate Limit Al	ll Users 🕐	
Rate Limit	No Limit by Default.	Kbps 🗸		
	Current: Kbps. Range:	1-1700000 Kbps		
Downlink Rate Limit	• Rate Limit Per User	🔘 Rate Limit Al	Users	
Rate Limit	No Limit by Default.	Kbps 🗸		
	Current: Kbps. Range:	1-1700000 Kbps		
		Cancel	OK	

Method 2:

- (1) To access the configuration page, perform the following operations:
- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose Network (WLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.

(2) Click to expand Advanced Settings. Enable **LimitSpeed**, set the uplink and downlink rate limit modes and rate limits, and click **Save**.

OKC	(After this feature is enabled, complete 802.1X authentication is not required for roaming.)				
LimitSpeed					
Uplink Rate Limit	○ Rate Limit Per User ● Rate Limit All Users ⑦				
Rate Limit	No Limit by Default. Kbps \checkmark				
	Current: Kbps. Range: 1-1700000 Kbps				
Downlink Rate Limit	 Rate Limit Per User Rate Limit All Users 				
Rate Limit	No Limit by Default. Kbps \vee				
	Current: Kbps. Range: 1-1700000 Kbps				
	Do you want to edit RF parameters? Navigate to Radio Frequency for configuration.				
	Save				

3. Configuring AP-based Rate Limiting

Choose Retwork (WLAN) > LimitSpeed > AP-based Rate Limiting.

- (1) Enable Wireless Rate Limiting.
- (2) Set the uplink and downlink rate limit modes to **Rate Limit Per User**, configure the rate limit values, and click **OK**.

Wireless Rate Limiting			
Client-based Rate Limiting	Wi-Fi-based Rate Limiting	AP-based Rate Limiting	Packet-based Rate Limiting
			ted to the network use the preset rate limiting value. rate limit per user.
AP-based Rate Lin	niting		
Uplink Rate Limit	 No Limit Rate Limit Pe Kbps ~ 	·Wechat texts, voice i · Real-time video call · Ultra HD/4K/Blue-ra	nessages and webpage services: 1 Mbps to 2 Mbps, s and HD videos: 2 Mbps to 4 Mbps, y videos and live videos: 5 Mbps to 10 Mbps, dvised to set the value to 20 Mbps. It may affect the Internet experience of other users in the internal network.
	Current: Kbps. Range: 1-170000	0 Kbps	
Downlink Rate Limit	O No Limit O Rate Limit Pe	r User	
	Kbps \vee		
	Current: Kbps. Range: 1-170000	0 Kbps	
	OK		

4. Configuring Packet-based Rate Limiting

Choose 🍈 Network (🐨 WLAN) > LimitSpeed > Packet-based Rate Limiting.

- (1) Enable Wireless Rate Limiting.
- (2) Select the specific type of packets for rate limiting, configure the rate limit value, and click **Save**.

Wireless Rate Limiting			
Client-based Rate Limiting	Wi-Fi-based Rate Limiting	AP-based Rate Limiting	Packet-based Rate Limiting
			the internet access is still slow and unstable when no client needs large amounts of traffic, you are advised to set the
Packet-based Rate	Limiting		
Broadcast Rate Limiting	🔿 Disable 🔷 Limit All 💽	Limit Part	
	ARP Packet DHCP Packet	et	
Multicast Rate Limiting	🔿 Disable 🔷 Limit All 💽	Limit Part	
	MDNS Packet SSDP Pac	ket	
* Rate Limit	Kbp Current: 0 Kbps. Range: 1-170000		
	Save		

3.14 Configuring Wi-Fi Blocklist or Allowlist

3.14.1 Overview

You can configure the global or SSID-based blocklist and allowlist. The MAC address supports full match and OUI match.

Wi-Fi blocklist: Clients in the Wi-Fi blocklist are prevented from accessing the Internet. Clients that are not added to the Wi-Fi blocklist are free to access the Internet.

Wi-Fi allowlist: Only clients in the Wi-Fi allowlist can access the Internet. Clients that are not added to the Wi-Fi allowlist are prevented from accessing the Internet.

A Caution

If the allowlist is empty, the allowlist does not take effect. In this case, all clients are allowed to access the Internet.

3.14.2 Configuration Steps

1. Configuring a Global Blocklist/Allowlist

Choose Olients (WLAN) > Blocklist/Allowlist > Global Blocklist/Allowlist.

Select the blocklist or allowlist mode and click **Add** to configure a blocklist or allowlist client. In the **Add** window, enter the MAC address and remark of the target client and click **OK**. If a client is already associated with the access point, its MAC address will pop up automatically. Click the MAC address directly for automatic input. All clients in the blocklist will be forced offline and not allowed to access the Wi-Fi network. The global blocklist and allowlist settings take effect on all Wi-Fi networks of the access point.

Global Blocklist/Allowlist SSIE	D-Based Blocklist/Allowlist			
• All STAs except blocklisted ST	As are allowed to access Wi-Fi.	Only the allowlisted S	TAs are allowed to acce	ss Wi-Fi.
Blocked WLAN Clients			+ Add	Delete Selected
Up to 256 members can be add	led.			
MAC Add	dress	Remarks		Action
		No Data		
< 1 > 10/page ~				Total 0
Add			×	
Match Type	• Full O Prefix (O	UI)		
* MAC	Example: 00:11:22:33:	44:55		
Remark				
		Cancel	ОК	

2. Configuring an SSID-based Blocklist/Allowlist

Choose Olients (WLAN) > Blocklist/Allowlist > SSID-Based Blocklist/Allowlist.

Select a target Wi-Fi network from the left column, select the blocklist or allowlist mode and click **Add** to configure a blocklist or allowlist client. The SSID-based blocklist and allowlist will restrict the client access to the specified Wi-Fi.

Global Blocklist/Allowlist	SSID-Based Blocklist/Allowlist	
<i>i</i> Note: OUI matching ru Rule: 1. In the Block	ed to allow or reject a client' s request to connect to the Wi-Fi network. Ile and SSID-based blocklist/allowlist are supported by only RAP Net and P32 (and later ver list mode, the clients in the blocklist are not allowed to connect to the Wi-Fi network. list mode, only the clients in the allowlist are allowed to connect to the Wi-Fi network.	rsions).
Device Group: Default	 All STAs except blocklisted STAs are allowed to access Wi-Fi. Only the allowisted STAs are allowed to access Wi-Fi. Blocked WLAN Clients	+ Add
	Up to 256 members can be added.	
	MAC Address Remarks No Data	Action
	< 1 > 10/page >	Total 0

3.15 Optimizing Wi-Fi Network

3.15.1 Overview

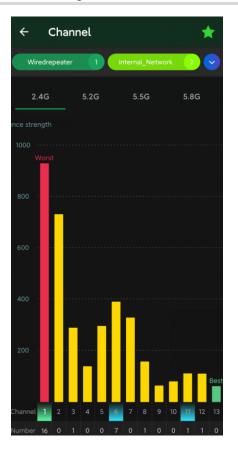
The device detects the surrounding wireless environment and selects the appropriate configuration upon power-on. However, network stalling caused by wireless environment changes cannot be avoided. You can optimize the network with one single click, analyze the wireless environment around the access point and select appropriate parameters.

A Caution

After being optimized, the Wi-Fi network will restart, and clients need to reconnect to the W-Fi network. Therefore, exercise caution when performing this operation.

3.15.2 Getting Started

Install Wi-Fi Moho or other Wi-Fi scanning app on the mobile phone and check interference analysis results to find out the best channel.



3.15.3 Optimizing the Radio Channel

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-RAP6262 models:

- Configure the master device. Choose ^A Network (**WLAN**) > Radio Frequency
- Configure the slave device. Choose (2) Devices > Select the target device in the device list and click SN > Radio Frequency

For other RAP models:

- Configure the master device. Choose The WLAN > Radio Frequency
- Configure the slave device. Choose WLAN > APs > Select the target device in the device list and click Manage > WLAN > Radio Frequency

Choose the best channel identified by Wi-Fi Moho or other Wi-Fi scanning App. Click **Save** to make the configuration take effect immediately. The more devices in a channel, the greater the interference.

🚺 Note

The available channel is related to the country or region code. Select the local country or region.

<i>i</i> Tip: Changing co	nfiguration requires a reboot and clie	nts will be reconnected.			
Radio Frequenc	y Device Group: Default				
Country/Region	China (CN)	~			
2.4G Channel Width	Auto	\sim	5G Channel Width	Auto	
Multicast Rate (Mbps)	Auto	\sim	Multicast Rate (Mbps)	Auto	
0			0	Auto	
Client Count Limit	64		Client Count Limit	36 (5.18GHz)	
Disconnection Threshold	•	65dBm	Disconnection Threshold	40 (5.2GHz) 44 (5.22GHz) 48 (5.24GHz)	۶m
0			0	52 (5.26GHz)	
— The settings are v	valid for only current device			56 (5.28GHz) 60 (5.3GHz)	
2.4G Channel	Auto	~	5G Channel	Auto	^
Transmit Power	O Auto Lower Low Medium	High	Transmit Power	O Auto Lower Low Medium I	High
0 =	O Low 40% 80%	High	Roaming 💿	O Low 40% 80% I	High

3.15.4 Optimizing the Channel Width

Choose hetwork (WLAN) > Radio Frequency.

A network with a lower channel width is more stable, while a network with a higher channel width is susceptible to interference. If the interference is severe, choose a lower channel width to avoid network stalling to a certain extent. The access point supports the channel width of 20 MHz and 40 MHz in the 2.4 GHz channel, and the channel width of 20 MHz and 40 MHz and 80 MHz and 160 MHz in the 5 GHz channel.

The default value is **Auto**, indicating that the channel width is automatically selected based on the environment. After changing the channel width, click **Save** to make the configuration take effect immediately.

A Caution

In the self-organizing network mode, the channel width settings will be synchronized to all devices in the network.

i Tip: Changing co	nfiguration requires a reboot and clier	ts will be reconnected.	
Radio Frequenc	y Device Group: Default V		
Country/Region	China (CN)		
2.4G Channel Width	Auto	 5G Channel Width 	Auto
Multicast Rate (Mbps)	Auto	 Multicast Rate (Mbps) Ø 	Auto 20MHz 40MHz
Client Count Limit	64	Client Count Limit	80MHz 160MHz
Threshold	isable -85dBm -4		Disable -85dBm -65dBm
The settings are 2.4G Channel	Auto	~ 5G Channel	Auto ~
Transmit Power	O Auto Lower Low Medium	Transmit Power	O de

3.15.5 Optimizing the Transmit Power

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-RAP6262 models:

- Configure the master device. Choose A Network (The WLAN) > Radio Frequency
- Configure the slave device. Choose (B) **Devices** > Select the target device in the device list and click **SN** > **Radio Frequency**

For other RAP models:

- Configure the master device. Choose **WLAN** > Radio Frequency
- Configure the slave device. Choose WLAN > APs > Select the target device in the device list and click Manage > WLAN > Radio Frequency

A greater transmit power indicates a larger coverage and brings stronger interference to surrounding wireless routers. In a high-density scenario, you are advised to set the transmit power to a small value. The **Auto** mode is recommended, indicating automatic adjustment of the transmit power. After adjusting the configuration, click **Save**.

i Tip: Changing cont	figuration requires a reboot and clie	ents will be	reconnected,	
Radio Frequency	Device Group: Default			
Country/Region	China (CN)	~		
2.4G Channel Width	Auto	~	5G Channel Width Auto	^
Multicast Rate (Mbps)	Auto	~	Multicast Rate (Mbps) Auto	
0			② 20MHz 40MHz	
Client Count Limit	64		Client Count Limit 80MHz	
Disconnection (Disconnection	
Dis Threshold	able -85dBm	-65dBm	Disable -85dBm - Threshold	-65dBm
0			0	
The settings are va	lid for only current device			
2.4G Channel	Auto	~	5G Channel Auto	~
Transmit Power (O uto Lower Low Medium	High	Transmit Power O Auto Lower Low Medium	High
-	O ow 40% 80%	High	Roaming ⑦ O Low 40% 80%	High
Access Threshold 🕥 (0	-65dBm	Access Threshold ③	-65dBm

3.15.6 Configuring the Multicast Rate

A Caution

This function is supported by only RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260, and RG-RAP6262.

Choose hetwork (WLAN) > Radio Frequency.

If the multicast rate is too high, the packet loss rate of multicast packets may increase. If the multicast rate is too low, the radio interface may become busy. When network stalling is serious, you are advised to configure a high multicast rate. When network stalling is minor, configure a medium multicast rate. After adjusting the configuration, click **Save**.

🥡 Tip: Changing con	figuration requires a reboot and clients w	/ill be reconnected.		
Radio Frequency	Device Group: Default v			
Country/Region	China (CN) v			
2.4G Channel Width	Auto ~	5G Channel Width	Auto	
Multicast Rate (Mbps)	Auto ~	Multicast Rate (Mbps)	Auto ^	
0		0	Auto	Ĩ
Client Count Limit	64	Client Count Limit	OFDM 6	
			OFDM 9	
Disconnection	0	Disconnection	OFDM 12	
Dis Threshold	sable -85dBm -65dE	3m D Threshold	OFDM 18	¦m
0		0	OFDM 24	
			OFDM 36	
 The settings are value 	alid for only current device		OFDM 48	
2.4G Channel	Auto ~	5G Channel	Auto	
	O uto Lower Low Medium Higi	Transmit Power	O Auto Lower Low Medium High	h
~	ato conci com medium mgi		Auto Lower Low Medium High	1

3.15.7 Configuring the Client Limit

Choose A Network (TWLAN) > Radio Frequency.

If the access point is associated with too many clients, it will have a lower performance, affecting user experience. After you configure the threshold, new clients over the threshold will not be allowed to access the Wi-Fi network. You can lower the threshold if there is requirement for bandwidth per client. You are advised to keep the default settings unless there are special cases. After adjusting the configuration, click **Save**.

i Tip: Changing cor	nfiguration requires a reboot and clie	ts will be reconnected.		
Radio Frequency	/ Device Group: Default			
Country/Region	China (CN)	~		
2.4G Channel Width	Auto	~	5G Channel Width	Auto
Multicast Rate (Mbps)	Auto	~	Multicast Rate (Mbps)	Auto
0			0	
Client Count Limit	64		Client Count Limit	512
Disconnection	-		Disconnection	•
Di Threshold	sable -85dBm	5dBm	Threshold	isable -85dBm -65dBm
0			0	
	alid for only current device			
2.4G Channel	Auto	\sim	5G Channel	Auto
	O Auto Lower Low Medium	High	Transmit Power	O Auto Lower Low Medium High

Note

The **Client Count Limit** refers to the maximum number of clients that can be connected to a single access point.

3.15.8 Configuring the Kick-off Threshold

Choose A Network (TWLAN) > Radio Frequency.

In the case of multiple Wi-Fi signals, setting the kick-off threshold can improve the wireless signal quality to a certain extent. The farther the client is away from the access point, the lower the signal strength is. If the signal is lower than the kick-off threshold, the Wi-Fi will be disconnected, and the client will be forced offline and select a nearer Wi-Fi signal.

However, the higher the kick-off threshold is, the easier it is for the client to be kicked offline. To ensure normal Internet access, you are advised to disable the kick-off threshold or set the value to less than -75dBm. After adjusting the configuration, click **Save**.

Tip: Changing con	figuration requires a reboot and clients will b	e reconnected.	
• • • • • • • • • • • • • • • • • • • •			
Radio Frequency	Device Group: Default V		
Country/Region	China (CN)		
2.4G Channel Width	Auto \lor	5G Channel Width	Auto
Multicast Rate (Mbps)	Auto 🗸	Multicast Rate (Mbps)	Auto
0		0	
Client Count Limit	64	Client Count Limit	512
Disconnection	0	Disconnection	
Dis Threshold	sable -85dBm -65dBm	Threshold	isable -85dBm <mark>-65dBm</mark>
0		0	
— The settings are va	alid for only current device		
2.4G Channel	Auto \checkmark	5G Channel	Auto
Transmit Power A	O uto Lower Low Medium High	Transmit Power	O Lower Low Medium High

A Caution

In the self-organizing network mode, the kick-off threshold settings will be synchronized to all devices in the network.

3.15.9 Configuring the Roaming Sensitivity

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-RAP6262 models:

- Configure the master device. Choose https://www.commune.com/intervence/inte
- Configure the slave device. Choose (B) **Devices** > Select the target device in the device list and click **SN** > **Radio Frequency**

For other RAP models:

- Configure the master device. Choose **WLAN** > Radio Frequency
- Configure the slave device. Choose **WLAN > APs >** Select the target device in the device list and click **Manage > WLAN > Radio Frequency**

()The roaming sensitivity enables the device to actively disconnect a client from the Wi-Fi network when the client is far away, forcing the client to re-select the nearest signal and thus improving the sensitivity of wireless roaming. Higher the roaming sensitivity level, smaller the wireless signal coverage. To improve the signal quality for a client moving within more than one Wi-Fi coverage, improve the roaming sensitivity level. You are advised to keep the default settings. After adjusting the configuration, click **Save**.

Radio Frequency	Device Group: Default						
Country/Region	China (CN)	~					
2.4G Channel Width	Auto	~	5G Channel Width	Auto	D		~
Multicast Rate (Mbps)	Auto	~	Multicast Rate (Mbps)	Auto	D		~
0			0				
Client Count Limit	64		Client Count Limit	512			
Disconnection (Disconnection) Threshold	O sable -85dBm	-65dBm	Disconnection Threshold	O Disable	-85dBm		-65dBm
0			0				
 The settings are value 	alid for only current device						
2.4G Channel	Auto	~	5G Channel	Auto)		~
Transmit Power (A	O o o o o uto Lower Low Medium	High	Transmit Power	O Auto	Lower Low	Medium	High
	O ow 40% 80%	High		O Low	40%	80%	High
-		CE 10	Access Threshold ②	_	05-10		<5.1D
Response RSSI	sable -85dBm O sable -85dBm	-65dBm -65dBm	Response RSSI	oisable O Disable	-85dBm -85dBm		-65dBm -65dBm

3.15.10 Configuring Access Threshold

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP1261, RG-RAP1260, RG-RAP2260 and RG-RAP6262 models:

- Configure the master device. Choose A Network (WLAN) > Radio Frequency
- Configure the slave device. Choose (B) **Devices** > Select the target device in the device list and click **SN** > **Radio Frequency**

For other RAP models:

• Configure the master device. Choose **WLAN** > Radio Frequency

Configure the slave device. Choose **WLAN > APs >** Select the target device in the device list and click **Manage > WLAN > Radio Frequency**

When the wireless signal of the end user is lower than the access threshold set on the device, the client cannot detect the wireless signal of the device. After adjusting the configuration, click **Save**.

Radio Frequenc	y Device Group: Default						
Country/Region	China (CN)	~					
2.4G Channel Width	Auto	~	5G Channel Width	Auto	0		~
Multicast Rate (Mbps)	Auto	~	Multicast Rate (Mbps)	Auto	D		~
0			0				
Client Count Limit	64		Client Count Limit	512			
Disconnection	•	65dBm	Disconnection Threshold		-85dBm		-65dBm
Threshold 🖉			ত				
— The settings are v	valid for only current device						
2.4G Channel	Auto	~	5G Channel	Auto	0		~
Transmit Power	O Auto Lower Low Medium	High	Transmit Power	O Auto	Lower Low	Medium	High
	O Low 40% 80%	High	Roaming ⊘	O Low	40%	80%	High
-	O isable -85dBm	-65dBm	Access Threshold ③	O Jisable	-85dBm		-65dBm
Response RSSI D Threshold	O isable -85dBm	65dBm	Response RSSI D Threshold	O lisable	-85dBm		-65dBm

3.15.11 Configuring Response RSSI Threshold

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP1261, RG-RAP1260, RG-RAP2260 and RG-RAP6262 models:

- Configure the master device. Choose A Network (WLAN) > Radio Frequency
- Configure the slave device. Choose (B) **Devices** > Select the target device in the device list and click **SN** > **Radio Frequency**

For the other RAP models:

• Configure the master device. Choose **WLAN** > Radio Frequency

Configure the slave device. Choose **WLAN > APs >** Select the target device in the device list and click **Manage > WLAN > Radio Frequency**

When the wireless signal of the end user is lower than the response RSSI threshold configured on the device, the client cannot detect the wireless signal of the device. The smaller the response RSSI threshold is configured, the less the environmental factors interfere with the AP. However, the connection of the client may be affected. After adjusting the configuration, click **Save**.

Radio Frequency	Device Group: Default			
Country/Region	China (CN)	~		
2.4G Channel Width	Auto	✓ 5G Channel Width	h Auto	~
Multicast Rate (Mbps)	Auto	 Multicast Rate (Mbps) 	Auto	~
0		0		
Client Count Limit	64	Client Count Limit	it 512	
Disconnection (\mathbf{r}	Disconnection	n O	
	-		Disable PEdPm	-65dBm
0		0)	
— The settings are val	lid for only current device			
The settings are val	lid for only current device	∽ 5G Channel	el Auto	~
	Auto	✓ 56 Channel Transmit Power		~
2.4G Channel Transmit Power	Auto	Transmit Power		→ m High
2.4G Channel Transmit Power Au Roaming ()	Auto	Transmit Power	er O Auto Lower Low Mediu	
2.4G Channel Transmit Power Au Roaming () Lo Access Threshold ()	Auto Duto Lower Low Medium Dow 40% 80%	High Roaming ③	Auto Lower Low Mediu O O Low 40% 80 O O	% High
2.4G Channel Transmit Power AL Roaming © LC Access Threshold © Disi	Auto Duto Lower Low Medium Dow 40% 80% Dable -85dBm	High Transmit Power High Roaming ⑦ High Access Threshold ⑦	Auto Lower Low Mediu O C Low 40% 80 D Disable -85dBm	
2.4G Channel Transmit Power Au Roaming () Lo Access Threshold ()	Auto	High Roaming ⑦ High Access Threshold ⑦ -65dBm Response RSSI	Auto Lower Low Mediu O C Low 40% 80 D Disable -85dBm	% High

3.15.12 Configuring WIO

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Network mode, choose A Network > WIO

For the other RAP models: Choose **WLAN** > WIO

Select the optimization mode. Then, click **OK** to optimize the wireless network.

A Caution

- WIO is supported only in the self-organizing network mode.
- The client may be offline during the optimization process. The configuration cannot be rolled back once optimization starts. Therefore, exercise caution when performing this operation.

Parameter	Description
Quick tuning	In this mode, external interference and bandwidth are not considered. A quick optimization is performed to optimize channel, power, and management frame power.
	In this mode, external interference and bandwidth are considered. A deep optimization is performed to optimize channel, power, and management frame power. Click to expand Advanced Settings to configure the scanning time, channel bandwidth and channels.
	• Scanning time: Indicates the time for scanning channels during the optimization.
	• Roaming Sensitivity: The roam sensitivity can be optimized based on the actual environment to ensure fast roaming of wireless devices.
Deep tuning	• Transmit power: Increasing the transmit power enhances both the strength and coverage of the wireless signal, but it may also introduce interference to surrounding wireless networks. With this feature enabled, the AP will automatically adjust the transmit power based on the environment.
	• 2.4G
	 Channel bandwidth: Indicates the channel bandwidth. The channel bandwidth will be calculated by the system if Default is selected.
	 Selected channels: Indicates the channels to be optimized.
	• 5G

Table 3-3 Description of Tuning Mode

Parameter	Description
	 Channel bandwidth: Indicates the channel bandwidth. The channel
	bandwidth will be calculated by the system if Default is selected.
	 Selected channels: Indicates the channels to be optimized.

• Choose Quick tuning, and click OK.

Network Optimization	Scheduled Optimization	Optimization Record	802.11k/v Roaming Opti	mization	
			Wireless Intelligent O	ptimization	
	Ser 🔺 🖉 👘		-	•	aximize wireless performance. Please use it after
?			II APs in the optimization are		
	💿	c	Optimization configurat	ion	
		?	Tuning mode: 💿 Quick t	uning O Deep tuning	
		E	stimated time consume	ed	
?			180s + Environment scan	3 minute Optimization configuration	
			ОК		

• Choose **Deep tuning**. Click to expand **Advanced Settings** to set the scanning time, channel bandwidth and selected channels. Then, click **OK**.

Network Optimization	Scheduled Optimization	Optimization Record	802.11k/v Roaming Optimization
		N N	Nireless Intelligent Optimization
			n a network environment, we will optimize your network to maximize wireless performance. Please use it after Il APs in the optimization area are fully online.
?		/ c	Dptimization configuration
			Tuning mode: Quick tuning O Deep tuning
		· • • • •	Advanced Settings

	Advanced Settings		
Scan time	10s	~	
Roaming Sensitivity			
Transmit Power	0		
	2.4G		
Channel Width	Default		~
* Selected	1 (2.412GHz) 🛞	2 (2.417GHz) 🛞	
channels	3 (2.422GHz) 🔘	4 (2.427GHz) 🛞	
chunnels	5 (2.432GHz) 🛞	6 (2.437GHz) 🛞	
	7 (2.442GHz) 🛞	8 (2.447GHz) 🛞	\sim
	7 (2.442GHz) 9 (2.452GHz)	8 (2.447GHz) 🛞 10 (2.457GHz) 🛞	~
			~
	9 (2.452GHz) 🛞	10 (2.457GHz) 🛞	~

	5G		
Channel Width	Default		\sim
* Selected	36 (5.18GHz) 🛞 40 (5.2GHz) 🛞		
channels	44 (5.22GHz) 🛞 48 (5.24GHz) 🛞		
	52 (5.26GHz) (Radar channel) 🛞		
	56 (5.28GHz) (Radar channel) 🛞		
	60 (5.3GHz) (Radar channel) 🛞		\sim
	64 (5.32GHz) (Radar channel) 🛞		
	149 (5.745GHz) 🛞 153 (5.765GHz)	\otimes	
	157 (5.785GHz) 🛞 161 (5.805GHz)	\otimes	
	165 (5.825GHz) 🛞		

After the optimization starts, please be patient and wait for the optimization to complete. After optimization is completed, you can click **Cancel Optimization** to restore the optimized RF parameters to their default values.

Click Back to homepage to perform wireless optimization again.

\bigcirc	Finish Optimization co Tuning mode: C	ompletion time: 2023-06 Quick tuning	6-12 11:10:44		Cancel C	optimization
	resulting in a 0. in overall netwo	d: 36 seconds, optimized 00% decrease in overall ork experience.			Back to	homepage
Dptimization de	t ails Band ≑	SN \$	Channel Width (Before/After)	Search N Channel (Before/After)	Transmit Power (Before/After)	5G 2.4G Sensitivity (Before/After)
Ruijie	5G	1234942571121	160->80	64->36	auto	0

Click **Optimization Record** to view the details of the latest optimization.

Network Optimization	Scheduled Op	timization Optim	ization Record	802.11k/v Roaming O	ptimization	
\bigcirc	Tuning mode: (Time consumed	d: 36 seconds, optimize 00% decrease in overa	ed 1 APs, resolved sev		APs,	el Optimization
	6 <mark>seconds</mark> , optimize	d 1 APs, resolved severe i		2.11k/v Roaming Optir esulting in a 0.00% decr		nterference and
an 0.00% improven	nent in overall netw ails	ork experience.		Search N	lame/SN Q	5G 2.4G
Hostname 🌩	Band \Leftrightarrow	SN \$	Channel Width (Before/After)	Channel (Before/After)	Transmit Power (Before/After)	Sensitivity (Before/After)
Ruijie	5G	1234942571121	160->80	64->36	auto	0
< 1 > 10/j	page 🗸					Total 1

You are advised to set a scheduled task to optimize the wireless network in the early hours of the morning or when the network is idle.

Network Optimization	Scheduled Optimization	Optimization Record	802.11k/v Roaming Optimization
<i>Scheduled Optim</i> Optimize the netwo	nization ork performance at a scheduled ti	ime for a better user experien	ce.
Enable 🔵			
Day Mon	~		
Time 00	\[\] \[00 \] \]		
Tuning mode: 🧿 Qui	ck tuning O Deep tuning		
	Save		

3.15.13 Configuring Wi-Fi Roaming Optimization (802.11k/v)

A Caution

This function is not supported by RG-RAP1200(F) and RG-RAP2200(F).

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In **Network** mode, choose **Network** > **WIO** > **Wi-Fi Roaming Optimization (802.11k/v)**.

For the other RAP models: Choose **WLAN** > WIO > Wi-Fi Roaming Optimization (802.11k/v).

Choose the optimization mode. Click **Enable** and the Wi-Fi roaming is further optimized through the 802.11k/v protocol. Smart clients compliant with 802.11k/v can switch to the APs with better signal and faster speed during the roaming process, ensuring high-speed wireless connectivity. To ensure smart roaming effect, the WLAN environment will be auto scanned when Wi-Fi roaming optimization is first enabled.

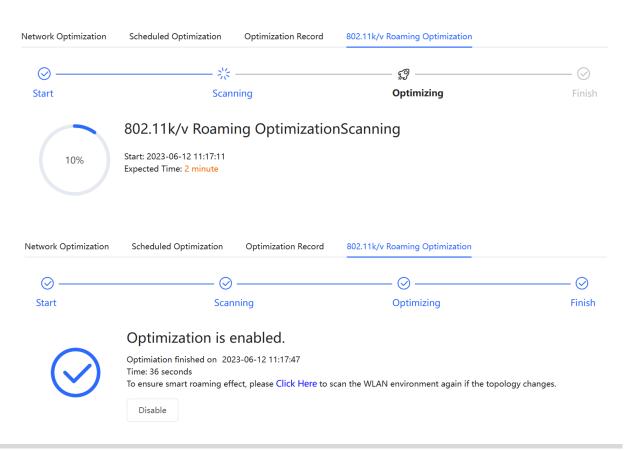
A Caution

- WIO is supported only in the self-organizing network mode.
- During the WLAN environment scanning, the APs will switch channels, forcing the clients to go offline. The process will last for 2 minutes.

Network Optimization	Scheduled Optimization	Optimization Record	802.11k/v Roaming Optimization			
Ø ———	🛇					
Start	Scar	nning	Optimizing Finish			
	Description: The Wi-Fi roaming is further optimized through the 802.11k/v protocol. Smart clients compliant with 802.11k/v can switch to the APs with better signal and faster speed during the roaming process, ensuring high-speed wireless connectivity. To ensure smart roaming effect, the WLAN environment will be auto scanned when Wi-Fi roaming optimization is first enabled.					
	Notes: During the WLAN environment scanning, the APs will switch channels, forcing the clients to go offline. The process will last for 2 minutes.					
	Optimization Mode O Performance-prior O Roaming-prior ⑦					
	Enable					

Table 3-4 Optimization Mode

Parameter	Description
Performance- prior	Maximum negotiation speed is preferentially guaranteed but connection stability may be affected.
Roaming-prior	Connection stability is preferentially guaranteed but maximum negotiation speed may be reduced.



3.16 Configuring Healthy Mode

Choose **A Network** (**WLAN**) > Wi-Fi > Healthy Mode.

Select **Device Group** from the drop-down list box. Click **Enable** to enable the healthy mode. You are allowed to set the effective time period for the healthy mode.

After the healthy mode is enabled, the transmit power and the Wi-Fi coverage area will decrease. The healthy mode may reduce signal strength and cause network stalling. You are advised to disable it or enable it when the network is idle.

<i>i</i> Enable the healthy mode. The device will decrease its transmit power to reduce radiation. Tip: Changing configuration requires a reboot and clients will be reconnected.							
Healthy Mode	Device Group: Default 🗸						
Enable							
Effective Time	All Time ~						
	Save						

3.17 Configuring XPress

- (1) Go to the page for configuration.
- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose Retwork (WLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (1) Click **Expand**, turn on **XPress** in the expanded settings and click **Save**. After XPress is enabled, the gaming traffic will be prioritized, ensuring a more stable gaming experience.

	Collapse
Wireless Schedule	All Time 🗸
VLAN	The same VLAN as AP $$
Hide SSID	(The SSID is hidden and must be manually entered.)
Client Isolation	Prevent wireless clients of this Wi-Fi from communicating with one another.
Band Steering	(The 5G-supported client will access 5G radio preferentially.)
XPress	(The client will experience faster speed.)

3.18 Configuring Wireless Schedule

- (1) Go to the page for configuration.
- Method 1: Choose Network (WLAN) > Wi-Fi > Wi-Fi Settings. Select the target Wi-Fi.
- Method 2: Choose A Network (TWLAN) > Wi-Fi > Wi-Fi List. Select the target Wi-Fi in the list and click Edit in the action column.
- (1) Click **Expand**, select a scheduled time span to turn on Wi-Fi and click **Save**. Clients will be allowed to access the Internet only in the specified time span.

* SSID	@Ruijie-s083			
Band	• 2.4G + 5G) 2.4G	○ 5G	
Security	Open		\sim	
	Coll	apse		
Wireless Schedule	All Time		^]
VLAN	All Time			
	Weekdays			
Hide SSID	Weekends			manually
Client Isolation	Custom			·Fi from

3.19 Enabling Reyee Mesh

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In **Network** mode, choose **Network** > **Reyee Mesh**

For the other RAP models: Choose **WLAN** > APs > Manage > Advanced > Reyee Mesh

After Reyee Mesh is enabled, you can set up a Mesh network through Mesh pairing between the devices that support Reyee Mesh. You can press the **Mesh** button on the device to automatically discover a new device for Mesh pairing or log in to the management page to select a new device for Mesh pairing. Reyee Mesh is enabled on the device by default.



3.20 Configuring AP Load Balancing

🛕 Caution

This function is supported by only RG-RAP series access points.

3.20.1 Overview

The AP load balancing function is used to balance the load of APs in the wireless network. When APs are added to a load balancing group, clients will automatically associate with the APs with light load when the APs in the group are not load balanced. AP load balancing supports two modes:

- Client Load Balancing: The load is balanced according to the number of associated clients. When a large number of clients have been associated with an AP and the count difference to the AP with the lightest load has reached the specified value, the client can only associate with another AP in the group.
- Traffic Load Balancing: The load is balanced according to the traffic on the APs. When the traffic on an AP is large and the traffic difference to the AP with the lightest load has reached the specified value, the client can only associate with another AP in the group.

Example: Add AP1 and AP2 into a group and select client load balancing. Set both the client count threshold and difference to 3. AP1 is associated with 5 clients and AP2 is associated

with 2 clients, triggering load balancing. New clients' attempt to associate to AP1 will be denied, and therefore they can associate only with AP2.

After a client request is denied by an AP and it fails to associate with another AP in the group, the client will keep trying to associate with this AP. If the client attempts reach the specified value, the AP will permit connection of this client, ensuring that the user can normally access the Internet.

3.20.2 Configuring Client Load Balancing

Choose Retwork (TWLAN) > Wi-Fi > Load Balancing.

Click Add. In the dialog box that appears, set **Type** to **Client Load Balancing**, and configure **Group Name**, **Members**, and **Rule**.

Load Balancing	9					+ Add	Delete Selected
lighter load. Example: Add AP1 a	into a group a and AP2 into a P2 is associate	nd enable load baland group and select clier ed with 2 clients, trigge	nt load balancing.	Set both the client co	unt threshold	d and difference to 3	. AP1 is associated
Group Na	ame	Туре		Rule		Members	Action
			No	o Data			
Add					×		
* Group Name							
* Type	Client Lo	oad Balancing			~		
* Rule	difference client cou 3 group. Af	ter a client associ	rently associat the lightest lo ssociate only to ation is denied ent will be allo	ad reaches another AP in th	nd		
* Members	Enter an	AP name or SN.			~		
				Cancel	ОК		

Parameter	Description
Group Name	Enter the name of the AP load balancing group.
Туре	Select Client Load Balancing.
	Configure a detailed load balancing rule, including the maximum number of clients allowed to associate with an AP, the difference between the currently associated client count and client count on the AP with the lightest load, and the number of attempts to the AP with full load.
Rule	By default, when an AP is associated with 3 clients and the difference between the currently associated client count and client count on the AP with the lightest load reaches 3, clients can associate only to another AP in the group. After a client association is denied by an AP for 10 times, the client will be allowed to associate to the AP upon the next attempt.
Members	Specify the APs to be added to the AP load balancing group.

3.20.3 Configuring Traffic Load Balancing

Choose A Network (TWLAN) > Wi-Fi > Load Balancing.

Click Add. In the dialog box that appears, set **Type** to **Traffic Load Balancing**, and configure **Group Name**, **Members**, and **Rule**.

Load	Balancing			+ Add	Delete Selected
Add J lighte Exam with	r load. ple: Add AP1 and AP2 int	p and enable load bal o a group and select o ated with 2 clients, tri	ancing. When load is unbalanced in the group, c client load balancing. Set both the client count th ggering load balancing. New clients' attempt to	reshold and difference to 3. Al	P1 is associated
	Group Name	Туре	Rule	Members	Action
			No Data		

Traffic Load Balancing
When the traffic load on an AP reaches 5
*100Kbps and the difference between the current traffic and
the traffic on the AP with the lightest load reaches
5 *100Kbps, clients can associate only to another
AP in the group. After a client association is denied by an AP
for 10 times, the client will be allowed to associate
to the AP upon the next attempt.
Enter an AP name or SN.

Table 3-6	Traffic load	balancing	configuration
-----------	--------------	-----------	---------------

Parameter	Description		
Group Name	Enter the name of the AP load balancing group.		
Туре	Select Traffic Load Balancing.		
	Configure a detailed load balancing rule, including the maximum traffic allowed on an AP, the difference between the current traffic and the traffic on the AP with the lightest load, and the number of attempts to the AP with full load.		
Rule	By default, when the traffic load on an AP reaches 500 Kbit/s and the difference between the current traffic and the traffic on the AP with the lightest load reaches 500 Kbit/s, clients can associate only to another AP in the group. After a client association is denied by an AP for 10 times, the client will be allowed to associate to the AP upon the next attempt.		

Cancel

Parameter	Description	
Members	Specify the APs to be added to the AP load balancing group.	

3.21 Wireless Authentication

🛕 Caution

This function is supported by only RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP1261, RG-RAP1260, RG-RAP2260, and RG-RAP6262.

3.21.1 Overview

Wireless authentication verifies the identity of users on a wireless network. Only authenticated users can access the network, ensuring wireless network security. You can configure authentication-free for wireless STAs (IP address/MAC address), public IP addresses, and domain names. Users can directly use network services or access specific websites without entering the username, password, or other information.

To use the wireless authentication function, ensure that the AP is added to Ruijie Cloud and is online. Then, configure a portal template on Ruijie Cloud and apply it to a specific SSID. When STAs connect to this SSID and access the network, the AP allows STAs added to the authentication-free lists configured on the Eweb management system (excluding those added to the MAC address blocklist) to access the network without authentication. The AP forbids STAs whose MAC addresses are added to the MAC address blocklist configured on the Eweb management system from accessing the network. For other users or domain names, the AP redirects them to the portal authentication page. Users need to complete identity verification on the portal page.

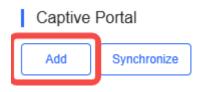
The following four authentication modes are supported:

- One-click Login: indicates login without the username and password.
- Voucher: indicates login with a random eight-digit password.
- Account: indicates login with the account and password.
- SMS: indicates login with the phone number and code.

Two or more authentication modes can be configured in a portal template. When multiple authentication modes are configured, users can select an authentication mode on the portal page.

3.21.2 Configuring One-click Login on Ruijie Cloud

- 1. Configuring a Portal Template with the Authentication Mode Set to Oneclick Login
- Log in to Ruijie Cloud, choose Project > Configuration > Authentication > Captive Portal, and select a network that needs to configure wireless authentication.
- (2) Click Add to open the portal template configuration page.



(3) Configure basic information of the portal template.

Name	Portal_one-click login						*	
Description]	
Login Options	One-click Login	Voucher	Account	SMS	Registration	beta	Facebook Account	
	Access Duration (Min)	Custo	m	~				
	Access Times Per Day	Unlim	ited					~
Show Balance Page 2								
Post-login URL 🛛	https://www.ruijienetworks.c	com						

Table 3-7 Basic Information of the Portal Template

Parameter	Description
Name	Indicates the name of a captive portal template.
Description	Indicates the description of a captive portal template.
Login Options	Select One-click Login , which indicates login without the username and password. You can set the access duration and access time per day.
Show Balance Page	Indicates the available duration, time, or data after portal authentication.
Post-login URL	Indicates the URL that is displayed after portal authentication.

(4) In the **Portal Page** area, click **Basic** to configure basic information for the portal page.

Portal Page 0		
Basic Advance	d	Mobile Desktop Reset Style
ogo	• Image O No Image	
ogo Image 🛛	Default Logo Upload	reugio 🖄
ackground	• Image O Solid Color	
ackground Image 🛙	Default Image Upload	One-click Login
Languages	English × +	
Welcome Messa	ge 💿 Text 🔿 Image 🥝	
Text	60 characters remaining	
		. /
Marketing Messa	age 60 characters remaining	
Terms & Condition	ons	
		Note: This is only a preview image. The actual effects vary with devices at different resolutions.
		OK
Copyright	60 characters remaining	

Table 3-8 Basic Information of the Portal Page

Parameter	Description		
Logo	Select whether to display the logo image.		
Logo Image	When Logo is set to Image , upload the logo picture or select the default logo.		
Background	Select the background with the image or the solid color.		
Background Image	When Background is set to Image , upload the background image or select the default image.		
Background Color	When Background is set to Solid Color , configure the background color. The default value is #ffffff .		
Language	 Select the language of the portal page and configure the content displayed on the portal page as required. You can click + to add portal pages in other languages. Welcome Message: Select the welcome message with the image or text. Marketing message: Enter the marketing message. 		

Parameter	Description	Description			
	Terms & Conditions: Enter te	erms and conditions.			
	Copyright: Enter the copyrig	• Copyright: Enter the copyright.			
	customize the button name	One-click Login: After One-click Login is enabled, you can customize the button name displayed on the portal page, which is set to One-click Login by default.			
	One-click Login	Reset			
	Switching Button One-click Login	45 characters remaining			

(5) In the **Portal Page** area, click **Advanced** to configure advanced information for the portal page.

Basic Advanced		Mobile Desktop Reset Style
Logo Position	Upper 🗸	Mobile Desktop Reset Style
ackground Mask Color	#a2a2a2	TRUMP (S
Background Mask Opacity	30	
Welcome Message Text Color	#ffffff	
Welcome Message Text Size	24 🗸	One-click Login
Button Color	#0066ff	
Button Text Color	#111111	
ink Color	#111111	
Text Color in Box	#111111	
		the second second second second second
		Note: This is only a preview image. The actual effects vary with devices at different resolutions.
		OK Cancel

Table 3-9 Advanced Information of the Portal Page

Parameter	Description
Logo Position	Select the logo position (Upper, Middle, or Lower).
Background Mask Color	Select the background mask color. The default value is #a2a2a2.
Background Mask Opacity	Select the background mask opacity (0-100).
Welcome Message Text	Select the welcome message text color. The default value is #ffffff.

Parameter	Description
Color	
Welcome Message Text Size	Select the welcome message text size.
Button Color	Select the button color. The default value is #0066ff.
Button Text Color	Select the button text color. The default value is #ffffff.
Link Color	Select the link color. The default value is #ffffff.
Text Color in Box	Select the text color in the box. The default value is #ffffff.

(6) After the configuration, click **OK** to save the portal template configurations.

2. Enabling One-click Login for an SSID

- Log in to Ruijie Cloud, choose Project > Configuration > Devices > Wireless > SSID, and select a network that needs to configure wireless authentication.
- (2) If the SSID that needs to enable wireless authentication is not created, click to open the SSID configuration page. If the SSID that needs to enable wireless authentication is

created, click in the **Action** column. The following content only describes configurations related to wireless authentication. For details about other SSID configuration parameters, see the Ruijie Cloud Cookbook.

SSID							
WLAN ID	SSID	Encryption Mode	Hidden	Forward Mode	Radio	Auth Mode	Action
1	WiFi_60	Open	No	Bridge	1	Auth Disabled	.ū.

(3) Enable **Auth** (disabled by default) and configure authentication-related parameters. After the configuration, click **OK** to save the configurations.

🚺 Note

When **Encryption Mode** is set to a value other than **WPA2-Enterprise(802.1x)**, **Auth** is available and you can select whether to perform wireless authentication.

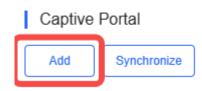
Auth				
Mode	Captive Portal	~		
Seamless Online 2	1 Day	~		
Select or add a new portal.				
Portal_SMS	Portal_account	Portal_voucher	Portal_one-click login	
SMS Login +86 Phone Number	Account Login	Voucher Login Access Code	C One-click Logn	
Verification Code	Password Cogn	Logn)
	One-dick Login			
	Г	OK Cancel		

- Mode: Set it to Captive Portal.
- Seamless Online: Determine whether to enable Seamless Online as required, which is enabled by default. After Seamless Online is enabled, users do not need to be authenticated when they go online again in the specified period of time.
- Select or add a new portal: Select a portal template with the authentication mode set to One-click Login. If the configured template does not meet the requirements, click or add a new portal to create a portal template.
- (4) Click **Save** for the configuration to take effect.

							Save	More 🗸
Wireless Configuration	tion							^
SSID 🖨								
WLAN ID	SSID	Encryption Mode	Hidden	Forward Mode	Radio	Auth Mode	Ac	tion
WLAN ID	SSID LJW_22	Encryption Mode Open	No	Forward Mode Bridge	Radio 1,2	Auth Mode Captive Portal	Ac	

3.21.3 Configuring Voucher Authentication on Ruijie Cloud

- 1. Configuring a Portal Template with the Authentication Mode Set to Voucher
- Log in to Ruijie Cloud, choose Project > Configuration > Authentication > Captive Portal, and select a network that needs to configure wireless authentication.
- (2) Click Add to open the portal template configuration page.



(3) Configure basic information of the portal template.

Name	Portal_voucher				*
Description					
Login Options	One-click Login	ucher Accour	t SMS	Registration	🕞 🔲 Facebook Account
Show Balance Page 🛛					
Post-login URL 🖉	https://www.ruijienetworks.com				

Table 3-10 Basic Information of the Portal Template

Parameter	Description
Name	Indicates the name of a captive portal template.
Description	Indicates the description of a captive portal template.
Login Options	Select Voucher , which indicates login with a random eight-digit password.
Show Balance Page	Indicates the available duration, time, or data after portal authentication.
Post-login URL	Indicates the URL that is displayed after portal authentication.

(4) In the **Portal Page** area, click **Basic** to configure basic information for the portal page.

Portal Page Ø	,	
Basic Advanc	sed	Mobile Desktop Reset Style
ogo	Image No Image	
ogo Image 🛿	Default Logo Upload	reugio 🛆
ackground	Image Solid Color	
ackground Image	Default Image Upload	♦ Voucher Login
Languages	English × +	Access Code
Welcome Mess	sage 💽 Text 🔿 Image 🛛	Login
Text	60 characters remaining	and the second se
Marketing Mess	sage 60 characters remaining	
Terms & Condit	tions	
		Note: This is only a preview image. The actual effects vary with devices at different resolutions.
		ОК Сапсе!
0.2	li	
Copyright	60 characters remaining	

Table 3-11 Basic Information of the Portal Page

Parameter	Description			
Logo	Select whether to display the logo image.			
Logo Image	When Logo is set to Image , upload the logo picture or select the default logo.			
Background	Select the background with the image or the solid color.			
Background Image	When Background is set to Image , upload the background image or select the default image.			
Background Color	When Background is set to Solid Color , configure the background color. The default value is #ffffff .			
Language	 Select the language of the portal page and configure the content displayed on the portal page as required. You can click + to add portal pages in other languages. Welcome Message: Select the welcome message with the image or text. Marketing message: Enter the marketing message. 			

Parameter	De	scription				
	•	Terms & Conditions:	Enter terms and	conditions.		
	•	Copyright: Enter the copyright.				
	•	Voucher Login: After customize the names authentication.	•			
		Voucher Login		Reset		
		Title ⊗Show		60 characters remaining		
		Voucher Login				
		Voucher Code Placeholder		60 characters remaining		
		Access Code				
		Login Button		60 characters remaining		
		Login				
		Switching Button		60 characters remaining		
		Voucher Login				

(5) In the **Portal Page** area, click **Advanced** to configure advanced information for the portal page.

Portal Page Ø		
Basic Advanced		Mobile Desktop Reset Style
Logo Position	Upper 🗸	
Background Mask Color	#a2a2a2	reuge 🛆
Background Mask Opacity	30	
Welcome Message Text Color	#11111	Voucher Login
Welcome Message Text Size	24 🗸	
Button Color	#0066ff	Access Code
Button Text Color	#fffff	Login
Link Color	#fffff	
Text Color in Box		. /
		Note: This is only a preview image. The actual effects vary with devices at different resolutions.
		OK Cancel

Table 3-12 Advanced information of the Portal Page	Table 3-12	Advanced Information of the Portal Page
--	------------	---

Parameter	Description
Logo Position	Select the logo position (Upper, Middle, or Lower).

Parameter	Description
Background Mask Color	Select the background mask color. The default value is #a2a2a2.
Background Mask Opacity	Select the background mask opacity (0-100).
Welcome Message Text Color	Select the welcome message text color. The default value is #ffffff.
Welcome Message Text Size	Select the welcome message text size.
Button Color	Select the button color. The default value is #0066ff.
Button Text Color	Select the button text color. The default value is #ffffff.
Link Color	Select the link color. The default value is #ffffff.
Text Color in Box	Select the text color in the box. The default value is #ffffff.

(6) After the configuration, click **OK** to save the portal template configurations.

2. Enabling Voucher Authentication for an SSID

- Log in to Ruijie Cloud, choose Project > Configuration > Devices > Wireless > SSID, and select a network that needs to configure wireless authentication.
- (2) If the SSID that needs to enable wireless authentication is not created, click to open the SSID configuration page. If the SSID that needs to enable wireless authentication is

created, click in the **Action** column. The following content only describes configurations related to wireless authentication. For details about other SSID configuration parameters, see the Ruijie Cloud Cookbook.

SSID								
	WLAN ID	SSID	Encryption Mode	Hidden	Forward Mode	Radio	Auth Mode	Action
	1	WiFi_60	Open	No	Bridge	1	Auth Disabled	C .ū.

(3) Enable **Auth** (disabled by default) and configure authentication-related parameters. After the configuration, click **OK** to save the configurations.

Note

When **Encryption Mode** is set to a value other than **WPA2-Enterprise(802.1x)**, **Auth** is available and you can select whether to perform wireless authentication.

Auth	0			
Mode Ca	ptive Portal	~		
Seamless Online 0	1 Day	~		
Select or add a new portal.				
Portal_SMS	Portal_account	Portal_voucher	Portal_one-click login	
Rugh	Plugite 🛆	Taujie 🛆 🧹	Ruge 🛆	
and the second				
SMS Login	Account Login	Voucher Login	One-click Login	
+86 Phone Number	Account	Access Code		_
Get Code				>
Verification Code	Login			
Login		Z		
•	Cone-click Login			
		OK Cancel		

- Mode: Set it to Captive Portal.
- Seamless Online: Determine whether to enable Seamless Online as required, which is enabled by default. After Seamless Online is enabled, users do not need to be authenticated when they go online again in the specified period of time.
- Select or add a new portal: Select a portal template with the authentication mode set to Voucher. If the configured template does not meet the requirements, click or add a new portal to create a portal template.
- (4) Click **Save** for the configuration to take effect.

							Save	More -
Wireless Configurati	ion							^
SSID								
WLAN ID	SSID	Encryption Mode	Hidden	Forward Mode	Radio	Auth Mode	Ac	tion
WLAN ID	SSID LJW_22	Encryption Mode Open	Hidden	Forward Mode Bridge	Radio 1,2	Auth Mode Captive Portal		tion

3. Adding a Voucher

- (1) Log in to Ruijie Cloud, choose **Project** > **Authentication** > **User Management**, **and** select a network in this account.
- (2) Configure a user group.
 - a On the **User Group** tab, click **Add**.

Account	Voucher	User Group	≪ E-sharing	i
+ Add				
			No Data	

b Configure user group parameters. After the configuration, click **OK**.

Add user group		Х
* User group name	test	
	User Group Policy	
Price		
Concurrent devices	3	~
Period	30Minutes	~
Quota 🛈	100 MB	\sim
Maximum upload rate	Unlimited	~
Maximum download rate	Unlimited	~
Maximum download fate	Unimited	
Bind MAC on first use		
	Cancel	ОК

User Group Name: indicates the user group name.

Price: indicates the price of the user group. Mark user groups by numeral. The current version has no impact on network usage.

Concurrent Devices: indicates the number of concurrent devices for one account.

Period: indicates the maximum validity time of an account. The maximum value is counted after the client passes authentication and successfully accesses the Internet.

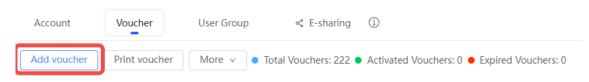
Quota: indicates the maximum amount of data transfer.

Maximum upload rate: indicates the maximum upload rate.

Maximum download rate: indicates the maximum download rate.

Bind MAC on first use: indicates that the MAC address of the first device used will be bound and other devices used by the same user will be prohibited from accessing the Internet.

- (3) Configure a voucher.
 - a On the Voucher tab, click Add voucher.



b Configure voucher parameters. After the configuration, click **OK**.

Add voucher		Х
* Quantity	2	
quantity		
* User group	∧	
	test	
User information setting $ \lor $	Custom	
Advance setting \checkmark		
	Cancel	ОК

Quantity: Enter the quantity of the voucher to print. When the value is set to 1, you can add a voucher and configure the name and the email address. When the value is greater than 1, you can add vouchers in batches. In this case, you can only configure the name and email address separately after the vouchers are added.

User group: Select a created user group from the drop-down list. If the created user group does not meet the requirements, click **Custom** to create a user group.

User information setting: Configure user information, which is optional.

Advance setting:

• **Voucher code type**: Set the value to Alphanumeric 0-9, a-z, Alphabetic a-z, or Numeric 0-9.

Advance Setting 🔨	
Voucher code type	Alphanumeric 0-9, a-z
	Alphanumeric 0-9, a-z
Voucher length	Alphabetic a-z
	Numeric 0-9
	Cancel OK
	Cancel OK

• Voucher length: Select the voucher length. The value ranges from 6 to 9.

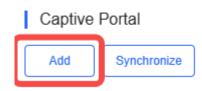
Voucher length	6 ^	
	6	
	7	
	8	
	9	

(4) Obtain the voucher code from the voucher list.

Add vou	Print vouche	r More 🗸 🔵	Total Vouchers: 4	Activated Vouchers: 0	 Expired Vouchers: 0 	Voucher	Q File
	Voucher code	User Group	Period	Created at	Activated at	Expired a	Operation
	fqyhwg	1	Unlimited	2022-08-12 18:34:31	-		∠CÖ
	dxwgkh	1	Unlimited	2022-08-12 18:34:31	-		∠Cī
	t5nq76	1	Unlimited	2022-08-12 11:09:07	-	-	∠CŌ
	jsz75g	1	Unlimited	2022-08-12 11:09:07	-		∠C₫

3.21.4 Configuring Account Authentication on Ruijie Cloud

- 1. Configuring a Portal Template with the Authentication Mode Set to Account
- Log in to Ruijie Cloud, choose Project > Configuration > Authentication > Captive Portal, and select a network that needs to configure wireless authentication.
- (2) Click Add to open the portal template configuration page.



(3) Configure basic information of the portal template.

Name	Portal_account .
Description	
Login Options	One-click Login Voucher Account SMS Registration Facebook Account
Show Balance Page 🛛	
Post-login URL 🛛	https://www.ruijienetworks.com

Table 3-13 Basic Information of the Portal Template

Parameter	Description		
Name	Indicates the name of a captive portal template.		
Description	Indicates the description of a captive portal template.		
Login Options	Select Account , which indicates login with the account and password.		
Show Balance Page	Indicates the available duration, time, or data after portal authentication.		
Post-login URL Indicates the URL that is displayed after portal authen			

(4) In the **Portal Page** area, click **Basic** to configure basic information for the portal page.

Portal Page 0

Basic Advance	ad	Mobile Desktop Reset Style
ogo	Image No Image	
ogo Image 🛛	Default Logo Upload	Taujjie 🛆
ackground	Image Solid Color	
ackground Image 🔇	Default Image Upload	Account Login
Languages	English × +	Account Password O
Welcome Messa	age 🔹 Text 🔷 Image 🖗	
Text	60 characters remaining	Login
		. /
Marketing Mess	age 60 characters remaining	
Terms & Conditi	ions	
		Note: This is only a preview image. The actual effects vary with devices at different resolutions.
		OK
	6	
Copyright	60 characters remaining	

Table 3-14 Basic Information of the Portal Page

Parameter	Description		
Logo	Select whether to display the logo image.		
Logo Image	When Logo is set to Image , upload the logo picture or select the default logo.		
Background	Select the background with the image or the solid color.		
Background Image	When Background is set to Image , upload the background image or select the default image.		
Background Color	When Background is set to Solid Color , configure the background color. The default value is #ffffff .		
Language Select the language of the portal page and configure the conditional displayed on the portal page as required. You can click add portal pages in other languages. • Welcome Message: Select the welcome message with image or text.			

Parameter	Description				
	Marketing message: Enter the marketing message.				
	•	Terms & Conditions: Enter terms and conditions.			
	•	Copyright: Enter the copyright.			
	•	Account Login: After Account Login is enabled, you can customize the names of the controls related to account authentication.			
		Account Login	Reset		
		Title ◎ Show	60 characters remaining		
		Account Login			
		Account Placeholder	60 characters remaining		
		Account			
		Password Placeholder	60 characters remaining		
		Password			
		Login Button	60 characters remaining		
		Login			
		Switching Button	60 characters remaining		
		Account Login			

(5) In the **Portal Page** area, click **Advanced** to configure advanced information for the portal page.

	Mobile Desktop Reset Style
Upper 🗸	
#a2a2a2	Religio
30	
#11111	Account Login
24 🗸	Account
#0066ff	Password
#11111	Login
#fffff	Lager
#ffffff	
	Note: This is only a preview image. The actual effects vary with devices at different resolutions.
	#a2a2a2 30 ##ffffff 24 #0066ff #ffffff #ffffff

Cancel

ок

Parameter	Description
Logo Position	Select the logo position (Upper, Middle, or Lower).
Background Mask Color	Select the background mask color. The default value is #a2a2a2.
Background Mask Opacity	Select the background mask opacity (0-100).
Welcome Message Text Color	Select the welcome message text color. The default value is #ffffff.
Welcome Message Text Size	Select the welcome message text size.
Button Color	Select the button color. The default value is #0066ff.
Button Text Color	Select the button text color. The default value is #ffffff.
Link Color	Select the link color. The default value is #ffffff.
Text Color in Box	Select the text color in the box. The default value is #ffffff.

Table 3-15Advanced Information of the Portal Page

(6) After the configuration, click **OK** to save the portal template configurations.

2. Enabling Account Authentication for an SSID

- Log in to Ruijie Cloud, choose Project > Configuration > Devices > Wireless > SSID, and select a network that needs to configure wireless authentication.
- (2) If the SSID that needs to enable wireless authentication is not created, click to open the SSID configuration page. If the SSID that needs to enable wireless authentication is

created, click in the **Action** column. The following content only describes configurations related to wireless authentication. For details about other SSID configuration parameters, see the Ruijie Cloud Cookbook.



(3) Enable **Auth** (disabled by default) and configure authentication-related parameters. After the configuration, click **OK** to save the configurations.

Note

When **Encryption Mode** is set to a value other than **WPA2-Enterprise(802.1x)**, **Auth** is available and you can select whether to perform wireless authentication.

Auth				
Mode	Captive Portal	~		
Seamless Online 2	1 Day	~		
Select or add a new portal.				
Portal_SMS	Account Login	Portal_voucher	Portal_one-click login	>

- Mode: Set it to Captive Portal.
- Seamless Online: Determine whether to enable Seamless Online as required, which is enabled by default. After Seamless Online is enabled, users do not need to be authenticated when they go online again in the specified period of time.

OK Cancel

- Select or add a new portal: Select a portal template with the authentication mode set to Account. If the configured template does not meet the requirements, click or add a new portal to create a portal template.
- (4) Click **Save** for the configuration to take effect.

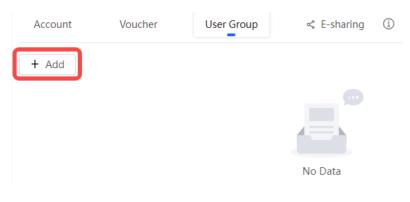
							Save More -
Wireless Configurati	tion						^
SSID 🖨							
WLAN ID	S SID	Encryption Mode	Hidden	Forward Mode	Radio	Auth Mode	Action
WLAN ID 1	\$\$ID LJW_22	Encryption Mode Open	Hidden	Forward Mode Bridge	Radio 1,2	Auth Mode Captive Portal	Action

3. Adding an Account

- (1) Log in to Ruijie Cloud, choose **Project** > **Authentication** > **User Management**, and select a network in this account.
- (2) Configure a user group.

Cancel

a On the User Group tab, click Add.



b Configure user group parameters. After the configuration, click **OK**.

Add user group		×
* User group name	test	
	User Group Policy	
Price		
Concurrent devices	3	~
Period	30Minutes	~
Quota 🛈	100 MB	\vee
Maximum upload rate	Unlimited	~
Maximum download rate	Unlimited	~
Bind MAC on first use		

User Group Name: indicates the user group name.

Price: indicates the price of the user group. Mark user groups by numeral. The current version has no impact on network usage.

Concurrent Devices: indicates the number of concurrent devices for one account.

Period: indicates the maximum validity time of an account. The maximum value is counted after the client passes authentication and successfully accesses the Internet.

Quota: indicates the maximum amount of data transfer.

Maximum upload rate: indicates the maximum upload rate.

Maximum download rate: indicates the maximum download rate.

Bind MAC on first use: indicates that the MAC address of the first device used will be bound and other devices used by the same user will be prohibited from accessing the Internet.

- (3) On the **Account** tab, add an account. Accounts can be added manually or through batch import.
- Adding an account manually

Click Add an Account, set parameters about the account, and click OK.

Add account		Х
* User name		
* Password		
* User group		~
Allow VPN connection		
Tips: By enabling this option, t	he user can use this account to log in remotely using a VPN.	
User information setting $ \lor $		



User name: The value is a string of less than 32 characters, consisting of letters, numerals, and underscores.

Password: The value is a string of less than 32 characters, consisting of letters, numerals, and underscores.

User group: Select a created user group from the drop-down list. If the created user group does not meet the requirements, click **Custom** to create a user group.

Allow VPN connection: By enabling this option, the user can use this account to log in remotely using a VPN.

User information setting: You can expand it to have more user information displayed, including the first name, last name, email, phone number, and alias.

• Adding accounts through batch import

Х

a Click Bulk import.

Bulk import accounts
Step1: Download and fill in the device information in the template. Up to 500 records can be imported each time.
Account and Password fields are required. Please enter less than 32 characters, consisting of letters, numbers or underscores.
Please select an .xls or .xlsx file Download Template

- b Click **Download Template** to download the template.
- c Edit the template and save it.

🛕 Note

- Account, Password, and User Group are mandatory.
- Check that the user group already exists and the added accounts are not duplicate with existing accounts.

lias User group Email
test
test
test

d Click **Please select an .xls or .xlsx file** to upload the file. After uploading, users are automatically created.

Account	Voucher	User Group	Contraction of the second s	()							O₽₿
Add acco	Bulk import	t One-click send	More v • T	otal Accounts: 3 🌒 A	Activated Accounts: (• Expired Accounts: 0				Accou	nt C
	Account	Password	User group	Status 🛈 🐨	Period	First name	Alias	Created at	Activated at	Ex	Operation
	test3	test3	test	Not used	30Minutes	Empty	Empty.	2023-02-13 16:42:21			∠Cī
	test4	test4	test	Not used	30Minutes	Empty	Empty.	2023-02-13 16:42:21	-		∠Cī
	test2	test2	test	Not used	30Minutes	Empty	Empty	2023-02-13 16:42:21	-		∠Cē
									3 in	total <	■ > 10 / page ∨

3.21.5 Configuring SMS Authentication on Ruijie Cloud

1. Adding a Twilio Account

Prerequisites

A Twilio account has been applied for from the Twilio official website (<u>https://www.twilio.com/login</u>).

Note

A Twilio account is used to send the SMS verification code.

Configuration Steps

(1) Log in to Ruijie Cloud and choose 🙆 > Account.

πυίπε 🝊	Home				🚥 ren-testas-001 🗸 📀 📭 🔀 🛞 🔗
Project 255	6	Device 53 • 1 devices have new version.	Alarm 24	8	Account Sub Account Release Notes Switch to Old Design Logout

(2) Add Twilio account information and click Save.

User Info		
Modify Password		
Modify Twilio Account How to apply twilio account?		
	Twilio Account SID	Account SID of Twilio
	Auth Token	Auth Token of Twilio
	Auth Phone	Active Number (Country Code + Phone Number) of Twilio
		Save
Delete Account		

2. Configuring a Portal Template with the Authentication Mode Set to SMS

- Log in to Ruijie Cloud, choose Project > Configuration > Authentication > Captive Portal, and select a network that needs to configure wireless authentication.
- (2) Click Add to open the portal template configuration page.

Captive Portal				
Add	Synchronize			

(3) Configure basic information of the portal template.

Name	Portal SMS *
Name	Porta_SMS
Description	
Login Options	One-click Login Voucher Account SMS Registration Facebook Account
	Twilio Account SID
	Auth Token
	Auth Phone
Show Balance Page	
Post-login URL 🕜	https://www.ruijienetworks.com

Table 3-16 Basic Information of the Portal Template

Parameter	Description				
Name	Indicates the name of a captive portal template.				
Description	Indicates the description of a captive portal template.				
Login Options	Select SMS , which indicates login with the phone number and code.				
Show Balance Page	Indicates the available duration, time, or data after portal authentication.				
Post-login URL	Indicates the URL that is displayed after portal authentication.				

(4) In the **Portal Page** area, click **Basic** to configure basic information for the portal page.

Portal Page		
Basic Advance	ced	Mobile Desktop Reset Style
.ogo	Image No Image	
.ogo Image 🛿	Default Logo Upload	
lackground	Image Solid Color	
ackground Image	Default Image Upload	SMS Login
Languages	English × +	+86 Phone Number
Welcome Mess	sage 🔹 Text 🔿 Image 🖗	Get Code Verification Code
Text	60 characters remaining	Login
Marketing Mes	ssage 60 characters remaining	·
Terms & Condi	itions	
		Note: This is only a preview image. The actual effects vary with devices at different resolutions.
		OK Cancel
Copyright	60 characters remaining	

Table 3-17 Basic Information of the Portal Page

Parameter	Description				
Logo	Select whether to display the logo image.				
Logo Image	When Logo is set to Image , upload the logo picture or select the default logo.				
Background	Select the background with the image or the solid color.				
Background Image	When Background is set to Image , upload the background image or select the default image.				
Background Color	When Background is set to Solid Color , configure the background color. The default value is #ffffff .				
Language	Select the language of the portal page and configure the content displayed on the portal page as required. You can click + to add portal pages in other languages.				
	 Welcome Message: Select the welcome message with the image or text. Marketing message: Enter the marketing message. 				

Portal Page @

Parameter	Description					
	Terms & Conditions: Enter terms and conditions.					
	Copyright: Enter the copyright.					
	• SMS Login: After SMS Login is enabled, you can customize the names of the controls related to SMS authentication.					
	SMS Login	Reset				
	Title ◎ Show	60 characters remaining				
	SMS Login					
	Phone Number Placeholder	60 characters remaining				
	Phone Number					
	Verification Code Placeholder	60 characters remaining				
	Verification Code					
	Verification Code Button	60 characters remaining				
	Get Code					
	Login Button	60 characters remaining				
	Login					
	Switching Button	60 characters remaining				
	SMS Login					

(5) In the **Portal Page** area, click **Advanced** to configure advanced information for the portal page.

Basic Advanced		Mobile Desktop Reset Style
Logo Position	Upper 🗸	
Background Mask Color	#a2a2a2	thuigta 📥
Background Mask Opacity	30	
Welcome Message Text Color	#11111	SMS Login
Welcome Message Text Size	24 🗸	+86 Phone Number
Button Color	#0066ff	Get Code
Button Text Color	#11111	Verification Code
Link Color	#11111	Login
Text Color in Box	#fffff	
		·
		Note: This is only a preview image. The actual effects vary with devices at different resolutions.
		OK Cancel

Parameter	Description				
Logo Position	Select the logo position (Upper, Middle, or Lower).				
Background Mask Color	Select the background mask color. The default value is #a2a2a2.				
Background Mask Opacity	Select the background mask opacity (0-100).				
Welcome Message Text Color	Select the welcome message text color. The default value is #ffffff.				
Welcome Message Text Size	Select the welcome message text size.				
Button Color	Select the button color. The default value is #0066ff.				
Button Text Color	Select the button text color. The default value is #ffffff.				
Link Color	Select the link color. The default value is #ffffff.				
Text Color in Box	Select the text color in the box. The default value is #ffffff.				

Table 3-18Advanced Information of the Portal Page

(6) After the configuration, click **OK** to save the portal template configurations.

3. Enabling SMS Authentication for an SSID

- (1) Log in to Ruijie Cloud, choose **Project** > **Configuration** > **Devices** > **Wireless** > **SSID**, and select a network that needs to configure wireless authentication.
- (2) If the SSID that needs to enable wireless authentication is not created, click to open the SSID configuration page. If the SSID that needs to enable wireless authentication is

created, click in the **Action** column. The following content only describes configurations related to wireless authentication. For details about other SSID configuration parameters, see the Ruijie Cloud Cookbook.

SSID							
WLAN ID	SSID	Encryption Mode	Hidden	Forward Mode	Radio	Auth Mode	Action
1	WiFi_60	Open	No	Bridge	1	Auth Disabled	C ū

(3) Enable **Auth** (disabled by default) and configure authentication-related parameters. After the configuration, click **OK** to save the configurations.

Note

When **Encryption Mode** is set to a value other than **WPA2-Enterprise(802.1x)**, **Auth** is available and you can select whether to perform wireless authentication.

	D			
	tive Portal	~		
Seamless Online 2	1 Day	~		
Select or add a new portal.				
Portal_SMS	Portal_account	Portal_voucher	Portal_one-click login	>

- Mode: Set it to Captive Portal.
- Seamless Online: Determine whether to enable Seamless Online as required, which is enabled by default. After Seamless Online is enabled, users do not need to be authenticated when they go online again in the specified period of time.
- Select or add a new portal: Select a portal template with the authentication mode set to SMS. If the configured template does not meet the requirements, click or add a new portal to create a portal template.
- (4) Click **Save** for the configuration to take effect.

							Save More -
Wireless Configurati	ion						^
SSID 🔁							
WLAN ID	\$ SID	Encryption Mode	Hidden	Forward Mode	Radio	Auth Mode	Action
WLAN ID 1	SSID LJW_22	Encryption Mode Open	Hidden	Forward Mode Bridge	Radio 1,2	Auth Mode Captive Portal	Action

3.21.6 Configuring an Authentication-Free User List on Eweb Management System

You can configure authentication-free for wireless STAs (IP address/MAC address), public IP addresses, and domain names. Users can directly use network services or access specific websites without entering the username, password, or other information.

1. Configuring an Authentication-Free User

- (1) Choose **Network** (**WLAN**) > Wireless Auth > Allowlist > User Allowlist.
- (2) Click **Add** to open the configuration page.

Cloud Integration	Allowlist	Client List	
<i>i</i> A user configu	red with whitelis	ted IP or MAC address can access the Internet without authentication.	
User Allowlist	IP Allowlist	Domain Allowlist MAC Blocklist/Allowlist	
User Allowlist			+ Add Delete Selected
Up to 50 entries of	an be added.		
		IP / IP Range	Action
		No Data	
	10/2222		Total 0

(3) Configure an STA IP address or IP address range. After the configuration, click **OK** to save the configurations.

Add				×
	* IP / IP Range	Example: 1.1.1.1-1.1.1.100		
			Cancel	ОК

- 2. Configuring an Authentication-Free Public IP Address
- (1) Choose Ketwork (WLAN) > Wireless Auth > Allowlist > IP Allowlist.
- (2) Click **Add** to open the configuration page.

Cloud Integration	Allowlist	Client List				
i A user config	ured with whitelis	sted IP or MAC address ca	n access the Internet without a	uthentication.		
User Allowlist	IP Allowlist	Domain Allowlist	MAC Blocklist/Allowlist			
IP Allowlist					+	Add 🗇 Delete Selected
Up to 50 entries	can be added.					
			IP	/ IP Range		Action
				No Data		
< 1 >	10/page V					Total 0

(3) Configure a public IP address or public IP address range. After the configuration, click **OK** to save the configurations.

Add				
	* IP / IP Range	Example: 1.1.1.1-1.1.1.100		
				_
			Cancel	ОК

3. Configuring a Domain Name Allowlist

- (1) Choose Retwork (TWLAN) > Wireless Auth > Allowlist > Domain Allowlist.
- (2) Click Add to open the configuration page.

Cloud Integration Allowlist Client List		
() A user configured with whitelisted IP or MAC address can a	access the Internet without authentication.	
User Allowlist IP Allowlist Domain Allowlist	MAC Blocklist/Allowlist	
Domain Allowlist		+ Add
Up to 100 entries can be added.		
	URL	Action
	No Data	
< 1 > 10/page ~		Total 0

(3) Configure authentication-free websites. After the configuration, click **OK**.

Add			×
* UI	L		
		Cancel	ОК

4. Configuring a MAC Address Allowlist and Blocklist

STAs whose MAC addresses are added to the MAC address allowlist can access the network without authentication, and STAs whose MAC addresses are added to the MAC address blocklist are forbidden to access the network.

- (1) Choose Network (WLAN) > Wireless Auth > Allowlist > MAC Blocklist/Allowlist.
- (2) Click Add to open the MAC address allowlist or blocklist configuration page.

Cloud Integration Allow	wlist Client List				
<i>i</i> A user configured with	h whitelisted IP or MAC address ca	in access the Internet without authentication.			
User Allowlist IP All	owlist Domain Allowlist	MAC Blocklist/Allowlist			
MAC Allowlist			(+ Add 🖻 Delete Selecte	ed
Up to 250 entries can be	added.				
		MAC Address		Action	
		No Data			
< 1 > 10/pag	ge 🗸			Tota	al 0
MAC Blocklist			(+ Add 🗇 Delete Selecte	ed
Up to 250 entries can be	added.				
		MAC Address		Action	
		No Data			
< 1 > 10/pag	je 🗸			Tota	al 0

(3) Configure the MAC address of a wireless STA. After the configuration, click OK.

Add			×
* MAC Address	Example: 00:11:22:33:44:55		
		Cancel	ОК

3.21.7 Displaying Authenticated Users on Eweb Management System

Choose **Network** (**WLAN**) > **Wireless Auth** > **Client List** to display authenticated users.

🚺 Note

The client going offline will not disappear immediately. Instead, the client will stay on the list for three more minutes.

Cloud Ir	ntegration Allowlist	Client List							
Clier	nt List						IP/MAC	Q	↓ Batch Logout
1	The client going offline will r	not disappear imm	ediately. Instead, the clien	t will stay in the list for t	hree more minutes.				
	Username	IP	MAC Address	Online Time	Auth Type	Connect the SSID	Access Name		Action
No Data									
<	1 > 10/page ~								Total 0

3.21.8 Displaying Authenticated Users on Ruijie Cloud

Log in to Ruijie Cloud, choose **Project** > **Monitoring** > **Clients** > **Auth Client**, and select a network that needs to display authenticated users.

Auth Clients							0
				Status: All \lor Ac	counts:	Auth Method: All	 Search
Status	Accounts	IP	MAC	Auth Method	Online Time	Device SN	Action
				No Data			

3.22 Configuring 802.1X Authentication

🛕 Caution

The functions mentioned in this chapter are supported by only RG-RAP2260(G), RG-RAP6260(G), RG-RAP6260(G), RG-RAP6260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260, and RG-RAP6262.

3.22.1 Overview

IEEE 802.1X is a port-based network access control standard that provides secure access services for LANs.

On an IEEE 802 LAN, a user can directly access network resources without authentication and authorization as long as it can connect to a network device. This uncontrolled behavior can bring security risks to the network. The IEEE 802.1X protocol was proposed to address the security issues on an IEEE 802 LAN.

The IEEE 802.1X protocol supports three security applications: Authentication, Authorization, and Accounting, abbreviated as AAA.

- Authentication: Determines whether a user can obtain access, and restricts unauthorized users.
- Authorization: Authorizes services available for authorized users, and controls the permissions of unauthorized users.
- Accounting: Records the usage of network resources by users, and provides a basis for traffic billing.

The 802.1X feature can be deployed on networks to control user authentication, authorization, and more.

An 802.1X network uses a typical client/server architecture, consisting of three entities: client, access device, and authentication server. A typical architecture is shown here.

Figure 3-1Typical Architecture of 802.1X Network



- The client is usually an endpoint device which can initiate 802.1X authentication through the client software. The client must support the Extensible Authentication Protocol over LANs (EAPoL) on the local area network.
- The access device is usually a network device (AP or switching device) that supports the IEEE 802.1X protocol. It provides an interface for clients to access the local area network, which can be a physical or a logical interface.
- The authentication server can realize user authentication, authorization, and accounting. Usually a RADIUS server is used as the authentication server.

Note

The RG-RAP APs only support the authentication.

3.22.2 Configuring 802.1X Authentication

(1) To access the configuration page, perform the following operations: In Network mode,

choose **hetwork** > 802.1x Authentication.

(2) Click Global 802.1x. A pop-up window is displayed. Click OK.

802.1x Authentication	RADIUS S	Server Management	Wireless User List	Wired User List
802.1x Authen	tication De	vice Group: Default		
Global 802.1x				
Authentication				×
		Are you sure you want t authentication?	o Enable global 802.1x	
	Set the		Cancel	ок
Escape SSID	•			
Re-authentication	•			
Client Packet * Timeout Duration	30			
	Override			

Enable the **Escape SSID** and configure parameters such as Escape SSID. Users can temporarily connect to the Escape SSID without a password when the authentication server is unavailable.

Escape SSID	0	
* Escape SSID	802.1x_escape	
* Security	WPA-PSK	~
* Wi-Fi Password	•••••	፞፞፞፞፞፞፞፞፞፠፞

Toggle on **Re-authentication** and set the re-authentication interval. The re-authentication function performs periodic user authentication, and users who do not pass the periodic authentication will be disconnected.

A Caution

The re-authentication interval must be set to 10800 seconds or above.

Re-authentication	• ?	
* Re-auth Interval		s

Client Packet Timeout Duration: The time limit for a client to wait for a response from the server. An authentication failure occurs after this time limit expires. The value range is 1 to 65535 seconds.

802.1x Authen	tication	Device Group:	Default	\sim
Global 802.1x				
Authentication				
	Go to Wi- Set the sec	- Fi surity mode of the	e SSID to 802.1	X (Enterprise).
Escape SSID				
Re-authentication	0			
Client Packet * Timeout Duration	30			s
	Overrid	e		

(3) Add a server.

Before proceeding, make sure that the following conditions are met:

- The RADIUS server is ready and the following configurations have been completed.
 - A username and a password have been added for client login.
 - The firewall has been disabled. Otherwise, authentication messages may be blocked, leading to authentication failure.
 - The IP address of the device to be authenticated has been added as a trusted IP address on the RADIUS server.

- The network between the device and the RADIUS server is reachable.
- The IP addresses of the RADIUS server and the device to be authenticated have been obtained.

Click **Add Server group** to configure server group parameters. You can click **Edit** to edit the server group, and click **Delete** to delete the server group.

Note

- You need to add at least one server for each server group, and a maximum of five servers can be added.
- Up to 20 server groups can be added under RADIUS Server Management.

802.1x Authentication	RADIUS Server Management	Wireless User List	Wired User List			
RADIUS Server N	lanagement				Add Server group	
Up to 20 entries can be added.						
Server group name	Server IP	Auth Port	Accounting Port	Shared Password	Action	
group1	1.1.1.2 1.1.1.1	1812 1812	1813 1813	ruijie ruijie	Edit Delete	
group2	1.1.1.3	1812	1813	ruijie	Edit Delete	

You can click \odot Add Server to add multiple servers to a server group, and click \square Server to delete a selected server.

Add				\times
* Server group name				
* Server IP	🖻 Server 1			
* Server name				
* Auth Port	1812			
* Accounting Port	1813	0		
* Shared Password				
* Match Order		0		
	••••• Add Server	 		
		Cancel	ОК	

Table 3-19	Server Group Parameters
------------	-------------------------

Parameter	Description
Server group name	Name of RADIUS server group
Server IP	IP address of the RADIUS server.
Server name	Name of RADIUS server
Auth Port	The port number for the RADIUS server to perform user authentication.
Accounting Port	The port number for the RADIUS server to perform user accounting.
Shared Password	Shared key of the RADIUS server.
Match Order	The system supports up to five RADIUS servers. A larger value indicates a higher priority.

(4) Configure the server and click **Save**.

RADIUS Server Management					Add Server
Up to 5 entries can be added.					
Server IP	Auth Port	Accounting Port	Shared Password	Match Order	Action
			No Data		
Server global configuration					
		* Packet Retransmission Interval	3 s		
		* Packet Retransmission Count	3 time		
		Server Detection			
		* Detection Interval	1 min		
		* Detection Count	5 time	0	
		* Detection Username	ruijie123		
		MAC Address Format	XXXXXXXXXXXXXX ~	0	
			Save		

Table 3-20	Server Global Configuration Parameters
------------	--

Parameter	Description	
Packet Retransmission Interval	Configure the interval during which the device sends a request to a RADIUS server before confirming that the RADIUS server	

Parameter	Description
	is unreachable.
Packet Retransmission Count	Configure the number of times that the device sends requests to a RADIUS server before confirming that the RADIUS server is unreachable.
Server Detection	If this function is enabled, it is necessary to set the server detection cycle, server detection times, and server detection username. Determines the server status and whether to enable functions such as the escape function.
MAC Address Format	 Configure the format of the MAC address used in attribute 31 (Calling-Station-ID) of a RADIUS message. The following formats are supported: Dotted hexadecimal format. For example, 00d0.f8aa.bbcc. IETF format. For example: 00-D0-F8-AA-BB-CC. Unformatted (default). For example: 00d0f8aabbcc

3.22.3 Viewing Wireless User List

모

When the 802.1X feature is configured globally, and a client is authenticated and connected to the network in a wireless manner, you can view the client in the **Wireless User List**.

To access the configuration page, perform the following operations: In Network mode, choose

02.1x Authentication	RADIUS Server N	/lanagement	Wireless User List	Wired User List			
<i>Description</i> The client going o	ffline will not disappe	ar immediately. Inste	ead, the client will sta	y in the list for a mor	e minutes.		
Wireless User Lis	t		Q	Search by ip/m	ac/Usernar Re	fresh ↓ Bat	tch Logout
Name	IP	MAC Address	online Time	Online Duration	Connect SSID	Access Name	Actior
			No Data				
	′page 🗸						Total

Click **Refresh** to view the latest user list.

If you want to disconnect a user from the network, select the user and click **Logout** under the **Action** column. You can also select multiple users and click **Batch Logout** to disconnect selected users.

3.22.4 Viewing Wired User List

When the 802.1X feature is configured globally, and a client is authenticated and connected to the network in a wired manner, you can view the client in the **Wired User List**.

In Ne	twork mod	e, choose	e 🖧 Netw	ork > 80)2.1x	Authe	ntication	> Wired Use	er List.
802.1x /	Authentication	RADIUS Serv	er Management	Wireless U	lser List	Wired	User List		
Wire	ed User List				Q	Search by	y mac	Refresh	↓ Batch Logout
	Username	Status	Interface	MAC Address	Onlir	ne Time	Online Duration	Access Name	Action
					No Data				
<	1 > 10/	page \vee							Total 0

Click **Refresh** to view the latest user list.

If you want to disconnect a user from the network, select the user and click **Logout** under the **Action** column. You can also select multiple users and click **Batch Logout** to disconnect selected users.

4 Network Settings

1 Note

This chapter takes the currently logged in device as an example to describe the entry of each function setting page. If you need to configure other devices in the network, please refer to the following path to enter the configuration page of the corresponding device, and then configure the function:

- For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260, and RG-RAP6262: Click Manage Network Device.
- For the other RAP models: Choose **WLAN > APs >** Select the target device in the device list and click **Manage**.

4.1 Switching Work Mode

4.1.1 Work Mode

See <u>Work Mode</u> for details.

4.1.2 Self-Organizing Network Discovery

When setting the work mode, you can set whether to enable the self-organizing network discovery function. This function is enabled by default.

After the self-organizing network discovery function is enabled, the device can be discovered in the network and discover other devices in the network. Devices network with each other based on the device status and synchronize global configuration. You can log in to the Web management page of any device in the network to check information about all devices in the network. After this function is enabled, clients can maintain and manage the current network more efficiently. You are advised to keep this function enabled.

If the self-organizing network discovery function is disabled, the device will not be discovered in the network and it runs in standalone mode. After logging in to the Web page, you can configure and manage only the currently logged in device. If only one device is configured or global configuration does not need to be synchronized to the device, you can disable the selforganizing network discovery function.

4.1.3 Configuration Steps

🚺 Note

If you need to switch the work mode to wireless bridging mode, please see <u>Wireless Repeater</u> <u>Mode</u> for details.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

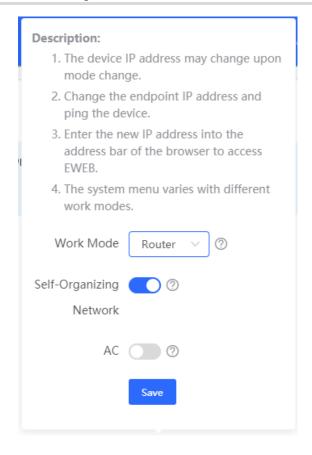
RAP6262 models: In Local Device mode, choose overview > Device Details

For other RAP models: Choose (TWLAN > APs > Manage) APs > Device Details

Click the current work mode to change the work mode.

Hostname: Ruijie • RAP	SN: G1QW,	7	IP: 172.26.1.209	() Reboot
Overview Basics ~ Security ~	Advanced ~ Diagnostics ~	System	~	
Overview				
Memory Usage 31 %	Online Clients		Status: Online Duration: 16 hours 45 minutes 21 s Systime: 2022-04-01 09:43:49	econds
Device Details				
Model: RAP			name: Ruijie 🖉	
SN: G1Q Work Mode: Router 🖉			MAC: AA:11:A/ Role: Master AP 0	
Hardware Ver: 1.00		Software	e Ver: ReyeeOS	
1 MAR 10:				

AC function switch: If a device works in the router mode and the self-organizing network discovery function is enabled, you can enable or disable the AC function. After the AC function is enabled, the device in the router mode supports the virtual AC function and can manage downlink devices. If this function is disabled, the device needs to be elected as an AC in self-organizing network mode and then manage downlink devices.



🛕 Caution

After the self-organizing network discovery is enabled, you can check the role of the device in self-organizing network mode.

4.1.4 Viewing Device Role

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose 6 Overview > Device Details

For other RAP models: Choose (**WLAN > APs > Manage**) **A Overview > Device** Details

()If the self-organizing network is enabled, you can view the device role on the **Device Details** page.

Master AP/AC: The device can manage downlink devices.

Slave AP/Device: The device has been managed by an AC. The slave Aps are managed by the master AP/AC in a unified manner. Some wireless network settings cannot be edited alone, and thus the master AP/AC delivers configurations to edit the network settings in a unified manner.

Device Details

Model: RAP2261(E) MAC Address: 58:69:6C:22:08:30 Hardware Ver: 1.00 Hostname: Ruijie & Work Mode: Router & Software Ver: ReyeeOS 1



4.2 Configuring Internet Connection Type (IPv4)

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose ONE Network > WAN > WAN

```
For other RAP models: Choose ( TWLAN > APs > Manage >) Retwork > WAN > WAN
```

Select the Internet connection type after confirming with the ISP. For detailed configuration, see <u>Work Mode</u>. After completing the configuration, click **Save**.

i wan	
* Internet	DHCP ~
	No username or password is required for DHCP clients.
IP Address	192.168.111.210
Subnet Mask	255.255.255.0
Gateway	192.168.111.1
DNS Server	192.168.111.1
	Advanced Settings
	Save

The device supports the following Internet connection types:

- **PPPoE**: This Internet connection type is supported only when the device works in routing mode. You need to manually configure the PPPoE username and password.
- **DHCP**: The current device will act as a DHCP client and apply for the IPv4 address/prefix from the upstream network device.
- **Static IP**: If this Internet connection type is selected, you need to manually configure a static IPv4 address, subnet mask, gateway address, and DNS server.

4.3 Configuring Internet Connection Type (IPv6)

🛕 Caution

This function is supported by only RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260, and RG-RAP6262 in the AP mode.

In Local Device mode, choose	Wetwork > WAN > WAN V6 Settings.

Select the Internet connection type after confirming with the ISP. For detailed configuration, see <u>Work Mode</u>. After completing the configuration, click **Save**.

WAN	WAN_V6 Settings		
	* Internet	Null	^
	IPv6 Address IPv6 Prefix	DHCP Static IP Null	
	Gateway		
	DNS Server		
		Save	

The device supports the following Internet connection types:

- **DHCP**: The current device will act as a DHCPv6 client and apply for the IPv6 address/prefix from the upstream network device.
- **Static IP**: If this Internet connection type is selected, you need to manually configure a static IPv6 address, gateway address, and DNS server.
- Null: The IPv6 function is disabled on the current WAN port.

4.4 Configuring LAN Port

A Caution

This function is not supported when the device works in AP mode.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose ONE Network > LAN > LAN Settings

For other RAP models: Choose (The WLAN > APs > Manage >) Retwork > LAN > LAN Settings

Click **Edit**. In the displayed dialog box, enter the IP address and subnet mask, and click **OK**. Change the IP address of the LAN port. Enter the new IP address in the browser and log in to the device again to configure and manage the device.

LAN Settings DHCP Clients	Static IP Addresses						
i LAN Settings							0
LAN Settings						+ Add	Delete Selected
Up to 8 entries can be added.							
IP Subnet I	Mask VLAN ID	Remark	DHCP Server	Start	IP Count	Lease Time(Min)	Action
192.168.120.2 255.255.	255.0 Default VLAN	-	Enabled	192.168.120.2	253	30	Edit Delete
Edit				×			
* IP	192.168.120.2						
* Subnet Mask	255.255.255.0						
Remark	Remark						
* MAC	aa:11:aa:00:04:	78					
DHCP Server							
		Can	ncel	ОК			

4.5 Configuring Repeater Mode

A Caution

RG-RAP1200(F) access point do not support this function.

4.5.1 Wired Repeater

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose Wetwork > Repeater Mode

For other RAP models: Choose (**WLAN > APs > Manage >**) **Wetwork > Repeater** Mode

Connect a network cable from the WAN port (uplink LAN port) of the device to the upper-layer device.

Select **Access Point**, click **Check**, confirm the Wi-Fi settings of the AP, and then click **Save** to expand the network coverage.

🛕 Caution

After the configuration is saved, connected clients will be disconnected from the network for a short period of time. You can reconnect the clients to the Wi-Fi network for restoration.

The device is working in	n Router mode.	
• Access Point	O Wireless Repeater	
		on between a primary router and a secondary router, extending network coverage. the local router to the LAN port of the primary router.
Wired Repeater		
	Check	

4.5.2 Wireless Repeater

The wireless repeater mode extends the Wi-Fi coverage range of the primary device. The device supports the dual-link wireless repeater mode and can extend both 2.4 GHz and 5 GHz signals of the primary device.

1 Note

- To avoid loops in wireless repeater mode, remove the network cable from the WAN port.
- Obtain the Wi-Fi name and Wi-Fi password of the upper-layer router.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose ONE Network > Repeater Mode

For other RAP models: Choose (**WLAN > APs > Manage >**) **Wetwork > Repeater** Mode

(1) Click Wireless Repeater and then click Select. A list of surrounding Wi-Fi signals pops up. A list of nearby 5 GHz Wi-Fi networks is displayed by default. You can switch from 5 GHz to 2.4 GHz band by selecting 2.4G from the drop-down list box. You are advised to select a strong 5 GHz Wi-Fi network signal.

The device is working in Access Point mode.			
Router Access Point Image: Wireless Repeater			
 This mode allows you to establish a wireless connection between a primary device and a secondary device, extending network coverage. The local device will work as a secondary device. It is recommended to select a 5G Wi-Fi of the primary device. To avoid loops, wireless repeater is not allowed to be configured. 			
Wireless Repeater			
Primary Device			
* SSID Select			

Γ

SSID	5G	✓ Re-sca	n	
SSID	BSSSID	Security	Channel	RSSI
damo	ec:b9:70:68:3b:86	OPEN	161	-18 dBm High
HUAWEI- 11111111	4c:50:77:42:61:58	WPA2PSK	36	-34 dBm High
@ew1800	c6:70:ab:8c:bf:b5	OPEN	36	-34 dBm High
HUAWEI- 11111111	4c:50:77:42:61:5e	WPA2PSK	149	-36 dBm High
@Ruijie- ew1800 5G	82:05:88:90:20:12	OPEN	64	-37 dBm High

- (2) Select the Wi-Fi signal of the upper-layer device that you want to extend. The configuration items of the local device are displayed. If the signal of the upper-layer device is encrypted, enter the Wi-Fi password of the upper-layer device.
- (3) Configure Local Router Wi-Fi. You can select New Wi-Fi or Same as Primary Router Wi-Fi.
 - If you select Same as Primary Router Wi-Fi, the Wi-Fi settings of the router are automatically synchronized with those on the primary router. Generally, clients merge Wi-Fi signals with the same name into one Wi-Fi signal, and they can search out only the Wi-Fi signal of the primary router.
 - If New Wi-Fi is selected, you can set a local Wi-Fi name and password. Clients will search out different Wi-Fi signals.

The device is working in	n Access Point mode.
O Router	 Access Point Wireless Repeater
i The local dev	ows you to establish a wireless connection between a primary device and a secondary device, extending network coverage. ice will work as a secondary device. inded to select a 5G Wi-Fi of the primary device. ireless repeater is not allowed to be configured.
Wireless Repeat	
— Primary Devic	e
* SSID	@ew1800 Select
Local Device	
Local Router Wi-Fi	New Wi-Fi Same as Primary Router Wi-Fi
* SSID(2.4G)	@ew1800_plus
* SSID(5G)	@ew1800_plus_5G
Wi-Fi Password	A blank value indicates no encryption.
	Save

A Caution

- After the configuration is saved, the AP will be disconnected from the Wi-Fi network and needs to connect to the new Wi-Fi network. Exercise caution when performing this operation. Record the new Wi-Fi name and password.
- You are advised to install the AP in a position where the RSSI is greater than two bars of signal to prevent signal loss. If the signal at the installation position is too weak, the Wi-Fi extension may fail or the quality of extended signal may be poor.

4.6 Creating a VLAN

A Caution

This function is not supported when the device works in AP mode.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose Wetwork > LAN > LAN Settings

For other RAP models: Choose (**WLAN > APs > Manage >**) **Wetwork > LAN > LAN** Settings

A LAN can be classified into multiple VLANs. Click **Add** to create a VLAN.

LAN Settings DHCP Client	ts Static IP Addresses						
i LAN Settings	() LAN Settings						
LAN Settings						+ Add	Delete Selected
Up to 8 entries can be added	d.						
IP Sub	net Mask VLAN ID	Remark	DHCP Server	Start	IP Count	Lease Time(Min)	Action
192.168.120.2 255.	255.255.0 Default VLAN	-	Enabled	192.168.120.2	253	30	Edit Delete
Add			×				
* IP	172.26.2.11						
* Subnet Mask	255.255.255.0						
* VLAN ID	3						
Remark	Remark						
* MAC	AA:11:AA:B4:16:E4						
DHCP Server							
		Cancel	ОК				

Table 4-1 VLAN Configuration

Parameter	Description
IP	IP address of the VLAN interface. The default gateway of devices that access the Internet through the current LAN should be set to this IP address.
Subnet Mask	Subnet mask of the IP address of the VLAN interface.
VLAN ID	VLAN ID.

Parameter	Description
Remark	VLAN description.
MAC	MAC address of the VLAN interface.
DHCP Server	Enable the DHCP server function. After it is enabled, devices on the LAN can automatically obtain IP addresses. After the DHCP service is enabled, you need to configure the start IP address to be assigned, number of IP addresses to be assigned, and address lease term for the DHCP server, and other DHCP server options. For details, see <u>Configuring DHCP Server</u> .

A Caution

VLAN configuration is associated with the configuration of the uplink device. Therefore, refer to the configuration of the uplink device when configuring a VLAN.

4.7 Configuring Port VLAN

A Caution

The port VLAN can be configured only when the device works in AP mode.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose ONE Network > LAN

For other RAP models: Choose (The weak of the second seco

(1) On the **LAN Settings** tab page, turn on **Port VLAN**, and click **OK** in the confirmation dialog box.

LAN Settings	Port VLAN				
i LAN Sett	i LAN Settings				
]				
LAN Setting	gs		+ Add	Delete Selected	
Up to 4 entri	es can be added.				
	VLAN ID	Remark		Action	
	99	test		Edit Delete	

(1) Click **Add**. Enter the VLAN ID and description, and click **OK** to create a VLAN. The added VLAN is used to set the VLAN, to which a port belongs.

Add		×
* VLAN ID	3	
Remark	Remark	
	Cance	ОК

- (2) Switch to the **Port VLAN** tab page and configure VLANs for the port. Click the option box below the port, select the mapping between a VLAN and the port from the drop-down list box, and click **Save**.
 - UNTAG: Configure the VLAN as the native VLAN of the port. That is, when receiving a packet from this VLAN, the port removes the VLAN tag from the packet and forwards the packet. When receiving an untagged packet, the port adds the VLAN tag to the packet and forwards the packet through the VLAN. Only one VLAN can be configured as an untagged VLAN on each port.
 - **TAG**: Configure the VLAN as an allowed VLAN of the port, but the VLAN cannot be the native VLAN. That is, VLAN packets carry the original VLAN tag when they are forwarded by the port.
 - Not Join: Configure the port not to allow packets from this VLAN to pass through. For example, if VLAN 10 and VLAN 20 are not added to port 2, port 2 will neither receive nor send packets from or to VLAN 10 and VLAN 20.

LAN Settings	Port VLAN				
<i>i</i> Port VLA Please cho	N pose LAN Settings to create a VLAN first and configure port settings based on the VLAN.				
Port VLAN					
Connected	Connected Disconnected				
	Port 1				
VLAN 1(WAI	N) UNTAG ~				
VLAN 99	Not Joir 🗸				

4.8 Changing MAC Address

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose ONE Network > WAN > WAN

For other RAP models: Choose (TWLAN > APs > Manage >) Retwork > WAN > WAN

ISPs may restrict the access of devices with unknown MAC addresses to the Internet for the sake of security. In this case, you can change the MAC address of the WAN port.

Click to expand **Advanced Settings**, enter the MAC address, and click **Save**. You do not need to change the default MAC address unless in special cases.

In the router mode, change the MAC address of the LAN port on Network > LAN.

A Caution

Changing the MAC address will disconnect the device from the network. You need to reconnect the device to the network or restart the device. Therefore, exercise caution when performing this operation.

	Advanced Settings
VLAN ID	Range: 2-232 and 234-4090.
* MTU	1500
* MAC	ec:b9:70:23:a4:bf
	Save

4.9 Changing MTU

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose ONE Network > WAN > WAN

For other RAP models: Choose (TWLAN > APs > Manage >) Retwork > WAN > WAN

WAN interface MTU indicates the maximum transmission unit (MTU) allowed by the WAN interface. The default value is 1500 bytes, indicating the maximum data forwarding efficiency. Sometimes, ISP networks restrict the speed of large data packets or forbid large data packets from passing through. As a result, the network speed is unsatisfactory or even the network is disconnected. In this case, you can set the MTU value to a smaller value.

····· /	Advanced Settings
VLAN ID	Range: 2-232 and 234-4090.
* MTU	1500
* MAC	ec:b9:70:23:a4:bf
	Save

4.10 Configuring DHCP Server

A Caution

This function is not supported when the device works in AP mode.

4.10.1 DHCP Server

In the router mode, the DHCP server function can be enabled on the device to automatically assign IP addresses to clients so that clients connected to the LAN ports or Wi-Fi network of the device obtain IP addresses for Internet access.

4.10.2 Configuring the DHCP Server Function

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose ONetwork > LAN > LAN Settings

For other RAP models: Choose (**WLAN > APs > Manage >**) **Wetwork > LAN > LAN** Settings

DHCP Server: The DHCP server function is enabled by default in the router mode. You are advised to enable the function if the device is used as the sole router in the network. When multiple routers are connected to the upper-layer device through LAN ports, disable this function.

A Caution

If the DHCP server function is disabled on all devices in the network, clients cannot automatically obtain IP addresses. You need to enable the DHCP server function on one device or manually configure a static IP address for each client for Internet access.

Start: Enter the start IP address of the DHCP address pool. A client obtains an IP address from the address pool. If all the addresses in the address pool are used up, no IP address can be obtained from the address pool.

IP Count: Enter the number IP addresses in the address pool.

Lease Time(Min): Enter the address lease term. When a client is connected, the leased IP address is automatically renewed. If a leased IP address is not renewed due to client disconnection or network instability, the IP address will be reclaimed after the lease term expires. After the client connection is restored, the client can request an IP address again. The default lease term is 30 minutes.

Ec	lit		×
	* IP	192.168.120.2	
	* Subnet Mask	255.255.255.0	
	Remark	Remark	
	* MAC	aa:11:aa:00:04:78	
	DHCP Server		7
	* Start	192.168.120.2]
	* Start * IP Count	192.168.120.2 253]
	* IP Count	253	

4.10.3 Displaying Online DHCP Clients

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose ONE Network > LAN > DHCP Clients

For other RAP models: Choose (**WLAN > APs > Manage >**) **Network > LAN > DHCP** Clients

Check information about an online client. Click **Convert to Static IP**. Then, the static IP address will be obtained each time the client connects to the network.

LAN Set	tings	DHCP Clients	Static IP Addresses			
1	View DHC	CP clients.				0
DHCP Clients S			Searc	ch by Hostname/IP/MAC	Q C Refresh	+ Batch Convert
Up to	o 300 IP	-MAC bindings can be	added.			
	No.	Hostname	IP	MAC	Remaining Lease Time(min)	Status
	1	nova G- f5a 97	192.168.120.172	42:11:26:	23	Convert to Static IP
	2	no 3- 7d2c 32	192.168.120.35	72:26:e8	13	Convert to Static IP
	3	R12	192.168.120.236	00:e0:4	19	Convert to Static IP

4.10.4 Displaying the DHCP Static IP Address List

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose RAP6262 models: In Local Device mode, choose Addresses

For other RAP models: Choose (**WLAN > APs > Manage >**) **Wetwork > LAN > Static** IP Addresses

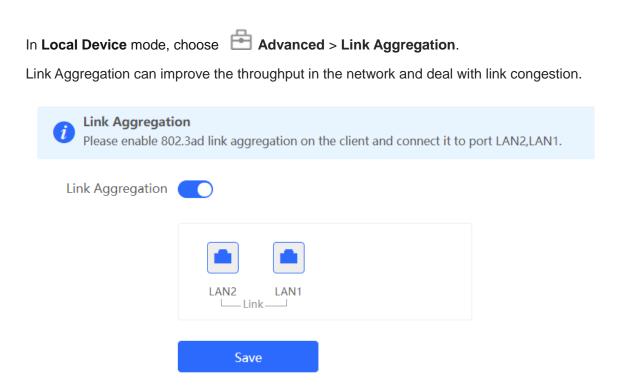
Click **Add**. In the displayed static IP address binding dialog box, enter the MAC address and IP address of the client to be bound, and click **OK**. After a static IP address is bound, the bound IP address will be obtained each time the client connects to the network.

LAN Settings	DHCP Clients	Static IP Addresses				
Static IP Address List						
Static IP A	ddress List		Search by IP/MAC	Q	+ Add	Delete Selected
Up to 300 e	ntries can be added.					
No.	I	P	MAC			Action
. 1	192.168	3.120.64	12:33:e3:b9:d9:36			Edit Delete

4.11 Link Aggregation

A Caution

The function is supported by only RG-RAP2260(H).



4.12 Configuring DNS

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose Advanced > Local DNS

For other RAP models: Choose (**WLAN** > APs > Manage >) Advanced > Local DNS

Enter the IP address of the DNS server and click **Save**. The local DNS server is optional. The device obtains the DNS server address from the connected uplink device by default. The default configuration is recommended. The available DNS service varies from region to region. You can consult the local ISP.

<i>i</i> The local DNS see	over is not required to be configured. By default, the device will get the DNS server address from the uplink device.
Local DNS server	Example: 8.8.8.8, each separated by a space.
	Save

4.13 Hardware Acceleration

🛕 Caution

This function is supported by only RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D,
RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260, and RG-RAP6262.

In Local Device mode, choose 🚔 Advanced > Hardware Acceleration.

After Hardware acceleration is enabled, the Internet access speed will be improved.

<i>i</i> Hardware Acce	eleration Acceleration is enabled, the Internet access speed will be improved and clients will not be rate-limited.
Enable	
	Save

4.14 Configuring Port Flow Control

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose Advanced > Port Settings

For other RAP models: Choose (**WLAN > APs > Manage >**) Advanced > Port Settings

When the LAN ports work at different rates, data congestion may occur, which can slow down the network speed and affect the Internet access experience. Enabling port flow control can help mitigate this problem.

ort Settings ow control can relieve the data congestion caused by ports at diffe	erent speeds and improve the network speed.
Flow Control	
Save	

4.15 Configuring ARP Binding

A Caution

This function is not supported when the device works in AP mode.

The device learns the IP and MAC addresses of network devices connected to ports of the device and generates ARP entries. You can bind ARP mappings to improve network security.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose Security > ARP List

For other RAP models: Choose (**WLAN** > APs > Manage >) Security > ARP List

ARP mappings can be bound in two ways:

(1) Select a dynamic ARP entry in the ARP list and click **Bind**. You can select multiple entries to be bound at one time and click **Bind Selected** to bind them. To remove the binding between a static IP address and a MAC address, click **Delete** in the **Action** column.

<i>i</i> The device learns IP-MAC mapping of all devices connected to its interfaces. You can bind or filter the MAC address.				ss. (?)
ARP List	Search	oy IP/MAC Q	+ Add Ø Bind Selected	Delete Selected
Up to 256	IP-MAC bindings can be added.			
No.	MAC	IP	Туре	Action
1	12:33:e3:b9:d9:36	192.168.120.64	Dynamic	
2	00:e0:4c:36:0b:ea	192.168.120.236	Static	Edit Delete
3	30:0d:9e:7e:13:a1	172.26.1.1	Dynamic	

(2) Click **Add**, enter the IP address and MAC address to be bound, and click **OK**. The input box can display existing address mappings in the ARP list. You can click a mapping to automatically enter the address mapping.

Add		×
	* IP	Enter or select an IP address.
	* MAC	Enter or select a MAC address.
		12:33:e3:b9:d9:36 (192.168.120.64)
		00:e0:4c:36:0b:ea (192.168.120.236)

4.16 Configuring LAN Ports

A Caution

The configuration takes effect only on APs having wired LAN ports.

Choose Retwork (TWLAN) > LAN Ports.

Enter the VLAN ID and click **Save** to configure the VLAN, to which the AP wired ports belong. If the VLAN ID is null, the wired ports and WAN port belong to the same VLAN.

In self-organizing network mode, the AP wired port configuration applies to all APs having wired LAN ports on the current network. The configuration applied to APs in **LAN Port Settings** takes effect preferentially. Click **Add** to add the AP wired port configuration. For APs, to which no configuration is applied in **LAN Port Settings**, the default configuration of the AP wired ports will take effect on them.

 LAN Port Settings The configuration takes effect only for the AP with a LAN port, e.g., EAP101. Note: The configured LAN port settings prevail. The AP device with no LAN port settings will be enabled with default settings. 					
Default Settings					
VLAN ID		Add VLAN			
(Range: 2-232 and 234-4090. A blank value indicates the same VLAN as WAN port.) Applied to AP device with no LAN port settings					
LAN Port Setting	gs	+ Add	Delete Selected		
Up to <mark>8</mark> VLAN IDs or	32 APs can be added (1 APs have been added).				
VLAN ID	Applied t	D	Action		
5	Ruijie		Edit Delete		

4.17 IPv6 Settings

A Caution

This function is supported only by RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1260, RG-RAP1261 and RG-RAP6262 in the router mode.

4.17.1 Overview

Internet Protocol Version 6 (IPv6) is the next generation IP protocol designed by the Internet Engineering Task Force (IETF) to replace IPv4 and solve the IPv4 problems such as address depletion.

4.17.2 IPv6 Basic

1. IPv6 Address Format

IPv6 increases the length of the address from 32 bits in IPv4 to 128 bits, and therefore has a larger address space than IPv4.

The basic format of an IPv6 address is **X:X:X:X:X:X:X:X**. The 128-bit IPv6 address is divided into eight 16-bit sections that are separated by colons (:), and 16 bits in each section are represented by four hexadecimal characters (0–9 and A–F). Each **X** represents a 4-character hexadecimal number.

For example: 2001:ABCD:1234:5678:AAAA:BBBB:1200:2100, 800:0:0:0:0:0:0:0:1, 1080:0:0:0:8:800:200C:417A

The number **0** in the IPv6 address can be abbreviated as follows:

- The starting 0s can be omitted. For example, 2001:00CD:0034:0078:000A:000B:1200:2100 can be written as 2001:CD:34:78:A:B:1200:2100.
- Consecutive 0s can be replaced by two colons (::). For example, **800:0:0:0:0:0:0:0:1** can be written as **800::1**. Consecutive 0s can be replaced by two colons only when the 16-bit section contains all 0s, and the two colons can only appear once in the address.

2. IPv6 Prefix

An IPv6 address consists of two parts:

- Network prefix: It contains n bits, and is equivalent to the network ID in an IPv4 address.
- Interface identifier: It contains (128 n) bits, and is equivalent to the host ID in an IPv4 address.

The length of the network prefix is separated from the IPv6 address by a slash (/). For example, **12AB::CD30:0:0:0/60** indicates that the length of the prefix used for routing in the address is 60 bits.

3. Special IPv6 Address

There are also some special IPv6 addresses, for example:

fe80::/8 is a link local address, and equivalent to 169.254.0.0/16 in IPv4.

fc00::/7 is a local address, and similar to 10.0.0.0/8, 172.16.0.0/16, or 192.168.0.0/16 in IPv4.

ff00::/12 is a multicast address, and similar to 224.0.0.0/8 in IPv4.

4. NAT66

IPv6-to-IPv6 Network Address Translation (NAT66) is the process of converting the IPv6 address in an IPv6 packet header to another IPv6 address. NAT66 prefix translation is an implementation of NAT66. It replaces the IPv6 address prefix in the packet header with another IPv6 address prefix to achieve IPv6 address translation. NAT66 can realize mutual access between an intranet and Internet.

4.17.3 IPv6 Address Assignment Methods

- Manual configuration: The IPv6 address/prefix and other network configuration parameters are manually configured.
- Stateless Address Autoconfiguration (SLAAC): The link local address is generated based on the interface ID, and then the local address is automatically configured based on the prefix information contained in the route advertisement packet.
- Stateful address autoconfiguration, that is, DHCPv6: DHCPv6 is divided into the following two types:
 - DHCPv6 autoconfiguration: The DHCPv6 server automatically configures the IPv6 address/prefix and other network configuration parameters.

DHCPv6 Prefix Delegation (PD): The lower-layer network device sends a prefix allocation application to the upper-layer network device. The upper-layer network device assigns an appropriate address prefix to the lower-layer device. The lower-layer device automatically subdivides the obtained prefix (generally less than 64 bits in length) into subnet segments with 64-bit prefix length, and then advertises the subdivided address prefixes to the user link directly connected to the IPv6 host through the route to realize automatic address configuration of the host.

4.17.4 Enabling IPv6

In Lo	ocal Device mode, choose 🐨 Network > IPv6 Address.							
Click	Enable, and then click OK in the dialog box that appears to enable IPv6.							
I	IPv6 Address1. When IPv6 is enabled, The MTU of IPV4 WAN port need higher than 1280.2. If you want to set more than one IPv6 LAN, please choose Port VLAN to set only one VLAN to Untagged and set the other VLANs to Non-added.							
	Enable							
Tips	; ×							
0	In the second							
	Cancel							

After IPv6 is enabled, you can configure the IPv6 addresses of WAN and LAN ports, view the DHCPv6 client, and configure a static DHCPv6 address for the client.

1		6 is enabled, The N	/ITU of IPV4 WAN port 1 one IPv6 LAN, please	
	Ena	ble 🔵		
WAN Set	ttings	LAN Settings	DHCPv6 Clients	Static DHCPv6
	* Inter	net DHCP		~
	IPv6 Addr	ess		
	IPv6 Pre	efix		
	Gatev	vay		
	DNS Ser	ver		
	NA	r66		
		Sa	ve	

4.17.5 Configuring the IPv6 Address for the WAN Port

In Local Device mode, choose Over Network > IPv6 Address > WAN Settings.

Configure the IPv6 address for the WAN port, and click Save.

	enabled, The MTU of IPV4 WAN port need higher than 1280. set more than one IPv6 LAN, please choose Port VLAN to set only one VLAN to Untagged and set the other VLANs to Non-added.
Enable	
WAN Settings LA	N Settings DHCPv6 Clients Static DHCPv6
* Internet	DHCP
IPv6 Address	DHCP Static IP
IPv6 Prefix	Null
Gateway	
DNS Server	
NAT66	
	Save

Parameter	Description				
	Specify the method for obtaining an IPv6 address for the WAN port.				
	• DHCP : The current device will act as a DHCPv6 client and apply for the IPv6 address/prefix from the upstream network device.				
Internet	• Static IP: If this Internet connection type is selected, you need to manually configure a static IPv6 address, gateway address, and DNS server.				
	 Null: The IPv6 function is disabled on the current WAN port. 				
IPv6 Address	If Internet is set to DHCP , the automatically obtained IPv6 address is displayed.				
	If Internet is set to Static IP , you need to manually configure this parameter.				
IPv6 Prefix	If Internet is set to DHCP and the current device obtains the IPv6 address prefix from the upstream device. The obtained IPv6 address prefix is displayed.				
Cotomor	If Internet is set to DHCP , the automatically obtained gateway address is displayed.				
Gateway	If Internet is set to Static IP , you need to manually configure this parameter.				
DNS Sonror	If Internet is set to DHCP , the automatically obtained DNS server address is displayed.				
DNS Server	If Internet is set to Static IP , you need to manually configure this parameter.				
NAT66	If the current device cannot access the Internet in DHCP mode or cannot obtain the IPv6 address prefix, you must enable NAT66 to assign the IPv6 address to an intranet client.				

Table 4-2 IPv6 Address Configuration Parameters of the WAN Port

4.17.6 Configuring the IPv6 Address for the LAN Port

In Local Device mode, choose ONetwork > IPv6 Address > LAN Settings.

When the device accesses the network in DHCP mode, the upstream device can assign an IPv6 address to the LAN port, and assign IPv6 addresses to the clients in the LAN based on the IPv6 address prefix. If the upstream device cannot assign an IPv6 address prefix to the current device, you need to manually configure an IPv6 address prefix for the LAN port, and assign IPv6 addresses to the clients in the LAN by enabling the NAT66 function (see <u>4.17.5</u> <u>Configuring the IPv6 Address for the WAN Port</u>).

 IPv6 Address 1. When IPv6 is enabled, The MTU of IPV4 WAN port need higher than 1280. 2. If you want to set more than one IPv6 LAN, please choose Port VLAN to set only one VLAN to Untagged and set the other VLANs to Non-added. 									
	Enable 🔵								
WAN Settin	ngs LAN Settings	DHCPv6 Clients Stat	tic DHCPv6						
LAN Se	ettings					+ Add 🗎 Del	ete Selected		
Up to 8	entries can be added.								
	VLAN ID	IPv6 Assignment	Subnet Prefix Name	Subnet ID	Subnet Prefix Length	IPv6 Address/Prefix Length	Action		
	Default	Auto		0	64		Edit Delete		

Click **Edit** corresponding to the default VLAN, and fill in a local address of no more than 64 bits in the **IPv6 Address/Prefix Length** column. This address will also be used as the IPv6 address prefix.

IPv6 Assignment specifies the method for assigning IPv6 addresses for clients. The following options are available:

- Auto: Both DHCPv6 and SLAAC are used to assign IPv6 addresses to clients.
- **DHCPv6**: DHCPv6 is used to assign IPv6 addresses to clients.
- **SLAAC**: SLAAC is used to assign IPv6 addresses to clients.
- Null: No IPv6 addresses are assigned to clients.

The setting of **IPv6 Assignment** is determined by the protocol supported by intranet clients. If you are not sure about the protocol supported by intranet clients, select **Auto**.

Edit			×
IPv6 Assignment	Auto	?	
IPv6 Address/Prefix Length	Auto DHCPv6 SLAAC Null	?	
	Cancel	OK	

You can click **Advanced Settings** to configure more address attributes.

Edit		×
IPv6 Assignment	Auto	0
IPv6 Address/Prefix	Example: 2000::1	?
Length		
	Advanced Settings	
Subnet Prefix Name	Default \lor	?
Subnet Prefix Length	64	0
Subnet ID	0	0
* Lease Time (Min)	30	0
DNS Server	Example: 2000::1, each separated by a comma	

O

Cancel

Table 4-3 IPv6 Address Configuration Parameters of the LAN Port

Parameter	Description
Subnet Prefix Name	Configure the interface from which the prefix is obtained, for example, WAN_V6 . The default value is all interfaces.
Subnet Prefix Length	Configure the length of the subnet prefix. The value ranges from 48 to 64.
Subnet ID	Configure the subnet ID in hexadecimal notation. 0 indicates that the subnet ID automatically increments.
Lease Time (Min)	Configure the lease term of the IPv6 address. The unit is minutes.
DNS Server	Configure the address of the IPv6 DNS server.

4.17.7 Viewing DHCPv6 Clients

In Local Device mode, choose ONE Network > IPv6 Address > DHCPv6 Clients.

When the device acts as a DHCPv6 server to assign IPv6 addresses to clients, you can view information about the clients that obtain IPv6 addresses from the device on the current page. The information includes the host name, IPv6 address, remaining lease term, and DHCPv6 Unique Identifier (DUID) of each client.

Enter an IPv6 address or DUID in the search bar, and click to quickly find the information of the specified DHCPv6 client.

	Pv6 is enabled, The N	ITU of IPV4 WAN port n one IPv6 LAN, please cl		only one VLAN to Untagged and set the other VL	ANs to Non-added.	
E	nable 🔵					
WAN Settings	LAN Settings	DHCPv6 Clients	Static DHCPv6			
<i>i</i> DHCPv6 You can v		ts information on this p	age.			
DHCPv6 Cl	ients				Search by IPv6 Address/DUII	Q + Batch Convert
No.	Hostnam	ie	IPv6 Address	Remaining Lease Time(min)	DUID	Status
				No Data		
< 1 >	10/page v					Total 0

4.17.8 Configuring the Static DHCPv6 Address

Configure the IPv6 address statically bound to the DUID of a client so that the client can obtain the specified address each time.

In Local Device	mode, choc	ose 🕀 Netw	vork > IPv6	Address > Stat	ic DHCPv6.	
IPv6 Address 1. When IPv6 is enabled, The 2. If you want to set more th			one VLAN to Untagged a	nd set the other VLANs to Non-adde	ed.	
Enable 🔵						
WAN Settings LAN Settings	DHCPv6 Clients	Static DHCPv6				
<i>i</i> Static IP Address List						
Static IP Address List				Search by IPv6 Address/DUI	Q + Add	Delete Selected
Up to 200 entries can be added	ł.					
No.	IPv6 Address		DUID		Action	
			No Data			
< 1 > 10/page >						Total 0
(1) Click Add.						
Add			×			
* IPv6 Address	Example: 2000:	:1				
* DUID	Example: 00030	000100d0f819685f				
		Cancel	ОК			

- (2) Enter the IPv6 address and DUID of the client.
- (3) Click **OK**.

4.17.9 Configuring the IPv6 Neighbor List

In IPv6, Neighbor Discovery Protocol (NDP) is an important basic protocol. NDP replaces the ARP and ICMP route discovery protocols of IPv4, and supports the following functions: address resolution, neighbor status tracking, duplicate address detection, router discovery, and redirection.

```
In Local Device mode, choose Security > IPv6 Neighbor List.
```

IPv6	5 Neigh	nbor List		Search by IP Address/MAC A	Q	+ Add		🗊 Delete Sele	ected
Up t	to 256 IF	P-MAC bindings can be added.							
	No.	MAC Address	IP Address	Туре		Ethernet	status	Action	
	1	58:69:6c:22:08:30	fe80::5a69:6cff:fe22:830	Dynamic		1AW	۷	∂ Bind	
	2	42:93:d6:46:2e:ab	fe80::5e1a:a95:3ed7:9be4	Dynamic		LAN	I	∂ Bind	
	3	f8:e4:3b:13:21:6f	fe80::9120:5120:d4df:562b	Dynamic		LAN	I		
	1	10/page V							Total 3

(1) Click Add and add the interface, IPv6 address and MAC address of the neighbor.

Add		×
* Interface	Select ~	
* IPv6 Address	Please enter an IPv6 address.	
* MAC Address	Please enter a MAC address.	
	Cancel	ОК

(2) Select the IPv6 neighbor list to be bound, and click **Bind** in the **Action** column to bind the IPv6 address and MAC address.

IPve	5 Neigh	bor List		Search by IP Address/MAC A	Q + Add		Delete Selected
Up	to 256 IP	-MAC bindings can be added.					
	No.	MAC Address	IP Address	Туре	Ethernet	status	Action
	1	58:69:6c:22:08:30	fe80::5a69:6cff:fe22:830	Dynamic	1AW	٧	@ Bind
	2	42:93:d6:46:2e:ab	fe80::5e1a:a95:3ed7:9be4	Dynamic	LAN	I	
	3	f8:e4:3b:13:21:6f	fe80::9120:5120:d4df:562b	Dynamic	LAN	1	
	1	10/page ×					Total 3

5 System Settings

5.1 PoE

A Caution

Only RG-RAP1200(P) supports this function.

Choose Wireless > APs > Manage > Basics > PoE.

The device supplies power to PoE powered devices through ports. You can check the total power, current consumption, remaining consumption, and whether PoE power supply status is normal. Move the cursor over a port. The power switch icon \bigcirc appears. You can click it to control whether to enable PoE on the port.

	Hostname: Ruljie	SN: G1	PW61G000208	IP:	MAC: 00:D0:F8:15:78:44		(1) Reboot
Overview Basics ~	Advanced ~ Diagnostics ~	System	~				
🪺 РоЕ							
PoE Consumption	1 Details						
Max Consumption			Current Consumption			Remaining Consumption	
	15.4W			0.0W		15.4W	
PoE Device Panel							
Powered On	Powered Off PoE Erro	or					
			Current	Consumption:	0.0W		

5.2 PoE Settings

A Caution

This function is supported by only RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260, and RG-RAP6262.

In Local Device mode, choose Advanced > PoE Settings.

Set the power mode for the AP to accept power over PoE. In AF mode, the maximum power supported by the device is 15.4 W. In AT mode, the maximum power is 30 W according to the IEEE 802.3at standard. In BT mode, the maximum power is 51 W according to the IEEE 802.3bt standard. By default, the device automatically negotiates with the power sourcing equipment (PSE) about the power mode. The default configuration is recommended.

<i>i</i> PoE Settings		
Power Mode	Auto	
Current Mode	IEEE 802.3bt	
Energy Saving	Full-power Mode V	0
Band	○ 2.4G ○ 5G ○ 2.4	4G+5G
Current Power	51W	
	Save	

5.3 Setting the Login Password

-0-

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-RAP6262 models:

If the device works in self-organizing network mode, and Network mode webpage is displayed,

choose System > Login Pas	sword
In standalone mode: Choose	System > Login > Login Password
For other RAP models:	
In self-organizing network mode: C	hoose Network > Password
In standalone mode: Choose	System > Login > Login Password
Enter the old password and new password to log in.	assword. After saving the configuration, use the new

A Caution

In self-organizing network mode, the login password of all devices in the network will be changed synchronously.

<i>i</i> Change the login	password. Please log in a	gain with the new password later.
* Old Password		
* New Password		
* Confirm Password		
	Save	

5.4 Setting the Session Timeout Duration

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-RAP6262 models:

If the device works in self-organizing network mode, and Local Device mode webpage is

displayed, choose System > Login			
In standalone mode: Choose System > Login > Session Timeout			
For other RAP models:			
In self-organizing network mode: Choose 😚 WLAN > APs > Manage > System > Login > Session Timeout			
In standalone mode: Choose System > Login > Session Timeout			
If no operation is performed on the Web page within a period of time, the session is automatically disconnected. When you need to perform operations again, enter the password			

to log in again. The default timeout duration is 3600 seconds, that is, 1 hour.

i Session Timeou	t	
* Session Timeout	3600	seconds
	Save	

5.5 Setting and Displaying System Time

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-RAP6262 models:

If the device works in self-organizing network mode, and Network mode webpage is displayed,

choose **System > System Time**

For other RAP models:

In self-organizing network mode: Choose **Network > Time**

In standalone mode: Choose **System > System Time**

You can view the current system time. If the time is incorrect, check and select the local time zone. If the time zone is correct but time is still incorrect, click **Edit** to manually set the time. In addition, the device supports Network Time Protocol (NTP) servers. By default, multiple servers serve as the backup of each other. You can add or delete the local server.

A Caution

In self-organizing network mode, the system time of all devices in the network will be changed synchronously.

<i>i</i> Configure and vie	ew system time (The device I	has no RTC mo	odule. The time settings will not be saved upon reboot).
Current Time	2022-04-01 10:14:00	idit	
* Time Zone	(GMT+8:00)Asia/Shang	hai 🗸	
* NTP Server	0.cn.pool.ntp.org	Add	
	1.cn.pool.ntp.org	Delete	
	cn.pool.ntp.org	Delete	
	pool.ntp.org	Delete	
	asia.pool.ntp.org	Delete	
	europe.pool.ntp.org	Delete	
	ntp1.aliyun.com	Delete	
	Save		

5.6 Configuring SNMP

A Caution

The functions mentioned in this chapter are supported by only RG-RAP2260(G), RG-RAP6260(G), RG-RAP6260(G), RG-RAP6260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260, and RG-RAP6262.

5.6.1 Overview

The Simple Network Management Protocol (SNMP) is a protocol for managing network devices. Based on the client/server model, it can achieve remote monitoring and control of network devices.

SNMP uses a manager and agent architecture. The manager communicates with agents through the SNMP protocol to retrieve information such as device status, configuration details, and performance data. It can also be used to configure and manage devices.

SNMP can be used to manage various network devices, including routers, switches, servers, firewalls, etc. You can achieve user management through the SNMP configuration interface and monitor and control devices through the third-party software.

5.6.2 Global Configuration

1. Overview

The purpose of global configuration is to enable the SNMP service and make the SNMP protocol version (v1/v2c/v3) take effect, so as to achieve basic configuration of local port, device location, and contact information.

SNMP v1: As the earliest version of SNMP, SNMP v1 has poor security, and only supports simple community string authentication. SNMP v1 has certain flaws, such as plaintext transmission of community strings and vulnerability to attacks. Therefore, SNMP v1 is not recommended for modern networks.

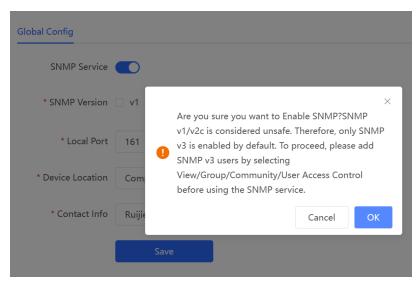
SNMP v2c: As an improved version of SNMP v1, SNMP v2c supports richer functions and more complex data types, with enhanced security. SNMP v2c performs better than SNMP v1 in terms of security and functionality, and is more flexible. It can be configured according to different needs.

SNMP v3: As the newest version, SNMP v3 supports security mechanisms such as message authentication and encryption compared to SNMP v1 and SNMP v2c. SNMP v3 has achieved significant improvements in security and access control.

2. Configuration Steps

In Network mode, choose System > SNMP > Global Config

(1) Enable the SNMP service.



When it is enabled for the first time, SNMP v3 is enabled by default. Click OK.

(2) Set SNMP service global configuration parameters.

Global Config	View/Group/Community/Client Access Control	Trap Settings
SNMP Servi	ice 🔵	
* SNMP Versio	on 🗌 v1 🗌 v2c 🔽 v3	
* Local Po	ort 161	
* Device Location	on Company	
* Contact In	fo Ruijie@Ruijie.com	
	Save	

Table 5-1 Global Configuration Parameters

Parameter	Description	
SNMP Service	Indicates whether SNMP service is enabled.	
SNMP Version	Indicates the SNMP protocol version, including v1, v2c, and v3 versions.	
Local Port	The port range is 1 to 65535.	
Device Location	1-64 characters. Chinese characters, full-width characters, question marks, and spaces are not allowed.	
Contact Info	1-64 characters. Chinese characters, full-width characters, question marks, and spaces are not allowed.	

(3) Click Save.

After the SNMP service is enabled, click **Save** to make basic configurations such as the SNMP protocol version number take effect.

5.6.3 View/Group/Community/User Access Control

1. Configuring Views

Overview

Management Information Base (MIB) can be regarded as a database storing the status information and performance data of network devices. It contains a large number of object

identifiers (OIDs) to identify the status information and performance data of these network devices.

Views in SNMP can limit the range of MIB nodes that the management system can access, thereby improving the security and reliability of network management. Views are an indispensable part of SNMP and need to be configured or customized according to specific management requirements.

A view can have multiple subtrees. The management system can only access MIB nodes in these subtrees, and cannot access other unauthorized MIB nodes. This can prevent unauthorized system administrators from accessing sensitive MIB nodes, thereby protecting the security of network devices. Moreover, views can also improve the efficiency of network management and speed up the response from the management system.

• Configuration Steps

In Network mode, choose System > SNMP > View/Group/Community/Client Access Control > View List

(1) Click **Add** under the View List to add a view.

View List	+ Add 🗇 Delete Selected		
Up to 20 entries are allowed.			
View Name	Action		
No Data			
Total 0 10/page <			

(2) Configure basic information of a view.

Add			×
* View Name			
OID	Example: .1.3		
	Add Included Rule	Add Excluded Rule	
Rule/OID List			Delete Selected
Up to 100 entries are	e allowed.		
Rule	e	OID	Action
	No E	Data	
Total 0 10/page 🗸	< 1 > Go	o to page 1	
			Cancel

Table 5-2 View Configuration Parameters

Parameter	Description				
View Name	Indicates the name of the view. 1-32 characters. Chinese or full width characters are not allowed.				
OID	Indicates the range of OIDs included in the view, which can be a single OID or a subtree of OIDs.				
Туре	 There are two types of rules: included and excluded rules. The included rule only allows access to OIDs within the OID range. Click Add Included Rule to set this type of view. Excluded rules allow access to all OIDs except those in 				
	the OID range. Click Add Excluded Rule to configure this type of view.				

Note

A least one OID rule must be configured for a view. Otherwise, an alarm message will appear.

(3) Click **OK**.

2. Configuring v1/v2c Users

Overview

When the SNMP version is set to v1/v2c, user configuration is required.

Global Config	
SNMP Service	
* SNMP Version	✓ v1 ✓ v2c 🗌 v3
* Local Port	161
* Device Location	company
* Contact Info	test@123
	Save

1 Note

Select the SNMP protocol version, and click **Save**. The corresponding configuration options will appear on the **View/Group/Community/User Access Control** page.

Configuration Steps

In Network mode, choose System > SNMP > View/Group/Community/Client Access Control > SNMP v1/v2c Community Name List

(1) Click Add in the SNMP v1/v2c Community Name List pane.

Global Config View/Group/	Community/Client Access Cont	rol Trap Settings				
SNMP v1/v2c Commur	ity Name List				+ Add 🗇 Delete Selected	~
Up to 20 entries are allowed.						
Community	Name	Access Mode		MIB View	Action	
			No Data			
Total 0 10/page V	1 > Go to page 1					
(2) Add a v1/v2c	user.					
Add					×	
* Community Nar	ne					
* Access Mo	de Read-Only		~			
* MIB Vie	all		\sim	Add View +		
				Const.		
				Cancel	OK	

Table 5-3 v1/v2c User Configuration Parameters

Parameter	Description
	At least 8 characters.
Community Name	It must contain at least three character categories, including uppercase and lowercase letters, digits, and special characters.
	Admin, public or private community names are not allowed.
	Question marks, spaces, and Chinese characters are not allowed.
Access Mode	Indicates the access permission (read-only or read & write) for the community name.
MIB View	The options under the drop-down box are configured views (default: all, none).

A Caution

- Community names cannot be the same among v1/v2c users.
- Click Add View to add a view.

(3) Click **OK**.

3. Configuring v3 Groups

Overview

SNMP v3 introduces the concept of grouping to achieve better security and access control. A group is a group of SNMP users with the same security policies and access control settings. With SNMP v3, multiple groups can be configured, each with its own security policies and access control settings. Each group can have one or more users.

• Prerequisites

When the SNMP version is set to v3, the v3 group configuration is required.

Global Config	View/Group/Community/Client Access Control	Trap Settings
SNMP Servi	ice 🔵	
* SNMP Versio	on 🗌 v1 🗌 v2c 🔽 v3	
* Local Po	ort 161	
* Device Location	on Company	
* Contact In	fo Ruijie@Ruijie.com	
	Save	

🚺 Note

Select the SNMP protocol version, and click **Save**. The corresponding configuration options will appear on the **View/Group/Community/User Access Control** page.

Configuration Steps

In Network mode, choose System > SNMP > View/Group/Community/Client Access Control > SNMP v3 Group List

(1) Click Add in the SNMP v3 Group List pane to create a group.

ilobal Config	View/Group/Community	//Client Access Control Trap Se	ttings				
SNMP v3 Group List							
					+ A	dd 📋 Delete Selected	
Up to 20	entries are allowed.						
	Group Name	Security Level	Read-Only View	Read & Write View	Notification View	Action	
	default_group	Auth & Security	all	none	none	Edit Delete	
otal 1 10)/page 🗸 🤇 🚺 🔿	Go to page 1					

(2) Configure v3 group parameters.

Add		×
* Group Name		
* Security Level	Allowlist & Security \sim	
* Read-Only View	all	Add View +
* Read & Write View	all V	Add View +
* Notification View	none ~	Add View +
		Cancel OK

Table 5-4 v3 Group Configuration Parameters

Parameter	Description	
	Indicates the name of the group.	
Group Name	1-32 characters.	
	Chinese characters, full-width characters, question marks, and spaces are not allowed.	
Security Level	Indicates the minimum security level (authentication and encryption, authentication but no encryption, no authentication and encryption) of the group.	
Read-Only View	The options under the drop-down box are configured views (default: all, none).	

Parameter	Description
Read & Write View	The options under the drop-down box are configured views (default: all, none).
Notification View	The options under the drop-down box are configured views (default: all, none).

🛕 Caution

- A group defines the minimum security level, read and write permissions, and scope for users within the group.
- The group name must be unique. To add a view, click Add View.

(3) Click OK.

4. Configuring v3 Users

• Prerequisites

When the SNMP version is set to v3, the v3 group configuration is required.

Global Config Vie	w/Group/Community/Client Access Control	Trap Settings
SNMP Service		
* SNMP Version	□ v1 □ v2c v 3	
* Local Port	161	
* Device Location	Company	
* Contact Info	Ruijie@Ruijie.com	
	Save	

Note

Select the SNMP protocol version, and click **Save**. The corresponding configuration options will appear on the **View/Group/Community/User Access Control** page.

• Configuration Steps

In Network mode, choose System > SNMP > View/Group/Community/Client Access Control > SNMP v3 Client List

(1) Click Add in the SNMP v3 Client List pane to add a v3 user.

Global Cont	ig View/Group/Com	munity/Client Access Control	Trap Settings					
SNMP	v3 Client List							~
							+ Add	Delete Selected
Up to 5	0 entries are allowed.							
	Username	Group Name	Security Level	Auth Protocol	Auth Password	Encryption Protocol	Encrypted Password	Action
				No Data				
Total 0	Total 0 10/page \checkmark < 1 \Rightarrow Go to page 1							

(2) Configure v3 user parameters.

Add					×
* Username	Username				
* Group Name	Select	~			
* Security Level	Auth & Security	~			
* Auth Protocol	MD5	~	* Auth Password		
* Encryption Protocol	AES	~	* Encrypted Password		
				Cancel	ок

Table 5-5 v3 User Configuration Parameters

Parameter	Description	
	Username At least 8 characters. It must contain at least three character categories, including	
Username	uppercase and lowercase letters, digits, and special characters. Admin, public or private community names are not allowed.	
	Question marks, spaces, and Chinese characters are not allowed.	

Parameter	Description	
Group Name	Indicates the group to which the user belongs.	
Security Level	Indicates the security level (authentication and encryption, authentication but no encryption, and no authentication and encryption) of the user.	
	Authentication protocols supported: MD5/SHA/SHA224/SHA256/SHA384/SHA512.	
Auth Protocol, Auth Password	Authentication password: 8-31 characters. Chinese characters, full-width characters, question marks, and spaces are not allowed. It must contain at least three character categories, including uppercase and lowercase letters, digits, and special characters.	
	Note: This parameter is mandatory when the security level is authentication and encryption, or authentication but no encryption.	
	Encryption protocols supported: DES/AES/AES192/AES256.	
Encryption Protocol	Encryption password: 8-31 characters. Chinese characters, full-width characters, question marks, and spaces are not allowed.	
Encryption Protocol, Encrypted Password	It must contain at least three character categories, including uppercase and lowercase letters, digits, and special characters.	
	Note: This parameter is mandatory when the security level is authentication and encryption.	

A Caution

- The security level of v3 users must be greater than or equal to that of the group.
- There are three security levels, among which authentication and encryption requires the configuration of authentication protocol, authentication password, encryption protocol, and encryption password. Authentication but no encryption only requires the configuration of authentication protocol and encryption protocol, while no authentication and encryption does not require any configuration.

5. Viewing v3 Device Identifier

In Network mode, choose System > SNMP > View/Group/Community/Client Access Control > SNMP v3 Device Identifier List

View the v3 device identifier in the SNMP v3 Device Identifier List pane.

SNMP v3	Device Identifier List			~
No.	Device Model	IP	engineID	Action
1			80	Сору
Total 1 10/	page \vee (1) G	o to page 1		

5.6.4 SNMP Service Typical Configuration Examples

1. Configuring SNMP v2c

• Application Scenario

You only need to monitor the device information, but do not need to set and deliver it. A thirdparty software can be used to monitor the data of nodes like 1.3.6.1.2.1.1 if v2c version is configured.

Configuration Specification

According to the user's application scenario, the requirements are shown in the following table:

Item	Description	
View range	Included rule: the OID is .1.3.6.1.2.1.1, and the custom view name is "system".	
Version	For SNMP v2c, the custom community name is "Ruijie_com", and the default port number is 161.	
Read & write permission	Read-only permission.	

Table 5-6 User Requirement Specification

- Configuration Steps
- (1) In the global configuration interface, select v2c and set other settings as default. Then, click **Save**.

Global Config Vi	iew/Group/Community/Client Access Control	Trap Settings
SNMP Service	e ()	
* SNMP Version	n 🗌 v1 🔽 v2c 🗌 v3	
* Local Por	t 161	
* Device Location	Company	
* Contact Info	Ruijie@Ruijie.com	
	Save	

- (2) Add a view on the View/Group/Community/Client Access Control interface.
 - a Click Add in the View List pane to add a view.
 - b Enter the view name and OID in the pop-up window, and click Add Included Rule.
 - c Click OK.

Add			×
* View Name	system		
OID	.1.3.6.1.2.1.1		
	Add Included Rule	Add Excluded Rule	
Rule/OID List			Delete Selected
Up to 100 entries are	e allowed.		
Ru	le	OID	Action
		No Data	
Total 0 10/page 🗸	< 1 > G	to to page 1	
			Cancel

- (3) On the View/Group/Community/Client Access Control interface, enter the SNMP v1/v2c community name.
 - a Click Add in the SNMP v1/v2c Community Name List pane.

b Enter the group name, access mode, and view in the pop-up window.

	~		-	
C	ല	lick	n	ĸ
C		II UIN	\mathbf{v}	IX.

Add				×
* Community Name	Ruijie_com			
* Access Mode	Read-Only	\sim		
* MIB View	system	\sim	Add View +	
			Cancel	ОК

2. Configuring SNMP v3

• Application Scenario

You need to monitor and control devices, and use the third-party software to monitor and deliver device information to public nodes (1.3.6.1.2.1). The security level of v3 is authentication and encryption.

Configuration Specification

According to the user's application scenario, the requirements are shown in the following table:

Item	Description
View range	Included rule: the OID is .1.3.6.1.2.1, and the custom view name is "public_view".
	Group name: group
	Security level: authentication and encryption
Group configuration	Select public_view for a read-only view.
	Select public_view for a read & write view.
	Select none for a notify view.
	User name: v3_user
Configuring v3 Users	Group name: group
	Security level: authentication and encryption

Table 5-7 User Requirement Specification

Item	Description
	Authentication protocol/password: MD5/Ruijie123
	Encryption protocol/password: AES/Ruijie123
Version	For SNMP v3, the default port number is 161.

- Configuration Steps
- (1) On the global configuration interface, select v3, and change the port number to 161. Set other settings to defaults. Then, click **Save**.

Global Config Vi	ew/Group/Community/Client Access Control	Trap Settings
SNMP Service		
* SNMP Versior	n 🗌 v1 🗌 v2c 🔽 v3	
* Local Por	t 161	
* Device Location	Company	
* Contact Info	Ruijie@Ruijie.com	
	Save	

- (2) Add a view on the View/Group/Community/Client Access Control interface.
 - a Click Add in the View List pane.
 - b Enter the view name and OID in the pop-up window, and click Add Included Rule.
 - c Click OK.

Add			×
* View Name	public_view		
OID	.1.2.6.1.2.1		
	Add Included Rule	Add Excluded Rule	
Rule/OID List			Delete Selected
Up to 100 entries ar	e allowed.		
R	le	OID	Action
	٨	lo Data	
Total 0 10/page v	< 1 > Go) to page 1	
			Cancel

- (3) On the View/Group/Community/Client Access Control interface, add an SNMP v3 group.
 - a Click Add in the SNMP v3 Group List pane.
 - b Enter the group name and security level on the pop-up window. As this user has read and write permissions, select public_view for read-only and read & write views, and select none for notify views.
 - c Click OK.

Add		×
* Group Name	group	
* Security Level	Allowlist & Security \sim	
* Read-Only View	public_view \lor	Add View +
* Read & Write View	public_view \lor	Add View +
* Notification View	none ~	Add View +
		Cancel OK

- (4) On the View/Group/Community/Client Access Control interface, add an SNMP v3 user.
 - a Click Add in the SNMP v3 Client List pane.
 - b Enter the user name and group name in the pop-up window. As the user's security level is authentication and encryption, enter the authentication protocol, authentication password, encryption protocol, and encryption password.

c Click OK						
Add						×
* Username	v3_userRuijie					
* Group Name	group	~				
* Security Level	Auth & Security	~				
* Auth Protocol	MD5	~	* Auth Password	Ruijie12	3	
* Encryption Protocol	AES	~	* Encrypted Password	Ruijie12	3	
					Cancel	ок

5.6.5 Configuring Trap Service

Trap is a notification mechanism of the Simple Network Management Protocol (SNMP) protocol. It is used to report the status and events of network devices to administrators, including device status, faults, performance, configuration, and security management. Trap provides real-time network monitoring and fault diagnosis services, helping administrators discover and solve network problems in a timely manner.

1. Enabling Trap Service

Enable the trap service and select the effective trap version, including v1, v2c, and v3 versions.

In Network mode, choose System > SNMP > Trap Settings

(1) Enable the trap service.

Global Config View/Group/Community/Client Access Control	Trap Settings		
Trap Service 💽			
* Trap Version 🗧 v1 📄 v2c 📄 v3			
Save			
Trap v1/v2c Client List	×		+ Add 📋 Delete Selected
Up to 20 entries are allowed.	I Are you sure you want to Enable trap?		
Dest Host IP Ve	Cancel OK	Community Name	Action
	No Data		
Total 0 10/page - C 1 Go to page 1			

When the trap service is enabled for the first time, the system will pop up a prompt message. Click **OK**.

(2) Set the trap version.

The trap versions include v1, v2c, and v3.

(3) Click Save.

After the trap service is enabled, click **Save** for the configuration to take effect.

Global Config V	iew/Group/Community/Client Access Control	Trap Settings
Trap Servic	e 🚺	
* Trap Versio	n 🗹 v1 🗌 v2c 🗌 v3	
	Save	

2. Configuring Trap v1/v2c Users

• Overview

Trap is a notification mechanism that is used to send alerts to administrators when important events or failures occur on devices or services. Trap v1/v2c are two versions in the SNMP protocol for network management and monitoring.

Trap v1 is the first version that supports basic alert notification functionality. Trap v2c is the second version, which supports more alert notification options and advanced security features.

By using trap v1/v2c, administrators can promptly understand problems on the network and take corresponding measures.

• Prerequisites

Once trap v1 and v2c versions are selected, it is necessary to add trap v1v2c users.

Configuration Steps

In Network mode, choose System > SNMP > Trap Settings

(1) Click Add in the Trap v1/v2c Client List pane to add a trap v1/v2c user.

Global Co	onfig View/Group/Com	nmunity/Client Access Control	Trap Settings		
	Trap Service 🔵				
*	Trap Version 🗹 v1 🔽	v2c 🗌 v3			
	Sav	re			
Trap v	v1/v2c Client List			+ Add	Delete Selected
Up to	20 entries are allowed.				
	Dest Host IP	Version Number	Port ID	Community Name	Action
			No Data		
Total 0	10/page 🗸 🔇 1	Go to page 1			

(2) Configure trap v1/v2c user parameters.

Add			×
* Dest Host IP	Support IPv4/IPv6		
* Version Number	v1 ~		
* Port ID			
* Community	Community Name/Username		
Name/Username			
		Cancel	ОК

Parameter	Description
Dest Host IP	IP address of the trap peer device. An IPv4 or IPv6 address is supported.
Version Number	Trap version, including v1 and v2c.
Port ID	The port range of the trap peer device is 1 to 65535.
Community Name/Username	Community name of the trap user. At least 8 characters. It must contain at least three character categories, including

Parameter	Description
	uppercase and lowercase letters, digits, and special characters.
	Admin, public or private community names are not allowed. Question marks, spaces, and Chinese characters are not allowed.

🛕 Caution

- The destination host IP address of trap v1/ v1/v2c users cannot be the same.
- Community names of trap v1/ v1/v2c users cannot be the same.

(3) Click **OK**.

3. Configuring Trap v3 Users

Overview

Trap v3 is a network management mechanism based on the SNMP protocol. It is used to send alert notifications to administrators. Unlike previous versions, trap v3 provides more secure and flexible configuration options, including authentication and encryption features.

Trap v3 offers custom conditions and methods for sending alerts, as well as the recipients and notification methods for receiving alerts. This enables administrators to have a more accurate understanding of the status of network devices and to take timely measures to ensure the security and reliability of the network.

• Prerequisites

When the v3 version is selected for the trap service, it is necessary to add a trap v3 user.

Configuration Steps

In Network mode, choose System > SNMP > Trap Settings

(1) Click Add in the Trap v3 Client List pane to add a trap v3 user.

Cancel

Global Config	View/Group/Comr	nunity/Client Access Contr	ol Trap Settings				
Trap S	ervice 🚺						
* Trap V	ersion v1	v2c 🔽 v3					
	Save						
Trap v3 Cli	ent List					+ Add	Delete Selected
Up to 20 en	tries are allowed.						
D	est Host IP	Port ID	Username	Security Level	Auth Password	Encrypted Password	Action
				No Data			
Total 0 10/p	age 🗸 🤇 1	> Go to page 1					

(2) Configure trap v3 user parameters.

Add					×
* Dest Host IP	Support IPv4/IPv6		* Port ID		
* Username			* Security Level	Auth & Security	·
* Auth Protocol	MD5	~	* Auth Password		
* Encryption Protocol	AES	~	* Encrypted Password		

Table 5-9 Trap v3 User Configuration Parameters

Parameter	Description
Dest Host IP IP address of the trap peer device. An IPv4 or IPv6 add supported.	
Port ID	The port range of the trap peer device is 1 to 65535.
	Name of the trap v3 user.
Username	At least 8 characters.
	It must contain at least three character categories, including

Parameter	Description			
	uppercase and lowercase letters, digits, and special characters.			
	Admin, public or private community names are not allowed.			
	Question marks, spaces, and Chinese characters are not allowed.			
Security Level	There are three security levels for a trap user, which are "Auth & Security", "Auth & Open", and "Allowlist & Security".			
	Authentication protocols supported: MD5/SHA/SHA224/SHA256/SHA384/SHA512.			
Auth Protocol, Auth Password	Authentication password: 8-31 characters. Chinese characters, full-width characters, question marks, and spaces are not allowed. It must contain at least three character categories, including uppercase and lowercase letters, digits, and special characters.			
	Note: This parameter must be set when the Security Level is Auth & Security or Auth & Open.			
	Encryption protocols supported: DES/AES/AES192/AES256.			
Encryption Protocol,	Encryption password: 8-31 characters. Chinese characters, full-width characters, question marks, and spaces are not allowed.			
Encrypted Password	It must contain at least three character categories, including uppercase and lowercase letters, digits, and special characters.			
	Note: This parameter must be set when the Security Level is Auth & Security.			

A Caution

The destination host IP address of trap v1/v2c/v3 users cannot be the same.

(3) Click **OK**.

5.6.6 Trap Service Typical Configuration Examples

1. Configuring Trap v2c

Application Scenarios

During device monitoring, if the device is suddenly disconnected or encounters an abnormality, and the third-party monitoring software cannot detect and handle the abnormal situation in a timely manner, you can configure the device with a destination IP address of 192.168.110.85 and a port number of 166 to enable the device to send a v2c trap in case of an abnormality.

Configuration Specification

According to the user's application scenario, the requirements are shown in the following table:

Table 5-10	User Requirement Specification
------------	--------------------------------

Item	Description
IP address and port number	The destination host IP is 192.168.110.85, and the port number is 166.
Version	Select the v2c version.
Community name/User name	Trap_ruijie

- Configuration Steps
- (1) Select the v2c version in the **Trap Setting** interface and click **Save**.

Global Con	nfig View/Group/Con	nmunity/Client Access Control	Trap Settings		
Т	Trap Service 🔵				
* T	īrap Version 🗌 v1 🔽	v2c v3			
	Sa	/e			
Trap v	1/v2c Client List			+ Add	ill Delete Selected
Up to 2	20 entries are allowed.				
	Dest Host IP	Version Number	Port ID	Community Name	Action
			No Data		
Total 0	10/page 🗸 🚺	> Go to page 1			

- (2) Click Add in the Trap v1/v2c Client List to add a trap v2c user.
- (3) Enter the destination host IP address, version, port number, user name, and other information. Then, click **OK**.

Add		×
* Dest Host IP	192.168.110.85	
* Version Number	v2c ~	
* Port ID	166	
* Community	Trap_ruijie	
Name/Username		

2. Configuring Trap v3

• Application Scenarios

During device monitoring, if the device is suddenly disconnected or encounters an abnormality, and the third-party monitoring software cannot detect and handle the abnormal situation in a timely manner, you can configure the device with a destination IP address of 192.168.110.87 and a port number of 167 to enable the device to send a v3 trap, which is a safer trap compared with v1/v2c traps.

Cancel

OK

• Configuration Specification

According to the user's application scenario, the requirements are shown in the following table:

Item	Description
IP address and port number	The destination host IP is 192.168.110.87, and the port number is 167.
Version and user name	Select the v3 version and trapv3_ ruijie for the user name.
Authentication protocol/authentication password Encryption protocol/encryption password	Authentication protocol/password: MD5/Ruijie123 Encryption protocol/password: AES/Ruijie123

 Table 5-11
 User Requirement Specification

- Configuration Steps
- (1) Select the v3 version in the Trap Setting interface and click Save.

Global Config	View/Group/Commu	unity/Client Access Control	Trap Settings				
Trap S	Service 🗾						
* Trap V	/ersion v1 v2	łc <mark>∠</mark> v3					
	Save						
Trap v3 Cl	ient List					+ Add	Delete Selected
Up to 20 er	ntries are allowed.						
D	Pest Host IP	Port ID	Username	Security Level	Auth Password	Encrypted Password	Action
				No Data			
Total 0 10/p	page 🗸 < 1	> Go to page 1					

- (2) Click Add in the Trap v3 Client List to add a trap v3 user.
- (3) Enter the destination host IP address, port number, user name, and other information. Then, click **OK**.

Add					\times
* Dest Host IP	192.168.110.87		* Port ID	167	
* Username	trapv3_ruijie		* Security Level	Auth & Security \vee	
* Auth Protocol	MD5	~	* Auth Password	Ruijie123	
* Encryption Protocol	AES	~	* Encrypted Password	Ruijie123	
				Cancel	К

5.7 Configuring Reboot

A Caution

- Do not cut off power during system reboot to avoid device damage.
- Do not refresh the page or close the browser during the reboot. After the device is successfully rebooted and the Web service becomes available, the device automatically jumps to the login page.

• Rebooting the device affects the network. Therefore, exercise caution when performing this operation.

5.7.1 Rebooting the Current Device

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose System > Reboot > Reboot > Reboot > For other RAP models:

In self-organizing network mode: Choose SWLAN > APs > Reboot

In standalone mode: Choose **System** > **Reboot** > **Reboot**

Click Reboot. The device will restart.

i) Please keep the device powered on during reboot.

Reboot

5.7.2 Rebooting All Devices in the Network

In self-organizing network mode, you can reboot all devices in the network in batches.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In **Network** mode, choose **System** > **Reboot** > **Reboot**

For other RAP models: Choose ----- Network > Reboot & Reset > Reboot

Click **Reboot**, select **All Devices**, and click **Reboot All Device** to reboot all devices in the current network.

Reboot	Scheduled Reboot		
i Ple	ease keep the device powe	red on during reboot.	
	Select 🔘 Local	• All Devices	O Specified Devices
	Reboot All De	evice	

🛕 Caution

It takes time to reboot all devices in the current network. The action may affect the whole network. Please be cautious.

5.7.3 Rebooting the Specified Device

In self-organizing network mode, you can reboot specified devices in the network in batches.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260

and RG-RAP6262 models: In Network mode, choose System > Reboot > Reboot

Click **Reboot**, click **Specified Devices**, select required devices from the **Available Devices** list, and click **Add** to add devices to the **Selected Devices** on the right. Click **Reboot**. Specified devices in the **Selected Devices** list will be rebooted.

Please kee					
Please kee	p the device powered on during reboot.				
Select	O Local O All Devices		Specified Description	evices	
	Available Devices	1/1		Selected Devices	
	Q Search by SN/Model			Q Search by SN/Model	
	G1QH6WX000610 - RAP2260(E)	< Delete	No data	
	Reboot				
_	duled Reboot				
_		C	Specified Devi	ices	
Please keep	duled Reboot	0/0	Specified Devi	ices	1/1
Please keep	duled Reboot the device powered on during reboot. Local All Devices		Specified Devi		1/1
Please keep	duled Reboot the device powered on during reboot. Local All Devices Available Devices		Specified Devi	Selected Devices	
Please keep	duled Reboot to the device powered on during reboot. Local All Devices Available Devices Search by SN/Model			Selected Devices	
Please keep	duled Reboot to the device powered on during reboot. Local All Devices Available Devices Search by SN/Model		< Delete	Selected Devices	

5.8 Configuring Scheduled Reboot

5.8.1 Configuring Scheduled Reboot for the Current Device

Confirm that the system time is accurate to avoid network interruption caused by device reboot at wrong time. For details about how to configure the system time, see <u>Setting the Session</u> <u>Timeout Duration</u>.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260

and RG-RAP6262 models: Choose **System** > **Reboot** > **Scheduled Reboot** For other RAP models:

To configure scheduled reboot for the current device, choose (The weak of the second se

System > Reboot > Scheduled Reboot

To configure scheduled reboot for all devices in the network, choose **Scheduled Reboot**

A Caution

If you configure scheduled reboot on the management webpage, all devices will restart when the system time matches with the scheduled reboot time. Please be cautious.

Click **Enable**, and select the date and time of scheduled reboot every week. Click **Save**. When the system time matches with the scheduled reboot time, the device will restart. You are recommended to set scheduled reboot time to off-peak hours.

Reboot	Scheduled Reboot
	recommended to set the scheduled time to a network idle time, e.g., 2 A.M downlink device will also be rebooted as scheduled.
	Enable
	Day 🗹 Mon 🔽 Tue 🔽 Wed 🔽 Thu 🔽 Fri 🔽 Sat 🗹 Sun
	Time 03 ~ : 00 ~
	Save

5.9 Configuring Backup and Import

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260

and RG-RAP6262 models: Choose **System** > **Backup** > **Backup** & **Import**

For other RAP models: Choose (**WLAN > APs > Manage >**) **System > Backup >** Backup & Import

Configuration backup: Click **Backup** to download a configuration file locally.

Configuration import: Click **Browse**, select a backup file on the local PC, and click **Import** to import the configuration file. The device will restart.

Backup & Import F	Reset	
	on is much later than the current version, some configuration may be missing. ed to choose Restore before importing the profile. The device will be rebooted automatically	
Backup Profile		
Backup Profile	Backup	
Import Profile		
File Path	Please select a file. Browse	

5.10 Restoring Factory Settings

5.10.1 Restoring the Current Device to Factory Settings

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

For other RAP models: Choose (**WLAN > APs > Manage >**) **System > Backup > Reset**

Click **Reset** to restore the current device to the factory settings.

Backup & Import	Reset
i Resetting the de	evice will clear the current settings. If you want to keep the setup, please Backup Profile first.
Reset	

A Caution

The operation will clear all configuration of the current device. If you want to retain the current configuration, back up the configuration first (See <u>Configuring Backup and Import</u>). Therefore, exercise caution when performing this operation.

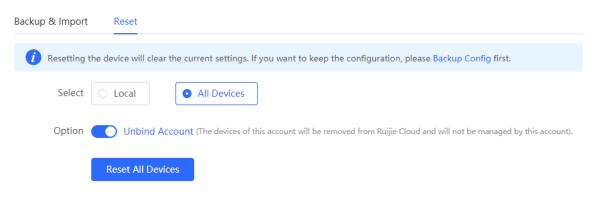
5.10.2 Restoring All Devices to Factory Settings

In the self-organizing network mode, all devices in the network will be restored to factory settings.

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-RAP6262 models: In **Network** mode, choose **System** > **Backup** > **Reset**

For other RAP models: Choose **Network > Reboot & Reset > Restore**

Click **All Devices**, select whether to enable **Unbind Account** and Click **Reset All Devices**. All devices in the network will be restored to factory settings.



A Caution

The operation will clear all configuration of all devices in the network. Therefore, exercise caution when performing this operation.

5.11 Performing Upgrade and Checking System Version

A Caution

- You are advised to back up the configuration before upgrading the access point.
- After being upgraded, the access point will reboot. Therefore, exercise caution when performing this operation.

5.11.1 Online Upgrade

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose System > Upgrade > Online Upgrade

For other RAP models: Choose (**WLAN > APs > Manage >**) **System > Upgrade >** Online Upgrade

You can view the current system version. If there is a new version available, you can click it for an update.

Online Upgrade	Local Upgrade
i Online up	grade will keep the current configuration. Please do not refresh the page or close th
Current Version	ReyeeOS 1.
New Version	ReyeeOS 1.
Description	1,
Tip	 If your device cannot access the Internet, please click Download File. Choose Local Upgrade to upload the file for local upgrade.
	Upgrade Now

5.11.2 Local Upgrade

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose System > Upgrade > Local Upgrade

For other RAP models: Choose (**WLAN > APs > Manage >**) **System > Upgrade >** Local Upgrade

You can view the current software version, hardware version and device model. If you want to upgrade the device with the configuration retained, check **Keep** Setup. Click **Browse**, select an upgrade package on the local PC, and click **Upload** to upload the file. The device will be upgraded.

Online Upgrade	Local Upgrade
i Please do	not refresh the page or close the browser.
Model	RAP
Current Version	ReyeeOS 1.
Keep Config	If the target version is much later than the current version, it is recommended not to keep the configuration.
File Path	Please select a file. Browse Upload

5.12 Switching System Language

Choose English > in the upper right corner of the Web page.

Click a required language to switch the system language.

	English ~	٢
Í	简体中文	
	English	

5.13 Configuring LED Status Control

A Caution

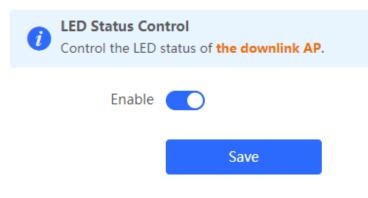
The LED Status Control function is not supported in the standalone mode (self-organizing network is not enabled).

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: Choose RAP6262 models: Choose

For other RAP models: Choose **WLAN** > LED

Turn on the LED of all downlink access points in the network.



6 Network Diagnosis Tools

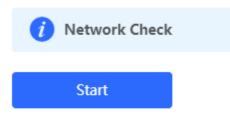
6.1 Network Check

When a network error occurs, perform **Network Check** to identify the fault and take the suggested action.

(1) Click in the navigation bar, or choose **Diagnostics** > **Network Check** and go to the **Network Check** page.



(2) Click Start to perform the network check and show the result.



i Network Check	0
Recheck	
	100%
WAN/LAN Cable	0
Auto-Negotiated Speed	0
WAN Port	0
LAN & WAN Address Conflict	0
Loop	0
DHCP Server Conflict	0
IP Address Conflict	0
Route	0
Next Hop Connectivity	0
DNS Server	0
IP Session Count	0

After performing the network check, you will find the check result and suggested action.

IP Session Count	0
DHCP Capacity	0
Ruijie Cloud Server	0
Check Connection to Cloud Server Result : The device is not connected with the cloud server. Cloud service may fail to start. Suggestion : Please verify that the device SN is added to the cloud and check the network.	

6.2 Network Tools

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose Oliagnostics > Network Tools

```
For other RAP models: Choose ( WLAN > APs > Manage >) Diagnostics > Network Tools
```

• The Ping tool tests the connectivity between the access point and the IP address or URL.

The message "Ping failed" indicates that the access point cannot reach the IP address or URL.

- The Traceroute tool displays the network path to a specific IP address or URL.
- The DNS Lookup tool displays the DNS server address used to resolve a URL.

Enter an IP address or a URL, and click **Start**. If you need to perform the ping or Traceroute operation, configure other parameters as required.

(i) Network Tools
Tool O Ping O Traceroute O DNS Lookup
Туре 💿 ІРv4 🕓 ІРv6
* IP Address/Domain www.baidu.com
* Max TTL 20
Start Stop
traceroute to www.baidu.com (163.177.151.109), 20 hops max, 46 byte packets 1 192.168.111.1 (192.168.111.1) 0.621 ms 0.536 ms 0.548 ms 2 172.20.74.1 (172.20.74.1) 2.271 ms 9.091 ms 8.565 ms 3 172.20.255.109 (172.20.255.109) 2.974 ms 6.424 ms 10.932 ms 4 * * * 5 172.22.0.249 (172.22.0.249) 1.902 ms 1.453 ms 1.081 ms 6 112.111.60.97 (112.111.60.97) 3.215 ms 3.290 ms 2.794 ms 7 218.104.229.69 (218.104.229.69) 2.890 ms 2.639 ms

6.3 Alarms

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In **Network** mode, choose **Network** > **Alarms**

For other RAP models: Choose (**WLAN > APs > Manage** >) **Diagnostics > Alarms**

The Alarms page displays possible problems on the network environment and device. All types of alarms are followed by default. You can click **Unfollow** in the **Action** column to unfollow this type of alarm.

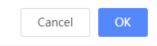
A Caution

After unfollowing a type of alarm, you will not discover and process all alarms of this type promptly. Therefore, exercise caution when performing this operation.

Alert Li	st	View Unfollowed Aler				
Expand	Alerts			ggestion		Action
~	There is more than one DHCP server in the LAN network.			ase disable the extra DHC	P server in the LAN network.	Delete Unfollow
	Hostname	SN	Туре	Time	Details	Action
	Ruijie	1234567891234	EG210G-P	2022-04-24 09:39:08	A DHCP server conflict occurs in LAN network: MAC:58:69:6c:00:00:01,I P:192.168.11.1,VLAN ID:233; MAC:UNKNOWN,IP:192 .168.112.1,VLAN ID:233	Delete

Are you sure you want to unfollow the alarm and delete it from the alarm list?

- 1. After being unfollowed, an alarm will not appear again..
- 2. You can click View Unfollowed Alarm to re-follow an unfollowed alarm.



Click **View Unfollowed Alarm** to view the unfollowed alarm. You can follow the alarm again in the pop-up window.

e is more than one	
P server in the network.	
Re-follow	
Re-follow	

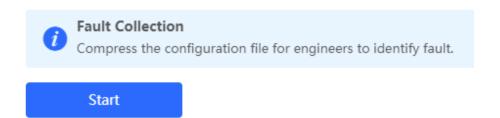
6.4 Fault Collection

For RG-RAP2260(G), RG-RAP6260(G), RG-RAP6262(G), RG-RAP2260(H), RG-RAP6260(H), RG-RAP6260(H)-D, RG-RAP2266, RG-RAP2260, RG-RAP1261, RG-RAP1260 and RG-

RAP6262 models: In Local Device mode, choose Oliagnostics > Fault Collection

For RAP models: Choose (🛜 WLAN >	APs > Manage >)	Diagnostics > Fault
Collection		

When an unknown fault occurs on the device, you can collect fault information on this page. Click **Start** to collect fault information and compress it into a file for engineers to identify fault.



7 FAQs

7.1 Login Failure

> What can I do when I failed to log in to the Eweb management system?

Perform the following steps:

- (1) Check that the Ethernet cable is properly connected to the LAN port of the device.
- (1) Before accessing the setup page, you are advised to choose Auto for the device enabled with DHCP service to assign an IP address to the PC. If you want to configure a static IP address for the PC, please make sure the IP address of the PC and the LAN port are in the same IP range. The default IP address of the LAN port is 10.44.77.254, and the subnet mask is 255.255.255.0. The IP address of the PC should be set to 10.44.77.X (X is an integer between 2 and 254), and the subnet mask is 255.255.255.0.()
- (2) Run the **Ping** command to check the connectivity between the PC and the device. If the ping fails, please check the network settings.
- (3) If the login failure persists, restore the device to factory settings.

7.2 Factory Setting Restoration

> How can I restore the device to factory settings?

Power on the device and press the **Reset** button for more than 5 seconds. The device is restored to factory settings after it is restarted. Then, you can log in to the Eweb management system using the default IP address (10.44.77.254).

7.3 Password Loss

- > What can I do when I forget the password?
- Webpage management password loss: Please enter the Wi-Fi password. If it is still incorrect, please restore the device to factory settings.
- Wi-Fi password loss: When the access point expands the Wi-Fi coverage, its Wi-Fi password is consistent with that of the master router. Please check the configuration of the master router and enter its Wi-Fi password. If the password is still incorrect, please restore the device to factory settings and reconfigure the Wi-Fi password.