

Reyee Series Implementation Cookbook (V1.5)



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1 Preface

Audience

Network Engineers

Network Administrator

Obtain Technical Assistance

Ruijie Networks Websites: https://www.ruijienetworks.com

Ruijie Service Portal: https://caseportal.ruijienetworks.com

Welcome to report error and give advice in any Ruijie manual to Ruijie Service Portal

Revision History

Date	Change contents	Reviser
2020.8	V1.0 Initial publication	Nick Chen
2020.11	V1.1 Fix a typo.	Nick Chen
2020.11	V1.2 Add EST310	Henry Huang
2021.3	V1.3 Add EW1200 series and EG authentication, app control	Henry Huang
2021.6	V1.4 Add PPPoE Server	Henry Huang
2021.7	V1.5 Add WIO, Load Balancing, IPTV, OUI- based and SSID-based Whitelist/Blacklist	Henry Huang

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2 Product Introduction

2.1 Cloud-managed Access Points

Reyee cloud-managed access point is a high performance for indoor/outdoor/wall scenarios. Compliant with 802.11ac wave2 Wi-Fi protocol, cloud-managed series access points support MU-MIMO dual stream technology. The industrial product design makes the product is simple to install and maintenance.

Cloud-managed access points support self-organizing network.

Provide better performance based on Dual-band Wi-Fi

Supports 2.4GHz and 5GHz dual-band communication, providing access rate of 400Mbps at 2.4GHz, 867Mbps at 5GHz and up to 1267Mbps per AP. It can provide 5GHz frequency band with less interference, wider channel, and faster speed for the terminals, allowing the users to enjoy excellent wireless experience.

Seamless Layer 3 Roaming

The device supports Layer 3 roaming for the complex Layer 3 network. When users move across the Layer 3 networks, seamless roaming can be achieved without service interruption.

Support Self-organizing networking feature

Self-organizing networking feature, which breaks through the product limitations and realizes auto-discovery, auto-networking and auto-configuration between routers, switches, and wireless APs without the need for controllers or Internet access. With the mobile app, users can quickly complete the device deployment and configuration, remote management, operation and maintenance of the entire network, which greatly reduces the investment of equipment cost, labor cost and time cost in the process of wireless network construction.

2.2 Reyee Switch

Reyee switches are designed to offer reliable and professional choices to businesses of all sizes. Unmanaged switches are well suited for businesses requiring no management or monitoring of their LAN, smart/L2 switches provide a cost-effective solution for small and medium-sized businesses, and L3 managed switches provide a scalable and stable solution for large organizations, campus networks and ISP networks.

Ruijie Cloud App/ Ruijie Cloud Platform Remote Management

The Reyee managed switches not only support web interface management, but also support life time free Ruijie Cloud App and Ruijie Cloud platform remote management. Users can view the network status, modify the configuration, and troubleshooting at home. In addition, the PoE port can be restarted remotely to restart the faulty PoE camera. With the mobile

app, users can quickly complete the device deployment and configuration, remote management, operation and maintenance of the entire network, such as NVR/ Camera recognition, configure VLAN, real time monitoring, real time alarm, and reboot remotely, which greatly reduces the investment of equipment cost, labor cost and time cost in the process of wireless network construction.

Self-Organizing Networking Feature

Self-organizing networking feature, which breaks through the product limitations and realizes auto-discovery, auto-networking and auto-configuration between routers, switches, and wireless APs without the need for controllers or Internet access.

Full-Power PoE Supporting PoE Cameras at Maximum Capacity

Ruijie Reyee smart surveillance switches support full-power PoE output, powering PoE network cameras for all PoE ports simultaneously. Whether it is day or night, the infrared light of the camera is on or off, it can ensure that all PoE network cameras are powered.

2.3 Easy Gate Series Router

Ruijie Reyee RG-EG series Router is a cloud managed router designed for villas and smart home, restaurant, small offices, homestay hotel. it is affordable, small and easy to use, but at the same time comes with 500M-600M bandwidth and supporting up to 200 terminals.

RG-EG series can perform per-port VLAN configuration to achieve port isolation, and integrate with smart flow control to achieve comprehensive network planning and perform local and remote network diagnosis.

2.4 EST310 Bridge

5GHz wireless bridge, including 2 devices for the recorder-end and camera-end, paired by default without requiring any configuration, 1 100M LAN port, up to 867Mbps throughput, built-in directional antenna, support one-to-many bridging, EWeb/ Ruijie Cloud app management, 12VDC and 24VDC non-standard PoE, wall-mounted/ pole-mounted installation

3 Daily Maintenance

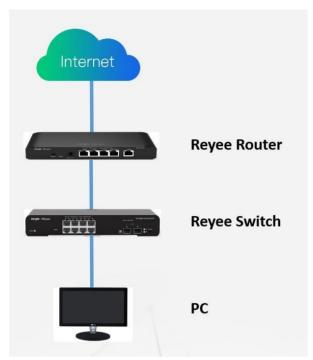
3.1 Device Login

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

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

Network Topology

As shown in the figure below, you can access the eWeb management system of an access or aggregation switch via a PC browser to manage and configure the device.



1) Set PC's IP assignment mode to Obtain an IP address automatically.

2) Visit http://192.168.110.1 by Chrome browser.

3) Enter the password on the login page and click "Login".

Default Password: admin



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

For the Reyee EG device, you may use either 192.168.110.1 or 10.44.77.254 to access the device.

For the Reyee switches, you may use **10.44.77.200 to** access the device.

For the Reyee AP, you may use either 192.168.120.1 or 10.44.77.254 to access the device.

For the EST, you may use 10.44.77.254 to access the device.

The default login password for all Reyee devices is admin.

You may visit <u>https://10.44.77.253</u> to login to the master device of Reyee network.

3.2 Change Password

Login to the master device and choose **Network > Password** to change the device password.

Ruijie	Reyee > Ruijie (Waster) 0	English 🗸	☐ MACC	Download App	🗟 Network Setup	ତ୍ତ୍ୱ Network Check	📺 Alarms 🕞
움Overview	Device Password						
(8) Online Clients	Change the device password. Please log in again with the new	password later.					2
(11) Gateway	* Old Password	1					
	* New Password	۹					
🗟 Switches	* Confirm Password	۹					
Setwork ^	Save						
Time							
Password							
Scheduled Reboot							
Reboot & Reset							

3.3 Factory Reset

Option 1: Press the "Reset" button on the device for more than 5 seconds to factory reset the device.

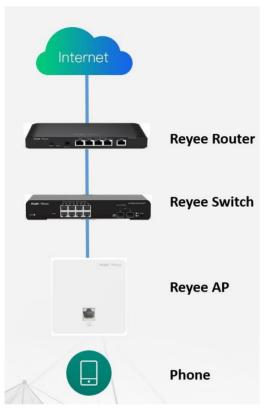
Option 2: Login to the eWeb of the device reset all device in the network.

Ruijie	Reyee > Ruijie [Mastor] 🛈 English 🗸 🛆 MACC 🔁 Download App 🎄 Network Setup 🔍 Network Check 👸 Alarms	G
움Overview		
Online Clients	Network Management	り
🖽 Gateway	The action here may affect the whole network. Please be cautious. If the page does not respond, please log in again.	
₩ireless	Network Management	
🗟 Switches	Action Reboot Reset	
Setwork ^	Option Unbind Account (The devices of this account will be removed from MACC and will not be managed by this account).	
Time	ОК	
Password		
Scheduled Reboot		
Reboot & Reset		

4 Quick Provisioning

4.1 Quick provisioning via Ruijie Cloud APP

Network Topology



1) If your mobile phone does not have the Ruijie Cloud App installed, please search "Ruijie Cloud" on App Store and install it on your mobile phone. Below is an example of searching "Ruijie Cloud" on Google Play Store. Tap INSTALL to install the App directly.

2) Ruijie Cloud App provides a quick start to Create Network and Add Device. You can follow the steps below to finish provisioning.

Step1: Connect to the Wi-Fi with Reyee AP.

Step2: Choose the SSID of "@Ruijie_mXXXX".

Step3: Check all the devices are detected.

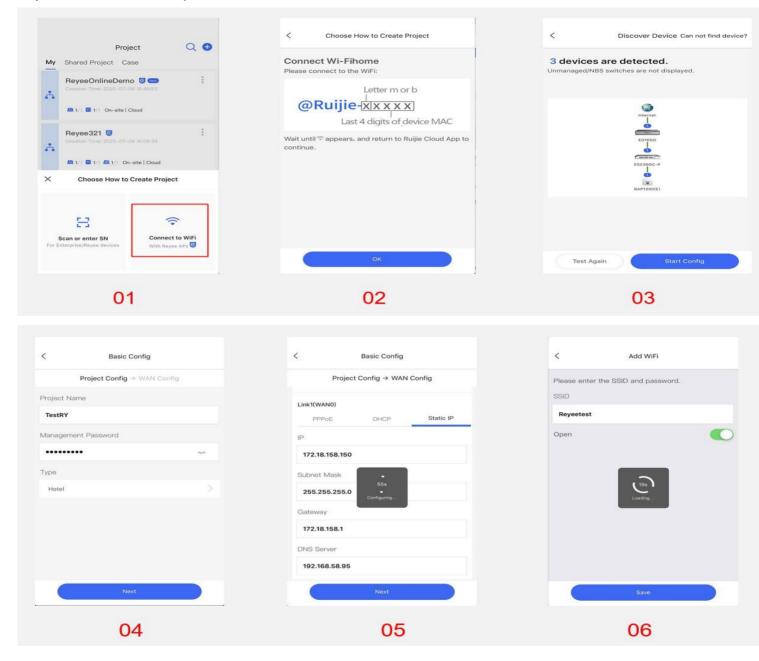
Step4: Add the project name and password.

Step5: Finish the WAN configuration.

Step6: Add the wireless configuration.

Step7: Finish all the configuration.

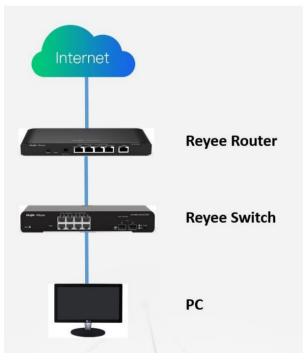
Step8: Devices all online in Ruijie Cloud.



< Add succeeded	<	TestRY	0	<	TestRY	0
Ø	A DEC	oject Status	Uptime Od Oh	Excellen		Uptime Od Oh
Add succeeded	Online Devices: 3 Offline Devices: 0	Internet		(Tp) New report is re Online Devices: 3 Offline Devices: 0	eady for the project.	S >
Wi-Fi @Bluijie-m1111 Password No Password Management Password		EGIDSO ES2260C-P			EG1050 ES226GC-P	Camera >
		RAP1200(E) Online Client 2			RAP1200(E)	
Enter Project	User Experience	e			Online Client 4	
		No Data		User Experience		
	Tool Kit Hotel	Config		Tool Kit Hotel Co	nfig	
07		08			09	

4.2 Quick provisioning via Reyee EWeb





Step 1: Login to Reyee EWeb (<u>http://192.168.110.1</u>), the local devices will be discovered automatically.

Net Status (Online Devic	es / Total)	6	_	_		Refres
		Internet	Gateway 1 Gateway	1/1 Switches		
My Network						
New Device (2 devices)						
	Model	SN	IP Address	MAC	Software Ver	
Gateway EG105G [Ma	ister)	1234567890123	192.168.110.1	00:D0:F8:11:11:11	EG_3.0(1)B11P30,Release(07181202)	
Switch RG-ES226GC-	P	G1NW12E000307	192.168.110.223	00:D0:F8:20:99:99	ESW_1.0(1)B1P2,Release(07181013)	

Step 2: Create a network based on the actually scenario (PPPoE/DHCP/Static IP Address).

Ruffe Create Network		English
* Network Name	: Reyee	
* Password		ingel .
IP Assignmen	t PPPOE DHCP Static IP Address Current IP	
* IP Addres	172.18.158.150	
* Submasi	255.255.255.0	
* Gateway	/ 172,18,158,1	
* DNS Serve	r 192.168.58.95	
* SSIL	Reyee666	
	Encrypted Open	
* Time Zon	(GMT+8:00)Asia/Shanghal	
	Previous Create Network & Connect	

Ruijie Create Network		English
	* Network Name Rey	
	* Password Operation	~
	IP Assignment Pr Current Project Name: Reyee	
	* IP Address 172 • SSID: Reyee666 • Password: ruljie123	
	* Gateway 172:10:136.1	
	* DNS Server 192.168.58.95	
	* SSID Reyee666	
	* Time Zone (GMT+8:00)Asia/Shanghai	
	Province Croixte Nativnik & Connect	

Step 3: Login to your Ruijie Cloud Account.

Ruíjie	Network Setup		English
		Please enter your Ruijie Cloud account to log in.	

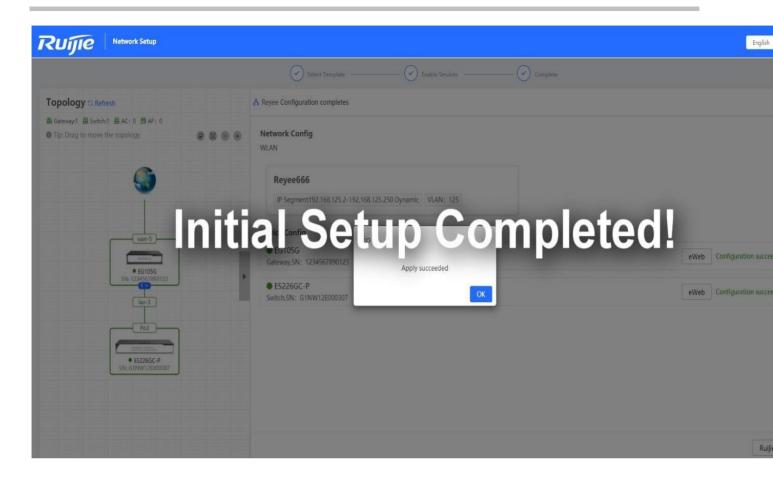
Step 4: Select the project type.

		1 Select Template	2 Enable	le Services 3	Complete	
e select the project type.						
Project Type						
Office		Hotel				
Hotel	\odot	You can add W	LAN, wired network, and enable	e loop prevention, DHCP Snoopin	ig and flow control by one click	<u>*</u>
CCTV						
Other		Preview				
		Typical topology	A Sample hotel		A typical togenlargy	Add a security gateway
		 Cloud enabled device: Gateway:1 Sedick:4 AP112 Legend 	Cable retwork planning Fically ender the base configured for you by detault for can enable them directly C Equipment management network C	😤 Room wireless network 🔹 👟	 Search repoperent Descriptional parameters for each free Cl Search Ensured 	Configure the switch for the camera connection Configured 0 sets. TPCIsk select witch to configure from the left
			montable network wreather than a set of	SSD swrate sum in transmitter		Compared parts of concerned
			IT Security monitoring network (# * monitoring metwork (#)	Wireless network of banquet halls *	Factor score score"	
		Same and a second secon	+ Add mene select setender (MATE)	+ Add more consists activately (MLP)		Divide the configured switch ports into vians Us identice == The Patternerge resolution ==
			2. Hotel applications during the second of t			Manna (2015) The Parl Andrew As united part of a galaxy (10/200-91) The Parl Andrew Strate (10/200-91) The Parl Andrew St

亨待 192.168.110.1 自

Step 5: Enable the services as you need and apply the config.

Ruffe Network Setup			English
	Select Template	Enable Services	- (3) Complete
Topology © Refresh Gisteway:1 B switch:1 B AC: 0 D AP: 0 Tip: Drag to move the topology Tip: Drag to move the topology	Reyee Hotel Succeeded to generate the actual topo You can enable the following services a	Nogy. Click Refresh to update. according to your requirements.	秦 VLAN Manage
S	1. Configure Network Wired Network		WLAN
	+/	Add (Divide VLAN)	+ Add (WiFi)
			1 Hotel WLANs are configured and can be enabled.
(wan-5 661056 5N: 1234567890123			Reyee666 IP Segment192.168.125.2-192.168.125.250 Dynamic VLAN: 125
			Segment192.168.130.2-192.168.130.250 Dynamic VLAN: 130
• ES226GC-P SN: G1NW12E000307			
	2. Configure Function		
	Smart Flow Control	IPTV Connect modem and gateway, and	
Back			Apply

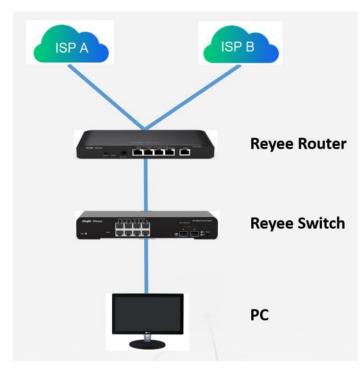


5 Reyee EG Series Router Configuration

5.1 WAN Load balance

The load balancing function distributes the data to multiple WAN interfaces to avoid the traffic congestion and provide redundancy.

Network Topology



Configuration Steps

Step 1: Choose Gateway \rightarrow Basics \rightarrow WAN

Ruíjie	Reyee > Ruijie (Wisstar) 3	Check <u>눩</u> Alarms
윤 Overview	Gateway Hostname: Ruijie SN: 1234567890123 IP Address: 172.18.158.150	
Online Clients	• EG105G MAC: 00:D0:F8:11:11:11	() Reboo
🖽 Gateway	Device Overview Basics A Security Behavior VPN Advanced Diagnostics System	
	WAN Settin Configure W/ LAN	?
Switches		
-a- -a-Network	Single Line Dual-Line	
	* IP Assignment Static IP Address ~	
	* IP Address 172.18.158.150	
	* Submask 255.255.255.0	
	* Gateway 172.18.158.1	
	* DNS Server 192.168.58.95	
	Advanced Settings	
	Save	

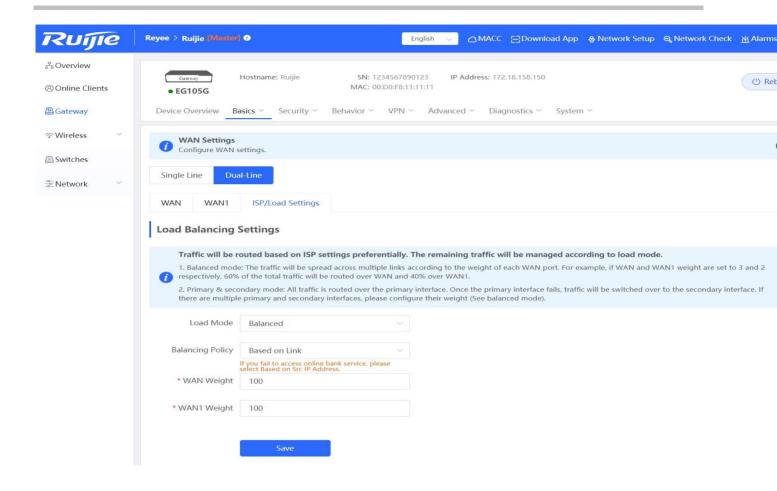
Step 2: Configure the WAN interface accordingly

Ruíjie	Reyee > Ruijie (Markor) • C English V C EDownload App & Network Setup & Network C	heck <u>芮</u> Alarms
[₽] aOverview	Gateway Hostname: Ruijie SN: 1234567890123 IP Address: 172.18.158.150	
Online Clients	EG105G Hostname: Ruijie SN: 123456/890123 IP Address: 1/2.18.158.150 MAC: 00:D0:F8:11:11:11	(U) Reb
盘 Gateway	Device Overview Basics Security Behavior VPN Advanced Diagnostics System	
	WAN Settings Configure WAN settings.	C
🖾 Switches	Configure was settings.	
-a- -a- Network	Single Line Dual-Line	
	WAN WAN1 ISP/Load Settings	
	* IP Assignment Static IP Address \checkmark	
	* IP Address 172.18.158.150	
	* Submask 255.255.255.0	
	* Gateway 172.18.158.1	
	* DNS Server 192.168.58.95	
	Advanced Settings	
	Save	

Step 3: Choose ISP/Load Settings, and configure the load mode and interface weight

1. Balanced mode: The traffic will be spread across multiple links according to the weight of each WAN port. For example, if WAN and WAN1 weight are set to 3 and 2 respectively, 60% of the total traffic will be routed over WAN and 40% over WAN1.

2. Primary & secondary mode: All traffic is routed over the primary interface. Once the primary interface fails, traffic will be switched over to the secondary interface. If there are multiple primary and secondary interfaces, please configure their weight (See balanced mode).



Step 4: Save the configuration

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음 Overview ⑧ Online Clients	Gateway Hostname: Ruijie SN: 1234567890123 IP Address: 172.18.158.150 () MAC: 00:D0:F8:11:11:11 MAC: 00:D0:F8:11:11:11 () () ()
& Online Clients	• EG105G
A Gateway	Device Overview Basics · Security · Behavior · VPN · Advanced · Diagnostics · System ·
	WAN Settings Configure WAN settings.
🖻 Switches	Configure warvisettings.
-a- -a- Network ∽	Single Line Dual-Line
	WAN WAN1 ISP/Load Settings
	Load Balancing Settings
	 Traffic will be routed based on ISP settings preferentially. The remaining traffic will be managed according to load mode. 1. Balanced mode: The traffic will be spread across multiple links according to the weight of each WAN port. For example, if WAN and WAN1 weight are set to 3 and 2 respectively, 60% of the total traffic will be routed over WAN and 40% over WAN1. 2. Primary & secondary mode: All traffic is routed over the primary interface. Once the primary interface fails, traffic will be switched over to the secondary interface. If there are multiple primary and secondary interfaces, please configure their weight (See balanced mode).
	Load Mode Balanced ~
	Balancing Policy Based on Link ~
	If you fail to access online bank service, please select Based on Src IP Address. * WAN Weight
	* WAN1 Weight 100
	Save

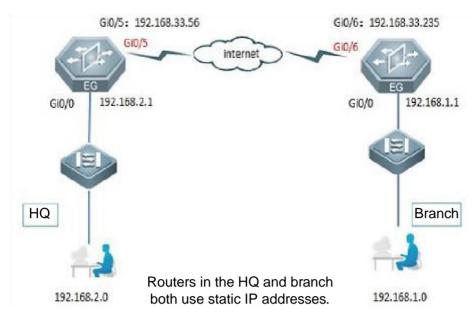
5.2 VPN

IPsec VPN

Networking Requirements

The HQ and branch routers use static IP addresses. The HQ router needs to verify the IP address of the branch router.

Network Topology



Configuration Key Points

- 1. Configure router A in the HQ as the IPsec server.
- 2. Configure router B in the branch as the IPsec client.
- 3. Keep parameter settings at both ends consistent. The parameter settings in this case are as follows:

Authentication mode: pre-shared key, with the key set to *ruijie*.

IKE algorithm: 3DES-MD5, DH2

IPsec negotiation scheme: ESP(3DES-MD5)

Configuration Steps

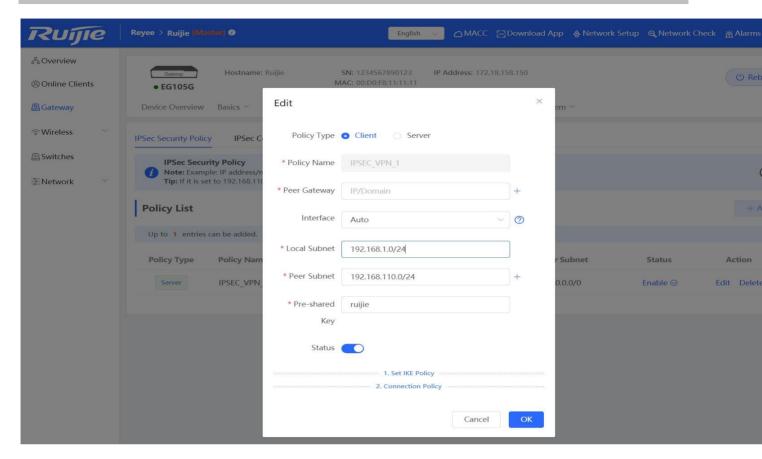
Step 1: Configure the HQ router. Choose **Gateway** \rightarrow **VPN** \rightarrow **IPSec** \rightarrow **Add** to add a policy.

Ruíjie	Reyee > Ruijie [Maatar] 🕢		금Download App 🛭 🍐 Network Set	tup 🔍 Network Check	<u>ന്</u> പ് Alarms
용Overview 용Online Clients	Gateway Hostname: Ruijie	SN: 1234567890123 IP Address: 1 MAC: 00:D0:F8:11:11:11	72.18.158.150		() Reboo
@ Gateway	Device Overview Basics ~ Security ~	Behavior YPN Advanced Di	agnostics × System ×		
중 Wireless ∨	IPSec Security Policy IPSec Connection S	IPSec			
Switches	 IPSec Security Policy Note: Example: IP address/number of sul Tip: If it is set to 192.168.110.x/24, the action 	bnet mask bits. ddress range is from 192.168.110.1 to 192.168.110	254.		?
	Policy List				+ Add
	Up to 1 entries can be added.				
	Policy Type Policy Name P	Peer Gateway Local Subnet	Peer Subnet	Status	Action
		No Data			

Step 2: Configure the server site's subnet and pre-shared key. For building VPN with other Reyee EG series routers, you may keep the default setting of "Set IKE Policy" and "Connection Policy"; For other devices, the parameters need to be configured accordingly.

Ruijie	Reyee > Ruijie [Waster] @	<u>ام</u> Alarms
A Overview		
(8) Online Clients	Gateway Hostname: Ruijie SN: 1234567890123 IP Address: 172.18.158.150 • EG105G MAC: 00:D0:F8:11:11:11 MAC: 00:D0:F8:11:11:11	(U) Reboo
A Gateway	Device Overview Basics ~ Edit * em ~	
ଙ୍ Wireless 🗸	IPSec Security Policy IPSec C Policy Type O Client O Server	
Switches	IPSec Security Policy Name IPSEC_VPN_1	6
-=- -=- -=-Network	Note: Example: IP address/n Tip: If it is set to 192.168.110 Interface Auto O	Q
	Policy List	+ Add
	*Local Subnet 192.168.110.0/24	
	Up to 1 entries can be added. * Pre-shared ruijie	
	Policy Type Policy Nam Key Status	Action
	Server IPSEC_VPN_ Status ◯ 0.0.0/0 Enable ⊙ E	dit Delete
	1. Set IKE Policy 2. Connection Policy	
	Cancel	

Step 3: Configure the branch router. Fill in the **Peer Gateway** (HQ's public IP address or domain), **Local Subnet**, **Peer Subnet** and **Pre-shared Key (need to be the same as HQ's key)**



L2TP/PPTP VPN

L2TP/PPTP support server and client,



Over	view Basics ~	Security Y Behavior Y VPN	× Advanced ×			
L2TP S	ettings Tunnel	List				
į	L2TP Settings					
	L2TP Enable					
	L2TP Type	L2TP Server L2TP Clier	ht			
	* Local Address	14.1.1.1				
	* IP Range	14.1.1.2-14.1.1.100	0			
	* DNS Server	114.114.114.114				
	IPSec Security	No	~			
لا	PPP Hello Interval	10	Sec			
		Save				
Overview	Basics ~ Security ~ Behavio	r Y VPN Y Advanced Y Diagnostics Y System	~			
() VPN	Clients					
VPN Clie	nt List					+ Add 🗇 Delete So
Up to 30	entries can be added.					
	Username	Service Type	Network Mode	Peer Subnet	Status	Action
	123456	L2TP	Router to Router	192.168.1.0/24	Enable	Edit Delete

Overview Bas	ics ~ Security ~	Behavior 🍝 V	PN Y Advance	ed ~			
PPTP Settings	Tunnel List						
i PPTP Sett	ings						
Enabl	e PPTP 🔵						
РРТ	Р Туре 💿 РРТР Se	rver 🔿 PPTP (Client				
* Local A	ddress 14.1.1.1						
* IP	Range 14.1.1.2-1	4.1.1.100	0				
* DNS	Server 8.8.8.8						
* PPP Hello I	nterval 10		seco	nds			
		Save					
Overview Basics [~] Security	Behavior YPN Advanced	Y → Diagnostics → System →					
PPTP Settings Tunnel List							
🚺 Tunnel List							
Username	Server/Client	Tunnel Name	Virtual Local IP	Access Server IP	Peer Virtual IP	DNS	Delete Action
123456	Client	pptp	100.1.1.2	172.26.4.207	100.1.1.1	114.114.114.114	Delete

With the PPTP/L2TP VPN Client, the branch clients no longer need to create a tunnel with the VPN server separately, and can communicate with HQ by connecting to EG

Overview Basics ~	Security ~ Behavior ~	VPN ~ Advance	ed ~			
2TP Settings Tunne	l List					
<i>i</i> L2TP Settings						
L2TP Enable						
L2TP Type	C L2TP Server • L2	TP Client				
* Username	123456					
* Password	*****	0				
Interface	WAN	~				
Tunnel IP	• Dynamic 🔿 Static					
* Server Address	172.26.4.207					
* Peer Subnet	192.168.1.0/24					
IPSec Security	No	~				
Work Mode	• NAT O Router					
* PPP Hello Interval	10	Sec				
Overview Basics [×] Security [×]	Behavior × VPN × Advanced ×	Diagnostics × System ×				
TP Settings Tunnel List						
i Tunnel List						
Username	Server/Client	Tunnel Name	Virtual Local IP	Access Server IP	Peer Virtual IP	DNS
123456	Client	l2tp	200.1.1.2	172.26.4.207	200.1.1.1	114.114.114.114

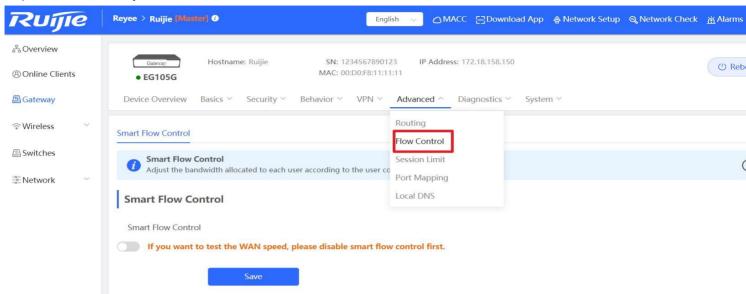
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PPTP Se	ttings Tunne	el List						
0	PPTP Settings							
	PPTP Enable							
	PPTP Type	O PPTP Server • PPT	P Client					
	* Username	123456						
	* Password	*****	<	D				
	Interface	WAN	~					
	Tunnel IP	• Dynamic 🔿 Static						
	* Server Address	172.26.4.207						
	* Peer Subnet	192.168.1.0/24						
	Work Mode	• NAT O Router						
* [PPP Hello Interval	10	Se	c				
Overview	Basics ~ Security ~	Save Behavior ~ VPN ~ Advanced ~ D	iagnostics ~ System ~					
TP Setting								
i Tunr	nel List							
	Username	Server/Client	Tunnel Name	Virtual Local IP	Access Server IP	Peer Virtual IP	DNS	
	123456	Client	pptp	100.1.1.2	172.26.4.207	100.1.1.1	114.114.114.114	

5.3 Smart Flow Control

Reyee Smart Flow Control is a feature used to avoid congestion by optimizing user traffic. The working principle is shown as below: when the total user traffic is low than the maximum WAN bandwidth, the rate limit policy will not be applied, every user will get the required bandwidth; However, when the total user traffic exceeds the maximum WAN bandwidth, the user-based rate limit will take effect. The total WAN bandwidth will be equally allocated to every user. For example, If there are 10 users in the network, the total user traffic is 200Mbps and WAN bandwidth is 100Mbps, every user will get 10Mbps bandwidth after enabling the smart flow control feature.

Configuration Steps



Step 1: Choose Gateway \rightarrow Advanced \rightarrow Flow Control and enable the feature.

Step 2: Fill in the WAN bandwidth and Save the configuration.

² / ₃ Overview Cateway Hostname: Ruijie SN: 1234567890123 IP Address: 172.18.158.150 ® Online Clients • EG105G MAC: 00:D0:F8:11:11:11 IP Address: 172.18.158.150 @ Gateway Device Overview Basics × Security × Behavior × VPN × Advanced × Diagnostics × System ×	() Reb
Smart Flow Control	
Switches Smart Flow Control Adjust the bandwidth allocated to each user according to the user count.	Ċ
Smart Flow Control Smart Flow Control Smart Flow Control If you want to test the WAN speed, please disable smart flow control first. WAN Bandwidth * Up 100 Mbps * Down 100 Mbps	

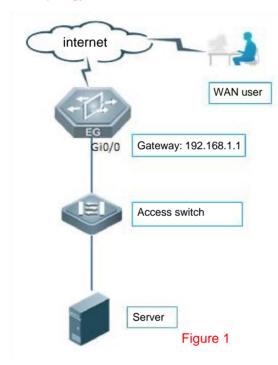
5.4 Port Mapping

Application Scenario

A customer deploys a server on the LAN and enables the HTTP or other services. The server address is a private address. WAN users can neither access this address directly nor use services provided by the server. In this case, you can enable the port mapping function to allow WAN users to access the LAN server. For example, the server address is 192.168.1.20 and HTTP is enabled. As the server address is a private address, WAN users cannot directly access the HTTP service provided by the server. In this case, you can map the server address and server ports to a public network address on the EG device so that WAN users can access the HTTP service provided by the server.

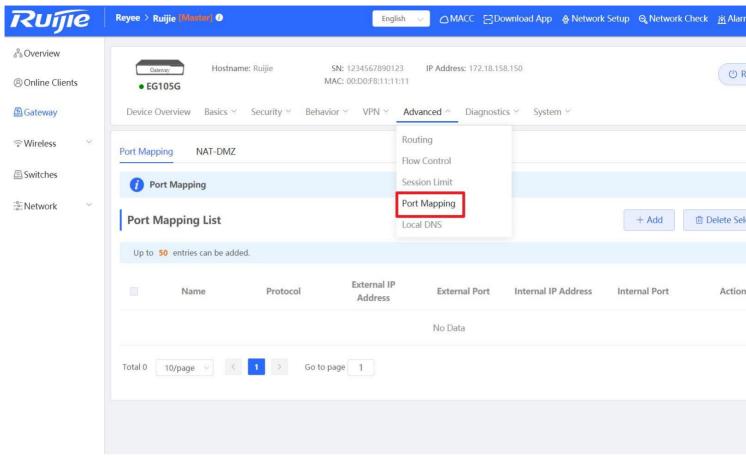
Networking Requirements

- 1. The WAN line is a single 10 Mbps fixed line. The address is 122.133.2.22, subnet mask is 255.255.255.0, and DNS address is 218.85.157.99.
- There is a remote desktop server on the LAN. The IP address of the server is 192.168.1.20. If the LAN server needs to be accessed from the WAN, port mapping is required to map the interfaces of the LAN server to the public network. Network Topology



Configuration Steps

Step 1: Choose Gateway -> Advanced -> Port Mapping



Step 2: Add a new Policy

Ruíjie	Reyee > Ruijie (Winster) 0		English V MACC	Download	App 💩 Network	Setup 🔍 Network Ch	ieck <u>済</u> Al
움Overview				22 40 450 450			
Online Clients	Gateway Hostname: Ruijie • EG105G	SN: 12345678 MAC: 00:D0:F8:		72.18.158.150			CC
A Gateway	Device Overview Basics 🗠 s Add			×	stem ~		
	Port Mapping NAT-DMZ	* Name HTT	P	<u>ه</u>			
Switches	<i>i</i> Port Mapping	Protocol UD	p	~			
Network	Port Mapping List	nal IP Address Def	ault: WAN IP address.			+ Add	🗇 Delete
	Up to 50 entries can be added. * Extern	al Port/Range 80					
	Name * Inter	nal IP Address 192	.168.1.20		al IP Address	Internal Port	Acti
	* Intern	al Port/Range 80					
	Total 0 10/page >		Cancel	ОК			

Internal IP Address: Indicates the IP address of the server.

Internal Port/Range: Indicates the port for the server that is to provide external services.

External IP: Indicates the IP address of a WAN port.

External Port/Range: Indicates the target WAN service port of port mapping.

5.5 Authentication

Cloud Auth

Configure the Cloud authentication on cloud and sync to EG. Then need to check the configuration on EG Eweb.

Cloud Portal Au	th Only supported on P50 and higher versions
2. The Voucher/A	account portal authentication on gateway does not support speed limit and flow quota limit that defined on profile. Account portal authentication on gateway does not support flow usage display. /Voucher/Account/SMS authentications are supported on the gateway (Facebook auth is not supported).
	Auth C After you enable Cloud Portal Auth, it will be synced to the Reyee EG automatically.
Porta	Escape
Auth I	P/Range 192.168.110.14-192.168.110.26 +
Seamless	Online 🛛 🚺 Day 🗸
fa Voucher Log Access Code	t a portal or add a new portal.

2 Overview	
Online Clients	Roder Hostname: Ruijie SN: H1MQ8W8006802 IP Address: 172.26.7.55 MAC: 00:74:9CiDF:8F:18 • EG105G-P EG105G-P EG105G-P EG105G-P EG105G-P EG105G-P
A Router	Overview Basics × Security × Behavior × VPN × Advanced × Diagnostics × System ×
	WeChat/SMS/One-Click Auth Account Auth Authorized Auth QR Code Auth Whitelist Online Users
🖾 Switches	WeChat/SMS/One-Click Auth
-e- -e-Network	Connect WiFi via WeChat: Please configure connecting WiFi via WeChat on WeChat public account platform and Ruijie Cloud first. View SMS Authentication: Please configure SMS authentication on Ruijie Cloud first. View If the IP address of the EAP device is in the authentication IP range, please choose Whitelist to add the EAP MAC address to the MAC address whitelist.
	Authentication
	* Server Type SMS/One-Click Auth V
	* Auth Server URL portal.ruijienetworks.com
	Client Escape 👩 Enable
	* IP/IP Range 192.168.110.14-192.168.111 Add
	Save

EG local authentication

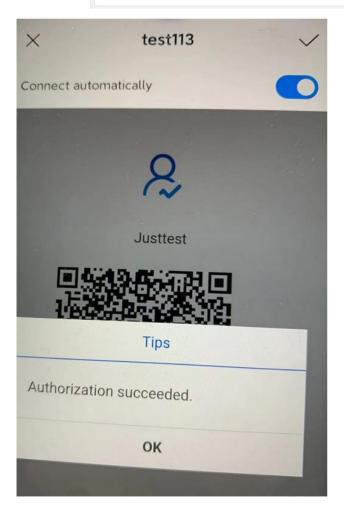
EG local account auth, add the account on EG Eweb and up to 200 accounts can be added.

용 Overview 용 Online Clients		28W8006802 IP Address: 172.26.7.55 MAC: 00:74:9C:DF:8F:1B			
@Router	EG105G-P Overview Basics × Security × Behavior × VPN × Ad	vanced Y Diagnostics Y System Y			
	WeChat/SMS/One-Click Auth Account Auth Authorized Au	th QR Code Auth Whitelist Online Users			
Switches	Account Auth 1. Enable account authentication and create an account. 2. A user logs in with the account created in step 1 and will be allo	wed to access the internet.			
	Make sure that the device can access the Internet. Otherwise, t If the IP address of the EAP device is in the authentication IP ra	he Portal page may not pop up on the terminal. nge, please choose Whitelist to add the EAP MAC address to the MAC address whitelist.			
	Account Auth				
	Accounts 1				
	* Auth IP/IP Range 192.168.110.15 Add				
	Save				
	Account Settings		s	Search by Username Search	+ Add
	Up to 200 accounts can be added.				
	Username	Password	MAC		Action
	test123	test123			Edit Delete
	< 1 > 10/page ~				

Authorized auth

There are 2 type clients, some are auth clients, some are authorization clients. When auth clients connect to EG, will pop-up the portal page with a QR code, need the authorization clients to scan the QR code to authorize.

2 Overview			
Online Clients	EG105G-P	Hostname: Ruijie SN:	: H1MQ8W8006802 IP Address: 172.26.7.55 MAC: 00:74:9C:DF:8F:18
/∰ Router	Overview Basics ~	Security ~ Behavior ~ VPN ~	Advanced <u></u> Diagnostics <u>System</u> <u></u>
⇔ Wireless ∨	WeChat/SMS/One-Click	k Auth Account Auth Authoriz	red Auth QR Code Auth Whitelist Online Users
🖻 Switches	Authorized Aut	th	
 Network		d user can authorize guests by scanning his	QR code.
a network			vise, the Portal page may not pop up on the terminal.
	If the IP address	of the EAP device is in the authenticatio	n IP range, please choose Whitelist to add the EAP MAC address to the MAC address whitelist.
	Authorized Auth		
	Popup Message	Just test	
			A
	* Auth IP/IP Range	192.168.110.137 Ac	14
	Limit Online Duration		
	* Duration Limit	60 minu	te
	* Authorization IP/IP	192.168.110.15	
	Range		
		Save	



Whitelist of authentication

Whitelist support user whitelist, IP whitelist, URL whitelist, MAC whitelist and MAC blacklist.

[₽] ₆ Overview			
(Online Clients	Boder Hostname: Ruijie SN: H1MQ8W8006802 IP Address: 172.26.7.55 MAC: 00:74:9C:DF:8F:18 • EG105G-P • EG105G-P<		(U) R
Router	Overview Basics × Security × Behavior × VPN × Advanced × Diagnostics × System ×		
₩ireless	WeChat/SMS/One-Click Auth Account Auth Authorized Auth QR Code Auth Whitelist Online Users		
🖾 Switches	1 A user configured with whitelisted IP or MAC address can access the Internet without authentication.		
Network	User Whitelist	+ Add	🗇 Delete Sele
	Up to 50 entries can be added.		
	IP/IP Range		Action
	No Data		
	< 1 > 10/page ~		1
	IP Whitelist	+ Add	🗇 Delete Sele
	Up to 50 entries can be added.		
	IP/IP Range		Action
	No Data		
	< 1 > 10/page ~		٦
80 Overview	10/page V		
Online Clients	URL Whitelist	+ Add	🗇 Delete Se
Router	Up to 100 entries can be added.		
♥Wireless ✓ Ø Switches	URL		Action
Switches	No Data		
	< 1 > 10/page ~		
	MAC Whitelist	+ Add	🗇 Delete Se
	Up to 250 entries can be added.		
	MAC		Action
	No Data		
	< 1 > 10/page ~		
	MAC Blacklist	+ Add	💼 Delete Se
	Up to 250 entries can be added.		
	MAC		Action
	No Data		
	< 1 > 10/page ~		

Online users list

Online users show the user list, "Delete" can kill off the auth user.

8 Overview								
Online Clients	Router Hostname: Ruijie EG105G-P	SN: H1MQ8W8006802	IP Address: 172.26.7.55	MAC: 00:74:9C:DF:8F:1B				0
Router	Overview Basics [∨] Security [∨] B	ehavior ~ VPN ~ Advanced ~	Diagnostics ~ System ~					
♥Wireless	WeChat/SMS/One-Click Auth Accourt	t Auth Authorized Auth QR C	Code Auth Whitelist Onlin	ne Users				
A Switches	i Online Clients							
Network	Auth Settings							
	Idle Client Timeout 15 Min	(Range: 5-65535)						
	Save							
	Online Clients				Search by IP Address	~ Enter	Q Q Refresh	Delete S
	Username	IP	MAC	Up on	Duration(Sec)	Auth Type	Status	
	0249.036a.d4d0	192.168.110.15	0249.036a.d4d0	2021-2-26 15:46:11	0	Scan QR Code	Online	
	< 1 > 10/page ~							

5.6 Behavior

APP control

Switch the feature library to international version, choose the blocked applications. Support blocked the applications with IP address group and Time

Roster Hostname: Ruijie SN: H1MQ8W8006802 • EG105G-P	IP Address: 172.26.7.55	MAC: 00:74:9C:DF:8F:1B					
Overview Basics × Security × Behavlor × VPN × Advanced × D	ia Add App		×				
App Control	IP Address Group	Custom ~					
App Control	* Custom	192.168.110.3-192.168.110.110]+		Feature Library Version	International V	+ Add 🗇 Delete
Up to 20 entries can be added.	Time	Weekdays \lor					
IP Address Group Time	* Blocked App	Social_applications × InstantMessaging_MOBILE × ×		us	Remark		Action
	Remark	 Communication Social_applications Chat 					
	Status	 InstantMessaging_MOBILE Video Shopping 					
		 Play Databank P2PSoftware AppStore 	ок				
		Payment					

Website Management

Step1 Set the website group, the group member can be a complete URL or a domain.

Example: *.ruijienetworks.com

Router Hostname: EG105G-P SN: H1PTATC001746 IP Address: 172.26.5.195 • EG105G-P	MAC: C0:98:E6:35:28:3C	
Overview Basics × Security × Behavior × VPN × Advanced × Diagnostics × System ×		
Website Filtering Website Group		
Website Group The group member can be a complete URL (example: www.baidu.com) or a domain (example: *.56.com).		
Website Group		+ Add 🗎 🖻 Delet
Up to 20 entries can be added.		
Group Name	Member	Action
Games	duowan.com More	Edit Delete
Finance	*.10jqka.com.cn More	Edit Delete
Communication	*.baihe.com More	Edit Delete
C Shopping	*.taobao.com More	Edit Delete

Step2 Set the website filtering, choose the blocked website group. Support blocked the applications with IP address group and Time

Router Hostname: EG105G-P • EG105G-P	SN: H1PTATC001746	IP Address: 172.26.5.195	MAC: C0:88:E6:35:28:3C				
Overview Basics Y Security Y Behavior Y	VPN × Advanced × Di	 Add Website Filter 	ing	×			
Website Filtering Website Group		IP Address Group	Custom ~				
Website Filtering		* Custom	192.168.110.3	+			
Website Filtering		Time	Weekends				+ Add 🗇 Dele
Up to 20 entries can be added.		* Blocked Website	Games × Communication × Shopping × × ×				
IP Address Group	Control Type	Remark Status	 All Games Finance Communication Shopping Live 		Status	Remark	Action
			Lusic Entertainment Forum Malibox Story Sports	ОК			

5.7 PPPoE Server

Configuration Steps:

Step 1: Choose Router \rightarrow Advanced \rightarrow PPPoE server

움Overview	
(8) Online Clients	Router Hostname: Ruijie SN: H1PT/ IP Address: 19
A Router	Overview Basics ~ Security ~ Behavior ~ VPN ~ Advanced ~ Diagnostics ~ System ~
	Global Settings Account Settings Account Management Exceptional IP Address Online Clients
🕾 Switches	Global Settings
$^{-\sigma-}_{-\sigma-}$ Network \checkmark	 1. MAC binding and MAC filtering are not valid for PPPoE clients. 2. The IP address of the PPPoE server cannot overlap with any interface IP range. 3. The authentication function is not valid for PPPoE clients.

Step 2: Advanced \rightarrow Global Settings, enable the PPPoE Server, configure the Local address and IP Range, base on the scenario, choose the VLAN.

윰Overview	Overview Basics ~	Security ~	Behavior \vee	VPN ~ Ad	dvanced \sim	Diagnostics \vee	System $^{\scriptstyle \vee}$
Online Clients	Global Settings Accou	unt Settings	Account N	Management	Exceptio	nal IP Address	Online Cl
A Router							
mouter	Global Settings						
	 1. MAC binding and 2. The IP address of 3. The authentication 	the PPPoE serv	er cannot over	lap with any inte	erface IP rang	e.	
🕾 Switches							
Network	PPPoE Server	Enable	 Disable 				
	Mandatory PPPoE Dialup	 Enable 	 Disable 				
			Disable				
	* Local Address	10.44.66.99	2				
	Eocal Address	10.44.00.55	,				
	* IP Range	10 44 66 10)0-10.44.66.20	0			
	in Kange	10.44.00.10	0-10.44.00.20				
	VLAN	Default VL		~			
	V 27 4 4	Deladit VE	-114				
	Primary DNS Server	8.8.8.8					
		0.0.0.0					
	Secondary DNS Server	Example: 1	.1.1.1				
	,,						
	* Unanswered LCP	10					
					Range: 1-6	0	
	Packet Limit				_		
	Auth Mode	V PAP	CHAP				
		MSCHAP	MSCH	IAP2			
« Collanse							

Global Settings	Account Settings	Account Management	Exceptional IP Address	Online Cli
2. The IP add	ng and MAC filtering are	e not valid for PPPoE clients. cannot overlap with any inte valid for PPPoE clients.		
PPPoE S	erver o Enable (Disable		
Mandatory PPPoE D	Dialup 🔾 Enable 🌘	Disable		
* Local Ad	dress 10.44.66.99			
* IP R	lange 10.44.66.100-	-10.44.66.200		
,	VLAN 50	~		
Primary DNS S	erver 8.8.8.8			
Secondary DNS S	Example: 1.1.	1.1		
* Unanswered	d LCP 10		Range: 1-60	
Packet	Limit		-	
Auth M	Mode 🗹 PAP 🔽	CHAP MSCHAP2		

Step 3: Advanced \rightarrow Account Settings, create the PPPoE account

Overview Bas	ics ~ Security ~ B	ehavior ~ VPN ~ Adv	vanced ~ Diagnostics ~	System ~			
Global Settings	Account Settings	Account Management	Exceptional IP Address	Online Clients			
<i>i</i> Account S	-	f <mark>fect.</mark> Enable smart flow control					
Account Lis	t						+ Add
Up to 35 entri	es can be added. Clients	1					
	Username	Password	Expire Da	te Status	Account Managemen	t Remark	Ad
	test123	test123	2021-06-2	26 Enable	-		Edit

Step 4: Access to the PPPoE client and configure the PPPoE configuration

<i>WAN Settings</i> Configure WAN s	ettings.					
Single Line Dua	al-Line					
* Internet	PPPoE	~				
* Username	test123					
* Password	•••••	**				
Forgot Account? Obtain Account from Old Device						
IP Address	10.44.66.100					

Subnet Mask 255.255.255.255

Gateway 10.44.66.99

DNS Server 8.8.8.8

Configure WAN	settings.		
Single Line Du	al-Line		
* Internet	РРРоЕ	~	
* Username	test123		
* Password	••••••	₩	
Forgot Ac	ccount? Obtain Account from Old Device		
IP Address	10.44.66.101		
Subnet Mask	255.255.255.255		
Gateway	10.44.66.99		
DNS Server	8.8.8		
	Advanced Settings		
* MTU	1492		Range: 576-1492.
* MAC	30:0d:9e:e7:e9:17		
802.1Q Tag			
* VLAN ID	50		
* Default Preference	0		A smaller value indicates a higher prefere

Step 5: PPPoE Server \rightarrow Online Clients, check the PPPoE status

Overview Basic	cs ~ Security ~	Behavior Y VPN Y Ad	vanced ~ Diagnostics ~	System ~					
Global Settings	Account Settings	Account Management	Exceptional IP Address	Online Clients					
i Online Clie	ents								
Account List								i Dise	conne
Online Clients 1									
	Username		IP Address		MAC		Up on		Act
	test123		10.44.66.101	30:0	D:9E:E7:E9:17	2	021-06-10 18:16:35	D	iscon

5.8 WIO

Wireless Intelligent Optimization (WIO) is an intelligent and automated RF optimization solution specially developed for complex and multiple wireless AP scenarios.

Configuration Steps:

1) Step 1: Ensure that all device versions are higher than R55 (EG and RAP)

Ruíjie I®Rcycc	Cloud_Auth_Test > Ruijie	e [Master]	0				English	✓ CRuijie Cloud	顓Download App	ietup @Network Check
욹Overview	(i) AP List									
Online Clients Router	AP List Group: All	Groups	Expand						IP/MAC/hostname/SN/Sof	tWare Ver Q
	Action	n	Hostname ≑	IP \$	MAC \$	Status ≑	Model \$	Clients \$	Software Ver	SN \$
APs	🗌 💮 Manage එ	Reboot	Ruijie	192.168.10.113	C4:70:/ 4	Online	RAP2200(F)	1	ReyeeOS 1.55.1906	G1QH16 3
Wi-Fi Clients	〇 Ø Manage C) Reboot	Ruijie	192.168.10.204	C4:70 5A	Online	RAP1200(F)	0	ReyeeOS 1.55.1906	G1QH2
Blacklist/Whitelist Radio Frequency	< 1 > 10/	/page 🗸								
LAN Ports										
LED Network Optimization										
🕾 Switches										
-a-Network ~										

Step 2: Choose Wireless \rightarrow Network Optimization Choose

Rujje	Cloud_Auth_Test > Ruijie (Nastar) 0	English 🗸 🛆 Ruijie Cloud 📓 Download App 🔌 Network Setup	@Network Check					
윦Overview	Network Optimization Optimization Record							
(8) Online Clients	Optimization Optimization Record							
A Router	Ø 0,							
ক Wireless	Start Scanning	Optimizing	Finish					
APs	Description: This feature will optimize the self-organizing network to maximize the WLAN perfo	ormance. Please make sure that all APs have been online.						
Wi-Fi	Notes:							
Clients	2. If dynamic channel allocation is running in the backend, network optimization w	1. During network optimization, the APs will switch channels, forcing the clients to go offline. The process will last for a while, subject to the quantity of devices. It is recommended you enable network optimi 2. If dynamic channel allocation is running in the backend, network optimization will fail. Please try again later.						
Blacklist/Whitelist	 3. The configuration cannot be rolled back once optimization starts. I have read the notes. 							
Radio Frequency	Network Optimization							
LAN Ports								
LED	Scheduled Optimization							
Network Optimization	Scheduled Optimization Optimize the network performance at a scheduled time for a better user experience.							
Switches	Scheduled							
-a- -a- Network	Optimization							
	Save							

Step 3: Start the optimization, about 2 mins

Ruíjie l R cycc	Cloud_Auth_Test > Ruijie [Master] 0		English 🗸 🔿 Ruijie Cloud 📓 Downl	load App 👌 Network Setup 🔘 Network Check 🖄 Alarm
움Overview	Network Optimization Optimization Re	cord		
(8) Online Clients	Hetwork optimization optimization re			
A Router	⊘ Start		🗊 Optimizing	Sinish
ক Wireless	Start	Scanning	Optimizing	Finish
APs		Scanning		
Wi-Fi	10%	Start: 2021-07-13 17:41:53 Expected Time: 2 minute		
Clients		Radio interference includes WLAN interference and non-WL		
Blacklist/Whitelist		WLAN interference mainly comes from 802.11 WLAN device provisioning and planning.		
Radio Frequency		Non-WLAN interference mainly comes from non-WLAN dev 802.11 devices, not following CSMA/CA backoff strategy. The c		
LAN Ports		It is recommended to disable power-saving for PC clients to Set the roaming sensitivity level to High to ensure that client		aving re-association or re-authentication.
LED		As for iOS-based clients, it is recommended to update to the		op up slowly and the Wi-Fi icon may light up slowly.
Network Optimization	Scheduled Optimization			
E Switches	Scheduled Optimization Optimize the network performance at a	scheduled time for a better user experience.		
-a- -a- -a-Network	Scheduled			
	Optimization			
	Save			

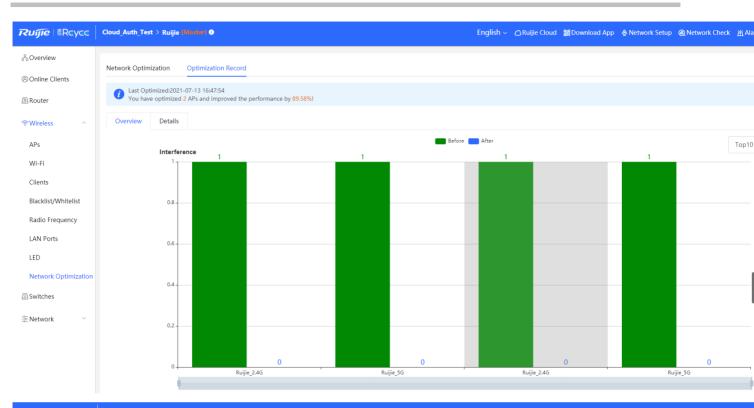


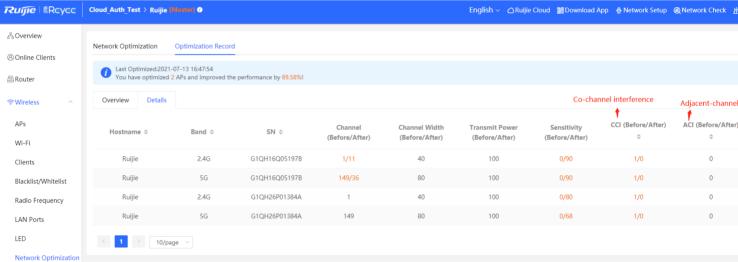
Rujje	Cloud_Auth_Test > Ruiji	e (Master) O		English 🗸 📿	∖Ruijie Cloud	鬷Download App	A Network Setup	@Network Check	k <u>済</u> Warr
중Overview	Network Optimization	Optimization Record							
(8) Online Clients		Optimization Record							
A Router	\odot —	*	<i>I</i> I			$ \odot$			
	Start	Scanning	Optimi	zing		Finis	sh		
APs	\square	Scanning							
Wi-Fi	20%	Start: 2021-07-14 14:48:00 Expected Time: 2 minute							
Clients		Radio interference includes WLAN interference and results.							
Blacklist/Whitelist		WLAN interference mainly comes from 802.11 WLAN Non-WLAN interference mainly comes from non-WL	AN devices working on 2.4Ghz or 5Ghz band	I, including microwa	ave oven, Bluet				
Radio Frequency		following CSMA/CA backoff strategy. The devices will o t is recommended to disable power-saving for PC cl				ciation or re-auther	ntication.		
LAN Ports		Set the roaming sensitivity level to High to ensure the As for iOS-based clients, it is recommended to upda		ntication page may	non un slowly	and the Wi-Fi icon i	may light up slowly		
LED				nication page may	pop up siemy		nay ngire ap sioniyi		
Network Optimization	Scheduled Optim	nization							
Switches	Optimize the netw	nization ıork performance at a scheduled time for a better user experie	ence.						
-e-Network	Scheduled Optimization								
		Save							

Step 5: When optimization finish, will show the optimization result

Ruíjie I Rcycc	Cloud_Auth_Test > Ruiji	e (Muster) O	English ~ 🛆 Ruij	jie Cloud Download App 🔮 Network Setup 🧉	夏Network Check <u>芮</u> Wa
중 Overview	Network Optimization	Optimization Record			
Online Clients		Optimization Record			
A Router	⊘ ——	⊘	⊘		
₩ireless	Start	Scanning	Optimizing	Finish	
APs		Finish			
Wi-Fi		Optimiation finished on 2021-07-14 14:48:35 Time: 35 seconds			
Clients	\mathbf{O}	Success			
Blacklist/Whitelist		View Details Back Cancel Optimization			
Radio Frequency	Scheduled Optim	nization			
LAN Ports	Cabadada d Orati				
LED	<i>i</i> Scheduled Optin Optimize the netw	nization /ork performance at a scheduled time for a better user experience.			
Network Optimization	Scheduled Optimization				
Switches 🖉		Save			
Network ~					

Step 6: Click "View Details", will show with overview and details. Overview, show the interference for all APs





Support scheduled Optimization

Rujje	Cloud_Auth_Test > Ruijie [Master] 0		English 🗸 🛆 Ruijie Cloud 🧱 Download App 🔌 Netwo	rk Setup @Network Check 尚A
^S ∂Overview	Network Optimization Optimization Record			
(8) Online Clients				
A Router	\odot —	Q,		$ \odot$
	Start	Scanning	Optimizing	Finish
	Development			
APs	Description: This feature will optimize the self-organ	izing network to maximize the WLAN performance. Plea	se make sure that all APs have been online.	
Wi-Fi	Notes: 1. During network optimization, the APs	will switch channels, forcing the clients to go offline. Th	e process will last for a while, subject to the quantity of devices. It is n	ecommended you enable network o
Clients		ng in the backend, network optimization will fail. Please	try again later.	
Blacklist/Whitelist	3. The configuration cannot be rolled baI have read the notes.	ck once optimization starts.		
Radio Frequency	Network Optimization			
LAN Ports				
LED	Scheduled Optimization			
Network Optimization	 Scheduled Optimization Optimize the network performance at a scheduled time for a 	better user experience.		
Switches	Scheduled			
-o -o-Network	Optimization			
	Day Sun 🗸			
	Time 03 ~ : 00 ~			
	Save			

Limitation

- 1) When there are only RAP2200(F), RAP1200(F) and no EG in the network, WIO is not supported (no EG and only 100M AP projects cannot be used WIO)
- 2) When there is no EG in the networking, WIO can only be used for networking with less than 50 APs (without EG, projects with less than 50 Gigabit APs networking can complete)
- 3) WIO can be used when there is EG

Support Models

Gateway: EG105G, EG105G-P, EG105GW, EG210G-P, EG105G-V2

RAP: RAP2200(E), RAP2200(F), RAP1200(F), RAP1200(P)

5.8 Load Balancing

Principle

- 1) The AP reports the number of STAs/traffic information to EG
- 2) EG judges whether to continue to allow access based on the reported information:

Comprehensively consider the balance of the entire network, and make balance decisions based on the set start threshold and traffic difference

3) The AP adjusts whether to allow terminal access according to the status by the EG:

Respond to the information that the terminals reach the upper limit in the disallowed state (auth response message with Status code 17), and guide the terminal to associate with other APs

Configuration Steps:

Step 1: Wireless \rightarrow Wi-Fi \rightarrow Load Balancing

Ruíjie I Rcycc	Cloud_Auth_Test > Ruijie (Maatar) 0	English ~ _ CRuijie Cloud Sig Download App	🖗 Network Setup 🛛 🍳 Network Check	<u>済</u> Warn 🕞 Default Passv			
운 Overview	Wi-Fi Settings Guest Wi-Fi Wi-Fi List Healthy Mode Load Balan	ing					
(8) Online Clients							
A Router	Load Balancing		+ Add	Delete Selected			
♥Wireless ^	Up to 32 entries can be added. Add APs in an area into a group and enable load balancing. When load is unbalanced in the group, clients will automatically associate to an AP with lighter load. 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 to AP2.						
APs							
Wi-Fi	Group Name Type	Rule	Members	Action			
Clients	test Client Load Threshold Balancing	3 Client Count Difference: 2 Max Denial Count: 10	2Members Details	Edit Delete			
Blacklist/Whitelist							
Radio Frequency							
LAN Ports							
LED							
Network Optimization							
🖻 Switches							
$- \frac{- \Theta^{-}}{- \Theta^{-}}$ Network							

Step 2: Based-Clients.

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 to AP2.

Ruíjie I Rcycc	Cloud_Auth_Test > Ruijie (Master) 0		English ~ _ Ruijie Cloud '왫 [
Overview	Wi-Fi Settings Guest Wi-Fi Wi-Fi List	Healthy Mode	Load Balancing
Online Clients A conter	Load Balancing	Add	;
œWireless ∧	Up to 32 entries can be added. Add APs in an area into a group and enable load Example: Add AP1 and AP2 into a group and sele.		TEST
APs	clients' attempt to associate to AP1 will be denie		Client Load Balancing \lor
Wi-Fi Clients	Group Name	* Rule	When an AP is associated with 3 () clients and the
Blacklist/Whitelist	test	В	difference between the currently associated client count and
Radio Frequency LAN Ports			client count on the AP with the lightest load reaches , clients can associate only to another AP in the
LED			RAP1200(F) List . 0 APs Selected Ruijie G1QH26P01384A
Network Optimization			RAP2200(F) List . 0 APs Selected
-9Network		* Members	Ruijie G1QH16Q05197B Enter an AP name or SN. ^
			Cancel

Step 3: Based-traffic.

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.

Ruíjie l [®] Rcycc	Cloud_Auth_Test > Ruijie (Master) 0		English ∨Ruijie Cloud 鼝Do
2 Overview	Wi-Fi Settings Guest Wi-Fi Wi-Fi List	Healthy Mode	Load Balancing
⑧ Online Clients ⊞ Router	Load Balancing	Add	×
↔ Wireless	Up to 32 entries can be added. Add APs in an area into a group and enable load b Example: Add AP1 and AP2 into a group and selec		TEST
APs	clients' attempt to associate to AP1 will be denied	* Туре	Traffic Load Balancing
Wi-Fi	Group Name	* Rule	When the traffic load on an AP reaches 5
Clients Blacklist/Whitelist	test E		*100Kbps and the difference between the current traffic and
Radio Frequency			the traffic on the AP with the lightest load reaches
LAN Ports			5 *100Kbps, clients can associate only to another
LED			AP in the group. After a client association is denied by an AP
Network Optimization			for 10 times, the client will be allowed to associate
A Switches			to the AP upon the next attempt.
-o- -o- -o-Network ∨		* Members	Enter an AP name or SN.
			Cancel

5.9 IPTV

Configuration Steps:

Step 1: Router \rightarrow Basics \rightarrow IPTV/VLAN

Ruíjie ®Rcycc	Cloud_Auth_Test > Ruijie	, [Master] 🕖		English
윰Overview				
8 Online Clients	EG105G-P	Hostname: Ruijie	SN: H1P	IP: 172
A Router	Overview Basics ^	Security ~ Behavior ~	VPN 🐃 Advanced 🐃 Diagnosti	cs ⊻ System ⊻
ি Wireless	iptv,			
🖻 Switches	IPTV/VL IPv6 Addre	SS		
-=- -=- Network	PoE		~	
	Port VLAN			
	IPTV/VLAN		\sim	
	* LAN1	IPTV	~	

Step 2: Configure the IPTV VLAN ID and IP-Phone VLAN ID

Ruijie @Rcycc	Cloud_Auth_Test > Ruij	jie [Master] 🕐		English \sim	∩Ruijie Cloud Download	d App 🛛 🔮 Network Setup	@Netwo
्र ⁸ Overview ® Online Clients	Router • EG105G-P	Hostname: Ruijie	SN: H1PTA	IP: 172.26.6.190	MAC: C0:B8		
A Router	Overview Basics ~	Security \checkmark Behavior \checkmark	VPN ~ Advanced ~ Diagnostics	✓ System ✓			
♥ Wireless	iPTV/VLAN set	tings.					
Switches	IPTV/VLAN						
-o- -o- -o- Network	* Mode	Custom	~				
	* LAN0	Internet					
	* LAN1	IPTV	~				
	* LAN2	IP-Phone	~				
	* IPTV VLAN ID	30					
	* IP-Phone VLAN ID	35					
	Internet VLAN	802.1Q Tag					
		Save					

6 Reyee NBS Series Switch Configuration

6.1 VLAN Setting

A virtual LAN (VLAN) is any broadcast domain that is partitioned and isolated in a computer network at the data link layer. VLANs work by applying tags to network frames and handling these tags in networking systems – creating the appearance and functionality of network traffic that is physically on a single network but acts as if it is split between separate networks. In this way, VLANs can keep network applications separate despite being connected to the same physical network, and without requiring multiple sets of cabling and networking devices to be deployed.

Configuration Steps:

Step 1: Choose Switches \rightarrow Manage to configure the switch

Ruijie	Reyee > Ruijie [Master]			English 🗸		E Download Ap	p 🛕 Network Setup 🔍 Network Cheo	k <u>濟</u> Alarms
움Overview	Switch List							
(8) Online Clients	<i>View switches in t</i>	the current netwo	rk.					
🖽 Gateway	Switch List						Delete Offline Devices	Batch Upgrad
₩ireless	Action	Hostname	IP Address	MAC	Status	Model	Software Ver	SN \$
Switches	Manage	ES226 ₡	192.168.110.224	00:D0:F8:20:99:99	Online	RG- ES226 I P	ESW_1.0(1)B1P2,Release(07181013)	G1NW12E000
Network ~	Manage	Ruijie 🖉	192.168.110.193	30:0D:9E:53:0F:E1	Online	NBS32 48GT4 P	SWITCH_3.0(1)B11P30,Release(07181111)	G1PD49X001
	Total 2 10/page 🗸	< 1	> Go to page	1				

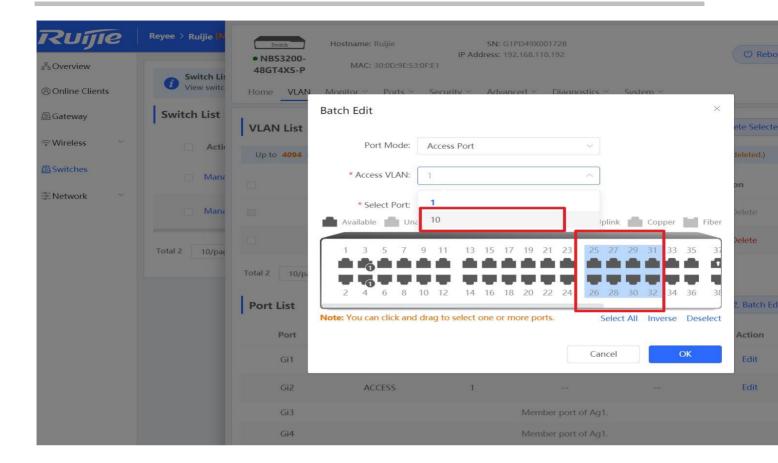
Step 2: Choose VLAN and Add a new VLAN

RUIJIe	Reyee > Ruijie R	switch • NBS3200- 48GT4XS-P	Hostname: Ruijie MAC: 30:0D:9E:53	SN: G1PD4 IP Address: 192.16 I:0F:E1		(U) Reboot
Online Clients	View switc	Home	Monitor ~ Ports ~	Security ~ Advanced	✓ Diagnostics ✓ System ✓	
A Gateway	Switch List	VLAN List	6		+ Batch Add + Add	d 🗊 Delete Selected
❤ Wireless	Acti		ntries can be added.(The de	efault VLAN, management VL	AN, native VLAN, svi Vlan and access	/LAN cannot be deleted.)
A Switches	🔲 Mana		VLAN ID \$	Description	Port	Action
Network	Mana		1	VLAN0001	Gi1-2,Gi5-48,Te49-52,Ag1	Edit Delete
	Total 2 10/pag	Total 1 10/page	e ~ < 1 >	Go to page 1		
		Port List				🖉 Batch Edit

Ruíjie	Reyee > Ruijie 🚺	Switch	Hostname: Ruijie		PD49X00172B		
2 Overview	Switch Li:	 NBS3200- 48GT4XS-P 	MAC: 30:0D:9E:53	IP Address: 192 OF:E1			(C) Rebo
Online Clients	View switc	Home VLAN	Marker Dates	Constants Address	nd an Disconstitution	Constant of	
🖽 Gateway	Switch List	VLAN List	Add				× ete Selecte
🐨 Wireless 🛛 🗸	🖂 Activ		* VLAN ID:	10	Re	ange: 1-4094	
Switches	- Mana	Up to 4094	Description:	IT departmant	M	ax: 32 characters.	deleted.)
-⊕- -⊕- Network ∽							on
	Mana				Canc	el OK	Delete
	Total 2 10/paç	Total 1 10/pag	ge < 🚺 🗦	Go to page 1			
		Port List	9				🖉 Batch Ec
		Port	Port Mode	Access VLAN	Native VLAN	Permit VLAN	Action

Step 3: Assign the new VLAN to ports.

Ruffe & Overview (8) Online Clients	Reyee > Ruijie W Switch Lis View switc	Switch • NBS3200- 48GT4XS-P Home VLAN	Hostname: Ruijie MAC: 30:0D:9E Monitor ~ Ports	IP Address: 192 :53:0F:E1		System ~	(U) Reb
A Gateway	Switch List	Click to Cli	Collapse the list.		+ Batch Add	+ Add	n Delete Select
	C Acti		-	e default VLAN, management	VLAN, native VLAN, svi VI	an and access VLAN c	annot be deleted.)
Switches	🔲 Mana		VLAN ID \$	Description	Port		Action
 Network	Mana		1	VLAN0001	Gi1-2,Gi5-48,Te4	49-52,Ag1	Edit Delete
	Total 2 10/pag		10	IT departmant			Edit Delete
		Total 2 10/pa	ige ~ < 1	> Go to page 1			
		Port List	•				
		Port	Port Mode	Access VLAN	Native VLAN	Permit VLAN	Action
		Gi1	ACCESS	1			Edit
		Gi2	ACCESS	1		-	Edit
		Gi3			Member port of Ag1.		
		Gi4			Member port of Ag1.		



6.2 Access Control List (ACL)

An access control list (ACL) is also referred to as firewall or packet filter in some documents. The ACL controls (permits or discards) data packets on a network device interface by defining ACEs (Access Control Entries).

Configuration Steps:

Step 1: Choose Switches \rightarrow Manage to configure the switch

	Reyee > Ruijie (Master)							
Rujje	Reyee > Ruijie (waaker)			English 🗸		-Download App	କ୍ଳ Network Setup ୍ ପ୍ର Network Chee	ାନ <u>ଜ</u> ି Alam
2 Overview								
(2) Online Clients	View switches in t	he current netwo	rk.					
🖽 Gateway	Switch List						Delete Offline Devices	Batch Upg
	Action	Hostname	IP Address	MAC	Status	Model	Software Ver	SN 🗧
Switches	Manage	ES226 Ø	192.168.110.224	00:D0:F8:20:99:99	Online	RG- ES226 ES	W_1.0(1)B1P2,Release(07181013)	G1NW12E
Network ~	Manage	Ruijie 🖉	192.168.110.193	30:0D:9E:53:0F:E1	Online	NBS32 48GT4 sv P	VITCH_3.0(1)B11P30,Release(07181111)	G1PD49X0
	Total 2 10/page 🗸	< 1	> Go to page	1				

Step 2: Choose Security \rightarrow ACL to enter the ACL management page

RUJJE &Overview	Reyee > Ruijie 🕅	Switch Hostname: Ruijie • NBS3200- 48GT4XS-P	SN: G1PD49X0 MAC: 30:0D:9E:5		B (U) Re
Online Clients	<i>i</i> View switch	Home VLAN Monitor \vee Ports \vee	Security ^ Advanced ~	Diagnostics \checkmark System \checkmark	
A Gateway	Switch List	ACL List ACL Binding	DHCP Snooping		
중 Wireless 🌱		ACL	Storm Control	+ Add	1 Delete Selec
A Switches	Mana	Up to 512 entries can be added.	Port Protection		
-e- -e-Network ∨	Mana	ACL Name	ACL Type	Status	Action
	Total 2 10/pag		No Data		
		Total 0 10/page ~ < 1 >	Go to page 1		

Step 3: Click the "Add" button to add an ACL

RUIJE &Overview	Reyee > Ruijie ()	• NBS3200- 48GT4XS-P	Hostname: Ruijie	SN: G1PD49) MAC: 30:0D:9E		193 🕑 R
Online Clients	<i>i</i> View switc	Home VLAN	Monitor ~ Ports ~	Security ~ Advanced ~	Diagnostics \checkmark System \checkmark	
A Gateway	Switch List	ACL List ACL	Binding			
☆ Wireless	🗌 Actio	ACL			+ Add	🗇 Delete Sele
Switches	Mana	Up to 512 entr	ries can be added.			
-e Network	🔲 Mana		ACL Name	ACL Type	Status	Action
	Total 2 10/pac			No Data	a	
		Total 0 10/pag	e ~ < 1 >	Go to page 1		

Step 4: Fill in the ACL name and type to create an ACL

Ruíjie	Reyee > Ruijie 🚺	Switch	Hostname: Ruijie	SN: G1PD49X001728	IP Address: 192.168.110.193	C
2 Overview	Switch Lis	 NBS3200- 48GT4XS-P 		MAC: 30:0D:9E:53:0F:E1		
Online Clients	<i>View switcl</i>	Home VLAN	Monitor V Ports V	Socurity × Advanced × Diagne	untice V Swetam V	
(III) Gateway	Switch List	ACL List AC	Add			×
ক Wireless 🛛 👋	Actie		* ACL Name:	ACL10		elete
A Switches	🗖 Mana	Up to 512 et	ACL Type:	Based on MAC Based on IP A	ddress	
돌 Network · · · ·	Mana	a .			Cancel OK	tion
	Total 2 10/pag					
		Total 0 10/pag	e ∽ < 1 >	Go to page 1		

Step 4: Click "Details" to configure the ACL rule.

Ruijie	Reyee > Ruijie 🎊	Switch	Hostname: Rui		SN: G1PD49X001	728 IP Address; 192.16	0 110 102
^e a Overview	Switch Lis	 NBS3200- 48GT4XS-P 	nostname. Kuj		MAC: 30:0D:9E:53:0		(Reb
Online Clients	View switch	Home VLAN	Monitor ~ F	Ports ~ Security ~	Advanced ~ [Diagnostics ~ System	~
Gateway	Switch List	ACL List ACL	Binding				
☆Wireless	Actie	ACL				+	- Add 👘 Delete Select
Switches	🔲 Mana	Up to 512 ent	ries can be added.				
* Network	Mana		ACL Name	ACL Ty	/pe	Status	Action
			ACL10	Based on IP	Address	Inactive	Details Edit Delete
	Total 2 10/pag	Total 1 10/pag	ie ~ 1	Go to page	1		
Ruíjie	Reyee > Ruijie ()	Switch		[ACL10]Settings	L: Block	• Allow	
Proverview	Switch Lis View switch	• NBS3200- 48GT4XS-P	Hostname: Ru	IP Protocol Numbe			
® Online Clients ∰ Gateway	Switch List	ACL List ACL	Monitor ~ I	Src IP Addres	s: All	0 / 255.255	.255.0
₩ireless	🗔 Actic	ACL	binding		(Address/Sub	mask)	
A Switches	🔲 Mana		tries can be added.	Dest IF	P: 🔽 All		
Network ~	Mana		ACL Name		Save	Reset	
	Total 2 10/pag		ACL10	Existing ACL: (Yo No. Rule	u can click and drag th	ne ACL number to swap the AC	Control Action
		Total 1 10/pag	ge 🗸 🧹	1		No Data Available	

Ruijie	Reyee > Ruijie 🚺		[ACL10]Settings	
2 Overview		Switch Hostname: Ruiji NBS3200-	ACL Name: ACL10	
Online Clients	<i>Switch Lis</i> View switch	48GT4XS-P Home VLAN Monitor ∽ Pe	ACL: 🕓 Block 💿 Allow	
A Gateway	Switch List		IP Protocol Number: 🗹 All	
중 Wireless	Actic	ACL List ACL Binding	Src IP Address: 🗾 All	
A Switches	Mana	ACL	Dest IP: 🗹 All	
-=- -==-Network		Up to 512 entries can be added.	Save Reset	
	Mana	ACL Name		
		ACL10	Existing ACL: (You can click and drag the ACL number to swap the ACL.))
	Total 2 10/paç		No. Rule	Control Action
		Total 1 10/page 🗸 🤇 1	[Src IP Address] 192.168.10.0/255.255.255.0 1 [Dest IP] All [IP Protocol Number] All	Allow Edit Swap [

Step 5: Bind the ACL to the interface.

Contine Clients Cateway Vireless	Reyee > Ruijie (M Switch Lis Switch List	ACL Bindi	Monitor ~ Binding	IP Add 0:0D:9E:53:0F:E1 Ports ~ <u>Security ~</u>	SN: G1PD49X001728 ress: 192.168.110.193 Advanced ~ Diagnostics ~	System ~	(⁽¹⁾ Rel
☑ Switches ➢ Network	D Mana	ACL Binding	only filters incom	ning packets. MAC-based	d ACL IP-based		Unbind Selec
	Total 2 10/pag		Gi1 Gi2				t Unbind
			Gi3 Gi4 Gi5		Member port	t of Ag1.	t Unbind
			Gi6 Gi7				t Unbind t Unbind
			Gi8 Gi9 Gi10			Edi	t Unbind t Unbind t Unbind

Ruijie	Reyee > Ruijie 🕅	Switch	Hostname: Ruijie	SN: G1F	D49X00172B		
[₽] aOverview	Switch Lis	• NBS3200- 48GT4XS-P	MAC: 30:0D:9E:53	IP Address: 192 3:0F:E1	.168.110.193	U F	Rebo
Online Clients	View switch	Home VLAN	Monitor v Dorte v	Socurity × Advance	od v Diagnostics v Susta	~ ~ 1	
A Gateway	Switch List		Edit			×	
☆ Wireless	🗆 Actio	ACL List AC	MAC-based ACL:	No Data			
Switches	🔄 Mana	The devic	IP-based ACL:	ACL10	~		
-e- -e-Network		ACL Bindin				ind Sel	lecte
	Mana				Cancel	OK	
	Total 2 10/paç		Gi1			Edit Unbind	
			Gi2			Edit Unbind	
			Gi3		Member port of Ag1.		
			Gi4		Member port of Aq1.		

6.3 Port Isolation

Port isolation implements layer-2 isolation of packets. After port isolation is enabled (which is disabled by default), data cannot be forwarded between isolated ports.

Configuration Step:

Step 1: Choose **Switches** \rightarrow **Manage** to configure the switch

Ruíjie	Reyee > Ruijie [Master]	•		English 🗸		EDownload App	o 🛕 Network Setup 🔍 Network Chec	ck <u>ന്</u> റ്റAlarr
움Overview	Culture Line							
Online Clients	<i>i</i> Switch List View switches in t	the current networ	rk.					
(#) Gateway	Switch List						Delete Offline Devices	Batch Upg
	Action	Hostname	IP Address	MAC	Status	Model	Software Ver	SN 4
Switches	Manage	ES226 🖉	192.168.110.224	00:D0:F8:20:99:99	Online	RG- ES226 ES P	SW_1.0(1)B1P2,Release(07181013)	G1NW12E
-a- -a- Network	Manage	Ruijie 🖉	192.168.110.193	30:0D:9E:53:0F:E1	Online	NBS32 48GT4 sv P	WITCH_3.0(1)B11P30,Release(07181111), ^{new}	G1PD49X
	Total 2. 10/page 🗸	< 1	> Go to page	1				

Step 2: Choose $\textbf{Security} \rightarrow \textbf{Port Protection}$ to configure the port isolation

Ruíjie	Reyee > Ruijie 🕅	Switch	Hostname: Ruijie	SN: G1PD49X0	00172B IP Address: 192.168.110.193	(U) Re
overview	Switch Lis	• NBS3200- 48GT4XS-P		MAC: 30:0D:9E:5	3:0F:E1	U Re
Online Clients	View switch	Home VLAN	Monitor ~ Ports ~	Security ^ Advanced ~	Diagnostics ~ System ~	
A Gateway	Switch List	Port Protec	ction	DHCP Snooping		
☆Wireless	Actio		ed ports are isolated from e			
Switches	🗇 Mana	Port List	1	ACL Port Protection		Z Batch
-a- -a-Network			Port		Action	
	Mana		Gi1			
	Total 2 10/pac		Gi2			
	Toppag		Gi3		Member port of Ag1.	
			Gi4		Member port of Ag1.	
			Gi5			
			Gi6			
			Gi7			
			Gi8			
			Gi9			
			Gi10			
		Total 53 10/pag	je ~ 1 2	3 4 5 6 >	Go to page 1	

Step 3: Enable the Port Isolation on Ports.

Ruíjie	Reyee > Ruijie 🚺	Switch	 Operation succeeded. 	
윦Overview	Switch Lis	NBS3200- 48GT4XS-P	MAC: 30:0D:9E:53:0F:E1	ال معاملة (10.193، 192.168.110.193)
Online Clients	View switch	Home VLAN Monitor - Ports -	Security ~ Advanced ~ Diagnost	iics ~ System ~
🖽 Gateway	Switch List	Port Protection The protected ports are isolated from	a cach othor	
☆Wireless	Actic	The protected ports are isolated iron	n each other.	
A Switches	🔄 Mana	Port List		🖉 Bate
-a- -o- Po-Network ∽		Port		Action
	Mana Mana	Gi21		
		Gi22		
	Total 2 10/pag	Gi23		
		Gi24		
		Gi25		
		Gi26		
		Gi27		
		Gi28		
		Gi29		
		Gi30		
		Total 53 10/page 🗸 1	2 3 4 5 6 > Go to p	page 3

6.4 DHCP Snooping

In the DHCP-enabled network, the general problem facing administrator is that some users use private IP addresses rather than dynamically obtaining IP addresses. As a result, some users using dynamic IP addresses cannot access the network, making network application more complex. In dynamic DHCP binding mode, the device records how legal users obtain IP addresses during the course of DHCP Snooping for security purpose.

Enabling DHCP Snooping helps filter DHCP packets. Only forwards DHCP request packets to the trusted port and DHCP response packets from the trusted port. The port connected to the DHCP server is configured as the trusted port generally

Configuration Steps

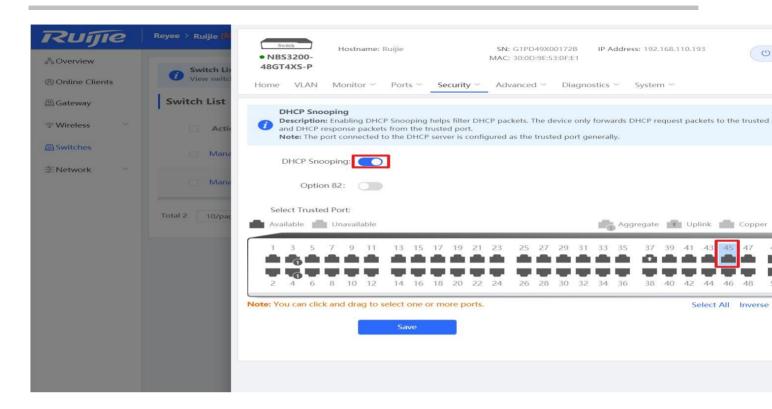
Step 1: Choose Switches \rightarrow Manage to configure the switch

Ruíjie	Reyee > Ruijie (Master	0		English 🗸		EDownload App	ବ୍ଧୁ Network Setup କ୍ଷ Network Cher	ck <u> </u>
Startiew	<i>i</i> Switch List	the current netwo	nrk					
⊗ Online Clients ∰ Gateway	Switch List						Delete Offline Devices	Batch Upg
	Action	Hostname	IP Address	MAC	Status	Model	Software Ver	SN 🗧
Switches	Manage	ES226 🖉	192.168.110.224	00:D0:F8:20:99:99	Online	Р	SW_1.0(1)B1P2,Release(07181013)	G1NW12E
	Manage	Ruijie 🖉	192.168.110.193	30:0D:9E:53:0F:E1	Online	NBS32 48GT4 si P	WITCH_3.0(1)B11P30,Release(07181111)	G1PD49X
	Total 2 10/page ~	< 1	> Go to page	1				

Step 2: Choose Security \rightarrow DHCP Snooping to configure the DHCP snooping

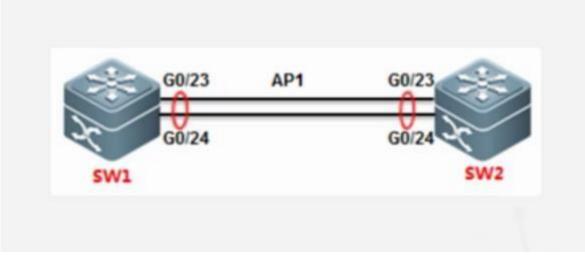
Ruíjie	Reyee > Ruijie 🕅	Switch Hostname: Ruijie SN: G1PD49X001728 IP Address: 192.168.110.193
2 Overview	Switch Lis	• NBS3200- 48GT4XS-P
Online Clients	View switch	Home VLAN Monitor - Ports - Security - Advanced - Diagnostics - System -
🕮 Gateway	Switch List	DHCP Snooping
♥Wireless	🗆 Actio	 Description: Enabling DHCP Snooping and DHCP response packets from the tr Note: The port connected to the DHCP Storm Control ACL ad port generally.
Switches	Mana	DHCP Snooping:
🚡 Network 🛛 🐣	🔲 Mana	Option 82:
	Total 2 10/paç	Select Trusted Port:
		1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49
		2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50
		Note: You can click and drag to select one or more ports. Select All Inverse
		Save

Step 3: Enable the DHCP and select the trusted port (the port connect to a DHCP server)



6.5 Link Aggregation

Link aggregation is a technology to combine multiple network connections in parallel in order to increase throughput and provide redundancy in case one of the links should fail.



Configuration Steps

Step 1: Choose Switches \rightarrow Manage to configure the switch

Ruíje	Reyee > Ruijie [Masker	0		English 🗸		E Download App	ବ୍ଲ Network Setup ୍ର Network Ch	ieck <u>ا</u>
A Overview								
(8) Online Clients	<i>i</i> Switch List View switches in	the current netwo	rk.					
🖽 Gateway	Switch List						Delete Offline Devices	Bat
	Action	Hostname	IP Address	MAC	Status	Model	Software Ver	
Switches	Manage	ES226 &	192.168.110.224	00:D0:F8:20:99:99	Online	RG- ES226 E	SW_1.0(1)B1P2,Release(07181013)	G1I
-o -oNetwork ~	Manage	Ruijie 🖉	192.168.110.193	30:0D:9E:53:0F:E1	Online	NBS32	WITCH_3.0(1)B11P30,Release(07181111	💌 G1
	Total 2 10/page 🗸	< 1	> Go to page	1				
	Total 2 10/page V	< 1	> Go to page	1				

Step 2: Choose Ports \rightarrow Aggregate Ports to configure the link aggregation

Ruíjie	Reyee > Ruijie 🕅	Switch Hostname: Ruijie SN: G1PD49X00172B	
움Overview	Switch Lis	• NBS3200- IP Address: 192.168.110.193 48GT4XS-P MAC: 30:0D:9E:53:0F:E1	
Online Clients	View switc	Home VLAN Monitor Vers Security Advanced Security Advanced System System System Stream	
A Gateway	Switch List	Basic Settings Global Settings	
	Actio	Load Balance Src & [Port Mirroring ~	
Switches	Mana	Algorithm: Rate Limiting	
-e-Network	Mana	PoE MGMT IP	
	Total 2 10/pag	Aggregate Port Settings	
		Up to 16 aggregate ports can be added. An aggregate port contains up to 8 member ports.	

Step 3: Fill in the aggregate port number and select the port member.

Ruíjie	Reyee > Ruijie 🕅	Global Settings	
& Overview	Switch Lis	Load Balance Src & Dest MAC	~
Online Clients	View switch	Algorithm:	
🕮 Gateway	Switch List	Save	
☆ Wireless	Actio		
Switches	Mana	Aggregate Port Settings	
Network		Up to 16 aggregate ports can be added. An aggregate p	port contains up to 8 member ports.
	Mana	Select All	
	Total 2 10/pag	Ag1 🗇 Delete Selected	
		* Aggregate Port: 2	
		* Select Member Ports	
		Available Unavailable	Aggregate 🕇 Uplink 🚺 Coppe
		1 3 5 7 9 11 13 11 17 19 2	21 23 25 27 29 31 33 35 37 39 41 43 45 4
		2 4 6 8 10 12 14 10 18 20 2	22 24 26 28 30 32 34 36 38 40 42 44 46 4
		Note: You can click and drag to select onter more por	rts. Select All Inverse
		Save	
		Save	
« Collapse			

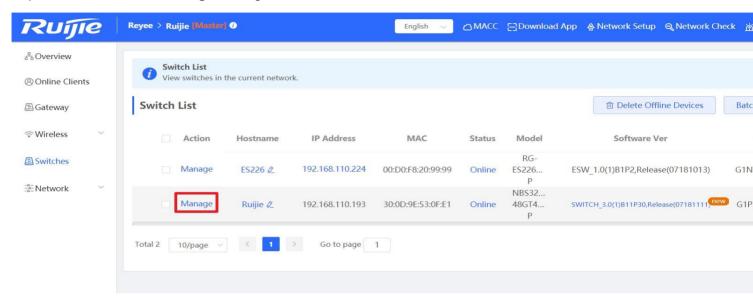
6.6 Storm Control

When there are excessive broadcast, multicast or unknown unicast data flows in the LANs, the network speed decreases and packet transmission timeout greatly increases. This is called LAN storm, which may be caused by topology protocol execution errors or incorrect network configuration.

Users can perform storm control separately for the broadcast, multicast, and unknown unicast data flows. When the rate of broadcast, multicast, or unknown unicast packets received by the device port exceeds the specified rate, the number of packets allowed per second, or the number of kilobits allowed per second, the device transmits packets only at the specified rate, the number of packets allowed per second, or the number of kilobits allowed per second, and discards packets beyond the rate range, until the packet rate becomes normal, thereby avoiding flooded data from entering the LAN and causing a storm.

Configuration Steps

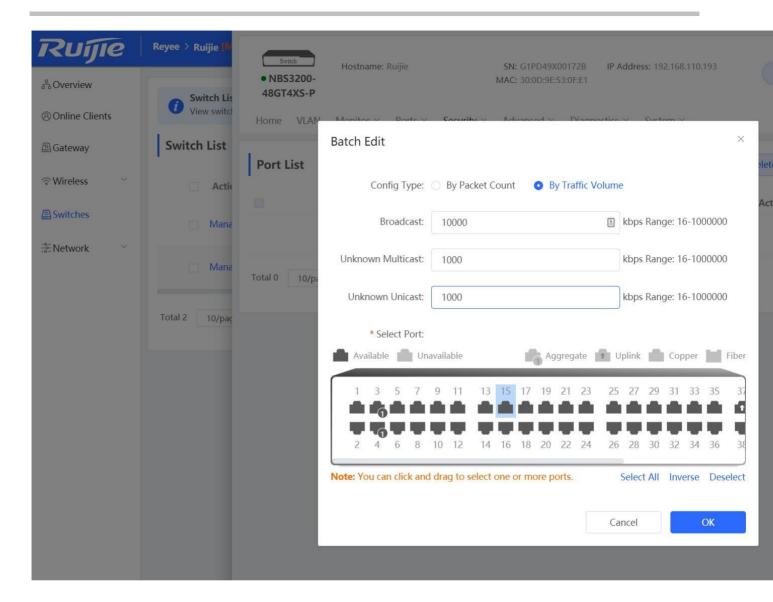
Step 1: Choose Switches \rightarrow Manage to configure the switch



Step 2: Choose Security \rightarrow Storm Control, and click Batch Edit

Ruije ² Overview	Reyee > Ruijie (N	Switch Hostname: Ruijie SN: G1PD49X00172B IP Address: 192.168.110.193 • NBS3200- 48GT4XS-P MAC: 30:0D:9E:53:0F:E1 IP Address: 192.168.110.193	
Online Clients	<i>i</i> View switch	Home VLAN Monitor - Ports - Security - Advanced - Diagnostics - System -	
🕮 Gateway	Switch List	DHCP Snooping	elet
	Actie	ACI	
Switches	Mana	Port Br //ulticast Unknown Unicast Port Protection No Data	Ac
-a- -a- Network		No Data	
	Mana	Total 0 10/page \checkmark < 1 \Rightarrow Go to page 1	
	Total 2 10/pag		
	-		

Step 3: Fill in the threshold value and select the port



7 Reyee ES Series Switch Configuration

7.1 VLAN Setting

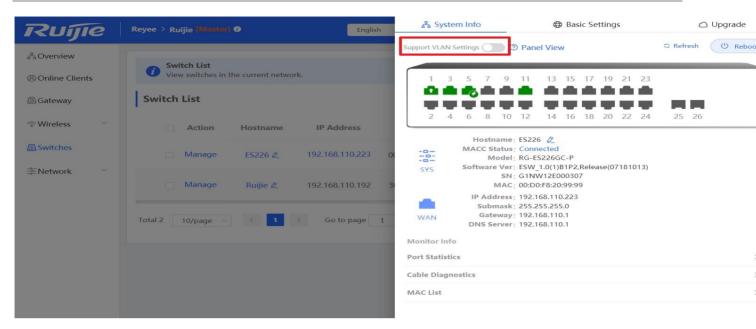
A virtual LAN (VLAN) is any broadcast domain that is partitioned and isolated in a computer network at the data link layer. VLANs work by applying tags to network frames and handling these tags in networking systems – creating the appearance and functionality of network traffic that is physically on a single network but acts as if it is split between separate networks. In this way, VLANs can keep network applications separate despite being connected to the same physical network, and without requiring multiple sets of cabling and networking devices to be deployed.

Configuration Steps:



Ruíjie	Reyee > Ruijie [Master]	0		English \lor		E Download	l App 🛭 Antwork Setup 🔍 Network Chee	ck 放 Alarms 🕞
옶Overview ⑧Online Clients	Switch List View switches in t	the current netwo	ork.					
🖽 Gateway	Switch List						Delete Offline Devices	Batch Upgrade
ି Wireless 🗸	Action	Hostname	IP Address	MAC	Status	Model	Software Ver	SN \$
Switches	Manage	ES226 🖉	192.168.110.223	00:D0:F8:20:99:99	Online	RG- ES226 P	ESW_1.0(1)B1P2,Release(07181013)	G1NW12E0003
-a -a na-Network ∨	Manage	Ruijie	192.168.110.192	30:0D:9E:53:0F:E1	Offline	NBS32 48GT4 P	SWITCH_3.0(1)B11P30,Release(07181111)) G1PD49X0017
	Total 2 10/page 🖂] < 1	> Go to page	1				

Step 2: Enable the VLAN settings (disabled by default)



Step 3: Add a VLAN member

Reyee Series Implementation Cookbook

Ruijie	Reyee > Ruijie [Master] 🕖	English	윰 Syst	em Info	🕀 Basi	c Settings		Upgrade
			1	Enable	Auto-Negotiation	1000M/Full-Duplex	Disable	Disabl
^b Overview	Switch List		2	Enable	Auto-Negotiation	Disconnected	Disable	Disabl
Online Clients	View switches in the current networ	k.	3	Enable	Auto-Negotiation	1000M/Full-Duplex	Disable	Disab
Gateway	Switch List		4	Enable	Auto-Negotiation	Disconnected	Disable	Disab
Gateway	1		Ę	Enable	Auto-Negotistion	1000M/Full-Dupley	Disable	Dieah
Wireless	Action Hostname	IP Address	Port Mirror	ing Ø				
Switches	Manage ES226 &	192.168.110.223 00	Static MAC	0				
Network			Search by N	/IAC				
	🗌 Manage 🛛 Ruijie 🖉	192.168.110.192 30	DHCP Snoo	ping 🛛				
			VLAN Setti	ngs				
	Total 2 10/page 🗸 🚺	Go to page 1	VLAN Mem			10 Delete Selected	Add	
				No.	1	/LAN ID		Action
				1		1		Delete
			VLAN Setti	ngs				
			OoS Setting	15				
			QoS Setting					
			Rate Limitir	na				
Ζυπε	Reyee > Ruijie (Maxim) @	 Add operation succeed 	Rate Limitir		- Bas	sic Settings	٥	Upgra
_	Reyee > Ruijie (Matikm) Ø	 Add operation succeed 	Rate Limitir	na	Hat Auto-Negotiation	sic Settings 1000M/Full-Duplex	Disable	
-	Switch List		Rate Limitir Com	na 				Disa
Overview			Rate Limitir e.c ded. 1	Enable	Auto-Negotiation	1000M/Full-Duplex	Disable	Disa
Overview Online Clients	Switch List		Rate Limitir c ded. 1 2	Enable	Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected	Disable Disable	Disa Disa Disa
Overview Online Clients	Switch List View switches in the current networ		Rate Limitin ded.	Enable Enable Enable	Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected 1000M/Full-Duplex	Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway	Switch List View switches in the current networ		Rate Limitin ded.	Enable Enable Enable Enable Enable	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected 1000M/Full-Duplex Disconnected	Disable Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway Wireless	Switch List View switches in the current network Switch List	rk. IP Address	Rate Limitin ded.	Enable Enable Enable Enable Enable	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected 1000M/Full-Duplex Disconnected	Disable Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway Wireless [×] Switches	Switch List View switches in the current networ Switch List	k.	Rate Limitin ded. 2 3 4 5 Port Mirro	Enable Enable Enable Enable Enable Enable	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected 1000M/Full-Duplex Disconnected	Disable Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway Wireless [×] Switches	Switch List View switches in the current network Switch List	rk. IP Address	Rate Limitin ded. 1 2 3 4 c Port Mirror Static MAC	Enable Enable Enable Enable Enable Enable Enable	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected 1000M/Full-Duplex Disconnected	Disable Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway Wireless ~ Switches	Switch List View switches in the current network Switch List Action Hostname Manage ES226 &	k. IP Address 192.168.110.223 0(Rate Limitin ded. 1 2 3 4 4 5 Port Mirro Static MAC Search by I	ring O MAC Opping O	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected 1000M/Full-Duplex Disconnected	Disable Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway Wireless ~ Switches	Switch List View switches in the current network Switch List Action Hostname Manage ES226 & Manage Ruijie &	k. IP Address 192.168.110.223 0(192.168.110.192 3)	Rate Limitin ded. 1 2 3 4 c Port Mirror Static MAC Search by I DHCP Snoo	Enable En	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected 1000M/Full-Duplex Disconnected	Disable Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway Wireless ~ Switches	Switch List View switches in the current network Switch List Action Hostname Manage ES226 &	k. IP Address 192.168.110.223 0(Rate Limitin ded. 1 2 3 4 5 Port Mirro Static MAC Search by I DHCP Snot	Enable En	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected 1000M/Full-Duplex Disconnected	Disable Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway Wireless ~ Switches	Switch List View switches in the current network Switch List Action Hostname Manage ES226 & Manage Ruijie &	k. IP Address 192.168.110.223 0(192.168.110.192 3)	Rate Limitin ded. 1 2 3 4 5 Port Mirro Static MAC Search by I DHCP Snot	Enable En	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected Disconnected 1000M/Full-Duplex	Disable Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway Wireless × Switches	Switch List View switches in the current network Switch List Action Hostname Manage ES226 & Manage Ruijie &	k. IP Address 192.168.110.223 0(192.168.110.192 3)	Rate Limitin ded. 1 2 3 4 5 Port Mirro Static MAC Search by I DHCP Snot	Enable En	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected Disconnected 1000M/Full-Duplex	Disable Disable Disable Disable	Disa Disa Disa Disa
Overview Online Clients Gateway Wireless ~ Switches	Switch List View switches in the current network Switch List Action Hostname Manage ES226 & Manage Ruijie &	k. IP Address 192.168.110.223 0(192.168.110.192 3)	Rate Limitin ded. 1 2 3 4 5 Port Mirro Static MAC Search by I DHCP Snot	Enable En	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected Disconnected 1000M/Full-Duplex Disconnected 1000M/Full-Duplex	Disable Disable Disable Disable	Upgrav Disa Disa Disa Disa Disa Disa Colea
CVERVIEW OONline Clients Gateway Wireless Ý Switches	Switch List View switches in the current network Switch List Action Hostname Manage ES226 & Manage Ruijie &	k. IP Address 192.168.110.223 0(192.168.110.192 3)	Rate Limitin ded. 1 2 3 4 5 Port Mirro Static MAC Search by I DHCP Snor VLAN Setti VLAN Men	And Enable Enabl	Auto-Negotiation Auto-Negotiation Auto-Negotiation Auto-Negotiation	1000M/Full-Duplex Disconnected 1000M/Full-Duplex Disconnected 1000M/Full-Duplex	Disable Disable Disable Disable	Disa Disa Disa Disa Nico

Step 3: Assign the new VLAN member to ports.

Ruíjie	Reyee > Ruijie [Wlaster] @ English	윰 Syst	em Info	⊕ Ba	asic Settings		Upgrac
Overview		4	Enable	Auto-Negotiation	Disconnected	Disable	Disab
	Witch List	Ę	Enable	Auto-Negotiation	1000M/Full-Dupley	Disable	Dical
Online Clients		Port Mirror	ring 🛛				
Gateway	Switch List	Static MAC	0				
Wireless	Action Hostname IP Address	Search by M	VAC				
6 . H. I.		DHCP Snoc	oping 🕼				
Switches	□ Manage ES226 & 192.168.110.223 0	VLAN Setti	ngs				
Network		VLAN Mem	iber 0				
	🔲 Manage Ruijie 🖉 192.168.110.192 3	VLAN Setti	ngs				
	Total 2 10/page > < 1 > Go to page 1	* Port	Port 19 × Port 21 ×	× -	Type Access	~	
			Port 20 ×				
		Permit	Select		* Native VLAN 10		
					Save		
		Port	VLAN Typ	Ð	Permit VLAN	N	ative V
		1	Access		1		1
		2	Access		1		1
		3	Access		1		1
		4	Access		1		1
		5	Access		1		1

7.2 Port Isolation

Port isolation implements layer-2 isolation of packets. After port isolation is enabled (which is disabled by default), data can be forwarded only between uplink ports and downlink ports, and downlink ports cannot forward packets to each other.

Configuration Steps

Step 1: Choose $\textbf{Switches} \rightarrow \textbf{Manage}$ to configure the switch

Ruíjie	Reyee > Ruijie (Master	0		English 🗸	○ MACC	E Download A	pp 🛕 Network Setup 🔍 Network Chee	ːk 👸 Alarms 🕞 I
움Overview	Switch List							
Online Clients		the current netwo	rk.					
🖽 Gateway	Switch List						Delete Offline Devices	Batch Upgrade
ି Wireless 🗸	Action	Hostname	IP Address	MAC	Status	Model	Software Ver	SN ≑
Switches	Manage	ES226 🖉	192.168.110.223	00:D0:F8:20:99:99	Online	RG- ES226 P	ESW_1.0(1)B1P2,Release(07181013)	G1NW12E00030
-d-a -a- -a-Network	Manage	Ruijie	192.168.110.192	30:0D:9E:53:0F:E1	Offline	NBS32 48GT4 P	SWITCH_3.0(1)B11P30,Release(07181111)	G1PD49X00172
	Total 2 10/page 🗸	< 1	> Go to page	1				

Step 2: Choose $\textbf{Basic Settings} \rightarrow \textbf{Port Isolation}$ to enable the Port Isolation

Ruijie	Reyee > Ruijie [Masker]	0		English	옹 System Info	Basic Settings	🛆 Upgrade
					Loop Protection ()		0
A Overview	<i>i</i> Switch List				Port Isolation 🕖		0
Online Clients	View switches in th	ne current netwo	ork.	_	Port Settings		
A Gateway	Switch List				Port Settings 🕖		
ି Wireless					Port Mirroring Ø		
◦ wireless	Action	Hostname	IP Address	MAC	Static MAC 0		
Switches	Manage	ES226 🖉	192.168.110.223	00:D0:F8:20:9	Search by MAC		
-a- -a- Network				_	DHCP Snooping 🕖		
			192.168.110.192	30:0D:9E:53:0	QoS Settings		
				-	Rate Limiting		
	Total 2 10/page 🗸	< 1	> Go to page	1	Storm Control		
					PoE Settings		
					PoE Settings		

7.3 DHCP Snooping

In the DHCP-enabled network, the general problem facing administrator is that some users use private IP addresses rather than dynamically obtaining IP addresses. As a result, some users using dynamic IP addresses cannot access the network,

making network application more complex. In dynamic DHCP binding mode, the device records how legal users obtain IP addresses during the course of DHCP Snooping for security purpose.

Enabling DHCP Snooping helps filter DHCP packets. Only forwards DHCP request packets to the trusted port and DHCP response packets from the trusted port. The port connected to the DHCP server is configured as the trusted port generally **Configuration Steps**

Reyee > Ruijie [Master] () English △MACC 글 Download App ♠ Network Setup ♥ Network Check ☆ Alarms Ruffe 윤 Overview Switch List 67 View switches in the current network. (R) Online Clients Switch List Delete Offline Devices Batch Upgrade ⊞ Gateway Action Hostname **IP Address** MAC Status Model Software Ver SN \$ RG-Switches Manage 192.168.110.223 G1NW12E00 00:D0:F8:20:99:99 ESW_1.0(1)B1P2,Release(07181013) ES226 Ø ES226... Online P ---- Network NBS32... Manage 192.168.110.192 30:0D:9E:53:0F:E1 Offline 48GT4... SWITCH_3.0(1)B11P30,Release(07181111) G1PD49X001 Ρ Go to page 1 Total 2 10/page

Step 1: Choose Switches \rightarrow Manage to configure the switch

Step 2: Choose **Basic Settings** \rightarrow **DHCP Snooping**, and enable the setting.

Ruíjie	Reyee > Ruijie [Waster] (D		English	윦 System In	ifo	Basic	Settings		🛆 Upgrad
	-				Loop Protection	0				
2 Overview	Switch List				Port Isolation					
Online Clients	View switches in th	e current network.			Port Settings					
🕮 Gateway	Switch List				Port Settings 🛛					
♥ Wireless					Port Mirroring Ø					
* Wileless	Action	Hostname	IP Address	MAC	Static MAC Ø					
Switches	Manage	ES226 🖉	192.168.110.223	00:D0:F8:20:99:99	Search by MAC					
-a- -a-Network ∽					DHCP Snooping	0				
			192.168.110.192	30:0D:9E:53:0F:E1	DHCP Snooping:					
					Trusted Port:	phrase.a	ll_select			
	Total 2 10/page 🗸	< 1 →	Go to page 1].		Port 1	Port 2	Port 3	Port 4	Port 5
						Port 6	Port 7	Port 8	Port 9	Port 1
						Port 11	Port 12	Port 1	B Por	t 14
						Port 15	Port 16	Port 1	7 Por	t 18
						Port 19	Port 20	Port 2	1 Por	t 22
						Port 23	Port 24	Port 2	5 Por	t 26
						Save				
						Juve				

Step 3: Select the trusted port and save the configuration

Ruijie	Reyee > Ruijie [Master]	0		English	윰 System Info	Basic Settings	🛆 Upgra
옹 Overview					Loop Protection 🕖		
	<i>Switch List</i> View switches in th	e current network.			Port Isolation ()		
Online Clients				_	Port Settings		
Gateway	Switch List				Port Settings 🕖		
					Port Mirroring Ø		
· · · · · · · · · · · · · · · · · · ·	Action	Hostname	IP Address	MAC	Static MAC ()		
Switches	Manage	ES226 🖉	192.168.110.223	00:D0:F8:20:99:99	Search by MAC		
-a- -a- Network ∽				_	DHCP Snooping ()		
			192.168.110.192	30:0D:9E:53:0F:E1	DHCP Snooping:		
					Trusted Port: 😑 phrase.a	all_select	
	Total 2 10/page 🗸	< 1 >	Go to page 1		Port 1	Port 2 Port 3	Port 4 Port
					Port 6	Port 7 Port 8	Port 9 Port
					Port 11	Port 12 Port 1	3 Port 14
					Port 15	Port 16 Port 1	7 Port 18
					Port 19	Port 20 Port 2	21 Port 22
					Port 23	Port 24 Port 2	25 🔽 Port 26
					Save		

7.4 Speed Rate Limit

Rate limiting feature is used to limit the transmit speed rate on a specific port.

Configuration Steps:

Step 1: Choose Switches \rightarrow Manage to configure the switch

Ruíjie	Reyee > Ruijie (Master)	i		English 🗸		Download A	pp 🛯 A Network Setup 🔍 Network Che	ck <u> </u>
용Overview ⑧Online Clients	Switch List View switches in t	he current netwo	rk.					
🖽 Gateway	Switch List						Delete Offline Devices	Batch Upg
ି Wireless 🗸 🗸	Action	Hostname	IP Address	MAC	Status	Model	Software Ver	SN
A Switches	Manage	ES226 🖉	192.168.110.223	00:D0:F8:20:99:99	Online	RG- ES226 P	ESW_1.0(1)B1P2,Release(07181013)	G1NW12
-d= -a= -a=Network ∨	Manage	Ruijie	192.168.110.192	30:0D:9E:53:0F:E1	Offline	NBS32 48GT4 P	SWITCH_3.0(1)B11P30,Release(07181111)	G1PD49)
	Total 2 10/page \vee	č 1	> Go to page	1				

Step 2: Choose **Basic Settings** \rightarrow **Rate Limiting**, and fill in the Port, Type, Status and Rate information.

Ruijie	Reyee > Ruijie Masteri 🗿	English	윤 System Info	Basic Se	ettings 🛆 U
名 Overview			Loop Protection @		
	Switch List View switches in the current network.		Port Isolation Ø		
Online Clients	View switches in the current network.		Port Settings		
Gateway	Switch List		Port Settings Ø		
🐨 Wireless 🗸 🗸			Port Mirroring 🛛		
* wheless	Action Hostname IP Addres	ss MAC	Static MAC 🕖		
Switches	Manage ES226 点 192.168.110	.223 00:D0:F8:20:9	Search by MAC		
Network			DHCP Snooping Ø		
	Manage Ruijie 192.168.110	.192 30:0D:9E:53:0	QoS Settings		
			Rate Limiting		
	Total 2 10/page 🗸 🧹 1 🔿 Go to pa	age 1	* Port Sel	lect 👻	Type All 🗸
			Status Er	nable 🗸	Rate 100
			Sa	ave	
			Port	Rx Speed (Mbps)	Tx Speed (Mbps)
			1	No Limit	No Limit
			2	No Limit	No Limit
			3	No Limit	No Limit
			4	No Limit	No Limit
			5	No Limit	No Limit
			Storm Control		
			PoE Settings		

7.5 Storm Control

When there are excessive broadcast, multicast or unknown unicast data flows in the LANs, the network speed decreases and packet transmission timeout greatly increases. This is called LAN storm, which may be caused by topology protocol execution errors or incorrect network configuration.

Users can perform storm control separately for the broadcast, multicast, and unknown unicast data flows. When the rate of broadcast, multicast, or unknown unicast packets received by the device port exceeds the specified rate, the number of packets allowed per second, or the number of kilobits allowed per second, the device transmits packets only at the specified rate, the number of packets allowed per second, or the number of kilobits allowed per second, and discards packets beyond the rate range, until the packet rate becomes normal, thereby avoiding flooded data from entering the LAN and causing a storm.

Configuration Steps:

Step 1: Choose $\textbf{Switches} \rightarrow \textbf{Manage}$ to configure the switch

Ruíjie	Reyee > Ruijie (Master	0		English 🗸		E Download	App ଜ୍ରୁ Network Setup କ୍ଟ୍ର Network Chec	ck <u>ঈ</u> Alarms [
움Overview	Switch List							
Online Clients		the current netwo	rk.					
A Gateway	Switch List						Delete Offline Devices	Batch Upgrade
₩ireless	Action	Hostname	IP Address	MAC	Status	Model	Software Ver	SN 🗘
A Switches	Manage	ES226 🖉	192.168.110.223	00:D0:F8:20:99:99	Online	RG- ES226 P	ESW_1.0(1)B1P2,Release(07181013)	G1NW12E000
-a- -a- -a- Network ∨	Manage	Ruijie	192.168.110.192	30:0D:9E:53:0F:E1	Offline	NBS32 48GT4 P	SWITCH_3.0(1)B11P30,Release(07181111)	G1PD49X001
	Total 2 10/page 🗸	۲ (> Go to page	1				
	Total 2 10/page V	۲ (> Go to page	1				

Step 2: Choose **Basic Settings** \rightarrow **Rate Limiting**, and fill in the Port, Type, Status and Rate information.

Ruijie	Reyee > Ruijie [Wester] 0 English	ය System Info	Basic Setting	gs 🔿 Upgrade
ै Overview ® Online Clients	Switch List View switches in the current network.	Direction * Dest Port	In × Select ×	
Gateway	Switch List	Src Port	Direction	Dest Port Action
₩ireless	Action Hostname IP Address MAC	Sicion	No Data	
A Switches	□ Manage ES226 之 192.168.110.223 00:D0:F8:20:5	Static MAC 0		
출 Network 🛛 🗹	Manage Ruijie 192,168.110,192 30:0D;9E:53;			
	Total 2 10/page < 1 > Go to page 1	QoS Settings Rate Limiting		
		Storm Control * Port Port 1 × Status Enable	× *	Type Broadcast V
		Save		
		Port Broad	cast (Mbit/sec) Unknowr (Mbit	
		1.	Disable Disa	able Disable
		2	Disable Disa	
		3	Disable Disa	
		4	Disable Disa	able Disable

8 Reyee AP Configuration

8.1 Wi-Fi Setting

The Wi-Fi Settings module allows you to configure the Wi-Fi pomewaters.

Ruíje	Reyee > Ruijie (Minster)	•	Engl	ish 🗸 🛆 MACC	EDownload App	le Network Setup	🔍 Network Check	<u>濟</u> Alarm
🖧 Overview 🛞 Online Clients 🕮 Gateway		figuration requires a reboot and will force onli	ne clients to go offline.					
♥Wireless ^ APs	WiFi Settings De	Reyee123						
Clients WiFi	Frequency	2.4G + 5G ~						
Advanced	Encryption	Open ~						
LED	Active Time	All Time ~						
Switches	VLAN	Default VLAN \lor						
	Hide SSID Client Isolation	 (The SSID is hidden and must be not set of the client joining this WiFi network) 						
	5G Prior	(The 5G-supported client will acce	ss 5G radio preferentially.)					
	XPress	(The client will experience faster s						
	Layer-3 Roaming	C (The client will keep his IP address Save	unchanged in this WiFi net	work.)				

Device Group: Choose the AP group, the following setting will only be applied to the chosen group.

SSID: The Wi-Fi name which the APs broadcasted.

Frequency: Choose the radio which the following setting will be applied to. Both2.4GHz and 5GHz radio will be applied by default.

Encryption: Choose the encryption mode.

Active Time: Choose the time period that the Wi-Fi signal will be broadcasted.

VLAN: The VLAN number that the WIFI will be associated with.

Hide SSID: The SSID is hidden and must be manually entered.

Client Isolation: The client joining this Wi-Fi network will be isolated, which means the clients cannot be accessed by each other.

5G Prior: The 5G-supported client will access 5G radio preferentially.

Xpress: The QoS setting will be automatically applied to optimize the game experience.

8.2 Multiple SSID setting

In some scenario, multiple SSIDs are needed in the network.

Configuration Steps:

```
Step1: Choose Wireless \rightarrow WiFi \rightarrow WiFi List
```

Ruijie	Reyee > Ruijie [Manter] 🕖			English 🗸		Download App	လ္ခွဲ Network Setup	ତ୍ତ୍ୱ Network Check	<u> 혀</u> Alarms
윩Overview	WiFi Settings Guest WiFi	WiFi List	Healthy Mode						
Online Clients	With Sectings Guest With		ficularly mode						
A Gateway	<i>i</i> Tip: Changing configuratio	on requires a reboo	t and will force o	nline clients to go	offline.				?
∻ Wireless ^	WiFi List Device Group:	Default 🗸 🗸							+ Ad
APs	Up to 8 SSIDs can be added.								
Clients	SSID	Frequency		Encryption		Hidden	VLAN ID	A	Action
WiFi	Reyee123	2.4G + 5G		OPEN		No	Default VLA	N Edit	Delete
Advanced									
LAN Ports									
LED									
🖻 Switches									
-a- -a-Network									

Step 2: Choose a Device Group and click the "Add" button

Reyee Series Implementation Cookbook

Dutio	Reyee > Ruijie (Master) 🕖	English O MACC	F2Download App	ළ Network Setup ෙ ල Netw	orle Charle - Marmo
Ruíjie		English 🗸 🛆 MACC	E-Download App	ङ्का Network Setup ्य Netw	OTK CHECK ALAITIS
2 Overview	WiFi Settings Guest WiFi WiFi List Healthy Mo	de			
Online Clients					
🖽 Gateway	<i>i</i> Tip: Changing configuration requires a reboot and will for	ce online clients to go offline.			(
중Wireless ∧	WiFi List Device Group: Default				+ A
APs	Up to 8 SSIDs can be added. Default				
Clients	SSID	Encryption	Hidden	VLAN ID	Action
WiFi	Reyee123 2.4G + 5G	OPEN	No	Default VLAN	Edit Delete
Advanced					
LAN Ports					
LED					
Switches					
-a- -a- Network					

Step 3: Fill in the SSID name WiFi related settings

Ruijie	Reyee > Ruijie [Master] 0		English 🗸		əad App 🔗 Network	Setup ପ୍ତ୍ରNe	
ిం Overview (8) Online Clients	WiFi Settings Guest WiFi	WiFi List Health	v Mode				
@ Gateway	i Tip: Changing configur	Add			×		
ন্থ Wireless	WiFi List Device Grou	<i>i</i> The configuratio EAP.	on will take effect after	being delivered to			E C
APs	Up to 8 SSIDs can be add	* SSID	<u>SSID2</u>	±			
Clients WiFi	SSID	Frequency	2.4G + 5G	~		AN ID	Action
Advanced	Reyee123	Encryption	Open	~	Deta	ault VLAN	Edit Delet
LAN Ports			Collapse				
LED		Active Time	All Time	~			
*** Network		VLAN	Default VLAN	\sim			
		Hide SSID	(The SSID is hid entered.)	dden and must be manu	ally		

8.3 AP Group

Reyee APs can be divided into different AP groups with different WiFi settings

Configuration Steps

Ruíjie	Reyee > Ruijie (Maater) 0 CMACC CDownload App & Network Setup & Network Check	പ്പ് Alarr
움Overview		
Online Clients	() AP List	
(Th) Gateway	AP List Group: All Groups Expand Advanced Search List Filter Batch	h Actio
	□ Action Hostname IP Address MAC MAC Status Model Clients Software Ver Software Ver	
APs Clients	Manage Ruijie 192.168.110.203 30:0D:9E:0C:1F:0A Online RAP120 0(E) 1 AP_3.0(1)B11P26,Release(0717230	1)
WiFi	Total 1 10/page \checkmark C 1 \rightarrow Go to page 1	
Advanced		
LAN Ports		
LED		
🗟 Switches		
-=- Network		

Step 1: Choose Wireless \rightarrow AP and click the "Expand" button



Ruijie	Reyee > Ruijie (Minuturi 🕢	English 🧹 🛆 MACC 🔁 Download App 💩 N	Jetwork Setup _ Q, Network Check _ 済 Ala
ింOverview @Online Clients	 AP List AP List 	Group: All Groups Collapse Advanced	l Search List Filter Batch Ac
⊞ Gateway	Search by Group * Group 1	IP Address ¢ MAC ¢ St	Model atus _{\$} Clients
APs Clients WiFi	Default 🖉 👘		nline RAP120 1 AP_3.0(1
Advanced LAN Ports	Total 1 10/page 🗸 🤇	1 > Go to page 1	
LED			
Network			

Step 3: Move the AP to the new group

Ruijie	Reyee > Ruijie [Wissker] 🕖	English 🧹 🛆 MACC 吕Download App 🖨 Network Setup Q Network Check 📸	<u>i</u> Alarr
2 Overview	AP List		
⊗ Online Clients ⊞ Gateway	AP List	Group: All Groups Collapse Advanced Search List Filter Batch	n Actic
	Search by Group	☑ Action Hostname IP Address MAC MAC Status	
APs Clients	Default 📿 💼	Manage Ruijie 192.168.110.203 30:0D:9E:0C:1F:0A Online RAP120 (Change Change)	ge Gr
WiFi Advanced		Total 1 10/page \checkmark < 1 \rightarrow Go to page 1	
LAN Ports LED			
🕾 Switches			
Ruíje	Reyee > Ruijie [Missker] Ø	English 🧼 🛆 MACC 듣Download App 🔮 Network Setup 🔍 Network Check 🦄	<u>ត</u> ្ត Alar
		English 🧹 🛆 MACC 듣Download App	<u>ម្</u> ត Alar
	Reyee > Ruijie (Miniter) @		<u>ទា</u> Alar h Acti
© Online Clients © Gateway → Wireless	AP List		
ی Overview (a) Online Clients (b) Gateway	AP List AP List Search by Group	Change Group × Advanced Search List Filter Batch I Select Group Group 1 ~ Status Model	
e ² ₀ Overview (a) Online Clients (b) Gateway (c) Wireless (APs)	AP List AP List Search by Group: All Groups Default Z 1	Change Group × Advanced Search List Filter Batch I Select Group Group 1 Status Model	h Acti
e ² 6 Overview ⊗ Online Clients ∰ Gateway ≎ Wireless APs Clients WiFi	AP List AP List Search by Group: All Groups Default Z 1	Change Group × Advanced Search List Filter Batch Select Group Group 1 > Status Model Clients It:0A Online RAP120 O(E) 1 AP_12	h Acti
 Overview Online Clients Gateway Wireless APs Clients WiFi Advanced LAN Ports 	AP List AP List Search by Group: All Groups Default Z 1	Change Group × Advanced Search List Filter Batch Select Group Group 1 > Status Model Clients It:0A Online RAP120 O(E) 1 AP_12	h Acti

8.4 Blacklist/Whitelist

The Blacklist/Whitelist module allows you to configure client blacklist and whitelist.

Blacklist: the devices are added into blacklist will not be able to access the network

Whitelist: only the devices in the whitelist are allowed to access the network

Configuration Steps

Step 1: Choose Wireless \rightarrow Blacklist/Whitelist \rightarrow Global

Ruíjie	Cloud_Auth_Test > Ruijie [Vaster] 🕐	English ~ 🔿 Ruijie Cloud	鬷Download App	@Network Check
움Overview	Global Blacklist/Whitelist	SSID-Based Blacklist/Whitelist			
(8) Online Clients	Global Blacklist/Whitelist	SSID-Based Blacklist/ Whitelist			
1 Router	• All STAs except blackli	sted STAs are allowed to access Wi-Fi.	Only the whitelisted STAs are allowed to access Wi-Fi.		
ক Wireless	Blocked WLAN Clie	ents			+ Add
APs	Up to 30 members can b	be added.			
Wi-Fi		MAC	Remark		Action
Clients		5C:80:B6:C5:38:89	LAPTOP-JB4BKVHL		Edit Delete
Blacklist/Whitelist Radio Frequency		5C:80:B6 OUI	LAPTOP-HW		Edit Delete
LAN Ports	< 1 > 10/pa	ge 🗸			
LED					
Network Optimization					
🖻 Switches					
:Network					

Support full match and OUI match

A Overview	Global Blacklist/White	list SSID-Based Blacklist/White	list	
(8) Online Clients				
A Router	• All STAs except	placklisted STAs are allowed to acce	Add	
	Blocked WLAN	Clients	Match Type	• Full OPrefix (OUI)
APs	Up to 30 member	s can be added.	* MAC	Example: 00:11:22:33:44:55
Wi-Fi				Please enter a MAC address.
VVI-11		MAC	Remark	
Clients		5C:80:B6:C5:38:89		
Blacklist/Whitelist				
Radio Frequency		5C:80:B6 OUI		Cancel

 $\textbf{Step 2: Choose Wireless} \rightarrow \textbf{Blacklist/Whitelist} \rightarrow \textbf{SSID-based}$

Ruíjie	Cloud_Auth_Test > Ruijie (Ma	ster] 🕖		English ~
A Overview	Global Blacklist/Whitelist	SSID-Based Blacklist/White	list	
⑧Online Clients				
A Router	<i>i</i> Note: OUI matching rul Rule: 1. In the Blacklis	d to allow or reject a client' e and SSID-based blacklist/w t mode, the clients in the bla	Add	
	2. In the Whitei	st mode, only the clients in ti	Match Type	• Full O Prefix (OUI)
APs	Device Group: Default	v O All STAs	* MAC	Example: 00:11:22:33:44:55
Wi-Fi	Cloud Auth Test		Remark	
Clients		Allowed		
Blacklist/Whitelist		Up to 30		
Radio Frequency				C
LAN Ports				
LED				
Network Optimization		< 1	> 10/page v	
🖾 Switches				
-o- -o- -o-Network				

Step 3 : Support to configure with Ruijie Cloud APP

<	Cloud_A	uth_Test	Q	<	STA Blacklist/Whitelist	Help
				By SSID		
Tool Kit	\$	8		Cloud_	Auth_Test	>
Wi-Fi Mgmt	Roaming Optimization	Optimize	Add Device	Global		
Q	Û	୶ୣ	On-site	Global	Configuration	>
Diagnose	Update	Share	Speed Test			
্বি	U	Ŀ	On-site			
Inspect	Reboot	Scheduled Reboot	Restore			
Settings						
æ	Ľ					
Device Password	Project Name	Report				
Advanced						
1	<u>.dı.</u>		23			
WAN Config	Smart Flow Control	LAN Config	Intranet Access			
Â	20					
Radio Settings	STA Blacklist/ Whitelist					

<	Ad	d	<		
	OUI	MAC	Blacklist	W	hitelist
		of MAC address in upper cas		AC addresses:	Batch Delete
		h the same OUI will be adde	5C:80:B6 OUI	LAPTOP-HW 🖄	创
First 6 d	igits of MAC	marks	5C:80:B6:C5:38:8 9	LAPTOP-JB4BKVH	₩ <i>ዾ</i> ๗
Ð				+ Add	
	Sav	re		Save	

8.5 Turn on/off LED indicator

The LED indicators on APs could be turned on/off according to the actual requirement.

Configuration Steps:

Choose $\textbf{Wireless} \rightarrow \textbf{LED},$ and turn on/off the LED setting.

Reyce > Ruijie [Window?] ① English ~ MACC EDownload App & Network Setup Q		
Online Clients Image: Clients Image	Network Check	<u>بة</u> م
Online Clients Control the LED status of the downlink AP. Gateway LED Save		
☆Wireless ^ Save		
APs		
Clients		
WiFi		
Advanced		
LAN Ports		
LED		
E Switches		
Network Y		

9 EST Series Configuration

9.1 Basic Setting

The devices are paired by default and can be used without requiring any configurations.

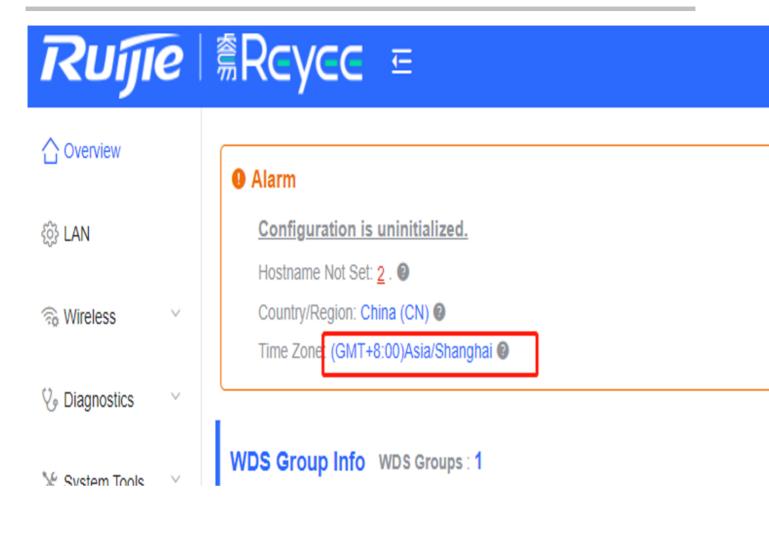
Change the Admin password

Ruijie	[®] Rcyco	= =				
	Alarm					
 ☆ LAN ☆ Wireless × ◇ Diagnostics × 	Configuration Hostname Not Admin Passwor Country/Region Time Zone: (GN	Set: 2 . Configuratio rd Not S Admin Passwo r: China Country/Region	n is uninitialized <u>.</u> rd Not Set: 2. <mark>Click here I</mark> p change n: China (CN) © MT+8:00)Asia/Shanghai ©	the password.		
💥 System Tools 🛛 🗠	WDS Group In	fo WDS Groups : 1				
	WDS Group1 AP: 1 . (Ruijie) CPE: 1 . (Online: 1	, Offline: 0)	Channel .52 WDS SSID :@Ruijie-wds	a4cc		Latency O. Fluent(1) Jitter(0) Free Interference O. Good(1) Medium(0 Medium Signal: — Poor Si
	 ♦ VCR (AP) ■ Ruijie Ø MAC: 30. ■ EST300 IP: 172.2 	0d:9e:07:a4:cc <			Latency 2ms	→ 400Mbns
Password						×
	* Password	•••••		\odot		
* Confir	m Password	•••••		\odot		
		Sa	we			
F						

Change the country code. Note: After you change the region, all WDS links will be off. If the specified region does not support the channel settings, the auto channel will be used instead.

Ruijie	[≜] Reyce =
습 Overview	
	• Alarm
谷 LAN	Configuration is un
	Hostname Not Set: 2. Configuration is uninitialized.
🚳 Wireless 🛛 👋	Admin Password Not Set: 1. Click here to change the password.
	Country/Region: China Country/Region: China (CN)
𝔥 Diagnostics →	Time Zone: (GMT+8:0) Time Zone: (GMT+8:00)Asia/Shanghai 💿
💥 System Tools 🛛 👋	WDS Group Info WDS Groups : 1
Ruíjie	e l ŝRcycc ≖
습 Overview	
C. Overview	Region
က်နှိုင် LAN	After you change the region, all WDS links will be off. If the specified region does not support the channel settings, the auto channel will be used
-	Country/Region
🙃 Wireless	
	Country/Region China (CN)
☆ WDS	
🏠 Region	Singapore (SG)
	Republic of Korea (KR)
Solution Diagnostics	Indonesia (ID)
	Hong Kong (HK)
💥 System Tools 👋	Macau (MO)
	Australia (AU)
	Thailand (TH)
	Dakietan (DK)

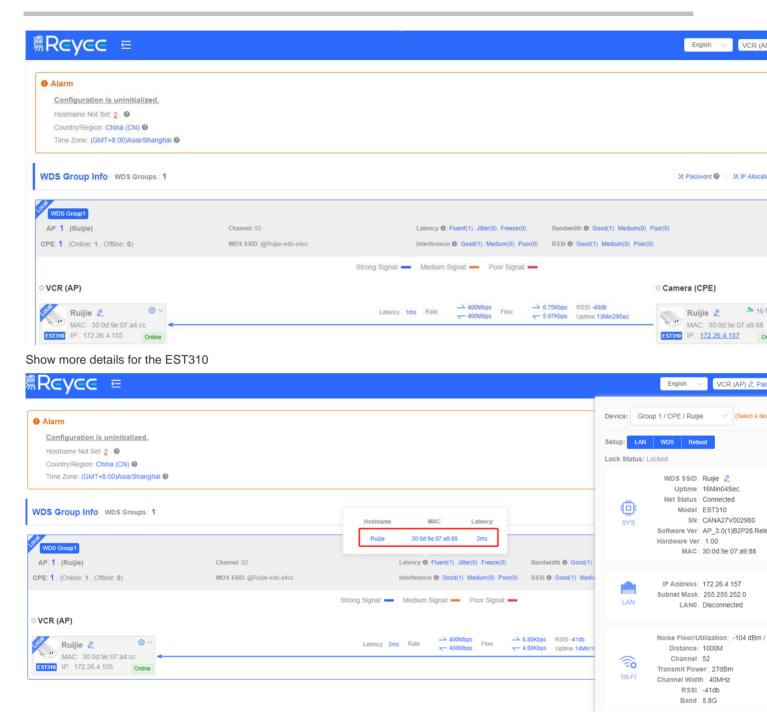
Change the Time Zone and NTP server



Ruíjie	Reyee	Œ		
☐ Overview	<i>i</i> Time Configure and view	v time (The device has no RTC n	module. The time settings will not be saved upon reboot).	
(j) LAN	Current Time	2020-11-17 15:04:16 Edit		
	 Time Zone 	(GMT+8:00)Asia/Shanghai		
♀ Diagnostics ♀ System Tools	* NTP Server	0.cn.pool.ntp.org	Add	
් Time		1.cn.pool.ntp.org	Delete	
ా Management		cn.pool.ntp.org	Delete	
r⊲ Update		pool.ntp.org	Delete	
☆ Reboot		asia.pool.ntp.org	Delete	
		europe.pool.ntp.org	Delete	
		rdate.darkorb.net	Delete	
		Save		

9.2 Devices status monitor

The status of EST310 is shown on overwiew, including channel, WDS SSID, latency, bandwidth, interference, RSSI, link signal, Rate, Flow and online status.



Click the LAN to edit the LAN configuration

					English 🗸 VCR (AP) 🖉 Pair Ag
1	LAN		×	Device: Grou Setup: LAN	p 1 / CPE / Rulijie (Select a device)
	IP Assignment	DHCP ~		Lock Status: Lo	WDS SSID: Ruijie 2 Uptime 16Min33Sec Net Status: Connected Model EST310 SN: CANA27V002980
	IP Address	172.26.4.157			Software Ver AP_3.0(1)B2P28,Release Hardware Ver 1.00 MAC: 30:00.9e.07:a9:88
hannel 1 DS SSID	Subnet Mask	255.255.252.0	Bandwidth O. Good(1) RSSI O: Good(1) Mediu	-	IP Address: 172.26.4.157
	Gateway	172.26.4.1		LAN	Subnet Mask 255.255.252.0 LAN0: Disconnected
	DNS Server	192.168.58.94 192.168.58.110 Submit	12Kbps RSSI-40db 20Kbps Uptime 14Min3	(ito Wi-Fi	Noise Floor/Utilization -104 dBm / 3% Distance: 1000M Channel: 52 Transmit Power: 27dBm Channel Width: 40MHz RSSI -40db
					Band 5.8G

Click the AP's WDS to edit the WDS configuration

					English 🗸 Camera (CPE) 🖉 Pair /
				Device: Gro	up 1 / AP / AP V (Select a devic
WDS		×		Setup: LAN	WDS Reboot
Channel : WDS SSID Channel Chan	& Transmit Power]	Bandwidth (): Good(2) RSSI (): Good(2) Mediu	Ö	WDS SSID: AP 🖉 Uptime: 7Day20Hr22Min25Sec Net Status: Connected Model: EST310
Channel Wi]	RSSI -44db Uptime 1Day01Hr11Min3:	SYS	SN: CANA27K001708 Software Ver: AP_3.0(1)B2P28,Relea Hardware Ver: 1.00 MAC: 30:0d:9e:07:a4:cc
Transmit Por			RSSI -46db Uptime 1Day01Hr11Min14	LAN	IP Address : 192.168.110.151 Subnet Mask : 255.255.255.0 LAN0 : 100baseT/Full-Duplex
	Save			Wi-Fi	Noise Floor/Utilization : -101 dBm / 1 Distance : 1000M Channel : 116 Transmit Power : 27dBm Channel Width :

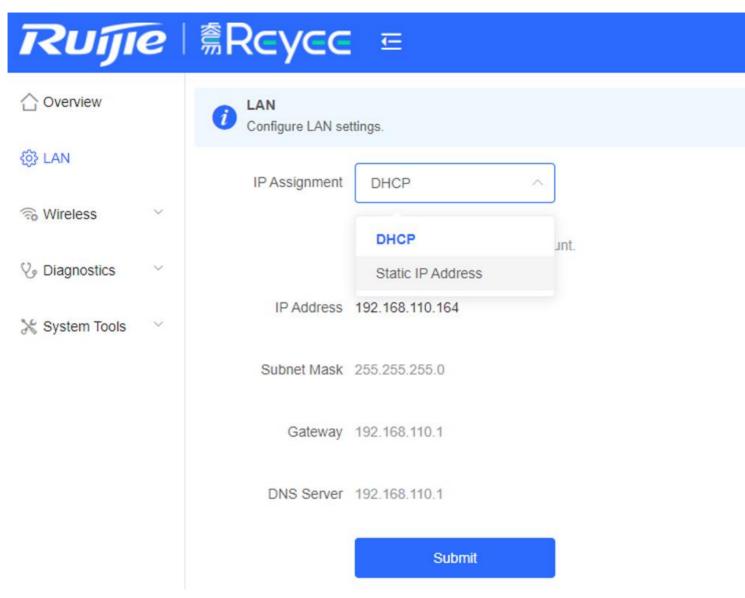
For the CPE, only show the WDS configuration and can't edit

					English 🗸 VCR (AP) 🖉 Pa
				Device: Grou	p 1 / CPE / Ruijie 🛛 🖂 (Select a de
	WDS	×		Setup: LAN	WDS Reboot
hal • 1 Channel ::	Channel & T Channel Channel Width		Bandwidth (): Good(1)	SYS .	WDS SSID: Ruijle Uptime: 16Min54Sec Net Status: Disconnected Model: EST310 SN: CANA27V002980 Software Ver: AP_3.0(1)B2P28,Ret Hardware Ver: 1.00 MAC: 30:0d:9e:07:a9:88
WDS SSIE	Transmit Power	ith the peer channel and channel width.	RSSI (): Good(1) Mediu	LAN	IP Address: 172.26.4.157 Subnet Mask: 255.255.252.0 LAN0: Disconnected
<	Distance	1KM ~ Save)1Kbps RSSI-40db 12Kbps Uptime 14Min5:	WI-FI	Noise Floor/Utilization : -104 dBm / Distance : 1000M Channel : 52 Transmit Power : 27dBm Channel Width : 40MHz RSSI : -40db Band : 5.8G

		English 🗸 VCR (AP) 🖉 Pal
	Device: Gr	oup 1 / CPE / Ruijie 🧹 (Select a de
	Setup: LAN	and the second
Channel :52 Bandwidth @ Good(1)	SYS	WDS SSID: Ruijie 2 Uptime: 17Min10Sec Net Status: Disconnected Model: EST310 SN: CANA27V002980 Software Ver: AP_3.0(1)B2P28,Rel Hardware Ver: 1.00 MAC: 30:0d:9e:07;a9:88
WDS SSID @Ruijie-wds-a- () Are you sure you want to reboot device Ruijie? (0) Poor(0) RSSI (): Good(1) Mediu Cancel OK Signal:	LAN	IP Address : 172.26.4.157 Subnet Mask : 255.255.252.0 LAN0 : Disconnected
Latency 4ms Rate — 400Mbps Flow — 6.99Kbps RSSI-40db ~ 400Mbps Flow ~ 5.55Kbps Uptime 15Min1;	Wi-Fi	Noise Floor/Utilization : -104 dBm / Distance : 1000M Channel : 52 Transmit Power : 27dBm Channel Width : 40MHz RSSI : -40db Band : 5.8G

9.3 LAN setting

Change LAN settings, support DHCP and Static IP Address, default is DHCP



9.4 Wireless Setting

WDS SSID configuration, only support change the SSID and the default encryption mode is WPA/WPA2-PSK

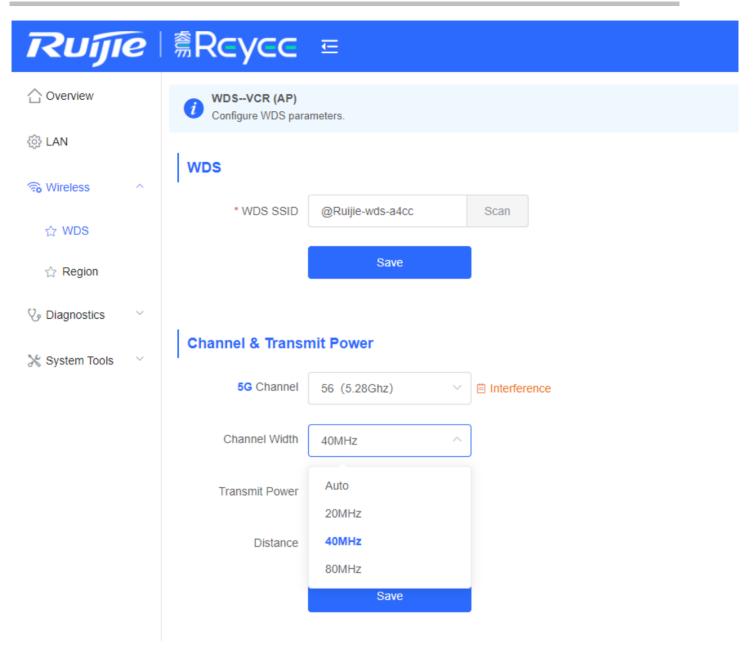
Ruíjie	[≜] Rcycc	Œ	
습 Overview	<i>WDSVCR (AP)</i> Configure WDS para	meters.	
贷 LAN	WDS		
ର Wireless ^ ☆ WDS	* WDS SSID	@Ruijie-wds-a4cc	Scan
☆ Region		Save	
😵 Diagnostics 🗸 🗸			
💥 System Tools 🛛 🗸	Channel & Transr	nit Power	
	5G Channel	Auto ~	Interference
	Channel Width	40MHz ~	
	Transmit Power	Auto ~	
	Distance	1KM ~	
		Save	

Choose Channel & Transmit Power \rightarrow 5G Channel, change the channel

Click the interference, will show the analysis of 5G channel and click to select a channel you want

Ruíjie	[®] Rcycc =
습 Overview	WDSVCR (AP) Configure WDS parameters.
ôð LAN	WDS
🙃 Wireless 🔷 🗠	* WDS SSID @Ruijie-wds-a4cc Scan
☆ WDS ☆ Region	Analysis (Current Channel: 56) C Refresh C RFI Strength
V Diagnostics	Highest
💥 System Tools 🛛 🗸	Channel & Transmit Power
	5G Channel 56 (5.28Ghz) ✓ ☐ Interference
	Channel Width 40MHz ~ 200 - Lowest Lowest
	Auto Channel 36 40 44 48 52 56 60 64 149 153 157 161
	Distance IKM × RFI Count 6 5 4 2 1 2 0 1 8 4 16 3 Tip Click to select a channel. Tip Click to select a channel.
	Save

Choose Channel & Transmit Power \rightarrow Channel Width, change the band width Default is 40MHz, EST310 LAN only support 100M, so 40MHz is enough



Choose Channel & Transmit Power \rightarrow Transmit Power, change the power

	Ruíjie	Reyee Reyee	Œ	
	☆ Overview	<i>WDSVCR (AP)</i> Configure WDS para	meters.	
	ô LAN	WDS		
	🗟 Wireless 🔷	* WDS SSID	@Ruijie-wds-a4cc	Scan
	☆ WDS		Save	
	☆ Region		Jave	
)	Contraction Diagnostics	Channel & Transn	nit Power	
	🔀 System Tools 🛛 🗠	5G Channel	56 (5.28Ghz) ~	⊟ Interference
		Channel Width	40MHz ~	
		Transmit Power	Auto ^	
		Distance	Auto	
			Low Medium	
			High	

Choose Channel & Transmit Power \rightarrow Distance, change the distance

Note: The distance does not refer to the actual physical distance. For example, if there are obstructions at a distance of 1KM, the performance requirements can be met by increasing the distance to 2KM

Ruíjie	[≜] Rсусс	Ē	
	<i>WDSVCR (AP)</i> Configure WDS para	meters.	
िं LAN	WDS		
ର୍କ୍ତ Wireless ^ ☆ WDS	* WDS SSID	@Ruijie-wds-a4cc	Scan
ය Region		Save	
🏷 Diagnostics 🗸 🗸		-14 P	
🔀 System Tools 🛛 👋	Channel & Transn	nit Power	
	5G Channel	56 (5.28Ghz) ~	⊟ Interference
	Channel Width	40MHz V	
	Transmit Power	Auto ~	
	Distance	1KM ^	
		1KM	
		2KM	
		3KM	

9.5 System Setting

Choose System Tools \rightarrow Time, change the time and NTP server

Ruíjie	[®] Rcycc =
	Time Configure and view time (The device has no RTC module. The time settings will not be saved upon reboot).
බ් LAN	Current Time 2020-11-17 16:49:15 Edit
Wireless	* Time Zone (GMT+8:00)Asia/Shanghai ~
♥ Diagnostics	* NTP Server Add
💥 System Tools 🔷 🗠	Save
☆ Time ☆ Management	
☆ Update	
☆ Reboot	

Ruíjie i ≋Rcycc ≖

☆ Overview	Configure and view	r time (The device has no R	TC module. The time s	ettings will not be saved upon	reboot).								
🔅 LAN	Current Time	2020-11-17 16:49:39	Edit	Edit									×
🛞 Wireless 👋	* Time Zone	(GMT+8:00)Asia/Shang	jhai 🗸										
Vy Diagnostics				* Time	© 202	0-11-1	7 16:49	39			Curr	ent Time	
💥 System Tools	* NTP Server	0.cn.pool.ntp.org	Add		2020)- <mark>11-</mark> 17			16:49:3	9			
		1.cn.pool.ntp.org	Delete		« <		2020	N	14	40	37		ок
습 Time		cn.pool.ntp.org		_	Sun	Mon	Tue	w	15	48	38		
🏠 Management					25	26	27	2	16	49	39		
☆ Update		pool.ntp.org			1	2	3	4	17 18	50 51	40		
🕆 Reboot		asia.pool.ntp.org	Delete		8	9	10	1	1070-		ncel OI	< <u> </u>	
					15	16	17	18	19	20	21	<u>اللہ</u>	
		europe.pool.ntp.org			22	23	24	25	26	27	28		
		rdate.darkorb.net	Delete		29	30	1	2	3	4	5		
		Save								Now	ОК		

Choose System Tools →Management, support backup and import setup, reset the device and set the session timeout

Ruíjie	ैि Rcycc
습 Overview	Backup & Import Reset Session Timeout
ô LAN	Backup & Import
🕤 Wireless	 If the target version is much later than the current version, some configuration may be missing. It is recommended to choose Reset before importing the setup. The device will be rebooted automatically later.
🎖 Diagnostics	Backup Setup
🔀 System Tools	Backup Setup Backup
් Time	Import Setup
☆ Management	File Path Please select a file. Browse Import
☆ Update	
් Reboot	

	Ruíjie	l ŜRcycc ∈
	☐ Overview	Backup & Import Reset Session Timeout
	တို့ LAN	<i>i</i> Session Timeout
		* Session Timeout 3600 Sec
)	𝔣 Diagnostics ∨	Save
	🔀 System Tools 🔷 🔿	
	☆ Time	
	☆ Management	
	☆ Update	
	☆ Reboot	

 $\label{eq:system-tools} Choose \ \textbf{System-tools} \rightarrow \textbf{Upgrade}, \ support \ online \ upgrade, \ local \ upgrade \ and \ update \ all \ the \ devices \ in \ the \ network$

	Ruíjie	[≜] Rcycc =
,	습 Overview	Online Update Local Update All Devices
	袋 LAN	Online Update Online update will keep the current configuration. Please do not refresh the page or close the browser. You will be redirected to the login page automatically after update
		Current Version AP_3.0(1)B2P28,Release(07210111) (Your version is the latest.)
	𝔥 Diagnostics ∨	
	🔀 System Tools 🔷 🗠	
	් Time	
	公 Management	
	☆ Update	
	☆ Reboot	

	Ruíjie	l ≋Rcycc
ĺ	C Overview	Online Update Local Update Update All Devices
4	ලි LAN	Local Update Please do not refresh the page or close the browser.
((0	🗟 Wireless 🗸 🗸	Model EST310
)	🕑 Diagnostics 🗸 🗸	Version AP_3.0(1)B2P28,Release(07210111) 1.00
	🔀 System Tools 💫 🔿	
	ු Time	Keep Setup (If the target version is much later than the current version, it is recommended not to keep the setu
	☆ Management	Update File Select Browse Upload
	☆ Update	
	☆ Reboot	

Ruíjie	[≜] R⊂ycc ≔
습 Overview	Online Update Local Update Update All Devices
စ္မ်ိုး LAN	<i>Update All Devices</i> Update all devices in the network. Please do not refresh the page or close the browser.
⊕ Wireless ∨	Model EST310
 >	Version AP_3.0(1)B2P28,Release(07210111) 1.00
్ద Time	Keep Setup 🗹 (Uneditable)
☆ Management	Update File Select Browse Upload
☆ Update	
Chasse System Teels - Beb	

Choose System Tools \rightarrow Reboot to reboot the device

Ruijie	[≦] Reyee ≔
습 Overview	<i>Reboot</i> Please keep the device powered on during reboot.
င့်} LAN	Reboot
) 😵 Diagnostics 🗸 🗸	
🔀 System Tools 🔷 🔿	
☆ Time	
☆ Management	
☆ Update	
☆ Reboot 9.6 PTMP setting	

Access to the device, if the device mode is AP, need to switch to CPE mode

						English 💛	VCR (AP)	air Again
					×	Password 🕥	X IP Allocation 🕑	X SSIE
e-wds-a4c	Note Vou can reset the device to restore default pairing status. Country/Region: Russia (RU) Pairing Status: Default	× Freeze(0) m(0) Poor(0) r Signal: —		od(2) Medium(0) P Medium(0) Poor(0)				
	Work Mode: VCR (AP) WDS SSID: @Ruijie-wds-a4cc Custom: 1. Support one-to-many (one AP to many CPEs). 2. Replace the paired device.	← 6.23Kb			EST310	ra (CPE) CPE2 & MAC: 30:0d:9 IP: <u>192.168.11</u> CPE1 &		
						English 🗸	VCR (AP) 🖉 Pa	iir Again
					*	Password 🥹	X IP Allocation 🕑	X SSID
Ruijie-wds-a	Mode Switchover Work Mode: VCR (AP)	× Freeze(0) ım(0) Poor(0)		ood(2) Medium(0) F) Medium(0) Poor(0)				
	Previous VCR (AP) Camera (CPE)	xt r Signal; —			⊘ Came	ra (CPE)		
roup Info	E WDS Groups : 1					-	assword 🕢 🛛 🔆 IP Allocati	P) 🖉 Pair Ag
aroup1 (AP) (Online: 2 , Of	ffine: 0) WDS SSID :@Ruijie-wds-a4c	WDS SSID can and select WDS SSID or enter DS SSID: @Ruijie-wds-a4cc	WDS SSID.	0) Poor(0) RSSI 🕖: Go	ood(2) Medium((
AP) AP 🖉 MAC 30:0d:	• ~	Previous Latency 2ms Rate	Next	DS SSID List (Click t Search by SSID WDS SSID @Ruijie-wds-a4cc	o select a SS RSSI -36	Re-scan	(CPE) PE2 2 16 (IAC: 30.0d 9erd6 d3:a6	

Access to the device, if the mode is CPE, no need to switch mode

Reyce =				English V	Camera (CPE) 🖉 Pair
O Alarm					
Configuration is uninitialized.					
Hostname Not Set: 1 . 🔘					
Admin Password Not Set: 1 . Click he	ere to change the password.				
Country/Region: China (CN) @					
Time Zone: (GMT+8:00)Asia/Shangh	nai 🔞				
WDS Group Info WDS Groups : 1 WDS Group1 AP: 0. (-) CPE: 1. (Online: 0, Offline: 1)	Channel : WDS SSID :			X Password 4	X IP Allocation
		Strong Signal: Mediu	ım Signal: 🛑 🛛 Poor Signal: 🛑		
◇ VCR (AP)				◇ Camera (CPE)	1
No Device Available	«			Ruijie MAC: 30 ESIMO IP: 10.44	0:0d:9e:d6:d3:a6

Choose $\textbf{Wireless} \rightarrow \textbf{WDS},$ scan the SSID list and select a SSID, click Save

Configure WDS para					
WDS					
* WDS SSID	@Ruijie-wds-c5a5	Scan	WDS SSID List (Cli	ck to select a	SSID.) ×
	Save		Search by SSID		Re-scan
		-	WDS SSID	RSSI	SN
	nit Deuren		@Ruijie-wds-a4cc	-37	CANA27K001708
Channel & Transı	nit Power				
5G Channel	Auto	Interferer			
Channel Width	40MHz	~			
	In CPE mode, the local chan	inel and channel			
Transmit Power	Auto	~			
Distance	1KM	~			
	Save				

Configure WDS part				
* WDS SSID	@Ruijie-wds-a4cc			
	Save			
Channel & Transi	mit Power		-	
5G Channel		Interference	Тір	×
Channel Width			The network service will be unavailable want to continue?	for a while. Do you
	40MHz Y	and channel width are consist		Cancel
Transmit Power	Auto			
Distance	1KM ~			
	Save			

PTMP success and show the actual topo on the overview

VDS Group1 AP: 1. (Ruijle) Channel :52 Latency ©: Fluent(2) Jitter(0) Freeze(0) Bandwidth ©: Good(2) Medium(0) Poor(0) CPE: 2. (Online: 2, Offline: 0) WDS SSID :@Ruijlewds-a4cc Interference @: Good(2) Medium(0) Poor(0) RSSI @: Good(2) Medium(0) Poor(0) Strong Signal: Medium Signal: Poor Signal: VCR (AP) Latency 2ms Rate 400Mbps - 400Mbps Flow 11.77Kbps - 7.62Kbps Rsili - 2900 WDI - 2000 -				
Hostname Not Set: 3. Country/Region: China (CN) The Zone: (GMT+8:00)Asia/Shanghal WDS Group Info WDS Groups: 1 WDS Groups: 1 WDS Groups: 1 WDS Groups: 1 WDS Groups: 1	Alarm			
Country/Region: Chin (CN) © Time Zone: (GMT+8:00)Asia/Shanghal © WDS Group Info WDS Groups: 1	Configuration is uninitialized.			
Time Zone: (GMT+8:00)Asia/Shanghai @ WDS Groups : 1 X Password @ X IP Alocation @] X Password @ X IP Alocation @] WDS Groups : 1 X Password @ X IP Alocation @] X Password @ X IP Alocation @] <t< th=""><th>Hostname Not Set: 3 . @</th><th></th><th></th><th></th></t<>	Hostname Not Set: 3 . @			
WDS Group Info WDS Groups : 1 X Password X IP Allocation Q WDS Group1 AP. 1. (Ruijie) CPE: 2. (Online: 2, Offline: 0) Channel 52 WDS SSID:@Ruijie-wds::a4cc Latency 0: Fluent(2) Jitter(0) Freeze(0) Bandwidth 0: Good(2) Medium(0) Poor(0) CPE: 2. (Online: 2, Offline: 0) WDS SSID:@Ruijie-wds::a4cc Interference 0: Good(2) Medium(0) Poor(0) RSSI 0: Good(2) Medium(0) Poor(0) CVCR (AP) Strong Signat: - Medium Signat: - Poor Signat: - VCR (AP) Latency 2ms Rate - 400Mbps Flow - 11.77Kbps RSSI-39db - RSSI -39db Uptime 494Mn31Sec Ruijie 2 MAC: 30.0d/9e:07:a4:cc Flow - 7.62kbps Uptime 494Mn31Sec MAC: 30.0d/9e:06:d3:a6	Country/Region: China (CN) @			
WDS Group1 AP. 1. (Ruijle) Channel :52 Latency @: Fluent(2) Jitter(0) Freeze(0) Bandwidth @: Good(2) Medium(0) Poor(0) CPE: 2. (Online: 2, Offline: 0) WDS SSID @Ruijlewds-a4cc Interference @: Good(2) Medium(0) Poor(0) RSSI @: Good(2) Medium(0) Poor(0) Strong Signal: Medium Signal: Poor Signal: • VCR (AP) Latency 2ms Rate 400Mbps - 400Mbps Flow 11.77Kbps - 7.62Kops Ruijle 2 Uplime 49Min31Sec • 16 @ v MAC: 30.001.9e:07:a4:cc Estancy IP: 10.44.77.254 Online Online Pice 400Mbps Flow 11.77Kbps RSII-3900 Vplime 49Min31Sec IEstancy	Time Zone: (GMT+8:00)Asia/Shanghai 🔮			
AP: 1. (Ruijie) Channel:52 Latency 0: Fluent(2) Jitter(0) Freeze(0) Bandwidth 0: Good(2) Medium(0) Poor(0) CPE: 2. (Online: 2, Offline: 0) WDS SSID:@Ruijie-wds-a4cc Interference 0: Good(2) Medium(0) Poor(0) RSSI 0: Good(2) Medium(0) Poor(0) Strong Signal: Medium Signal: Poor Signal: • • VCR (AP) Latency 2ms Rate - 400Mbps - 11.77Kbps RSSI-39db Vptime 49Min31Sec MAC: 30:0d:9e:07:a4:cc	WDS Group Info WDS Groups : 1			X Password I X IP Allocation I X St
CPE: 2. (Online: 2., Offline: 0) WDS SSID @Ruljie-wds-a4cc Interference ©: Good(2) Medium(0) Poor(0) RSSI @: Good(2) Medium(0) Poor(0) Strong Signal: - Medium Signal: - Poor Signal: - • VCR (AP) Latency 2ms Rate	WDS Group1			
Strong Signal: — Medium Signal. — Poor Signal. — VCR (AP) Ruijie 2	AP: 1. (Ruijie)	Channel :52	Latency @: Fluent(2) Jitter(0) Freeze(0) Bandwidth @: Good(2) Medium(0)	Poor(0)
VCR (AP) Camera (CPE) Latency 2ms Rate	CPE: 2 . (Online: 2 , Offline: 0)	WDS SSID :@Ruijie-wds-a4cc	Interference 1: Good(2) Medium(0) Poor(0) RSSI 1: Good(2) Medium(0) Poor	(0)
Ruijie 2 Image: Constraint of the state of the sta			Strong Signal: — Medium Signal: — Poor Signal: —	
Ruijie Z Latency Zms Rate 400Mbps Flow 7.62Kbps Uptime 49Min31Sec MAC: 30:0d:9e:07:a4.cc MAC: 30:0d:9e:06:d3:a6 MAC: 30:0d:9e:d6:d3:a6 E31310 IP: 10.44.77.254 Online Online Online	◇ VCR (AP)			◇ Camera (CPE)
ESTESIO IP: 10.44.77.254 Online	Itulije v_		Latency 2ms Rate + 400Mbps + 400Mbps + 600Mbps + 00, - 11,77Kbps - 11,77Kbps RSSI-39db - 7,62Kbps Uptime 490Min31Sec 	Ruijie 🖉 🄉 16 🐵 🗸
Latency 4ms Rate 400Mbps Flow 8.85Kbps Uptime 03Hr12Min18Sec Ruijie 2 P+16 9 0			Latency 4ms Rate — 400Mbps Flow — 12.59Kbps RSSI -43db ~ 400Mbps Flow ~ 8.05Kbps Uptime 03Hr12Min18Sec	
MAC: 30:0d:9e:07:a9:88				

Alarm <u>Configuration is uninitialized.</u> Hostname Not Set: <u>3</u> . Country/Region: China (CN)					
Time Zone: (GMT+8:00)Asia/Shanghai @				Camera Count Supporte WDS Link	
WDS Group Info WDS Groups : 1			×	Camera Type	Count
				100W Pixels (Data Rate: 3M)	16
WDS Group1 AP: 1 . (Ruijie)	Channel :52	Latency O: Fluent(2) Jitter(0) Freeze(0) Bandwidth O: Good(2) Medium(0)	Poor(0)	130W Pixels (Data Rate: 5M)	10
CPE: 2 . (Online: 2 , Offline: 0)	WDS SSID :@Ruijle-wds-a4cc	Interference (): Good(2) Medium(0) Poor(0) RSSI (): Good(2) Medium(0) Poor(0)	200W Pixels (Data Rate: 6M)	8
◇ VCR (AP)		Strong Signal: — Medium Signal: — Poor Signal: —	⇔Camei	300W Pixels (Data Rate: 10M)	5
Ruijie 2 @ ~ MAC: 30:0d:9e:(E5T510 IP: 10.44.77.254 LAN		Latency 2ms Rate $ ightarrow 400Mbps$ Flow $ ightarrow 11.77Kbps$ RSSI-39db $ ightarrow 7.62Kbps$ Uptime 49Min31Sec		Ruijie 16 @ MAC: 30:0d:9e:d6:d3:a6 IP: 10.44.77.254 On	
WDS Reboot		Latency 4ms Rate - 400Mbps Flow - 12.58Kbps RSSI-43db - 2.55Kbps Uptime 03Hr12Min18Sec	10	Ruijie ♪ 16 € MAC: 30:0d:9e:07:a9:88 IP: 10.44.77.254 On	

10 EW Series Configuration

10.1 Basic Setting

are paired by default and can be used without requiring any configurations. Quick setup, login to Reyee EWeb (<u>http://192.168.110.1</u>) via wired or wireless.

Rujje

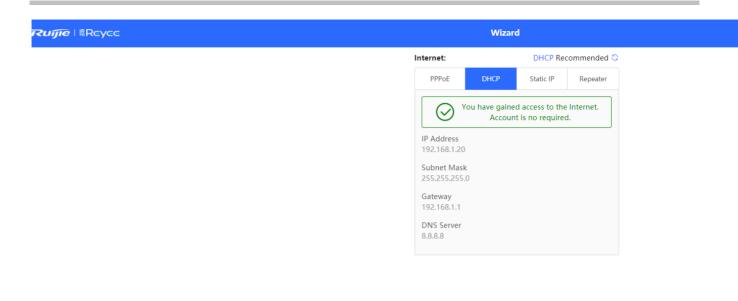


Welcome to Use Reyee Router

I have read and agreed to Software License Agreement
 Auto upgrade the device when a new version appears



The default configuration of WAN is DHCP.

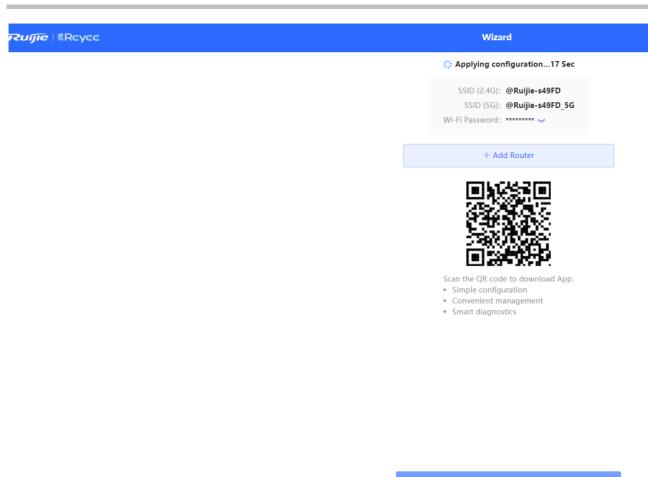


Previous Next

Set the WiFi settings, management password, country code and time zone.

/cc	Wizard	
	WiFi Settings	
	Dual-Band Single SSID	
	* SSID (2.4G) Large Coverage & Slo	w Rate
	@Ruijie-s49FD	
	* SSID (5G) Small Coverage & Fa	st Rate
	@Ruijie-s49FD_5G	
	* Wi-Fi Password	
	Please enter a Password.	***
	Management Password (Please remember the password.) Same as Wi-Fi Password	
	* Management Password	
	The password is 8-31 characters long.	>~~
	Country/Region/Time Zone	~
	* Country/Region	
	China (CN)	~

Apply the configuration to device and finish the quick setup.



🍀 Fini

WAN setting Support DHCP, PPPoE and static IP. Advanced settings including MTU, MAC and 802.1Q tag.

Ruíj	īe	[®] Rcycc	L Home	8 Clients	Internet	ি WiFi	-D- More
⊕ Basics WAN	^	WAN Settings Configure WAN s	settings.				
LAN		* Internet	DHCP	~			
IPv6 Address		No username	or password is required for D	HCP clients.			
Repeater		IP Address	192.168.1.20				
	\sim	Subnet Mask	255.255.255.0				
⊘ Security	~	Gateway	192.168.1.1				
Advanced	~	DNS Server	8.8.8.8				
ඁ © Diagnostics	\sim		Advanced Settings				
System	\sim	* MTU	1500		Range: 576-1500.		
		* MAC	c0:b8:e6:21:49:fd				
		802.1Q Tag					
		* VLAN ID	300				
			Save				

LAN settings

Default IP of LAN is 192.168.100.1 with DHCP server.

Ruíjie	[≜] Rcycc	D Home	8 Clients	Internet	WiFi	More
⊕ Basics ^	LAN Settings DHC	P Clients Static IP Addresses	DNS Proxy			
WAN	i LAN Settings					
IPv6 Address	LAN Settings					
Repeater	* IP Address	192.168.110.1				
♥ Wireless	* Subnet Mask	255.255.255.0				
Security ×	Remark	Remark				
Advanced	* MAC	c0:b8:e6:21:49:fe				
© Diagnostics ∽	DHCP Server					
.a_ System	* Start	192.168.110.1				
	* IP Count	254				
	* Lease Time(Min)	30				
		Save				

Convert the DHCP clients to static IP on DHCP clients.

Ruíjie	Rcycc	L Home	8 Clients	Internet	(WiFi	-0- -0- More		Engli	sh ~ 🗄
Basics ^ WAN LAN	LAN Settings DHCP C DHCP Clients View DHCP clients.	Clients Static IP Addresses	DNS Proxy						
IPv6 Address Repeater	DHCP Clients							Q C Refresh	+ Batch Con
ি Wireless ৺ ⊘ Security ৺	Up to 300 entries can b	e added. Hostname		MAC	IP Ad	ldress	Remaining Lease Time(Min)	Statu	s
Advanced	1	LAPTOP-JB4BKVHL		00:0e:c6:60:c2:e6	192.168	8.110.45	30	Convert to	Static IP
🔍 Diagnostics 🛛 🗸	< 1 > 10/p	age \vee							

Add the static IP address, up to 300 entries can be added.

⊕ Basics ^	LAN Settings DHCP Clients Static IP Addresses DNS Proxy		
LAN	3 Static IP Address List	Add	
IPv6 Address	Static IP Address List	* IP Address 192.168.110.45	Q + Add Delete Sel
Repeater	Up to 300 entries can be added.	* MAC 00:0e:c6:60:c2:e6	
	No. IP Address		Action
⊘ Security ~		Cancel	
🗄 Advanced	< 1 > 10/page ~		
🔍 Diagnostics 🛛 🗸	to page		

Repeater settings

EW support 2 mode, Router, Wired repeater and Wireless repeater.

Router: The default mode of EW, support Reyee Mesh.

Wired repeater: Allows you to establish a wired connection between a primary router and a secondary router, extending network coverage.

Wireless repeater: Allows you to establish a wireless connection between a primary router and a secondary router, extending network coverage. It is recommended to select a 5G WiFi of the primary router.

Ruijie	Rcycc	L Home	8 Clients	Internet	ি WiFi	More
⊕ Basics ^	The device is worki	ing in Router mode. The followin	g three modes are available:			
WAN	Router	O Wired Repeater	O Wireless Repeater			
LAN						
IPv6 Address						
Repeater						
⊘ Security ~						
🗄 Advanced 🛛 👋						
©₀ Diagnostics ∽						
ta= ta=System ∨						

Ø

3

俞

reujie	6 51	RCYCC	Home	Clients	Internet	WiFi
Basics WAN	^		Router mode. The following Wired Repeater	three modes are available:) Wireless Repeater		
LAN IPv6 Address		<i>i</i> This mode allows y Cable Connection:	ou to establish a wired connec Please connect the WAN port	ction between a primary router a of the local router to the LAN po	nd a secondary router, extending net ort of the primary router.	work coverage.
Repeater		Wired Repeater	1. Check network en 2. Set a local router 3. Click Save.			
	~	Status D	isabled 0			
⊘ Security	~		Check			
🗄 Advanced	~					
ି Diagnostics	~					
-=- System	~					

Ruíjie	Rcycc	1 Home	8 Clients) Internet		? WiFi		- C - C Mo
Basics WAN		g in Router mode. The following		_				
LAN IPv6 Address	 The local r It is recom 	Wired Repeater allows you to establish a wireless outer will work as a secondary rou mended to select a 5G WiFi of the the cable to avoid loops.			lect a target Wif			×
Repeater ∵ Wireless	Wireless Repe			SSID	BSSSID	Security	Channel	RSSI
⊘ Security ~	* Primary Router SSI			test GAS_360	c4:70:ab:a2:c3:6c 06:05:88:aa:00:48	OPEN OPEN	157	-8 dBm High -22 dBm High
Advanced ~	Local Router Wi	Fi Same as Primary Router	WiFi 🕜 New WiFi	vRanger	0a:05:88:aa:00:48	OPEN	149	-23 dBm High
System				vSmart	0e:05:88:aa:00:48	WPA2PSK	149	-23 dBm High
				test113	12:05:88:aa:00:48	OPEN	149	-23 dBm High
					20.010 L 00	00511		-36 dBm

The Wi-Fi Settings module allows you to configure the Wi-Fi pomewaters.

Ruijie	Rcycc	A Home	8 Clients	Internet	(WiFi	More
⊕ Basics ∨	WiFi Settings Guest W	iFi Smart WiFi Hea	Ithy Mode			
중 Wireless ^		uration requires a reboot and cli				
Blacklist/Whitelist	WiFi Settings					
Radio Frequency	Dual-Band Single SSID	(The 2.4G and 5G band	s use the same SSID.)			
⊘ Security ~	* SSID(2.4G)	@Ruijie-s49FD				
🗄 Advanced 🛛 🗸	* SSID(5G)	@Ruijie-s49FD_5G				
ඁ© Diagnostics	Security	WPA_WPA2-PSK	~			
-a- -a-System ∨	* WiFi Password	•••••	**			
		Collapse				
	Wireless Schedule	All Time	~			
	Hide SSID	(The SSID is hidden and	d must be manually ente	red.)		
	AP Isolation	(The client joining this)	WiFi network will be isola	ated.)		
	Band Steering	(The 5G-supported clier	nt will access 5G radio p	referentially.)		
	XPress	(The client will experien	nce faster speed.)			
		Save				

SSID: The Wi-Fi name which the APs broadcasted.

Dual-band Single SSID: Choose the radio which the following setting will be applied to. Both2.4GHz and 5GHz radio will be applied by default.

Security: Choose the encryption mode.

Wireless schedule: Choose the time period that the Wi-Fi signal will be broadcasted.

Hide SSID: The SSID is hidden and must be manually entered.

AP Isolation: The client joining this Wi-Fi network will be isolated, which means the clients cannot be accessed by each other.

Band Steering: The 5G-supported client will access 5G radio preferentially.

Xpress: The client will experience faster speed.

10.2 Blacklist/Whitelist

The Blacklist/Whitelist module allows you to configure client blacklist and whitelist.

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

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

The blacklist and whitelist take effect based on the whole network based or SSID based blacklist/whitelist are not supported.

Configuration Steps

Step 1: Choose Wireless \rightarrow Blacklist/Whitelist

Ruíjie	Rcycc	L Home	(8) Clients	Internet	(î) WiFi	-o- -o- More
⊕ Basics ∨						
	All STAs except bla	acklisted STAs are allowed to a	ccess WiFi. Only t	he whitelisted STAs are allowed to	o access WiFi.	
WiFi	Blocked WLAN	Clients				
Blacklist/Whitelist	Up to 30 members of	can be added.				
Radio Frequency		MA	AC		Rema	rk
⊘ Security ~					No Data	
₽ Advanced ~						
🔍 Diagnostics 🛛 👋						
-o- -o- -o- System						

Step 2: Click the "Add" button to add the client's MAC address

Ruíjie	Rcycc	û Home	8 Clients	Internet	? WiFi	More
⊕ Basics ~						
	All STAs except	blacklisted STAs are allowed to a	access WiFi. Only	the whitelisted STAs are allow	ved to access WiFi.	
WiFi	Blocked WLAN	l Clients		Add		×
Blacklist/Whitelist	Up to 30 member	s can be added.		* MAC	Example: 00:11:22:33:44:55	
Radio Frequency		M	AC	Remark		
⊗ Security ~						
🔁 Advanced 🛛 👻					Cance	ОК
Solution ⊂ Solutio						
System 🗸						

10.3 DDNS

Step 1: Register the account on https://www.noip.com/sign-up and set the domain

Ruíjie	∙∣癝F	Reyee	1 Home	8 Clients		Hand Hand Hand Hand Hand Hand Hand Hand	🔶 Wi-Fi	-B- -B- More
Basics	\sim	Peanut Shell NAT	Dynamic DNS	No-IP DNS Dy	nDNS			
ক Wireless	\sim	i No-IP DNS						
₩ Repeaters		* Username			Register			
Security	~	* Password						
Elow Control	^	Domain			0			
Port Mapping			Log In	Delete				
Dynamic DNS		Link Status	-					
UPnP Settings Local DNS		Domain	-					
Reyee Mesh								
Other Settings								
Diagnostics	~							
System	~							

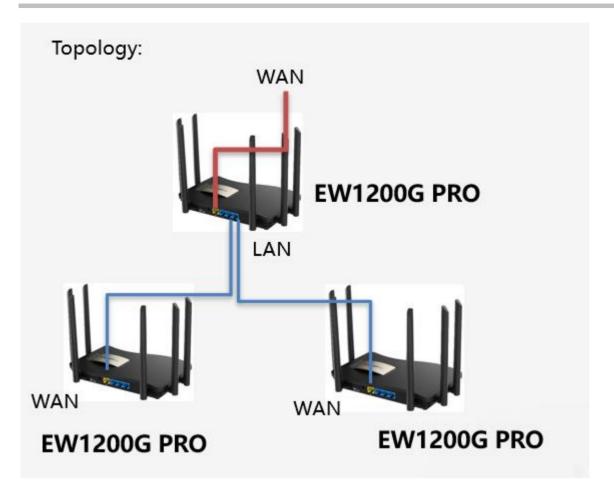
Step 2: Input the username, password and domain

Step 3: Check the link status

Step 4: Support dynDns

Ruijie	∮│衞F	Reyee	1 Home	8 Client	s) Internet	≈ Wi-Fi	More
Basics	\sim	Peanut Shell NAT	Dynamic DNS	No-IP DNS	DynDNS			
🛜 Wireless	~	<i>i</i> DynDNS		L. L				
🖽 Repeaters		* Username			Register			
Security	\sim				Register			
🗄 Advanced	^	* Password						
Flow Control		* Domain			0			
Port Mapping			Log In	Delete				
Dynamic DNS		Link Status	-					
UPnP Settings								
Local DNS Reyee Mesh								
Other Settings								
@ Diagnostics	~							
-B- System	~							
10.4 MESH								

Wired MESH



Configuration steps:

By default, EW1200G-Pro is enabled with Mesh. When the WAN port of EW1200G-Pro is connected, it will automatically identify whether the uplink is an EW1200G-Pro LAN port. If it is, the EW1200G-Pro will automatically change from route mode to mesh mode.

If the topology is connected, the network will be automatically connected after the connection is completed, and all the device indicators will turn on (about 5 minutes)

Wireless MESH



1) Master must meet two conditions:

①Finish the quick setup

②The WAN port is connected and the interface indicator is on.

2) Slave must meet two conditions:

①Slave is the factory state;

②Slave is within 3 meters from the master and is unobstructed (ensure the signal strength is above -35)

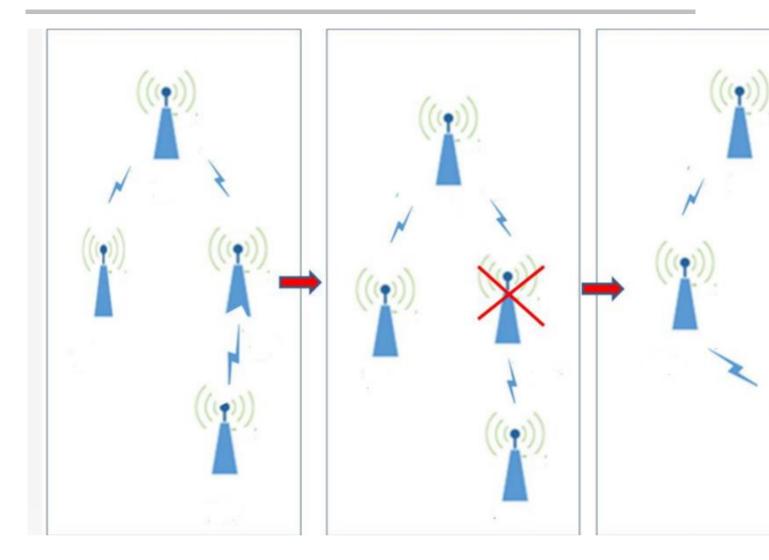
3) Both the master and slave are powered on

Press the reset button of the master, and the indicator light will flash quickly

After 1-3S, the slave indicator will start to flash quickly. After the indicator lights of the slave and slave are always on again, the wireless mesh is successful.

Then take the slave to the place where you need to use it and wait for the indicator light to stay on.

Self-recovery



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- Does Reyee Device support Telnet or SSH login?
 No. Reyee device only support web management.
- 2. What is the default IP address of the Reyee switch? 10.44.77.200.
- 3. What is the IP address of the master device on the self-organizing network? 10.44.77.253
- 4. What is the device priority of the self-organizing network master selection? EG > AP > Switch
- 5. What is the difference between the default SSID @Ruijie-s and @Ruijie-m?@Ruijie-m is generated after successful network self-organization, while @Ruijie-s is generated on a standalone device.
- 6. Does the self-organizing network support to be formed between Reyee series devices and other Ruijie devices (Running RGOS)?

No. Self-organizing network can only be formed between Reyee Series devices.

7. I failed to log into the eWeb management system. What can I do?

Perform the following steps:

- (1) Check that the network cable is properly connected to the LAN port of the device and the corresponding LED indicator blinks or is steady on.
- (2) Before accessing the configuration GUI, set the IP assignment mode to Obtain an IP address automatically (recommended), so that the server with DHCP enabled can automatically assign an IP address to the PC. To designate a static IP address to the PC, set the IP address of the PC in the same network segment as the IP address of the management interface. For example, if the default IP address of the management interface is 192.168.110.1 and the

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subnet mask is 255.255.255.0, set the IP address of the PC to 192.168.110.X (X is any integer ranging from 2 to 254), and the subnet mask is 255.255.255.0.

(3) Run the ping command to test the connectivity between the PC and the device.

(4) If the login failure persists, restore the device to factory settings.

8. What can I do if I forget my username and password? How to restore the factory settings?

To restore the factory settings, power on the device, and press and hold the Reset button for 5s or more, and release the Reset button after the system LED indicator blinks. The device automatically restores the factory settings and restarts. The original configuration will be lost after the factory settings are restored. After the restoration, the default management address is http://10.44.77.254. You can set the username and password upon first login.

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