

Some Reyee AP can't be online on SON

I. Applicable Scenarios

RAP or EAP series products of Reyee may not be discovered in a network. A L2 topology is taken as an example in this document to describe the troubleshooting of this issue.



III. Troubleshooting An AP failed to obtain an IP address (1) Check the link connectivity. (2) Check the DHCP server configuration. An AP obtains an incorrect IP address Check whether a router is connected to the intranet without authorization.





III. Troubleshooting

3 An AP is connected to a self-organizing network (SON) of other devices

Restore the factory setting of the AP.

4 An AP is not located in the same network segment as the main device

Check whether the intranet is divided into multiple network segments. An AP cannot be connected to a SON by crossing a network segment.

IV. Configuration

- (1)
- An AP failed to obtain an IP address.
- (1) Check the link connectivity.
 - Replace the target AP with a wired PC and test whether IP addresses can be obtained through the PC.
- A. If no IP address can be obtained, configure an IP address to test the gateway connectivity. If the gateway is unreachable, connect to a router for test. Confirm that the connection is normal and check whether the switch works normally. You can change the switch port or the switch for test.

- B. If IP addresses can be obtained, run the ping command to test whether other APs can be pinged. If not, L2 isolation is enabled on a port in the internal switch to limit other switch ports. Log in to the access switch and choose Security > Port Protection to check whether the port protection function is enabled on the corresponding port and causes communication failure between ports. If yes, disable the port protection function on the port. The AP can communicate with other APs.

• NBS3100- 24GT4SFP-P	e: NBS3100 SN: IP Addres	ss: 192.168.111.8 MAC:	() Reboot
Home VLAN Monitor $^{\sim}$	Ports \checkmark L2 Multicast Security \checkmark Advanced \checkmark	Z Diagnostics Z System Z	
Port Protection The protected ports are isc	plated from each other.		
Port List			🖉 Batch Edit
	Port	Action	
	Gi21		
	Gi22		
	Gi23		
	Gi24		
	Gi25		
	Gi26		
	Gi27		
	Gi28		
Total 28 10/page V	1 2 3 > Go to page 3		





IV. Configuration

(2) Check the DHCP server configuration. Check whether all DHCP addresses are allocated and cannot be released. Log in to the DHCP gateway and choose **Basics**> LAN Settings. The number of the IP addresses is 4 and they are all occupied. Increase the number of IP addresses so that they can be obtained through the AP.

	Router Hostname: EG105C • EG105GW MAC:	IP: 172.26	5.5.237	(U) Reboot
Switcles Switcles Switcles Network In Settings DHCP Clients Static IP Addresses DHCP Option DHCP Server Start DHCP Count Lease DHCH Delete Selected DHCP Server Start DHCP Count Lease DHCH Delete Selected DHCP Server Start DHCH Server Start DHCP Server Start DHCH Server Start	Overview Basics ~ Security ~ Bel	or Y VPN Y Advanced Y Diagnostics Y System	n ~	
Switches ** Network ILAN Settings Up to 8 entries can be added. IP Subnet Mask VLAN ID Remark DHCP Server Start IP Count Lease Time(Min) Action 192.168.110.1 255.255.255.0 Default VLAN	LAN Settings DHCP Clients Static	Addresses DHCP Option DNS Proxy		
	<i>i</i> LAN Settings			0
Up to 8 entries can be added. IP Subnet Mask VLAN ID Remark DHCP Server Start IP Count Lease Time(Min) Action 192.168.110.1 255.255.255.0 Default VLAN - Enabled 192.168.110.1 4 30 Edit Delete	LAN Settings		+	Add Delete Selected
IPSubnet MaskVLAN IDRemarkDHCP ServerStartIP CountLease fme(Min)Action192.168.110.1255.255.0Default VLAN-Enabled192.168.110.1430Edit Delete	Up to 8 entries can be added.			
192.168.110.1 255.255.0 Default VLAN - Enabled 192.168.110.1 4 30 Edit Delete	IP Subnet Mas	VLAN ID Remark DHCP Server	Start IP Count Tim	ease Action ne(Min)
	192.168.110.1 255.255.255 .	Default VLAN - Enabled	192.168.110.1 4	30 Edit Delete
// Collance				

An AP obtains an incorrect IP address.

Check whether a router is connected to the intranet without

authorization.

Check whether the physical port of the switch is connected to a router without authorization, causing the AP to obtain IP addresses through the DHCP server connected to this router. Log in to the switch, click the **Security** tab, enable **DHCP Snooping**, select port 13, and click **Save**. Port 13 is the uplink port of the switch and is configured as a trusted port to ensure that DHCP data delivered through the uplink port can be normally transmitted.

Switch Hostname: NBS3100 SN: IP Address: 192.168.111.8 MAC: 24GT45FP-P VAC: VAC:<	() Reboot
Home VLAN Monitor V Ports V L2 Multicast Security Advanced V Diagnostics V System V	
 DHCP Snooping Description: Enabling DHCP Snooping helps filter DHCP packets. The device only forwards DHCP request packets to the trusted port and DHCP response packets from the trusted port. Note: The port connected to the DHCP server is configured as the trusted port generally. 	
DHCP Snooping:	
Option 82:	
Select Trusted Port:	
Available Unavailable Aggregate 🕇 Uplink Copper Fiber	
1 3 5 7 9 11 13 15 17 19 21 23	
2 4 6 8 10 12 14 16 18 20 22 24 25 26 27 28	
Note: You can click and drag to select one or more ports. Select All Inverse Deselect	
Save	





IV. Configuration

3 An AP is connected to a SON of other devices. Restore the factory setting of the AP. If the AP is connected to a SON of other devices, Add to My Network is displayed on the interface. You need to reset the AP and connect it to the new SON.

Rujje IRcycc	test123 > EG105GW (Navini)			English ~ Ruijie Cloud 📓D	ownload App 🔞 Network Setup 🍓 Network Check 📺 Wa	im 🕞 Log Out
Cline Clients Clien	Vest123 > EGI05GW (Manual) O Network List Every network varies in devices and configuration. Vo My Network test123 (4 devices) Model Fouter EG105GW (Master) AP RAP2260(E) Switch: NBS3100-24GT4SEP-P Guiter: RG-ES209GC-P Other Network Router RAP (1 devices) Model	SN	Vetwork. IP 192.168.111.1 192.168.111.200 192.168.111.8 192.168.10.87	MAC	Software Ver SwiTCH_3.0(1)811P31,Release(08130616) ESW_1.0(1)81P3,Release(07200415)	en Elog Out
« Collanse	RAP1200(E)		192.168.111.100		ReyeeOS 1.55.1914	6
«Collapse						

An AP is not located in the same network segment as the main device.

Check whether the intranet is divided into multiple network segments. An AP cannot be connected to a SON by crossing a network segment.

An AP is connected to a SON in broadcast mode and this cannot be implemented crossing networks. To enable SON connection crossing a network segment, log in to the DHCP gateway, for example, Reyee EG105GW, and disable the SON function of the gateway. Choose **Basics > LAN > DHCP Option** and configure the **Option 43** field as the IP address of the main AP in the format of #RJ#*main AP IP address*.

Rujje Rcycc	test123 > EG105GW O	English 🗸 🛆 Ruijie Cloud	뾃 Download App 🔌	Wizard @Network Check	ங்∰Warn ⊟Log Out
응 Overview	LAN Settings DHCP Clients Static IP Addresses DHCP Option	DNS Proxy			
⊕ Basics	DHCP Option DHCP option settings are applied to all LAN ports.				0
WAN	DNS Server Example: 8,8,8,8, each separated by a space.				
LAN	Option 43 #RJ#192.168.110.4 ②				
Port VLAN	Option 138 Example: 1,1,1,1				
IPTV/VLAN	Option 150 Example: T.T.T.T., each separated by a space.				
⇔ Wireless	Save				
⊘ Security ~					
ണ് Behavior ്					
© VPN ∽					6
«Collapse					





V. Result Validation

If you add all Reyee devices to a SON, you can view all device information in the SON device list.

Net Status (Online Devices / Total)	<u></u>	Router	Switch	-	Refresh O
	DHCP	1 Router	2/2 Switches	2/2 APs	
My Network					
test123 (5 devices)					795
Model	SN	IP	MAC	Software Ver	
Router EG105GW [Master]	1	192.168.110.1		ReyeeOS 1.55.1915	
Switch N853100-24GT4SFP-P		192.168.110.2		ReyeeOS 1.72.2130	
A P RAP2260(E)		192.168.110.4		ReyeeOS 1.75.2429	
A P RAP1200(E)		192.168.110.5		ReyeeOS 1.55.1914	
Switch RG-ES209GC-P		192.168.110.3	6	ESW_1.0(1)B1P3,Release(07200415	5
		Padiscount	Chart Colum		

Official Website ≫ https://www.ruijienetworks.com
 Community ≫ https://community.ruijienetworks.com
 Facebook ≫ https://www.facebook.com/ruijietac







Community