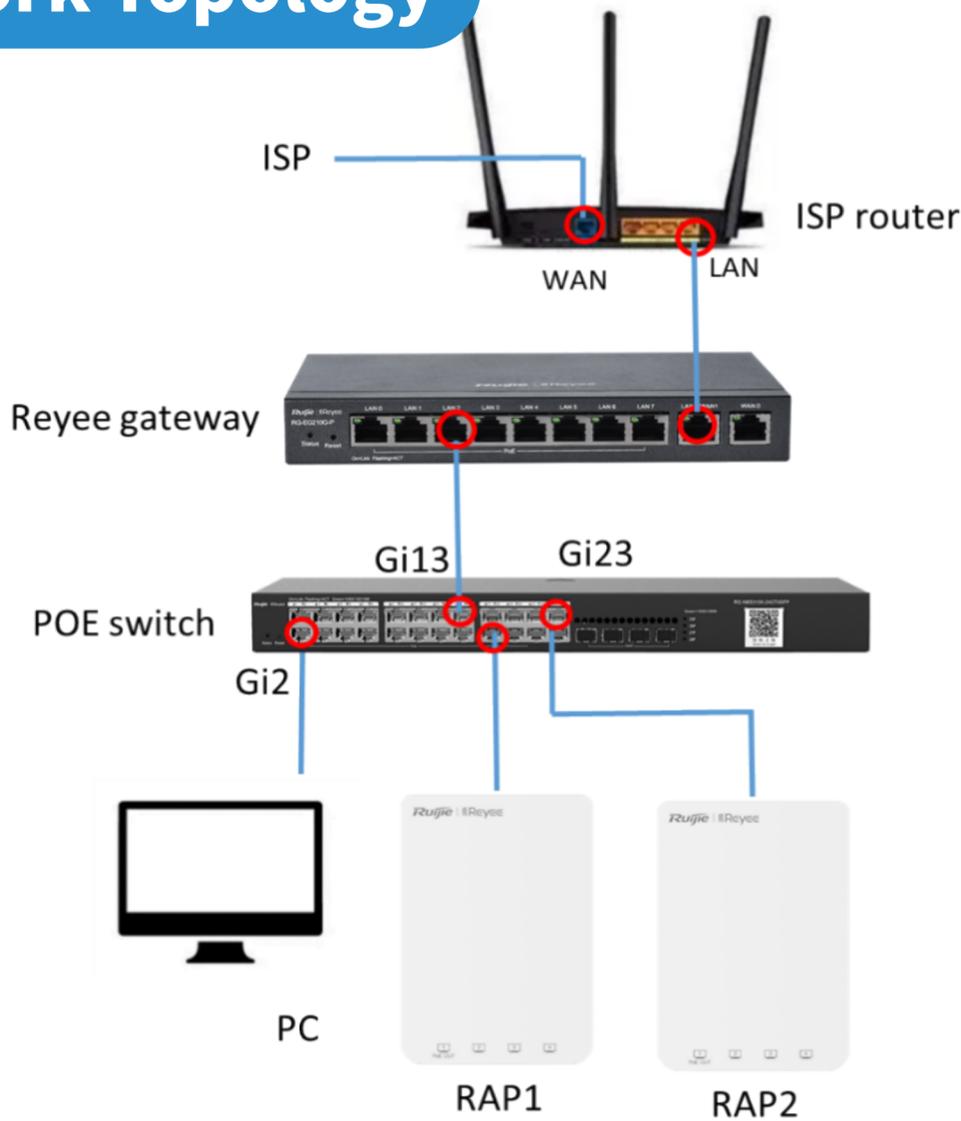


Some Reye AP can't be online on SON

I. Applicable Scenarios

RAP or EAP series products of Reye 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.

II. Network Topology



III. Troubleshooting

- 1 An AP failed to obtain an IP address
 - (1) Check the link connectivity.
 - (2) Check the DHCP server configuration.
- 2 An AP obtains an incorrect IP address

Check whether a router is connected to the intranet without authorization.

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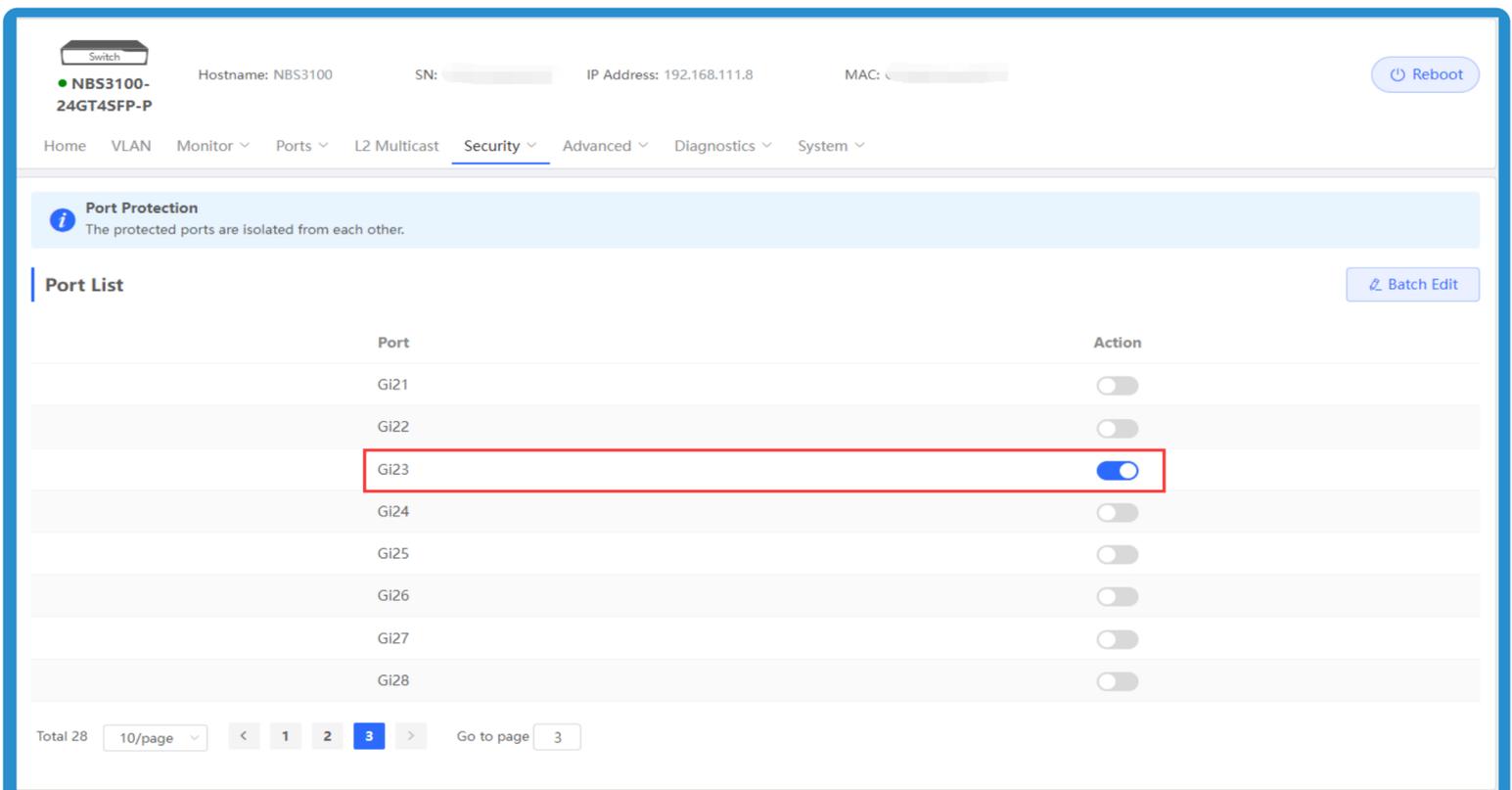
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III. Troubleshooting

- 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.



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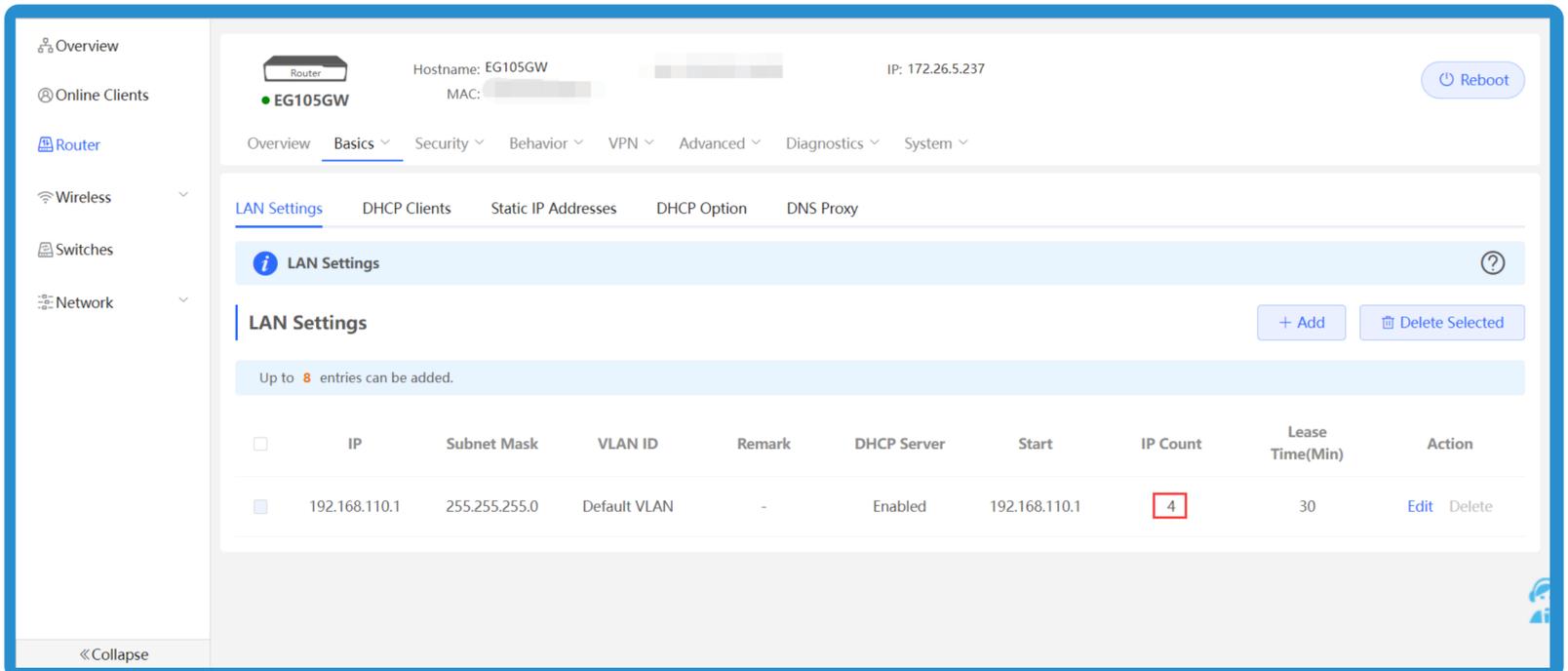


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IV. Configuration

(2) Check the DHCP server configuration.

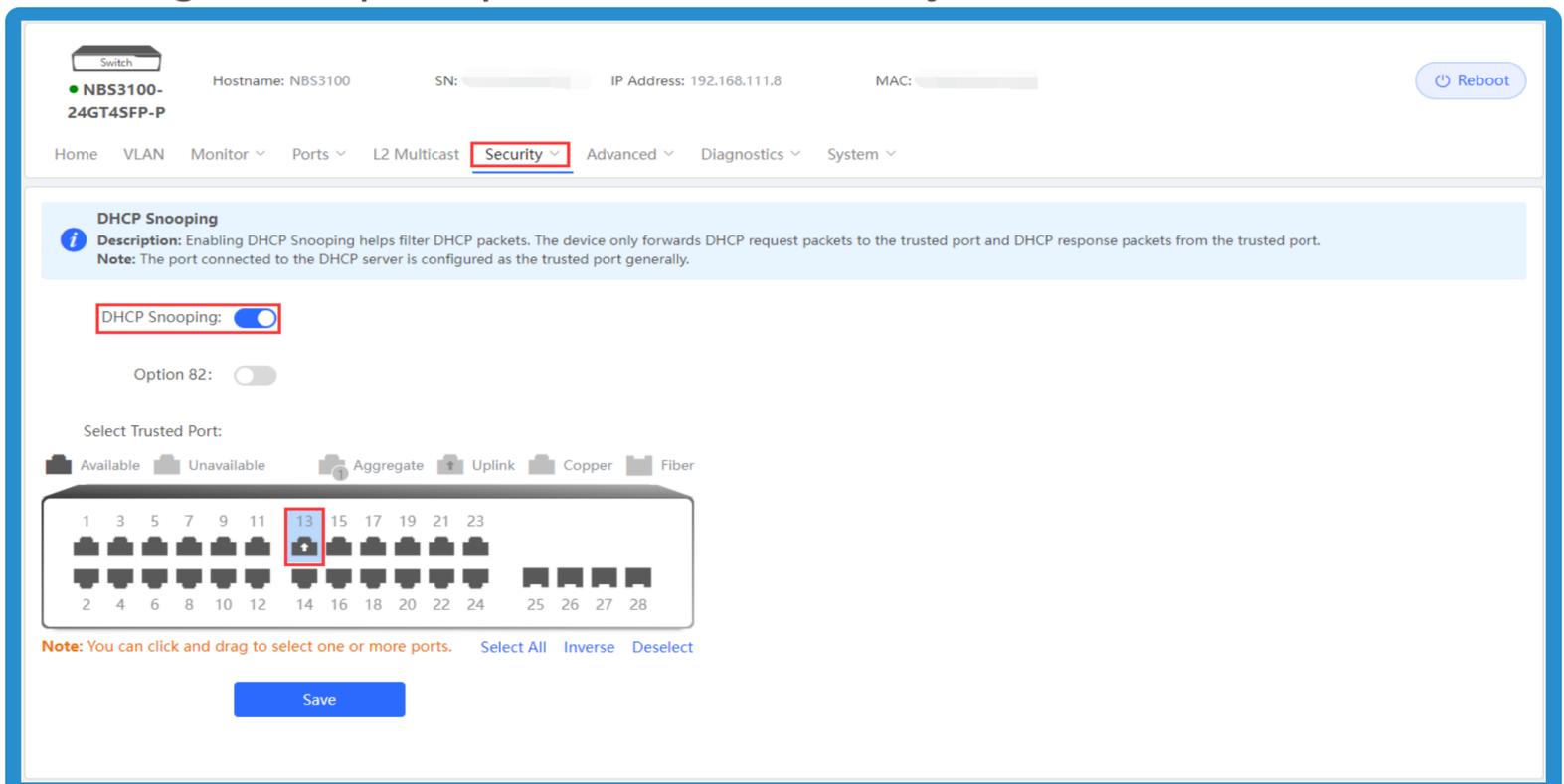
Check whether all DHCP addresses are allocated and cannot be released. Log in to the DHCP gateway and choose **Basics > LAN Settings**. The number of the IP addresses is 4 and they are all occupied. Increase the number of IP addresses so that they can be obtained through the AP.



2 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.



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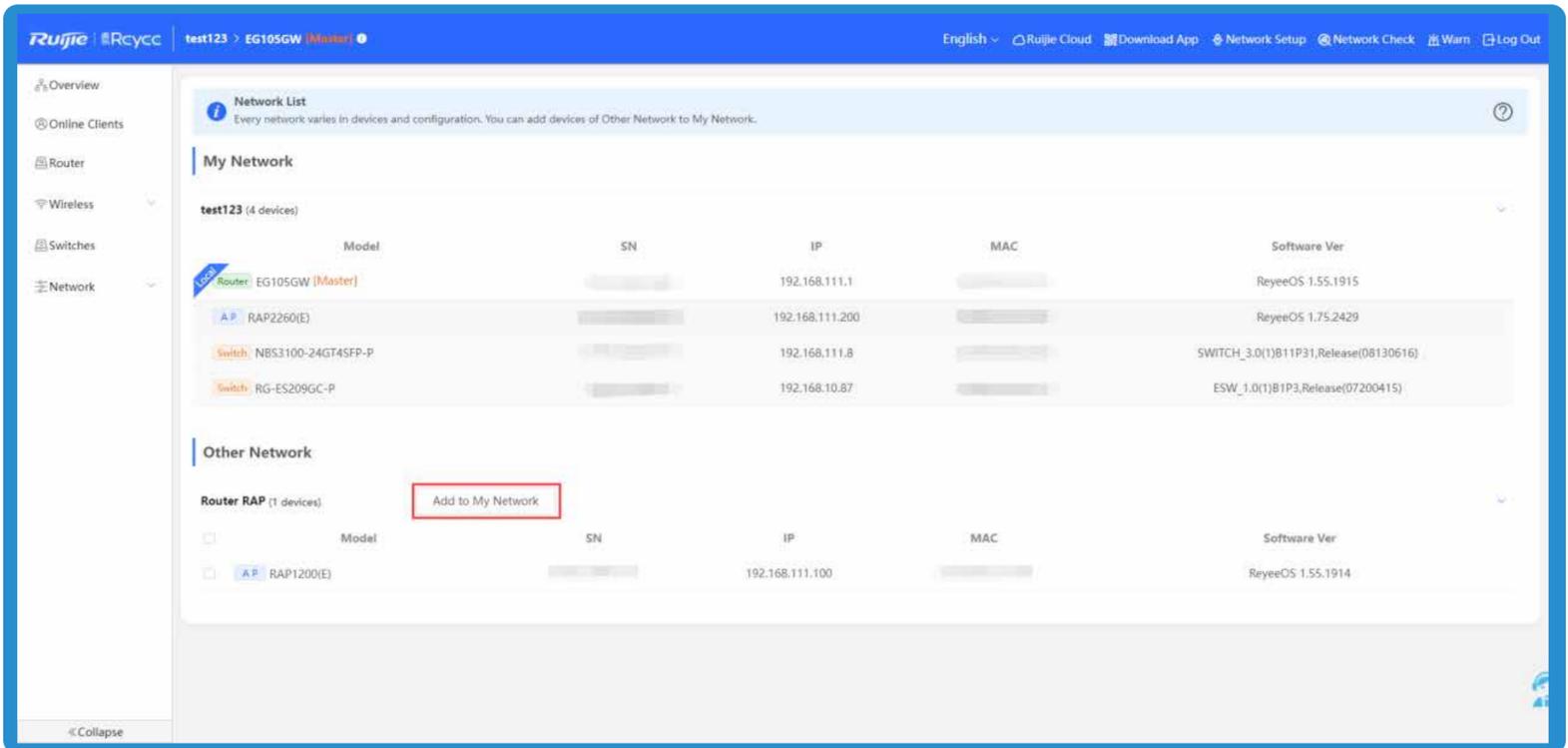
Community



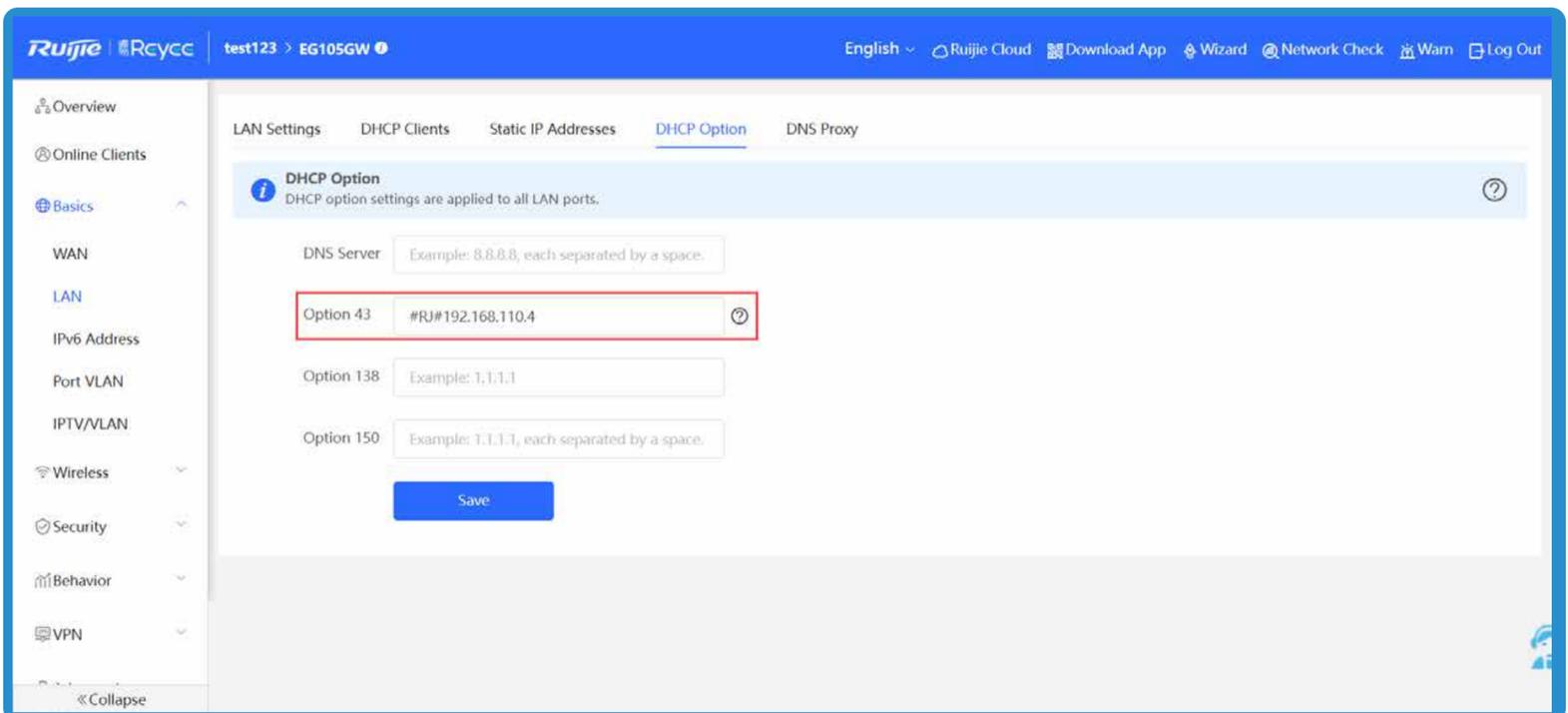
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IV. Configuration

- 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.



- 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.
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, Reyeeg 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**.



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V. Result Validation

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

The screenshot shows the 'Discover Device' interface in the Ruijie Reeye management console. At the top, it displays 'Net Status (Online Devices / Total)' with a network diagram showing connections to Internet, 1 Router, 2/2 Switches, and 2/2 APs. Below this, the 'My Network' section shows a list of 5 devices under the network 'test123'. The devices are:

Model	SN	IP	MAC	Software Ver
Local Router EG105GW [Master]	[Redacted]	192.168.110.1	[Redacted]	ReeyeOS 1.55.1915
Switch NBS3100-24GT4SFP-P	[Redacted]	192.168.110.2	[Redacted]	ReeyeOS 1.72.2130
A.P. RAP2260(E)	[Redacted]	192.168.110.4	[Redacted]	ReeyeOS 1.75.2429
A.P. RAP1200(E)	[Redacted]	192.168.110.5	[Redacted]	ReeyeOS 1.55.1914
Switch RG-ES209GC-P	[Redacted]	192.168.110.3	[Redacted]	ESW_1.0(1)B1P3,Release(07200415)

Buttons for 'Rediscover' and 'Start Setup' are visible at the bottom of the device list.

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