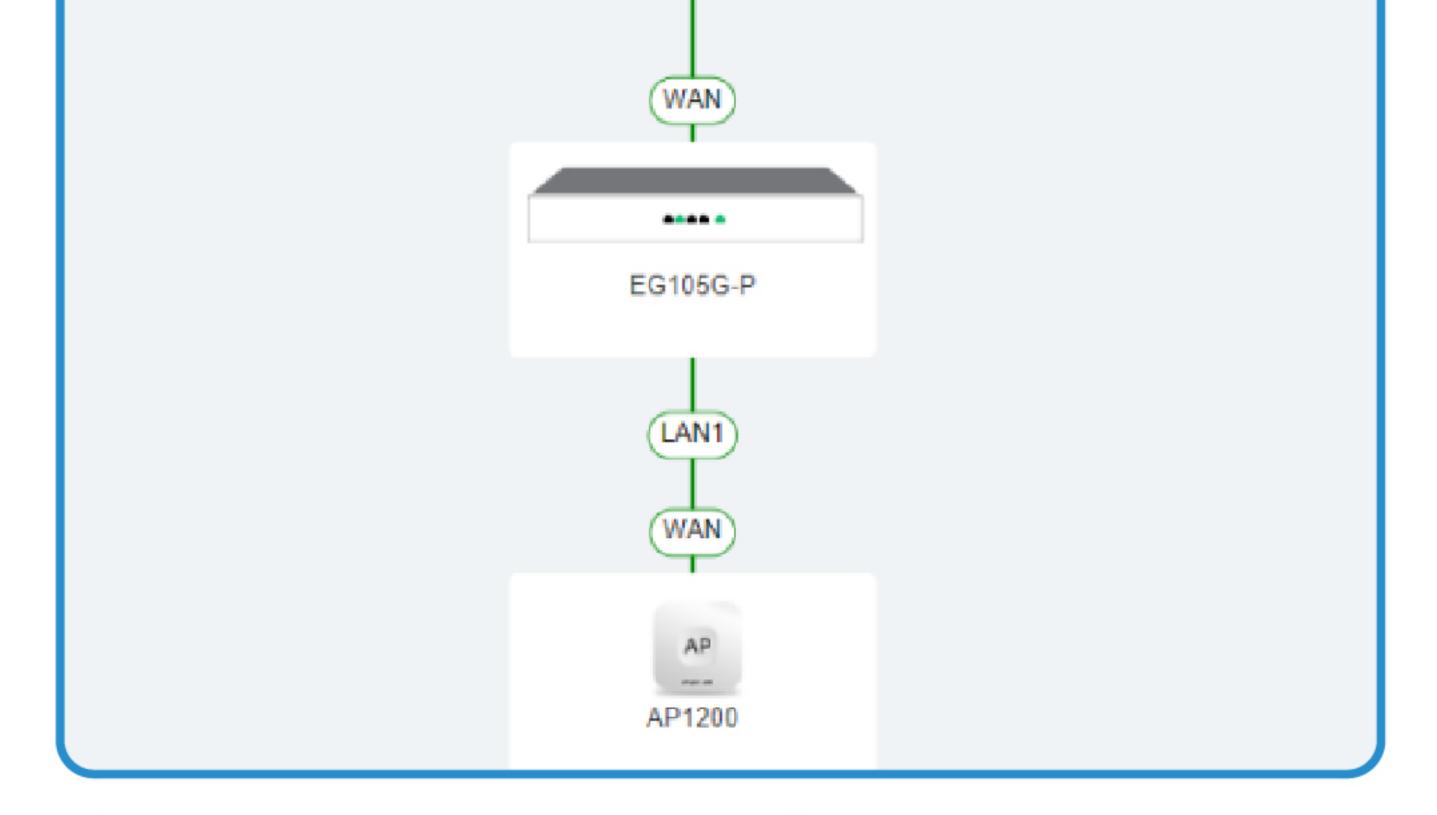
# How to achieve the ideal wireless speed

When measuring the rate of your wireless network, you may find that the result falls short of your expectations or greatly differs from the rate of the wired network. How can you troubleshoot the fault?

# I. Scenario

The measured wireless speed is unsatisfactory and falls short of device performance requirements, resulting in a project acceptance failure.

# **II. Network Topology**



# **III. Troubleshooting Steps**

- Check whether bottlenecks exist in the Internet bandwidth and the device capacity.
- (1) Connect a PC to a modem to test the actual bandwidth.
- (2) Ensure that the cable connecting devices is capable of providing the maximum bandwidth supported by the device, for example, 1000 Mbps.

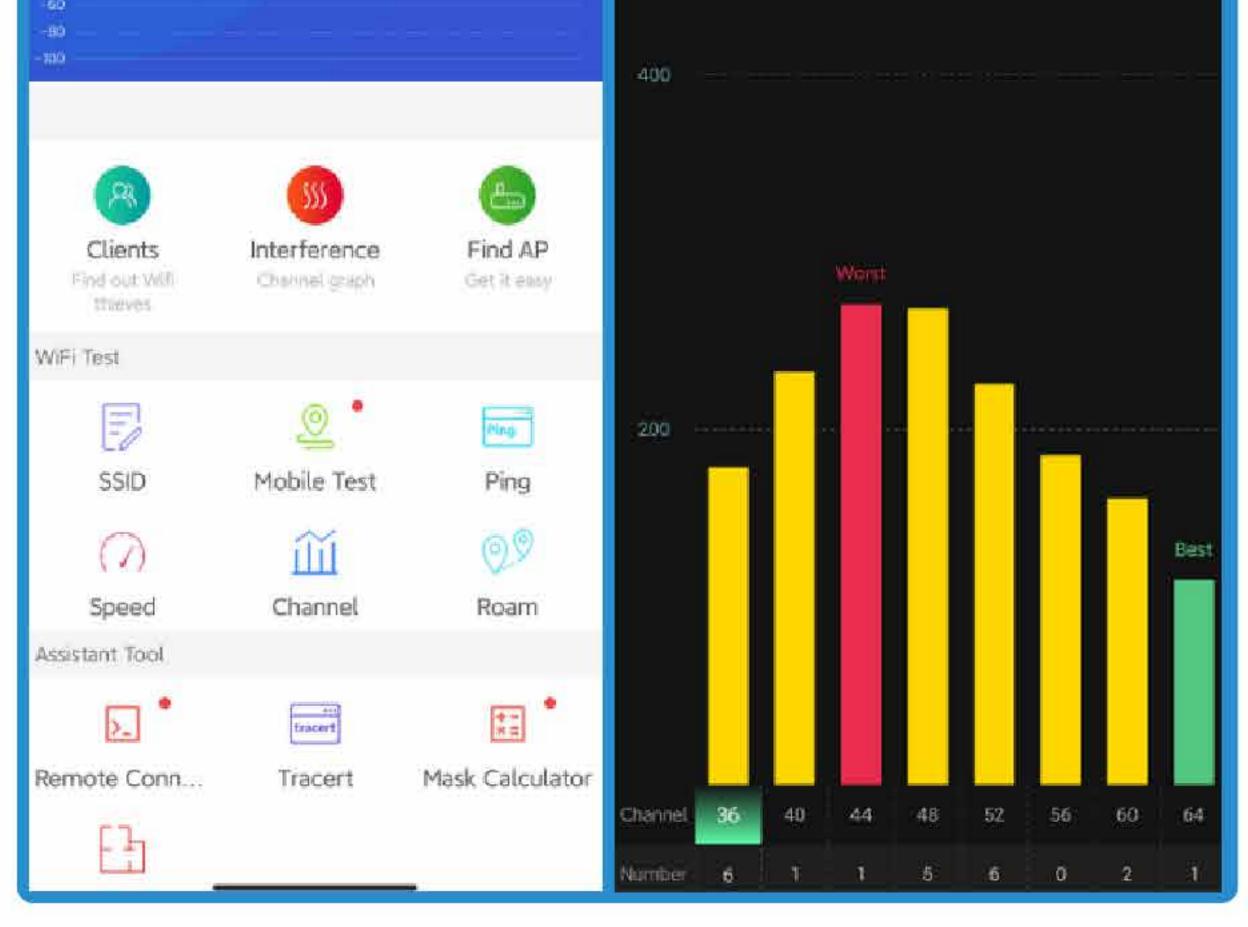


# **III. Troubleshooting Steps**

### Optimize the wireless environment.

- Use Wi-Fi Moho to test the wireless interference as follows:
   <1> Test the signal strength of the current SSID.
  - <2> Click Channel to check the channel interference in the current environment.

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-20 -40							





# **III. Troubleshooting Steps**

(2) Log in to Ruijie Cloud, choose Configuration > Radio Planning. In Radio Settings, adjust the channel width to increase the link speed.

	Radio Settings	
<ul> <li>WIRELESS</li> <li>Basic</li> <li>Layout</li> <li>Radio Planning</li> </ul>	Country/Region RF1(2.4G) Default Channel Width RF2(5G) Default Channel Width	United States(US) ~ Please select ~ Auto
Roaming Bluetooth Load Balancing	RF3(5G) Default Channel Width	20MHz 40MHz

(3) Choose Configuration > Radio Planning. In Manual Planning, manually modify the channel and TX power.

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### Check the link speed of wireless client.

(1) Check the link speed between the client and the AP by using Wi-Fi Moho. Generally, in 2.4 GHz, the maximum link speed is 300 Mbps and the test speed is 100 - 150 Mbps; in 5.8 GHz, the maximum link speed is 866 Mbps and the test speed is 400 - 500 Mbps, depending on the environment.



# **III. Troubleshooting Steps**

(2) You can also connect the PC to the SSID to check the link speed of the wireless network adapter (the rate is related to the performance of the network adapter).

General		
Connection IPv4 Connectivity: IPv6 Connectivity: Media State: SSID: Duration: Speed:	Internet No network access Enabled 00:01:40 1200 Mbps	this is the lin speed associated
Signal Quality: Details Wireless Activity	Properties	with the router.
Sent — Bytes: 63,34	4   Received 4   148,119	
Properties	Diagnose	

(3) Finally, use Speedtest for testing. You are advised to access www.speedtest.cn for to a get a more reliable test result.

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