



eero Support | Common
Troubleshooting Scenarios



Common Troubleshooting Scenarios

This training module will cover our top contact drivers along with troubleshooting steps to resolve these customer pain points.

Categories

- Setup Issues
- Offline eero(s) issues
- Speed Issues
- Connected Device Troubleshooting



Setup Issues

Setup Issues

One of the biggest frustrations with a traditional router has to be the confusing and complex setup process, so at eero we've taken a different approach: make the entire setup experience as quick and easy as possible.

Our app will walk customers through the process, but here is a list of common issues they may encounter during setup.

- Gateway Setup Issues
- Leaf node: Error message "eero not found"
- Leaf node: Error message "Hmm, let's try moving it"



Gateway Setup Issues

If a customer reports any setup problem with the gateway eero, first make sure that they have followed the process below, and preferably walk them through it step-by-step.

Initial Steps

1. Disconnect other devices from modem / MRC and power off the unit
2. Use one ethernet cable to connect an eero to the modem / MRC
3. Power on both the eero and the modem
4. Once both devices are fully booted, open the eero app and begin setup



Gateway Setup Issues

If you run into any [error messages](#), try each of these steps and re-attempt setup.

Troubleshooting Error Messages

1. Power cycle the modem / MRC with the eero connected
 - a. Power off for at least 2 full minutes
 - b. Power on the modem first and make sure it's online prior to plugging in the Gateway eero
2. Hard reset the gateway
 - a. press & hold the reset button until LED blinks red
3. Swap ethernet ports
4. Swap units (if possible)
5. Try setting up behind existing router (if possible)
6. Add unit manually via RNM / Admin
 - a. You will likely need to create a network for the user as well
 - b. Steps to accomplish this are covered on the next slides

Gateway Setup Issues

If the issue requires manual setup of a network, follow the steps below to create the network on behalf on the customer.

How to create a network in RNM

1. Plug in the gateway eero
 - a. Connect the modem to any ethernet port on the gateway eero using an ethernet cable
 - b. Connect power to both the modem and gateway eero
 - c. Make sure the gateway eero's status LED flashes blue before continuing to the next step
2. Add the gateway eero
 - a. This is done by inputting the 16 character eero serial number
 - b. Assign a location by using the drop down menu or entering a custom location
3. Set the customer's SSID and network password
 - a. Please advise the customer to change the password after setup for security purposes
4. Add more eeros if needed and finish network setup

Gateway Setup Issues

If the issue is adding an eero to an existing network, this can be accomplished in RNM via the steps below.

How to add an eero to a network

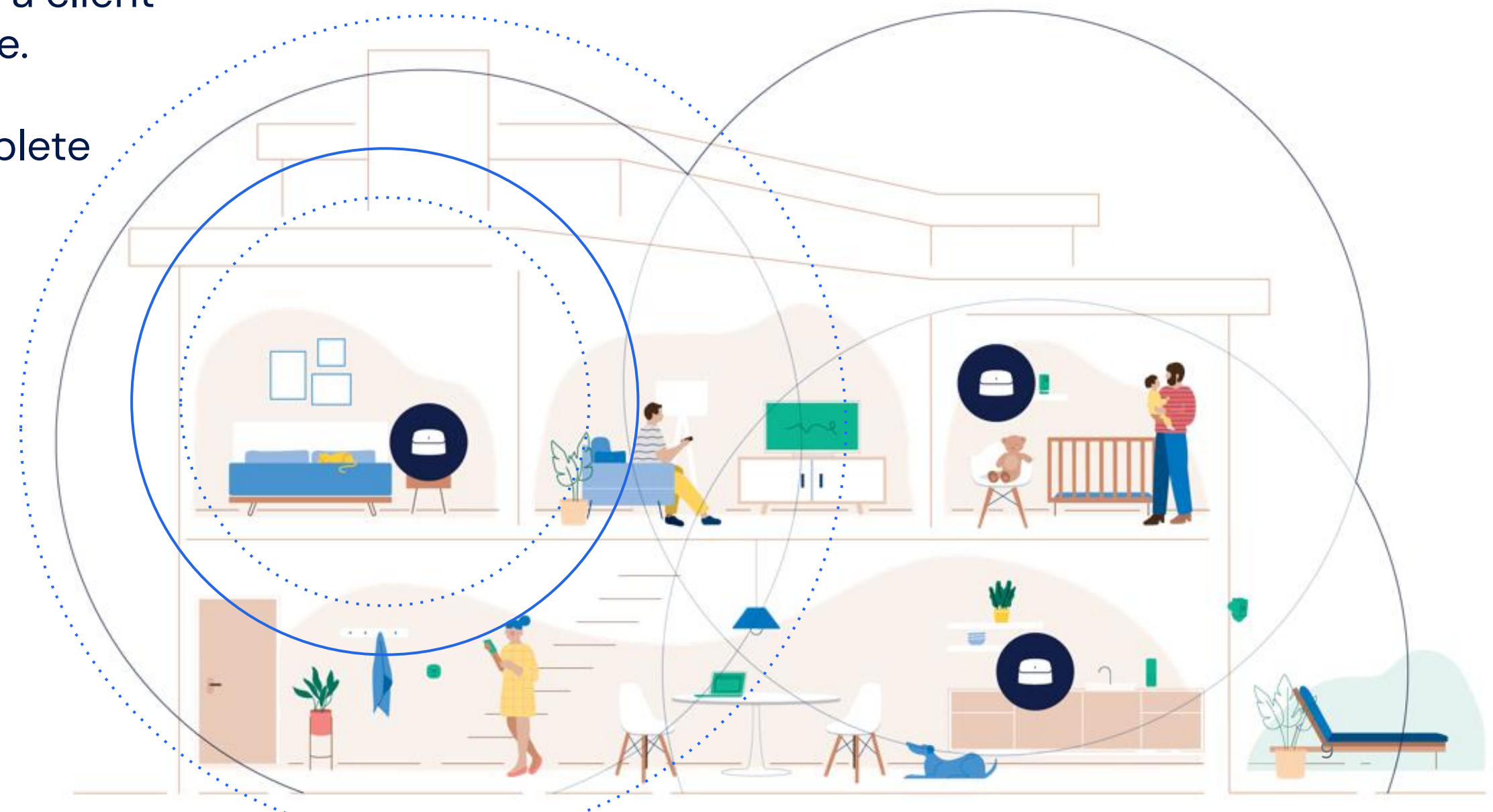
1. Ensure the eero is plugged into power. Ethernet connectivity is not required to add an eero to an existing network.
2. Select “Add” on the network page in RNM
3. Input the serial number of the eero into RNM
4. Select a location or create a custom location

Gateway Setup Issues

If you are still unable to create a network after following the previous troubleshooting steps, please make sure that:

Additional Troubleshooting

1. Ensure the LAN cable between the eero and the modem / MRC isn't frayed, poorly terminated, or has questionable integrity, and that the eero is properly connected to the modem (one ethernet cable to a designated LAN port)
2. Confirm active internet connection at the modem or upstream router – connect a client device like a laptop or desktop to the modem and see if the internet is reachable.
3. Check if the user's ISP requires a Static IP. If so, follow these instructions to complete setup



Leaf Node Issues

The most common issues that arise when setting up leaf nodes are “No eero device found” and “Hmm, let’s try moving it.” These issues are typically attributed to a bluetooth connectivity issue, or placement of the leaf nodes. [This public-facing help center article](#) addresses these issues.

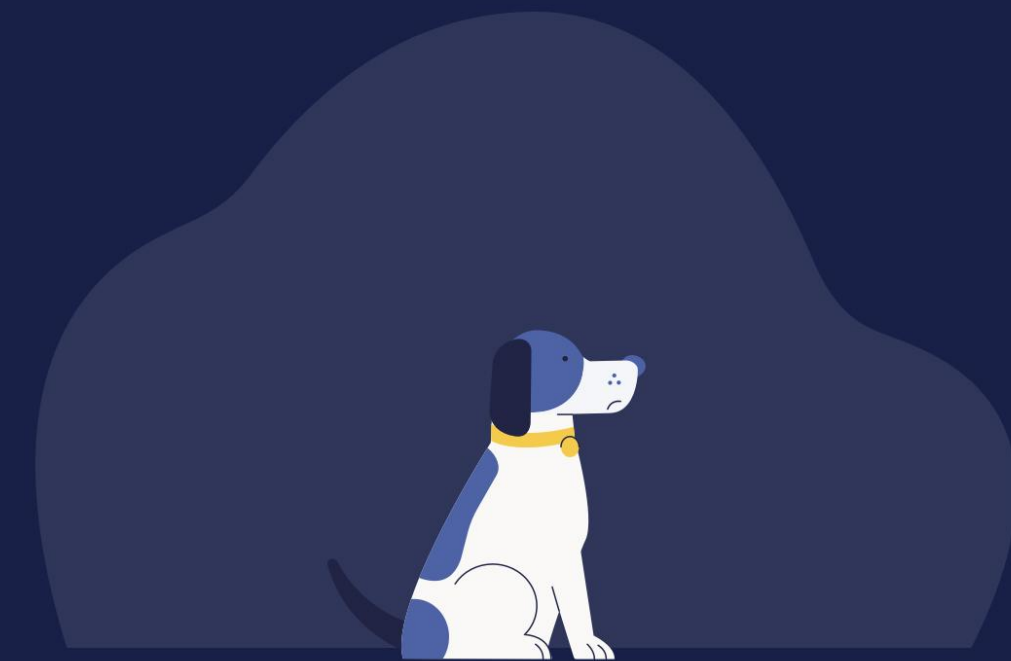
Troubleshooting “No eero device found”

1. Ensure bluetooth is enabled on the smartphone/tablet.
2. Attempt to set up using a different smartphone/tablet.
3. Have the user attempt to add the eero in-app by entering in the serial number
4. Attempt to add the eero manually via RNM.
5. Perform hard reset on eero and try again.
 - a. To perform a hard reset, hold the reset button down for 20 seconds or until the LED is flashing red



No eero device found

We're not detecting an eero device nearby.
Make sure you are near it, and that it's
plugged in and blinking blue.



Set Up Using a Serial Number

Try Again

Leaf Node Issues

This error is often the result of the eero not being able to communicate with the Gateway eero.

Troubleshooting “Hmm, let’s try moving it”

1. Move eero into the same room as the Gateway eero for setup.
 - a. If this step is successful, move the eero to the intended location and check the signal strength
2. Attempt to add the eero manually via RNM.
3. Connect eero via an ethernet cable to the Gateway eero.
 - a. Once connected, attempt to add the eero manually in RNM
4. Hard reset the unit.
 - a. To perform a hard reset, hold the reset button down for 20 seconds or until the LED is flashing red
 - b. Once reset, attempt to add the eero manually via RNM/Admin.



eero Offline Issues

eero Offline Issues

When troubleshooting offline eeros (or networks), make sure to confirm an active internet connection at the modem or upstream router by connecting an end-device like a laptop or desktop to the modem and verifying that the internet is reachable.

- One or more leaf eeros offline
- All eeros offline
- eero Offline (Blinking Blue LED)
- Stability issues on a leaf node

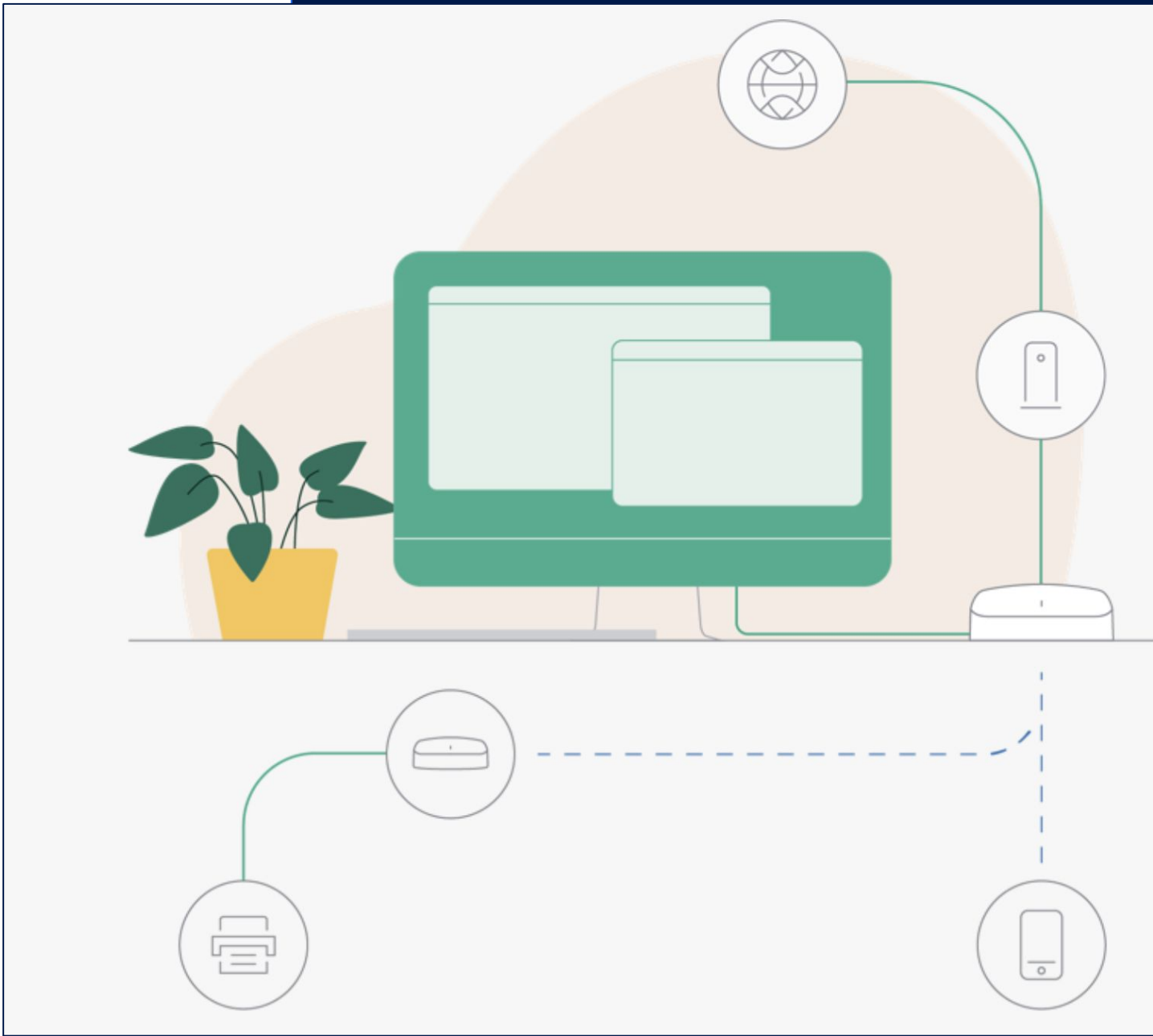
Note: The following steps are for troubleshooting offline eeros / networks. If the eero functions properly after any step, the issue has been resolved and no further actions are needed.



eero LED Status Lights

On the front of the eero, there is a LED status light. When everything is running correctly, the eero's light will be solid white (unless you have turned it off). If your LED is in a different state, including a different color or is blinking/flashing, please refer to the list below:

LED Color	What it Means
 No Light	eero doesn't have power
 Blinking White	eero software starting up/connecting to the Internet
 Blinking Blue	Broadcasting Bluetooth
 Solid Blue	The eero app is connected to your eero and setting it up
 Blinking Green	Multiple eeros detected
 Blinking Yellow	Unapproved USB-C power source used
 Solid White	eero connected to the Internet
 Solid Red	eero is not connected to the Internet



Network Offline

If all eeros are offline, it's important to ensure that the network has a working upstream WAN connection.

Troubleshooting Steps

1. Power cycle the modem and the Gateway
 - a. Pro tip: Turn off power to both the modem and Gateway eero while keeping them connected via ethernet. After two full minutes, power on the modem first, and once it's online, power on the Gateway eero.
2. Test to see if the network comes online.
 - a. If not, check the customer's topology. Are there any routers or switches upstream of the eero? If so, try bypassing them if possible.
3. Soft reset the Gateway eero by holding the reset button for 7 seconds, or until the LED flashes yellow.
4. Swap a leaf node eero with the Gateway eero.
 - a. If this is successful, make sure all eeros come online to rule out a faulty eero.
5. Hard reset the Gateway eero by holding the reset button for 20 seconds, or until the LED flashes red.
 - a. **IMPORTANT:** This should be used as a final troubleshooting step. Hard resetting the gateway will delete the customers network and requires it to be re-setup.



One or more leaf eeros offline

If the customer reports an issue with one or more leaf nodes offline, you will see an error in RNM on the Network details page. The following troubleshooting steps should be taken to address the issue.

Troubleshooting Steps

1. Power cycle the leaf eero(s).
2. Place leaf eero(s) in the same room as the gateway eero and power on.
 - a. Wait 2–3 minutes and check if eero comes online
3. Connect leaf eero(s) to the gateway eero via Ethernet.
 - a. Wait 2–3 minutes and check if eero comes online
4. Swap leaf eero(s) with gateway eero and power cycle the modem.
 - a. Please note to customer that their WiFi will go down while performing this step
5. Hard reset leaf eero(s), remove in RNM if necessary, and re-add eero(s) to network again through RNM/Admin.
 - a. You can perform a hard reset by holding the reset button down for 20 seconds, or until the LED blinks red.
 - b. Do not hard reset the Gateway eero. If a hard reset is performed on the Gateway, the network will be deleted and required re-setup.

Details

Network Name

Wiffy Rooter

Connection status

! Check eeros

Modem Compatibility Status

OK

UPnP Status

Enabled

Timezone

America/Chicago

Geo IP

United States: Austin, TX

WAN Speed from Last Test

↓ 484.3 Mbps down

↑ 23.98 Mbps up

2020-11-24, 4:54am

Run speed test • Past speed tests

Troubleshooting

5GHz Active Temporarily disable 5GHz

Leaf Node Offline (Blinking Blue)

If a leaf node is offline and the status light is blinking blue, follow the steps below to re-establish connection.

Troubleshooting Steps

1. Check to see if the eero has already been added to the network. If so, you will see the eero on the network details page in RNM. It will show offline as indicated in the picture to the right.
 - a. If this eero has not been added to the network, walk the customer through adding it to their network or add it on their behalf in RNM.
2. Power cycle the eero.
3. Look up the eero by serial number in RNM and check the History. If this node has been deactivated, you can re-add it manually via RNM.
 - a. If yes – Proceed with adding it back
 - b. If no – Check to see if the eero has an internet connection by moving it closer to an active eero

 Master Bedroom

Edit ▾

Offline

IPs (2) [Show all](#)

192.168.7.238

Serial

J9BN0DXTXAE5ZJHX

Product model

eero

MAC Address

48:dd:0c:7c:af:60

Initial setup date

2020-11-24, 6:38pm

Firmware version

v6.0.4-1

Latest firmware version

Yes

LED

Off

Organization

Direct Sale

Ethernet ports

Left side (Port 0)

Right side (Port 1)

● Not plugged in

● Not plugged in

Leaf Node Stability Issues

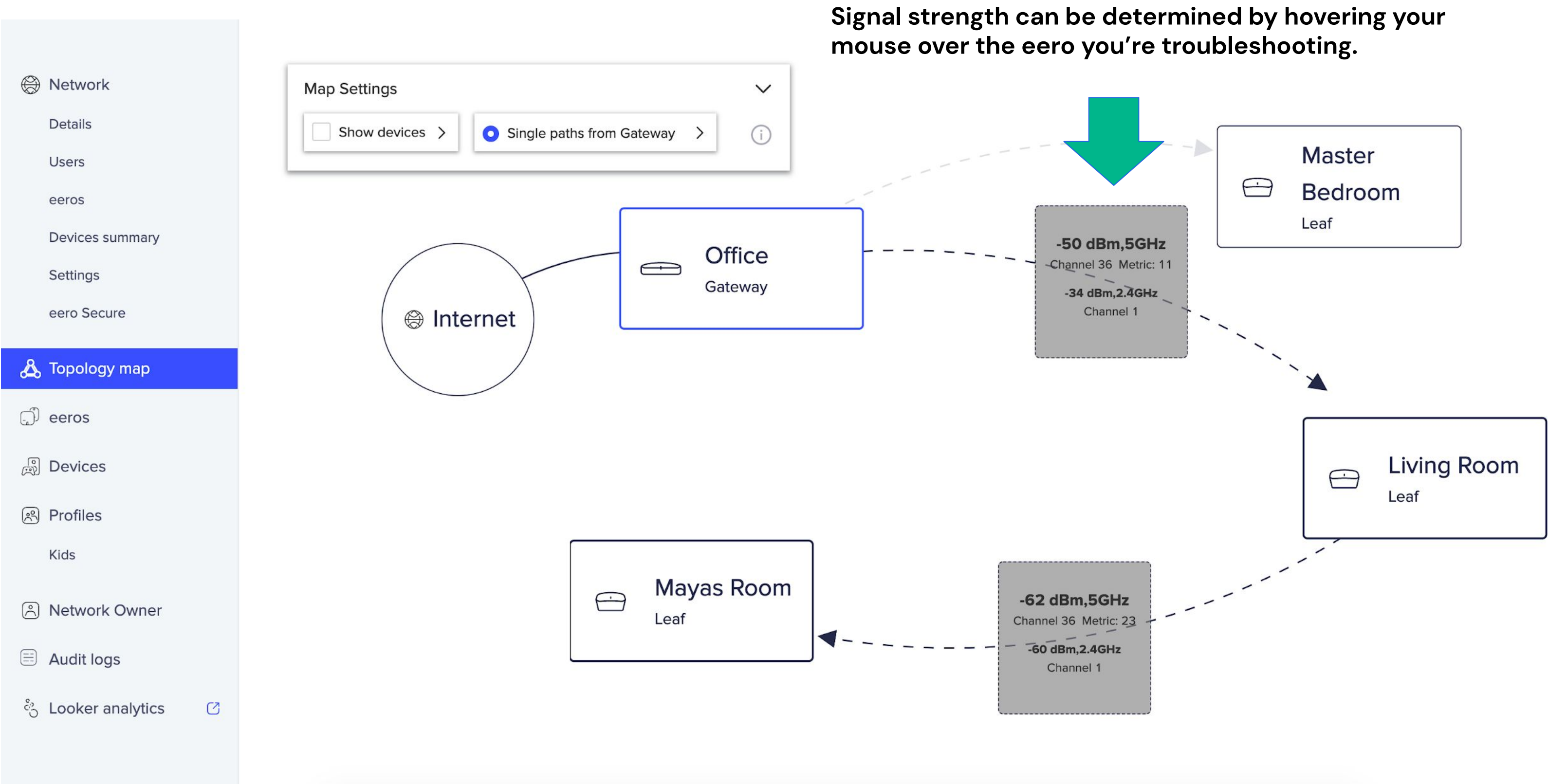
If a leaf node is falling offline intermittently, it's often due to placement or environmental factors.

Troubleshooting Steps

1. Confirm that the node is within the recommended distance (12–13 meters, 40–45 ft. max)
2. Gather topology information
 - a. Every network is different, therefore we cannot make any assumptions about what type of setup a given customer has. We will need to know how everything is connected in the customer's network.
3. Check the environment of the eero (is it out in the open; flat surface; are there any appliances nearby, etc.)
 - a. If there are nearby electronics that may be causing interference, have the customer move their eero or power off electronics close by.
4. Soft reset the unit
 - a. Hold the reset button for 7 seconds or until the LED flashes yellow
5. Monitor the performance and follow-up if needed.

Leaf Node Stability Issues Continued

RNM features a Topology Map to use when troubleshooting. This map shows connection quality of the eeros and connected devices, and is very useful when isolating issues with an eero or client device.



Leaf Node Stability Issues Continued

Signal strengths between the minimum and maximum range will impact the performance of the network. While many factors can come into play when gauging the performance of a wireless network there are some signal values recommended for certain activities. These are approximate values and are provided as general guidance.

Signal	Performance	Use
-45 to -57 dBms	Excellent	Device should potentially get the best connection possible which allows for HD streaming, stable VoIP and speedy downloads of large files.
-58 to -75 dBms	Good	Device may see a degradation in speed but should still be able to utilize most of their services with little problems.
-76 to -85 dBms	Fair	Definite step downs in connection. Packets may get lost and the connection could be unstable. Streaming and VoIP may become unreliable.
-86 to -95 dBms	Poor	At this level the connection will be minimal and may experience drop offs. If it is connected, streaming will buffer often and VoIP will be very poor.

Speed Issues

Speed Issues

It is important to assume that all speed concerns are an actual issue until proven otherwise. We want to empower the customer by providing them with information, rather than dismissing their concerns. Troubleshooting any kind of speed issues can be a lengthy process. Be sure to perform a speedtest after each of the steps and keep the customer informed on the reasoning behind the steps. In this section we cover the following topics.

- Slow Speeds on a connected device
- Slow speeds on the network
- Troubleshooting upstream connection

Note: The following steps are for troubleshooting performance issues on a device or network level. If the network or device is performant properly after any step, the issue has been resolved and no further actions are needed.

**Stanford Institute for Economic Policy Research*

***US Bureau of Labor Statistics*



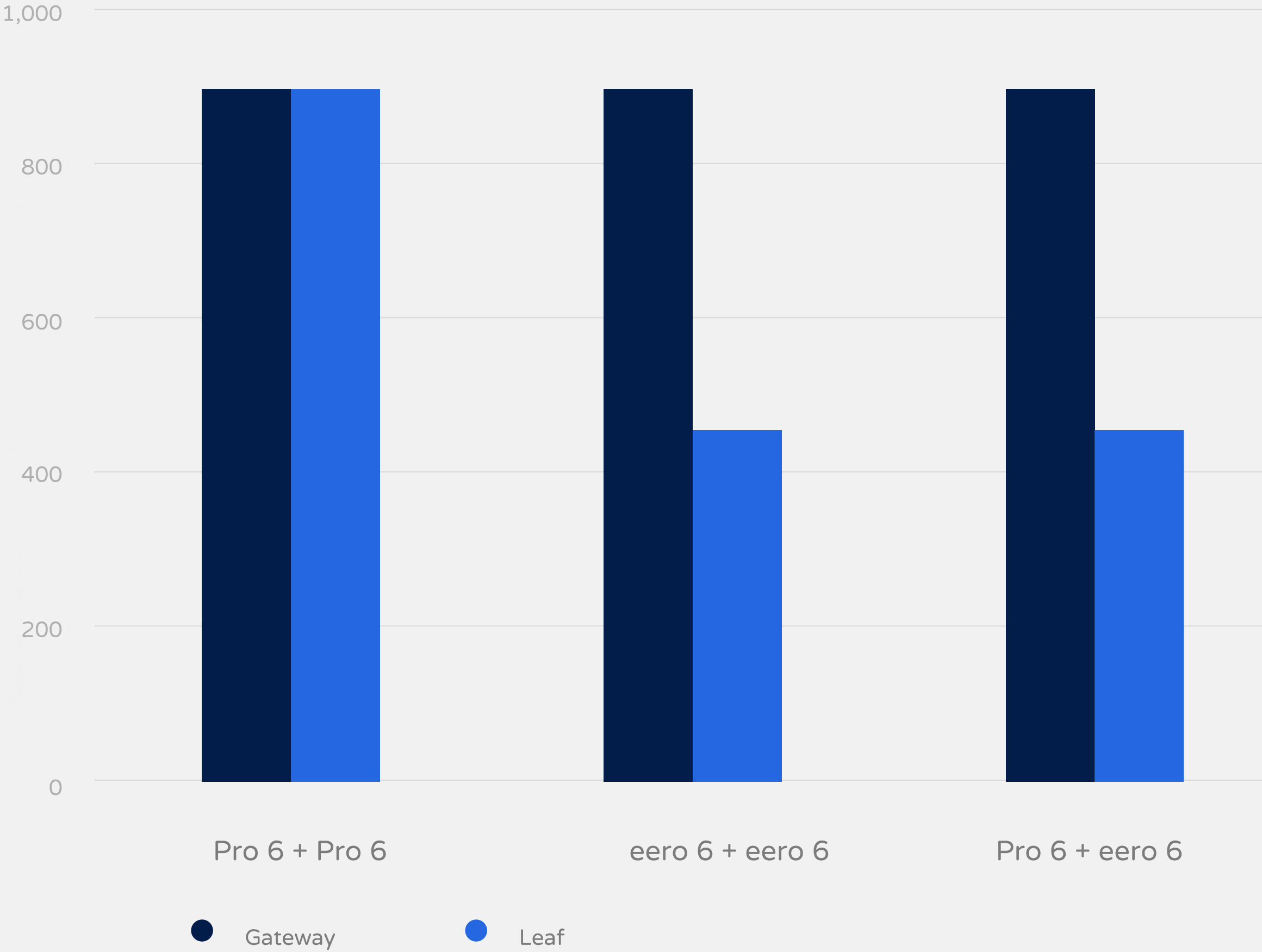
Wireless speed comparison.

Typical wireless speeds supported by eero to client devices by product type.



Test results in real world conditions with an MCS of 11

eero Pro 6 and eero 6



Slow speeds on the network

When troubleshooting slow speeds, it's important to look at things on a network level as you work to isolate the issue. This involves testing performance on the modem, gateway eero and additional leaf nodes. You can run a speed test and view past speed tests in RNM as shown in the video.

Troubleshooting Steps

1. Test the speeds at the Gateway eero
 - a. Confirm that you are connected to it and perform a speedtest
2. Wire a device (Laptop, computer) to the Gateway and repeat step 1.
3. Check the environment of the unit
 - a. Are there any other active WiFi networks; is it out in the open; flat surface; are there any appliances nearby, etc.
4. Soft reset the Gateway eero
 - a. Hold the reset button for 7 seconds or until the LED flashes yellow. Test again.
5. Swap the Gateway unit with another one (if possible).
 - a. Advise the customer that the network will go offline as you perform this step. Test speeds once this is complete.
6. If you have confirmed that the speeds at the Gateway are reliable and as expected, repeat the steps above with a Leaf node of choice
7. If the issues persist, troubleshooting the upstream connection in the following slides

Slow speed on a connected device

Before you begin troubleshooting connected device performance, make sure to check the WAN speeds of the network. If it's lower than the expected see, troubleshoot slow speeds on the network level in the previous slide.

Troubleshooting Steps

1. Confirm that the device is connecting to the closest eero while testing.
 - a. See the relevant help center article [here](#)
 - b. You can also view this in RNM on the Topology Viewer page
2. Ensure "Optimize for Conferencing and Gaming" (eero Labs) is disabled before performing speed tests.
3. Use at least two 3rd party speed test servers (fast.com and speedtest.net are good options)
4. Test with at least two different devices.
 - a. If you've isolated the issue to one device, you may need to refer the customer to that device manufacturer
5. Try to wire the device to the Gateway eero (explain Theoretical Wi-Fi speeds if needed).
 - a. If the device obtains proper speed wired directly into an eero, the device could be experiencing issue with its WiFi card. Verify again that other devices are getting expected speeds and refer to manufacturer of the device.

Slow speed on a connected device continued

RNM includes tools to help you troubleshoot connected device connectivity and performance. The Topology map and Devices tabs will let you check connectivity status, signal strength, Rx Bitrate and more.

Network

Details

Users

eeros

Devices summary

Settings

eero Secure

Topology map

eeros

Devices

Profiles

Kids

Network Owner

Audit logs

iPhone

Details

Nickname	Device Type	Manufacturer	MAC Address
None	Generic	Not available	d2:80:f5:bd:28:a0
Hostname	IP Addresses	Security	
iPhone	192.168.7.251 fe80:0:0:0:1c26:7db9:8d3f:8413	Basic (WPA2)	

Connection details

Connection

eero

Master Bedroom

Connection

Wireless (5 GHz)

Activity

Current activity

↓ 0.04 Mbps
↑ 0 Mbps

Last active

2020-11-25, 12:24pm

First active

2020-11-25, 8:50am

Signal strength

Score

Rx bitrate

6.0 MBit/s

Signal

-71 dBm

Profile

none

Troubleshooting the Upstream connection

If the issue is persistent on both the network and connected device level, it's time to check the upstream WAN connection.

Troubleshooting Steps

1. Remove the Gateway eero from the ethernet connection, and test the upstream connection directly by hardwiring a device to the upstream connection (Modem, router, ONT, etc) and running a speedtest.
2. Confirm that the Ethernet cable supports the expected speeds
 - a. CAT 5 – up to 100 mbps.
 - b. CAT 5e or above – completely support Gigabit internet speeds.
3. Swap ethernet cords – if the cable looks damaged/faulty.
4. Swap ethernet ports – it is possible that the ethernet port on the upstream device is faulty.
5. Refer to the ISP – we have proven that the issue is not eero related.

Connected Device Troubleshooting

Troubleshooting Connected Devices

Troubleshooting connected devices can vary greatly depending on the client device. The following slides cover the common steps that apply to the largest number of devices you will see contacts for.

Note: Turning device WiFi off for ~10 seconds and turning it back on can resolve many device-specific issues with intermittent connectivity.

- Device not connecting to the network
- Device dropping from the network / stability issues
- Device connected, but no internet
- Smart home devices not accessible from outside the network

Note: The following steps are for troubleshooting connectivity issues on a device or network level. If the network or device is performing properly after any step, the issue has been resolved and no further actions are needed.



Device not connecting to the network

If a device is unable to connect, or has lost connection with your network, follow the troubleshooting flow below.

Troubleshooting Steps

1. Gather information about the device and the error message they are seeing
 - a. Google is helpful to find device-specific info and troubleshooting steps
2. Reset network settings on the device
 - a. This can vary depending on the device. Google is advised to find steps
3. Disable WPA3
 - a. In the app navigate to Discover > eero Labs > Toggle off WPA3
4. Try connecting the device while 5GHz is disabled
 - a. App -> Settings -> Troubleshooting -> My device won't connect
 - b. If it is an older device not compatible with WiFi 6, try enabling [Legacy Mode](#)
 - i. Note: Legacy Mode is only available on eero 6 and eero 6 Pro. If a device is not compatible with WiFi 6, it will not see the network name in the list of available WiFi networks.
5. Enable the [Guest Network](#) and attempt to connect.
 - a. If it does, adjust the IP range of the network as needed (Reach out for assistance if needed)
6. Contact Manufacturer if other devices can connect and you've exhausted all troubleshooting steps

Device dropping from network

If a device is dropping from a network, it's important to understand the environment that the device is being used in. Follow the steps below to isolate and diagnose the issue.

Troubleshooting Steps

1. Gather information on how the device is connected and ensure that the environment is good
 - a. How far away is the customer from the closest eero?
 - b. Are there a lot of electronic devices causing possible interference?
 - c. Is the issue with one device or multiple devices?(Set an IP reservation (if wireless) – App → Settings → Advanced → Reservations and Port forwarding.
2. Toggle WiFi On / Off
3. Forget the network on the connected device and reconnect
4. Set an IP reservation (if wireless)
 - a. App > Settings > Advanced > Reservations and Port forwarding
5. Check the ethernet cable and ethernet ports (if wired).
 - a. Attempt connecting the device to another ethernet port on the eero
 - b. If a switch is present, try hardwiring directly to the eero
6. If the devices connected, monitor performance and follow-up as needed. If the device is unable to connect or stay connected, contact manufacturer

Device connected but no internet connection

Troubleshooting Steps

1. Reset network settings on the device
2. Check if the device is Paused or Blocked from the eero app.
 - a. Paused devices will show in the app on Home > Profiles > Devices Paused
 - b. Blocked will show on Home > Scroll to the bottom > Blocked
3. Change the DNS of the network
 - a. Settings > Advanced > DNS.
 - i. We often recommend Google DNS
 1. IPv4 Primary: 8.8.8.8
 2. IPv4 Secondary: 8.8.4.4
4. Soft reset Gateway eero by holding the reset button for 7 seconds or until the LED flashes yellow
5. Contact Manufacturer
 - a. Set a follow-up with the customer

Thanks!