

FAQ:

### **Why my clients don't roam/connect to the nearest Deco node?**

Generally, your client device will connect to the nearest Deco node. However, there are still some clients sticking on a Deco node further away, which may be decided by the roaming mechanism of the client device itself.

A client device decides whether to roam or not depends on several factors.

#### **1. A shorter distance does not mean a stronger signal.**

Obstacles and wireless interference may affect the signal quality of the Deco units. You can get a better understand of the signal quality of surrounding APs via Wi-Fi analysis software such as Wi-Fi Analyzer.

#### **2. It doesn't reach the roaming threshold.**

For AP steering among different Deco nodes, only when the signal strength of the current AP (Deco) becomes lower than a threshold and the signal strength of another AP is good enough, Deco will recommend clients to roam via 802.11k/v standards.

#### **3. The roaming behavior can vary depending on clients.**

Deco can only provide a roaming suggestion. Whether to roam or not depends on the client itself as it has its own roaming threshold as well, which is decided by its manufacturer. In this case, clients may refuse the roaming suggestion or respond slowly causing the delay of roaming. There are also some clients that may decide to roam even though Deco doesn't recommend roaming.

If you want to stop your clients especially for stationary devices from roaming, you can try to disable the Mesh Technology option for these clients. Deco doesn't support the feature to fix clients to specific Deco at present. But we have planned to add this function in future updates. Please pay attention to our firmware updates.

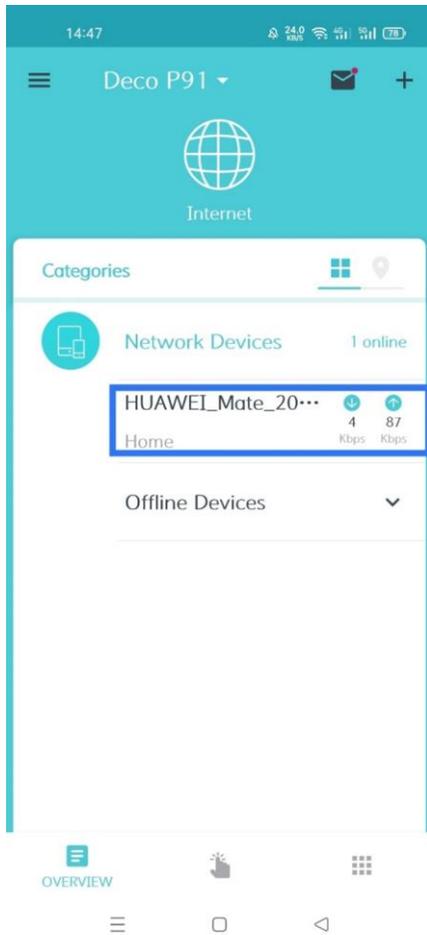
If your client doesn't roam to the nearest Deco node, just take it easy, it still has a good connection in most cases. If you find the connection is too weak, please try to power cycle the client and it will usually select the nearest Deco node to connect.

**Get to know more details about [the roaming mechanism of the Deco system](#).**

How do I know which Deco my client is connected to?  
Here are two methods for your reference:

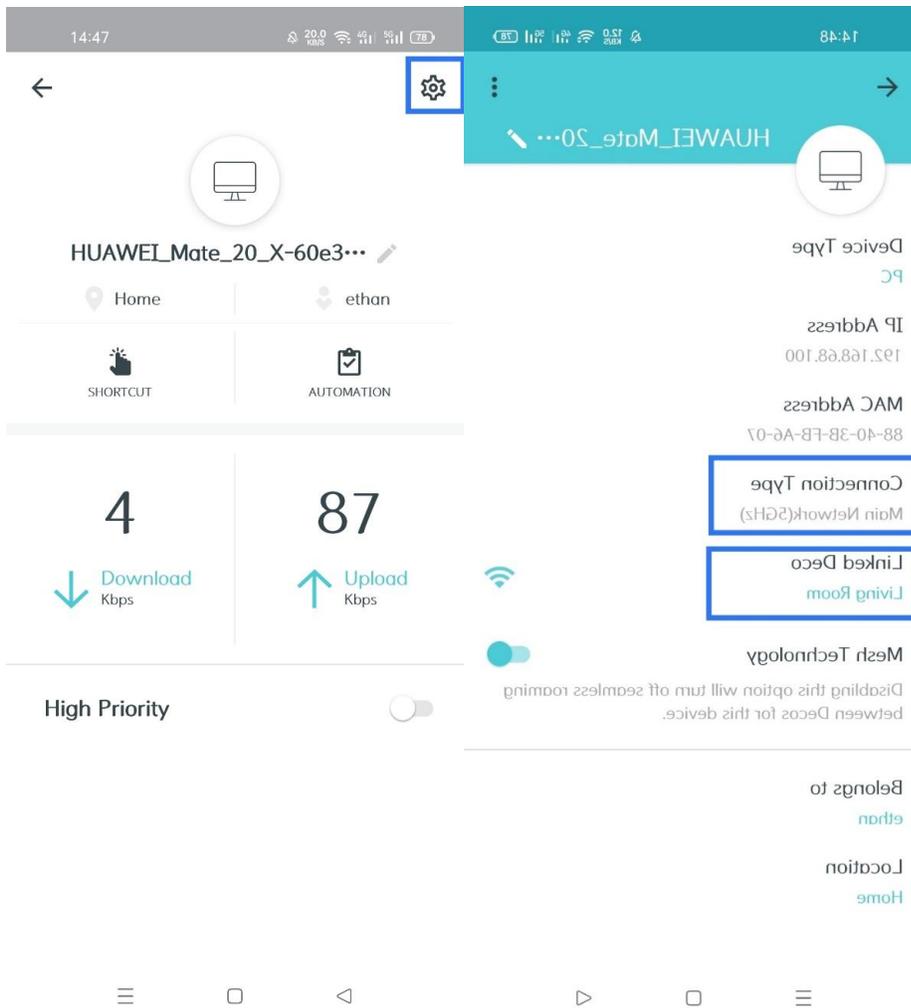
#### **Method 1:**

**Step 1:** Launch the Deco APP and tap **Overview>>Network Devices>>the target client (you want to learn about)** to open its **details page**.



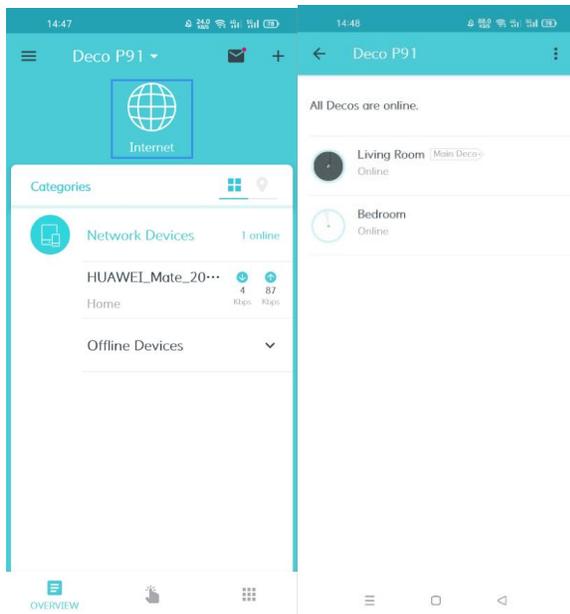
**Step 2:** Then please click on the **Settings button** on the upper right to see the network information you can know and want to know.

You can see the **IP Address**, **MAC Address**, **Connection type** (which band the client connected) and **Link Deco**.



## Method 2:

**Step 1:** Launch the Deco APP and tap **Overview**>>**Global Symbol**>>click on one of the Deco you have.



**Step 2:** Then you will see this Deco's network information, such as **IP Address**, **MAC Address**, **Main Deco** or **Satellite Deco**, **Deco's Name** and the **Connected Clients**, etc.



To get to know more details of each function and configuration please go to [Download Center](#) to download the manual of your product.

What can I do if my wireless devices cannot connect to Deco?  
**How to connect a device to my Deco?**

Deco supports both wired and wireless connections.

For wireless devices, you only need to search Deco's Wi-Fi name on the client and connect with the Wi-Fi password.

Besides, each Deco provides two Ethernet ports on the back for wired devices such as PC, printers, TVs, etc. You can also connect a switch to the Ethernet port to expand the wired connections.

**Note:** Deco M3W does not have an Ethernet port.

### **What can I do if my wireless devices cannot connect to Deco?**

If you fail to connect your device to the Deco, the below article will provide you some suggestions.

#### **On the Deco:**

1. Confirm you are connecting to the correct Wi-Fi network and enter the correct password.

If you're not sure, please launch the Deco app, go to the More -> Wi-Fi page to check your wireless password and Wi-Fi name.

2. Refer to the [link](#) to check whether the device is on the blacklist. If yes, remove it from the blacklist.

3. Turn off the Fast Roaming feature.

Some devices may not be compatible with Fast Roaming thus fail to connect to the Wi-Fi network. In this case, it's suggested to launch the Deco app and tap **More** -> **Advanced**. Find and turn off the **Fast Roaming** feature.

4. Turn off the 5G Wi-Fi network temporarily.

Some smart devices only support 2.4G Wi-Fi and need to be configured with a phone, and they require the phone to be on the same Wi-Fi band during configuration. In this case, turn off the 5G Wi-Fi network temporarily when setting up the smart device will solve the Wi-Fi connection issue.

You can launch the Deco app, tap **More** -> **Wi-Fi**, and then turn off the 5G Wi-Fi network.

5. Connect your device to the guest network for a try.

6. Change the wireless security type on the Deco app. On the Deco app, you can tap More>Wi-Fi>tap SSID>click on Security to change the wireless security type.

7. Ensure there are no special characters in the SSID and wireless password, such as apostrophe

#### **On the device:**

1. Ensure the device doesn't have a static IP address.

2. Make sure the device receives a very good signal from Deco.

3. Power cycle your wireless device and Deco.

4. Update the driver of the wireless adapter on this device.

5. If the issue still exists, it's suggested to contact the device's tech support to get help.

## How to Boost Your Wi-Fi Signal?

What if the Wi-Fi signal coverage is not good because of the Wi-Fi dead zone? Below is the comparison of Range Extenders, Powerline Adapters, and Mesh devices, etc, you may choose an appropriate solution based on your own requirements.

### Range Extender (RE)

Wi-Fi Range Extenders boost the existing Wi-Fi in your home by receiving the wireless signals from your router and repeating them with powerful amplifiers and antennas, extending your coverage by up to twice the range. Just place the range extender about halfway between your router and the Wi-Fi dead zone. The extender will capture and repeat the Wi-Fi signal from your router to the surrounding areas to expand your wireless network coverage. Your devices can connect to the network either through your router or extender as you move around your house. So sudden signal drops or Wi-Fi dead zones become a thing of the past.

Note: Like wireless routers, range extenders also suffer from interference from obstacles such as concrete walls, metal objects, and microwaves. To avoid such obstacles for the best wireless performance. All TP-Link range extenders have a Signal LED to indicate the signal strength a range extender gets from the main router, which can help you find the best location for your extender.



### Power line Adapter (PLC)

Powerline networking solutions transmit data and extend your home network using existing electrical wiring. Eliminating the need for expensive and complicated Ethernet cables. Thick walls and similar obstacles aren't an issue the way they might be with a range extender.

Note: Both powerline adapters will need to be on the same electrical circuit. If your home is wired on multiple circuits, you'll need to check that the section of your home with the router and the section you want to add coverage to are on the same circuit.



### Mesh

If you still encounter Wi-Fi dead-zones when walking around your home, you can take TP-Link's whole-home mesh Wi-Fi solutions into consideration. Mesh Wi-Fi network, multiple network nodes work together to form a single, unified network that shares the same Wi-Fi settings. To know more about it, refer to <https://community.tp-link.com/en/home/stories/detail/407>

TP-Link currently provides two mesh Wi-Fi solutions:

- **Deco: Whole new mesh ecosystem**

Setting up a whole new Wi-Fi system is a good choice if you want to have a new and high-quality system. For more details, please refer to <https://www.tp-link.com/support/faq/1427/>

When Deco works with the existing router, here are two typical connection structures.

Topology 1:



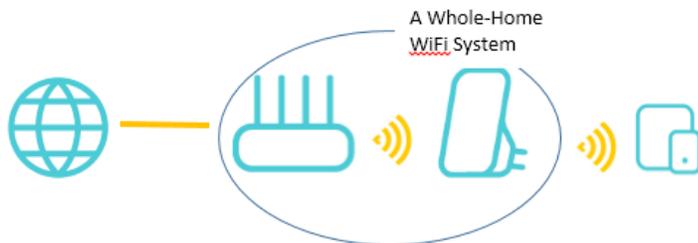
Topology 2---Ethernet backhaul, please refer to <https://www.tp-link.com/support/faq/1794/>



- **One Mesh™:** Cost-effective mesh network with existing TP-Link devices

One Mesh network can provide stability, good performance network for you. If you already have a One Mesh router like Archer A7, you can just add a repeater to build a Whole-Home WiFi System.

To know more about an OneMesh™ network, refer [here](#).



### How to improve the Wi-Fi range of Deco?

The Wi-Fi range of the Deco will be affected by wireless interference, physical impediments, and location of the Deco. To improve the Wi-Fi range, please pay attention to the following tips.

1. Finding a place for your Deco that's higher up (e.g., bookcase, shelf, upstairs), which will provide better coverage.
2. Move your Deco off the floor and away from walls and metal objects (such as metal file cabinets). Metal, walls, and floors will interfere with the wireless signals. The closer your Deco is to these obstructions, the greater the interference, and the weaker the connection.
3. Move your Deco away from electric devices such as Bluetooth, USB 3.0 devices, microwave, etc, which will radiate much noise on the 2.4GHz band and affect the Wi-Fi range of Deco.