Project Name: Complete a Router installation in a small office.

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Introduction:

This document provides a guide for setting up a router in a small office environment. The main objective is to create a dependable and secure network for the office's devices.
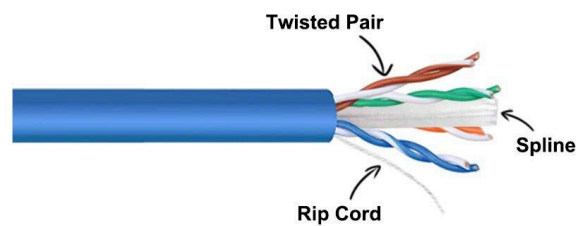
Required Hardware and Software

Hardware

➢ **Router**: A router is a networking device that directs data packets between different computer networks, including large-scale networks like the global Internet.

➢ **ONUs** (Optical Network Units): An ONU (Optical Network Unit) is a user-side device in the GEPON (Gigabit Passive Optical Network) system, which uses PON technology to receive services from an OLT (Optical Line Terminal). Together with the OLT, the ONU enables broadband services for users, such as internet access, VoIP, HDTV, and other digital services.
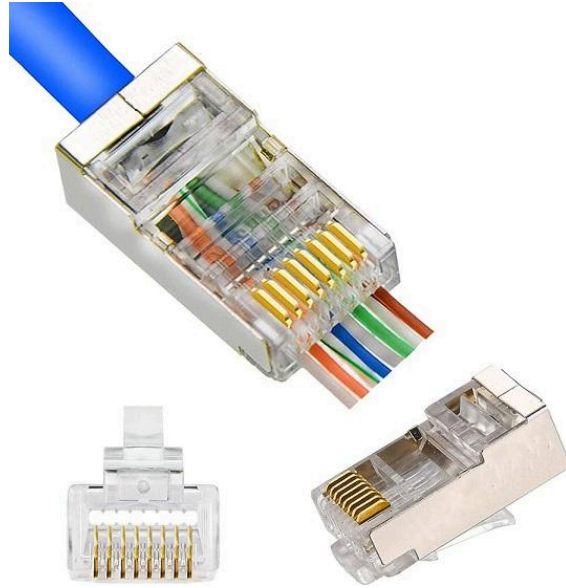
➢ **Ethernet Cable:** Ethernet is a way of connecting computers and other network devices in a physical space. This is often referred to as a local area network or LAN. The idea of an Ethernet network is that computers and other devices can share files, information and data with each other efficiently.
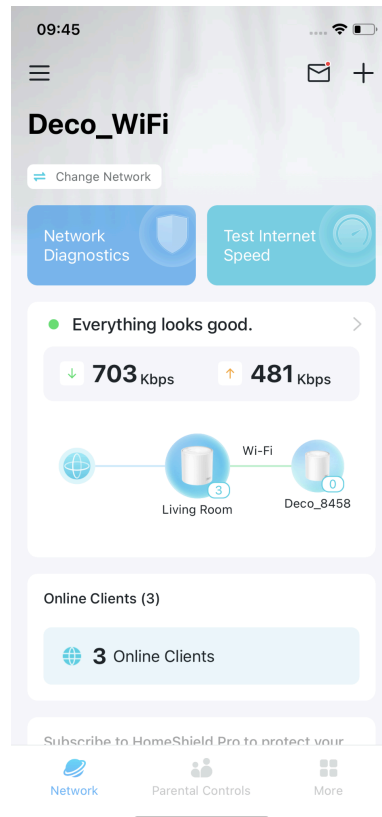

Ethernet Cable

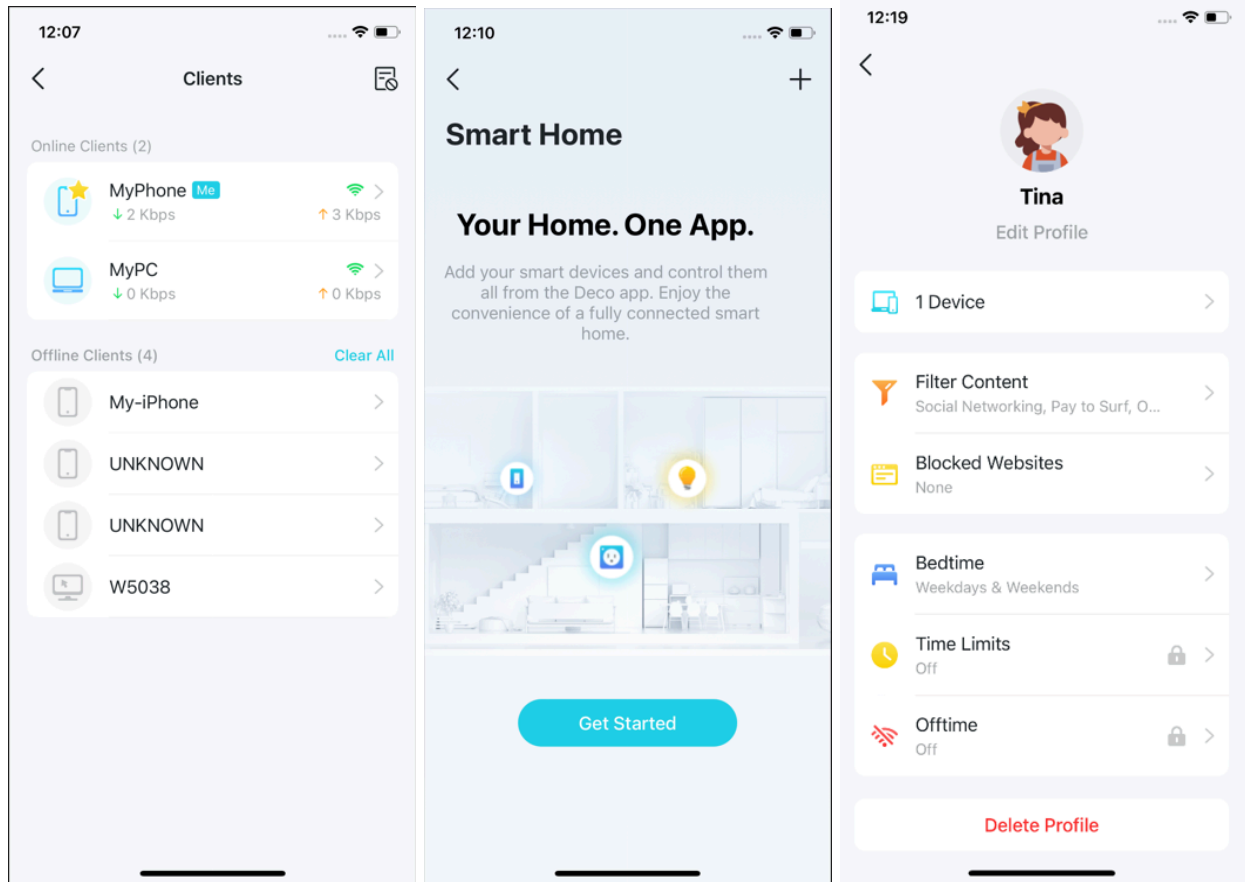➢ **RJ45 Connector:** Use to terminate Ethernet cables.

Software:

DECO Software and its function: The Deco app allows you to quickly and easily install and manage your Deco Whole Home Mesh Wi-Fi System. You can monitor your home Wi-Fi from anywhere, and make changes right from your smartphone or tablet.
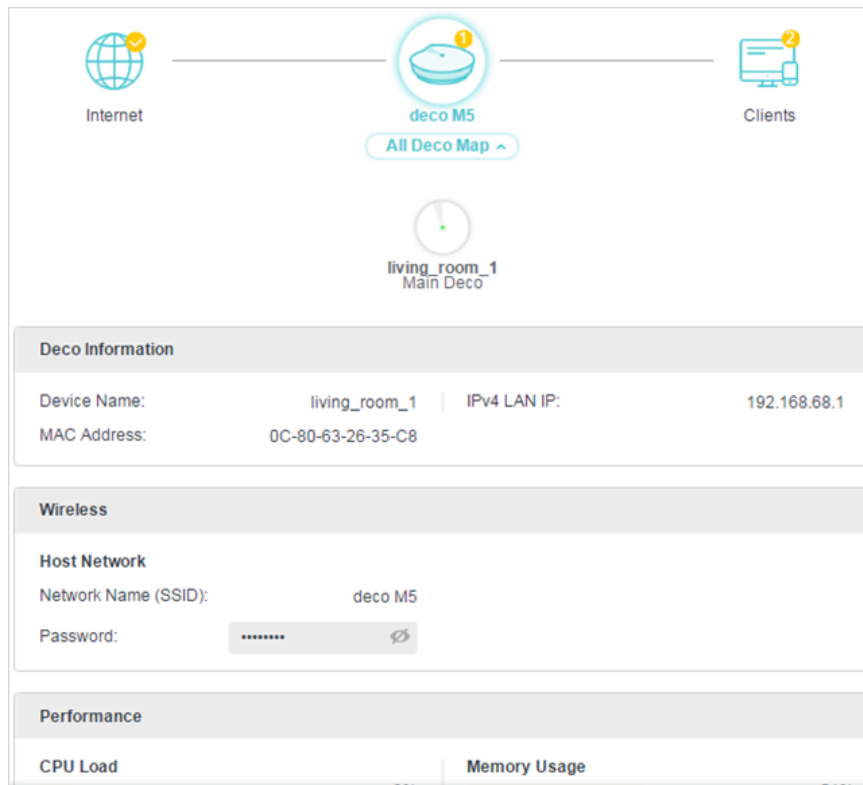
Configuration with DECO software: While most users nowadays use routers from their internet service provider, there still is reason to purchase a router. Those who buy routers separately often look for ones with open-source firmware support, especially for those supporting the Linux-based DD-WRT firmware. There are some who even avoid a router altogether if DD-WRT cannot be installed on it. The TP-Link Deco X90 does not have support with DD-WRT, but what is used to make configuration changes? To answer the question, you can start by connecting your device to the TP-Link Deco X90. Unfortunately, the only way to set it up first is to connect one of the units to your internet connection. Afterwards, you can download the TP-Link Deco app from the Apple App Store or Google Play. The app is used for both setting the network up and for making configuration changes, as there is no web interface.

User and password on DECO software: Deco Monthly Recap- Check

What's Currently Going on With Deco KidShield Test Recruitment, Share Your Ideas With us! Wi-Fi Schedule Ideas Wanted! Yes, and the default username and password are both admin.

1. Installation Process

A. Hardware Components

i. Router
• **Function:** A router is a networking device that forwards data packets between computer networks. It connects multiple devices to the internet and manages the traffic between them.

ii. ONU (Optical Network Unit)
• **Function:** An ONU connects a fiber-optic network to the end-user's network. It converts optical signals to electrical signals for devices to understand.

iii. Cable
• **Function:** Cables, such as Ethernet cables, are used to connect the router to the ONU and to other devices within the network. They transmit data between devices.

iv. Connector
• **Function:** Connectors are used to join cables to devices like routers and computers, ensuring a stable connection for data transmission.

B. Software Components

i. DECO Software

• **Function:** Deco software is used to manage and configure Deco mesh routers. It provides users with options to set up the network, manage devices, and enhance network security.

ii. Configuration with DECO Software

• Steps to Configure:

1. Download the Deco app from the App Store or Google Play Store.
2. Create a Deco account or log in with your existing account.
3. Follow the in-app instructions to connect the Deco router to the ONU using an Ethernet cable.
4. Power on the Deco device and wait for the LED indicator to show a stable connection.
5. Use the app to configure the Wi-Fi network name (SSID) and password.
6. Save the settings and connect your devices to the newly created network.

iii. User and Password

• Default Username: admin
• Default Password: admin