

# What is a mesh network?

Last Modified on 11/26/2024 4:26 pm EST

Mesh networks enable multiple routers to work in unison to deliver hyper-fast, super-stable Wi-Fi. Each device in a mesh network connects to the other devices, rather than each device connecting to your Internet Service Provider. Unlike a typical home network which is built around a centralized hub, a mesh network consists of multiple routers communicating with each other. Unlike other mesh network systems, Plume continuously learns about your Internet needs and performs advanced self-optimizations, allocating capacity to devices that need it most. And it gets better each day!

Why does this matter? Have you ever noticed that your Wi-Fi signal is stronger in your living room than it is in your bedroom? Or that you can stream videos in your kitchen but can't even load a webpage in your backyard? The challenge of traditional Wi-Fi networks is that they rely on single routers to broadcast a Wi-Fi signal. This means that your signal is strong when you're near your router and gets weaker as you move away.

The cool thing about mesh networks is that they enable multiple routers to work as a team. When all your routers can communicate and share information with each other, they can improve three important features of your network: range, speed, and stability.

A mesh network has a greater range and is much faster and stronger than your normal Wi-Fi network. The range of your mesh network can be extended simply by adding nodes (pods). Each node in a mesh network is a device that not only sends and receives data but determines the best path by which to send it. The nodes in a mesh network can automatically reconfigure themselves, using multiple routes to find the most optimal path to the Internet. Shutting down one of the nodes in a mesh network won't necessarily shut down the entire network, which means the mesh network is much stronger than the centralized architecture of the Wi-Fi in your home today.

---