

Smarter, consistent residential Wi-Fi® coverage

The increase in connected devices has changed the way people use technology. The average person owns multiple mobile devices, including smartphones, laptops, tablets, and smartwatches, and they desire to be connected to the internet wherever they are. This is no different in the home: mobile device owners want to be connected when they walk in the door and stay connected as they travel from room to room—even in outdoor spaces. Good connectivity is essential for mobile devices as well as for the smart TV streaming a movie, the video game console used for online gaming, or the wireless speakers playing music on the outdoor deck.

Demand on Wi-Fi in the home has risen, and with it so have consumer expectations about connectivity. Traditionally, home Wi-Fi networks consisted of a single wireless router with an access point (AP) to the internet. While this provides great coverage in some spaces, many homes need more than one AP to truly blanket the desired coverage area with effective Wi-Fi. Multiple AP Wi-Fi networks provide an easy-to-use, unified network of consistent coverage everywhere in the home and provide consumers with the Wi-Fi coverage they expect.



Standards-based Wi-Fi networks that adapt to changing conditions

Wi-Fi CERTIFIED EasyMesh™ is a certification program by Wi-Fi Alliance® that brings a standards-based approach to multiple AP networks. Wi-Fi EasyMesh™ networks increase capacity and effective throughput in the home by forming a smart, adaptable network that is easy to setup and maintain with very little user intervention. These networks can self-organize to provide consistent coverage anywhere in the home, office, or outdoor spaces. Because Wi-Fi EasyMesh networks use a common standard, they bring added flexibility to both consumers and service providers, enabling devices from different vendors to work together and provide extended coverage.

Wi-Fi EasyMesh provides a simple way to install and configure multiple AP networks. These networks monitor conditions and self-adjust to ensure good performance in real-time. Wi-Fi EasyMesh certification allows devices from multiple vendors to onboard, configure, and communicate with each other to create an adaptive network of extended, uniform coverage.

Key benefits:

Flexible design: Extended coverage through optimal placement of APs without requiring a wired connection

Easy setup: Automatic onboarding and configuration of Wi-Fi EasyMesh devices

Network intelligence: Self-organizing network collects information and adapts to ensure optimized performance

Load balancing: Client devices are automatically guided to connect to the best available AP

Scalability: Easily add APs wherever needed, even from various vendors

Creating more intelligent home Wi-Fi

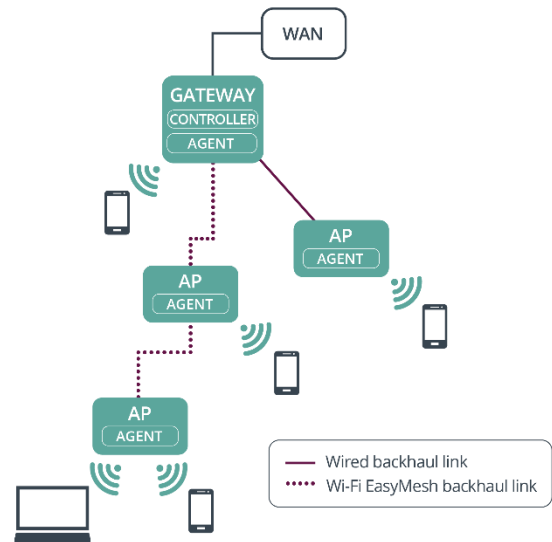
Wi-Fi EasyMesh networks consist of a device acting as network controller and one or more devices acting as agents. To enable a Wi-Fi EasyMesh network to coordinate amongst multiple APs without interfering with each other, the controller manages the agents. Mechanisms used by Wi-Fi EasyMesh to provide a smart, self-adapting network include:

Onboarding, discovery and configuration: New Wi-Fi EasyMesh AP devices automatically connect and establish their role as controller or agent

Channel and network management: Wi-Fi EasyMesh controllers collect preference data such as channel preferences from Wi-Fi EasyMesh agents to effectively manage the network

Capability and metrics reporting: Controllers understand the capabilities of all agents because each agent reports their capabilities, such as throughput, signal strength, and number of radios available

Link optimization: Wi-Fi EasyMesh supports multiple connectivity technologies, including Wi-Fi and Ethernet; data paths can also be optimized by the controller depending upon network conditions



Complementary technologies from the Wi-Fi CERTIFIED™ portfolio

Wi-Fi CERTIFIED Home Design™ shares the goal to provide good, full coverage Wi-Fi throughout the home. Wi-Fi Home Design™ floorplans focus on where each AP in a home should be located to get maximum coverage, while Wi-Fi EasyMesh networks define the technologies used to ensure streamlined communication between agent APs to give a quality service experience. A Wi-Fi Home Design floorplan could leverage Wi-Fi EasyMesh networks.

Wi-Fi CERTIFIED Agile Multiband™ client devices deliver better user experiences on Wi-Fi EasyMesh networks. Wi-Fi EasyMesh includes some of the Wi-Fi Agile Multiband™ technologies to enable steering of devices to agent APs that will provide the best service based on the client device's function.

Wi-Fi: Technology to trust

Since 2000, Wi-Fi Alliance has been driving the adoption and evolution of Wi-Fi through its Wi-Fi CERTIFIED program. The Wi-Fi CERTIFIED logo designates products with proven interoperability, backward compatibility, and the highest industry-standard protections in place. Wi-Fi CERTIFIED devices can communicate with previous and future generations of Wi-Fi technologies, supporting use cases including seamless network access, multimedia, and device-to-device connectivity.

Wi-Fi CERTIFIED devices give consumers confidence that the product they purchase will deliver a consistently good user experience.



Learn more: www.wi-fi.org/wi-fi-easymesh