Eero Wi-Fi system aims to conquer dead zones, buffering

4 February 2015, by Nancy Owano

The makers of a sleek-looking white box called Eero are pointing out that this is no router—it's a Wi-Fi system with features that are capable of blanketing every inch of your home with speedy coverage. With Eero, you create a network easily. "Pick up your phone, type in your name and password, you're done," said its promotional video. An Eero comes with built-in Bluetooth, which allows the Eero app to connect with your first Eero for setup. A set of three Eeros covers a typical home. They connect to create a mesh network for a home with reliable Wi-Fi. After you plug your first Eero into your existing cable or DSL modem; additional ones just need power from a standard outlet. The app helps place them for optimal Wi-Fi coverage. The team said the setup takes under 60 seconds with "no Ethernet wiring or IT degree required." The distinctive aspect of Eero is that the Eeros work together to form a mesh network, a technology familiar in enterprise settings.

Unlike traditional routers and extenders that allow for data to make a single hop, the Eero allows for

multiple hops with minimal signal loss, said the company. You can connect up to 10. Each device is an access point. The company's software allows them all to connect to form a mesh network. The mesh allows for many paths for data, automatically choosing the fastest. Eero supports the 802.11ac Wi-Fi standard that uses the 5GHz radio spectrum, less crowded and offering more and wider channels than the 2.4GHz spectrum, but 5GHz radio waves have limited range "and don't play nice with walls and doors," said the company. When the Eero system cannot use 5GHz throughout the home, it will automatically switch between 2.4 and 5GHz frequency bands.

Also, Eero allows its owner to grant guess access with visitors with a tap of the finger. Another feature is that Eero automatically updates itself. The system regularly runs checkups. In the unlikely case that it goes down, said the team, as in a power outage, "it simply reboots itself and fixes the problem – before you ever know there's a problem."

Senior Reviews Editor at *Ars Technica*, Lee Hutchinson, said the Eero team designed their system such that the mesh functionality is tied directly to their custom firmware. "From a high level, the Eero devices use one of their two radios to talk to WLAN clients and the other of the two radios to talk to other Eero devices. In practice, which radio is doing which bit of communication might change from moment to moment, with the functionality being algorithmically controlled by the Eero firmware."

You still need ISP service from a provider such as Comcast or AT&T for getting a signal to where you live. Once you plug the device into the existing modem, the device takes care of everything else. Eero was named after Eero Saarinen, the famous architect. The company said they have Eero available on preorder. For now, the device is shipping only in the US and Canada. A single Eero

is $125. A three-pack is $299. They said, "We'll ship
 orders this summer."

   More information: