

Solving home network complexity

CommScope's Ken Haase explains how the home gateway is the starting point for delivering connected home services, and how they are evolving to be the platform for the next generation of smart home services.

Q: What do you see as the challenges for service providers (SP) in delivering the connected home?

A: The home is increasingly complex for both consumers and service providers. We are all connecting more devices, mainly over Wi-Fi—whether smart speakers, security cameras, smart lighting or streaming video to our tablets.

Making all of this work together is a challenge for the consumer and an opportunity for the SP. SPs get the calls anyway if the customer can't connect. If SPs can offer services that are easy to use and that simplify consumers' connected lives, then SPs can be at the heart of the home. And that starts with the home gateway.

We are seeing demand for not only higher speeds and lower latency for streaming video and applications like gaming and VR, but the need to deliver that bandwidth reliably around the home—and that means better Wi-Fi. In fact, Wi-Fi issues are the most common causes for calls to the call center.

Then there is security. Consumers are becoming increasingly aware of threats to the home network from new points of attack (like security cameras) and are concerned for how their data is being used. Plus, parents want a safe online environment for their children. Our research shows that telcos are in a strong position to be the trusted provider of a secure connected home.

Q: How is the home gateway evolving to meet these challenges?

A: The home gateway has, for a long time, been central to the home network: terminating the network and providing first-line security (firewall, etc.) and connectivity through Ethernet or Wi-Fi. But if service providers are going to be central to the smart home—and not just the broadband connection—they need to have a gateway platform that supports innovation of services.

Ken Haase VP, Global Telco Broadband Devices CommScope Home Networks

Ken is responsible for CommScope's home broadband solutions for telcos and mobile operators, including home gateways and Wi-Fi.

He joined CommScope through the acquisition of ARRIS and has held similar positions in Motorola and Netopia Inc. Ken has over 25 years of experience in the computer networking industry and 22 years in product line management.

The home gateway is becoming an applications platform – an edge computing device. Building on our mature, stable, secure 9.x software platform, in use in millions of homes today, we have added Containerization which enables new applications to be installed in a more secure and flexible manner. The time to test and deploy new services and features is reduced. So for example, enhanced security features or smart home service can be introduced much faster than before. Applications can be loaded on demand and discarded when no longer required.

Fundamental to the connected home experience is Wi-Fi, and this will improve to deliver a wireless network that compliments the gigabit speeds in the access network. Today we offer solutions with tri-band Wi-Fi 6 and we're excited about Wi-Fi 6E: the new 6 GHz spectrum that will enable us to deliver a true gigabit

Wi-Fi backbone for the home network. We work closely with our customers to deliver the best Wi-Fi at the right cost point

For the larger home, we have HomeAssure, our mesh Wi-Fi solution that automatically optimizes Wi-Fi performance. Cloud management provides the analytics to pro-actively solve issues.

We have made it easy to install and use, with an app that helps consumers with the installation process and provides the tools for them to manage their home network. So it's Wi-Fi that just works—simple!

Q: What else is making the consumer experience simpler?

A: An important first step ensuring the home gateway is easy to install. Our PON gateways have built-in optics that eliminate the need for multiple devices to be installed in the home and allow gateway to be placed in an optimal location for Wi-Fi performance. Our Fixed Wireless Access gateways have internal antennas for plug and play installation, with LED indicators to help identify the optimal placement for good connection. Not only does our approach mean the customer can install the device themselves without any hassle, but it also makes a huge difference to the economics for the service provider, who can save on everything from technician deployment to helpdesk calls.

Q: What role will the gateway have in the evolution of the smart home?

First, it needs the connectivity. That means great Wi-Fi. We have to think about reaching that video doorbell on the front porch outside the house. It also means adding radios such as Bluetooth® Low Energy, Z-Wave® or Zigbee® to connect smart devices.

CommScope is trusted by tier 1 service providers to deliver reliable, customized solutions. We shipped more than 20 million home gateways in 2018.

Our heritage, expertise, solutions and resources are here to work with service providers to deliver the nextgeneration connected home.

Our products include:

- xDSL gateways
- · Passive optical network (PON) gateways
- Fixed wireless access gateways
- Wi-Fi extenders
- Whole-home managed Wi-Fi (HomeAssure)
- · Home network management software
- Professional services

Then there is the software. Some functions will move to the cloud, but others need to run in the home for latency, security and performance reasons. Again this is where containerization simplifies this.

Cloud management tools are essential to provide the visibility and analysis to proactively manage the home network. Avoiding issues before they happen and enable the helpdesk to rapidly address any call that arises.

Finally, let's not forget environment sustainability. We're driving down energy consumption and addressing the use of single-use plastics.

Find out more: Telco Home Network solutions

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Visit our website or contact your local CommScope representative for more information.

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