Nokia enhances whole-home Wi-Fi solution for service providers to provide faster, better, smarter network experience



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- Expanded portfolio of Nokia residential devices and gateways now supports intelligent mesh Wi-Fi capabilities, strengthened by new Unium software
- New software and analytics provide self-healing, self-learning, self-care functions that optimize Wi-Fi networks and maximize performance
- Nokia enables service providers and users to quickly identify and resolve Wi-Fi network issues with new online portal and mobile application

Nokia is introducing several enhancements to its in-home Wi-Fi solution that maximize Wi-Fi performance and simplify network management. The new Wi-Fi solution expands Nokia's portfolio with meshed Wi-Fi gateways and beacons, delivers a new Wi-Fi Home Portal for service providers, introduces a mobile application for users and provides new software functions and analytics that improve network intelligence.

Whole-home Wi-Fi networks are increasingly being strained by the growing number of connected devices and signal interference that comes from appliances like microwaves, creating an influx of help desk calls by users frustrated with their Wi-Fi performance. With more than 30 percent of calls related to poor in-home connectivity*, service providers are increasingly challenged with troubleshooting issues that are often the result of third-party Wi-Fi solutions. With limited network visibility into the home, this can lead to lengthy trial and error procedures or expensive visits to diagnose issues.

Nokia's in-home Wi-Fi solution overcomes these challenges with several new enhancements that improve the user experience and significantly reduce the time and complexity for service providers to solve network problems. These include:

- Extended portfolio with meshed Wi-Fi solutions that include a wide array of premium, flagship and entry level Gateways and Beacons - Wi-Fi access points that consumers can install throughout the home to create an intelligent mesh, extend coverage and boost performance. Beacons quickly guide each device to the nearest or fastest access point, and ensure an optimal path through the network.
- Software enhancements from Nokia to quickly upgrade selected existing gateways in the field to support meshed Wi-Fi networking capabilities.
- Wi-Fi Home Portal for Service Providers - Providing a single screen, holistic view of a user's in-home Wi-Fi network, allowing service providers to effectively manage devices, quickly identify and resolve issues or upsell new services - such as broadband capacity or additional beacons - to improve network performance.
- New software and embedded analytic functions that compile insights on the network, devices and interference sources to automatically self-heal and optimize the Wi-Fi experience. This includes algorithms that automate band and channel steering to improve overall performance and create full in-home coverage with seamless roaming capabilities without service interruption.
- End-user mobile application - Delivering an intuitive, simple interface that provides a visual representation of the Wi-Fi network including a heat map to easily locate and manage dead zones and identify the right place to add new access points to fill coverage gaps. Customers can also quickly access device lists and management capabilities to create guest networks. The application gives users access to a wide array of self-install, network care and troubleshooting capabilities.

Federico Guillén, president of Nokia's Fixed Networks business group, said: "For many users, the concept of Wi-Fi and broadband access are synonymous, putting many service providers on the front line of customer complaints if Wi-Fi performance is impacted. Depending on the tools available to service providers, this can become either a business challenge or an opportunity. Nokia's enhanced in-home Wi-Fi solution is unique in that it addresses the customer need for a better Wi-Fi experience while providing service providers with the tools and

visibility they need to quickly resolve issues, enhance customer loyalty and create additional revenue-generating opportunities."

Nokia will be showing its whole-home Wi-Fi solution with integrated Unium software at its Booth at Mobile World Congress 2018.

Did you know?

- Strengthening Nokia's in-home Wi-Fi solution are several software capabilities that support both Nokia and other multi-vendor gateways. Nokia's Autonomous Customer Care Analytics (HAL) and Home Access software improve operators' ability to monitor, predict and quickly resolve residential issues before they impact subscribers' experiences.

- Nokia AirScale Wi-Fi includes compact indoor/outdoor Wi-Fi access points and Wi-Fi modules for integration into small cells for public purposes.

About the Nokia solution

- Nokia Wi-Fi solution works across a variety of wireless chipsets, processors and operating systems.
- Embedded Unium intelligent Wi-Fi software and machine-learning algorithms learn the specific capabilities and performance of each device in the home, creating fingerprints that help optimize connections and deliver a tailored, exceptional customer experience.
- The Nokia Wi-Fi Gateway and Beacon can identify as many as seventeen different interference sources occurring at 2.4 GHz or 5 GHz, outperforming any current product on the market, which typically detects about four.
- Nokia Wi-Fi Home Portal lets care agents view an individual home network status in real-time. The Home Portal provides the care agents with real-time insights, recommendations, and wireless spectrum interference tracking. The mobile app lets users see some of these insights, self-install additional beacons and manage their guest network.
- Nokia's Wi-Fi Home Portal supports device management through TR-069** and provides service providers with recommendations to solve issues.

* ABI Research: Next Generation Wi-Fi - Service Provider Management Solutions, December 27, 2017

** TR-069 (Technical Report 069) is a technical specification of the Broadband Forum being used by service providers for the remote management of customer-premises equipment (CPE) connected to an Internet Protocol (IP) network.

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