SMARTRG
HOME ANALYTICS

SMART/RG®
forward thinking

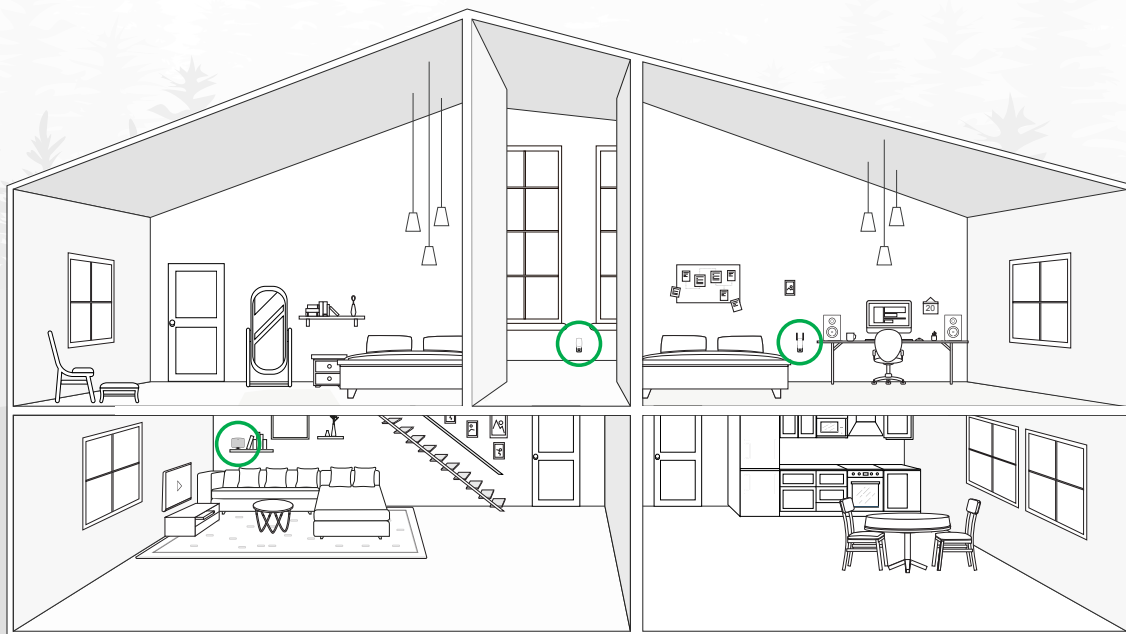# Optimize the in-home WiFi experience

With the increase in smartphones, tablets, set-top boxes (STBs), thermostats and game consoles, dependency on broadband Internet traffic over home WiFi networks is growing dramatically. That's good news for service providers, but it also introduces new challenges.

Setting up WiFi networks can be cumbersome and configuration can be more complex than expected. Meanwhile, consumer expectations for quality of experience (QoE) and easy access to self-care tools are rising and demand will only continue to increase. Consider, for example, the elevated expectations for voice over WiFi (VoWiFi) service quality as compared to the lower WiFi quality required for Internet browsing.

When it comes to video streaming, the demand for a reliable, high bandwidth WiFi network will also increase expectations for performance and reliability. In fact, millennials are already streaming more programs on their companion WiFi devices than on a traditional TV in the living room.

Managing the residential customer experience requires the service provider to control WiFi network performance. By leveraging usage and network data, SmartRG Home Analytics enables helpdesk agents to quickly, easily and accurately qualify home networks for advanced services and network enhancements. In conjunction with SmartRG Device Manager, SmartRG Home Analytics allows service agents to optimize in-home quality of service (QoS) so that particular services, such as VoWiFi or video, get optimal treatment. The resulting performance improvements translate into improved customer satisfaction, lower churn and substantial reductions in service provider operating expenses.

Managing complex networks

The complexity of the home network environment is driving up support costs for many service providers. Often, they have little or no visibility into the devices connected to the home networks they support, how the networks are being used or how they are performing.

This is a problem since the WiFi user experience greatly depends on the type of service, such as voice, browsing or video, and the user's location in the house. Adding to the challenge, there is the potential for neighboring WiFi signal interference. All of these factors can negatively affect QoE. That's important because a positive customer experience inspires loyalty, allows for upsell opportunities and attracts new subscribers.

To address these challenges, SmartRG Home Analytics enables the following advantages:

- Provides helpdesk agents a better understanding of subscriber service calls and the recommendations they need to resolve WiFi issues quickly

- Reduces helpdesk calls and proactively eliminates the need for on-site visits

- Detects developing home network issues before subscribers are impacted

- Eliminates multi-system queries by providing CSRs a comprehensive single view of subscriber, network and device performance

- Delivers relevant insights into in-home WiFi performance on a per subscriber basis, as well as across the entire WiFi subscriber network

- Aggregated dashboard views provide IT, engineering and vendors data they can use to develop fixes and continuous technical improvements to the network, services, equipment and devices

- Allows pairing of SmartRG Home Analytics™ with Device Manager for one-stop management, monitoring and sophisticated predictive analytics for both SmartRG and third-party wireless and networking equipment
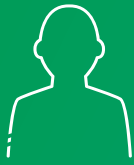
Improving the subscriber experience

SmartRG Home Analytics provides customer support agents with a straightforward way to troubleshoot subscriber home networks. It provides operations teams advanced in-home WiFi monitoring and optimization tools. In both instances, the overall goal of the system is to improve the home WiFi customer experience and reduce the number of support calls.

System components	Features	Benefits
Executive Dashboards	• Presents aggregate averages across the entire population of devices for various key performance indicators	• Provides network operations center staff and business decision makers real-time information about the performance of the network needed to rapidly address a changing environment
	• The ability to zoom into historical data for closer examination	• Allows quick analysis of past events to better understand exactly what happened and why
Support Portal Applications	• Unique visibility and analysis of in-home network performance across a wide variety of parameters including WiFi performance, connected devices within the home network, bandwidth utilization per connected device, WiFi environment statistics, and hardware status	• Historical data on network performance during previous degradations or outages enables root cause resolution before the next service affecting incident occurs
	• Zoomable graphs of each performance parameter showing 30 days of high resolution data	• The intuitive displays and online help allow non-technical staff to ramp quickly while providing the details necessary for technicians and engineers
	• Easy to interpret summaries of multiple subscriber network functions	
Subscriber Portal	• Simple user interface	• Remote access to information that used to only be available with trained on-site staff allows Customer Care and Engineering personnel to troubleshoot problems without a truck roll
	• Easy to understand recommendations for corrective action	
	• Single-signon (SSO) account management	• Instructions such as "move this device closer to the gateway" and "this device is using a high percentage of your bandwidth" empowers users to understand and fix problems within the home network without needing to call their service provider support line
		• The Subscriber Portal leverages existing subscriber account systems to avoid dedicated logins for this service and can be used with SmartRG Device Manager
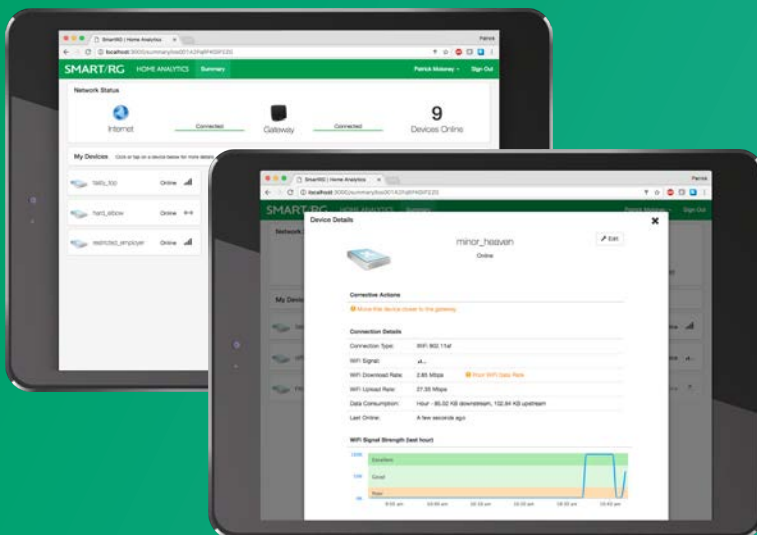
About SmartRG software solutions

SmartRG software is a first-of-its-kind portfolio specialized to automate service, network and IT operations with unparalleled data analysis. Today, there are more than 600 deployments worldwide to fulfill, optimize and protect customer experiences. Because we know the whole network, only SmartRG can provide the software solutions purpose-built for cloud and fixed environments.

SmartRG Home Analytics provides service providers with unique visibility and analysis of common WiFi and bandwidth-related service issues, security vulnerabilities and market trends across the subscriber base. The outcome is measurably improved customer experiences, happier subscribers and decreased churn.

Together with our service provider partners, we are building competitive advantage, enhancing subscriber experiences and accelerating the move to a digital society. For more information about how SmartRG can contribute to your success, contact us today at www.smartrg.com

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