MANAGING THE WI-FI HOME EXPERIENCE

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Abstract

With the average number of WiFi consumer owned connected devices now at 6 devices and growing, cable operators have to deal with a tidal wave of new devices connecting to the home network. These Wi-Fi devices are a mixed blessing – they can help reduce installation costs, but they can drive up customer care calls if proper Quality of Experience is not maintained. Hence, it is becoming increasingly important to ensure that we have the appropriate tools and technologies to manage the evolution to an all WiFi connected home.

First, we will review the trends on Wi-Fi device adoption and the rate at which new devices get added to the home Wi-Fi network. Newly added, heavy hitters for bandwidth or portable devices can present increased difficulties in managing a consistent quality of experience and we will explore how best to optimize their performance.

Next, we will provide customer experience research completed in multiple home environments with different data rates and types. With multiple Wi-Fi devices competing in the home, the consumer experience can be artificially impacted and we will review how this can occur. We will also touch on the effects of supporting close in and far out WiFi devices as they compete for time and resources of the airtime and Access Point to service them.

Once we have defined Wi-Fi trends and measured the quality of experience when not properly managed, we will the review short and long term solutions to address these issues and continue to deliver optimal in-home Wi-Fi experience.

Finally, we will show how, through constant technology updates, we can significantly improve the customer's Quality of Experience. We will analyse the implications and benefits of the following:

- Hardware Components – 802.11 Technologies, Effects of additional Radios, Spatial Streams, MIMO and Beamforming.
- MSO Owned Hardware – Home Gateway and Modems as the manager.
- Network and Cloud - Adaptive Bit Rate, Software Monitoring Tools, etc.

Attendees will leave this presentation with a better understanding of the importance of managing the in home Wi-Fi Network and provide the best Quality of Experience.

ACCESS TO THE PRESENTATION

The audio recording of this topic and the supporting presentation materials will be available at www.thecableshow.com and www.springtechforum.com after the conclusion of the 2013 Spring Technical Forum at The Cable Show 2013.