

## **White Papers: 802.11n in Infrastructure Improves Legacy Clients**

### **No urgent need for 802.11n radios in mobile computers or medical devices**

Akron, Ohio, March 25, 2008 – Two new white papers from Summit Data Communications, a leading provider of Wi-Fi® radio modules and cards for mobile computers and medical devices, reveal that client devices don't need 802.11n inside to realize big benefits from 802.11n infrastructures. While the throughput benefits of 802.11n are grabbing all the headlines, other 802.11n benefits such as improved predictability of coverage and greater range are more important to business-critical mobile devices. When an organization deploys an 802.11n wireless networking infrastructure, client devices that support the traditional Wi-Fi standards of 802.11a, 802.11b, and 802.11g realize the non-throughput benefits of 802.11n.

"802.11n incorporates many exciting enhancements to wireless LAN technology," said Ron Seide, Summit's president and the primary author of both papers. "To take advantage of enhancements that boost throughput, you need 802.11n on the client side and the infrastructure side. To gain the other benefits of 802.11n, however, you don't need to incur the costs and risks of upgrading or replacing the client devices on which users rely to do their jobs. Instead, you can simply upgrade your infrastructure."

802.11n is a forthcoming IEEE standard that promises throughput as much as 10 times greater than that available with current Wi-Fi standards. The greater throughput is generating tremendous interest among users of Wi-Fi products and even spurring debates on whether or not wireless LANs will become the primary means of network access for typical computer users.

Even though the 802.11n standard will not be finalized and ratified until next year, dozens of models of laptops, home routers, and other products already have radios that are based on a draft of the standard. The Wi-Fi Alliance®, an industry association, is performing product interoperability testing and certification based on the draft standard. With more and more devices adopting 802.11n, manufacturers of business-critical mobile devices are being peppered with questions on when their devices will support 802.11n. The white papers explain why most mobile device vendors and users can choose to forego today's pre-standard 802.11n radios and stick with proven solutions that support some combination of 802.11a, 802.11b, and 802.11g.

Due to the type of network traffic they support, most mobile devices don't need a major throughput boost. What they do need is a wireless LAN connection that is reliable, even when the device user is on the move in an environment that presents connectivity challenges. Fortunately, 802.11n provides not only increased throughput but also greater range and improved predictability of coverage. The even better news, which is explained in detail in the white papers, is that non-throughput benefits are available to all Wi-Fi client devices when an organization deploys 802.11n in its network infrastructure.

Armed with the information in the white papers, organizations can deploy 802.11n in their infrastructures without having to undertake simultaneous client upgrades or replacements. The only penalty for deploying 802.11n in the infrastructure without 802.11n on all client devices is reduced throughput for devices with 802.11n radios. Summit believes that, as bandwidth requirements increase, so too will pressure to ensure that **all** mobile devices support, but not necessarily exploit, 802.11n. Makers of mobile computers and medical devices will respond to that pressure by putting 802.11n radios – likely those that support the final, ratified standard – in their devices but may not redesign those devices to exploit certain 802.11n capabilities that are challenging to implement, especially in small devices.



The white papers, entitled “The Value of 802.11n for Mobile Computers” and “The Value of 802.11n for Medical Devices”, can be downloaded free of charge from the Documentation section of the Summit Web site, [www.summitdatacom.com](http://www.summitdatacom.com).

#### **About Summit**

Summit Data Communications, Inc. is dedicated to providing high-performance wireless LAN radio modules and cards for today’s business-critical mobile devices, such as mobile computers, portable printers, medical devices, and industrial automation equipment. Summit radios are optimized for the challenging radio environments in which business-critical mobile devices operate, including factories, warehouses, ports, hospitals, and retail stores.

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