Wi-Fi: Still Waiting in the Wings

By Dan O'Shea
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When Wi-Fi entrepreneur Sky Dayton of Boingo Wireless strode into the klieg lights at the Wireless 2002 show to share the keynote stage with mobile industry giant John Stanton, it was a significant and symbolic moment for the wireless industry. The mobile traditionalists gathered at the Cellular Telecommunications & Internet Association's annual convention signaled open-mindedness about an exciting and enigmatic new technology that could either help or threaten their own wireless data hopes.

One year later, the excitement and the enigma persists. The mobile industry certainly has taken further steps to embrace the Wi-Fi wireless LAN format, but it has yet to make the kind of financial and strategic commitments it reserved for 3G. The industry also has not convinced all Wi-Fi constituents that it is serious about investing in the technology, or even that CTIA's yearly confab is the best place for Wi-Fi companies to hawk their wares.

"The CTIA show isn't in our plans right now because we still see it as more of a mobile voice show," said one source at a small Wi-Fi software developer.

That seems to be the opinion held by at least a cadre of Wi-Fi applications and security firms, and those that consider their products to be strictly enterprise-focused. However, Wi-Fi-related issues will make an appearance on the Wireless 2003 agenda next month in New Orleans, and there will be at least a handful of Wi-Fi technology vendors exhibiting. Also, just as Wi-Fi will be top of mind for any show attendee whose business is being affected * or is thinking about using Wi-Fi to affect change in the market * a more certain resolution to the mobile industry's investigation of the Wi-Fi enigma likely will play out this year.

In the remaining weeks leading up to Wireless 2003, the industry will hear much more about efforts to integrate mobile networks and Wi-Fi hot spots. Some of those attempts are being made through the development of new equipment that service providers can deploy to create their own public hot spot networks, as well as solutions that let them integrate with existing hot spot topologies.

Vivato, one of the leading voices in the new product class of Wi-Fi switches for carriers and enterprise networks, will be at the show talking about its new platform. Vivato and other start-ups are seeking to develop intelligent switches for the network edge from which public network operators or other companies would manage and control multiple hot spots.

Elsewhere, companies such as Juniper Networks and Network Associates have recently launched new product strategies to address mobile/Wi-Fi integration. Both approaches take existing router products with carrier-grade scalability and reliability and target them toward the development of public hot spots that support access to virtual private networks (VPNs) and class-of-service offerings.

While some carrier's Wi-Fi strategies remain up in the air (pun intended), carriers generally will stake a claim to the technology by imposing their own standards for reliability and service prioritization, said Mike Capuano, director of product marketing at Juniper. "Carriers are saying they need to differentiate to be involved in Wi-Fi, and carrier-grade reliability is the difference they can offer. Wi-Fi without standard quality of service will not be a sustainable business model."

Aside from hardware equipment, new software from companies such as **Birdstep Technology,** which has developed a client/server network roaming solution, will further erase the boundaries that exist between traditional mobile networks and Wi-Fi enterprises or hot spots. And as new applications for Wi-Fi-compatible routers surface, software for enhanced Wi-Fi security and enterprise VPN mobility are sure to follow. Meanwhile, carrier-driven alliances such as Cometa and the more recent AT&T Wireless/Wayport venture will transcend the handshake and photo-op stage to begin bringing new converged solutions to market.

These are a few things to keep in mind as mobile types meet at the industry's annual convention. They will need to maintain the open-mindedness CTIA initiated last year because wireless data now comes in more than just one flavor, and their 3G dreams will have to coexist with Wi-Fi reality.