Client › **WirelessWERX**

The Challenge:
Help WirelessWERX complete its wireless node network to deliver exact indoor locations of mobile phone callers.

The Solution:
Embed the MatchPort® b/g to bridge the Ethernet-to-wireless gap between the SiteWERX Managed Server and the SiteWERX base station.

The Result:
The new WirelessWERX Location Node Network allows first responders and other emergency personnel to pinpoint the exact location of a 9-1-1 caller.

> "Our engineering staff found the MatchPort b/g to be a very well-designed device, and the support we received from Lantronix was exceptional."
>
> **Jim Ashley, Jr.,**
> CTO

The Challenge: Boosting Response Times for Emergency Responders

When an emergency situation occurs, accurate location information can mean the difference between life and death. Because the current 9-1-1 emergency system was built around the use of addresses associated with landlines, those who rely solely on cell phones are unknowingly putting themselves at risk. Emergency personnel simply cannot pinpoint the exact location of a mobile 9-1-1 caller, especially from inside a building, which can delay response times and make a bad situation worse.

Anaheim, California-based WirelessWERX has a long history of developing end-to-end solutions for the deployment of mobile resource management and tracking systems. In 2008 the company set out to develop a wireless node network that would create a "safety zone" around, for example, a college campus or government complex. If a 9-1-1 call is made from anywhere within the safety zone, the system would automatically send the location information to the 9-1-1 communication center, telling them exactly where the caller is. To complete this location information platform, WirelessWERX knew it needed a network device to bridge the Ethernet-to-wireless gap between the SiteWERX Managed Server and the SiteWERX base station.

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The Solution: Lantronix Comes to the Rescue

WirelessWERX researched several options for networking its new SiteWERX Location Node Network and ultimately selected the Lantronix MatchPort® b/g. Using a dual processor design, the MatchPort b/g enables 802.11 wireless connectivity and web services on any device with a serial interface on its host microcontroller. WirelessWERX embedded the Matchport b/g into a gateway device that required Wi-Fi in order to interface with a specific network. According to Jim Ashley, Jr., CTO of WirelessWERX, "Our engineering staff found the MatchPort b/g very easy to interface. The minimal engineering support we needed was promptly provided by Lantronix."

The MatchPort b/g offers the highest levels of security, a feature that was very important to WirelessWERX. Says Ashley, "One of the biggest reasons we chose the MatchPort b/g was its superior encryption support." WirelessWERX also appreciated the MatchPort b/g's UART capabilities, which provided a more straightforward interface for the system's Bluetooth module and allowed the company to perform "over the air" configurations of the MatchPort b/g using Bluetooth. The MatchPort b/g's power consumption was also better than comparable devices, because its dedicated co-processor module manages wireless and network activity, permitting the new system to function at maximum efficiency.

The Results: WirelessWERX Delivers the 4-1-1 to 9-1-1 Responders

Through the SiteWERX platform, WirelessWERX is now able to facilitate enhanced location information from Bluetooth-enabled wireless devices, including the elusive "Z" or altitude coordinate, for its customers. When a 9-1-1 call is made using a SiteWERX-enabled cell phone, the location information is automatically sent to the 9-1-1 communication center, telling them exactly which building, floor and room the caller is in. Not only does the SiteWERX Location Node Network allow a mobile caller's location to be transmitted, it also allows area-specific messages to be sent directly to a wireless caller or group, enabling administrators or safety personnel to relay instructions, such as evacuation orders.

The MatchPort b/g has already proven itself in pilot programs in various locations across the country, and initial production orders of the SiteWERX Location Node Network are scheduled to ship in November 2010. As new applications are developed, WirelessWERX intends to maintain its relationship with Lantronix. According to Ashley, "Lantronix products have proven themselves to be reliable, and Lantronix has a high degree of professionalism that we appreciate."

About WirelessWERX, Inc

Established in 1998, WirelessWERX is a leader in delivering indoor location services (ILS) via Bluetooth-enabled mobile devices. Headquartered in Anaheim, California, the company has a long history of developing and deploying end-to-end solutions for the deployment of mobile resource management and tracking solutions as well as location-based services systems. WirelessWERX recently released its MobiWERX (mobiwerx.com) application that leverages its robust ILS platform to deliver location-based content and marketing initiatives to mobile handsets. WirelessWERX is a privately held, venture-funded company. For more information, visit www.wirelesswerx.com.

For more information on the MatchPort b/g, visit:
www.lantronix.com/matchport-bg

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CORPORATE HEADQUARTERS

167 Technology Drive | Irvine | CA 92618 | USA | t: 800.422.7055 | f: 949.450.7232 | www.lantronix.com

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