

Sports Apparel Firm Improves Productivity and Customer Satisfaction with Cisco Mobile Solutions

Brooks Sports relies on NetVersant to deploy mobile solutions that will improve productivity and streamline business processes.

EXECUTIVE SUMMARY

BROOKS SPORTS, INC.

- **Industry:** Manufacturing
- **Location:** Bothell, Washington
- **Number of Employees:** 200+

BUSINESS CHALLENGE

- Improve warehouse productivity and support new inventory management mobile solution
- Enable real-time update of inventory of pallets and boxes
- Enhance network security and provide wireless guest access

NETWORK SOLUTION

- Unified wireless network supports wireless bar code scanning and inventory access
- Wireless control system provides integrated security, centralized network management and locates rogue devices and scanners
- Network allows secure guest traffic in the office on the same wireless network

BUSINESS RESULTS

- Improve productivity and response times for increased customer satisfaction and loyalty
- Reduce shipping errors
- Improve responsiveness and collaboration with visitors and suppliers without compromising company data and network security

Business Challenge

Brooks Sports, Inc. is a leading running company that designs and markets a line of high-performance men's and women's running shoes, apparel, and accessories in more than 40 countries worldwide.

Brooks has a hard-earned reputation for engineering footwear that provides the best possible fit for runners. As a result, the company is praised by several sports medical professionals, industry magazines, top runners, and retailers worldwide for its full line of performance footwear, each catering to the unique needs of every running profile.

Brooks' existing pick and pack process was paper-based, with scanners physically connected to PCs in a limited number of places in the facilities. This approach required products to be picked, and corresponding boxes to be identified and brought to the packing station for scanning and shipping. This process was time consuming and prone to error, thus hindering employee productivity. In an ongoing effort to streamline business operations and improve customer service, Brooks decided to introduce new

wireless technologies in their manufacturing facility in Washington and to mobilize an inventory management application from Lawson. This mobile solution was driven by the need to improve productivity, reduce paperwork, and empower mobile workers via a ubiquitous access to inventory, shipping, and bookkeeping applications as well as the ability to wirelessly scan bar codes on boxes and pallets anywhere in the manufacturing facility.

"To support inventory management on the move with wireless bar-code readers, it was important for us to have a reliable, pervasive wireless network that would not be affected by any downtime and provide secure access anywhere in our facilities," says Mark Severson, Brooks network operation manager. "Security was an important consideration, because the warehouse is located in a large industrial park. We wanted to prevent potential rogue devices or a security breach in order to protect confidential product and customer information." Finally the mobility solution would have to be easy to manage and maintain on a day-to-day basis, without constant attention by network

administrators. Once Brooks had a clear understanding of its requirements, the company started searching for vendors to do the implementation.

After a competitive bidding process, Brooks selected NetVersant, a Cisco® Premier Partner, certified in advanced wireless LAN and security, and located in Bellevue, Washington. NetVersant provided Brooks with a complete mobile solution, from the bar-code scanning to possible evolution to passive and active RFID in the near future. "Brooks was very impressed with Cisco's fully integrated unified wired and wireless network solution. It offered the robust levels of security, reliability, and centralized management capabilities that Brooks was looking for, as well as investment protection of their existing Cisco infrastructure," says Josh Snow and Joe Dagonese, NetVersant and Cisco account managers. "Brooks especially liked the ease of management, the enhanced security features inherent in a centrally-managed WLAN, and the ability to easily add mobility services on the same wireless infrastructure."

Solution

NetVersant began by conducting a detailed RF site survey of Brooks' 150,000-foot warehouse and distribution center, using AirMagnet, to identify potential RF interference and design the network for optimal WLAN coverage. They also worked closely with Brooks' IT department to further take into consideration environmental conditions (such as ambient temperature ranges, dust, dirt, humidity, and weather elements) and data usage to identify potential coverage issues and meet Brooks' business requirements.

To support Brooks' new inventory management system, NetVersant recommended a controller-based architecture to simplify deployment and configuration of the WLAN and eliminate complexity for the network administrators. The solution was integrated with Brooks' existing Cisco infrastructure, consisting of several Cisco Catalyst® switches and routers as well as Cisco Secure Access Control Server (ACS).

The new wireless network was composed of Cisco 4400 Series Wireless Controllers in a redundant configuration for higher availability along with Cisco Aironet® 1100AG Series Access Points installed throughout the manufacturing facility. The Cisco Wireless Control System (WCS) software was also installed for centralized network management, security monitoring, and localization of rogue devices as well as wireless scanners.

After a rapid deployment due to the self-configuration mode of the solution, Brooks' employees had full access to the corporate resources on the go, allowing them to access planning systems and shipping and bookkeeping applications, while visitors and suppliers gained basic secure wireless Internet access in the office. Brooks was already using Cisco Secure Access Control Server (ACS) software to enforce privileges for its wired network, and was pleased to find that ACS also allowed network administrators to authorize and authenticate users on the wireless network as well.

Although Brooks has tested the deployment with Symbol wireless scanners, they are continuing to evaluate other Windows-based scanners from Handheld and Datalogic to complement their existing deployment.

"Our choice of NetVersant was a big part of the success of this deployment. They had the knowledge and expertise to deliver a complete end-to-end solution, from pre-installation and security planning to compliance testing, including support for emerging technologies such as RFID," says Mark Severson. "The Cisco Unified Wireless Network works flawlessly, and

NetVersant's implementation was very smooth. They did a terrific job delivering the solution within budget and on time."

Results

"The Cisco Unified Wireless Network allowed us to streamline our business process," says Severson. "By providing mobile access and scanning in our facilities we eliminated a couple of steps in the pick and pack process such as the need to manually look up the box and shipping address." The new application automatically tells employees which box to use when a product is scanned, and the shipping label is printed automatically. This capability has allowed Brooks to accelerate the process, help ensure shipping address accuracy, as well as map the right box with the right order. Customer satisfaction was increased in two ways: no shipping mistakes and faster turn-around on shipments.

Cisco's Unified Wireless Network centralized management has proven invaluable for deploying access points easily and rapidly and for enhancing Brooks' network security by quickly detecting rogue devices and wireless intrusions. The secure nature of the network allowed IT staff to keep the guest network separate from the corporate network, maintaining the security of company data.

Next Steps

The technology in place at Brooks provides the foundation for future solutions, including the deployment of Context Aware Mobility solutions such as Network Location Services applications and asset tracking for wireless scanners. These deployments would require the addition of the Cisco Mobility Services Engine and Cisco Context Aware Software. Contextual information is collected for Wi-Fi-enabled clients and can easily be expanded to mobile assets that don't have intrinsic wireless simply by adding RFID tags and the software for tags. Contextual information can also be provided for both indoor high ceiling, and outdoor environments.

Brooks is also considering expanding the wireless deployment to their corporate headquarters.

PRODUCT LIST

Routing and Switching

- Cisco Unified Wireless Network
- Cisco 4400 Series Wireless LAN Controllers
- Cisco Aironet 1130 AG Series Access Points
- Cisco Wireless Control System
- Routing and Switching
- Cisco Catalyst 3560E Series Power over Ethernet Switches
- Cisco Catalyst 3750E Series Power over Ethernet Switches
- Cisco 2800 Series Integrated Services Router

For More Information

For more information on Cisco wireless products, visit www.cisco.com/go/wireless.

For more information on Brooks Sports, Inc., visit <http://www.brooksrunning.com/>.

For more information NetVersant Solutions, visit <http://www.netversant.com/home.htm>.



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