February, 2008

CASE STUDY

Retail / Warehousing

Maurice Sporting Goods Trades Up to Smart Wireless LAN System from Ruckus Wireless

For the world's largest distributor of sporting goods, deploying and managing a wireless LAN was anything but cheap and easy using off-the-shelf consumer Wi-Fi products that were simply striking out.

The three-person IT department at Maurice Sporting Goods (Maurice) merely wanted to give the executives within their 65,000 square foot corporate headquarters predictable and convenient Wi-Fi connectivity. Eventually they were given the green light as long as it was done "affordably." But after deploying a small office/home office (SOHO) 802.11g D-Link solution, which included router, nine access points (APs) and power over Ethernet (PoE) injectors, problems quickly ensued.

At Maurice Sporting Goods, the world's largest wholesale sporting goods distributor, Wi-Fi was a reliability game.

"Our initial Wi-Fi deployment was continually unstable," said Michael Wozny, network administrator at Maurice Sporting Goods. "Fixing operational management, user connection and Wi-Fi reliability issues began to take up huge amounts of time."

According to Wozny, daily reboots of the D-Link APs and user complaints about connectivity issues were the norm. Maurice wanted the Wi-Fi network to leverage its network infrastructure, such as its DHCP and authentication servers. But because the D-Link APs didn't function in a coordinated fashion, each had to provide DHCP services to associated clients. This caused additional headaches.

Users could often associate with the APs but couldn't obtain an IP address. And without centralized controls, management of the APs was painful and time consuming. When a single AP hung, the entire network had to be rebooted because all the APs shared the same power source.

Finally, guest access was a constant concern. The D-Link APs didn't support multiple SSIDs. And because Maurice uses a WPA encryption for secure access, guests, vendors, auditors and visiting contractors couldn't be provided wireless access. The ideal solution would support multiple SSIDs, each of which would be tied to a virtual LAN (VLAN) with each VLAN having its own set of defined parameters such as bandwidth limits.

"We really needed something that was purposely designed and priced for a medium-sized company," said Wozny. "We wanted a system that gave us stable Wi-Fi connections everywhere without having to deploy and manage a huge number of APs. And we needed centralized controls for the Wi-Fi network that made it easy to use and cost-effective to deploy." So Maurice went looking for a trade.

TRADING FOR ZONEFLEX

Maurice began its hunt by getting the prices of the most popular WLAN systems from companies such as Cisco Systems, 3Com, HP, Ruckus Wireless and others. They then compared feature/functionality against this pricing – finally settling on the Ruckus Wireless ZoneFlex WLAN solution.

For Maurice, five key criteria were essential in their Wi-Fi decision-making process: ease-of-installation and on-going management, reliability, extended range, consistent performance and seamless integration with their existing network infrastructure.

COMPANY OVERVIEW

Founded in 1923, Maurice Sporting Goods is the world's largest sporting goods distributor and full service merchandiser. Headquartered in Northbrook, Illinois, Maurice services over 10,000 store fronts, operating seven offices and five distribution centers. With over 650,000 square feet of warehouse space, Maurice supplies a variety of sporting goods to some of the world's largest retainers, including WalMart, Dick's, Rite Aid, Sports Chalet and Sports Authority.

REQUIREMENTS

- Ubiquitous Wi-Fi coverage in corporate offices and warehouse facility
- Maximum coverage at minimum cost
- Reliable user connectivity
- Multiple virtual networks for guest / employee access
- Reduce network administration and trouble calls
- Fast, easy installation and configuration
- Easy maintenance and customization

SOLUTION

- One Ruckus ZoneDirector 1006 Smart WLAN controller
- Six Ruckus ZoneFlex 2942 APs

BENEFITS

- 95% reduction of Wi-Fi network administration
- Fewer APs providing ubiquitous and reliable Wi-Fi access
- Elimination of user connectivity problems
- Centralized control and management of entire WLAN system
- Easy guest pass generation and access
- Better Wi-Fi signal reach and reliability
- Half the cost of high-end enterprise systems

Ruckus™ WIRELESS

CASE STUDY

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"While inexpensive, the consumer-grade Wi-Fi system we deployed caused more problems than it solved with constant AP reboots and user connectivity issues.

We looked at all the popular wireless LAN alternatives but could only find one that was affordable, reliable and easy-to-use.

Once we deployed our Ruckus ZoneFlex wireless LAN, the management and administration of our Wi-Fi network literally dropped 95 percent."

Michael Wozny
Network Administrator
Maurice Sporting Goods

"ZoneFlex combined affordability and ease-of-use with advanced Smart Wi-Fi technology that could provide a longer range and more reliable Wi-Fi experience," said Wonzy. "Unlike any system we'd ever seen, ZoneFlex was configured and installed in one-third the time it to deploy any other centralized alternative."

So Maurice replaced the nine D-Link APs with six Ruckus ZoneFlex 2942 APs and a Ruckus ZoneDirector 1006 smart WLAN controller. A 16-port LinkSys PoE switch was used to connect each ZoneFlex 2942 deployed in the ceiling.

Configuration of the ZoneFlex APs was performed in a matter of minutes through a Wizard-based configurator embedded within the ZoneDirector 1006.

On the ZoneDirector, Maurice configured the APs to support multiple SSIDs. One SSID, tied to a discrete VLAN, now allowed guests to access the Web and HTTP/S applications. A second corporate SSID, for all employees provides secure mobility using a WPA key.

"Frankly, the thing that took the most time was physically removing the old APs out of the ceiling and replacing them with the new ones," Wozny said.

The ZoneFlex system seamlessly integrated with the Ethernet infrastructure Maurice already had in place. Once installed, the ZoneFlex APs automatically discovered the ZoneDirector and self-configured. IP address allocation was also no longer dependent on the APs but now provided through Maurice's existing DHCP server.

With the ZoneDirector, Maurice could also now easily generate guest passes. The Guest Pass feature on the Ruckus ZoneDirector generates a unique access code to allow leased network access. Administrators can configure the time allowed to access the network, from minutes to days, and provide simple instructions that can be handed to each user.

With the orginal wireless system, this wasn't possible. Maurice was also able to set a bandwidth threshold for the guest network to protect against guests consuming too much of the network's capacity.

Additionally, with the ZoneFlex system, Maurice was also now able to identify and find rogue access points. "With a busy IT staff, finding rogue APs was a big problem," said Wozny. "Since we didn't spend our entire day walking around with network sniffers, the only way to really find these breaches was to scan for SSIDs on our laptops when we had the time."

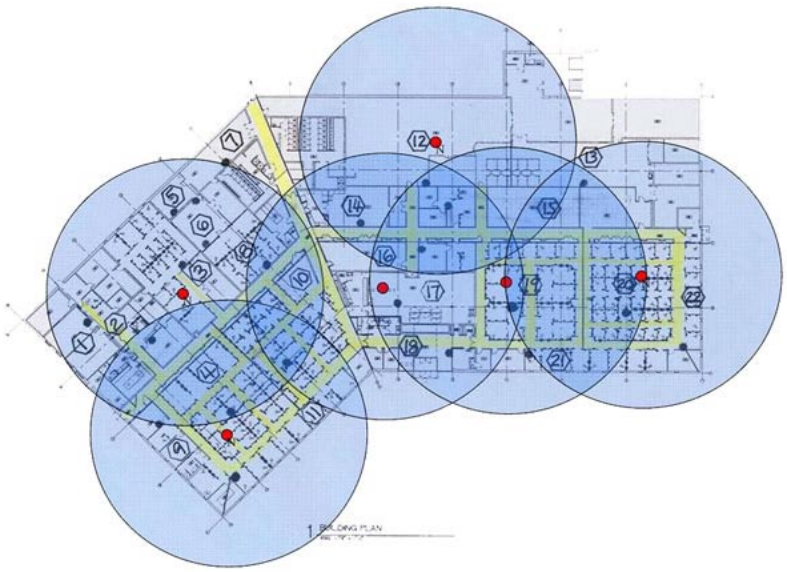
With the Ruckus ZoneDirector unauthorized APs are now automatically detected and administrators altered by email so action can be taken immediately.

With the Ruckus ZoneFlex system, Maurice has seen the administration of its wireless network drop dramatically.

"We've realized about a 90-to-95 percent savings in the time it takes to manage this network. And with a limited IT staff and budget, this is real money," said Wozny.

Looking ahead, Maurice plans to roll out the Ruckus ZoneFlex Smart WLAN system in branch locations and facilities nationwide.

"ZoneFlex allowed us to transform our Wi-Fi network from an unreliable,. administrative nightmare into a reliable utility that we no longer have to worry about," concluded Wozny.



Because of the extended range of the Ruckus ZoneFlex system, made possible by state-of-the-art directional antenna array technology, Maurice Sporting Goods was able to deploy far fewer access points and gain even better Wi-Fi coverage and reliability throughout their 58,000 square foot corporate offices just outside Chicago.