Distributor Gains New Value by Updating Old Wireless LAN

Frank Laudino knew it was time to update his company's wireless LAN, but didn't know when the company had the time to do it. Laudino is CIO of Aaron & Company, a thriving plumbing, heating, cooling and sheet metal supply wholesaler serving

New Jersey and Eastern Pennsylvania. The company's 100,000 square foot warehouse runs two shifts Mondays through Friday and one on Saturday. At any given time there are about 25 workers with mobile computers connected to the wireless network to receive order picking instructions from the company's Eclipse warehouse management system (WMS). Without the wireless LAN, order fulfillment would come to a standstill.

So Laudino was worried when workers started experiencing coverage dead spots. He called Advanced Mobile Group for a consultation. Advanced Mobile Group had designed and installed the original wireless LAN 12 years previously and managed a more recent upgrade of Aaron's mobile computers.

"Advanced Mobile Group has been a trusted vendor for us for many years and we wanted their advice on what we should do about our network," Laudino said.

Advanced Mobile Group did some troubleshooting and got the failing access points running again, but believed there was a strong risk the problems would return because of the age of the equipment. The old, IEEE 802.11b standard access points also

represented a data security risk because they did not support the advanced security that has become available. Advanced Mobile Group recommended replacing all seven of the old access points with newer-generation equipment.

Tight Transition Window

The new Zebra Technologies (formerly Motorola) AP7522E access points that Advanced Mobile Group recommended are fully compatible with the mobile computers used in the warehouse, offer a much higher level of security and would greatly improve network reliability. Improving reliability convinced Laudino the upgrade would be worthwhile. However, the process of transitioning from the old network to the new was a major concern.

"I was nervous because we hadn't done this before," said Laudino. "We are nearly a 24-hour shop and couldn't afford to shut down. We could have done it on a weekend but it would be difficult to test the system under real working conditions."

Overcoming these constraints required careful planning. Advanced Mobile Group's engineers assessed the warehouse and determined the new access points could be placed in the same locations as the old ones with no additional units needed.

Advanced Mobile Group's experience made a fast transition possible, practical and seamless. It sent a team of technicians on site that replaced the old access points with pre-configured new units and updated the IDF, which included adding power-over-Ethernet (PoE) switches. Some technicians worked on the access points while others simultaneously updated the network settings on the mobile computers. The mobile

updates began during a slow period in the morning and were completed during the lunch break, which kept Aaron & Company's distribution operations from falling behind schedule.

"We had minimal downtime," said Laudino. "The Advanced Mobile Group staff really did a great job. There was very little that I had to do, because they took care of 99.9 percent of the work."

Faster Performance, Better Security

The new Zebra 7522E access points have two radios, an IEEE 802.11n standard for backwards compatibility with previous-generational mobile devices plus an 802.11ac radio that is faster and provides better transmission quality for more reliable performance. The dual radio can support mobile devices running different wireless protocols on the same network, so organizations can gradually upgrade as individual mobile computers need replacement, instead of replacing the entire population at once for compatibility with the new network.

The faster transmission speeds and higher processing power also enable stronger network security. The 7522 access points can satisfy multiple security requirements, including PCI for retail and HIPAA for healthcare. Supported security protocols include WPA2, WPA,

801.11i and 802.1x and includes network intrusion and other security features. Aaron & Company previously secured its wireless network with the WEP protocol, which left it highly vulnerable. Weak network security is a common situation, as 82 percent of midsize organizations are at risk of a data breach risk according to a 2014 study by The Hartford, and nearly have had experienced a data breach in the past three years, according to a Symantec study.

"A lot of companies have older wireless LANs and don't realize they are at risk," said Advanced Mobile Group co-founder Wynn Polin. "As long as the old equipment works they don't really think about it. Companies with older wireless LANs also don't know about the performance they're missing out on. New systems create value because they are more reliable, faster and much more secure."

"The decision to upgrade really wasn't difficult," said Laudino. "There is value to improving reliability, the upgrade wasn't too burdensome financially, plus we would be getting enhanced security."

"The only real risk I saw was the upgrade process itself. We needed someone that could get it done quickly and get it done right the first time. Our warehouse is critical to our operations. Advanced Mobile Group did a great job of managing the project and protecting our business." •

About Advanced Mobile Group

Founded on a commitment to service, accessibility and hands-on support, Advanced Mobile Group provides tailored, industry-specific solutions that best meet your company's business objectives. From hardware and software to integration services, Advanced Mobile Group delivers complete, end-to-end solutions from leading manufacturers—providing unparalleled value to clients of all sizes.

Benefits of Working with Advanced Mobile Group:

• Enjoy the convenience and assurance of a single point of contact and accountability for hardware, software and services

• Gain access to the knowledge and experience of mobile industry specialists who have overseen hundreds of implementations over the past 20 years

• Benefit from access to mobile computing software and technologies from multiple vendors, helping ensure that you get the right solutions for your business

• Realize improved speed, accuracy and visibility through the cost-effective efficiencies mobile solutions can deliver

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