Tire Rack Accelerates Operations with Xirrus Wireless Arrays

TIRE RACK®.com

Since 1979, Tire Rack has grown from a single retail store in Indianapolis to become America's largest independent tire tester and consumer-direct source for tires, wheels and performance accessories. The company now encompasses two million square feet of space and has six distribution centers across the country. Maintaining this growth and a thirty-year commitment to high-quality performance products, expert advice, fast shipping and exceptional pricing has demanded cutting-edge technology. Today, Xirrus Wireless Arrays are accelerating employee collaboration at the company's headquarters, allowing Tire Rack to put more Americans on the road.

Faced with the critical bandwidth demands of their internal marketing department, planners at Tire Rack decided to implement a wireless network that would provide complete Wi-Fi coverage to its new office annex in South Bend, Indiana. Tire Rack's team needed a network that would allow employees to collaborate using a wide range of bandwidth-intensive applications which involve sending, sharing, and transferring multihundred-megabyte media-rich files.

To enable the marketing department to reach full productivity, network planners would also need sufficient capacity to support more than 150 users, span three stories and several hundred thousand square feet, and allow for seamless roaming as users move between offices and conference rooms.

"Tire Rack's marketing team decided that they could no longer afford to stop a project, meeting, or brainstorm session due to wireless bandwidth issues," said Blake Williams, enterprise account executive at Zones, a partner of Xirrus.

A Convincing Wireless Experience

Tire Rack was introduced to Xirrus while attending the Interop Vegas 2012 enterprise IT show. As the sole provider of high-density, high-performance wireless access for the conference, Xirrus had demonstrated that it could meet the aggregated wireless needs of thousands of attendees toting smartphones, tablets, and other wireless devices. Tire Rack executives cited the reliable network connectivity, minimal equipment required, and low capital costs of Xirrus Wi-Fi arrays in their decision.

Requirements

- Wireless coverage for three stories and several hundred thousand square feet
- Bandwidth to support over 150 concurrent users to collaborate, send bulk files, and share huge digital photos and advertisements
- Scalability to support device growth and bandwidth-intensive applications
- Rapid wireless network activation and provisioning
- Fiber backbone to support wireless-growth expectations through 2016
- Wireless management system to track users, devices, and applications, and to set policies

Solutions

- 4 radio XR-4430 Wireless Arrays, each with 4 open radio slots for future expansion
- Xirrus Management System (XMS) to configure and monitor the wireless network

Benefits

- Delivers bandwidth for fast and easy collaboration by headquarters employees
- Complete control, monitoring and management of network at all times
- Potential for wireless access at the outdoor test track and events
- Seamless roaming for continual connectivity as users move from offices and conference rooms

At Interop, Tire Rack saw firsthand how Xirrus could seamlessly support thousands of people, many of whom had moved beyond email access and web browsing and into streaming media-rich applications and sending volumes of high-megapixel photos and advertisements," said Bruce Miller, vice president, product marketing at Xirrus. "Tire Rack's decision came down to simple math: supporting multiple concurrent users collaborating on large files adds up to a requirement for highly scalable bandwidth and ubiquitous connectivity. That's what Xirrus delivers."

Fast Deployment of Fast Wireless

Xirrus met the demands of Tire Rack by deploying XR-4430 Wireless Arrays. As part of the XR-4000 series, the 4 radio XR-4430 Array delivers up to two times the coverage andtwo times the bandwidth and user density as legacy thin access points (APs). The XR-4430 models also include 4 open radio slots to support future doubling of capacity expansion and/or incorporation of next-generation 802.11ac technology. The multi-radio design and directional antennas of the Array minimized the number of devices that Tire Rack would need to deploy, resulting in savings in equipment, cables, switch ports, installation time, maintenance, and power consumption.

The entire Xirrus system took just minutes to install, said Jean Roberson, chief information officer of Tire Rack, and each Array took just 15 minutes to configure – quickly resulting in noticeable improvements.

Roberson commented: "The speed and performance of the Xirrus Arrays are simply astounding. Xirrus provides employees with the proper tools to maximize productivity and minimize congestion due to technical problems. We see our marketing department benefitting particularly from the installation of Xirrus, which allows multiple concurrent users to collaborate and share huge digital photos and advertisements with ease."

In making the decision, Roberson also saw scalability and security as critical concerns. To monitor the network's capacity, the deployment included the Xirrus Management System (XMS), a wireless network management platform that provides full monitoring and management of the Xirrus Wireless Array network via a web-based application with graphical map views. Tire Rack benefited from the XMS's integrated rogue detection, rogue mitigation, and client location detection to maintain a secure, highfunctioning environment.

Endless Possibilities

Now, with hundreds of corporate employees fully Wi-Fi-enabled, Tire Rack IT administrators are considering how high-performance wireless can benefit their team of over 100 test drivers (their sales teams) at the company's state-of-the-art, 11.7-acre test facility.

Roberson added: "We are only beginning to leverage this technology to empower our internal team and customers. Our test track hosts comprehensive tire tests throughout the year. Xirrus Arrays will let our testers stand on the track infield gathering data completely wirelessly – a huge benefit for Tire Rack. What's even more exciting is the possibility of wirelessly streaming video feeds from in-car cameras as they traverse our test track – and the Xirrus system can handle it all, no matter the load."

Tire Rack executives are now using the headquarter's Xirrus wireless network as the model to roll out smaller Wi-Fi deployments in their remote tire centers and for new testing tracks.

"Tire Rack is an excellent example of how Xirrus helps transform business," says Miller. "The Xirrus Arrays enable businesses to devote more time and energy to critical tasks, and to reduce hours devoted to fixing internal snafus. Xirrus is allowing Tire Rack to focus on their business, and to explore new ways to exceed customer expectations."

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About Xirrus

With the explosion of smartphones and tablets, people expect to connect wirelessly whenever and wherever they want. Organizations require highbandwidth connections to send and receive voice, video and data, from any device to any other device. And no one delivers better than Xirrus. The Array-based solutions draw from cellular tower design principles to provide wired-like reliability, increased user density and capacity, and superior security. They perform under the most demanding conditions and have lower infrastructure requirements than traditional AP-based Wi-Fi systems. When integrated with business and IT objectives, they help users do more than ever before.

At Xirrus, we apply the "best practices" of wired networking to wireless infrastructure by distributing the intelligence to the edge and outfitting the Array with dense software programmable radios in the same manner as a wired switch. That's how Xirrus delivers the bestperforming, most scalable wireless solutions in the industry. It's a strategic IT infrastructure advantage that fuels organizations. Because Xirrus does wireless networks right.

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