TRACTOR SUPPLY COMPANY SOWS THE SEEDS OF RAPID GROWTH WITH A FLEXIBLE, MULTISERVICE NETWORK

Summary

Company:
Tractor Supply Company

Industry:
Retail

Business Challenges:
Refresh network to support rapid growth of retail stores and e-commerce.

Technology Solution:
- *MX480, MX240, MX150, and MX104 Universal Routing Platforms*
- *SRX3000 and SRX1500 Services Gateways*
- *QFX10008 and QFX5100 Switches*

Business Results:
- *Built a carrier-class, multiservice network and high-performance data centers to support 1700 stores, 10 distribution centers, and e-commerce operations*
- *Securely segmented the network to support retail operations, payment processing, IoT devices, and administration*
- *Piloted guest Wi-Fi in 100 stores in less than two weeks*
- *Simplified network operations and lowered network support costs*

With a brilliant red antique tractor as the centerpiece of its modern headquarters in suburban Nashville, Tractor Supply Company is on the leading edge of omnichannel retailing. With roots as a Depression-era mail order business, Tractor Supply Company is the largest rural lifestyle retail store in America, supplying everything customers need to maintain their farms, ranches, homes, and animals. The company has more than 1700 stores in 49 states. With annual revenues of $7.26 billion, the company is on an aggressive growth trajectory, with a long-term goal of 2500 stores.

Deliver a Consistent Customer Experience

Tractor Supply strives to deliver a customer-centric experience, whether online, in one of its 20,000-square-foot stores, or over the phone. It does this by offering modern-day amenities such as the ability to buy online and pick up items at the store, with a customer's full order waiting at the door or tucked into a physical locker. To keep its shelves stocked with the latest products, the company leverages the latest technology from the retail floor to its distribution centers.

But the company's legacy network was straining under the heavy load of business growth. Tractor Supply set out to refresh its network to meet its goals of opening 100 new stores each year and rapidly growing e-commerce sales.

"You're probably not going to find many enterprises that start their relationship with a vendor by replacing their core network," says Raymond Beaudoin, who, as senior network architect at Tractor Supply, has overseen the network for the last six years. "It was a highlight of my career to sit with my C-level executives and explain that I believed Juniper was a benefit to Tractor Supply Company."

"With Juniper, we offer a service to our internal and our external customer that's nearly invisible, and that's been really great."

- Raymond Beaudoin, Senior Network Architect, Tractor Supply Company

Fertile Ground for Growth

"The Juniper platform is truly a Swiss Army knife," says Beaudoin. "The MX Series offered us every feature set we were looking for within one box."

With Juniper Networks® MX Series Universal Routing Platforms as the foundation, Tractor Supply built an IP/MPLS carrier-grade, multiservice network to support its retail operations across the U.S. The network delivers the highest levels of

performance, availability, and security. It also uses Juniper Networks QFX10008 and QFX5100 switches in its data centers. "We're a Fortune 400 company, but we run our network like a service provider," says Beaudoin.

The MX Series routers provide network segmentation at unprecedented scale. Network segmentation enables a single infrastructure to support many different business services—in-store operations, payment processing, e-commerce operations, distribution centers, third-party vendors, as well as the company's own administration. "With Juniper, we offer a service to our internal and our external customer that's nearly invisible, and that's been really great," Beaudoin says.

With Juniper, Tractor Supply connected its stores far faster and at a fraction of the cost than had it stayed with its incumbent network vendor. Beaudoin estimates that building a Juniper network saved more than $2 million in upfront capital costs alone, because of Juniper's consistent architecture and the need to buy fewer different network products to support its retail operations. "We were able to deploy the Juniper network without making any changes to the stores," says Beaudoin. "Juniper has given us the agility and scalability that we need."

"You're probably not going to find many enterprises that start their relationship with a vendor by replacing their core network. It was a highlight of my career to sit with my C-level executives and explain that I believed Juniper was a benefit to Tractor Supply Company."

- Raymond Beaudoin, Senior Network Architect, Tractor Supply Company

More Agile, Easier to Support

Store operations depend on fast, reliable connectivity, and Tractor Supply's new network is more agile and easier to support. Credit and debit transactions are faster than they've ever been—in some cases, 100 time faster. Stores can take advantage of the boom in retail technology innovation. In-store kiosks, self-service package lockers, digital signage, and other IoT devices can perform their functions readily, while IoT traffic stays isolated and secure from payments and other sensitive data.

An agile, multiservice network enabled Tractor Supply to pilot guest Wi-Fi in 100 stores within two weeks. Many people in rural America live beyond the reach of high-speed broadband, but they can come into a Tractor Supply store for complimentary wireless Internet access. "A couple of scripts, and the entire

"The Juniper platform is truly a Swiss Army knife."

Raymond Beaudoin, Senior Network Architect, Tractor Supply Company

thing was preconfigured and ready to go," says Beaudoin. "It wouldn't have been feasible without Juniper."

Not only is the network far simpler and more flexible, but support costs are lower. "It's so common in networking that people are stuck in a reactive state," Beaudoin says. "We felt it, and it was unsustainable. Now with Juniper, we're proactively ready to serve the business."

Secure Third-Party Access

Providing third-party vendors access to the retail network is critical, but without the right precautions, it can increase security risks. Three dozen vendors need direct access to Tractor Supply's network to provide in-store services such as physical security, digital safes, and vending machines. Activating new partners across 1700 stores used to take Beaudoin's team a month; now, onboarding a new vendor takes just an hour. "With our migration to Juniper, supporting partners has been a breeze," Beaudoin says.

On a Path to Multicloud

A Juniper infrastructure and network automation is making it easier for Tractor Supply to embrace a multicloud strategy from its retail stores to its data center and cloud providers. Multiple cloud services, including IBM SoftLayer, Microsoft Azure, and Amazon Web Services, are connected through the Juniper network. With a multicloud strategy, on-premises and cloud resources can be managed holistically.

The network team at Tractor Supply appreciates the details when it comes to configuring and operating a Juniper network, like zero-touch provisioning and the ability to roll back changes. They are also exploring network automation to create greater efficiencies. "The Junos® operating system has an API-centric deployment, so we can tie into our deployment methods," says Beaudoin. "Juniper makes it easy."

Old-Fashioned Values

Tractor Supply is more than a big retailer: the company is founded on a strong mission and values. "Our 'change' value ties into Juniper: Accept change, embrace it, initiate it," says Beaudoin. "Our two organizations are aligned when it comes to respect, a winning attitude, and teamwork."

For More Information

To find out more about Juniper Networks products and solutions, please visit www.juniper.net.

About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

Corporate and Sales Headquarters

Juniper Networks, Inc.
1133 Innovation Way
Sunnyvale, CA 94089 USA
Phone: 888.JUNIPER (888.586.4737)
or +1.408.745.2000
Fax: +1.408.745.2100
www.juniper.net

APAC and EMEA Headquarters

Juniper Networks International B.V.
Boeing Avenue 240
1119 PZ Schiphol-Rijk
Amsterdam, The Netherlands
Phone: +31.0.207.125.700
Fax: +31.0.207.125.701