Pulse Secure®

Pulse Secure Brings Convenience, Security to 7-Eleven's In-Store Network

Summary

Company: 7-Eleven

Industry: Retail

Challenges: 7-Eleven needed a secure and reliable network to make it easier for store managers to stock fresh foods and order merchandise to keep pace with ever changing customer preferences

Selection Criteria: Refresh routing and switching infrastructure to support rapidly growing business

Network Solution:

- Pulse Policy Secure
- Pulse Secure Appliances
- SRX210 Services Gateway
- AX411 Wireless LAN Access Point
- EX2200 Ethernet Switch
- J2350 Services Router

Results:

- Place orders for fresh food and other items to be delivered to stores in less than 24 hours
- Provide consolidated security and network services to 7,000 stores
- Conduct transactions, operations, and advertising over in-store network
- Comply with PCI DSS

"When most people think of convenience stores, the first name that pops into their heads is usually 7-Eleven. That's probably because the Dallas, Texas-based chain operates, franchises, or licenses more than 7,600 stores in North America, making it the largest in the convenience retailing industry. Globally, 7-Eleven has an additional 35,000 stores in 16 countries, making it a ubiquitous part of many people's lives, whether they are stopping in for a Slurpee, Big Gulp, coffee, or something from the store's wide range of fresh food offerings. 7-Eleven stores worldwide generated total sales close to $63 billion in 2010."

Challenge

Defining the convenience store category, 7-Eleven has the daily challenge of offering hundreds of different products in their stores while maintaining fresh stock inventory. 7-Eleven's latest step in providing customers what they want is item-by-item management.

"We are looking hard at what sells in stores," says Eric Walters, network manager at 7-Eleven. "The success of our business transformation effort means greater collaboration between our franchisees and corporate headquarters. Using item-by-item management, rather than a replenishment model, allows our franchisees to limit the write-off for fresh food and increase sales and profitability."

7-Eleven has long been an innovator in retail information systems. The company's point of-sale touch-screen system includes integrated product scanning as well as credit, debit, and stored value card authorization. Managers use wireless handhelds to order products on a daily basis, and their ordering decisions are supported by 5 day weather forecasts, merchandise promotions, and historical sales information. Store managers can make delivery adjustments, verify orders, and perform write-offs on their handhelds. Back-office functions, such as sales and cash reporting and payroll, are connected directly to the company's centralized accounting system.

Selection Criteria

7-Eleven has been a Juniper Networks and Pulse Secure customer for more than a decade, and when it came time to refresh the company's in-store security and network infrastructure, Juniper Networks and Pulse Secure rose to the top of the list of preferred vendors. "We've had a very long and very valuable relationship with Pulse Secure," says Walters.

"One of the key aspects of the relationship with Juniper Networks and Pulse Secure is their ability to listen to what the customer needs," says Walters. "We have helped influence some of the evolution of the products and features that we as well as other customers would see as a benefit."

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> **Eric Walters**
> **Network Manager, 7-Eleven**

Solution

The joint Juniper Networks and Pulse Secure solution keeps 7-Eleven operating around the clock. At its stores, corporate headquarters, and regional offices, 7-Eleven uses Juniper Networks SRX210 Services Gateway, EX2200 Ethernet Switch, J2350 Services Router, and Pulse Secure Appliances and Services.

7-Eleven is upgrading more than 7,000 stores from the joint Juniper Networks and Pulse Secure firewall/VPNs to the SRX210 Services Gateway. It is also deploying SRX210 gateways in new stores as part of its expansion in Canada. Juniper Networks SRX Series Services Gateways are high-performance security, routing, and network solutions. SRX Series gateways are based on Juniper Networks Junos® operating system, Juniper Networks proven OS which delivers security and advanced protection, rich routing capabilities, and reliable service operations.

The company uses Juniper Networks EX2200 line of Ethernet switches to connect its point-of-sale system, back-office computer, and digital signage in the stores In-store Wi-Fi connectivity is provided by Juniper Networks AX411 Wireless LAN Access Point—a dual-band, dual-radio 802.11n access point. AX411 access points are combined with and managed by the SRX Series for category leading security.

7-Eleven also uses Pulse Secure solutions at its corporate headquarters and regional offices. 7-Eleven uses Pulse Secure Policy Secure to reduce the company's exposure from insider threats and mitigate risks. Policy Secure protects 7-Eleven's mission critical applications and sensitive data by identity enabling network security and providing network access control, visibility, and monitoring. With Policy Secure, 7-Eleven can provide secure wireless LAN guest access at its corporate headquarters. In addition, the retailer uses Pulse Secure Odyssey Access Client to perform 802.1X authentication and workstation compliance checking.

Thousands of 7-Eleven's employees use Pulse Secure Clients for secure remote access to key applications such as e-mail, finance, and ERP, from any standard Web browser. Pulse Secure Appliances deliver best-in-class performance, scalability, and redundancy for secure remote access and authorization.

Results

7-Eleven's new network allows the company to hone store operations. Managers use wireless handhelds to quickly identify what needs to be restocked—down to the item—and place the order while still on the floor. "Store managers can place an order by 10:00 a.m. and the product will show up by 5:00 a.m. the next morning," Walters says. "The franchisees use a constant ordering process seven days a week, and the network is always available to support that business priority."

The Pulse Secure Policy network gives 7-Eleven the security, scalability, and ease of management that it needs to efficiently operate globally. 7-Eleven can consistently enforce its security policies across all store locations, while accommodating variations in store operations such as whether the location sells gasoline. "The solution we have put in place allows us to secure everything within the store," says Walters. "We feel confident that the solution, the environment in the store, and the connectivity to the store is adequately protected."

The Juniper Networks infrastructure and Pulse Secure solution provides the strong security that 7-Eleven needs to consolidate multiple services on the same network, including customer transactions, store operations, and in-store digital display advertising. It also enables compliance with Payment Card Industry Data Security Standards (PCI DSS).

"The vision was that we needed network separation as everything becomes Wi-Fi enabled," Walters says. "We can use the SRX Series platforms to provide that isolation. If we did not do that, we would have had to make a massive investment to put a firewall in every store to support PCI as fully as we do today. Without the Juniper Networks SRX Series Services Gateways, it becomes much more difficult."

The ability to provide digital advertising over the in-store network created additional efficiencies. "We realize savings in that the digital signage provider does not have to supply a separate network to the store, and we've made a better investment in the network," says Walters.

The ability to consolidate and scale secure connectivity to store locations is critical for operational efficiency. "The management of 7,000 individual devices is critical," says Walters. "If you have to make a change across all locations, you would normally have to make a change in each location. It's really critical to be able to manage it as though it were one device."

The ability to adapt to evolving business and technical requirements is essential. "The SRX Series platform we use in the stores gives us the protection to know that as we change demands in the store—if we want to add another service or kiosk or change the systems in the store to operate in a different way—we can do that without compromising security," says Walters.

For example, 7-Eleven has seen success using 3G wireless as a temporary WAN connection to new stores, and it is examining the use of 3G or 4G as a backup connection should there be an outage on the primary T1. With the SRX Series platform, 7-Eleven has its choice of WAN connectivity. "Without the right routing product in place, we would have to do a forklift upgrade to make that change in connectivity," says Walters.

Next Steps and Lessons Learned

"As our customers change their wants and demands from a convenience standpoint, we'll be able to evolve," says Walters. "We'll be able to implement new technologies in the store and feel confident that we can address those without having to go in and replace the equipment. That's the key to the success of the network and of providing convenience to the customer."

About Pulse Secure, LLC

Pulse Secure, LLC is a leading provider of access and mobile security solutions to both enterprises and service providers. Enterprises from every vertical and of all sizes utilize the company's Pulse virtual private network (VPN), network access control and mobile security products to enable end user mobility securely and seamlessly in their organizations. Pulse Secure's mission is to enable open, integrated enterprise system solutions that empower business productivity through seamless mobility.

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