

CASE STUDY

Streamlining Secure Network Management by Leveraging FortiSwitch Across 2,500+ Restaurants

When you are looking for a sandwich with a "zing," look no further than Jersey Mike's Subs. The restaurants—in every U.S. state including the District of Columbia—pride themselves on being "A Sub Above." Jersey Mike's premium meats and cheeses are sliced on the spot and piled high on in-store baked bread. Then they use a red wine and olive oil blend to give their sub sandwiches the Jersey Mike's signature flavor. Authentic cheesesteaks are grilled fresh.

The company's commitment to quality explains why it has grown dramatically since 17-year-old Peter Cancro purchased the original Point Pleasant, New Jersey-based Mike's Subs back in 1971. More than five decades later, Cancro is CEO of Jersey Mike's Franchise Systems Inc., overseeing more than 2,500 restaurants with new locations opening often.

The restaurants are individually owned and operated, but Jersey Mike's corporate provides them with certain services, including their IT infrastructure. A team of six internal staff is responsible for networking and cybersecurity across all 2,500-plus locations, supported by a managed service provider (MSP), Fortinet partner GLS.

"The franchisees own their network and security hardware, but our team has responsibility for keeping those devices functioning. We have day-to-day support from managed service provider GLS. Still, managing such a broad network requires our lean team to work as efficiently as we possibly can," says Scott Scherer, Chief Information Officer for Jersey Mike's.

Networking and Security Go Hand in Hand

Scott Scherer leads that lean team. "Network security, application security, and obviously ransomware are all concerns," he says. "But my biggest security concern is social engineering, because preventing that kind of attack is out of my control to some extent."

Three years ago, as part of the standard franchisee technology package, Jersey Mike's and GLS began rolling out a FortiGate Next-Generation Firewall (NGFW) at each franchise location. "We really liked the content filtering, web filtering, IPS [intrusion prevention system], and other security features in the FortiGate Next-Generation Firewalls," Scherer says. "When we saw how much easier it would be for GLS to centrally manage FortiGate firewalls compared with our legacy firewalls, we began migrating away from our legacy platform and toward the Fortinet Security Fabric."

Today, every franchise restaurant routes all its traffic through one of its FortiGate NGFWs two virtual local area networks (VLANs). A PCI-compliant VLAN handles





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Scott Scherer Chief Information Officer Jersey Mike's Franchise Systems, Inc.

Details

Customer: Jersey Mike's Subs

Industry: Retail

Headquarters: Manasquan,

New Jersey

Secure SD-WAN Locations:

2,500+

Business Impact

 Local area network (LAN) segmentation gives franchisees flexibility in how they use their back-office network traffic for the restaurant's point-of-sale (POS) system, while the franchise's back-office traffic utilizes the other VLAN. "Because the point-of-sale traffic does not traverse the back-office network, the franchisee has more flexibility to use things like camera systems," Scherer explains.

The Jersey Mike's franchisee package also includes one network circuit, and the company encourages each restaurant to add a cellular network for failover. The restaurants connect to the Jersey Mike's wide area network (WAN) using the Fortinet Secure SD-WAN (software-defined wide area network) capabilities built into the NGFWs. "We have three data centers, which operate together with failover to meet our redundancy needs as a company," Scherer says. "Each data center has an HA [high availability] pair of FortiGate firewalls. The benefit of SD-WAN is that devices can fail over quickly and reliably anytime there is a problem with a circuit.

"For the restaurants, Fortinet Secure SD-WAN enables us to prioritize point-of-sale services over back-office services," he adds. "We will not have an issue where something on the back-office network that requires a lot of bandwidth is impacting the store's ability to process customer payments. In fact, we have the SD-WAN set up so that, in the event of a failover to cellular, the point-of-sale network keeps working but the back office gets shut down."

Equally important, the FortiGate NGFWs provide security alongside their networking capabilities, making Scherer and his team much more comfortable that their network is protected. "The IPS inspection helped us take a big jump forward in terms of security," he says. "We use the URL filtering extensively, especially on the point-of-sale side. And the ability to segment into VLANs, keeping point-of-sale traffic isolated from everything else, is a key benefit of the FortiGate firewalls."

He adds, "It makes my life easier to work with a vendor that operates at the convergence of networking and security." To achieve a comparable level of security in its legacy infrastructure, Jersey Mike's would have implemented an assortment of different devices, which would have greatly complicated network and security management.

Faster Deployment, Better Visibility

GLS manages all the NGFWs across Jersey Mike's restaurants, plus the three corporate data centers, using Fortinet tools. The FortiManager management solution enables the MSP to deploy NGFWs in remote restaurants with little effort from on-site staff. Meanwhile, Scherer uses the FortiAnalyzer data analysis tool to dig into any issues and troubleshoot traffic flows. FortiAnalyzer provides visibility over network security by integrating across the Fortinet Security Fabric and harnessing actionable insights.

"The GLS team can register a new firewall within FortiManager," Scherer says.
"They have scripts and policies that are consistent across all stores, and they
automatically deploy that configuration to a device before sending it out." When the
NGFW arrives at the restaurant, "store staff contact GLS. Then GLS works with them
to make sure the FortiGate firewall is up and running, working to their satisfaction."

GLS also uses the FortiSIEM security information and event management platform, which is part of the firm's security operations center (SOC) service. FortiSIEM enables the GLS team to monitor for security issues and delve into any problems they find to figure out what happened. "They also integrate their vulnerability assessments," Scherer says. "Some of their proprietary services rely on data from FortiAnalyzer and FortiSIEM."

Business Impact (cont.)

- Increased uptime for restaurants, thanks to network redundancy, hardware reliability, and improved visibility
- Improved security for both point-of-sale and backoffice networks vs. legacy environment
- 80% time reduction for help desk to troubleshoot switches
- 50% fewer return merchandise authorizations (RMAs) vs.
 legacy environment
- 50% faster deployment of LANwhen new franchise is opening

Solutions

- FortiGate Next-Generation
 Firewall
- Fortinet Secure SD-WAN
- FortiManager
- FortiAnalyzer
- FortiSIEM
- FortiSwitch
- FortiAP
- FortiLAN Cloud
- FortiClient

Service

FortiGuard Al-Powered
 Security Service UTP Bundle



The FortiGate NGFWs and Fortinet Secure SD-WAN have proven highly reliable. "Our legacy firewalls had considerably more issues with hardware and network reliability than we have had since transitioning to the FortiGates," Scherer reports. "To some degree, that is because FortiManager provides GLS with better visibility; they can solve problems immediately, rather than having a store just send the equipment back and providing them a new device. Overall, the number of RMAs [return merchandise authorizations] we do has been more than cut in half since we started using the FortiGate firewalls."

This reduces the hassle of technical support for everyone involved. "It also saves the franchisee money," Scherer points out. "If we can fix a configuration issue, for example, and avoid an RMA for something that was not an actual problem with the equipment, we can substantially increase the restaurant's network uptime."

In addition, Scherer estimates, FortiManager has cut time to deployment in half. "The length of time it takes GLS to get a FortiGate firewall running in a franchise location, from the time that we first request it, has gone from about a week to four days. More importantly, the length of time between when the device arrives on-site and when it is operational used to be four to six hours. Now it is two to three."

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Scott Scherer Chief Information Officer Jersey Mike's Franchise Systems, Inc.

Visibility Is Key to Central Management of 2,500+ Locations

While GLS has responsibility for the WAN and restaurant firewalls, Jersey Mike's internal staff provides support for franchisees' LAN. Unfortunately, many franchisees simply install switches that they pick up from a local big-box store. "My team has been supporting thousands of unmanaged switches," Scherer reports. "We have had no ability to manage them and no visibility into the switch at all."

Jersey Mike's is now beginning to replace the unmanaged switches in its thousands of restaurants with FortiSwitch enterprise switches. Scherer's team will manage the FortiSwitch devices using FortiLAN Cloud, a hosted cloud-based management platform for FortiSwitch and FortiAP devices.

"The idea is to monitor down to the port level," Scherer explains. "We have had no way to do that in our legacy environment. But we are replacing those off-the-shelf switches with FortiSwitches, which can be managed, monitored, and configured with security. Instead of guessing, our help desk will see indicators of the health of the switch. This will dramatically reduce the time they spend troubleshooting a problem—not just the switch, but also other systems, such as the point-of-sale device—because they will be able to pinpoint where the problem is much faster. FortiSwitches will give us visibility where we currently have little black boxes in the middle of the network."

In addition to saving his team time, this accelerated troubleshooting will enhance their ability to resolve franchisee problems. "With help desk issues, half of our time may be spent isolating the trouble, and the FortiSwitch approach will reduce that by about 80%," Scherer estimates. "The more quickly we can find where an issue is and then deploy the right resources to fix it, the less time the franchisee will have the problem. Moving to FortiSwitches is greatly enhancing our help desk support of Jersey Mike's franchisees."

Next, Jersey Mike's is considering rolling out FortiAP access points in certain locations. The restaurants do not offer guest Wi-Fi, but Scherer sees a role for wireless devices in the processing of customer orders, particularly at restaurants that include a drive-through. "When we have point-of-sale devices that need to be wireless, we need to put in a solution that is also secure," Scherer says.

"FortiAPs have better availability than their competitors and easier, single-pane-of-glass management," he adds. "We considered an unmanaged AP, but when we realized how tightly FortiAP integrates with the Fortinet Security Fabric, the decision was a nobrainer. We expect the FortiSwitches and FortiAPs to work together to paint a very complete security picture for our team."



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