

CASE STUDY

Regional Supermarket Chain Builds Its Digital Transformation on the Fortinet Security Fabric

Cub, based in Stillwater, Minnesota, was established in 1968 as one of the nation's first discount grocery stores. The organization operates 80 grocery stores and pharmacies in Minnesota and Illinois that offer customers fresh produce, a wide selection, and food expertise throughout the stores to meet their everyday grocery needs. Cub also offers a well-crafted selection of products at its 31 Cub Wine & Spirits and Cub Liquor stores. As the hometown grocer for over 50 years, Cub has made it a priority to be a good corporate citizen by helping to create healthy and thriving communities that enhance the quality of life for its customers, employees, and neighbors.

Building a New Network from the Ground Up

When UNFI purchased Cub from SuperValu, UNFI intended to divest the company in line with its core operational focus on wholesale distribution. Cub was therefore tasked with building a standalone network and security infrastructure from the ground up.

Although UNFI eventually paused the divestiture, Cub proceeded with its network build. As Luke Anderson, Chief Information Officer at Cub, explains: "The pandemic transformed the market dynamics and made grocery retail a clear growth driver. Along with wanting to ensure that there was no disruption to communities' highly valued grocery stores during the crisis, UNFI thought again about the sale and has decided to maintain the Cub and Shopper Foods brands within its portfolio.

"However, as we were already in the process of separating our IT infrastructure from UNFI's and given the different operational requirements of retail and wholesale distribution, it made sense for us to continue with the project."

A Modernization Imperative

Cub's infrastructure refresh could not have come at a better time. Due to many years of underinvestment, the company was burdened with an aging infrastructure that made it difficult to meet customers' needs and support new ways of working for employees. Cub, therefore, planned to use its network build project as an opportunity to modernize its systems at the root and branch. "We needed to upgrade our stores, our network, and our cybersecurity systems," says Anderson, "so our program to separate from UNFI's systems rapidly evolved into a holistic digital transformation."

Modernizing the network was the company's single biggest priority. Cub's antiquated network made it difficult for employees to use devices in its stores, impacting productivity and customer service. Meanwhile, its public Wi-Fi connections were slow and unreliable, negatively affecting the customer experience



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Luke Anderson
Chief Information Officer
Cub

Details

Customer: Cub
Industry: Retail
Location: Stillwater, MN

Securing the Network

Because Cub does not operate many custom-made applications, application code vulnerabilities are of far less concern than network security. As Anderson says: “The main considerations for us are around our employees and social engineering. Our employees represent a significant attack surface, and we must monitor each one of their devices as a potential risk. We are also keen to ensure that our vendors and partners are maintaining appropriate security standards.”

Although advances in payment processing mean that Cub does not handle credit or debit card data, it does routinely store and transact customer and employee data, including names, addresses, email addresses, and, through its pharmacies, health data. “We treat all this information with due care. We want to maintain our customers’ and our employees’ privacy across the board,” adds Anderson.

Building on the Fortinet Security Fabric

A strategic requirement for Cub’s network build was to source as many of its network and security systems as possible from a single partner. This was to ensure a rapid network rollout and to reduce management time over the long-term. “There are only so many hours in the day to have meetings with partners,” comments Anderson. “We want to minimize the number of companies we work with to reduce the time burden on me and my team.”

Cub’s managed service provider (MSP), Acuative, oversaw the management and implementation of the project. A Fortinet partner, Acuative introduced Cub to the Fortinet Security Fabric and recommended that it leverage the extensive Fortinet product portfolio to meet its network and security needs.

Today, Cub has nearly completed its network transformation by integrating security and networking with the Fortinet SD-Branch solution. Combining FortiGate Next-Generation Firewalls (NGFWs), Fortinet Secure SD-WAN, FortiSwitch enterprise switches, and FortiAP access points, the multi-store branch network will soon be easier to manage and more secure.

From a security perspective, Cub is leveraging a wide range of Security Fabric tools in addition to the FortiGate NGFWs, including FortiNAC (network access control), FortiSIEM (security information and event management), FortiEDR (endpoint detection and response), and FortiCASB (cloud access security broker). The company utilizes FortiGuard Security Services for artificial intelligence (AI)-powered protection across the Security Fabric. The Security Fabric will be centrally managed and optimized using FortiManager and FortiAnalyzer.

Future-Proofed for the Digital Age

With its new network, switching, and security infrastructure falling into place, Cub is now better prepared for the digital-enabled future of grocery retail. “Retail is fast becoming a technology business,” says Anderson. “But our evolving digital applications and innovations are first and foremost reliant on a high-performance network. Thanks to Fortinet, we will have just that. As a result, we will be able to deliver seamless and convenient employee experiences, such as through better point-of-sale (POS) technology, new ordering devices in stores, better training, and enhanced work management systems.”

Business Impact

- Provided a secure and high-performing foundation for digital transformation
- Improved employee productivity through better connectivity
- Enhanced customer experience with fast and reliable Wi-Fi
- Simplified management through a highly integrated platform
- Improved visibility into network risks
- Accelerated network deployment and reduced management time through consolidation

Solutions

- FortiGate Next-Generation Firewall
- Fortinet Secure SD-WAN
- FortiSwitch
- FortiAP
- FortiNAC
- FortiSIEM
- FortiClient
- FortiManager
- FortiAnalyzer
- FortiEDR
- FortiCASB
- FortiGuard Security Services

The improved Wi-Fi connectivity delivered by Fortinet is particularly welcome, as it will help boost employee productivity in stores and improve the customer experience. “When I started, poor Wi-Fi connectivity was one of the main complaints for store directors,” says Anderson. “With Fortinet, we have been able to eliminate this problem. That is great news for employees and customers, and it saves the IT team a great deal of time.”

Fortinet also helps future-proof Cub from a security perspective. With FortiAP devices and service set identifiers (SSIDs) terminating on the FortiGate NGFWs, Cub can manage security for its POS devices and set policies from one central location.

The Benefits of Integration

The IT team also benefits from the simple setup and configuration requirements of Fortinet devices. Anderson explains that it has been easy to connect to the network and integrate Fortinet products: “The Security Fabric allows us to manage everything as a connected whole as opposed to a bunch of individual products, and that has been really helpful,” he says.

The seamless integration of Fortinet products is also helping improve Cub’s security posture. There are, as Anderson puts it, fewer gaps between the security tools because the overarching system has been designed with consideration to all constituent parts. “That makes me feel more confident that we are covering all potential risk areas,” he says.

The company also experienced a significant improvement in its ability to monitor for potential threats. “Using the FortiAnalyzer solution, Acumatica provides us with reports on the number of security incidents that have been detected and analyzed,” explains Anderson. “We are seeing something in the region of 2 million events analyzed every month. Fortunately, few of these have been serious enough to investigate and none has proved to be hacking attempts. Fortinet is providing a level of visibility that simply was not there before.”

Soon, the integration of FortiSwitch and FortiAP in the Fortinet Secure SD-WAN solution will further enhance the security of Cub’s environment by extending FortiGate NGFW features to its wired and wireless local area networks through convergence.

The Path to Zero-Trust Network Access

The immediate priority for Cub is to complete the final elements of its network rollout, including the Fortinet Secure SD-WAN deployment. Looking ahead, however, the company has a goal to ensure its systems are continually up to date and that it has what it needs to stay ahead of bad actors.

In this regard, moving to a zero-trust model is a priority. Anderson concludes: “We believe that zero-trust network access is the right approach for our organization as hybrid working models continue to gain traction. We are therefore configuring our virtual private network with that in mind and intend to use FortiClient as a key enabling technology.”

