

CASE STUDY

How a 138-Year-Old Paper Distributor Adopted Fortinet Solutions

A few years ago, cybersecurity at Central Michigan Paper reached a turning point when the small IT team turned to third-party service providers to manage some of their security solutions. The paper distributor, which has been in business since 1885, has always operated with a lean staff. Currently, the IT team consists of two Progress OpenEdge programmers, who support a legacy enterprise resource planning (ERP) system as well as servers and B2B websites, and Network Administrator John Haney. Needless to say, Haney is not dedicated to security full time.

“We all wear many hats,” he explains. “I have been responsible for the cybersecurity projects, but our department supports hardware, software, VoIP communications, backups, networking, and our system users. It can be stressful having to make sure we are secure against all the cyberthreats we read about these days.”

In 2019, the company was transitioning to a new data center while some of its security solutions, including its firewalls, were well past end of life. Simultaneously, Central Michigan Paper needed to add user authentication and other capabilities to retain its cybersecurity insurance coverage. “We had to make sure we had certain boxes checked to continue to qualify for coverage,” Haney says. “There were a few security tools on the list that we had not yet implemented.”

Brian Van Donselaar from YourIT, a contact of Haney’s who provides network and security consulting services, recommended FortiGate Next-Generation Firewalls (NGFWs) to replace Central Michigan Paper’s legacy devices. By January 2020, Haney and his colleagues had rolled out two FortiGate NGFWs, with the AI-powered FortiGuard Security Services Unified Threat Protection (UTP) bundle, which includes intrusion prevention system (IPS), content security, and web security services. As they tested and learned to use the NGFWs, they liked what they saw.

“The FortiGate firewalls took some getting used to,” Haney says. “I had previously always used the command line on our older firewalls, so the GUI [graphical user interface] was foreign. But the user interface is actually very intuitive and easy to learn.”

The company deployed FortiClient as well, and Haney discovered the power of the Fortinet virtual private network (VPN), with the FortiGate NGFWs providing multi-factor authentication (MFA) using FortiToken tokens. “With the legacy firewalls, granting users remote connectivity required us to open a Telnet port on the firewall,” Haney explains. “That created a vulnerability to the internet. We wanted



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Details

Customer: Central Michigan Paper
Industry: Business Services
Location: Ada, Michigan

to close those holes and did so with the Fortinet solution. The FortiGate firewalls allowed us to enable VPN without opening ports to the internet, so our network is buttoned up and more secure. That is what really sold me on Fortinet.”

Another key benefit was the ability of the FortiGate NGFWs to block traffic from specific countries. “Most of our business is in North America, with a little bit in one European country,” Haney says. “We do not do any business with the countries that most cyberattacks come from, so we wanted to block traffic from those places. But to do that with our legacy equipment, I would have had to go find the IP addresses assigned to each country. That was a daunting task. The FortiGate NGFWs simplified the process of geoblocking by country.”

Central Michigan Paper uses FortiGuard threat signature and website classification data to enhance the NGFWs’ effectiveness, and FortiMail uses antivirus, antispam, content, and Microsoft 365 protections. “We rolled out the recommended best-practices setups,” Haney says. “As we learn more about FortiGuard, FortiSandbox, and FortiAnalyzer, we are open to adding to our Fortinet solutions.”

Streamlined VPN Supported Remote Work During the Pandemic

Shortly after the NGFWs were installed and as the VPN was undergoing testing, the COVID-19 pandemic hit. “We had not yet replaced our legacy firewalls,” Haney says. “We had dedicated one of the company’s three internet connections to the FortiGate NGFWs, so we were running dual site-to-site IPsec connections: one on our legacy hardware and one based on the FortiGate firewalls.”

Central Michigan Paper, like most businesses around the world, turned the majority of its staff members into remote workers. They used the FortiGate connection for VPN access to the company’s systems. “It was a stroke of luck that we implemented a new VPN solution in January 2020,” Haney says. “Nobody knew what was coming, but when everybody was sent home because of the pandemic, we already had a secure VPN solution in place and tested.”

This was especially crucial because a month before the onset of the pandemic, the company’s accountant had retired on short notice. Her duties had fallen to Haney until Central Michigan Paper could find a replacement, because he had served as the company’s accountant years earlier.

“I was not only handling my network administrator duties but also the full-time job of daily accounting tasks, as well as training a new accountant on our system,” he reports. “When everyone got sent home, I then also had to support the VPN environment from my home office. The FortiClient VPN and FortiGate firewalls were especially helpful in getting us through that. People could get on the VPN and securely do everything they needed to do without my assistance. That experience made me a true believer in Fortinet. Since then, we have added so much other Fortinet equipment and services that I now call Central Michigan Paper a ‘FortiHouse.’”

Business Impact

- Better visibility and integrated response to security incidents
- Two to four hours saved each day by warehouse workers
- Double the increase in cybersecurity insurance coverage, with no increase in price

Solutions

- FortiGate Next-Generation Firewall
- FortiClient
- FortiToken
- FortiEDR
- FortiSwitch
- FortiAP
- FortiMail

Expanding the Fortinet Security Architecture

Soon, Central Michigan Paper began evaluating the Fortinet FortiEDR endpoint detection and response (EDR) solution. This was important, as EDR was included on the list of solutions required to retain coverage from Central Michigan Paper's cybersecurity insurance provider. Central Michigan Paper selected Fortinet partner Liquid Networkx, a San Antonio, Texas-based Fortinet Preferred Engage Services Partner, to deploy and manage FortiEDR.

"In June of last year, we installed the FortiEDR client on all our PCs and servers," Haney says. "Liquid Networkx fully manages the FortiEDR programs, and we receive notifications at least twice a day on endpoint protections. If FortiEDR sees something suspicious, it will block the threat and update Central Michigan Paper's FortiGate NGFWs, offering another layer of protection."

Haney is pleased with Liquid Networkx's support of Central Michigan Paper. "Liquid Networkx has been wonderful to work with," he says. "They have been extremely helpful and communicative throughout the entire process. They have a great deal of expertise with Fortinet solutions."

Central Michigan Paper also deployed FortiAP access points and FortiSwitch secure enterprise switches in both of the company's locations to replace some "very old gear" from another vendor. The switches support a VoIP phone system that uses Power over Ethernet (PoE). They also support the FortiAP access points the organization rolled out.

Previously, the Central Michigan Paper warehouse had limited Wi-Fi capabilities provided by its legacy router. Delivery drivers used the Wi-Fi at the beginning and end of each day for purposes of electronic logging, and the office provided some Wi-Fi access for guests.

"Adding nine to 10 FortiAP access points gave us coverage throughout both the office and the warehouse," Haney explains. "Our warehouse users now use tablet computers to connect to our internal network over the Wi-Fi. This enables them to work much more efficiently. They have immediate access to inventory locations for putting away stock. We have always had stationary workstations in the warehouse, but the space is so large that it was not convenient to access one of those computers every time a question arose."

Haney estimates that the warehouse staff is saving a total of two to four hours each day because of this increase in efficiency. "The FortiAP infrastructure is also convenient for guests, office workers, and delivery drivers," Haney adds.

One final driver of the decision to deploy Fortinet access points and switches was their remote management capabilities. Van Donselaar, who initially recommended Fortinet, now helps manage the NGFWs, FortiAP access points, and FortiSwitch switches for Central Michigan Paper. "He is in another state, but he can go into FortiCloud and do anything that we need to have done," Haney says. "Giving an outside firm access to these core networking and security solutions has been very helpful. It has freed up time for putting out the fires that come up day to day. It has also enabled us to move forward with some major projects, including FortiEDR and FortiMail."

More Secure and Better Insured

The tight integration of all these solutions within the Fortinet Security Fabric further improves efficiency and automates security actions. For example, an upcoming project Central Michigan Paper will work on with partner Liquid Networkx is the integration of FortiEDR with the company's FortiGate NGFWs. This will provide an extra layer of protection. When FortiEDR blocks a site, it will automatically update the FortiGate NGFWs.

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“When we first deployed the FortiGate NGFWs, the ability to tightly integrate with other networking and security solutions was not the focus,” Haney says. “But now that we have Fortinet solutions installed, the integration is the focal point of all our deployments. Being able to manage networking and security tools through a single dashboard is very beneficial, especially given the limited team resources we have.”

The Fortinet Security Fabric has substantially boosted the solutions’ effectiveness, as well. “I can get on our FortiGate Next-Generation Firewalls and see exactly what they are blocking,” Haney continues, “so I know that they are blocking some very nasty threats and bad actors. With our older equipment, we could not see that. Moving over to Fortinet opened a whole new world to us. In some ways, it is a double-edged sword, because now we are aware of how many attacks we face. But some of our peers and suppliers have been hit with ransomware, so it is crucial for us to understand the threat landscape.”

Most recently, Liquid Networkx replaced Central Michigan Paper’s legacy cloud-based spam filter with the FortiMail Cloud email protection solution. “The FortiMail Cloud solution has a lot more functionality and integrates with the FortiGate firewalls,” Haney says. “We had [our legacy cloud-based spam filter] for 12 years. We were already looking for a replacement when our cyber-insurance provider offered to double our coverage if we moved off the legacy spam filter to one of the products on their list. FortiMail was on the list. When we saw how it integrated with the Fortinet Security Fabric, that was a no-brainer.”

Once the FortiMail project was completed, Central Michigan Paper notified their insurance provider, which doubled the company’s cyber coverage without raising its premium. “We have had cyber insurance for several years, and each year the cost has increased significantly,” Haney says. “Our relationship with Fortinet has enabled us to protect our environment against ransomware both by developing better security and by enabling expansion of our insurance coverage.”

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