MYCON is an award-winning, industry-leading commercial contractor based in Dallas, Texas. Since 1987, MYCON's work portfolio has spanned construction categories ranging from healthcare, industrial, and institutional to office, retail, religious, manufacturing, food processing, and more. Through client partnerships, it builds groundbreaking projects that serve the community and foster progress.

Connectivity is mission-critical. Not only does MYCON connect office locations, but robust connectivity to the construction sites operated nationwide is imperative. Vital data such as plans, change orders, and requests for information (RFIs) are digital, and without access to these documents, construction projects would cease operating.

Chris Martin, vice president of technology services, comments, “Where possible, we connect via broadband, but since many of the construction projects are on 'greenfield' sites, we frequently use LTE or 4G. Securing these networks is key. Cyber criminals view the construction industry as something of a 'soft target'; construction firms conduct sensitive transactions with customers and suppliers but often do not have the same levels of security as companies in industries such as financial services. Our strategy is for MYCON to withstand the volume of attacks in our industry.”

Plugging a Leaky Security Architecture

However, the security infrastructure that Martin inherited in 2017 was poorly suited to withstand attacks. The company used a mix of off-the-shelf firewalls and hotspots provided by telecom carriers to secure its network. “It was immediately clear we would need to start over,” says Martin. “Our legacy approach was not secure—no application control, no intrusion prevention system, no domain name system filtering, web filtering, or even secure web access. MYCON urgently needed a product that could deliver robust security, control, and visibility.”

For Chris and his team, the critical decision criteria for the new security system were intuitive operation, consolidation of equipment, and reliability. Having experimented with trying to unify equipment from multiple vendors, Martin quickly ruled out that approach. “Our initial tests showed that multiple vendor integrations would be prohibitively expensive, and the devices would require IT professionals to install and run at each location—adding additional cost and effort. We needed a simple ‘plug and play’ solution that anyone could set up, even people without technical skills.”

“The FortiGates, FortiSwitches, and FortiAPs are all easy to use. When a construction site needs to be set up or requires more connectivity as it grows, we ship devices to the team on site—they plug them in, then we manage the configuration centrally.”

– Chris Martin, Vice President of Technology Services, MYCON

Details

Customer: MYCON General Contractors, Inc. (MYCON)

Industry: Construction

Location: Dallas, TX

Business Impact

- Robust and performant security at the edge and across devices
- Exceptional performance-to-cost ratio
Fortinet Secure SD-Branch, Driven by the Fortinet Security Fabric

After evaluating available options, MYCON selected a Fortinet Secure SD-Branch solution incorporating the Fortinet Security Fabric. The solution is anchored by a fast, scalable, and flexible software-defined wide-area network (SD-WAN), based on FortiGate Next-Generation Firewall (NGFW), FortiWiFi, FortiSwitch, and FortiAP devices. The devices are deployed in various configurations depending on the site's needs and configured and managed centrally via FortiManager. FortiAnalyzer provides Security Fabric analytics and automation.

Martin explains, “We install the devices in job trailers on the construction site, each with a unique configuration. For example, for small trailers, FortiWiFi firewalls provide everything; in medium-sized trailers, we include FortiSwitches and FortiAPs [access points].” When it comes to connectivity, each construction site leverages FortiGate Secure SD-WAN for failover where possible to 4G LTE WAN links. This configuration is beneficial on a construction site where it is not uncommon for a fiber or broadband line to be damaged during construction. Martin continues, “What is consistent is the need to manage all devices remotely, as we cannot spare the time or resources to send IT professionals all over the country.”

Another critical capability of MYCON’s Secure SD-Branch solution is its use of secure network access control, allowing it to control access and gain visibility into what is connecting to its network. For example, with construction sites that do not have IT personnel, MYCON must be particularly careful that no one enters the trailer and accesses the network without proper authorization.

Finally, in response to the rapid uptick in remote work that resulted from the COVID-19 pandemic, MYCON has added FortiEDR and FortiClient to its Fortinet Security Fabric. FortiEDR delivers automated, real-time endpoint detection and response (EDR) capabilities to proactively reduce the attack surface and prevent malware infections. “FortiEDR is now a critical part of our Security Fabric,” says Martin. “It allows MYCON to secure our network in an environment where the workforce is highly decentralized, and you never know for certain who is using an employee’s device.” FortiClient endpoint software is centrally managed by the Endpoint Management Server (EMS).

Proven Security

With the Fortinet Security Fabric in place, MYCON benefits from a robust, reliable, and simple-to-manage approach to security. For Martin, the most crucial benefit is that the solution is proven to keep the company’s network secure. As he explains, “We recently submitted our network to an external threat assessment—the Fortinet Security Fabric did exactly what we needed and protected our networks.”

This external validation of MYCON’s security posture is significant as it provides a valuable attestation to customers and other stakeholders that the company’s network can be trusted. For example, cyber insurance brokers have started requiring a more active security posture to be insurable.

Simplified Remote Management

Another significant advantage of Fortinet’s systems is that they are simple to use. “The simplicity of Fortinet’s products was one of the main reasons we initially decided to go with the company,” continues Martin. “The FortiGates, FortiSwitches, and FortiAPs are all easy to use. When a construction site needs to be set up or requires more connectivity as it grows, we ship devices to the

Business Impact (contd.)

- Resources saved through the simple setup and centralized management capability
- Rapid scalability to address remote distributed workforce
- Lower premiums for cyber insurance policies

Solutions

- Fortinet Secure SD-Branch
- FortiGate Next-Generation Firewall
- FortiManager
- FortiAnalyzer
- FortiClient EMS
- FortiWiFi
- FortiSwitch
- FortiAP
- FortiEDR

“I would say that no other product touches the performance based on the cost of the Fortinet Security Fabric. We achieve phenomenal throughput, even with all inspection and IPS activated and multiple virtual private networks in use.”

- Chris Martin, Vice President of Technology Services, MYCON
team on site—they plug them in, then we manage the configuration centrally. This approach saves a huge amount of time and cost for our IT team as we are not constantly crisscrossing the country setting up networks.”

The ability to remotely configure network devices means that Martin and his team can simultaneously update configuration on all FortiGate NGFWs, and confirm that all network parts are up to date. This approach delivers a consistent branding experience for clients using guest access across MYCON’s locations.

A Strong Performance-to-cost Ratio

When it comes to performance, Martin believes no other system approaches the features and performance at the price points offered by Fortinet. As Chris explains, “I would say that no other product touches the performance based on the cost of the Fortinet Security Fabric. We achieve phenomenal throughput, even with all inspection and IPS activated and multiple virtual private networks in use. The reliability is incredible—in the four years MYCON has been using FortiGates, we have only sent a device in for repair once, and that is impressive given the conditions these devices operate in the field.”

The value for performance delivered by Fortinet is significant to MYCON because margins are tight in the construction industry. Fortinet’s solutions’ automation capabilities are essential, as they allow MYCON to operate and be effective with a small IT team.

“As the adage goes, it is better to have a fence at the top of a cliff than a hospital at the bottom,” says Martin. “In this analogy, our FortiGate Security Fabric is the fence, with powerful automated capabilities that keep intruders out of our network, so we do not spend considerable time responding to malware infections and network breaches. As a result, we maintain the size of our security operations center team—a significant saving and return on investment.”

The Power of One Security Fabric

The FortiEDR solution is bringing the power of automation to bear on MYCON employees’ endpoints. Part of the success is perfect integration with the wider Fortinet Security Fabric. Martin expands on this point, “We looked at other EDR systems, but they were siloed or bolted together with other products. FortiEDR is integrated from endpoints through firewalls to quickly remove someone from the network if suspicious activity is detected—providing peace of mind that east-west attacks are not happening on the network, and rapidly addressing any malicious behavior.

“More broadly, the beauty of a single Security Fabric is that even though many moving parts are involved, they all source logs from the same location and use the same protocols to talk to each other. Therefore, it makes integration exponentially easier, further enhancing security.”

Additionally, the Fortinet Security Fabric means that MYCON only interacts with one security partner—and with Fortinet, this is a true partnership. Martin concludes, “The support structure at Fortinet is incredible. We have resolved several problems by working in true collaboration, which you do not experience with many vendors. Fortinet is a fantastic partnership for MYCON.”