CASE STUDY

FortiSASE Brings Best-of-Breed Cloud-Delivered Security to a Dispersed, Mostly Remote Workforce

For 30 years, Liquid Networx has helped businesses throughout the United States build digital connectivity. Originally a broker for telecommunications carriers, Liquid Networx is now primarily an IT consulting firm and managed service provider.

"We provide break-fix support, and we do implementations, network designs, and system configurations for customers of all sizes," explains Andrew Hammond, director of strategic services. "We are based in San Antonio but do not focus on a specific region or vertical. We have customers coast to coast in every industry you could imagine. The commonality of our customers is that they are Fortinet shops. Our solutions are Fortinet-centric."

Except for some individuals who manage hardware in the data center, the large majority of Liquid Networx's staff works entirely remotely. Keeping the data center, key cloud resources, and the remote workforce safe is a top organizational priority. "Because we provide professional services, we are constantly targeted by threat actors," Hammond says. "Obviously, a successful attack would be extremely detrimental to our business. People are not going to trust a professional services organization that gets breached, so we have to secure our internal systems to protect our reputation before we do anything else."

"Exceptional" Fortinet Infrastructure Withstands Constant Attacks

To secure its network, Liquid Networx relies on the Fortinet Security Fabric. The data center's perimeter is protected by FortiGate Next-Generation Firewalls (NGFWs) and FortiSwitch secure Ethernet switches, as well as a video surveillance system with a FortiCamera and FortiRecorder. FortiAP access points provide wireless connectivity within the data center. FortiTester supports network security testing, and FortiConverter streamlines customers' migration to FortiGate NGFWs.

All the company's endpoints run the FortiEDR endpoint detection and response solution, with the FortiAuthenticator user identity solution providing multi-factor authentication and FortiNAC network access control securing access to data center resources. The FortiMail email security solution protects Liquid Networx's Microsoft 365 environment, complementing the productivity suite's native protections via application programming interface (API) integration. And Liquid Networx manages the environment using the FortiManager platform.

This Fortinet infrastructure has been in place for years, and Hammond reports that the solutions "have all been exceptional." He adds, "Through the Fortinet solutions, we see threats coming in all the time, and we remediate all of them. We have been

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Director, Strategic Services,
Liquid Networx

Details

Customer: Liquid Networx

Industry: Technology

Headquarters: San Antonio, Texas

Business Impact

- Dramatically improved security posture for the company's large remote workforce
- Enabled secure private access for remote workers
- Better visibility to network security for administrators
- Substantial improvements in efficiency for network and security managers
- User productivity improved through single sign-on, elimination of repeated connecting and disconnecting from VPNs

doing this work for quite some time now, and we have not experienced a material breach or ever had any information stolen. The Fortinet infrastructure is doing a great job."

That said, several months ago, Liquid Networx saw an opportunity to strengthen security for its remote employees further.

FortiSASE: The Right Choice for Securing a 97% Remote Workforce

"The vast majority of our employees work from home," Hammond says. "Our engineers have their own FortiGates and FortiSwitches, but our project managers, NOC [network operations center] staff, account consultants, and sales team were being protected only by the infrastructure they had set up in their homes and FortiEDR on their endpoints. We wanted to deploy the full capabilities of the Fortinet Security Fabric to each of our remote users." In addition, Liquid Networx's executive team travels frequently. "Some of our managers are regularly working in hotels and airports. We needed to better lock down systems amid all that travel," Hammond explains.

The firm deployed a secure access service edge (SASE) solution to improve access controls to its cloud and on-premises applications for all staff. FortiSASE was the obvious choice, not only because Liquid Networx is Fortinet-centric.

"In my role as a consultant, I have been involved in some customers' deep-level conversations with other SASE providers," Hammond says. "My understanding of how those products work led me to FortiSASE as well. Most Fortinet competitors charge for bandwidth used. That is not going to work for Liquid Networx because we want always-on connectivity for our remote workers."

Another consideration: "We want our SASE solution to integrate tightly with our FortiGates in the data center. That architecture is not possible with some of the competitors because of how they deliver SASE."

FortiSASE Dramatically Improves Security with No Impact on User Productivity

Liquid Networx began rolling out FortiSASE three months ago. "Deployment went very well," Hammond reports. "Our engineering team was our pilot group, and a majority of them were rolled out within a week. Now we have up to almost 50 users. Rollout has been fast and fairly easy. What we are doing with FortiSASE today is largely secure internet access," he continues. "We have enabled FortiSASE web content filtering and antivirus, DLP [data loss prevention], and IPS [intrusion prevention system] capabilities for all our users. We are also sandboxing files as appropriate, something we could not do before. Having Fortinet's full UTM [unified threat management] functionality sitting in front of our remote users has drastically improved their security posture."

FortiSASE is currently mandatory for gaining administrative access to Liquid Networx's cloud platforms. "We have locked down our cloud solutions' admin accounts to be accessible only from the FortiSASE IP addresses," Hammond explains. "Soon we are going to lock down all user access to our cloud apps, as well, so that everyone will have to come through FortiSASE to reach them, including Microsoft 365. That is the next level."

Hammond is not worried about that change hampering user productivity. "The beauty behind FortiSASE," he says, "is that it has not negatively impacted our

Business Impact(cont.)

- Security staffing skills gap reduced through infrastructure ease of use
- Lower total cost of ownership for the network
- Zero material breaches, ever, across broad Fortinet infrastructure

Solutions

- FortiGate Next-Generation Firewall
- FortiSwitch
- FortiCamera
- FortiRecorder
- FortiAP
- FortiTester
- FortiConverter
- FortiEDR
- FortiAuthenticator
- FortiNAC
- FortiMail
- FortiManager
- FortiSASE

Services

- FortiGuard AI-Powered Security Services Unified Threat Protection (UTP) Bundle

"The beauty behind FortiSASE is that it has not negatively impacted our users' day-to-day workflows in any way. In fact, its integration with Active Directory and SAML authentication has simplified user logins by giving us a single sign-on through FortiSASE."

Andrew Hammond
Director, Strategic Services,
Liquid Networx

users' day-to-day workflows in any way. In many cases, they do not even know they are protected. All they know is that they installed FortiClient. In fact, the FortiSASE integration with Active Directory and SAML [Security Assertion Markup Language] authentication has actually simplified our user logins by giving us a single sign-on through FortiSASE."

"I was one of our organization's first FortiSASE users," he adds. "I have always-on secure access. The first day I had FortiSASE, I took a flight to California and kept a videoconference call going during the entire flight. All they saw was my SASE tunnel."

> *"If we train engineers on FortiOS, they can support all the Fortinet solutions, including FortiSASE, which feels just like a FortiGate. Fortinet is reducing the skills gap by making products easier to manage. That is a big win for a company like Liquid Networx."*
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> **Andrew Hammond**
> Director, Strategic Services,
> Liquid Networx

Secure Access, Better Visibility, and Faster Threat Response

For Liquid Networx's network administrators, FortiSASE has substantially improved visibility. "Most of our users are admins on their systems, so they can install whatever technologies they need," Hammond says. "Prior to FortiSASE, we did not always know what everyone had installed. Now, FortiSASE gives us information about which applications are on each endpoint. So, if, for example, a vulnerability comes out in an application that some of our engineers use, we know where to go to respond to that zero-day threat. And if a user complains about access to a cloud application, we can use FortiSASE digital experience monitoring to troubleshoot."

The team intends to eventually add Fortinet's SOC-as-a-Service and FortiGuard Forensics capabilities to further tighten security and gain "additional eyes on our security environment," Hammond says. "But already, our team can absolutely, 100%, respond more quickly in the event of a security incident."

He adds that FortiSASE is particularly helpful in staging equipment before it goes out to customer sites. "We have a secure staging area inside our SOC 2 Type 2 data center," Hammond says. "We stage thousands of devices—mostly FortiGates, FortiSwitches, and FortiAPs—every year. One complication of our business model is that remote workers need access to the staging area. We have put FortiGates in front of the staging area and leveraged the SPA [Secure Private Access] functionality inside FortiSASE to provide our team with access into that part of the data center. They can stage gear over that SPA connection."

Plus, Hammond says, FortiSASE has strengthened security on some of the older applications that the firm is running on-premises in the data center. "Before, we were having to expose those applications to the internet so that staff could use them," he says. "Now, FortiSASE enables us to have a ZTNA [zero-trust network access] proxy on the front end of those applications."

Efficiency Key to Building Enterprise-Quality Security for a Small Company

At the same time, FortiSASE has made network and security management far more efficient. "Being able to have the full UTM Security Fabric in front of remote workers' systems, without putting gear in their houses, is huge for a small company like ours," Hammond says. "And when we started building our FortiSASE environment, we used FortiManager to pull in policies and address objects that were being used in our data center. That was extremely slick."

However, Hammond sees the greatest efficiency gains arising from the SPA access Liquid Networx created for its staging area. "To access the staging area, engineers used to stop what they were doing, VPN in and do what they needed to do, then disconnect to go do something else," he says. "The fact that the SPA gives them direct connectivity to the data center greatly enhances their efficiency. FortiSASE similarly increased productivity for staff connecting to our legacy applications.

"FortSASE is awesome," he continues, "but it is not the 'be-all and end-all.' The Fortinet Security Fabric, as a whole, makes our network more secure and efficient. I spent 25 years learning to use other vendors' products, and we use Fortinet today because the infrastructure is so much simpler to support. FortiEDR, FortiManager, FortiAuthenticator, FortiGates, FortiSwitches, FortiAPs, and FortiSASE all combine to give us a simple, universal approach to network security. A simple network is a supportable network, and a supportable network is a secure network."

This approach not only boosts efficiency, but also helps Liquid Networx reduce the total cost of ownership of its networking and security environment. “Finding people who can support Fortinet solutions is much easier than with other vendors,” Hammond says. “It is very uncommon in the industry to find one engineer who can support a mail product, an endpoint product, an authentication product, a firewall, a switch, an access point, and a management system. However, in the Fortinet world, it is common. All the products in the Fortinet Security Fabric follow the same nomenclature, and they look and act similarly. If we train engineers on FortiOS, they can support all the Fortinet solutions, including FortiSASE, which feels just like a FortiGate. Fortinet is reducing the skills gap by making products easier to manage. That is a big win for a company like Liquid Networx.”

Down the road, Hammond expects to add FortiDeceptor, which uses deception assets and contextual intelligence to detect and respond to network intrusions. Liquid Networx might also deploy the FortiRecon digital risk protection service as its business grows.

“Liquid Networx is a Fortinet EPSP partner that is doing a ton of work for multibillion-dollar enterprises,” Hammond concludes. “We have to adhere to enterprise-grade security practices. The best way to accomplish that is with a universal framework that includes Unified SASE.”

December 12, 2024 2:21 PM / CS-12-0-0-EN