

CASE STUDY

Fortinet Provides Scalable and Secure SD-WAN Solutions to Protect Vietnam's Digital Banking Pioneer

Established in 1993, An Binh Bank (ABBANK) is one of the leading joint stock commercial banks in Vietnam. It provides efficient retail banking services to more than 1 million customers nationwide, with more than 165 branches in 34 cities. A pioneering bank, ABBANK introduced digital banking to Vietnam in 2020.

“The banking sector is rapidly digitalizing and all banks today are under pressure to apply digital solutions to increase efficiency, speed and customer satisfaction,” says Dao Van Ngoc, vice director of service management and operation center and head of IT security at ABBANK. “As a bank that has embraced technology and innovation from its earliest days, ABBANK made information security the central pillar of our ongoing digital transformation.”

Mr. Ngoc goes on to explain why security is such a priority: “ABBANK has earned the trust of families across Vietnam. To maintain our reputation in the face of rapid growth and digital transformation, we have to make sure that our system is safe and that our customer information is protected at all times. And for that we need the best tools and the best partners.”

Protecting the Network as Threats Evolve

Over the years, ABBANK has adopted leading security solutions in line with a carefully considered security framework and roadmap. It currently runs solutions from Fortinet and other leading technology providers. A key challenge for Mr. Ngoc's security team in 2022 is to integrate solutions from different vendors to ensure optimal security as threats continue to escalate. Like other financial services firms, the bank is subject to a constant barrage of email phishing attacks, ransomware attacks, and attacks that seek to exploit software vulnerabilities.

Securing SD-WAN With Fortinet

With so many locations communicating with one another, ABBANK relies heavily on its wide-area network (WAN). Each location is connected to the WAN—and to the internet—by means of an edge routing device. Previously, the routing devices used multi-protocol label switching (MPLS), a packet-forwarding technology, to send data traffic to its destination over predetermined paths. But implementing the bank's new security objectives with MPLS would have been overly costly and difficult to manage. ABBANK determined that an appropriate software-defined WAN (SD-WAN) architecture would give it greater flexibility, both to incorporate the various security features it needed and to accommodate its multiple vendor technologies.

After considering various vendors, ABBANK concluded that Fortinet Secure SD-WAN best met its requirements for secure networking with increased operational efficiency, easier management, cost savings, and better performance. The bank invited Fortinet to take part in a proof of concept (POC), which assessed



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- Dao Van Ngoc, Vice Director of Service Management and Operation Center and Head of IT Security, ABBANK

Details

Customer: An Binh Commercial Joint Stock Bank (ABBANK)

Industry: Financial Services

Location: Hanoi, Vietnam

Number of Locations: 165 branches in 34 cities

the various capabilities of the Fortinet Secure SD-WAN solution. These included firewall features, network throughput, traffic shaping, load balancing, ability to meet performance service-level agreements (SLAs), and routing-based applications. Satisfied with results of the rigorous POC, ABBANK decided to deploy the Fortinet Secure SD-WAN at all of its locations. Fortinet Secure SD-WAN is implemented through FortiGate Next-Generation Firewalls (NGFWs), with firewall sizes and configurations varying to suit the needs of each location. ABBANK also selected enterprise-level FortiGate NGFWs to protect its corporate data center, thereby closing security gaps across the enterprise.

Some 165 ABBANK sites were involved in phase 1 of the rollout. During phase 2, the bank plans to extend Fortinet Secure SD-WAN to another 100 remote sites for ABBANK automated teller machines (ATMs), with plans to invest more in Fortinet's cybersecurity solutions if ABBANK sets up new bank branches or ATMs in future.

"With Fortinet solutions at the heart of our strategy, we are investing to prevent and control security threats at the corporate data center and to bring enterprise-level network security to all of our 165 branches, one data center, and one data recovery center," Mr. Ngoc says. "Our Fortinet branch office firewalls have software-defined wide-area networking [SD-WAN] functionality built in to enable us to dynamically distribute traffic across multiple WAN links and provide secure and cost-efficient branch connectivity to resources in the data center."

Complementing the FortiGate SD-WAN-enabled firewalls at the WAN edge are two components of Fortinet's Fabric Management Center. The first is FortiManager, which Mr. Ngoc's team uses to centrally manage all of the bank's Fortinet devices from a single console. This reduces complexity and saves time and effort. The team also relies on FortiAnalyzer to generate relevant reports that provide complete visibility of the entire attack surface and help it proactively identify and remediate risks, as well as work to continuously simplify the bank's security operations.

ABBANK expects to complete the upgrade to Fortinet Secure SD-WAN soon, with a total implementation time of six months. About 5,000 employees will use the new system daily, with remote team members connecting to the corporate network via a VPN through the FortiGate NGFW using a third-party token.

Business Benefits of a Security-Driven Approach

With Fortinet solutions protecting the internal network, the WAN, and the branch offices, ABBANK has greatly enhanced its network security. The Fortinet solution has helped ABBANK minimize cybersecurity incidents caused by cyberattacks, viruses, malware, and botnets.

The solution also simplifies administration. An in-house team of 12 experienced security professionals manages the bank's security applications. No additional training was required to get them up to speed with the new Fortinet solutions. The team enjoys full administration and visibility across the network from the FortiManager console, with streamlined provisioning and innovative automation tools, plus in-depth reports from FortiAnalyzer.

With the FortiManager, ABBANK can track every device in the network and easily monitor the status. If a device is malfunctioning, an alert will appear on the FortiManager console to notify the ABBANK IT staff to address the issue. The automation feature of FortiManager also makes it easy to configure various workflows so that different types of issues will be channeled to the appropriate team to handle for greater efficiency and time savings.

Business Impact

- Efficient and effective threat mitigation
- Simple administration and ease of use
- Improved operational efficiencies
- Reduced operating costs with a reasonable investment

Solutions

- Fortinet Secure SD-WAN
- FortiGate Next-Generation Firewalls
- FortiManager
- FortiAnalyzer

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ABBANK's security posture is stronger with Fortinet solutions. The FortiManager allows ABBANK to easily apply security patches and updates to all devices quickly and from a single location. Previously, these updates had to be applied manually by plugging in the device to a laptop. This was a time-consuming process and also required a lot of labor resources from ABBANK.

With FortiManager and FortiAnalyzer, ABBANK operates more efficiently. The time savings allow the in-house staff the opportunity to work on strategic network security plans and attend to security incidents that require human intervention.

Mr. Ngoc also reports more stable and efficient operations, citing the dependable high performance of the FortiGate NGFWs and the consolidation of advanced security and network capabilities—including SD-WAN functionality—into a compact desktop footprint. The security features ABBANK uses on a regular basis include network traffic control; attack prevention; virus, malware and botnet removal; and unknown malware blocking using sandboxing technology.

For their part, the ABBANK staff has found the Fortinet solutions to be easy to use, with a relatively simple interface.

Finally, ABBANK has found that Fortinet solutions are cost-effective to purchase and run. For example, the bank is achieving considerable operational savings by using SD-WAN rather than routing devices and leased MPLS lines.

"We trust both the quality and value of Fortinet's solutions," Mr. Ngoc concludes. "Choosing Fortinet, our investment costs are more than 30% lower compared to another vendor's solutions. Overall, I am completely satisfied with our FortiGate infrastructure. We will continue to partner with Fortinet to optimize our security environment as we grow as an end-to-end digital bank for Vietnam."



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