



CASE STUDY

ATM Solutions Provider Delivers End-to-End Reliability, Speed, and Protection



Headquartered in Green Bay, Wisconsin, Cash Depot Ltd. provides end-to-end ATM solutions as well as air and vacuum coin-operated machines primarily used at convenience stores. In 2014, in addition to selling, renting, and leasing ATM equipment, the company added a complementary new business line to provide wholesale services for other ATM operators. New communications hardware has recently been added to vacuum and pressurized air equipment to enable electronic payments to be accepted.

Handling many millions of payment transactions each month requires Cash Depot to adhere to multiple payment industry mandates, including the EMV (Europay, MasterCard, and Visa) standard for smart payment cards, Payment Card Industry Data Security Standard (PCI DSS), and PCI PIN. In the case of the latter, it is focused on safeguarding the integrity of four-digit personal identification numbers typically used to access ATMs.

Growing Pains

The success of the business model and the resulting increase in network traffic created the need to reevaluate all aspects of the company's IT infrastructure. Derald Groth, chief technology architect for Cash Depot, elaborates, "In particular, it became very evident that our existing firewall appliances couldn't accommodate our rapid growth, so we started looking for alternatives. We needed a security solution that could handle current and future traffic without needing to be upgraded or replaced."

Structured for Success

Consulting with long-time Fortinet Partner Camera Corner Connecting Point (CCCP), Groth conducted a security analysis of his environment. CCCP's recommendation was to deploy two pairs of Fortinet FortiGate next-generation firewalls (NGFWs)—a pair located in each of Cash Depot's two data centers. The objective was to provide hot failover for disaster recovery and contingency planning.

"We worked closely with CCCP to design redundancy into the infrastructure at the network and application levels," explains Groth. "This means that both data centers are operational and online 24x7, and that traffic can be automatically routed between either one. This configuration also enables us to balance loading between facilities to ensure optimal throughput at all times."

Cash Depot has also implemented Windows Communication Foundation (WCF) to support its service-oriented applications. Deployments in more rural or isolated locations are handled with nonwired private cell networks from Verizon and Cellcom, utilizing BGP [Border Gateway Protocol] to supply routing and reachability information.

"The FortiGate NGFWs are at the forefront of everything Cash Depot does—handling all our network traffic. We need our security to be fast, reliable, and effective. Our FortiGate NGFWs definitely deliver on these expectations!"

– Derald Groth, Chief Technology Architect, Cash Depot Ltd.

Details

Customer: Cash Depot Ltd.

Industry: Financial Services

Location: Green Bay, Wisconsin

Partner: Camera Corner
Connecting Point

Uninterrupted Deliveries

The FortiGate NGFWs manage all ATM traffic, air, and vacuum-related interactions, as well as email and other communications with the stores. The network handles a mix of VPN, point-to-point, secure sockets layer (SSL) VPN, and transport layer security (TLS) encrypted information. To ensure continuous compliance with every applicable standard, all traffic is encrypted as it passes through the FortiGate pairs.

Cash Depot has over 22,000 ATMs in service and processes roughly 14 to 15 million transactions per month, with peaks hitting over 70,000 transactions an hour. Custom processors designed by Fortinet engineers equip the FortiGate NGFWs with industry-leading IPS (intrusion prevention) and SSL/TLS inspection performance.

Groth remarks: “Our infrastructure is designed to handle twice our current throughput. Since adding wholesale transaction processing, we’ve outgrown many of our original IT components, but the FortiGate NGFWs continue to scale and deliver the performance needed to meet our demands.”

He continues: “We have high volumes and a pretty complex mix of traffic, including telemetry data that we rely on to alert service technicians if a unit requires attention. However, the FortiGate firewalls have run uninterrupted for two years straight, which is just fantastic!”

Sophisticated but Simple to Use

The flexibility of the FortiGate range enables all models to be finely configured to accurately comply with standards laid out by the PCI council. To further support compliance requirements, the vulnerability management program operated by FortiGuard Labs ensures that all devices are protected against malware and have the most up-to-date security intelligence.

As key components of the Fortinet Security Fabric, the FortiGate NGFWs are designed to interoperate with diverse solutions from other security vendors.

“The FortiGate firewalls integrate really well with all of the other components in our security stack,” observed Groth. “Despite their sophistication, the FortiGate has an easy learning curve and the user interface is very intuitive and convenient to navigate—both on PCs and Macs, locally and remotely.”

Michael Seering, senior account executive and shareholder with partner CCCP, adds: “We were able to consult with Cash Depot to create a packaged solution that we knew would exceed expectations, and at a price point that was compelling. The breadth of capabilities made the FortiGate an easy recommendation, and our extensive experience in deploying Fortinet products resulted in a very smooth implementation.”

Groth concludes: “Because we are responsible for the entire end-to-end transaction chain, we can’t afford any issues or permit anything to impact operations. The FortiGate firewalls are at the forefront of everything Cash Depot does—handling all our network traffic. We need our security to be fast, reliable, and effective: Our FortiGate firewalls definitely deliver on these expectations!”

Business Impact

- Enhanced to achieve parallel construction
- Rapid, dependable, and secure delivery of services to clients
- Support for corporate business growth with adaptability and scalability
- Ensured compliance protection in high-volume, complex traffic environment

Solution

- FortiGate

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– Derald Groth, Chief Technology Architect, Cash Depot Ltd.