Upgrade to a fully managed solution keeps national automotive service chain running smoothly

Challenges

- Company required reliable data connectivity for payments, scheduling, inventory and payroll at its high-volume company-owned and franchise auto service locations across the US

- With more than 1,500 locations to upgrade, budget considerations made minimizing capital and operating expenses a priority

- Customized applications – some hosted internally and others cloud-based – and a nonstandard legacy environment created a complex upgrade path

- Network routing was inefficient with VPN tunnels to corporate data centers, then from data centers to AWS; network traffic from stores could not reach AWS directly for applications hosted in the cloud

- Planned evolution from legacy data centers to AWS and reimagined store connectivity created opportunities to deliver cost savings along with improved customer and employee experience

- Lack of clear documentation and inconsistent equipment layout and configurations made diagnosing issues challenging for a thinly staffed internal help desk

- With a nationwide footprint, ordering and monitoring circuits from dozens of carriers was complex and time-consuming, while reconciling hundreds of separate bills each month was inefficient for accounting

- Access and equipment outages were major issues; rural locations suffered from unreliable access and lengthy repair times, while lack of equipment redundancy meant that a failure of any component would send a store offline until a field service technician could repair or replace the unit

- Franchise and regional operations were responsible for procuring data circuits; decentralized ordering created cost inefficiencies and inconsistent pricing across locations, as well as finger-pointing and delays in maintenance driven by multiple vendor solutions

Customer Profile

Industry
Retail automotive services

About
A nationwide chain of automotive service centers with more than 1,500 company-owned and franchise locations

V2_0922

Solutions

Granite Guardian Services
- Proactive monitoring of broadband modems, wireless access, SD-WAN devices, switches and wireless access points with real-time notification of issues or device failures
- Fortinet SD-WAN configuration updates and patch management
- Managed Field Services dispatches technicians in as few as 4 hours

- New site testing and turn-up
- Dedicated NOC team and help desk
- Reporting, including availability, trouble tickets, MTTR, bandwidth usage, network anomalies
- Hardware spares and inventory management

AWS cloud

Retail locations
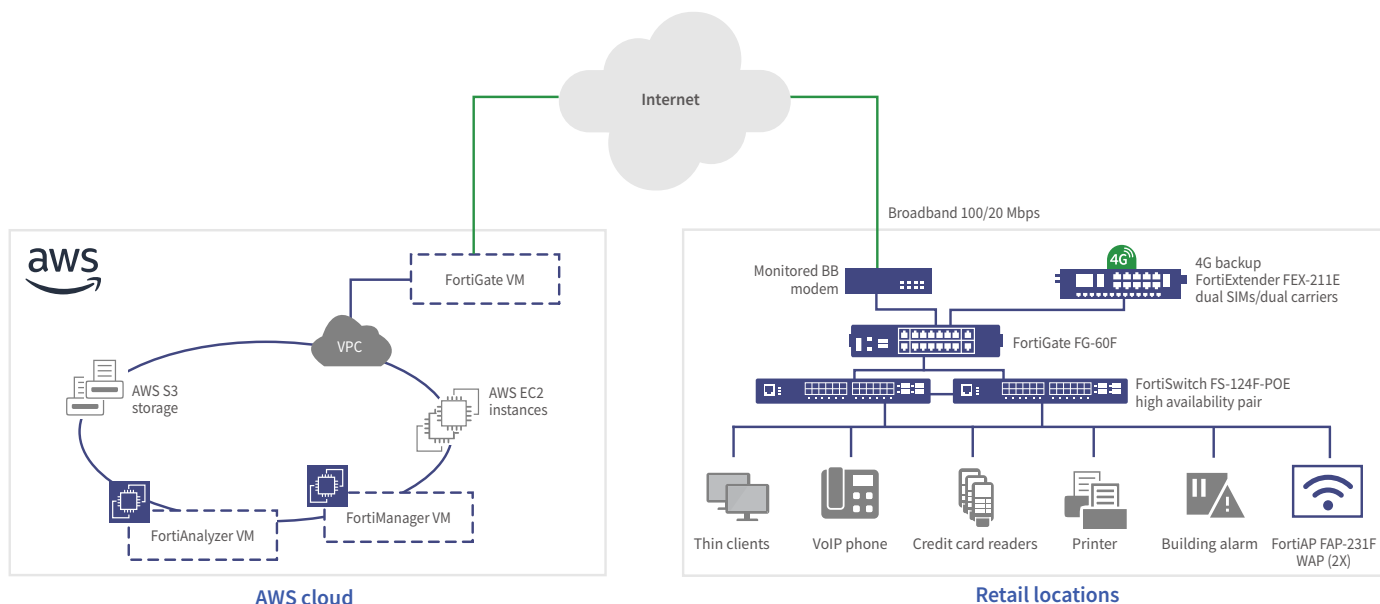
- Granite recommended a unified Fortinet SD-WAN and LAN solution with redundant access and fault-tolerant hardware to deliver reliability and simplify network routing
- Prior to rollout, a proof of concept (POC) with multiple nodes was built in the Granite SD-WAN Lab to evaluate network latency and throughput, failover/restore, and monitoring; the POC allowed Granite engineers to test and optimize network routing and configuration, ensuring a smooth rollout
- Network was architected around the Fortinet suite for unified single-vendor for store location and AWS cloud, simplifying control and monitoring and ensuring seamless interoperability
- Granite customized the solution by location type:
  - Stores: pre-configured SD-WAN and firewall, wireless broadband, redundant PoE switches and multiple wireless access points hardware
  - Cloud provider: FortiGate, FortiManager and FortiAnalyzer VM images
- Granite centralized the ordering, provisioning and installation of broadband circuits across all sites, ensuring timely deployment and delivering a single, customized bill for easy processing; because of Granite's scale, the company paid a single nationwide broadband price regardless of carrier or location, delivering substantial value to franchisees
- Access redundancy is delivered via FortiExtenders for seamless 4G wireless failover; each site is configured with dual modem/dual SIM on diverse carriers, allowing the wireless broadband devices to select the best connection
- Granite-managed wireless plans and cross-carrier pooling minimize the cost of standby wireless and eliminate surprise expenses when stores need to rely on cellular during a broadband outage

V2_0922

Solutions *(continued)*

- Granite fully managed the rollout across all sites, from pre-site inspection and updating cabling to removing existing equipment and installing new hardware; installations and turn-up testing were scheduled after hours to minimize operations interruptions

- Granite managed all equipment sourcing and configured, staged and shipped all hardware from its national configuration center, ensuring efficient and timely implementation by field technicians

- To expedite installation, eliminate errors and simplify maintenance, Granite developed detailed, color-coded runbooks documenting old equipment removal, rack configuration, port connections, cable colors, turn-up and testing

- Granite Guardian provides 24/7 monitoring with dedicated NOC and client service teams; automated reporting and network monitoring identify any issues and create automated tickets for troubleshooting, and if necessary, dispatch

- If dispatch is necessary, a trained Granite Managed Field Services technician can be on-site in as little as four hours, and regional depots ensure that dedicated spares inventory is always available

Results

- Despite global supply chain challenges, rollout proceeded on schedule; most sites were upgraded in less than two hours, minimizing interruptions and ensuring stores were ready for business the next morning

- Redundant access circuits – seamlessly switching between broadband and wireless – ensure that stores are never off-line; high-availability, on-site hardware minimizes outages due to equipment failure, and Granite Premium Dispatch delivers fast-track technicians on site when needed

- Granite upgrades to store broadband circuits increased bandwidth, while purchasing volume enabled lower costs and consistent nationwide pricing

- One-vendor solution, from network design and installation to monitoring and repairs, delivered single-point accountability for billing, reliability, performance and customer satisfaction

- The future-proof network architecture positioned the customer to deliver innovative services across its retail locations and enabled planned cloud migration

- Granite's network design and operations expertise enables the customer's lean IT department to focus on core business processes, with confidence that experts are monitoring the network and that store help desk issues will be promptly and courteously handled

- Granite is also helping the client create a new concept store for 18-wheelers, providing outside and inside private and guest WiFi networks so staff can check in big rigs from anywhere on site and drivers can access high-speed WiFi while waiting for service

V2_0922