BUILDING A MANAGEABLE HIGH-PERFORMING NETWORK

High-performance car maker Shelby American minimizes IT overhead by running its business on an IT infrastructure with Silver Peak SD-WAN and Dell EMC Networking solutions.

Business needs

Shelby American required a reliable, secure and affordable way to connect on-premises networks at its Las Vegas headquarters and other locations with data center network resources to support long-term growth.

Solutions at a glance

- **Data Center**
  - Dell EMC Networking N-Series Power-over-Ethernet switches
  - Dell EMC Networking X-Series Smart Managed switches
  - Dell EMC OpenManage Essentials
  - Silver Peak Unity EdgeConnect SD-WAN solutions
  - Silver Peak Unity Boost optional performance pack

Business results

- Supports future growth with the right network topology
- Achieves PCI compliance in credit card processing
- Prevents unauthorized access to corporate IT systems

Up to **80%** saved in bandwidth compared to MPLS-based VPN

**20%** reduction in the time needed for IT management tasks
Founded by legendary racing driver and automotive designer Carroll Shelby in 1962, Shelby American creates and manufactures high-performance automobiles and accessories. When the company turned 50, it refreshed its corporate IT systems and infrastructure. “We wanted to look forward to the next 50 years and use the latest in technology innovation to fuel growth and maintain our competitive edge,” says Richard Sparkman, IT director at Shelby. “Given our strong relationship with Dell EMC, we are doing very well on the technology end of things.” Shelby acquired new Dell EMC Precision workstations for CAD design and Dell EMC PowerEdge rack servers with Intel® Xeon® processors to run applications.

More recently, Shelby transitioned most of its IT infrastructure – including two clustered Dell EMC Storage PS Series arrays – into a large, colocated data center close to its headquarters. Shelby purchased additional Dell EMC PowerEdge R720xd servers to distribute workloads optimally between headquarters and the data center. Shelby also performed a proof-of-concept project to identify the best fit for its data management needs among Dell Networking N-Series and X-Series solutions. As a result, the company deployed Dell EMC N-Series switches in the data center network core and the X-Series 1018P switch to manage the data traffic from camera surveillance systems.

In need of an economical and secure way to connect multiple locations with the data center, Shelby evaluated software-defined wide area network (SD-WAN) solutions to achieve redundancy with multiple internet links, improve data replication and ensure reliable backups. Shelby selected and deployed the Silver Peak Unity EdgeConnect SD-WAN solution together with Silver Peak Unity Boost, which applies WAN optimization to increase network link performance between the data center and other Shelby locations.

Savings in bandwidth and cost

Running backups over the internet saves Shelby the expense of multiprotocol label switching (MPLS). The network tunnel between the different locations achieves almost 90 percent utilization and yields data compression of up to 95 percent on some applications. “We save 75 to 80 percent of what we would use in bandwidth if we went over an MPLS-based VPN,” says Sparkman. “Because the EdgeConnect devices enable us to fully use our available bandwidth, we save approximately $1,500 per month thanks to compression and bandwidth efficiencies.”

Robust protection for data and applications

EdgeConnect edge-to-edge encryption and WAN hardening capabilities segment and secure application and data traffic in a virtual WAN overlay between the two EdgeConnect devices. SonicWall TZ400 firewalls provide an added layer of protection for applications and data. Sparkman explains, “The Dell EMC and Silver Peak security capabilities prevent hackers getting from public assets into corporate assets and support full PCI compliance. We can securely process credit card transactions in our retail stores and the museum.”

“SD-WAN from Silver Peak was a rock-solid performer for us.”

Richard Sparkman
IT Director, Shelby American
Minimized IT management

Shelby’s business infrastructure runs predictably and requires minimal administration. Sparkman relies on the Dell EMC OpenManage Essentials console to identify and proactively address potential performance bottlenecks. “With Dell EMC OpenManage Essentials, I can take care of our IT needs in about 20 percent of the time it took previously,” he says. “It helps me spend less time actively managing all my servers and more time on strategic tasks that may not relate directly to IT.”

Future-proof, scalable infrastructure

Regarding the long-term value of Silver Peak and Dell EMC together, Sparkman says, “Silver Peak lets us take full advantage of our Dell technologies. It’s critical in enabling the network topology that powers Shelby American’s future.” Shelby plans to add more Dell EMC PowerEdge rack servers to its network to enhance server performance and achieve better load balancing by separating servers to perform file management and application tasks.

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