Silver Peak | customer profile

SILVER PEAK'S ACCELERATED IPSEC HELPS CHARLOTTE METRO SECURE ITS DATA TRAFFIC

Leading credit union builds high-speed virtual private network with Silver Peak software

The revelations over government eavesdropping coupled with concerns over cyber threats have made securing data-in-transit a bigger imperative for any enterprise, even those who restrict data to private, MPLS networks. All too often, though, virtual private networks (VPNs) have meant more capital expenditures, degrading application performance, and increasing complexity, but not for Charlotte Metro Federal Credit Union (CMCU).

The credit union was struggling to replicate all of its data to a disaster recovery location within its Recovery Point Objective (RPO). Branches were also growing, putting pressure on CMCU to upgrade their T1 lines. By deploying Silver Peak software at each location, CMCU not only met its RPO and avoided line upgrades, but also protected data with Silver Peak's built-in Accelerated IPSec VPN.

"We reduced our costs, improved our performance and secured our data," says David Cooper, vice president of information systems at Charlotte Metro. "I couldn't ask for anything more from a VPN."

SECURITY FIRST

CMCU, a credit union based in Charlotte, North Carolina and in business for more than 50 years, services 40,000 members across nine locations (See Figure 1). Like other fast-growing financial institutions, CMCU faced a number of challenges. Branch locations were growing too fast for their T1s, critical data assets needed protection, and although the disaster recovery site was only 18 miles away, replication was still taking too long for CMCU to meet its one-minute RPO.

Then there was the issue of data security. National Credit Union Association (NCUA), the supervising agency over federal credit unions, mandates data privacy, as do numerous regulations. While CMCU was already in compliance with industry standards by using an encrypted MPLS service, there were still some concerns.

"Our MPLS provider held the encryption key," added Cooper. "If someone over there went rogue, they could decrypt our traffic in-transit. So, we made the decision to deploy a VPN at each site."

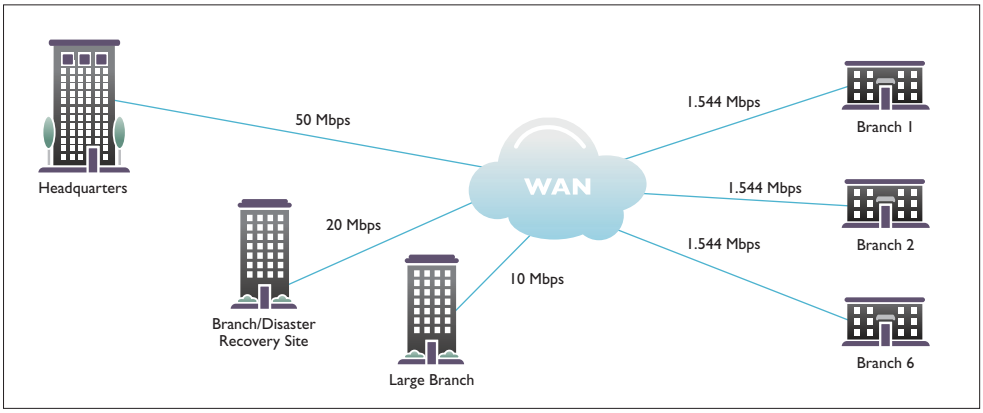

Figure 1 CMCU wanted better security and performance, despite running across an encrypted MPLS network.

Customer: CHARLOTTE METRO FEDERAL CREDIT UNION

Business Challenges

- Meet and exceed regulatory expectations for privacy on data in transit.
- Deploy a virtual private network (VPN) that could scale to meet requirements.

Network Background

- Nine locations - a data center, seven branches, and a DR site.
- All sites connected via MPLS at 1.544 Mbps (T1) to 50 Mbps.
- Line of business applications, e-mail, and general office applications.
- Offsite replication from data center to disaster recovery site using CA's ARCserve Replication.
- RPO: under one minute for 28 servers (only one met that goal).
- RTO: four hours for all servers.

Silver Peak Results

- Secured traffic with an Accelerated IPSec VPN.
- Doubled the throughput of their WAN connections.
- Met their one-minute RPO for all 28 servers.
- Avoided more than $1,500 per branch in capital expenses.

CMCU began its VPN search by using the VPN capabilities in the existing routers, but soon that ran into problems. "Running VPNs off our routers worked for one or two locations, but as the number of locations grew so did the complexity," he said. "We had to configure rules at each router and initiate a tunnel request to the remote router while being logged in at the same time. It was also easy to make mistakes because we had to type in IP addresses and randomly generated IPSec keys."

Cooper and his team considered VPN hardware while exploring WAN optimization to address CMCU's bandwidth problems. They considered pairing a WAN optimizer with VPN hardware, but were concerned about the cost and impact on the rest of IT operations. "With other competitive solutions we couldn't upgrade our business software until we updated the WAN acceleration software," he says.

SILVER PEAK'S IPSEC

Instead, CMCU turned to Silver Peak. The Silver Peak software combines the best of site-to-site VPN technology with award winning WAN acceleration. "Silver Peak not only matched other WAN accelerator's performance, but by working at the lower layers of the stack, the software is agnostic to the application," Cooper added. "We don't have to worry about issues with software updates or interoperability."

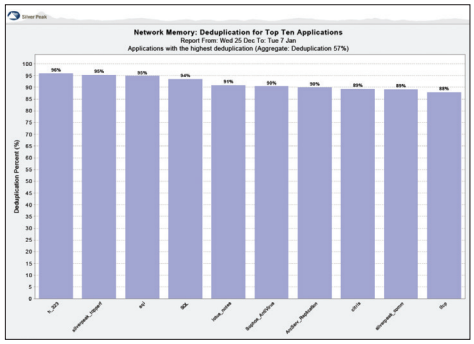

Figure 2: CMCU solved its bandwidth and security problems with Silver Peak.

CMCU ultimately deployed Silver Peak instances in the data center, disaster recovery site, and seven other branch locations, solving VPN and WAN acceleration problems. "It took us maybe five minutes to roll out an IPSec tunnel with Silver Peak," he said. Silver Peak's Accelerated IPSec uses industry leading AES-256 for encryption and SHA-1 for authentication. The software is included in every model and leverages Silver Peak's years of experience developing scalable, easy-to-deploy tunnels.

Not only did Silver Peak solve security concerns, but also bandwidth limitations. With deduplication ratios exceeding 96 percent, the branches more than doubled their data throughput (See Figure 2). Line upgrades were no longer needed and replication was back on schedule. CMCU was now able to meet its one-minute RPO for 28 servers not just one server.

Silver Peak also gave CMCU unparalleled visibility into the operations of his VPN. "When branch users call about WAN performance, we can pinpoint the problem and correct it while they're on the phone. Silver Peak's real time reporting is a great thing," says Cooper.

Ease of use and performance were compelling to Cooper, but so were the savings. "With Silver Peak, we got a WAN acceleration platform, a virtual private network, and a network monitoring system all rolled up into one." He estimates Silver Peak saved the credit union $1,500 to $2,500 per branch in VPN hardware costs alone not including the costs for network monitoring.

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