Midsize Financial Firm Fixes Co-Location Blind Spots

Deploys network visibility solution to remotely monitor co-located data center

Summary

Customer: Midsize Enterprise
Industry: Financial Services
Location: USA

Challenge:
• Co-location facility
• Intermittent network issues
• Off-site diagnostics is difficult

Solution:
• INTELLASTORE II appliance
• All-in-one monitoring system

Benefits:
• Complete network visibility
• Remote site monitoring
• Greatly reduce site visits
• Capture intermittent events
• Diagnose with onboard tools
• All-in-one solution lowers costs

CHALLENGE

A midsize financial services firm was having problems diagnosing network issues at its data center hosted off-site at a co-location facility.

Off-site hosting for the data center, and their other remote locations, was a practical choice for the midsize financial services company. It was a lower overall cost versus constructing in-house data centers. However off-site hosting presents additional challenges including visibility blind spots and the ability to troubleshoot issues.

The co-location is in a remote, locked, lights-out facility. On-site diagnostics not only requires IT staff to drive across town, it must be coordinated with the hosting company including fees for the truck roll and hourly fees for required on-site staff.

The financial firm realized they had network blind spots, and specifically were having problems finding and reacting to intermittent issues. The current issue is network security TACACS authentication. It was granting all users full rights, regardless of the access specified for the user account. Scheduling on-site real time Wireshark packet captures with a laptop did not identify the problem.

“Anytime TACACS authentication was happening, everyone was being allowed Administrator access. We couldn’t get granular control over our network rights,” said the financial service firm’s network engineer.
“We have co-located equipment in remote data centers. These are locked, lights-out facilities.”

“To perform diagnostics...we not only incur the cost of a truck roll, but also the cost of the hosting company truck roll, and the hourly rate for the hosting company's person to be there, just to do a Wireshark capture on a laptop. Implementing APCON’s INTELLASTORE saves that expense.”

“We use INTELLASTORE as an inexpensive alternative to a NetScout Infinistream. We like to run our tests and capture the results to disk.”

**SOLUTION**

The financial services firm installed INTELLASTORE II at the data center co-location, connecting key Ethernet points using taps and SPAN ports for monitoring. The INTELLASTORE II network monitoring appliance includes both a monitoring switch and on-board capture and diagnostic applications.

With real time complete network visibility, the IT staff could remotely select, capture and view any traffic flowing through the network.

To research the TACACS issue the network engineer aggregated traffic from key ports. They filtered TACACS packets (TCP port 49) and setup triggers to capture traffic for diagnostics using the onboard Wireshark application.

“I was able to watch the TACACS requests, and then observe the permit or deny response from the TACACS server. I expected to see 4 levels of permission: Guest, Operator, Advanced Operator, and Admin. But I also saw a fifth level, which was a reporting user level that we had not configured. The TACACS server would get to that command and approve all access as an Admin. Using the INTELLASTORE, I was able to figure out this error and now our TACACS is operating correctly.”

**BENEFITS**

Today the financial services firm has complete visibility of their data center network eliminating all prior blind spots. All functionality can be done remotely, greatly reducing site visit costs. And with modular systems that scale from 14 to 504 monitoring ports, the monitoring architecture will scale for growth.

Using the INTELLASTORE II network monitoring appliance with on-board capture and diagnostic applications, network engineers have the tools in place to proactively monitor the network. Intermittent problems that required days of diagnostics are now resolved within hours.