Energy Leader Centralizes Monitoring Management with APCON TITAN EP

Case Study

A global energy supplier provides petroleum and natural gas to power today's industry. Publicly traded with annual revenues of over $11 billion, this energy leader has operations in over 130 countries across five continents. This customer deployed a variety of scalable APCON intelligent network monitoring switches and centralized network monitoring management using APCON's TITAN EP multi-switch management software. The result was greatly enhanced efficiency and network visibility, coupled with reduced costs in redundant tools.

- **Global energy supplier deployed INTELLAFLEX and TITAN EP at each of its six data centers**
- **INTELLAFLEX simplified operations and reduced costs by eliminating the need for both 10G and 1G tools in monitoring an environment of mixed rates and protocols**
- **TITAN EP enabled engineers at corporate to oversee monitoring at all six data centers**

Business operations including several distribution plants, refineries, carriers and nearly 100,000 employees require a tremendous amount of IT infrastructure. Six global datacenters support its heavy IT operations.

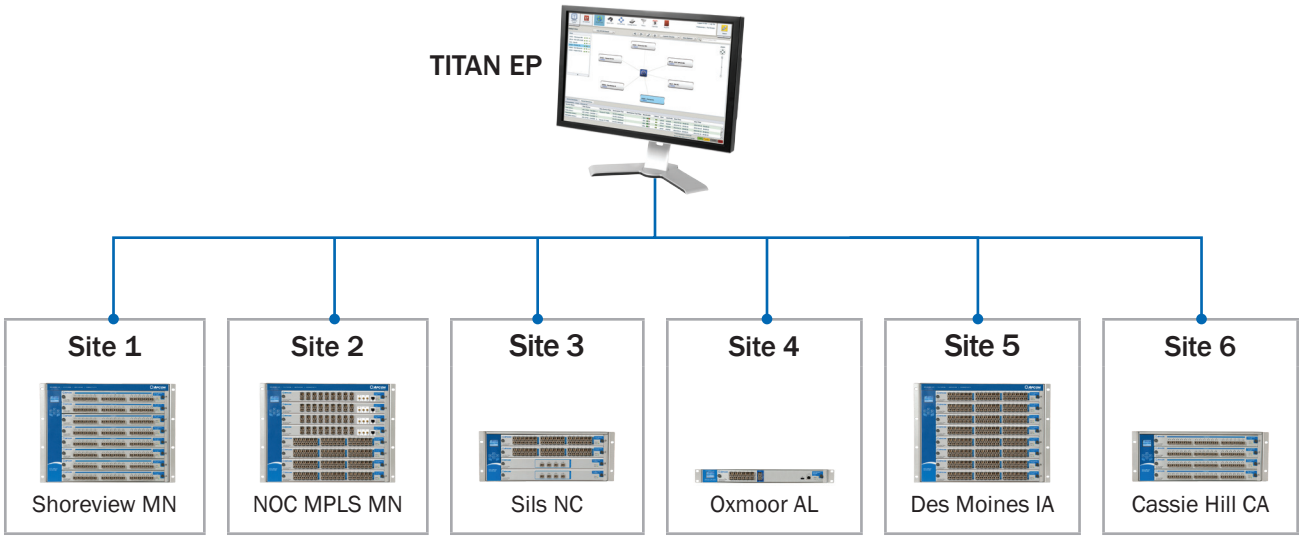
The Challenge

The obstacles between the customer's resources and full visibility were infrastructure-related. It was vital for the customer to ensure that data packets and frames were not changed or modified as they were conveyed to the analyzers. Therefore, SPAN ports and any kind of VLAN across the actual production network to pass traffic to analyzers were disqualified. Direct Taps were required.

The options for connecting a small number of analyzer ports to a plurality of direct TAP points were few. SLA requirements dictated that the majority of the 1G and 10G links be monitored constantly. Therefore, portable analyzers for ad hoc use were not an option. To complicate matters further, the expense of dedicating an analyzer to each Tap was staggering and such a deployment would be much too complex to administer. Furthermore, no "matrix Tap" inline device could support the breadth of each facility's requirement. Faced with these constraints, the customer initiated a search for a purpose-built switching platform to address connectivity.

The project architect was aware that software-configurable switches were available. These devices' main application is to remotely manage the connection between a Tap cable and the receiving analyzer appliance's physical port. The network architect sought out this technology to allow his team to instantly deploy network monitoring tools to a Tap electronically, while maintaining static connections as well. This in turn helps increase ROI on all sniffers, probes and analyzers by reducing tool downtime and maximizing tool utilization.

However, this project featured a broad mix of 1G and 10G rates, as well as copper, single-mode, and multimode connections. The ideal solution therefore would not modify data, but would boast a high quantity of physical ports to connect to Taps and analyzers, offer link aggregation and filtering for 1G and 10G traffic, support both fixed connections and ad-hoc changes, and be both easy and secure in its everyday use.



TITAN EP Provides a convenient, web-based interface to control your entire end-to-end network monitoring program.

The Solution

The chief architect ultimately decided on an access-management infrastructure centered on APCON's INTELLAPATCH® intelligent network monitoring switches. Switching is such that each tool is connected to the INTELLAPATCH chassis once, and is then electronically shared as needed across the 1G and 10G Taps.

Faced with the choice between managing each facility individually or centrally, the customer chose APCON's TITAN EP software, which enables users to manage connections of all ports on all switches from one screen. From his office, he was able to manage network connections for all six facilities continent-wide.

An APCON INTELLAPATCH switch equipped with INTELLAFLEX packet aggregator port blades was deployed at each location. The INTELLAPATCH switches were a mix of models scalable to 144 ports (4 blades) and 72 ports (2 blades) respectfully. The INTELLAFLEX blades in each chassis offers 4 copper, 8 × 1G Ethernet and 12 × 10G Ethernet for a combined 24 ports of aggregation and filtering per 1RU blade.

Data from multiple 10G sources can be aggregated, filtered and directed to 1G data mining tools instantly and electronically—allowing users to monitor 10G networks with 1G tools. By deploying INTELLAFLEX, the customer is able to monitor both 10G and 1G data flows with the same tools. This eliminates the need to purchase and maintain redundant tool sets, greatly reducing CAPEX costs and tool-servicing expenses.

Because of the large number of ports and the consequences of a network failure, the lead architect chose an APCON deployment of the INTELLAPATCH, INTELLAFLEX and TITAN EP. This enables him to control monitoring at all six data centers from a single location, negate the problems associated with a mixed 10G and 1G architecture, and increase tool ROI by instantly deploying traffic capture and analysis tools.

Contact Us

Please email sales@apcon.com if you have any questions

ABOUT APCON

APCON develops innovative, scalable technology solutions to enhance network monitoring, support IT traffic analysis, and streamline IT network management and security. APCON is the industry leader for state-of-the-art IT data aggregation, filtering, and network switching products, as well as leading-edge management-software support. Organizations in over 50 countries depend on APCON network infrastructure solutions. Customers include Global Fortune 500 companies, banks and financial services institutions, telecommunication service providers, government and military, and computer equipment manufacturers.

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APCON Solutions for Networks