APCON Meets Worldwide Big Data Challenge



World Financial Leader Cites Scalability, 40G Ethernet, Flexible Multi Stage Filtering as Decision Drivers

APCON intelligent network monitoring switches are used by many of the world's largest financial institutions for comprehensive monitoring of data center performance, network latency, and both proactive and forensic security activities.



Big Data, Big Opportunity

The level of activity in retail credit and debit card transactions is at the heart of the Big Data revolution, and while processing and monitoring that activity is challenging, it also presents a new opportunity to understand and predict consumer buying habits. APCON intelligent network monitoring switches are ideal for gathering packets for metadata analysis - providing information about the data stream that's passing through a production data center. Using metadata in the monitoring network, analysts can spot trends, hot spots, and underserved markets - another source of business advantage from intelligent network monitoring!

As credit and debit transactions and other online financial trade becomes more and more commonplace in all regions of the world, the resulting growth in packet-based network traffic that must be evaluated has outstripped the ability of traditional reactive network monitoring to keep financial data centers secure and performing within design parameters.

Several leading financial institutions have recently expanded their use of APCON intelligent network monitoring switches as a worldwide standard. This case focuses on one such customer and a particular need for a solution to the Big Data challenge.

Monitoring Tool Proliferation

Another requirement for this customer stems from the large selection of monitoring tools in use. Tool inventory at each regional data center includes Niksun, Riverbed/Opnet, Tealeaf, Rum, and other IDS/IPS and Application Performance Monitoring tools, as well as data recorders for forensic analysis. In addition to serving the great variety of tools, the APCON intelligent network monitoring solution helps protect this customer's limited capital equipment budget by increasing the use efficiency of the existing global tool inventory.

APCON's industry-unique Multi Stage Filtering allows these data centers to untangle the raw packet flow and send each tool only those packets it needs to see. Packet filters are arranged in "stacks" that enable you to precisely direct matching packets to certain tools while passing unmatched packets to additional filters for further processing.

"This allows us to really zero in on the finite details of the data we want to capture. We can pinpoint specific needs within business units, and these switches allow each of our tools to see the data they need, and not be flooded with irrelevant data," said the network security officer in charge of this project.

The APCON Solution

APCON proposed a set of multiple INTELLAFLEX chassis, each equipped with several of APCON's 32-port 10G/40G blades and filled out with APCON's 36-port blades configurable at 1G or 10G, allowing the customer to maintain the service life of some legacy 1G tools. The customer uses the 40G ports to trunk the chassis together to take in all the required data inputs. The data is aggregated and processed through APCON's Multi Stage Filtering, and then sent via the trunk lines to egress switches connected to the various tools.

"The ability to pull in all that data and filter it precisely so that each tool gets only the packets it needs to see saves us both capital budget and operational expense. Plus, we know we're getting every last packet to the tools – we have no blind spots," the security officer noted.

Another advantage is that APCON's 10G/40G Ethernet capability will allow this customer the flexibility to keep pace with future growth. By trunking multiple switch chassis together with 40G connections, this customer can manage the biggest of Big Data challenges.

When the system has been replicated at the Asia-Pacific data centers, the entire worldwide networking monitoring program will be visible and manageable through APCON's unique TITAN EP multi-switch management software. This will allow bulk firmware upgrades, automated switch backups, data routing to any tool in the worldwide inventory, and controlled capital expenditures on new tools.

Tangible Results

As this APCON-based network monitoring system is deployed worldwide, savings on reduced tool purchases are expected to amount to millions of dollars. The APCON solution has already been proven in America and Europe over the past several



APCON's support for 40G Ethernet allows ultra-high-speed trunk links between switch chassis, while APCON's unique Multi Stage Filtering provides precise direction of packets to appropriate tools. Together, these features support seamless growth to thousands of data sources and fully-utilized tool inventories.

years, allowing the company to make a more efficient and timely rollout with confidence.

In addition to measurable cash savings, the security provided by APCON's industry-leading 40G scalability, non-blocking connectivity, and accuracy courtesy of Multi Stage Filtering could save this financial institution from catastrophic network troubles or security breaches – and the value of that security could amount to far more than the cost of 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 managementsoftware 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.

