APCON
Solutions for Networks

LEADING AUTOMAKER ARCHITECTS LARGE-SCALE, COMPLETE NETWORK VISIBILITY

Deploys IntellaFlex 3288-XR Systems At Newly Consolidated Data Centers

SUMMARY

Customer:
Fortune 50 Enterprise

Industry:
Automobile Manufacturing

Location:
USA (Global traffic)

Challenges:
- Data center consolidation
- Architect complete visibility
- Very large port density
- Direct traffic to the tools

Solutions:
- IntellaFlex 3288-XR
- Titan central management
- High-density monitoring

Benefits:
- Highly scalable
- Enterprise-class availability
- Increased tool efficiency
- Single-screen management
- Global traffic visibility

A shift in IT strategy at one of the world's largest automakers meant that the company needed to consolidate most of its almost two dozen data centers around the globe into just two in the U.S.

The Overview

Overall, this data center consolidation was part of a larger company strategy to make the business more responsive to customers, bring new products to market quicker and deliver better results for shareholders. But moving all that compute power to under just two roofs provided challenges. In particular, network visibility and how to get it.

These data centers have hundreds of connection points all pushing data at 10G and 40G speeds. That's an avalanche of information. It was too much to handle for the number of different tools and security products that the automaker had in place, especially for the granular level of visibility that the company wanted.

How did they get that level of network visibility?

"We did it with APCON's infrastructure and hardware."

Gaining Visibility

This automaker needed a monitoring architecture with three key components: scalability; switches that could tailor data for each of the tools and devices; and a network management tool that was both robust and easy to use.

Highly Scalable

Scalability, for this customer, was focused on two aspects: volume and common architecture. The automaker had a lot of tools and devices that it needed to connect to its network, so it needed a lot of ports. The IntellaFlex 3288-XR eight-slot chassis provided that. In each data center, the company is using two full chassis. That adds up to 576 ports in a common architecture, the other element to scalability. Common architecture means trunking becomes easier and reduces cabling and stacking to increase the effectiveness of your deployment. It also makes switching out hardware in case of failure a simple task.

Tailoring The Data

Like any enterprise, this automaker had a plethora of tools to monitor data, network security, performance, and provide application-specific diagnostics. Those tools were designed to receive data tailored in very specific ways.

Monitoring/security appliances needed to receive only the data that they required to perform their task and not become oversubscribed. APCON's advanced features like multi-stage filtering, deduplication, protocol stripping and packet slicing directed the right traffic to the right tool.

The auto manufacturer realized another layer of savings: all those features the automaker has used to tailor the data to maximize the performance of its tools all come standard on APCON's IntellaFlex XR blades. There are no extra licenses — and, by extension, no extra costs — needed to turn the features on. Plug the blade in and all the features are immediately available. The same is true for the ports — no extra licenses needed, and no extra fees.

Robust and Intuitive Management Tools

With the number of switches and ports that this automaker needed, it was unrealistic to expect them to be managed manually. When the company was looking for a provider, it needed one that would provide a tool that could simplify remote switch management. That's exactly what APCON provides with its intuitive and easy-to-use WebXR and Titan switch management software.

Titan allowed the automaker to remotely manage its entire monitoring infrastructure from a single screen and gave the network managers point-and-click access to all APCON switches from a central console. It also allowed the managers to create custom dashboards, giving them a graphical summary of switch performance and tool utilization. Titan also supported batch upgrades to all APCON switches from the desktop as opposed to manually updating the software for each switch individually.

The Partnership Continues

The automaker gave itself a daunting task. Consolidating global data centers into just two locations wasn't going to be easy, and the management team knew it. Visibility was the key to monitoring data centers the size of the ones they were going to be building. These APCON switches gave them that visibility.

APCON's relationship with the company hasn't ended with that initial success. As the company's two main data centers continue to grow, APCON is working with the network operations team to provide future capacity, features and functionality. At the remote sites and manufacturing facilities, APCON is there making monitoring easier, because no matter where in the world the automaker has a problem, network engineers can analyze the data and take appropriate actions.

Products

IntellaFlex 3288-XR
Eight-Slot Chassis

Titan
Multi-Switch
Management Software