

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)

Challenge:

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

Solution:

- INTELLAFLEX 3288-XR
- TITANXR 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.

Overall, the move was part of a larger company strategy that allowed the business to be 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, visibility and how to get it.

These data centers have hundreds and 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 was wanting.

So, how did they get that level of visibility? With APCON infrastructure and hardware.

Gaining Visibility

This automaker needed a monitoring architecture that was three things: highly scalable, included switches that could tailor the data for each of the tools and devices, and had a management tool that was both robust and easy to use.



Highly Scalable

Scalability, in this case, was about two things: 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. APCON's INTELLAFLEX 3288-XR eight-slot chassis provided that. How many ports? In each data center the company is using two, full chassis. That's 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 much easier.

Tailoring the Data

Like any enterprise, the automaker had a plethora of different tools to monitor things like network security and performance as well as providing application-specific diagnostics. That plethora of tools all needed data tailored in very specific ways.

The tools needed to see only the data that they needed to perform their task and not become oversubscribed. APCON's advanced features like multistage filtering, packet deduplication, protocol stripping and packet slicing made sure that happened.

Another benefit, all those features the automaker has used to tailor the data to maximize the performance of its tools all come standard on an 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 there and waiting. The same is true for the ports. There are no extra licenses needed for those either.

Robust, Intuitive Management Tool

With the number of switches and ports that this automaker needed, it was unrealistic to expect them to be managed manually. That's why when the company was looking for a provider, it needed one that would be able to provide a tool that could simplify remote switch management. That's what APCON's intuitive and easy to use WEBXR switch management software, and TITANXR multi-switch management software provided.

TITANXR 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. TITANXR also let the automaker perform batch upgrades to all of its 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. Leaders there knew that. They knew that visibility was the key to monitoring data centers the size of the ones they were going to be building. APCON switches gave them that visibility.

But APCON's relationship with the automaker hasn't ended there. As the company's two main data centers continue to grow, APCON 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 and act.



Products

INTELLAFLEX 3288-XR eight-slot chassis

TITANXR multi-switch management software