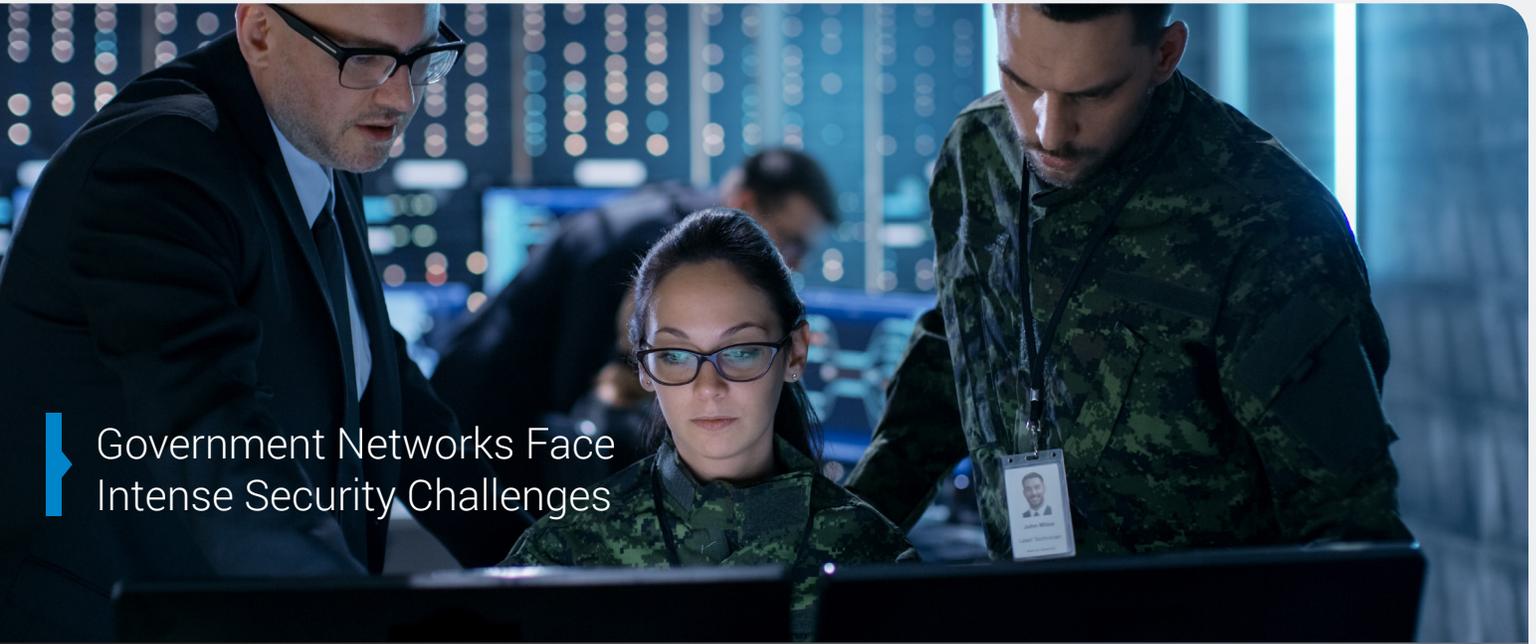


Visibility Across Network Environments Critical to Government Cybersecurity



Government Networks Face Intense Security Challenges

Summary

Customer: Federal Agency

Industry: Government

Location: USA

Challenge:

- New data center visibility
- 10G monitoring
- Centralized management

Solution:

- IntellaFlex XR Network Monitoring
- TitanXR Multi-Switch Management

Benefits:

- Proactive complete network visibility
- Improved time to resolution
- Expanded visibility at lower costs
- Scalability and enterprise reliability

Government Networks Face Intense Security Challenges

According to the [2016 U.S. Government Cybersecurity Report](#), “U.S. federal, state and local government agencies rank in last place in cybersecurity when compared against 17 major private industries.” This is extremely concerning as threats to government data security are growing in volume, intensity, and sophistication, and they aren’t going away.

In response to increasing security concerns, the White House recently issued the executive order, [“Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure,”](#) which holds federal agency heads accountable for implementing improved cyber risk management measures within their organizations. The directive raises cybersecurity to a much higher priority level, requiring those at the highest levels of government to make significant improvements.

Federal agencies are responding to the executive order by taking steps to protect against network vulnerabilities and deploying network monitoring solutions to enhance security, visibility and compliance.

A high-profile federal agency, and APCON customer since 2009, built new data centers from the ground up and needed to create standards for how they would monitor and secure the system. U.S. government agencies have been upgrading and consolidating data centers to save space and use fewer resources. While this has saved millions of dollars, the consolidations have caused data loss and network visibility issues due to differing network architectures.





Network monitoring solutions to enhance security, visibility and compliance

The APCON solution provides the federal agency with numerous methods to reduce traffic loads for data mining, by optimizing traffic being sent to network and security analysis tools using filtering, load balancing, and deduplication. For this federal agency's needs, the most important feature was deduplication at up to 200 Gbps.

The agency needed to deploy a solution that would improve the visibility of their network traffic to enhance data center performance and security analysis. After considering various suppliers, the agency worked with leading value-added reseller, [CNI Sales, Inc.](#) to determine that APCON was the best suited to provide a scalable family of network visibility solutions for the government agency's two large-scale data centers.

Federal Agency Leverages IntellaFlex XR and Titan XR Solution

The federal agency deployed APCON's IntellaFlex XR, a complete network visibility system that's easy-to-use and scalable. APCON offers an IntellaFlex system that has completed the Federal Information Processing Standard (FIPS) [140-2 certifications](#) from the U.S. government's National Institute of Standards and Technology (NIST).

IntellaFlex XR systems filter, aggregate and optimize data traffic for distribution to network performance and security analysis tools. The systems are set up and configured with an easy-to-

use graphic interface and APCON's TitanXR allows the client to view multiple network visibility and monitoring systems with one centralized management console and customizable dashboard.

Specifically, this agency deployed an IntellaFlex 3288-XR eight slot chassis, with HyperEngine packet processor blades to provide packet deduplication technology coupled with standard IntellaFlex aggregation and filtering blades.

The customer also integrated the TitanXR centralized management platform with an intuitive graphical interface that allows users to quickly and efficiently use the system without extensive training. TitanXR seamlessly provides the agency with a network visibility solution with a consolidated view of data centers, VM networks and remote branch offices from a single pane of glass. The customer can also view their entire network on a map, including system status and summary of events.

The APCON Solution Makes an Impact

The APCON technology provides the agency with immediate visibility anywhere in the network and to any of the monitoring and security tools they connect to. The solution is the most scalable in port density and processing power, providing the ability to scale up, adding more tools that will collect and analyze data. Ultimately, the APCON IntellaFlex XR solution will become the gateway between all network traffic and the agency's security and monitoring tools.

It was important to the agency to have the ability to deduplicate packets at higher speeds. In the future, the agency plans to leverage the HyperEngine's packet processor capability of deduplication up to 200 Gbps and will still be able to maintain the same network visibility.

One of the advantages the agency has seen is that its new network visibility system allows captured data to be stored for longer durations by removing duplicate packets and only storing the traffic of interest. The deduplication technology provides more than a 40% reduction in the amount of traffic stored. Ultimately, the new system provides visibility to all packets, which allows the agency to identify threats and potential network performance issues much faster than ever before.

The APCON IntellaFlex XR and TitanXR solution provides the government a future proof solution that supports the needs of their new world class data centers today and can provide a platform to monitor virtualized traffic and other complex network environments moving forward.