

Acquisition and Network Consolidation Drives Centralized Monitoring for Healthcare System

Expanding network demands coupled with increased security requirements drive mission-critical need for new network monitoring design



Customer: Leading healthcare system

Industry: Healthcare

Location: USA multiple locations

Challenge:

- Data center expansions
- Remote branch and acquisition visibility
- Duplicate network packets
- Oversubscription of tools

Solution:

APCON's Security Monitoring for Healthcare solution with advanced NetFlow and packet deduplication services

Benefits:

- Expanded network visibility
- Scalability for future growth
- Packet deduplication for enhanced tool efficiency
- NetFlow Generation for traffic and packet level visibility across the network
- Increased network and security tool efficiency
- Carrier-grade reliability for fail-safe operation
- Virtual environment monitoring tools efficiency
- Enterprise class availability

Today's healthcare industry faces unique challenges with balancing network security, regulatory compliance and 24/7 service availability. These network directives drive multiple challenges in balancing regulatory compliance, such as HIPAA regulations, in a large BYOD environment. Coupled with security threats and the paramount need to safeguard patient privacy, the network stress dictates a new approach towards monitoring and traffic visibility. This was the case for a large healthcare system in the United States following their acquisition activities.

Challenges When Expanding Networks

Following the merger of two large healthcare companies, this leading U.S. healthcare provider's IT team faced several challenges. With over 40,000 employees serving 5.1 million people annually, questions arose as to how the IT team was going to handle the increased data bandwidth and network demands with existing monitoring tools.

Their current solution was not achieving the visibility the network was now demanding. The increase of data traversing the network began to overwhelm security and visibility tools leading to skewed data reporting. This was problematic as the IT team requires real-time insights into the traffic to optimize network performance and protect customer and employee information.



Challenge of Duplicate Packets

Many companies choose to provide data to their monitoring systems and tools using SPAN or mirror ports. Either approach may introduce duplicate packets to the tools. Duplicate packets can cause a wide range of issues, including skewed data reporting, unnecessary utilization of tool processing resources and troubleshooting complications.

Duplicate packets have a dual negative side effect of increasing network/operations/engineering workloads, and decreasing the efficiency of already overburdened tools.

NetFlow

NetFlow is an industry standard protocol used by network, security and application administrators to understand traffic patterns and gain visibility into who, what, when, where and how network traffic is flowing. When the network behavior is understood, a more efficient operation can be achieved.

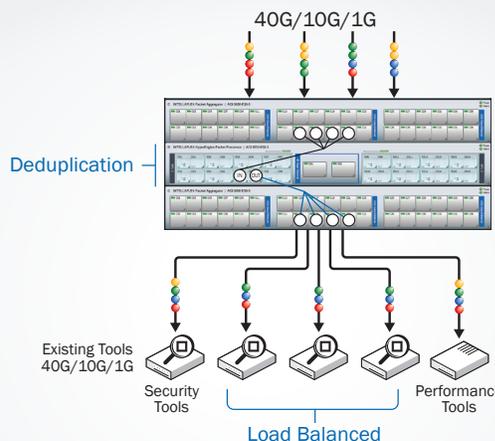
Many companies today rely on the information generated by NetFlow, and this healthcare system is no exception. NetFlow records can be generated by switches and routers, yet this method increases the workload of already taxed network equipment, potentially leading to performance problems.

Increase Monitoring Efficiency

With the multiple issues of integrating a larger network, gaining additional NetFlow visibility and implementing a more robust deduplication strategy, this healthcare provider selected APCON's Security Monitoring for Healthcare solution with the IntellaFlex XR platform and HyperEngine Packet Processor.

APCON's industry-leading solutions are designed for enterprise networks that demand scalable, high-capacity, reliable data aggregation and filtering. The HyperEngine Packet Processor offers up to 200Gbps of high performance packet processing to the IntellaFlex XR monitoring system, including packet deduplication, NetFlow generation and GRE endpoint capabilities for virtual network monitoring.

The introduction of APCON's solution into the healthcare provider's network not only provided enhanced NetFlow record generation capabilities, but also reduced the workload of the existing network equipment. The healthcare system's IT team was able to eliminate duplicate packets, providing an immediate increase in tool performance and efficiency, along with reduced troubleshooting times and lowered operational costs.



Process packets from multiple ports to remove duplicates, directing traffic of interest to security and performance tools.

Moving Forward

During the post-acquisition transition, this healthcare provider realized the need for a scalable network monitoring solution that can grow with the company as data requirements continue to increase, and without adding additional staff.

The APCON team worked alongside the healthcare system's IT staff to architect a network monitoring solution that would meet their immediate needs of aggregation, filtering, packet deduplication, NetFlow generation and scalability requirements. The healthcare provider is confident in APCON's ability to provide the right network and security monitoring for visibility into their networks today and in the future.

Contact the APCON sales team at sales@apcon.com to find out how we can help increase network visibility and improve security and monitoring tool efficiency.