

Large Retail Pharmacy Uses Keysight Visibility to Help Secure and Optimize Its Network

Organization

- Large retail pharmacy with 8000 outlets

Challenges

- SPAN port shortages hindered data access to tools
- Existing visibility solution dropped packets
- Multiple teams needed role-based access to the NPB
- Hard to filter monitoring traffic to existing tools

Solutions

- 10x Keysight Vision Network Packet Brokers

Results

- MTTR reduced by 75%
- SPAN port contention eliminated
- Monitoring tool costs lowered with port utilization
- PCI compliance improved with packet slicing

With more than 8,000 retail outlets and two data centers, this retail pharmacy has a significant information technology (IT) infrastructure to monitor and protect, including more than 30,000 network and wireless devices. The data center delivers critical applications and services, including credit card transaction processing, vendor supply applications, and e-commerce systems. Many such systems today rely on millions of connected “things” to function as e-commerce points of sale (PoS). The connected wireless things report issues before customers can take notice, understand the needs of the customer at the granular level, and track shipments (e.g., pharmaceutical drugs) in real time. This strong connection between e-commerce systems and connected wireless things only works if the networks on which they rely are continually monitored and protected.

Over the years, the operations team has accumulated a considerable range of analysis tools that require packet-based data, including Riverbed, NetScout, and Dell, for uses cases such as application performance management (APM), analysis and intrusion detection. While the concept was simple, the implementation was extremely hard—until they discovered Keysight Security Fabric™. According to the network analyst, “We originally tried to set this up using Cisco switches to supply monitoring packet streams. But we ran into trouble with the limits of two Switch Port Analyzers (SPANs) per device, and we couldn’t split or filter the traffic easily enough. And to make matters worse, we were having problems with packet drops.”

The network analyst and his team procured ten Keysight Vision network packet brokers (NPBs) to cover both their data centers. According to the network analyst, “The new solution made life much easier. It was a night and day difference versus our old approach of using the Cisco switches.” The NPBs also provided data aggregation, filtering out-of-band monitoring data, and load balancing functions to make the company’s monitoring tools much more efficient.

“The biggest payoff has been faster response time for fixing issues—where a few minutes of downtime translated into big dollars lost (now saved).”

Network Analyst

Visibility Architecture Results in a 75% Decrease in MTTR

The Keysight solution resulted in a number of positive financial returns. First, personnel can adjust monitoring configurations as needed without requiring change tickets and change board approval using the intuitive console. The Vision NPB's ability to do packet slicing is also an added bonus, since monitoring tools are not allowed to view/ retain credit card numbers under Payment Card Industry Data Security Standard (PCI DSS) regulations.

The biggest payoff has been in terms of faster response time for fixing issues. Before deploying the solution, the team was missing alerts about application failures and critical outages. In addition, they often did not have the data they needed for troubleshooting due to packet drops. When applied to a business-critical application, such as the e-commerce portal, minutes translated into big dollars lost (now saved). The new solution allowed them to reduce mean time to repair (MTTR) by 75%.

Deploying the Keysight solution saved the organization the cost of purchasing more monitoring tools by aggregating low-speed links and making sure that all of the monitoring tools had proper data access. This extended the life of existing monitoring tools. The Vision solution also helped to troubleshoot the monitoring tools.

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