SUCCESS STORY

Midwestern Financial Services Company Banks on Visibility from Forescout and Keysight to Drive High-Speed Networks

COMPETITIVE TAKEOUT

HIGHLIGHTS

Industry: Banking and finance

Customer: Large US bank

Challenge: Upgrading visibility while migrating data centers to 40G

Solution: Keysight Flex Taps aggregating and processing network data for analysis by Forescout

Results:
- 100% visibility across all network links
- Cost-efficient approach avoids wasting switch ports and data center resources
- Customer positioned for growth throughout migration

Overview

When a prominent bank opted to upgrade its data centers to 40G, the network architecture team began replacing its visibility architecture with a more powerful, scalable, and cost-effective solution from Forescout and Keysight.

Faster speeds and new devices need modern visibility

With more desktops and Internet of Things (IoT) devices accessing its new 40G network, the network team at a large banking company needs to maintain a real-time inventory of assets and everything taking place across its environment. The company first chose the Forescout Platform to monitor traffic and surface emerging cyber-threats, a vital function that requires up-to-the-minute packet data.

The team began evaluating network visibility solutions to feed network data to Forescout at ultra-high speeds, without dropping any packets that might contain valuable insights. They first considered installing more of an existing tap solution and an alternative approach – using mirroring ports on its network switches to collect and send traffic for analysis. To make the final decision, they engaged solution provider partner CDW to help choose the best approach and choose the ideal solution.

ROI calculations rule out wasting switch ports

The customer's goal of being able to tap every link in its network ruled out the use of a switched port analyzer (SPAN) approach. Using existing resources would have negated the need to buy standalone network taps, but a quick calculation showed the CPU-intensive SPAN approach would cost much more in the long run. It also might result in switches becoming overwhelmed or an eventual shortage of SPAN ports resulting in coverage gaps or dropped packets.

The high cost and unacceptable risk associated with the SPAN approach convinced the team to move forward with a visibility architecture based on network taps and intelligent packet brokers to aggregate and filter traffic for analysis by Forescout and other monitoring solutions. The challenge then became choosing the right taps to access traffic everywhere across the network.

Performance goals drive an upgrade to Keysight

Migrating the network from 1G and 10G to 40G links meant the North American financial services company needed 100% visibility coverage on every network segment, a goal that brought the shortfalls of its prior tap solution to the forefront. For starters, the previous taps took up too much space in the data center and consumed considerable CPU resources.

Along with the exorbitant costs, the team found the previous vendor's user interface (UI) tedious to operate which did not bode well for configuring hundreds, even thousands of taps and network packet brokers. So, rather than double down on its old solution – and watch resource consumption skyrocket – CDW brought in Keysight to demonstrate the benefits of high-powered Flex Taps against competing approaches.

Forescout and Keysight emerge as clear winners to up-level visibility

The banking services provider elected to deploy a joint solution from Keysight and Forescout to achieve scalable world-class visibility based on several factors:

- Keysight Flex Taps delivered the highest-density in a rack-mounted deployment model providing roughly double the density compared to the old vendor's solution

- Operating the Keysight platform and UI proved simple and elegant by comparison

- The Keysight, CDW, and Forescout teams worked closely together to demonstrate and deliver a proven joint solution the customer literally could bank on

Visibility bolsters security

The new visibility architecture initially featured Keysight Flex Taps feeding the Forescout Platform network traffic at two major data centers including the bank's Chicago headquarters and a primary southeast location. The initial installation having gone smoothly, the rollout progressed to other regions nationwide. By the time the upgrade concludes, the company may have invested up to $2 million in Keysight taps — a sizeable investment but still significantly lower than the cost of competing approaches that don't perform as well.

Phase 2 to add filtering and data augmentation

With taps in place to collect the traffic needed to manage security and maintain compliance, the visibility upgrade will enter "Phase 2" which includes replacing its existing, underpowered network packet brokers (NPBs) with a more modern, ultra-reliable solution. In the meantime, the team can head off performance issues and hunt for security threats based on reliable, complete visibility of what's taking place across its new network 24/7.

Visit **GetNetworkVisibility.com** for the latest from Keysight on insights for optimizing network monitoring, security, and analysis.

For more info, contact: **1-888-438-4942 or visibilitysales@keysight.com**