



CASE STUDY

Government Agency Reduces Network Security Costs \$260K

Decrease security tool costs using filtering and deduplication

This company is a government agency based in the Middle East. Security analysis of suspect data is critical to them but so is controlling costs. They were looking for a visibility solution that could accomplish both goals for their out-of-band security tool solution.

As part of this technology initiative, the company needed to reduce the transmission of suspect data from 100 Gbps down to 10 Gbps. They accomplished this with a three-step process of data filtering. An initial basic IP address filter was implemented using their Cisco Nexus 3000 switches on the 100 Gbps links. This involved using 1024 rules for the IP access list and 512 rules for the MAC address list. The remaining data was passed to a second stage of filtering that used the Keysight Vision ONE network packet broker (NPB) to create IP address ranges for 40 Gbps links. This stage also involved packet deduplication and packet slicing to remove packet payloads. A third filtering stage used the Keysight ATI Processor to filter data based upon application type to remove uninteresting data (like YouTube, web video, etc.). The resulting data was then load balanced across their existing Cisco FirePOWER security appliances using 10 Gbps links.

Keysight's Security Fabric solution eliminated unnecessary traffic to the security tools, making them 35% more efficient.



Company:

- Government Agency

Key Issues:

- Filtering and deduplicating 100Gbps traffic
- Needed to step down 100 Gbps traffic to 10 Gbps
- Wanted to reduce security tool costs

Solutions:

- Vision ONE NPB
- ATI Processor
- AppStack, PacketStack

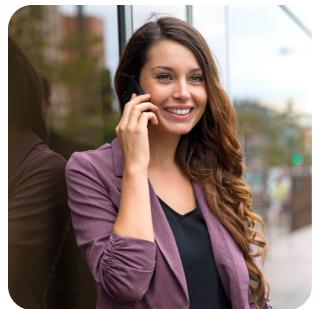
Results:

- Saved \$260K on additional tool costs
- Increased efficiency by 35%
- Removed duplicate traffic



In addition, the customer loved the GUI interface because it made filter creation quick and simple for the Keysight Vision ONE NPB. Unlike the Cisco switches, no command line interface (CLI) was needed for the Vision ONE. It was as simple as “drag and drop” and “point and click.”

According to the security architect, “The Keysight Security Fabric allowed me to quickly set up data filters for my 100 Gbps architecture. With the GUI interface, I can also quickly update and change my layer 2 through 4 and app filters within a minute or two. It takes me that long just to remember how to log into my other products, but with Keysight I’m already done.”



Security fabric results in \$260K cost savings



The second major requirement that the company had was to reduce costs. By using the NPB filtering capabilities, the customer removed uninteresting traffic. In addition, the removal of the payload for certain types of Ethernet traffic further reduced the load on their existing security tools making them more efficient. This meant that they were able to extend the life of their existing tools further. In addition, the Keysight NPB also provided data aggregation and load balancing functions to make the company’s security tools even more efficient.

For instance, one of the FirePOWER IDS tools was near 75% utilization while the second was at 21%. Load balancing smoothed out the load across both tools and gave the customer more aggregate capacity. Load balancing also improved the customer’s FireEye solution. Combined with deduplication and packet slicing efficiencies from the PacketStack feature set and application filtering efficiencies of AppStack, the customer expects their current solution to be viable for at least 2 to 3 more years before more capacity is needed, resulting in a current savings of around \$260K

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— Security Architect

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