



Use Case

Global Service Provider Uses Gigamon to Enable Data Center Security Infrastructure

By introducing the Visibility Fabric, the new design drastically reduced the number of security tools required, bringing in the total cost of the project to 75 percent less than what would have been required under the original design.

Customer

European-based global service provider offering communication, information, and entertainment solutions in 20 countries for 300 million customers.

Challenge

Building out the security infrastructure for a new data center was cost-prohibitive due to the number of intrusion prevention systems required to protect dozens of 10Gb links.

Solution

A Gigamon Visibility Fabric™ built using Gigamon fabric nodes.

Benefits

- Installed solution secures double the planned links with half the original budget
- N+1 tool redundancy and failover protection
- Ability to leverage the solution for performance monitoring applications

Business Challenge

When it came time for this global service provider to build out a new data center in Europe, their multi-tier security project hit a wall due to budget constraints. The design called for one intrusion prevention system (IPS) inline on each of the 22 x 10Gb links coming in from the firewalls, but the \$2 million price tag was cost-prohibitive. The RFP was cancelled and the organization went back to the drawing board to see if there was another way to achieve the security requirements without breaking the budget.

The solution would have to provide comprehensive security for 22 x 10Gb links initially, but would have to scale up to twice that and beyond. It would also have to scrutinize all the traffic coming in from the firewalls and prevent malicious traffic from getting into the data center without dropping packets, degrading network performance, or affecting subscriber quality of experience.

Resolution

A local Gigamon channel partner suggested a design alternative that met all of their requirements at a fraction of the original cost. The power and efficiency gains possible with an active network visibility platform could help the service provider achieve its goals and more without sacrificing security or budget.

Because the individual 10Gb links were not running at full capacity, there was no need to overbuild the security solution by dedicating an expensive tool to every link and thereby sinking capital into underutilized resources. The solution took advantage of Gigamon Visibility Fabric nodes to create a visibility layer where traffic is aggregated from any number of incoming links and then forwarded to a centralized, shared IPS farm.

Essentially, adding a visibility layer eliminated the one-to-one relationship between link and IPS that was a limiting aspect of the original design. With the Visibility Fabric in place, the fabric nodes not only accommodated 100 percent of the traffic without packet loss, but also prevented congestion by load balancing that traffic across a farm of IPS devices.

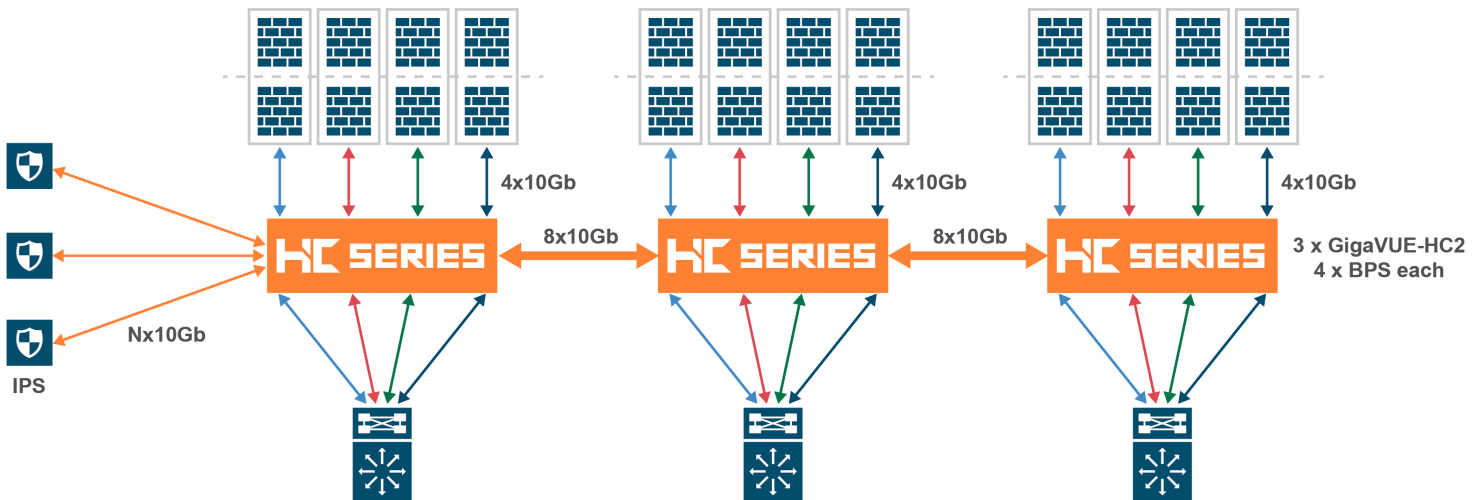


Figure 1: Multi-site deployment using bypass (BPS)

Benefits

The Gigamon Visibility Fabric allowed the service provider to achieve their security goals while purchasing a fraction of the tools. The original design called for 6 tools for 22 links at a cost of \$2 million, but by the time the updated design was implemented, the requirements had almost doubled with 8 – 10 tools for 44 links, including fiber and copper, which would have doubled the cost in the original design to \$4 million.

By introducing the Visibility Fabric, the new Gigamon-based design drastically reduced the number of tools required, bringing in the total cost of the project to \$1 million, 75 percent less than what would have been required under the original design. Because of the modular nature of the platform, capacity can be added incrementally as required. When it came to the budget, not only did the provider save on the initial CAPEX investment for tools, but also on the recurring OPEX costs for tool management and maintenance.

In addition, the bypass protection made possible by the integrated TAPs in the Gigamon platform removed points of failure, and the Visibility Fabric allowed the security solution to be configured for N+1 redundancy, further improving the efficiency and efficacy of the inline IPS solution.

But the benefits didn't end with the security team. The Gigamon platform offers advanced features like NetFlow Generation and SSL Decryption on the same system, which means the network team is now able to leverage an existing asset to increase their monitoring and management capabilities with only incremental costs.

As a result, the service provider now supports a level of security and protection that would not have been possible without the Gigamon Visibility Fabric.

About Gigamon

Gigamon provides an intelligent Unified Visibility Fabric™ to enable the management of increasingly complex networks. Gigamon technology empowers infrastructure architects, managers and operators with pervasive visibility and control of traffic across both physical and virtual environments without affecting the performance or stability of the production network. Through patented technologies, centralized management and a portfolio of high availability and high-density fabric nodes, network traffic is intelligently delivered to management, monitoring and security systems. Gigamon solutions have been deployed globally across enterprise, data centers and service providers, including over half of the Fortune 100 and many government and federal agencies.

For more information about our Gigamon products visit:

www.gigamon.com