# Nominee: Gigamon

## Nomination title: Gigamon boosts network visibility across private clouds and virtualised data centres

Sitting between the IT infrastructure and the network tools, Gigamon's Visibility Fabric can aggregate, filter, replicate or modify traffic to centralised management, analysis and security tools. This extends the reach of the tools, improves ROI and allows organisations to more efficiently manage their networks.

As new technologies emerge, organisations are recognising traffic visibility as an essential component in managing, analysing and securing complex networks. Legacy approaches offer limited visibility and filtering capabilities; are difficult to scale and manage; and often require network downtime to introduce changes. Gigamon overcomes these challenges, allowing IT organisations to more efficiently manage change with a solution that can adapt as networks evolve.

Gigamon's service also enables organisations to deliver Visibility as a Service to multiple internal stakeholders, meaning that end users within the data centre can obtain the visibility they need based on their unique requirements. These multiple tenants may be various IT operations teams or different business functions within a single enterprise.

In May 2014, Gigamon announced new enhancements for its GigaVUE-VM Visibility Fabric node and GigaVUE-FM Fabric Manager. Virtualisation has led to increased deployment of distributed applications, dramatically increasing the need for visibility at the Virtual Machine level. Gigamon addresses these concerns with these software updates, which increase the scale of virtual visibility. The GigaVUE-FM 2.2 update introduces a "single pane of glass" graphical user interface (GUI), adding powerful configuration management capabilities to its current asset management capabilities for an intuitive management experience spanning physical and virtual Fabric Nodes across the Unified Visibility Fabric.

With over eight years' experience designing and building traffic visibility products in the US, Gigamon solutions are deployed globally across vertical markets including over half of the Fortune 100 and many government and federal agencies.

Gigamon has received a number of global awards.  The Visibility Fabric was awarded Best of Show Grand Prix award in the Management, Monitoring and Testing category at Interop Tokyo 2013.

In 2014, Gigamon has been recognised by the International Business Awards (Stevies) for its rack-mounted Visibility Fabric Node 'GigaVUE-HC2' in the category for 'Best New Product or Service of the Year - Hardware – Networking'.  Also, in July this year, Gigamon won Network World Asia's Information Management Awards in the 'Network Traffic Monitoring & Management' category.

Gigamon's patented traffic filtering technology (Flow Mapping) allows operators to create thousands of individual 'map-rules' to determine how traffic on network ports should be sent to tools.

This ensures each tool only sees the traffic that it needs, and nothing else.  Such granular customisation is an important differentiator as it can overcome tool over-subscription when aggregating traffic from multiple ports, and allows tools to operate more efficiently, with less management. This leads to CAPEX and OPEX savings.

While many companies claim to offer real-time traffic visibility into network monitoring and security tools, Gigamon's Flow Mapping is the only architecture that gives complete control of all traffic at full line rate speeds – which is critical as network complexity increases.

Overcoming the scalability challenge of traditional network management, Gigamon's technology uses multi-rule sequential pre-filters to load balance traffic across multiple 1GbE analysers.  This allows the 1GbE tools to effectively monitor 10GbE traffic, with each tool analysing a specific and pre-defined function.

Similarly, as network speeds increase, Flow Mapping allows 10GbE tools to monitor 40GbE and 100GbE networks – and so on.  Essentially, Gigamon's technology is the most cost-effective way of monitoring networks at high speeds, without oversubscribing any single tool.

The GigaVUE-VM 2.2 software release will add support for VMware vSphere Standard Switch (VSS) in addition to the existing support for VMware vSphere Distributed Switch (VDS) and Cisco Nexus 1000V virtual switch. This software enhancement will provide support for hundreds of monitored hypervisors per vCenter and support for multiple vCenters benefiting private cloud data centre deployments.

Gigamon has 53 of the Fortune 100 companies as customers and 840 end-user customers across many vertical sectors, including finance, healthcare and telcos.

The benefits of Gigamon's technology are numerous – from allowing mobile operators to maintain their QoS amid Big Data concerns, to providing financial institutions with a cost-effective means to monitor and secure their networks.  Essentially, gaining greater visibility with Gigamon can increase performance and profitability.

One organisation that has benefiting from Gigamon's solution is Glasgow University.  The University needed a technically viable and cost-effective way of upgrading their Intrusion Detection System (IDS) so it could alert them to hacking attempts and identify PCs infected with malware - and do all of this at speeds of multiple tens of gigabits per second.

The University looked at a wide range of possible solutions before being introduced to Gigamon's technology by systems integrator Synetix Solutions.  The university was impressed by the Gigamon solution's 10Gb capability which also allowed plenty of headroom for future growth.  It was also drawn to the granularity of Gigamon's hardware based filtering as it would allow it to select only the traffic it needed to send to the IDS – as well as the fact that it was cost-effective and included platforms at the right scale.

Using Gigamon's G-TAP optical traffic splitters, all external internet traffic is mirrored through its ability to duplicate traffic passing over the 10Gb links.  The system then uses Gigamon's hardware-based, patented Flow Mapping technology to isolate the traffic that needs to be sent to the IDS.

"We could send all our traffic to the IDS servers, but the Gigamon system allows us to be much more efficient and isolate only the traffic that we're really interested in", said Edwards. "For example, we might be sending some massive date files from the Large Hadron Collider project – which we know we can trust and might be too large for our IDS servers to analyse. We can use the Gigamon systems to filter this traffic out based on source and destination addresses, and significantly reduce the load on the IDS servers. When new sources come online, it's an easy process to exclude the ones we aren't interested in."

## Why nominee should win

•       Gigamon addresses the challenges of increased network traffic, providing unmatched visibility into traffic across both physical and virtual networks


•       Intelligent Flow Mapping is the only traffic visibility architecture that can cope with increasing network speeds at high data volumes


•       The Traffic Visibility Fabric provides a cost effective solution allowing organisations to do more with less


•       Gigamon's Traffic Visibility Switch is the most cost-effective way of monitoring at 10GbE rates, without oversubscribing 1GbE tools


•       Effectively, Gigamon is enabling organisations and service providers to prepare their networks for the demands of tomorrow, today