

“Now we can control and optimise the applications our users rely on, without incurring any unnecessary costs monitoring those we don’t need to.”

// Philip Kenney, HEAD OF IT OPERATIONS AT PORTSMOUTH HOSPITALS NHS TRUST

Portsmouth Hospitals NHS Trust

Portsmouth Hospitals NHS Trust is one of the UK’s largest ‘acute’ Hospitals NHS Trusts, providing care for over half a million people in Portsmouth and the surrounding areas.

The trust provides a range of services, based out of the Queen Alexandra Hospital in Portsmouth, which has 1,200 beds, 28 theatres and one of the busiest emergency departments in the UK, treating over 130,000 patients each year. The hospital campus has recently gone through a major redevelopment, which was completed in 2009 and serves as a hub for a number of smaller outlying facilities.

The trust also hosts the largest Ministry of Defence Hospital Unit in England, treating members of the armed forces and their families from all corners of the United Kingdom, with military staff working alongside their civilian colleagues in the same campus.

In total, the Trust has over 6,000 IT users accessing over a hundred applications.

Challenge(s)

Portsmouth Hospitals is building a clinical desktop portal for the future, called i-Desktop. i-Desktop provides access to a number of critical clinical and business applications including Bedside Vital Signs, Emergency Department Clinical Information System, Electronic Discharge Summaries and Electronic Patient Record, to name just a few.

The hospital already had a basic level of SNMP monitoring, and application aware tools, but it wanted to use wire data analytics to understand all of the flows and transactions across its network. In particular, the trust wanted to get a greater level of visibility into the traffic that crosses its wide area network, across all its applications, from layers two to seven.

This included the desire to monitor desktop users, mobile devices and remote users. For example, it wanted to ensure its Citrix users were getting good application performance and gather the information required to optimise it.

Challenge

Portsmouth Hospitals NHS Trust wanted to increase the scope of its application and network monitoring, but needed a way to filter and aggregate data into its new systems.

Solution

A Gigamon solution using a GigaVUE® Visibility Fabric™ node.

Benefits

- Ability to monitor traffic across entire estate, 24x7, and fine tune the performance of critical clinical applications across Layers 4-7.
- Optimise the efficiency of its new monitoring tools.
- Aggregate traffic from multiple network ports to provide a clean flow of packets into the analysis tools
- Perform VLAN filtering to save costs associated with analysing unnecessary traffic

It had selected technology from ExtraHop Networks to do the analysis and reporting, but it had to resolve a number of issues before it could implement the solution.

The analysis tools would work most efficiently if they were presented with a single clean data feed, aggregated from different parts of the network.

The trust also wanted to minimise costs associated with analysing low priority traffic or applications of little interest.

Philip Kenney, Head of IT Operations at Portsmouth Hospitals NHS Trust, said, “ExtraHop’s technology promised us greater visibility and control over our applications than we’d ever had before, but we still had to find a way to make it viable to deploy. Experts from ExtraHop recommended we look at Gigamon, as they knew Gigamon had solved similar issues for other users.”

Selection Criteria

The hospital trust was introduced to Gigamon by the chosen provider of its analysis tools, ExtraHop, which realised that the trust could benefit from Gigamon’s traffic aggregation.

It was important for the hospital that the solution could aggregate packets from multiple points in the network port into a single connection to the monitoring system.

It was also important that it could do VLAN filtering, at wire rate, which could be used to avoid sending unnecessary traffic to monitoring devices, and reduce the cost of the overall solution.

The hospital was looking for a platform that could support 10Gb interfaces, to ensure a growth path for the future.

And the hospital wanted a system that it could trial, allowing it to evaluate and prove out the technology in advance.

Solution

The Portsmouth Hospitals NHS Trust selected a GigaVUE Visibility Fabric node solution from Gigamon to solve its challenges.

The Gigamon technology is used to aggregate traffic from multiple network ports and distribute it into the analysis tools.

It also performs VLAN filtering, to reduce the need to analyse unnecessary traffic, such as that generated by a community of devices that are being phased out of service. This saves cost by increasing the efficiency of the monitoring and analysis systems.

Results

The hospital can now monitor traffic across its entire estate, 24x7, and fine tune the performance of its most critical clinical applications across Layers 4-7.

Philip Kenney said, “We had good engineering support from Gigamon, who helped us resolve the challenges we faced. They were willing to invest in a trial unit and support it, so we could be confident in the solution from the outset. Now we can control and optimise the applications our users rely on, without incurring any unnecessary costs monitoring those we don’t need to.”

Next Steps and Lessons Learned

Gigamon has provided Portsmouth Hospitals NHS Trust with greater visibility into its monitoring and analysis systems by aggregating traffic from different parts of the Trust’s infrastructure. As network traffic continues to grow, and new applications are deployed, it can be confident that it has a scalable system for the future control and management of its IT infrastructure.

About Gigamon

Gigamon® provides an intelligent Visibility Fabric™ architecture 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