

LINCOLNSHIRE NHS SHARED SERVICES

Lincolnshire NHS Shared Services Accesses Advanced Network Utilization Information By Deploying Scrutinizer NetFlow Analyzer



About Lincolnshire NHS Shared Services

Lincolnshire NHS Shared Services (LSS) is hosted by Lincolnshire Partnership NHS Trust to provide services to Lincolnshire Partnership NHS Trust, Lincolnshire Primary Care Trust, East Midlands Ambulance Service NHS Trust and United Lincolnshire Hospitals NHS Trust.

The area covered by LSS is approximately 2,000 square miles with 83 sites which directly connected to the wide area network (WAN). There are 102 GP practices and 12 branch sites. They have over 4,500 PCs and 7,000 users.

LSS has in place Castle Rock's SNMPc solution, purchased from Teneo back in 2004. SNMPc is used to monitor and control key applications across the corporate WAN. Whilst SNMPc monitors the general health of the network, they needed to be able to identify how much network traffic there is and what that traffic is doing. Traffic running over the network consisted of SMB (CIFS) file shares, Outlook email access to Exchange servers, HTTP for intranet/internet, Citrix and Telnet for clinical systems. Clinical system access and email were critical to the smooth running of the business.

The Challenge

To Identify Which Users And Applications On The Network Are Causing The Most Traffic In Order To Make Sure Everything Is Running Efficiently And Minimize Use Of Bandwidth

Tony Arnold, Senior Network and Systems Manager at LSS was faced with the task of finding a network traffic analyzing solution. He needed a solution that would provide him and the IT team at LSS with the information that when they are making changes, what the effect would be on network traffic. They didn't want to rely on guess work alone but needed to make qualified judgements based on what was actually happening. Accurate analysis was becoming increasingly important as the network was growing at an accelerated rate.

“Traffic flow was very fluid and dynamic with lots of peaks and troughs. More and more PCs were being rolled out but without the tools to look at network traffic flows it was difficult to know what was going on with regard to our network traffic and where to position everything.” Remarked Tony Arnold.



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Tony Arnold

Senior Network & Systems Manager, LSS

In Brief

Industry

- ▶ Public Sector

Challenge

- ▶ Identify which users and applications on the network are causing the most traffic
- ▶ Ensure everything is running efficiently by analyzing NetFlow information

Solution

- ▶ Deploy Plexer Scrutinizer

Benefits

- ▶ Immediate, detailed, yet easy to use NetFlow analysis at the click of a button
- ▶ Able to identify quickly which users and applications on the network are causing the most traffic
- ▶ Pinpoint easily the effect of changes made to the network
- ▶ Minimize the use of broadband by having the information to make best use of the network
- ▶ Provides the knowledge to make more informed infrastructure decisions and investments

LSS network devices consisted of various Cisco routers and switches. Most switch and router vendors support technologies called NetFlow or sFlow. NetFlow (most commonly used) is an open but proprietary network protocol developed by Cisco Systems to run on Cisco IOS-enabled equipment for collecting IP traffic information. Once installed, the switches are configured to send IP NetFlow or sFlow information to Scrutinizer. In just a few minutes, Scrutinizer enables users to see traffic details from several geographically disparate locations on their network. Users benefit from in-depth visibility in real-time and gain invaluable insights into how their traffic impacts their overall network health. Users are empowered to instantly pin down the cause of network incidents, understand patterns in network performance, make the right capacity planning decisions, and of course, save a whole lot of time!

LSS needed a NetFlow solution that would enable them to get the most out of their networks with very limited bandwidth. Scrutinizer enables users to make more informed infrastructure investments. It enables users to see the impact of application rollouts on WAN links, and measure application traffic growth via graphical displays of trend analyses and application baseline trend comparisons. Scrutinizer enables users to evaluate better and less expensive alternatives to costly upgrades by identifying the applications, hosts, and conversations that consume bandwidth in easy-to-understand charts. Tony noted that,

“Bandwidth is very expensive and LSS just couldn’t afford the wastage caused by inefficient applications. We needed a solution that would enable us to identify where things are clogging up the network in order to sort out the problem and free up as much of our limited bandwidth as possible.”

Tony researched all the major NetFlow analysis solution providers in order to find the one that matched both their technical and budgetary requirements. Scrutinizer seemed to match all their requirements.

The Solution

Deployment Of Plixer Scrutinizer

Scrutinizer is a tool that provides incredibly detailed network utilisation information on

the users and applications that are using up the most network resources. It enables users to identify bottlenecks, rogue applications and what applications are consuming vital bandwidth. It uses Cisco's NetFlow Technology to retrieve the traffic details you need and present them in a detailed graphical view. If you have sFlow or IPFIX capable routers or switches, you can point the sFlow or IP Flow to Scrutinizer and most of the same great traffic detail is available.

Scrutinizer integrates with a number of third party applications, including Castle Rock SNMPc which works extremely well side by side with Scrutinizer. Tony commented,

“SNMPc looks after our overall network health but what it doesn’t do is the NetFlow analysis. Scrutinizer identifies where the network is affected and where the bottlenecks are, what applications are being used and if any are affected by a virus.”

Benefits

Immediate, Detailed, Yet Easy To Use NetFlow Analysis At The Click Of A Button

Scrutinizer enables users to solve performance problems faster. It allows real-time reports for each interface on the network and enables users to view applications, hosts, and conversations consuming WAN bandwidth on a customised graphical display. This enables users to isolate and resolve problems. The customizable reports allow users to view the scope of potentially malicious traffic and identify every affected network link and server.

“We can pinpoint easily exactly what is going wrong and sort out the problems quickly and efficiently. We don’t rely on guesswork but instead can drill down instantaneously to a simple to use graphical display.”

Deployment was incredibly easy. Installation took just a day. Scrutinizer takes away the guesswork providing LSS with the information about whether something is a cost effective solution and whether an upgrade is needed and how effective the upgrade is.

“At LSS our IT costs are kept as low as possible which means limited bandwidth. The key benefit for us has been the visibility of network traffic. It provides the ability to target connections that need it and allows rogue applications and viruses to be found, easily offering real evidence of where to put applications and the ability to see clearly the benefits gained.”

Scrutinizer has enabled LSS staff to optimize the network infrastructure for application performance by leveraging statistics that show which applications are using network resources, who is using them, and when. It allows users to analyze trends in applications, hosts, and conversations per class of service. It has allowed users to determine appropriate application classification with real-time visibility into how network traffic is prioritized.

About Teneo

Teneo is an Infrastructure Optimization Company that helps customers to understand and improve the way their IT works.

We do this by providing solutions in the areas of Management, Performance and Virtualization.

Teneo has over 1000 customers across 40 countries and offers a portfolio of services that includes Training, Installation, Maintenance and Performance Analysis Consultancy.

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About Plixer

Scrutinizer NetFlow Analyzer from Plixer is a tool that provides incredibly detailed network utilization information for users and applications on the network that are causing traffic.

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