CASE STUDY

Since implementing the AcceleNet network compression solution, the PCT have seen systems run faster, experienced increased bandwidth on their network and realized savings on their ISDN and GPRS usage costs.

"With the benefits we have realized, all organizations with multiple sites will benefit from a compression solution of this type. AcceleNet maximizes all WAN connections and is especially beneficial for organizations with ISDN, GPRS and modem dial up connections."

Mike Davis, IT Lead, NHS

"The installation is very easy with minimal administration required. The system has been 100% reliable and has made a big difference to the speed of the systems running over the network. Following the success using it for our GPRS, ISDN and dial up users, we have rolled it out across all of our networked sites and have seen significant reductions in the amount of network traffic and big improvements in the users perception of systems."

Ben Sutton, Networks Manager NHS

PROJECT OVERVIEW

East Elmbridge & Mid Surrey Primary Care Trust provides healthcare services to a population of 275,000 people. These services include District Nursing, Health Visiting, Therapies and associated Community Services.

The PCT have 44 networked sites, of which 16 are through ISDN connections, and have 100 users of Tablet PCs who access the network using a GPRS solution into NHSNet. There are also 70 users of dial up access from home using modems through strong authentication.

The applications being used across the network include e-mail through Outlook Web Access, a web based Community Patient Record System, and other web based applications.

TECHNICAL BACKGROUND AND REQUIREMENT:

East Elmbridge & Mid Surrey Primary Care Trust places a large emphasis on staff having the knowledge to use systems and be able to access technology where it is required to enhance the care provided to the patient. Over the past two years, the PCT have invested a significant amount of time and resource into four major projects:

- Rolling out e-mail to all PCT staff
- Implementing a new web based patient records system
- Providing a remote GPRS solution for nursing staff to access systems real time whilst at the point of care
- Upgrading the network infrastructure to cope with the additional users
The major issue identified after the implementation of the projects was the speed of access to the web based applications, especially by users of the GPRS solution and at sites linked to the network by ISDN connections.

This prompted research into solutions that could increase the performance of applications over small bandwidth connections. Following months of research, it was established that there hadn’t been an effective compression solution implemented in the NHS and little was known about this area generally.

SOLUTION:
The AcceleNet compression solution was introduced at the PCT enabling greater capacity on the existing network and faster connections to the systems in use.

IMPLEMENTATION:
East Elmbridge & Mid Surrey Primary Care Trust went through a detailed analysis of the marketplace to establish which network compression tools were available. After trialling several products, AcceleNet was selected for it’s performance, security, reliability and ease of use. AcceleNet out performed the other products trialled in all areas and delivered compression rates double that of any other product.

The supplier provided the structure for implementation and the technical resource to install it. The installation was quick and simple with no disruption to the network.

The AcceleNet server sits within the network and acts as a proxy server for each system. A small AcceleNet client application sits on each machine on the network. When a user selects a system like Outlook webmail, the AcceleNet client application sends a request to the AcceleNet server rather than to the Exchange Server to start the system. The AcceleNet Server then communicates with the Exchange Server, gets the required data, compresses it, and sends it back to the AcceleNet client. The AcceleNet client decompresses it and transfers the data to the application.

Overall, the PCT are delighted with the AcceleNet solution and the effectiveness across the organisation.
SUMMARY:
Taking advantage of the capability of the AcceleNet solution, the PCT realised significant benefits through the compression achieved on low bandwidth connections. The speed of connection for all users has increased with web based applications being accessed at least four times faster.

The PCT is also saving money as the data being transferred through the GPRS connections has reduced dramatically and the rate of compression has allowed us to reduce all of our ISDN circuits to 1 channel rather than 2.

BENEFITS

FASTER SYSTEMS
Employees who previously had experience of slow access to systems because of low bandwidth connections to remote sites now have access at the same speed as their colleagues in the major sites. Our tests have revealed that system response times are up to seven times quicker with AcceleNet in place. Our Dial Up and GPRS users saw huge improvements in speed of systems with usual 33k or 56k connections effectively turning into 150k and 200k connections.

GREATER NETWORK CAPACITY
The capacity of the network at the PCT was enhanced as soon as AcceleNet was installed. The usage on the network links fell by 75% which resulted in more efficient use of the bandwidth.

COST SAVINGS
As the compression reduces network traffic, the cost for the GPRS users fell. Before AcceleNet, the typical user would use between 8Mb and 10Mb of data transfer per month costing in the region of £24. With AcceleNet, the users are now typically using around 3Mb – 4Mb per month costing £11.

With the reduction in network traffic, our ISDN lines do not need two channels open all of the time. We have now cut this back to just one channel and this is saving over £10k a year.

As the usage of our private circuits has also fallen, we no longer have to upgrade these links when introducing new PCs onto the network.
MORE INFORMATION

For more information regarding the use of AcceleNet at East Elmbridge & Mid Surrey Primary Care Trust, please contact:

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About Intelligent Compression Technologies Inc. (www.accelenet.com)

Intelligent Compression Technologies Inc. (ICT), a wholly-owned subsidiary of ViaSat Inc. (Nasdaq:VSAT), based in Quincy, Massachusetts, began as a supplier of data compression software that was embedded into software products of licensees including industry leaders in new media software for accelerating traffic over wired and wireless networks. The company’s primary product, AcceleNet™, is a WAN/wireless data acceleration product that optimizes Web and e-mail applications over slow or long-latency data links.

About Tracline (www.traceline.uk.co)

Tracline (UK) Ltd is a reseller of AcceleNet. Founded in 1985 and based at Edgware, North West London, Tracline (UK) Ltd supplies complete IT solutions, including computer hardware, software, consultancy, training, communications and ongoing support to its clients throughout the U.K.

About NHS (www.eastsurreyhealth.nhs.uk/)

The NHS was established in 1948 and is now the largest organization in Europe. It is recognized as one of the best health services in the world by the World Health Organization.