THE SINT LUCAS ANDREAS ZIEKENHUIS

HEALTHCARE

Upgrading the Network to Meet Today's Healthcare Requirements

EXECUTIVE SUMMARY

Technology Challenge

Reliable, secure, and high-performance network solution for demanding healthcare and teaching environment

Solution

- Brocade® BigIron® Series switches in the core
- Brocade FastIron® Series in the core and at the edge to make it possible to scale to 10 Gigabit Ethernet (GbE)
- Brocade wireless access points at the perimeter for end-to-end wireless connectivity
- Brocade IronView® Network Manager (INM) for simple, integrated LAN and WAN management

Benefits

- Increased bandwidth for transmitting large files and streaming video
- Improved high-performance network to support a new electronic record keeping system
- No system downtime since deployment
- Scalability for future growth
- Simple, integrated tools for LAN and WLAN management

The Sint Lucas Andreas Ziekenhuis, a 550-bed teaching hospital in Amsterdam-West, has much riding on its future vision. As a member of the association of tertiary medical teaching hospitals, and one of 15 top clinical hospitals in The Netherlands, the Sint Lucas Andreas Ziekenhuis continually strives for innovation in medical training and scientific research. But recently these goals were impeded by an aging network that couldn't scale to meet the hospital's future requirements for reliability and security.

As the existing network aged out, network administrators recognized that it was time to upgrade the infrastructure to support current and more innovative technologies that would move the hospital forward on its mission of excellence. Sint Lucas Andreas Ziekenhuis sought a faster, high-performance networking partner that could deliver a reliable, scalable solution— with comprehensive and user-friendly management tools. The hospital found that partner with Brocade.

LOOKING FORWARD TO HIGH-PERFORMANCE HEALTHCARE

Sint Lucas Andreas Ziekenhuis had already outgrown the capabilities of its four-year-old network, limiting the hospital's ability to deploy the latest advances in healthcare

innovations. The hospital wanted to open up new possibilities by replacing its outdated infrastructure with network equipment capable of supporting high-performing new technologies. Hospital executives knew that new technology would be key, not only for innovative features, which are crucial to modern healthcare, but for improving the reliability and availability of the system on a day-to-day basis.

"We wanted a network that could face the challenges coming our way in the coming years," explains Arnold Oudejans, Project Manager/Architect Technische Infrastructuur. "We spoke with another Brocade customer, the Amsterdam Internet Exchange, a service provider with complex network and performance requirements. We heard nothing but good things about Brocade's ability to support a network that requires unparalleled performance and reliability. That meant a lot to us and gave us the confidence that Brocade could meet our needs moving forward."

The hospital's list of requirements didn't end there though. It also wanted quality integration and support between the LAN and WAN, as well as ease of management and, last but not least, robust security.

BROCADE

MANAGING A ROBUST NETWORK, SIMPLY

After evaluating the alternatives, Sint Lucas Andreas Ziekenhuis chose Brocade, and from there, work quickly got underway to make the sweeping changes that would have a significant impact on the network. Project leaders deployed 2 Brocade BigIron Series switches and 8 Brocade FastIron switches in the core. Another 30 Brocade FastIron switches were installed at the edge along with Brocade wireless access points.

- The BigIron Series of Layer 2/3 Ethernet switches enabled the deployment of an Ethernet infrastructure that addresses the hospital's current requirements with a scalable and future-ready architecture, which will support network growth and evolution for years to come.

- The FastIron Series provides a scalable architecture in a compact form factor. Featuring redundant power supplies and 10 GbE upgradeability for high-capacity connectivity to the network backbone, the FastIron delivers the scalability, low latency, and resilience needed to support future growth.

- Finally, IronView Network Manager (INM) fulfilled one last item on the checklist: ease of management. INM provides network administrators the tools they need to easily configure and manage this new network. With INM, adding new devices or new services does not mean increasing complexity for the IT staff.

ADVANCED APPLICATIONS HELP DELIVER SUPERIOR CARE

Today Sint Lucas Andreas Ziekenhuis is experiencing improved network performance and the ability to support advanced applications. The hospital is delivering the high level of healthcare services its patients have come to expect and the ground-breaking education for which it has become recognized.

As a teaching hospital, Sint Lucas Andreas Ziekenhuis requires the ability to record procedures taking place in the operating room and to share them with the medical students in the hospital's education center. This ability to provide high quality on-demand video streaming to students is one of the immediate wins for the new Brocade network. In addition, the hospital no longer has to fear collapse of their system under the strain of continuous digital data growth, caused by medical imaging technologies such as Electrocardiography (ECG), Magnetic Resonance Imaging (MRI), and multisliced CT scans. Like video, these too require the unparalleled performance and availability now provided by the Brocade solution.

The hospital's network demands and requirements have increased in other ways, for example, with the implementation of a new Hospital Information System (HIS) that includes electronic patient files. The Brocade network was critical to this important transition as the network has remained stable, reliable, and secure—with the ability to support new applications that will contribute to enhanced quality of care.

WHY BROCADE

- Proven solution in demanding environments
- Simplified management
- Reduced Total Cost of Ownership (TCO) without sacrificing performance
- Future-proof platform for advanced applications

"After evaluating the alternatives, we believed that Brocade offered the best WLAN solution and the best technology for the core while still providing the management simplicity our network administrators demanded," says Oudejans. "Today we can monitor and manage the LAN and WLAN with the same tool, all based upon Brocade's superior technology."

Incorporating the latest advances in switch architecture, system resilience, quality of service, and switch security—all in a modular chassis—the BigIron RX Series provides the price/performance numbers, scalability, and reduced TCO the hospital wanted.

"We have not experienced any downtime of the WLAN since deploying the new Brocade network," notes Oudejans. "The new Brocade network has fulfilled all of our technology requirements while also simplifying network management for administrators. Brocade has given us the best of both worlds and a strong foundation for the future."

For more information, visit www.brocade.com.

BROCADE