



CASE STUDY

Solution at-a-glance

Company

Sint-Jan General Hospital

Industry

Healthcare

Employees

- 2,500 employees
- 155 doctor-specialists
- 80 trainee doctor-specialists

Storage application

Prepare the storage system for a Picture Archiving and Communications System (PACS) implementation

StorageTek® solutions

- A storage area network (SAN) based on the D178 disk subsystem
- SANtricity™ Storage Manager software

Related solutions

Brocade fabric switches

Business results

- Two separate SANs, completely redundant
- No single point of failure
- Mirroring capability
- Scalable and modular
- Very user-friendly SAN management

Sint-Jan General Hospital

The StorageTek® solution is the heart of the SAN for Sint-Jan General Hospital.

Sint-Jan General Hospital, or Algemeen Ziekenhuis (AZ) Sint-Jan, in Brugge (Bruges), Belgium, generates an enormous quantity of information linked to the different hospital departments. The hospital must keep up with this ever-increasing amount of data.

The solution

AZ Sint-Jan chose the StorageTek® D178 disk subsystem in mirror configuration to provide the foundations for its storage area network (SAN) system. This open-ended solution provides rapid and permanent access to data seamlessly. StorageTek implemented and configured the server connection and the hospital's storage system on the SAN.

Anticipating a PACS system

One of the main reasons for choosing a SAN solution was that AZ Sint-Jan had planned to implement a Picture Archiving and Communication System (PACS) system. This system dispatches and backs up medical imaging data (CT scans, radiographs, and so on) in digital form. The PACS can generate an annual total of approximately 4 terabytes to back up data and other information such as medical records, patient records, and laboratory, logistics and administrative information. To process all of this information, a dependable, open-ended storage solution is needed. The work performed by direct attached storage (DAS) was no longer able to meet expectations and was becoming too expensive.

Following an in-depth analysis of the hospital's issues and requirements, a team at AZ Sint-Jan drew up detailed specifications. The main requirement concerned the system — it had to be completely redundant in all areas. This led to two SANs, each completely separate from the other, with no weak points (no single point of failure for the hardware, the software, the wiring, and so forth) and with

mirroring capability. Moreover, in order to keep pace with the most recent technologies and the hospital's own growth requirements, the solution had to be scalable and modular. Another important element was that the management of the SAN had to be as user-friendly and simple as possible.

Benefits

Peter Cosman, the system administrator at AZ Sint-Jan, commented on SANtricity software, the result of a strategic alliance of StorageTek and LSI Logic Storage Systems: "We became convinced very rapidly that StorageTek offered the best solution. SANtricity, the software provided by StorageTek to manage its SAN, is a very simple, straightforward management system, with precision functionality enabling us to manage our system more effectively."

AZ Sint-Jan Hospital also found StorageTek's clear, transparent licensing policy attractive. "The principle of 'one box/one license' was very important for us because of the scalability and modularity it provides. It allows us to expand an installed mirror capacity of 1 terabyte into a 32-terabyte mirror capacity without having to purchase expensive new licenses," explained Helga De Neve, AZ Sint-Jan IT manager.

"StorageTek's entire storage solution was also the easiest one to duplicate. In addition, everything ran on software incorporated into the hardware (firmware). In this way, we were able to achieve our main objective — namely no single point of failure," added Cosman.

Physically, two D178 disk subsystems, each connected to two Brocade fabric switches, are now running in mirror mode in separate wings of the hospital. By implementing the SAN, AZ Sint-Jan was able to achieve considerable storage and server consolidation, and do it cost effectively.

"Collaboration with the AZ Sint-Jan team was very constructive and professional," said Luc Wuyts, country manager for StorageTek Belgium. "With the SAN, we delivered an entirely operational solution that met the hospital's specific requirements and expectations. We built the SAN heart to which the hospital will be able to add on all of its future storage needs. And, with an information lifecycle management approach, we are perfectly capable of developing the most advantageous storage solutions in the future as the hospital continues to grow."

About the solution

The D178 disk system offers a cost-effective, high-performance storage solution. It seamlessly scales up to 32 terabytes with pay-as-you-grow flexibility, and features an open, modular architecture that offers true investment protection. The SANtricity Storage Manager software permits viewing and management of disk subsystem redundancy features to boost availability and online scalability. Problem resolution and security features make it easier for administrators to avoid errors.

About Sint-Jan General Hospital

The Sint-Jan General Hospital (AZ Sint-Jan) has existed in Brugge for eight centuries. Today the AZ Sint-Jan AV is an autonomous healthcare institution that, in addition to providing general medicine and surgery services, dispenses extremely specialized medication to its patients. The hospital is managed by local politicians, designated by the municipal council, and representatives of the non-profit association Sint-Franciscus Xaveriusziekenhuis, designated by the Board of Trustees.



ABOUT STORAGETEK®

Storage Technology Corporation (NYSE: STK), a \$2 billion worldwide company with headquarters in Louisville, CO, has been delivering a broad range of storage management solutions designed for IT professionals for over 30 years. StorageTek offers solutions that are easy to manage, integrate well with existing infrastructures and allow universal access to data across servers, media types and storage networks. StorageTek's practical and safe storage solutions for tape automation, disk storage systems and storage integration, coupled with a global services network, provide IT professionals with confidence and know-how to manage their entire storage management ecosystem today and in the future.

StorageTek products are available through a worldwide network. For more information, visit www.storageitek.com, or call 1.800.275.4785 or 01.303.673.2800.

WORLD HEADQUARTERS

Storage Technology Corporation
One StorageTek Drive
Louisville, Colorado 80028 USA
1.800.877.9220 or 01.303.673.5151

© 2004 Storage Technology Corporation, Louisville, CO. All rights reserved. Printed in USA. StorageTek and the StorageTek logo are registered trademarks of Storage Technology Corporation. Other names mentioned may be trademarks of Storage Technology Corporation or other vendors/manufacturers.

StorageTek equipment is manufactured from new parts, or new and used parts. In some cases, StorageTek equipment may not be new and may have been previously installed. Regardless, StorageTek's standard warranty terms apply, unless the equipment is specifically identified by StorageTek as "used" or "refurbished."

Replacement parts provided under warranty or any service offering may be either new or equivalent-to-new, at StorageTek's option. Specifications/features may change without notice.

MZ 9399 B 3/04

Case study company: **Sint-Jan General Hospital**
www.azbrugge.be

"We became convinced very rapidly that StorageTek offered the best solution. SANtricity, the software provided by StorageTek to manage its SAN, is a very simple, straightforward management system, with precision functionality enabling us to manage our system more effectively."

Peter Cosman, system administrator, Sint-Jan General Hospital