

UZ Gent implements a new storage solution for the next decade

Over the last couple of years, the UZ Gent (Universitary Hospital in Ghent, Belgium) experienced a strong growth in the use of EPF (Electronic Patient Files) and PACS (Picture Archiving and Communication Systems). Telindus Belgacom ICT provided the hospital with a new storage solution based on NetApp technology. As the solution is future proof and scalable, it guarantees sufficient storage capacity and the right level of availability of private and confidential medical data. And what's more, Telindus Belgacom ICT provided UZ Gent with a storage solution that also allows the hospital to digitalise and easily manage its vast medical archives.

The challenge: scalable solution for future proof storage



Dr. Bart Sijnave,
ICT Manager UZ Gent

"The solution's scalability holds an important opportunity. With a capacity of 400 TB, the hospital should have more than sufficient storage for the next decade. At the same time, storage cost will continue to decrease. We believe we have the right storage solution for the years to come."

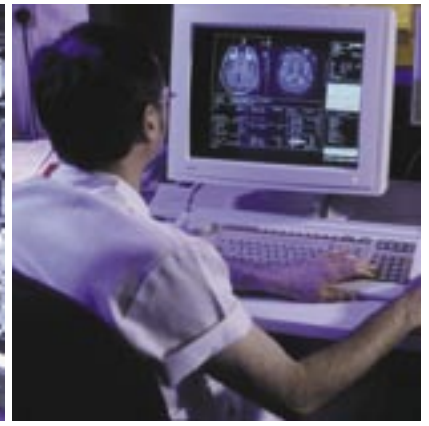
Prior to installing the new solution, UZ Gent relied on two storage systems. Both proved not to be scalable enough to be able to support the substantial growth in UZ Gent's need for archiving and EPF. Instead of upgrading the existing systems, UZ Gent preferred implementing a new single storage solution to cover all of the hospital's storage needs, and complying with government laws and regulations concerning storage, archiving and protection of medical data.

After a thorough study of the storage market, UZ Gent chose the solution based on NetApp technology as

proposed by Telindus Belgacom ICT. As opposed to many others, this solution is quite independent of the influence of technological evolutions in the market. This guarantees a reliable solution over a longer period of time. NetApp also proved to be the only solution who could provide UZ Gent with the unique combination of SAN and NAS. With this approach Telindus Belgacom ICT delivered the exact solution that was required by UZ Gent, looking at storage in the broader sense of the word.



“Result: sufficient storage for the next decade”



Belgacom solution: fast access, high availability

The old storage solution provided UZ Gent with a capacity of 5 TB. With the Telindus Belgacom ICT project, the hospital has tripled this capacity on its two redundant storage locations and can now expect to have sufficient capacity to support the rapid growth of storage need for radiology. Of the 15 TB that are currently in use, 5 TB is accessible through a 150 MB/s fibre channel that lets all PACS images that are younger than two years benefit from high availability through the fiber channel. When a doctor wants to look into a 200

MB medical scan, he can access that file through the fiber channel in less than two seconds. In general, older data are not that frequently in use. “We still have easy access to any of these files using Serial ATA, which is about half as fast as the fiber channel”, added Frits Dumortier. At the same time, UZ Gent ensures an end-to-end high-speed 4 Gbit connection throughout the whole data retrieval process. The innovative combination of SAN and NAS with these high-speed switches marks a truly unique solution.

Result: sufficient storage for the next decade

Telindus Belgacom ICT designed the solution and implemented the five month project in close collaboration with NetApp, guaranteeing the smooth migration of all existing data without any downtime. At the same time, NetApp took care of the solution’s internal security. That aspect is important as well, as the medical files contain private and confidential patient information. Furthermore, NetApp’s monitoring solution controls the overall condition of the storage solution, ensuring continuous availability of medical data to doctors and hospital staff.

UZ Gent decided to write off the investment over the next five years. The solution that is in place now is expected to cover the hospital’s storage needs over the same period of time. Nonetheless, the solution’s design allows expansion of the storage capacity up to 400 TB: a scalability that holds an important opportunity. With a capacity of 400 TB, the hospital should have more than sufficient storage for the next ten years or so. At the same time, storage cost will continue to decrease. All of this taken into consideration, UZ Gent now strongly believes it has chosen the right storage solution for the years to come.



UZ Gent in a nutshell

UZ Gent is one of the largest healthcare organisations in Flanders, Belgium. The hospital’s core activities include medical care, education, scientific research and medical services. It relies on a staff of 4.800 employees, including 600 doctors and 1.700 nurses. UZ Gent has 1.100 hospital beds at its disposal for the hospitalisation of patients during one or more days. The hospital’s turn-over of 300 million euros is the result of 365.000 consultations per year, 300.000 hospitalisation days, 24.000 cases of day-time only hospitalisation, 26.000 cases of surgery, and more. The UZ Gent hospital campus has a total surface of 52 hectares.

More information? www.belgacom.be