

Case study

Hospital AZ Groeninge virtualizes with blade servers by Fujitsu

»Fujitsu's PRIMERGY BX400 blade servers work very well and they are perfectly suited for virtualizations with VMware. Extensions and updates can now be done during ongoing operations – we basically have no more downtime.«

Jean-Pierre Gouwy, ICT manager, AZ Groeninge Hospital



A hospital with a great history

AZ Groeninge is one of Belgium's largest hospitals. Based near the French border in the north-western city of Kortrijk, the hospital is also one of the country's oldest medical facilities with a history dating back to the 13th century. Nowadays it is home to state-of-the-art medical departments including radiotherapy and several oncological clinics. The hospital offers almost 1100 beds and employs 2700 people.

Consolidating server environment

Jean-Pierre Gouwy is one of the people working at AZ Groeninge. The ICT manager is responsible for the IT infrastructure at the hospital. Gouwy justifies the need for a new IT environment like this: "Until now each application had to run on its own server. Sometimes this is a condition by software suppliers for offering support. Looking after a large number of servers means investing a lot of time, therefore we decided to virtualize our server environment. This way we can still assign a server to each application, it's just no longer done physically." So the individual servers at AZ Groeninge could be virtualized and consolidated. "Initially we had considered classical rack servers, but Fujitsu convinced us with their blade server concept," says Gouwy. "We are very enthusiastic about these energy-efficient and space saving systems."

Mirrored data center

To ensure maximum system stability AZ Groeninge now uses a mirrored data center at two separate locations. Each data center consists of a PRIMERGY BX400 blade server by Fujitsu and a NetApp FAS3160 storage system. VMware vSphere is used as virtualization solution.

The customer

Renowned hospital AZ Groeninge in Kortrijk is one of Belgium's largest medical facilities.
www.azgroeninge.be



The challenge

Consolidating the server environment and simplifying admin of IT surroundings.

The solution

Mirrored and virtualized data center with PRIMERGY BX400 blade servers by Fujitsu as hardware basis.

The benefit

- Lower energy costs
- Perfect addition to server virtualization with increased flexibility and efficiency plus fewer cables and a joint infrastructure
- Modular design permitting additional resources to be added-on quickly
- Increased system stability and availability
- Simple and centralized monitoring

Products and services

- Blade servers: 2 x PRIMERGY BX400
- Storage systems: 2 x NetApp FAS3160
- Virtualization software: VMware vSphere

Major consolidation

About 1.200 users access the network at AZ Groeninge. In the past they simply had to accept an application being temporarily not available. "Thanks to virtualization our environment has become much more stable," a satisfied Gouwy points out. „The new hardware basis consolidates the selected servers to eight server blades inside the PRIMERGY BX400 chassis. Each server blade has a powerful Intel Xeon CPU with 2.8 gigahertz." Gouwy appreciates the advantages offered by the blade technology:

"I believe the somewhat higher blade server investments pay off quickly. We benefit from the reduced spatial needs of the PRIMERGY BX400. Plus both electricity consumption and heat development are much lower. And of course admin is a lot less of an effort."

Blade servers for savings

Both the IT department with its 20 employees and the AZ Groeninge on the whole benefit from the new blade server environment. "We wanted to consolidate our server environment to become more efficient," explains Jean-Pierre Gouwy. "These ultra-compact systems by Fujitsu have allowed us to do just that." One of the advantages is permanent cost reduction. Because of Fujitsu's economical systems, the AZ Groeninge's electricity bill will be reduced by a third. This is a result of less cooling being needed. Furthermore, the hospital saves about a third of its AC technology in the data center.

Extending resources becomes child's play

Here's another aspect equally important for the Head of IT: admin and scalability of the IT environment have been simplified a lot. "Now we can manage nearly all systems using one central platform," Gouwy

points out. "Increasing server resources is also much easier – we simply order a new server blade and insert it into the chassis – without any mounting effort whatsoever. The installation just needs a few clicks." The compactness of the systems is something Gouwy refers to as "almost a relief. We now save many metres of cables because the data center only contains one server chassis with its two redundant power supplies."

Failover via storage

AZ Groeninge is the result of four different medical facilities merging, another aspect that had contributed to the uncontrolled server growth. However it had the positive side effect of an additional data center when the IT was merged. Jean-Pierre Gouwy and his team now use this as Failover data center. The mirrored storage systems serve as its basis. "Without the servers having to interfere, the NetApp filer can do their mirroring autonomously – and in cases of emergency they can take over for the other storage system respectively," Gouwy explains. This is possible given the MetroCluster solution by NetApp. Clustering and synchronized mirroring are combined which allows for a permanent data availability and quick recovery in case of failures respectively.

A one-stop solution

"We like working with Fujitsu as it is a real one-stop solution," Gouwy concludes. "Not only did we order all the hardware from them, but also all the software components were available from Fujitsu. We benefit from great prices when it comes to upgrades or the VMware acceleration kit. The combined service is excellent. After all, when we contact Fujitsu, we are also in touch with experts who know about NetApp."



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