nexenta™
Global Leader in Software Defined Storage.

Case Study

Architecten aan de Maas gains fast and scalable Software-Defined Storage environment with NexentaStor

Challenge
Expand storage capacity to support explosive data growth.

Benefits
Improve the performance of storage systems. Implement scalable storage solutions to match future growth. Guarantee high data availability.

Solution
Architecten aan de Maas combines HP hardware with NexentaStor software, giving it a flexible, scalable and cost-effective storage solution.

System Configuration

- 128-bit file system
- VMware server environment
- Disaster recovery / High Availability features
- Business-critical, graphic CAD and Adobe applications

BUSINESS OVERVIEW

Architecten aan de Maas is an architectural practice. It specialises in the design of buildings, preparing complete, technical construction plans and drawings, and overseeing construction projects. To an increasing degree, the company also advises on urban development, construction finance, building management and multi-year maintenance planning.

The practice has a team of 40 specialist architects based in two locations: Maastricht and Rotterdam. Maastricht hosts the headquarters, where Architecten aan de Maas also has its active storage and backup environment. At any given time the company's teams work on between 5 and 20 projects, with each of them currently taking up an average of 25GB of storage. Completed projects must be retained on file, so a flexible and scalable storage environment is critical for Architecten aan de Maas to support its everyday work and explosive data growth.

CHALLENGES

Previously, to cope with the storage needs of its files and the virtualised environment, Architecten aan de Maas had 6 HP Proliant G5 servers running. However, Peter Hilkens, system manager with the practice, needed to find a new storage solution. "We were busy virtualising our physical servers while also improving our storage performance," he explained. "And the physical servers had reached their maximum capacity, so it was critical that we upgraded the entire storage environment."

Architecten aan de Maas faced two challenges. The first was that the need for storage capacity had increased significantly through digitisation within the architectural sector. Hi-resolution images and large graphics files were becoming the norm (with all the versions created during one project having to be saved), so that up to 35GB of storage was taken up in a single project. This meant that the need for data capacity had grown by a factor of ten in just five years.

At the same time, performance of the old storage system was no longer adequate and the practice was looking for a more efficient solution which would enable high reading and writing speeds for the extensive CAD, Adobe PhotoShop and InDesign files (up to 1GB per file). These performance improvements were needed to let the team collaborate effectively, quickly and ultimately deliver projects on schedule.

"With this new Nexenta environment, Architecten aan de Maas now has an advanced, flexible and scalable solution which can grow to match the company's anticipated storage needs in the next five years."

Peter Hilkens
System Manager

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THE NEXENTA SOLUTION

After comparing a number of storage suppliers, Architecten aan de Maas opted for NexentaStor by Nexenta, combined with 4 HP Proliant 360 G6 servers. The Windows Server 2008 and VMware environments use the new storage infrastructure. This now gives the company 16TB of raw capacity, divided over its two locations in Maastricht and Rotterdam.

“With NexentaStor we can now guarantee good accessibility to our storage, by using the software solution’s High Availability feature,” notes Hilkens. “Given that our team creates and saves huge quantities of data every day, and that this data is mirrored across both locations for continuity purposes, it’s vital for us that our data centre is always available.”

Also, the architectural practice is now using tiered storage. Previously, completed projects were archived on DVDs or CDs. In the new situation this data can be saved to cheaper and slower discs within the storage environment, while fast, high-end storage hardware is used for the active data of ongoing projects.

NEXENTASTOR BENEFITS

The migration trajectory to the Nexenta platform was set up by IT service provider NLcom. Hilkens explains that the transition was problem-free. “A welcome added extra was that during the migration, we didn’t have to do any physical unplugging. With the old systems, if we had to change discs and migrate data to their replacements, the storage servers were offline for at least an hour. The transition to Nexenta was flawless, and in the future too, adding and changing discs will be far easier and less disruptive.”

Hilkens concludes: “With this new Nexenta environment, we now have an advanced, flexible, more efficient and scalable solution which can grow to match our anticipated storage needs over the next five years. Just having separated the hardware and software alone has made our organisation more flexible.”

NexentaStor has features such as deduplication, unlimited snapshots, thin provisioning and hybrid storage pooling. These features have been developed for clients who want to have cost-effective, high-performance storage. NexentaStor also supports a large number of storage protocols such as CIFS, NFS, rsync, iSCSI, Fibre Channel, SATA and AoE.

The ZFS basis of NexentaStor also offers scalability so as to meet the storage needs of the future. Finally the snapshot feature ensures that companies can restore their data at any given time.

NexentaStor is an Open Storage solution. In any future expansion or upgrading of the system, this gives Architecten aan de Maas the flexibility to implement affordable solutions, without being restricted to specific and often more expensive suppliers.

Business Impact

Delivers a fast and scalable software-defined storage platform which can grow in tandem with future storage capacity needs.

Offers high storage environment availability across two redundant locations.

Migration to the Nexenta platform is quick and easy.

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