StorMagic

CASE STUDY

ST. JOSEFSHAUS

LOCATION: GERMANY | **INDUSTRY:** HEALTHCARE

German healthcare facility depends on StorMagic SvSAN for uninterrupted patient care

St. Josefshaus
FRANZISKANERBRÜDER
VOM HEILIGEN KREUZ

BUSINESS CHALLENGE

St. Josefshaus is a hospital and nursing home located in Hausen, Germany which offers services to both young and older people. They provide all of the needed aspects of care for those that are physically or mentally ill - including housing, meals, as well as on-site medical care and therapy.

The servers and storage that support all of the facility's applications (including Citrix Desktop, back office and central infrastructure) were due for a refresh, and St. Josefshaus' IT department was looking for a solution that would fit their budget while also providing high availability. Their previous server infrastructure had no redundancy - if there was a serious problem with a server, all of the facility's IT operations could be impacted and restores would have to be retrieved from backups. This is time-consuming and could significantly impact the quality of care provided to the residents.

SOLUTION

St. Josefshaus' IT department went looking for possible approaches that would deliver the performance and high availability at the lowest possible cost. Additionally, a major consideration was ease of use - they didn't want to have to spend a lot of time training on a new system or administering it. They investigated solutions from HPE (StoreVirtual), Nutanix (hyperconverged) and using NetApp NAS

> *With the implementation of StorMagic SvSAN we were able to improve performance by 88% with batch processing time cut to under 10 minutes.*

Burkhard Saftig
IT Systemsmanager, St. Josefshaus

with HPE servers. In the end, they decided to deploy new HPE servers with StorMagic SvSAN to virtualize the storage and allow the compute nodes to be extended using StorMagic's hybrid approach to hyperconverged solutions.

StorMagic and their systems integrator, SVA System Vertrieb Alexander GmbH, worked with the IT department to architect a 4-node VMware compute solution - all based on StorMagic's virtual SAN. This hybrid approach includes a 2-node SvSAN cluster that virtualizes all of the disk drives in the new HPE servers and provides high availability with synchronous mirroring between the two servers. Additionally, they were able to repurpose two existing servers as compute nodes because SvSAN presents virtual storage as an iSCSI target. St. Josefshaus was able to create a full 4-node VMware compute cluster on the StorMagic virtual SAN without additional StorMagic licensing costs for the compute-only nodes. The VMware cluster can load-balance and migrate VMs across any of the 4 physical servers as needed - which provides additional flexibility to the IT team.

Server Configuration (Per Server)

SvSAN License	SvSAN Unlimited TB Gold
Hardware	HPE
CPU	2 per server, 12 cores each
Memory	192GB
Storage	HDD: 10 x 1TB 10K RPM (RAID 5) SSD: 2 x 1.92TB (RAID 1) SvSAN useable capacity ~ 7.5TB
Networking	2x Dual Port 10GbE cards 10GbE connection to switches for additional server access to SvSAN
Hypervisor	VMware vSphere 6.5 Standard Edition
Applications	All applications required to run the facility including Citrix Desktop, back office and central infrastructure
Data Protection	Veeam backup to disk

WHY STORMAGIC

St. Josefshaus was able to achieve all of the requirements by implementing StorMagic SvSAN on two clustered servers. SvSAN's synchronous mirroring of data between the two nodes provides the high availability. They also implemented StorMagic's Predictive Storage Caching feature which delivers exceptional performance without the high cost of an all-flash array. Each of the two SvSAN clustered servers contain 10K drives, SSD and system memory which Predictive Storage Caching leverages to intelligently cache the most frequently used data. This approach increases performance because more reads and writes are handled in flash; and it lowers costs because less expensive, slower disk drives can be used for capacity.

Overall, St. Josefshaus is very happy with the solution delivered as it provides the high availability, performance and ease of administration required - and the solution was between 60 and 70% less expensive than other alternatives they had considered.