StorMagic

THOMAS KRENN®

CASE STUDY

HERMANN BANTLEON GMBH

LOCATION: GERMANY | **INDUSTRY:** MANUFACTURING

Hermann Bantleon GmbH simplifies maintenance and ensures high availability with StorMagic and Thomas-Krenn

AVIA BANTLEON

THE COMPANY

Hermann Bantleon GmbH is a manufacturer of high performance lubricants for the metalworking, construction machinery, food production and medical technology industries. Founded in 1918, the company has developed over the years from a pure fuel and heating oil dealer to a modern production and service company. It currently operates two locations in Ulm, as well as another one in Crimmitschau, consisting of development facilities, production and filling facilities and a logistics center. Bantleon employs a total of 230 people, four of whom work in the IT department.
As Bantleon is continually expanding its portfolio of products and services, its demands on corporate IT are also steadily growing. A stable and uninterrupted ERP system is crucial for the operation of the company.

THE CHALLENGE

Bantleon's IT infrastructure comprises nine physical servers, the majority of which are located at the primary site in Ulm. The software landscape is Microsoft-oriented, and Navision is used for the ERP system.

For many years, Bantleon ran its applications almost

> *Once it became clear that StorMagic SvSAN offers exactly the functionality we needed, Thomas-Krenn really caught our attention as we moved into the offer phase. This is what high availability and hyperconvergence should be like: uncomplicated installation and maintenance, available when needed and otherwise running reliably and quietly in the background.*

Alexander Bunk
CIO, Hermann Bantleon GmbH

exclusively on IBM and later on Lenovo servers. These remained in use when the company virtualized most of its servers. The one exception being the Navision systems, which were not virtualized for the time being.

> *Based on my experience with various other storage systems, I expected this to take considerably longer. The fact that our employees were involved in the installation process and were able to familiarize themselves with StorMagic right from the start was also a pleasant surprise.*
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> **Alexander Bunk**
> CIO, Hermann Bantleon GmbH

When it was due for renewal in 2016, the company wanted to virtualize its ERP system in such a way that the availability of the data – and thus reliability – would be improved.

Up to this point, a shared storage system had been used as memory, which was highly available itself as a dual-port system. Nevertheless, the data was only available as a single instance and the ERP systems had to be completely shut down for software updates or other maintenance tasks.

IT manager Alexander Bunk therefore went in search of a possibility to store the company's data redundantly and keep it permanently available without an expensive mirrored SAN. Ideally, the solution would fit into the budget of a medium-sized company and integrate well into the existing Microsoft landscape. Additionally, it should be easy to set up and as simple as possible to administrate during operation.

THE SOLUTION

Alexander Bunk finally found what he was looking for at Thomas-Krenn. The Bavarian server manufacturer from Freyung offers complete packages combining high performance hardware and StorMagic SvSAN. The latter creates a virtual SAN from the hard drives or SSDs in virtualized servers. It works with VMware vSphere and Microsoft Hyper-V and leverages the high availability features of the hypervisor. In this way, lightweight clusters can be created from hyperconverged systems that offer the full range of functions with just two nodes and these can be easily expanded during operation.

"Once it became clear that StorMagic SvSAN offers exactly the functionality we needed, Thomas-Krenn really caught our attention as we moved into the offer phase," recalls Alexander Bunk. "After all, we had no previous contact with the manufacturer. But the technical sales department responded very precisely to our project and, over a longer process, we found the optimal hardware configuration. The fair and knowledgeable advice the team provided in advance led us to award Thomas- Krenn with the order."

Two 2U systems with full flash storage optimized for Windows Server 2012 R2 were purchased for the cluster. Eight 960GB SSDs for each additional server and NVMe high speed SSDs for the Navision databases provide the necessary storage capacity in the RAID network. Since the cluster is not a pure storage system but also accommodates the virtual machines such as the SQL server for the Navision ERP system, CRM and some other applications as a hyperconverged system, CPU and RAM are generously dimensioned. Two 14-core E5-2600 Xeons and 256GB RAM ensure the necessary performance for the 16 virtual machines that run on them. The configuration is rounded out by two dual-port network cards in each system with 10GBit bandwidth for fast synchronization.

The cluster went into operation without a hitch. After the servers were delivered, Bantleon's IT staff installed them in two server rooms located in separate fire compartments of the building.

The rest of the installation was done by a StorMagic-certified consultant at Thomas-Krenn AG via remote access. Next, the administrators received the necessary training for operating the system, which was also carried out remotely. Within a day, the cluster was up and running while the IT staff at Bantleon were equipped with the know-how to administer it on their own.

Alexander Bunk was impressed: "Based on my experience with various other storage systems, I expected this to take considerably longer. The fact that our employees were involved in the installation process and were able to familiarize themselves with StorMagic right from the start was also a pleasant surprise."

The cluster has been running for over two years now without any problems. During this time there were no failures of an entire node, so it has been spared the ultimate test so far. Nevertheless, regular tests ensure that fail-safe reliability is always guaranteed. There are also no maintenance intervals and therefore no planned downtimes anymore with the StorMagic cluster. Updates to hypervisors, the operating system or firmware are simply transferred to the virtual machines.

SUMMARY

Bantleon was so impressed with the solution that it purchased another StorMagic cluster from Thomas-Krenn just a few months after the initial commissioning. The cluster is used by all other applications, runs 60 virtual machines and operates the Citrix environment, file servers, document management and a few other specialized applications.

Thanks to the in-depth training provided by the Thomas-Krenn consultant, Alexander Bunk's team was able to commission this second system on their own and scale it up during ongoing operations when capacity became too small. A third StorMagic environment followed shortly afterward. This time with already existing hardware at another location.

Server Configuration (Per Server)

SvSAN License	Mix of SvSAN 6TB and 12TB Gold
Hardware	2U Thomas Krenn servers optimized for Windows Server 2012 R2
Storage	Eight 960GB SSDs for each server and NVMe high-speed SSDs for the Navision databases
Networking	Two dual-port network cards in each system with 10GBit bandwidth
Processors	Two 14-core E5-2600 Xeons and 256 GB RAM
Hypervisor	Microsoft Hyper-V and VMware vSphere
Applications	Virtualized SQL-based Navision ERP System, CRM, other miscellaneous applications