



GRÜNENFELDER SA: OPTIMIZED PERFORMANCE DUE TO SYSTEM UPGRADE AND STORAGE VIRTUALIZATION



CUSTOMER
GRÜNENFELDER SA

WEBSITE
WWW.GRUENENFELDER.BIZ

INDUSTRY
LOGISTICS

LOCATION
QUARTINO, CANTON OF TICINO,
SWITZERLAND

CHALLENGES

- Improving performance of the company's IT system
- Slow access to data and applications
- Simplify system management

SOLUTION

Replacement of hardware system at Grünenfelder SA, release upgrade of the VMware systems and implementation of VMware vSAN storage system

BENEFITS

- Improved system performance
- Noticeable increase in speed of access to data and applications
- Increased storage capacity
- Introduction of disaster recovery service

Logistics company Grünenfelder SA, located in Southern Switzerland is experiencing a phase of expansion that is putting the company's IT systems under enormous pressure. Users complain about slow access to data and applications. In cooperation with partner 4IT Solutions, the company is upgrading their IT infrastructure. The project includes hardware replacement and a radical storage transition to VMware vSAN. Benefits include improved performance for user access to applications, and data queries now run ten times faster than before. Servers, desktops and storage can be managed from a central platform, benefitting from performance capacity and sustainability of a software-defined data centre, including system management.

Grünenfelder SA is the leading logistics company for food and non-food products, located in the canton of Ticino in Switzerland. The company enjoys an excellent reputation for reliability and quality. The family company employs over seventy people and operates predominantly in Ticino, but also throughout Switzerland. The company currently is experiencing a phase of strong growth. This is affecting its information systems' ability to cope with business requirements and to provide employees with appropriate services.

The challenge

Luca Bolla is IT Manager at Grünenfelder SA, managing a relatively small infrastructure completely centralised on three internal servers that tackle the workload for the entire company. When Bolla joined the company in 2004, there were an AS/400 and a Windows server; today he has modernised the system with virtualization.

"We have been using virtualization for some time now, whether for servers, applications or users' desktops", Bolla explains. "Recently however, we have seen a drop in overall IT performance, when it comes to servers as well as clients." The slowdown occurred mainly in day-to-day operations of virtual desktop infrastructure (VDI) and access to data. The performance drop in company software slowed down daily administrative activities and logistics work. It impacted data processing in particular, affecting users' work. From a system management perspective, it was necessary to work with different dedicated systems for servers, applications and storage. In particular, the storage system was no longer supported by the vendor. This caused excessive maintenance costs with regard to the need to expand available space.

"From a software point of view, the decision to continuously use virtualization was never questioned as this is the major element of modernizing our data

“We have not changed anything at the application level – that’s the nice thing about VMware. Thanks to VMware technology, we were able to replace our servers without any changes in the application layer, with the benefit of measurable increase in performance, a new dimension in storage and a fantastic disaster recovery service.”

LUCA BOLLA
IT-MANAGER
GRÜNENFELDER SA

VMWARE FOOTPRINT

- VMware vSphere® 6.5
- VMware vSAN™
- VMware ESXi
- VMware Horizon View

VIRTUALIZED APPLICATIONS

- Microsoft Exchange
- Microsoft SQL Server
- Microsoft Office
- SAP All-In-One

PLATFORM

- Dell PowerEdge R730

PARTNER

4itSolutions 

centre”, Bolla says. “We have been working with VMware for a number of years and with positive experiences, thus we decided to introduce VDI. Since I am the only IT specialist in the company managing workflows, the traditional way was no longer feasible, so we had to solve the problem by elegantly building a virtual desktop infrastructure. We even went one step further by implementing a new hardware platform.” Grünenfelder had to look for a hardware system capable of speeding up performance as well as software response times.

The solution

Grünenfelder SA therefore turned to its VMware partner, 4IT Solutions, who advised them on the choice of hardware best suited to the requirements and further developing the virtualization systems. Hardware from Dell was chosen for the new servers because this company’s products – in addition to the attractive price – also offered a high level of integration of hardware and software, because of the close cooperation of VMware and Dell for a number of years. The VMware systems got a release update and the traditional storage system was replaced by a VMware vSAN solution. “The package chosen by Grünenfelder SA includes 5 years of support guaranteeing regular updates and protecting the company against uncertainties,” explains Raffaele Amoia, Account Manager at 4IT Solutions, who worked on the project. “If the servers need to be replaced after 5 years, there will be no additional licence costs – just costs for new hardware – which means a considerable saving with regard to a technological upgrade.”

4IT Solutions implemented the new servers and vSAN rapidly, with the test phase and commissioning completed in less than a month. The migration of critical applications like the SAP system was realised over a weekend without any major interruptions or machine downtimes. The new servers installed in Grünenfelder’s data centre now share the task of managing all processing workflows, storage and desktop user provisions in VDI mode.

“The most dramatic change for us was the transition from traditional storage to a virtualized storage network with VMware vSAN,” Luca Bolla adds. “It was a big step, which finally allowed us to optimize performance with unbelievable response times that are up to ten times faster.”

The benefits

With the implementation of the new systems, there is no lack of IT resources, which ensures greater flexibility for management and migrating virtual machines. User acceptance has also increased significantly. With regard to data access, Grünenfelder SA was able to achieve a noticeable reduction in response and retrieval times for data. “We used to run some of our calculation processes and processing of various queries on daily data at night as it took hours, whereas today they are done in a few minutes,” Bolla continues. “In particular, we have seen massive improvement in database application response times on the SQL database server which is the basis for our SAP systems.”

There were also noticeable improvements in storage. The dimensions of the new hard drives and improvements enabled by vSAN guarantee enough memory space even for future developments. When necessary, one can add a new hard drive to increase capacity of the entire solution. Backups also run a lot faster within the allocated time frame.

As far as system management is concerned, the work of the IT team has become a lot more pleasant as users are increasingly satisfied and the integrated platform facilitates the administrators’ work. “With the fully

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integrated vSAN I can manage everything from a single point in vCenter. vCenter, although we were already familiar with it, allows integrating functions, updates and monitoring of storage, servers and virtual machines,” Bolla states.

Besides simplifying administration tasks, security and disaster recovery have also been optimized. “vSAN enables us to provide disaster recovery simply and without additional costs,” explains Bolla. “The new infrastructure allows us to set up a secure system working from one or two server hard disks even in the case of failure. This means we rely on a redundant system operating even during upgrades or maintenance work.”

“We have not changed anything at the application level – that’s the nice thing about VMware,” Bolla reports. “Thanks to VMware technology, we were able to replace our servers without any changes in the application layer, with the benefit of measurable increase in performance, a new dimension in storage and a fantastic disaster recovery service.”

