FUJITSU

Case study
Technolit GmbH optimizes virtualization with Blade Servers and Zero Clients

»We appreciate that the PRIMERGY BX400 Blade Servers offer great value for money. Given its consolidated and centralized design, such a system is more cost-effective than using individual rack servers with the same performance. And on top of that we also save a lot of energy.«

Dieter Kaupe, Head of IT, Technolit GmbH

The customer

Founded in 1979, Technolit® GmbH is renowned as an international trading enterprise for welding technology.
www.technolit.de

The challenge

Renewing the IT infrastructure, simplifying the administration and reducing energy costs in the server and client environment.

The solution

A mirrored and virtualized data center with PRIMERGY BX400 Blade Servers by Fujitsu and NetApp-storage systems as hardware basis plus Fujitsu Zero Clients.

Technolit – the workshop expert

Apart from welding technology which is its core competence, Technolit GmbH also offers a wide range of quality products for grinding and separating, chemically technical products, tools and machines as well as workshop supplies for trade and the automotive industry. Technolit GmbH operates internationally and has more than 1500 employees. The head office is based in Großenlüder near the Hessian city of Fulda. Over 550,000 customers from trade and industry receive products as well as services using Technolit. By now the range encompasses about 50,000 items stored in a high rack warehouse equipped with special logistics. Innovative computer systems ensure constant availability of all items. Internal organisation and logistics have been optimized to such a degree that any item is delivered within 24 or 48 hours of receiving an order.

Reducing energy consumption and admin efforts

To make sure these high standards can be met permanently, Technolit GmbH has been applying virtualization in its mirrored data center for some time. All server resources – with the exception of ERP applications – are virtualized on the basis of VMware vSphere. Until now there used to be two dedicated physical servers per data center for resource planning applications apart from the four ESX servers for the virtualized environment. "On the one hand we wanted to reduce energy consumption in our data centers", explains Dieter Kaupe, Head of IT at Technolit. "On the other hand we wanted to simplify the administration and build up a better performing server environment."

Virtualized IT environment up to the desk

Scalability was another key argument for drawing Dieter Kaupe's attention to the advantages of the Blade Server technology. Technolit ordered two PRIMERGY BX400 Blade Servers from Fujitsu and two NetApp FA3240 storage systems that are now delivering their mirrored services at the headquarters in Großenlüder. In order to continue the virtualization, Technolit has also launched a VDI concept, i.e. a virtualized client environment.

The benefit

- More efficient energy use in terms of power and cooling
- Perfect addition to server virtualization with increased flexibility, efficiency, fewer cables and a joint infrastructure
- Dynamic resource management of servers, storage and network
- Improved business continuity with low-cost HA and DR options
- Simplified installation, administration and management

Products and services

- Blade Servers: 2 x PRIMERGY BX400 with altogether 6 BX920 S2 server blades
- Storage systems: 2 x NetApp FAS3240 with 100 TB of total storage capacity
- Clients: 50 x Fujitsu Zero Clients DZ22-2
- Virtualization software: VMware vSphere
- Management solution: Fujitsu ServerView Suite

Warehouse logistics around the clock

A total of 350 IT-work places access the data centers at Technolit headquarters. "We are mainly dealing with trade and warehouse logistics for the 50,000 items Technolit stocks", Dieter Kaupe points out. "In any case, having a sound server platform is very important – after all we do business internationally." Remaining technically up-to-date is therefore even more important. "Our servers and storage systems were simply out-of-date", Kaupe continues. "We were specifically looking for hardware with an optimum focus on virtualization and on an environment that partially still consists of purely physical servers respectively."

Managing virtual and physical resources centrally

Fujitsu's PRIMERGY BX400 Blade Servers offer what Technolit was looking for in this respect. "Obviously saving energy was one of our demands," explains the Head of IT, "as well as good value for money. Both these conditions are fulfilled by the Fujitsu Blade Servers." There is now a PRIMERGY BX400 Blade Server chassis in each of the two data centers at Technolit with each of them containing two ESX server blades for the virtualized resources and one server blade for the ERP system that is kept running physically. Five plug-in positions remain available and can be used for either further server blades but also for storage blades. In Dieter Kaupe's opinion the investment makes perfect sense:

"The PRIMERGY BX400 Blade Servers have enabled us to locate all physically and virtually run server resources in one chassis. Everything can easily be managed via one platform using the management console of Fujitsu ServerView Suite. Configuring either switches or the fibre channel network has also become much easier."

Virtualizing clients

In terms of virtualization the company goes even further. Renewing the data center hardware has also included a virtualized client infrastructure which relieves the desks: "We wanted to get away from standard pc workplaces altogether so that we could say good-bye to any hard drive and main board defects once and for all," René Wolf, in charge of infrastructure management at Technolit, outlines his aim. "We also want to avoid setting up new operating systems individually in the future." Technolit has chosen a VDI environment with Fujitsu Zero Clients. These contain no more moveable parts and get all storage and processing resources from the data processing centre. Such a client essentially consists of a 22 inches screen with USB and Ethernet plug-ins. "In case of a fault we only have to exchange the client that is affected – and work can continue immediately," René Wolf praises the extremely low-maintenance concept. "Another advantage is the high degree of amortization as we will benefit from noticeable energy savings."

Familiar environment remains intact

A VDI concept makes no difference to the user since all functionalities are fully preserved. "If a member of staff moves internally, she only has to log-on to the client in the new room – her Windows environment shows up on the screen immediately," Head of IT Dieter Kaupe sums up. "Nobody has to move any data back and forth." Technolit already has sufficient capacities for the first 50 work places in the data center. In the near future the remaining 300 IT work places will be virtualized as well. When that happens resources can be added to both the servers and the storage systems without a new chassis being needed.

Green IT

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