

Enhancement of IT operations with PRIMERGY BX EcoSystem and VMware

## HypoVereinsbank opts for virtualization



» Consolidation through server virtualization yields significant improvement in terms of ecology, economy and quality. We now save 2 million kWh a year in electricity. «

Stefan Schmidt, Senior System Architect, HVB IS

### → The challenge

**To reduce complexity** – by using virtualization to consolidate several hundred physical servers

**To improve economy** – by cutting the cost of energy, space and server administration

**To increase flexibility** – by installing a system that supports faster deployment of applications to handle changed requirements

### → The solution

HypoVereinsbank Information Services GmbH (HVB IS) re-organized a major part of its data center operations with the help of Fujitsu Siemens Computers. The project involved consolidation of some 650 physical servers with **PRIMERGY Blade servers and VMware**. This represented the initial phase in the deployment of the virtualization strategy of the UniCredit Group, intended to permit more economical and more flexible IT operation. HVB IS was able to achieve significant improvement in terms of economical and ecological considerations. The customer now uses 2 million kWh less electricity per year – with an installation that takes up only five percent as much space as the previous solution! Of course, there will be absolutely no decrease in service capacity or functionality. HVB IS also optimized flexibility in the area of IT operations, for example, due to enhanced server availability and faster deployment of infrastructure resources.



**HypoVereinsbank Information Services GmbH (HVB IS)** is the IT service provider of HypoVereinsbank. The company ranks among the largest full-service IT providers in the European financial services sector. The company's spectrum of services is organized into three core areas – application development, IT operations and service and consulting. More at: [www.hvbis.com](http://www.hvbis.com)

#### → Solution components

- Data center reorganization through server virtualization
- Consolidation of 650 physical servers with PRIMERGY BX600 Advanced Blade EcoSystem and VMware ESX Server
- PRIMERGY BX600 Advanced Blade EcoSystem with 55 BX630 blade servers to support 1,400 virtual machines

#### → Customer benefits

- Significant reduction in infrastructure costs in the area of energy, cooling, space requirements – savings of 2 million kWh\* per year
- Improved, more flexible use of resources: customers needs can be more easily met and project implementation time shortened
- Reliability: Better server availability through hosting of virtual machines
- Investment security: Simple integration of new technology into BX600 EcoSystem

\* Equivalent of 1,040 metric tons of CO<sub>2</sub> or automobile emissions from vehicles driving a total of 5.6 million kilometers (7.7l petrol/100 km).

#### → The project

The UniCredit Group has adopted server virtualization as the strategic approach to the reorganization of its data centers. This strategy is expected to result in significant savings and greater flexibility in terms of server deployment and operation. Initial implementation by HVB IS delivered enormous improvement. The IT service provider had previously used some 650 server boxes for work preparation and production. The data center's server farm not only took up considerable space, but was also expensive to operate due to the high power consumption and intensive administration. Following a preliminary analysis, HVB IS therefore decided in favor of extensive reorganization. The customer's objectives were to achieve greater agility in the area of IT operation and maximum use of resources with minimum power consumption per square meter. The consolidation plan adopted to realize these goals was based on server virtualization with VMware ESX Server and PRIMERGY BX600 Advanced Blade EcoSystem and server blades with low-voltage AMD® Opteron processors. Designed for continuous, high-efficiency operation, the BX600 series is open to future processor technology and covers a broad spectrum, including everything from communication to database configurations. Its design features centralized power and cooling components to eliminate the complexity of conventional server infrastructures with no single point of failure. It can be seamlessly scaled with the use of virtualization solutions such as VMware ESX Server and guarantees a highly agile IT operation. Another important benefit in this case is that the benefits and features of VMware technology flow directly into the design of these servers. As a result, HVB IS was able to work with Fujitsu Siemens Computers to eliminate potential operational problems in advance to guarantee smooth implementation. Stefan Schmidt, Senior System Architect of HVB IS, says: "The implementation of PRIMERGY BX600 EcoSystem with VMware is a very good fit for our strategy, which is to achieve reliable, efficient and flexible IT operation. In particular, the solution lets us meet our annual cost-reduction targets because of its low power consumption and economical memory expansion."

#### → A record of success

HVB IS migrated groups of 15 to 30 old servers to the new system with impressive results. "Consolidation resulted in significant improvement in terms of ecology, economy and quality. We now save 2 million kWh a year in electricity," says Schmidt. At the same time, hosting virtual machines has a positive impact on the service quality of IT operations: "The virtualized data center makes us more agile. We can make compute capacity available on demand, shorten project implementation times and increase server availability." As a result of overall positive experience, HVB IS is already planning a more comprehensive reorganization of its data centers based on virtualization.

#### → Contact

Fujitsu Siemens Computers  
Hermann Lang  
Mies-van-der-Rohe-Strasse 8  
80807 Munich  
Germany  
Phone +49 (0) 89 62060-1759  
hermann.lang@fujitsu-siemens.com

Fujitsu Siemens Computers GmbH,  
Mies-van-der-Rohe-Strasse 8, D-80807 Munich,  
Phone +49 (0) 89 62060-0  
[www.fujitsu-siemens.com/casestudies](http://www.fujitsu-siemens.com/casestudies)

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