VMWARE CASE STUDY

THE CHALLENGE
• Fast go-to-market with new SAP database Sybase ASE
• Reduced operating costs and bundling of IT resources
• High database stability
• Security, scalability and high availability of data

THE SOLUTION
• Virtualisation of SAP Sybase ASE with VMware vSphere Hypervisor

VMWARE IN USE
• vSphere
• vCenter
• VMware High Availability (HA)
• vMotion
• Storage vMotion

Market advantage through virtualisation: Fujitsu TDS GmbH offers new hosting service for SAP database Sybase ASE on VMware vSphere

Reliable outsourcing - on time, in budget
As a complete IT service provider and SAP system consultant, Fujitsu TDS GmbH, a subsidiary of the Fujitsu Group, offers medium-sized and large companies a wide variety of data centre services. With over 800 employees in 15 locations throughout Germany, Fujitsu TDS GmbH implements custom projects for customers anywhere in the IT infrastructure. In addition to IT outsourcing and application management, the focus of their services is on SAP. This includes certified SAP consulting and SAP hosting as well as SAP-based industry solutions and templates, and in-memory computing with SAP HANA. The portfolio also includes private cloud services, which Fujitsu provides from their own highly secure data centres in Germany. The IT service provider, headquartered in Neckarsulm, has 40 years of experience in this area. Well-known customers in the automotive, retail and processing industries, as well as banks and insurance companies, rely on its independent, competent support. Fujitsu manages the specific quality and security requirements of a variety of industries thanks to continuous further development. Its great capacity for implementation and its optimum results are based on the high qualifications of its IT consultants.

Perfect basis for a success story: IT hosting simplifies the entire IT infrastructure with mature virtualisation solutions from VMware
Secure, modern data centres are the most important factor in outsourcing. So Fujitsu has built one of the most modern data centres in Germany, in the town of Neuenstadt am Kocher in Baden-Württemberg.

It’s one of two large data centre locations that are twelve kilometres apart as the crow flies. As a long-time VMware Service Provider (VSP), the company has relied on virtualisation with VMware for many years. “To stay competitive as a hosting provider in the ever-changing IT market, we have to keep our own IT infrastructure in optimum condition and invest in the latest technology,” says Frank Bräuninger. As Technology Manager in Business Development, he is responsible for the ongoing development of infrastructure at Fujitsu. Together with his team, Frank Bräuninger introduced server virtualisation with VMware vSphere Hypervisor to the VSP standard bundle and enterprise bundle at the IT service provider five years ago. Consolidating the server hardware enabled high-performance computing as well as a reduction of ongoing operating costs in the data centre by 25 per cent to date. To manage the vSphere environment, the IT administrators use VMware vCenter. Fujitsu also relies on storage virtualisation for data mirroring during disaster recovery between and within the two data centre locations. VMware Storage vMotion is used for storage migration and storage management as a part of VMware vSphere Hypervisor. The IT hosting provider uses VMware to provide a large number of operating systems, from Windows and Suse Linux to Red Hat Enterprise Linux, as well as applications. These include not only email and archive services, but especially database and SAP operations as well as application management in the SAP environment. VMware vSphere High Availability (HA) ensures the level of availability that most applications need to execute virtual machines (VM). HA also provides failover protection for hardware and operating system crashes in the virtualised IT environment at Fujitsu, where the entire IT department is built as a shared infrastructure, from storage and servers to the WAN and LAN. “Our goal is to virtualise every part of the data centre if possible, in order to increase performance and to provide our customers with high availability of their data,” reports Frank Bräuninger. This is because, according to SLAs,
Fujitsu guarantees its customers service availability of up to 99.8 per cent. VMware virtualisation solutions provide this Total Solution Provider and SAP Gold Partner with a great deal of added value. Most SAP solutions have run in virtual environments for years – and with optimum performance.

**Strictest requirements: Increasing reliability and agility of the SAP database during "go-to-market"**

Fujitsu wanted to expand its extensive portfolio of SAP solutions with the new SAP transaction database Sybase ASE. This is because it can be combined with SAP HANA and SAP Sybase IQ, as the three central pillars of the SAP real-time business platform, to implement a consistent database strategy. "To provide our customers with an optimum SAP infrastructure, it’s essential that, in terms of technology, we always stay a step ahead of the competition," explains Manuel Thalhofer. As Portfolio Manager Business Development for the SAP Services area, he has already led a variety of different innovation projects in the areas of SAP databases, SAP cloud and analytical services at Fujitsu. In January 2013, together with his team, he started the virtualisation of Sybase ASE with VMware vSphere. That makes Fujitsu one of the first customers to have virtualised this complex SAP database. "For us, this pilot project was primarily a strategic marketing decision, because we’re convinced that future SAP developments will rely heavily on Sybase ASE," adds Manuel Thalhofer. "We wanted to use the virtualisation of the SAP database to build on our market lead in this area." Fast go-to-market was top priority. But at the same time, the pilot project had to meet the strictest of technical requirements: high availability and top security of data and applications, scaling of data, reduction in system management complexity and the uniform modelling of different HA and DR scenarios. Synergistic effects through bundling of IT resources were also important. "As an IT service provider, we have to completely meet individual customer requirements in our IT infrastructure, while also meeting tough compliance and certification requirements," explains Manuel Thalhofer. Consistent quality and cost management are also essential for Fujitsu’s own business success. "Without the virtualisation of Sybase ASE with VMware, we would have risked our market advantage as a pioneering company in the hosting of ASE-based SAP systems, or at least exceeded the market price."

**Fast, effortless implementation thanks to mature concepts**

As a VMware partner with great in-house expertise, Fujitsu had no problems implementing the project themselves. Since all of the important concepts, including complexity reduction, security and high availability, were already in place due to their many years of experience with VMware solutions, the virtualisation went quickly and without surprises. It was largely possible to use the standard solutions. "As the concepts were already encapsulated at the vSphere Hypervisor layer, this was an enormous advantage for the entire project. We were able to reuse the existing standards so that the technical and time costs for us were nearly zero," reports Manuel Thalhofer. "We were able to meet the tight schedule completely." A Technical Account Management at VMware was also available for support. Within just a few months, the virtualisation of Sybase ASE was complete. The first customer was already able to get on board the virtualised ASE environment in August 2013, with production systems and a data volume of over 7 TB. In the meantime, there are over 20 installations, and more customer projects are being planned. The advantages of SAP virtualisation for Fujitsu are particularly the significantly reduced complexity of management and automatic deployments through standardisation, high failure safety due to implicit redundancy concepts and high availability of data through use of mature concepts. It is a dynamic and agile infrastructure that also brings significantly lower operating costs, allowing Fujitsu to retain their innovative “pay per use” service model. "Our goal was to be the first on the market to offer ASE live in operation and already to have gathered some operating experience with virtualisation before taking our first customer request," says Manuel Thalhofer. "And we met that goal. We are very satisfied with the new environment." Fujitsu has been able to implement another large project with VMware as well: the virtualisation of SAP HANA based on vSphere.
"We were able to implement the virtualisation of the new SAP database Sybase ASE on the basis of VMware vSphere in just a few months, allowing us to expand our market advantage with a great deal of customer satisfaction."

Manuel Thalhofer, Portfolio Manager Business Development for SAP Services at Fujitsu TDS GmbH

Results

• New service offering with SAP database Sybase ASE in an existing virtualisation environment
• Competitive advantage over competitors
• Reduced complexity of database management
• Reduced operating costs due to standardisation
• High availability of data and applications through automatic deployment
• Elimination of failures through implicit redundancy concepts
• Dynamic scalability, security and high availability of data