Optimized data streams for perfect flows of goods

Weichelt helps drive more performance out of Schenker's logistics processes with BS2000/OSD and CentricStor

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»The automated operations enabled us to slash our total cost of ownership, while helping bring about considerable improvements in throughput and performance. And thanks to CentricStor, we have extremely high-speed backup processes.«

Peter Schirmer, Managing Director of Johannes R. Weichelt GmbH Informationssysteme und Service

→ The Customer

Johannes R. Weichelt GmbH Informations-systeme und Service, Coburg/Germany

→ The Project

Technology change-over at the data center to ensure greater fault tolerance and cost-effectiveness
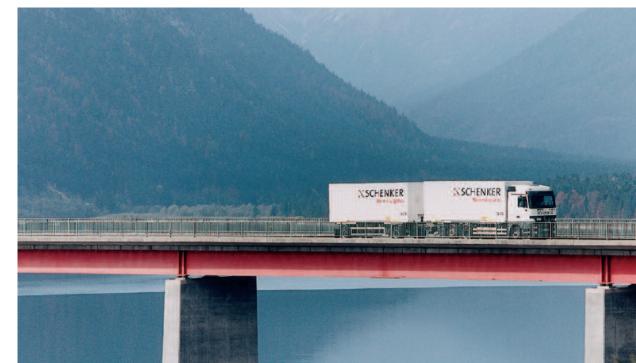
→ The Solution

Disaster-tolerant infrastructure with S145 and S140 BS2000/OSD Business Servers

CentricStor Virtual Tape Appliance, Symmetrix 8530 disk storage systems, Scalar tape libraries

Logistical feats such as just-in-time deliveries to industries or major sporting events can only be achieved if an IT system is running at peak performance levels. Johannes R. Weichelt GmbH Informationssysteme und Service helps to make this a reality for Schenker AG, a logistics group in Germany. And to do so, Weichelt, a subsidiary of Schenker, has relied for years now on the expertise of Fujitsu Siemens Computers. This was again the case recently, as the data center was slated to be modernized. A BS2000/OSD-based infrastructure was implemented that is distributed across two locations. What makes this infrastructure so special is that it guarantees significantly improved cost-efficiency with largely automated operations, in addition to achieving greater fault tolerance

and performance. The new storage concept with the CentricStor Virtual Tape Appliance and high-availability Business Servers S140 and S145 play a role here.

Central service for some 3,000 users
With a staff of 45 employees, this Schenker AG subsidiary organizes and manages the logistics group's central data processing in Germany. The central application for some 3,000 users is Mistral, a freight-forwarding software. It is utilized for all tasks involved in small freight service – from entering shipping orders and calculating freight charges, drayage and incidental costs, to generating bills of lading and accompanying papers, right through to invoicing.

Benefits for Johannes R. Weichelt GmbH

- □ Higher quality of service and greater efficiency due to automated operations
- □ Personnel costs slashed by 90 percent and the room costs reduced by 50 percent
- □ Flexible capacity adaptation with changing performance requirements
- □ Significant improvement in backup efficiency
- □ Ensured business continuity in the event of a disaster

The solution at a glance

- □ Modernization of the data center infrastructure with a disaster-tolerant solution across two locations
- □ Servers: BS2000/OSD Business Servers S140 and S145 with VM2000
- □ 2 Symmetrix 8530 disk storage systems
- □ 2 CentricStor Virtual Tape Appliances
- □ 1 Scalar i2000 and 1 Scalar 100 Tape Library
- □ VM2000 virtual machine system, DRV for dynamic online data mirroring

Automated, virtualized, fail-safe

In logistics, reliability is what counts. That is why Weichelt (which previously went by the name of Spedition Weichelt) has relied on the combination of Mistral and BS2000 for 25 years. And Weichelt also relies on the ability of the server platform to grow with the requirements that are placed on a modern logistics company. In 2004, Weichelt initiated the next stage in this process with a comprehensive modernization of the infrastructure. The primary objective was to achieve increased automation of operations in order to further enhance productivity and efficiency. A disaster-tolerant solution that features flexible resource utilization, storage virtualization and dynamic online data mirroring was implemented at Weichelt's two data center locations, which are situated several kilometers apart.

Location A has an S145 BS2000/OSD Business Server that enables reliable order processing. This server uses the VM2000 virtual machine system, which allows the various host applications to run in complete isolation from each other. It also features a spare CPU that can be activated dynamically, thus ensuring the performance and availability of the system. The Business Server is connected to Weichelt's SAN via Fibre Channel and an EMC Symmetrix 8530 disk storage system. Furthermore, data backup has advanced into a new dimension, thanks to the use of the CentricStor Virtual Tape Appliance to which a Scalar i2000 with LTO2 tape drives is connected. The system environment at Location B is almost identical, with a Business Server S140 and a Scalar 100 installed there. The benefits that Weichelt derives from this configuration are quite diverse. The new storage concept with CentricStor provides one of these benefits by decoupling the host systems from the physical magnetic tape peripherals. As a result, the individual applications can now simultaneously utilize the consistently available virtual drives provided by the storage solution. "CentricStor acts like a turbocharger for our restore and backup processes," says Managing Director Peter Schirmer, explaining its impact.

In the event of a disaster, Weichelt now also has optimized data streams and can restore business operations in a very short time. With the help of DRV (Dual Recording by Volume), the data is mirrored synchronously online to the respective backup data center. The trick is that write requests are always executed on two disks, and read requests are serviced by the disk with the fastest access. "This makes it possible to increase the speed of read accesses many times over", says Schirmer.

Weichelt had the new infrastructure up and running by the spring of 2005, just in time to mark the 25 years that it has deployed Mistral and BS2000. Since then, the company has experienced on a practical level the kind of impact that intelligent automation and virtualization can have. "Due to the automated operations, we were able to slash our personnel costs by 90 percent for the year. And our costs for electricity, air conditioning and rent have also been reduced by half, thanks to the compact construction of the new systems", Schirmer says in summary.

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