

Lufthansa Systems Infratec Gmbh



Making Data Security a Top Priority for Leading IT Provider to the Airline Industry

A new backup system for more than 380 servers? Anyone wanting to introduce such a system for a financial services provider needs, above all, experience, discipline, and accurate time management. The project managers at Lufthansa Systems Infratec Gmbh and Symantec Corporation were able to contribute all this and were able to ensure together that, as part of the migration project for DekaBank, Veritas NetBackup™ software from Symantec™ could go into successful operation as planned. It is a solution of which Curt Borschel, the head of enterprise storage management at Lufthansa Systems, is confident about: he uses it for all his customers. Today NetBackup—together with Stretch Cluster and Virtual Tape Library—are ensuring that DekaBank too can benefit from high-level data security and rapid recovery, and can also enjoy greater backup speeds. Another advantage is that the solution helps save costs.

ORGANIZATION PROFILE

Lufthansa Systems Infratec Gmbh is one of the leading IT providers for the airline and aviation industry and a successful IT service provider worldwide for companies in other sectors.

INDUSTRY

Aviation

SOLUTION

Backup & Recovery
Disaster Recovery

Shaping the Corporate Culture of the Business

“The aviation industry places high demands on data security. This has been instrumental in shaping the entire corporate culture of Lufthansa Systems for more than 30 years.”

The aviation industry places high demands on security. “This demand has been instrumental in shaping the entire corporate culture of Lufthansa Systems for more than 30 years,” says Curt Borschel, head of enterprise storage management, Lufthansa Systems. Customers of the service provider also rely on maximum security when they outsource their storage management to the Lufthansa subsidiary. One of these customers is DekaBank. The enterprise storage management team of Lufthansa Systems took on the task of introducing data security on more than 380 servers on behalf of DekaBank and, in so doing, launched a major new innovation: switching data security over to Veritas NetBackup. According to Borschel, the Symantec solution used by Lufthansa Systems provides all its customers with optimum availability and fast recovery. “Veritas NetBackup used in conjunction with SUN Solaris enables reliable and cost-efficient data security,” he says.

Curt Borschel

Head of Enterprise Storage
Management
Lufthansa Systems
Infratec Gmbh

NetBackup is particularly suitable for UNIX®, Microsoft® Windows®, Linux, and Novell® NetWare® networks, which are used by major firms that give top priority to the security and ready availability of their data. This is because the solution does not merely allow efficient data security; it also offers integrated disaster recovery functions.

Lufthansa Systems reaches break-even point with NetBackup after approximately two years.

“After a year of intensive work we were able to complete our migration of data backup—which involved a volume of 160 terabytes every month—successfully and on schedule.”

Curt Borschel

Head of Enterprise Storage Management
Lufthansa Systems Infratec GmbH

Migration Project with Dual Management

When the project began, the task was to secure data volumes at DekaBank covering more than 380 servers, consisting of roughly 160 terabytes. Transferring such a volume onto a new backup system can only be managed successfully by creating a professionally designed migration project. To manage this project Borschel appointed two persons: a Lufthansa Systems employee and a Symantec consultant headed the project as a team. This way Lufthansa Systems was able to ensure adherence to the principle of dual control and simple deputyship arrangements.

The second step in the project demanded comprehensive work on detail and careful precision. The project team recorded the data on all the DekaBank servers that were migrating by means of more than 380 data backup assignments, as well as the corresponding information on the operating system, on the volume of data stored on the servers, and on what data security requirements had to be met.

The third step consisted of reading the data electronically and migrating it server by server. “A backup product is so deeply integrated into the IT infrastructure that migration into Windows environments required short breaks of about ten minutes for each server,” Borschel explains. For 30 days the earlier environment remained in place on the servers to secure the data so that, in an emergency, the data could be recovered using the old infrastructure. “After a year of intensive work we were able to complete the migration of data backup—which involved a volume of 160 terabytes every month—successfully and on schedule.”

He continues, “Since then we have managed to fulfil 99.5 percent of the service level agreements with DekaBank. In almost all cases we were able to meet the allotted data recovery times. The IT engineers from all three companies—Lufthansa Systems, Symantec and DekaBank—who worked on the project are satisfied with this solution.”

Breakeven Point Reached After Less Than Two Years

Simultaneously with the new backup solution, Lufthansa Systems introduced one more innovation: storing data in a Virtual Tape Library (VTL) supported by Veritas NetBackup software. “With data volumes increasing this is an effective way to keep rising costs under control,” Borschel comments. The virtual library not only reduces resource requirements, it also increases backup speed. And virtualization also means the backups run by the IBM Tivoli Workloader Scheduler (TWS) can be accepted and carried out at any time without resource standby time.

Lufthansa Systems maintains a number of data processing centers, one of which is in Kelsenbach (near Frankfurt Airport) and another in Offenbach. Increased data security is ensured by means of a stretch cluster between the two systems, which are roughly 25 kilometers apart. The data secured in this incremental backup is replicated once daily from one location to the other, which means it remains available even if one of the two centers were to fail. Once a week, the data is stored onto the SUN Solaris-based backup master servers as part of a full backup procedure.

The new backup system with its greater efficiency has already had positive cost effects after a relatively short period of time. Borschel comments, “After approximately two years of storing data with NetBackup we’ve reached break-even point.” His conclusion on the course of the project is that, “Overall my dual management team has done an excellent job, from the initial presentation to our customer DekaBank through to an almost trouble-free migration process.”

'Strong Positive' From All Sides

Recently, Borschel and his team set a new volume record of their own. A volume of more than one million data gigabytes is now stored in his data centers every month. Another migration project is also now in the planning stage. At Lufthansa Systems' Munich data center, Borschel is intending to migrate up to 50 terabytes for storage using Veritas NetBackup over the coming months.

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Head of Enterprise Storage Management
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SOLUTION AT A GLANCE

Business Drivers

- Increase efficiency of data security in the data center
- Achieve cost savings through virtualized backup

Technology Challenges

- Ensure reliable backup and recovery processes on all systems
- Manage backup and recovery centrally with real-time monitoring, progress reports, management of error reporting and troubleshooting
- Accelerate data storage and recovery
- Optimize resource utilization

Solution

High performance data protection for UNIX environment

Symantec Products

- Veritas NetBackup™ from Symantec

Technology Environment

- Servers: 380 servers
- Operating systems: SUN® Solaris®
- Storage: 160 terabytes on virtual tape library; IBM® Tivoli® Workloader Scheduler (TWS)

Symantec Services

- Basic Support

BUSINESS VALUE AND TECHNICAL BENEFITS

- Reached break-even point with NetBackup after approximately two years of storing data
- Completed the migration of data backup—which involved a volume of 160 terabytes every month—successfully and on schedule
- Fulfilled 99.5 percent of the service level agreements, meeting the allotted data recovery times
- Backups are carried out at any time without resource standby time