

# Utescheny AG



Automotive industry and IT—  
convincing quality

HP consolidates server and storage  
architecture and realizes a NAS/SAN  
fusion at Utescheny AG



**Utescheny AG**



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Georg Kourtidis, Head of Information Technology, Utescheny AG



Drivers and passengers riding in Porsches or BMWs can almost be sure that they are looking at Utescheny AG's products. The company develops and manufactures high-quality plastic mold parts for car interiors, e.g. for dashboards, ceilings, center consoles, and doors.

Utescheny AG was established in 1977 and holds six subsidiaries at four sites with 545 employees. The company has achieved a favorable position in today's competitive market, producing a turnover of EUR 95 million in 2003. Utescheny is a first-tier supplier for luxury car manufacturers such as Porsche and high-volume production car manufacturers of the premium segment, e.g. BMW, DaimlerChrysler, Audi, and Volkswagen.

#### **Server and storage—a grown infrastructure**

Because of Utescheny AG's growth in the last few years, the company's number of servers had dramatically increased. In addition to an AS400 for Production Planning and Control (PPC), IT employees had to administer several Intel-based servers, including HP LC2000r, LH3000r, LH6000r, LH4r, LP2000r and LP1000r servers, a powerful HP RP7410 server for CAD, and one server each for the SAP Human Resources module and the firewall.

For storage Utescheny used a pure Network Attached Storage (NAS) solution and distributed disk systems with different file structures under Windows and UNIX. This resource-saving and efficient solution was well-suited for a certain level of performance and capacity. However, Utescheny had clearly exceeded this level—which became obvious through the continuously increasing administration effort.

#### **Call for a consolidated solution**

IT managers at Utescheny recognized the call for action as well as the savings potential of an optimized, i.e. a consolidated solution. Therefore, a project was started with sufficient financial backing to accommodate all server and storage capacities in space-optimized and rack-based systems and to pool them in a centralized data center.

#### **SAN and NAS storage solution**

HP is Utescheny's hardware partner of many years, both servers and desktop systems bearing the HP logo. Therefore, HP was asked to deliver a concept for the planned server and storage consolidation.

HP recommended to introduce a Storage Area Network (SAN) for storage purposes. HP's "My first SAN" concept was successfully implemented using an HP StorageWorks EVA 5000 as central storage system. The storage virtualization technology of the Enterprise Virtual Array 5000 offers high performance and capacity at low cost. Within the scope of HP's "Easy as NAS" concept, the smooth integration of NAS solutions was made possible. HP proposed to implement an HP StorageWorks NAS 4000s running under Windows Storage Server 2003 for file serving. This NAS solution should be used to transfer existing UNIX and Windows file structures to a common system.

### **Making some room with space-saving blade servers**

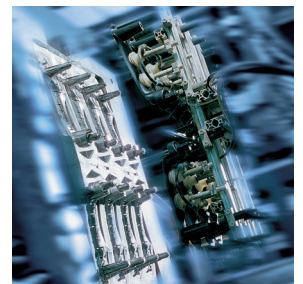
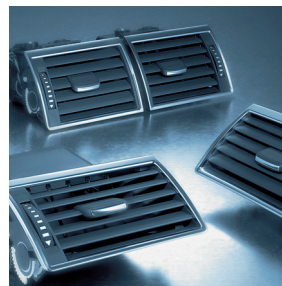
For server consolidation, HP envisaged to cut the number of Intel-based servers in half and replace them with HP ProLiant BL20p blade servers and two HP ProLiant DL360 servers. In addition, all systems were to be migrated from Windows 2000 Server to Windows Server 2003.

### **Why favor HP?**

Due to the fact that Utescheny had established extensive Windows know-how and because Windows services were cost-efficient, a Linux-based solution was out of question. Utescheny intensively worked on the project and evaluated several solutions which facilitated the decision to implement the one recommended by HP. Georg Kourtidis, Head of Information Technology of Utescheny AG, explains the advantages, "Combining the HP Storage Area Network with blade server technology running under Windows was convincing in several ways. We were impressed by the idea of an increased system reliability and availability, compact blade design, the standardized environment and the extremely simplified administration."

From Utescheny's point of view, facts speaking in favor of the SAN were more flexible storage management, a consistent directory structure in Gigabyte intervals and the ability to flexibly allocate the entire storage capacity. The use of renowned and proven administration tools such as the HP OpenView Storage Area Manager was yet another benefit. Comments Georg Kourtidis, "In addition, the system is future-proof because it can quickly be expanded in a modular way. Last but not least, the price-performance-ratio is perfect."

After awarding the contract, Utescheny and HP worked out a project plan for the consolidation and the related migration process. The storage systems were introduced in January and February of 2004. The HP StorageWorks EVA 5000 provides a net storage capacity of 2TB that can be modularly extended to a maximum of 35TB. Two redundant HP StorageWorks SAN switches 2/16 link the EVA 5000 to the HP StorageWorks NAS 4000s, which has a capacity of 1TB and is used for file serving under Windows Storage Server 2003.



## Challenges

- Storage consolidation:  
Replacement of the NAS system and distributed disk systems with different file structures
- Server consolidation:  
Pooling of numerous Intel-based servers
- Consolidation of all server and storage capacities to a centralized data center and accommodation in space-optimized and rack-based systems
- Migration of UNIX and Windows file structures to Windows Storage Server 2003, management optimization

## Solutions

- NAS/SAN fusion
- One HP StorageWorks EVA 5000 with a storage capacity of 2TB
- Two HP StorageWorks SAN switches 2/16
- Bisecting the number of Intel-based servers and replacing them with HP ProLiant BL20p and DL360 servers plus one HP StorageWorks NAS 4000s with a capacity of 1TB running under Windows Storage Server 2003

## Results

- Consolidation of server and storage systems at one site
- Space-saving and rack-based units
- Reduced administration effort through the Rapid Deployment Pack for HP ProLiant servers and HP OpenView Storage Area Manager
- Optimum utilization of storage capacities by fusion of NAS/SAN
- High scalability through future-proof systems
- Unified management and file structure for both Windows and UNIX

### Higher performance, lower administration effort

The implementation of storage systems was immediately followed by the consolidation of the server architecture and the migration to Windows Server 2003 in February and March of 2004. With the new and consolidated structure of the data center, Utescheny was able to realize a true leap in performance that also became obvious to the users of the Windows clients. At the same time, the administrative effort was reduced, and space-related problems were a thing of the past. The decision in favor of the SAN has also proven right. Says Georg Kourtidis, "The fusion of NAS and SAN enabled us to combine the most useful features of both technologies. With Windows Storage Server 2003 we succeeded in eliminating isolated islands of storage and generated a unified management and file structure for both Windows and UNIX. Migrating the server architecture to blade server technology created a centralized, space-saving and technologically adaptive solution for the entire IT. Furthermore, the HP Rapid Deployment Pack paved the way for enormous advantages in production, and servers can now be cloned within minutes."

### Outlook: keeping blade servers busy

Bearing these positive results of the migration and consolidation in mind, Utescheny decided to also migrate other applications to HP blade servers within the next few months. The SAP modules for Human Resources management (HR) and quality management (CRQ) will be the first for transition and will shortly be followed by the Citrix Metaframe environment.

Find out more about the Frontline Partnership between HP and Microsoft, visit [www.hp.com/microsoft](http://www.hp.com/microsoft)

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