

O2 Germany

Sun Boosts Storage Infrastructure to Support Growth and Innovation for German Mobile Service Provider

Customer Success Story

Industry

- Telecommunications

Business Issues

- Streamline and simplify storage management
- Increase ability to respond to new requirements
- Minimize costs associated with managing storage

Solution

As lead contractor, Sun™ directed the consolidation of O2's heterogeneous storage landscape onto a central SAN infrastructure. In partnership with HDS and Brocade, Sun designed the storage architecture and migrated the data without affecting production operations. Sun provided performance analyses, advised on storage layout and developed proofs of concept for disk-to-disk backup and reporting. Sun also implemented a tiered storage architecture to lower costs and provide better support for O2's business processes.

Business Results

- Greater flexibility to respond to changes in the market
- Enhanced ability to comply with regulations
- Reduced total cost of administering storage

Products/Services/Solutions

- Sun StorageTek 9960 Storage Systems
- Sun StorageTek 9980 Storage Systems
- Sun StorageTek 9990 Storage Systems
- Brocade SilkWorm 12000 and 24000 directors
- Brocade SilkWorm 4100 Fibre Channel switches
- Data migration services
- SAN design
- Storage design

URL Reference

sun.com/customers

O2, a wholly-owned subsidiary of Telefónica S.A., comprises mobile network operators in the UK and Ireland, along with integrated fixed/mobile businesses in Germany, the Czech Republic and the Isle of Man.

Success at a glance

Young, dynamic, innovative O2 Germany is a high-flyer. This subsidiary of O2 plc specializes in mobile telecom services of every kind: Innovative contract and prepaid products are as much part of its portfolio as mobile data services based on GPRS technology and products for the new UMTS generation of mobile phones. Although active in the German market only since 2002, when it changed its name from VIAG Interkom, O2 Germany has now attracted well over 8 million customers, a trend which shows no sign of abating. In 2004 the company recorded sales revenue of 2.7 billion EUR (3.2 billion USD), making it the third largest German mobile telephony supplier. And O2 is still growing.

There's no success without hard work. This applies not only to the staff on the O2 sales front, but the back office as well, which must also cope with requirements that are rising steadily in parallel with customer and sales figures. "Grow, expand, save; grow, expand, save," explains Roman Pritzkow, Manager of Architecture Deployment. "Our IT structures are meeting this challenge daily."

The Need for a Top-Flight Storage Infrastructure Three years ago, the mobile-telephony giant was still operating in a highly heterogeneous environment: storage systems from EMC, servers and clusters from HP and Sun Microsystems, and a relatively complex Storage Area Network (SAN) from Brocade. It was a complicated system, ill-suited to further growth.

In response, O2 asked itself a series of questions. How can we manage storage better in future? How do we become more flexible when faced with the need to satisfy new requirements? How in the long term can we save on costs in the SAN environment? This round of questioning resulted in an invitation to tender, which O2 sent to the major storage vendors.

O2 sought a solution that was the best in a number of areas: the best technology, best for future expansion, the best architecture, the best technical expertise, the best service and not least the best partner strategy. O2 wanted a single source, to minimize problems and to streamline the migration during production. "The winning candidate would have to convey the feeling that we're all rowing the same boat, with a common objective," says Pritzkow.

Only one team made the grade: Sun Microsystems, as lead contractor, with partners Hitachi Data Systems (HDS) and Brocade. This trio clearly showed the spirit of cooperation O2 was looking for. Moreover this team's common strategy promised to respond very quickly to new market conditions with new products and services. That kind of forward-looking thinking was absolutely essential to O2.

A Total Systems Approach For O2, the Sun-led engagement means no extra outlay on management. O2 manages the system as a whole, not as individual components. All storage systems integrate seamlessly into the central storage scheme.

To stay at the forefront of innovation, O2's IT Department is in constant touch with its contacts at lead contractor Sun. Whether support questions must be answered, new architectures evolved or order processes initiated, the Sun team coordinates everything for O2. "In Sun we have found a company capable of combining the expertise of three partners and managing this know-how appropriately," remarks Pritzkow.

Sun also loans hardware so that O2 can test new concepts and ideas without any commitment to buy. Pilot systems must satisfy the requirements before they are adopted into the system. "We then issue a purchase order and incorporate the components into our architecture," says Pritzkow. "We can therefore continue to modernize while minimizing our risk by moving one step at a time."

Storage Platform for Future Growth The new Sun StorageTek™ 9990 systems provide more than just expanded storage. They open the door to O2's latest IT project: finding the optimum software and hardware platform for the next five years, one which completes the integration of the existing structure. This groupwide project extends to the storage division.

How the new architecture will look and interact with users has not yet been finalized in detail. The project is still at the proof-of-concept stage, but some elements are already decided, for example, the new Brocade multiprotocol routers. These components make it easier to link different sites, while the individual environments remain logically separate from one another. This security measure protects the production environment during tests.

The Sun StorageTek 9990 systems form the foundation of the storage subsystem for the new architecture. "This product series incorporates features that enable us to virtualize and manage whole storage generations centrally and easily," says Pritzkow. Storage resources can thus be assigned from the control center by storage classes, reflecting the fact that not every data item is accessed equally often. Nonactive data need not therefore remain on the fastest and most expensive storage arrays, but can instead be moved to a more appropriate storage location, which greatly facilitates disk-to-disk backup. O2 can also administer snapshots more easily with the Sun StorageTek 9990 storage generation, as the systems need no longer be selected individually. "Thanks to the new, coordinated Sun, HDS and Brocade technologies, O2 can further optimize our central, consolidated storage pool," says Pritzkow. This simplifies the storage architecture and processes within O2, thus reducing costs.

"Going forward, we have much more flexibility to generate prompt, up-to-date reports of appropriate quality and with short execution times," Pritzkow continues. Thomas Knabe, Head of Planning Infrastructure, adds: "By optimizing this business environment, we can react faster to changing conditions in the telecommunications market. Ultimately that puts us in a position to win more market share. When it comes to investing in our infrastructure, the best only just passes the test."

"Thanks to Sun's new storage virtualization technology, O2 can now consolidate its central data-storage pool even better. It simplifies processes and architecture, while also reducing costs."

Roman Pritzkow

Manager of Architecture Deployment, O2 Germany