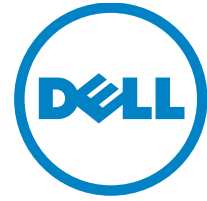


# Leading history museum cuts server and storage management times by around 50 per cent with virtualization



- Disaster Recovery
- Intelligent Data Management
- Green Efficiency
- Virtualization



“By reducing the number of physical servers and increasing the level of automation on the SANs we managed to reduce IT admin time by around 50 per cent.”

*Robert Sailer, Head of IT,  
Museum of Natural History Vienna*

## Customer profile

Company:	Museum of Natural History Vienna
Industry:	Research, Education
Country:	Austria
Employees:	244
Website:	<a href="http://www.nhm-wien.ac.at">www.nhm-wien.ac.at</a>

## Business need

The museum needed to meet a growing demand for IT services from administrators and researchers, but its datacentre was small and couldn't be expanded.

## Solution

Working with [Dell Consulting Services](#), the museum created a scalable, [virtualized](#) IT environment with [Dell EqualLogic technology](#). It chose [Dell ProSupport™](#) to maximise performance.



## Benefits

- IT reduces server and storage management times by around 50 per cent
- Museum consolidates servers by around 77 per cent
- Customer makes IT energy savings of around 60 per cent
- Museum lowers storage costs by approximately 60 per cent
- Customer expects return on investment in around 36 months

The Museum of Natural History Vienna, Austria, is among the largest of its kind and one of the most important museums in Europe. In 39 exhibition halls, thousands of objects representing the earth and life sciences convey an impression of the diversity of nature. Precious minerals, rare fossils and unique prehistoric findings – such as the famous Venus of Willendorf – can be found among the museum’s collections, with more than 60 staff scientists working to maintain around 30 million specimens and artefacts.

“We’ve consolidated the server environment by around 77 per cent with Dell. This has freed a lot of space, allowing us to expand the infrastructure over time.”

*Robert Sailer, Head of IT,  
Museum of Natural History Vienna*

These scientists rely on the museum’s IT network to provide applications for processing scientific data and space for storing their research. Over time, the museum saw the demand on IT – particularly storage space – grow. But it wasn’t able to simply add more servers and storage because the datacentre, located in the main building, had reached its capacity.

Robert Sailer, Head of IT at the Museum of Natural History Vienna, says: “We love the museum’s building, but it wasn’t created with a growing datacentre in mind. We could see issues arising with space, power supplies and cooling unless we changed our approach to IT.”

#### **Museum gains deep level of technical support**

The IT team wanted to [virtualize](#) the infrastructure to consolidate the amount of physical hardware and reduce energy consumption. It began talking to leading IT solution providers such as HP and Fujitsu Siemens about its goals. However, having carefully considered the potential partners, the team decided to work with Dell. Sailer says: “After working with Dell in the past, we knew that it had a strong customer focus. Dell listens to its customers. I knew we could talk to the sales teams in a technical way and still be understood.”

#### **IT team finds solution to meet business needs**

The museum received a detailed design for a virtualized environment in less than a month. In that time, Sailer and his colleagues met with the [Dell Consulting team](#) to discuss solutions and evaluate iSCSI-based storage technologies. The museum was keen to re-use as much of the existing IT infrastructure as

possible to reduce costs. Plus, it hoped to swap out its fibre channel storage area network (SAN) for a solution that was easier to manage. “We knew that Dell could offer end-to-end solutions for our IT requirements. Dell provided us with a great insight into iSCSI-based storage and a range of SANs to meet our business needs,” says Sailer.

The customer worked with Dell consultants to migrate to a virtual landscape. The consultants took just four days to complete the work, deploying a virtualized SAN, creating virtual hosts and migrating data. They also spent time configuring the infrastructure’s Active Directory® access management software and checking that backup processes operated efficiently. “Deployment went smoothly,” says Sailer. “We gained great insight into managing the new infrastructure because Dell provided a form of on-the-job training during the deployment work.”

### **Technology in practice**

#### **Services**

[Dell Consulting Services](#)

[Dell Support Services](#)

– [Dell ProSupport™ with Mission Critical](#)

#### **Hardware**

[Dell EqualLogic PS6000XV storage area networks](#)

#### **Software**

[VMware® vSphere™ server software](#)  
– [VMware vMotion™](#)



### **Customer consolidates existing servers by around 77 per cent**

The Museum of Natural History Vienna has significantly reduced the number of physical servers in its datacentre by adopting virtualization. Today, it operates just four physical machines instead of 17. "We've consolidated the server environment by around 77 per cent with Dell," says Sailer. "This has freed a lot of space, allowing us to expand the infrastructure over time." The four physical servers run [VMware® vSphere™ server virtualization software](#) and currently support around 25 virtual servers. These deliver applications such as Active Directory and Microsoft® Exchange Server. "The virtual machines are performing well," says Sailer. "If there's an issue and we need to complete maintenance work, I have the reassurance that I can move the virtual machines quickly between physical hosts using VMware vMotion. Employees are seeing maximum uptime."

### **IT team makes energy savings of around 60 per cent**

By lowering the number of physical servers, the IT team has more than halved [energy consumption](#). There's no longer the need to power and cool so many machines, enabling the team to align more closely with the museum's sustainability goals. Sailer says: "We've cut energy consumption by around 60 per cent with Dell. It's helping us do our bit to reduce environmental damage."

### **Personnel benefit from scalable IT services with iSCSI storage**

Administrators and scientific researchers can continue to gain the IT services they need because the museum has created a highly scalable environment that can be easily expanded. Sailer says: "Museum personnel can get on with the work and we no longer have to worry about meeting their IT requirements. We can add new virtual servers and provision storage in minutes." To meet its storage needs, the museum deployed two iSCSI-based Dell EqualLogic PS6000XV SANs – delivering up to 14 terabytes of storage when combined. The [Dell EqualLogic PS6000XV](#) – which is ideal for large-scale scientific applications – is simple to operate, rapid to deploy and delivers seamless scalability. The IT team can also expand storage on-the-fly, which avoids over provisioning disk space and wasting resources. Sailer says: "With our Dell EqualLogic storage, museum personnel can store their scientific data safely, while accessing it quickly."

### **Customer lowers costs of storage by approximately 60 per cent**

The museum has significantly reduced storage costs by moving from a fibre channel to an iSCSI solution. This is because the IT team no longer pays a third party to complete some maintenance tasks. In addition, the museum has avoided the significant costs of upgrading storage controllers to support an expanded SAN. "When we had fibre channel, we had to hire storage specialists because we didn't have the experience, or even the time, to oversee the storage," says Sailer. "With Dell EqualLogic storage, we can scale our storage easily and manage the solution ourselves, helping us lower storage costs by around 60 per cent."

"We've cut energy consumption by around 60 per cent with Dell. It's helping us meet our commitment to greener IT and more environmentally friendly operations."

*Robert Sailer, Head of IT,  
Museum of Natural History Vienna*

## IT reduces server and storage management times by around 50 per cent

Despite taking on complete responsibility for the storage, the IT team has still managed to halve management time. Sailer and his colleague can concentrate on strategic work to improve services instead of basic administration. "With fewer physical machines to oversee and the high level of automation in the SANs, we've cut management time by about 50 per cent," says Sailer.

## Return on investment expected in approximately 36 months

The museum thinks the infrastructure will have paid for itself in just a few years. "I expect payback on our Dell environment in around three years," says Sailer. But he believes the value of the new infrastructure goes far beyond return on investment. "Eventually, visitors to the museum will feel the benefits of our new Dell infrastructure, because we can better serve the administrators and scientists that help maintain our reputation."

## Expected improvements in backup and archiving

After the success of the two Dell EqualLogic PS6000XV SANs, the museum plans to add a third SAN to increase capacity and support disk-to-disk-to-tape backups. As a temporary measure, the IT team backs up data to the old fibre channel SAN before archiving it to tape. The process is controlled by Symantec™ Backup Exec™ software. "We expect to achieve a highly efficient backup and archiving process with the deployment of our Dell EqualLogic SAN," says Sailer.

## Maximum performance using responsive service

According to Sailer, the museum also chose Dell because of its [post-sales support](#). "When you look at customer surveys in the trade press, Dell regularly comes top among IT solution providers for support," he says. "We are one of many happy customers that would recommend Dell ProSupport to anyone." To ensure that the museum receives emergency dispatch and immediate phone-based troubleshooting, Sailer selected Dell ProSupport™ with Mission Critical. "It means we receive four-hour onsite assistance in an emergency, keeping our systems up and running," he says.

For more information go to:  
[dell.com/casestudies/emea](http://dell.com/casestudies/emea)  
and [dell.at](http://dell.at)

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