

“Our embrace of VMware and Intel solutions has allowed us to be the first University Hospital in Germany to achieve nearly 100 percent virtualization for its production systems.”

Daniel Pfuhl

IT Manager, University Hospital Leipzig

HIGHLIGHTS

CHALLENGE

Move critical applications off of aging physical hardware

SOLUTION

VMware® and Intel® technology creates a virtual platform for applications that improves performance, availability, and manageability

VMWARE AND INTEL AT WORK

VMware Infrastructure 3 Enterprise, featuring:

- VMware ESX™ Server 3.5
 - Fujitsu RX300S3 and RX600S4 servers with Intel Xeon processors attached to EMC CX3-80 and CX3-40 SAN
- VMware VirtualCenter 2.5
- VMware VMotion™
- VMware Distributed Resource Scheduler (DRS)
- VMware High Availability (HA)

DEPLOYMENT ENVIRONMENT

- Guest operating systems: Windows 2008, Windows 2003, Windows 2000, Windows XP, Linux SLES, debian, Ubuntu, Open SUSE
- Virtualized Applications: SAP Human Resources, SAP Business Warehouse, Exchange 2007, SQL Server 2000 and 2005, Citrix Presentation Server 4.5, domain controllers, web proxies

UNIVERSITY HOSPITAL WITH A 21ST CENTURY IT INFRASTRUCTURE

The University Hospital Leipzig, located in Leipzig in the Free State of Saxony, Germany, is part of one of the oldest universities in Europe. The clinic's 3,200 employees – doctors, nursing and administration staff, along with staff in service providers – take care of the health, recovery and the well-being of the patients. With the exception of heart surgery, all areas of medicine are represented in its 38 clinics, polyclinics and departments.

Behind the scenes, the University Hospital depends on critical applications like SAP Human Resources and SAP Business Warehouse to keep its operations running smoothly. Unfortunately, the hardware hosting these applications was ending its lifecycle. This provided the perfect opportunity for the University to 'rebuild' its datacenter with a combination of newer, Intel-powered hardware and virtualization software from VMware.

“We received positive feedback from our SAP admins—as well as from our SAP users—that the systems performed much better after virtualization,” says Daniel Pfuhl, an IT Manager at the University. “Also, the SAP admins enjoy the monitoring tools provided by VMware vCenter to analyze heavy workloads or other issues to optimize performance.”

In addition to these performance gains, the University Hospital has also enjoyed greater scalability for its IT infrastructure. “Intel's compatibility with VMware allows us to buy additional servers with the newest processors as we need them, and add them to the existing clusters,” says Pfuhl. “The ability to use features like VMware High Availability and VMware Distributed Resource Scheduler across all of our physical machines lets us make very effective use of our hardware resources.”

RESULTS

- Virtualize 50% of SAP environment.
- Increase application uptime and availability. “Virtualization provides transparent failover support to the applications we are running inside the guests,” says Pfuhl. “The scripted failover mechanism that we relied on in the past was very complex to maintain, by comparison.”
- Strengthen disaster recovery foundation. “We are the first University Hospital with two redundant data-center locations,” says Pfuhl. “With the foundation we already have in place, we are looking forward to implementing VMware Site Recovery Manager as the ‘one red button’ to switch over our most critical systems to our secondary datacenter.”