

Carl Zeiss

Inspired, ingenious  
and inventive



**COMPAQ**  
Inspiration Technology

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IT Communications Manager  
Carl Zeiss

*What makes it work:*

- > *Hardware: Two mail servers: Compaq ProLiant 6400R systems, 2 GB RAM, 4 Xeon 550 MHz processors, 1 MB cache*
- > *Two application servers: Compaq ProLiant 5500 systems, 1 GB RAM, 2 Xeon 550 MHz processors, 512 KB cache*
- > *Software: Lotus Domino and Lotus Notes*
- > *Storage: Compaq Storage Area Network, One StorageWorks™ RA8000 full of 36 GB disk drives, two mail servers and one application server connected to the SAN via a fibre channel.*
- > *Services: Compaq Global Services*

*Business results:*

- > *Reduced time-to-solution with no business interruption*
- > *Improved performance — speed improvements of 50 percent*
- > *Global messaging and collaboration to speed communication*

For more than 150 years, Carl Zeiss ([www.zeiss.de](http://www.zeiss.de)) has helped improve the vision of our world — both literally and figuratively. Today, the global company continues to lead technology in the fields of optics, precision engineering, and electronic visualization — pioneering new standards in sophisticated technology for recognizing, experiencing, measuring, analyzing, structuring, and processing a wide spectrum of objects.

Headquartered in Oberkochen, Germany, Carl Zeiss uses professional optics to meet the expectations of even its most critical customers — who span the fields of research, medicine and biology, semiconductor technology, photography, and astronomy.

The company’s top priority is to understand the needs of its customers and implement them in the form of dedicated

products and services. Its goal is to provide optimum quality and maximum precision — while ensuring that customers receive excellent value for their investment.

Thomas Bullinger, IT communications manager at Carl Zeiss explains, “To be on the leading edge in your industry, you also need to have leading-edge technology inside your own company.” That technology is based on Lotus Domino running on a Compaq ProLiant™ platform.

### Uniting the global company through Lotus Notes

While Carl Zeiss is globally dispersed, its multi-continent workforce is united by Lotus Domino and Lotus Notes — which serve as its base for messaging as well as collaboration via the company’s intranet.

“E-mail is our killer application,” says Bullinger. “Lotus Notes is critical for our company. It must be there every day of every week, of every year.”

The company’s messaging community includes 85,000 Lotus Notes users — 3,500 of in Germany Oberkochen — supported by two mail servers and two application servers located in Oberkochen. The balance of the users access Notes through servers located in 12 sites in Europe, three in the Americas, and two in Asia.

Carl Zeiss started using Lotus Notes R3.3 in 1995 in order to give its management the ability to communicate faster. From July to December of that year, the IT team installed a local Lotus Notes infrastructure based on OS/2 for nearly 100 users. By 1996, the number of users had grown tenfold to 1000, so they installed three more servers and migrated to Lotus Notes R4.x.

In December 1997, the company had exceeded its storage capabilities and upgrades were unavailable. The IT staff's options included maintaining its existing architecture and adding more servers — or replacing the existing servers with more powerful technology. They chose the later option, moving to a Compaq *AlphaServer* 4100 system — the most powerful machine at the time — running Lotus Notes with virus-scanning engines in a Microsoft Windows NT cluster.

“Compaq provided very good support,” comments Bullinger. “They have thorough knowledge of the environment, expertise in Lotus Notes and Windows NT, and deep experience in enterprise-wide computing.”

The Windows NT cluster on a Compaq platform provided compelling advantages, including enhanced performance, browser-ready capabilities, and elimination of the need for real-time replication or extra storage.

In early 1998, Carl Zeiss started to roll out SAP R/3 for 2,500 users in Oberkochen and decided that every SAP user must have Lotus Notes, too. Due to the power of the Compaq *Alpha*™ platform, it could easily handle

the extra users. In 1999, they had more than 3,000 users on both *Alpha*™ systems. Two additional servers were added as Notes application and Intranet servers. The company's next step was to migrate to Microsoft Windows NT and Compaq *ProLiant* servers. The move also included upgrading to Domino R5.

### The power of Domino R5

Always seeking state-of-the-art technology, Carl Zeiss is an early adopter of Domino R5. “Domino R5 delivers a quantum improvement in performance on the same hardware,” says Bullinger. “It supports an increased number of users and has powerful new features such as a new fast-index engine and a multi-mail router — so if one mail router crashes, it automatically routes through other mail routers.”

The combination of Lotus Domino and Notes on the latest Compaq *ProLiant* servers equals one thing: speed. “Release 5 of Lotus Notes is perfect with fast hardware,” states Bullinger. “We've seen speed improvements of 50 percent because of Domino Release 5, Compaq *ProLiant* CPU speeds,

and SAN storage. And the cluster configuration ensures that this business-critical application is always up and running.”

Bullinger cites other attributes about the Lotus solution. “With Lotus, it's easy to develop solutions quickly. It's an open solution based on Internet technology, and because it integrates with SAP, it increases the productivity of our people.”

### Partnering with Compaq means rapid deployment

The relationship between Carl Zeiss and Compaq is longstanding. “We had Compaq servers and were happy with them. We trust Compaq. If you are happy with a company, there's no reason to move to another,” says Bullinger.

“With a global environment like ours, we need a partner who does more than just sell hardware,” continues Bullinger. “We need someone who has deep experience in software such as Lotus Domino, as well as servers, clustering, and SAN technologies. That's why we partner with Compaq.”

One of the benefits of this partnership is rapid deployment. Carl Zeiss made the upgrade to

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its new *ProLiant* servers, storage area network, and Lotus Notes R5 in a matter of days.

On Wednesday, the deployment team installed and checked the server hardware and storage area network. On Friday, they installed and tested Lotus Notes R5 and moved files from the *Alpha* to *ProLiant* systems via drag and drop. On Saturday, the move was completed, Lotus Notes R5 started, and the databases were compacted and installed. On Sunday, the migration was fully accomplished.

“Compaq was instrumental in this upgrade,” says Bullinger. “Their people helped us to plan necessary hardware and clustering services, so the actual upgrade went quickly and smoothly.”

#### Future vision

Carl Zeiss finds Lotus Domino and Notes running on a Compaq platform to be the ideal springboard for the future.

In the future, the company is looking into unified messaging so that the Lotus system is integrated with its telephone system. The IT staff of Carl Zeiss also wants to improve the company's extranet so its messaging and collaboration systems connect with external partners.

According to Bullinger, e-mail is just the beginning. “Having the right messaging infrastructure — such as Lotus Domino — opens the door to add new technologies, such as wireless and mobile messaging, knowledge management, and e-learning.”

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