

A GERMAN MUNICIPAL UTILITY GETS READY FOR SAP HANA

How Dell EMC helped Stadtwerke Erfurt, a municipal utility in Germany, to modernize its IT infrastructure for SAP.





Power supply

Erfurt

The challenge

Stadtwerke Erfurt is a municipal utility in the midsized German city of Erfurt. The hardware running the company's SAP applications had reached the end of its lifecycle and had to be modernized. In order to reduce administrative complexity and bring down operating costs, the company was looking for an alternative to the UNIX-based servers it had been using.

The solutions

- Dell PowerEdge R730 servers
- Dell Storage SC4020 all-in-one arrays
- Brocade switches

The results

- High-performance and high-availability operations
- A system fit for the future by supporting SAP HANA
- Quadrupled SAPS
- SAPS costs reduced by 90 per cent per SAPS

A German municipal utility gets ready for SAP HANA

Stadtwerke Erfurt, a municipal utility in the midsized German city of Erfurt, modernized its IT infrastructure for SAP with solutions from Dell EMC. The new hardware increased the performance of the SAP system significantly, drastically reduced operating costs, and made the company ready for SAP HANA.

As at many municipal utilities and service providers, SAP's business software plays a central role at Stadtwerke Erfurt. The company uses SAP software not only for standard operations in accounting, logistics, and human resources management, but also for its business-critical energy management processes. "IT requirements are very high in today's energy supply industry," says Mathias Pohl, head of IT infrastructure at Stadtwerke Erfurt. "Today, statutory regulations for data exchange in the energy markets mandate high-performance and highly reliable IT systems at all times in order to meet these requirements."

End of lifecycle

The hardware for Stadtwerke Erfurt's SAP applications had long reached its capacity limits. It was no longer able to offer performance reserves and could no longer be extended in a commercially viable way because it had already been written off the company's books. But increased IT resources were necessary because Stadtwerke Erfurt wanted to convert its SAP system to Unicode. "Our technology platform for SAP had purely and simply reached the end of its lifecycle and therefore had to be modernized," says Pohl.

Instead of simply upgrading to the next generation of its old hardware, Stadtwerke Erfurt decided to look for alternatives. "Our systems had very complex administration and high operating costs. We wanted to use the hardware upgrade to change that," Pohl explains. He was further encouraged to act by another central goal of the modernization project: In order to be fit for the future, the utility's SAP platform had to be ready for SAP HANA's in-memory technology. This required switching operating systems. The servers which had been used up until that point were UNIX-based. In order to support SAP HANA, the next generation would have to run on Linux. "Changing operating systems was mandatory anyway," says Pohl. "It made the decision to replace the underlying hardware even easier for us."

> "With this project, we proved once more that businesscritical applications such as SAP can run on x86 servers at high-performance levels."

Mathias Pohl, head of IT infrastructure Stadtwerke Erfurt

Comprehensive selection process

Stadtwerke Erfurt asked several suppliers of IT systems for solutions that would meet their demands. At the end of a comprehensive discussion and selection process, they opted for a solution design offered by system integrator System Vertrieb Alexander (SVA) and used hardware solutions from Dell EMC. "The conversations with Dell EMC were open, honest, and professional. The consultants understood our requirements very well and were able to convince us that our highly critical applications are in good hands if we use their systems."

Today, Stadtwerke Erfurt's hardware for SAP consists of six PowerEdge R730 servers and two SC4020 storage arrays as well as Brocade network switches from Dell EMC. These servers are, among other things, characterized by impressive processor performance and a large memory footprint. The storage systems use all-flash arrays. This combination allows the utility not only to run current SAP applications at a highperformance, high-availability level, but also to be ready for in-memory databases, making it possible to run SAP HANA applications in the future.



"Together with Dell EMC, we succeeded in building a future-proof, highperformance SAP platform – and all of this at lower operating costs."

Mathias Pohl, head of IT infrastructure Stadtwerke Erfurt

Impressive success figures

"Our old infrastructure with Unix-based servers is a typical setup for our industry. Many still believe that businesscritical applications such as SAP only run in a truly reliable and stable way on this type of infrastructure," says Pohl. "Our project is one of many examples that prove this belief wrong. Indeed, these types of applications can also run on x86 servers such as our new ones at high-performance levels."

He can prove the success of the project with impressive numbers based on a metric called SAP Application Performance Standard (SAPS), which measures the performance of SAP systems. With its new hardware, Stadtwerke Erfurt was able to quadruple the performance from 110,000 SAPS to 440,000 SAPS. At the same time, costs per SAPS fell by 90 percent. The project has been a success, says Pohl: "Together with Dell EMC, we succeeded in building a future-proof, high-performance.



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