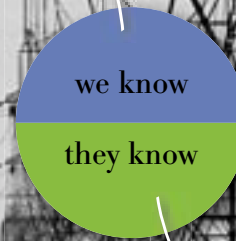# evu zählwerk makes light work of billing with IBM and SAP

Overview

■ The Challenge

evu zählwerk, an electricity clearance and service company, planned to expand its reporting capabilities to differentiate it from its competitors. Its customer base – regional electricity companies – would be offered access to new analyses and business ratios, with stable response times. The current infrastructure and application solution would not support this requirement, without increasing response times and causing long periods of downtime each day in order to load the data used to calculate bills and usage statistics. The inability to meet competing demands for business operations and customer service requirements was impacting total productivity, leading to longer response times for customer requests and preventing the broadening of the range of services.

■ The Solution

rku.it has implemented a high-speed solution from IBM, used for both the SAP Industry Solution for Utilities (IS-U) and SAP NetWeaver Business Intelligence (BI), to enable a fast and cost-efficient generation of a variety of reports. rku.it used IBM's advanced virtualization technologies with On Demand functionality, running under AIX and DB2 optimized for SAP software on the IBM System p5 570 platform. Storage is handled by IBM Tivoli Storage Manager and an IBM System Storage DS4400 storage system.

■ The Benefits

Daily data-loading time reduced from 12 hours to one; annual closing figures are ready much earlier than before. Advanced data mining and reporting in SAP NetWeaver BI allows evu zählwerk to offer better analyses for customers. Annual financial reports and other CPU-intensive SAP NetWeaver BI operations no longer affect the IS-U production systems – helping to reduce customer response times. Innovative reports for the customer base make it possible to offer a better service and individually created solutions to end customers.

■ Key Solution Components

Industry: Utilities
Applications: SAP® R/3® 4.6, including financials, controlling, and human resources applications: SAP for Utilities solution portfolio; SAP NetWeaver® Business Intelligence
Hardware: IBM System p5™ 570 servers, System Storage™ DS4400 storage system
Software: IBM DB2® optimized for SAP software, AIX® 5L™ v5.3, Tivoli® Storage Manager, HACMP™

evu zählwerk is the accounting company for several public utilities companies in Germany, like Stadtwerke Bochum and Stadtwerke Herne. The competitive pressures within the unified Germany and a deregulated European marketplace have highlighted the importance of cost-efficiency and the ability to respond rapidly to customer needs and market patterns, both of which depend on rapid access to accurate information.

evu zählwerk planned to optimize and expand its reporting capabilities in order to be able to offer its customer base of electricity suppliers better reports, business ratios and stats. Thereby the company could differentiate itself from other accounting subsidiaries and make customer service more efficient because of new and innovative reports and faster response times, even as data volumes continue to increase.

Much of the business relies on the billing systems, which depend on projections of electricity usage for each customer. Whereas traditionally users have been treated as groups of consumer types, at evu zählwerk every customer is stored as a unique entity with an individual usage profile. To deliver meaningful results with this level of detail, the predictions require considerable processing power and the manipulation of very large databases.

"The goal was to fulfill our customers' requirements concerning new reports and faster response times. The fact that annual financial report figures were available not earlier than in March, was, in consideration of constantly increasing data volume, not acceptable any more", says Markus Borgiel, Head of Reporting at evu zählwerk.

Peter Gieda explains his challenge as Chief of Business Warehouse application development at rku.it: "To cope with peak usage during the calculation of annual reports, we needed a very high-performance solution for evu zählwerk, with the additional requirement that costs were not to increase."

Virtualization and Capacity on Demand

During the whole process, evu zählwerk worked in tight cooperation with its IT partner, rku.it, an IT outsourcing company, which added to the existing software environment by implementing SAP for Utilities and SAP NetWeaver BI applications, supported by a migration from Oracle to IBM DB2 optimized for SAP software, running under IBM AIX 5.3 on the IBM System p5 570 platform. The company's storage needs would be handled by IBM Tivoli Storage Manager and an IBM System Storage DS4400 storage system.

The System p platform offers two key advantages for evu zählwerk: Capacity Upgrade on Demand, and Advanced POWER Virtualization. The Capacity Upgrade on Demand enables evu zählwerk to access additional processors within their System p servers as and when required – paying for them only when they need them, providing a cost-effective way of dealing with peak demand times like the annual close.

"The IBM On Demand technologies help us deal with demand spikes in a fast and efficient manner," says Ulrich Klenke, who is responsible for hosting these systems at rku.it.

The virtualization capabilities of the POWER5 processors also help evu zählwerk keep costs low, by ensuring the optimal utilization of each processor. "Instead of each application running on a separate processor – and often perhaps only using 30 per cent of its capacity – virtualization assigns the idle capacity to other applications," explains Ulrich Klenke. "We can thus maximize the utilization of the processors we have, which saves on platform costs."

rku.it has also moved evu zählwerk's databases from Oracle to DB2 optimized for SAP software, primarily achieving savings on license and maintenance costs. In addition, the migration has reduced administration costs and improved performance. Ulrich Klenke says: "DB2 optimized for SAP software allows us to reduce expenditure on database administration. This version has been optimized for SAP software, and we have noticed that application performance is very good."

Advanced POWER Virtualization enables evu zählwerk to scale quickly, using virtual servers to handle additional workload and enabling the company to achieve its business goals without the disruption of adding new physical systems.

The IBM and SAP solution has already proved its great scalability in adjusting to business growth. "The volume of data has increased from 700GB to 4TB, and can still be managed perfectly easily with the new IT solution", says Ulrich Klenke. "By comparing the computing power and storage capacity of the old and new solutions, we have seen a definite reduction in TCO."

Understanding customer behavior
rku.it helped evu zählwerk to implement this faster and more flexible infrastructure. IBM Global Business Services provided database migration services. Whenever a question arose, the support from IBM was very professional, and evu zählwerk and rku.it report being very satisfied with the IBM team's problem-solving abilities.

The increased performance of the new hardware enables evu zählwerk to make the most of its SAP software. The company can now use advanced data-mining techniques within SAP NetWeaver BI to understand customer behavior better, and the greater part of reporting can now be performed by business users within the software itself, saving time and workload for IT staff. The calculation of projected usage for individual customers in the utilities software can be completed much faster, freeing the system for

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Ulrich Klenke
rku.it

other analyses which help the customers' marketing teams and enable better strategic planning.

The virtualized IBM environment has enough resources to enable the SAP IS-U application to operate in SAP NetWeaver BI even at peak periods of annual financial reporting, without affecting daily operational needs. The great advantage of the SAP solution is its high degree of customizability. "SAP NetWeaver BI's voluminous adaptation features have enabled us to orientate ourselves to the needs of our customer evu zählwerk," explains Peter Gieda. "Because of these configurations and adaptations, the response time for reports and the load time for the data have been dramatically reduced."

Smoother data flow

The new solution has enabled evu zählwerk to cut daily data-loading times from twelve hours down to just one. The high performance of the IBM hardware combines with the automation of the SAP applications to offer dramatically improved data throughput at peak times, too.

"Loading the data for annual billing used to take several weeks," explains Markus Borgiel. "Now it can be done in four days. And the annual financial reporting used to be ready in May, but we can now get it done by the end of February. Because of the new IT system, we can react better and faster to the requirements of our customer base of energy suppliers, and have dramatically improved our customer satisfaction."

"With System p, DB2 and SAP software, evu zählwerk has a reliable, high-performance IT infrastructure that supports our business from end to

end, helping us give our customers the best possible service, and providing a stable platform for growth in the future even with a further steep increase in data volumes," says Ulrich Klenke.

"evu zählwerk and rku.it have ensured themselves a good position in the energy supply industry with this new IT solution," sums up Peter Gieda. "It is rare in Germany to find such a comprehensive, high-performance and cost-effective IT solution that can manipulate data for multiple electricity suppliers."

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