

TOP TO BOTTOM

we know

they know

END TO END

Siteco makes an enlightened choice with IBM System x and VMware for SAP ERP

Overview

■ The Challenge

Siteco wanted to introduce multi-language capabilities to enable employees and partners in Eastern Europe and other countries to use its SAP applications. This would require a Unicode conversion and upgrade to SAP ERP 6.0. To prepare for these major projects, the company needed to expand its test and development environments.

■ The Solution

To provide sufficient headroom for Unicode and SAP ERP 6.0 in its test and development environments, Siteco's IT team used VMware VMotion to migrate 50 virtual SAP and Oracle servers from the existing hardware platform to four new Intel Xeon 7400 processor-based IBM System x3850 M2 servers and an IBM BladeCenter.

■ The Benefits

VMotion enabled the migration to be completed in seconds, with no disruption to the business. The new IBM hardware provides 64-bit support – vital for Unicode conversion – and sufficient capacity to support at least 30 percent growth in the SAP test and development environments. The company is now considering virtualizing its production systems on IBM System x too.

■ Key Solution Components

Industry: Industrial products
Applications: SAP® ERP 6.0, SAP Customer Relationship Management, SAP Advanced Planning and Optimization, SAP NetWeaver® Business Warehouse, SAP Solution Manager
Hardware: IBM® System x® 3850 M2 with Intel® Xeon® processor 7400 series, IBM BladeCenter®
Software: VMware® ESX, VMware VMotion, Microsoft® Windows®, Oracle®

Siteco is one of the world's leading suppliers and manufacturers of technical indoor and outdoor lighting, and also supplies lighting design and implementation services. Based in Traunreut, Germany, the company also has manufacturing plants in Turkey, China and Malaysia, and sales offices in 20 countries worldwide. It employs 1,250 people.

As an increasingly international business, Siteco wanted to standardize its global IT systems around its central SAP ERP instance in Germany. However, employees in other countries would need multi-language support, and the company's Oracle database did not support the extended Unicode character sets required by languages like Chinese and Malay.

"We decided to convert our database to Unicode and upgrade to SAP ERP 6.0," comments Frank Schäfer, Head of Data Center at Siteco. "Preparing for this major project would require a lot of development work and testing, and we realized that our existing test and development servers were not fit for the purpose."



“With six cores per processor, the Intel Xeon 7400 processor series enables the x3850 M2 servers to offer impressive performance while enhancing energy efficiency. Our database server has plenty of headroom for expansion, and the two servers running VMware ESX also have considerable performance reserves. This will be crucial as we gear up our test and development workload for the Unicode conversion and SAP ERP upgrade.”

Frank Schäfer, Head of Data Center, Siteco

The company was running its test and development environments in a virtualized VMware ESX environment on a number of aging Intel processor-based servers.

The servers could not support a 64-bit architecture – a key requirement for Unicode conversion – and had too little headroom to provide the 30 percent performance increase that the company estimated the Unicode systems would need. A new server and storage landscape was required – and Siteco chose IBM.

“IBM has been one of our main IT partners for several years, and we have a very high opinion of IBM server and storage hardware,” says Frank Schäfer.

“Moreover, since most of our infrastructure comes from IBM, it was simpler from a vendor management perspective for IBM to supply the new test and development hardware.”

Impressive performance

Siteco deployed four IBM System x3850 M2 machines: two to support VMware virtual machines for the SAP ERP, SAP Advanced Planning and Optimization and SAP NetWeaver Business Warehouse applications, one for the database server, and one to act as a standby. Additional SAP applications – SAP Customer Relationship Management and SAP Solution Manager – run in an IBM BladeCenter on Intel Xeon processor-based HS21 blades.

The x3850 M2 servers each contain four Intel Xeon 7400 series processors, running at 2.66GHz with 16MB of Shared L3 Cache and 64GB of RAM. The servers leverage fourth-generation IBM X-Architecture technologies to provide industry-leading reliability and performance – ideal for business-critical SAP application workloads.

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Room for growth

Migrating the SAP landscape onto the new servers was a simple task, thanks to VMware enhanced VMotion and Intel VT FlexMigration, which allow virtual machines to be moved from the older physical servers to the new physical servers without significant downtime.

“From the original idea through to go-live, the project only took eight weeks, and was accomplished easily by our in-house team without external support,” says Frank Schäfer. “With VMotion, the migration of the 50 virtual servers took a matter of minutes, and the whole technical migration was performed during a standard weekend maintenance period. If it wasn’t for the fact that the system response speed suddenly got a lot quicker, our users wouldn’t even have noticed the change!”

With the System x and VMware virtualized infrastructure in place, Siteco is now in an excellent position to begin its Unicode conversion and SAP ERP upgrade – which will ultimately enable the company to roll out its central SAP applications to users around the world. This will help Siteco gain a better view of global processes and ultimately increase efficiencies in its supply chain and distribution network.

Testing for SAP applications

In addition to the ERP upgrade, the company is also utilizing the virtualized System x and BladeCenter infrastructure to perform crucial testing on its SAP CRM, SAP APO and SAP NetWeaver Business Warehouse environments.

“Almost all of our key business processes – from reporting, planning and forecasting through to customer-facing activities – depend on our SAP applications, so we need to be able to test and develop them effectively,” comments Frank Schäfer. “The IBM infrastructure provides the flexibility and performance we need to facilitate the development of these applications – and ultimately improve our production processes.”

Conclusion

“By virtualizing our test and development environments, we are able to save space in our data center and ensure that every application can utilize exactly the resources it needs,” concludes Frank Schäfer. “The benefits of VMware virtualization on IBM hardware for an SAP ERP environment are clear: faster provisioning, easier maintenance, and better resource utilization. For these reasons, we are now considering using VMware and System x to virtualize our SAP production environment too.”

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Frank Schäfer, Head of Data Center, Siteco





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