



## SAP virtualisation at BENDER

"Electrical safety solutions for systems" – BENDER Group fulfills this standard with over 500 employees and 56 international subsidiaries. BENDER solutions are used in hospitals, power plants, the Eurotunnel and major film productions. The company produces innovative measurement, protective and monitoring systems which report critical operating conditions before they affect the power supply. BENDER is also an innovator when it comes to the company's own IT department. In the first such project ever completed in Germany, PC-WARE worked together with HP and VMware to virtualise a SAP CRM 2005 and Enterprise Portal 7.0 solution for the company. This makes BENDER the first customer of HP and VMware to receive comprehensive support for productive SAP environments in a Windows environment.

### New CRM – and a new philosophy

BENDER operates a three-level SAP system landscape and uses SAP ERP 2004 with Oracle 9.2 and the MS Windows Server 2003 Enterprise Edition operating system on HP ProLiant server systems. To support its global sales and customer service operations, the BENDER Group decided to install SAP CRM 2005 and Enterprise Portal 7.0 at its headquarters in 2007. In order to ensure a comprehensive IT infrastructure and a high ROI, the company resolved to implement the new SAP systems as a scalable and expandable Storage Area Network (SAN) solution – in addition to the extended virtualisation. After all, virtualisation is the option of choice to guarantee efficient server structures, ease of operation and reduced energy consumption and infrastructure costs.

### Implementation by PC-WARE

BENDER contracted PC-WARE to realise the project in July 2007. It started with a workshop to develop the design and concept for the new solution. At the time, ESX Server was one of the few virtualisation products suitable for productive SAP applications in Windows environments. SAP allows the use of VMware ESX Server in training and development landscapes for Windows operating systems assuming it is connected to a SAP Computing Centre Management System. PC-WARE set up a system environment for VMware Virtual Infrastructure 3.0.2 based on HP ProLiant server systems and a 4 GBit/s SAN environment with HP StorageWorks EVA 4100. The system implementation, including SAP NetWeaver, was completed at the end of August 2007. After customizing the SAP CRM 2005 and SAP Enterprise Portal 7.0 environment, BENDER launched the system in December 2007.

*"The virtualisation project has made our operations far more flexible and transparent. If we had chosen a conventional solution, we would have needed four additional server systems for the new SAP systems alone. The virtual infrastructure makes it possible for us to run the SAP portal, CRM system and SAP Solution Manager on just two servers – while still having resources open for new applications. PC-WARE provided outstanding and comprehensive customer service, from the first consultation and planning of the entire system environment to the final testing."*

*Harald Rado,  
IT Manager at BENDER Group*





The Walther Bender House

*Virtualisation is one of today's hottest trends – and will be for SAP users in the near future.*

## A successful premiere

### Windows-based SAP environment with support from HP and VMware

PC-WARE took over the installation, configuration and testing of the server and storage systems, including primary and secondary storage in the Storage Area Network, at BENDER's data centre. The functions of the new CRM were examined along with various system failure scenarios.

PC-WARE installed VMware Consolidated Backup as an additional backup system which allows for LAN-free data backup. The installation of SAP NetWeaver for SAP CRM 5.0 and Enterprise Portal 7.0 was conducted in close cooperation with the SAP system vendor itelligence AG, who also performed the customising.

BENDER is now the first customer to receive comprehensive support for productive SAP environments from both HP and VMware in a Windows environment. As an OEM partner of VMware, HP offers the advantage of receiving licenses, services and support from a single contact.

### Virtual makes more possible

Virtualisation is one of today's hottest trends – and will be for SAP users in the near future. The advantages are obvious. The process of virtualisation enables conventional server to "run" several virtual servers. Finally virtualisation makes it possible to use available resources far more efficiently. In addition, it is much easier to add extra virtual servers if required than to install or configure new

physical devices. Thereby response times for system adaptations are reduced to a minimum.

Prior to the SAP virtualisation, the IT department at BENDER had experience in using VMware GSX Server. One of PC-WARE's responsibilities during the project was to port the existing virtual machines from VMware GSX Server to VMware VI 3.0.2.

### Teamwork plus expertise equals outstanding results

The HP SAP Competence Centre has conducted the VMware certification process for SAP systems since mid-2007. SAP created two support service components (queues) for VMware to guarantee the trouble-free VMware support for all SAP customers in the future. SAP employees can submit customer reports of suspected VMware errors which are monitored by a VMware employee at SAP. Potential problems are handled and integrated in the support process at VMware to find solutions. In the end, SAP customers benefit from comprehensive support in virtual environments.

Engineer Stefan Ehrhardt, Manager Storage and Hosting Solutions at PC-WARE: "We are proud to have been the first in Germany to implement such an innovative project for BENDER Group together with our partners HP and VMware."

#### INDUSTRY

Electrical Engineering

#### SOLUTION

SAP CRM 2005 and SAP Enterprise Portal 7.0 Virtualisation with design, sizing and implementation of VMware Virtual Infrastructure 3.0.2 on the basis of HP StorageWorks EVA 4100

#### SERVICES

Consulting and project management; Deployment and installation, testing, documentation

#### PRODUCTS

HP Server, HP Storage, VMware ESX Server, Windows 2003 64bit operating system

#### PARTNERS

VMware, Hewlett-Packard

2008

Preferred Partner

