

VHV gains premium performance with server consolidation.



Overview

■ The Challenge

Construction of an integrated system base for the secure and efficient operation of complex insurance applications and future e-business services; reduction of administrative effort and increase in performance and availability; platform and database migration for server consolidation and system harmonization

■ The Solution

*Application: mySAP® ERP
Hardware: IBM @server® zSeries®
Software: zLinux; z/OS®; z/VM®;
IBM WebSphere® Application Server
Services: IBM Global Services;
KPMG*

■ The Benefits

Greater security and availability through stable, high-performance server technology; greater flexibility and scalability thanks to Capacity on Demand; standardization, simplification, and higher performance of the application systems; extensive, consistent development portfolio for e-business and web services; quick and cost-effective capacity adjustment on demand in case of changes in the workload; higher quality of service for brokers, customers, and employees



The number of Intel® servers running under Microsoft® Windows NT® had increased to more than 150 in the last few years. File and print servers, servers for office and communication applications – new servers were always being installed. The business applications of the SAP solution were however also being handled on this platform. “An ever more complex landscape. Costs and administration were permanently on the rise. The network became increasingly difficult to manage - and this with the same IT team.” Peter Schadel, Director of IT Computer Center/Production at VHV Versicherungen, and his IT colleagues did not want to stand back and watch this go on any longer. So the IT team members sat down with experts from IBM and partner company becom, and sought, found and developed a new solution: ‘server consolidation based on the IBM @server zSeries under Linux’ is now their IT strategy. “The already apparent advantages of the new solution reinforce our feeling that we are ‘in good hands’ with IBM,” says Peter Schadel. He did not choose the phrase ‘in good hands’ by accident – at VHV Vereinigte Hannoversche Versicherung a.G. this has a special meaning.

In good hands with VHV.

This motto is a part of the company philosophy. Reliable, comprehensive insurance protection at a reasonable price. Quick and easy handling of claims. Individual consultation, custom-tailored offerings. Competent, quick information – all this is to ensure that customers feel they are ‘in good hands’ with VHV. And they do! The business results show it: No. 1 in the construction industry, No. 3 in the bonds trade, No. 5 in vehicle insurance, and, since the merger with Hannoversche Lebensversicherung in 2003, also No. 1 in direct sales of life insurance – this diversified specialty insurer occupies a strong position on the German insurance market. The company employs more than 2,700 people, manages 5.7 million contracts, and achieved a total premium volume of approximately 2 billion in 2002. Approximately 12,000 qualified agents cooperate with VHV and, together with the employees at headquarters, provide outstanding customer service in day-to-day business. Efficient, secure, and stable information and communication systems are a further key to success. Here, a new direction has now been set.

With Linux into the wide-open future.

The starting point was the requirement for a cost-effective, yet also failsafe, easy to administer and flexible operating system. Linux fulfills many of IT management’s requirements. Especially in times of tight budgets, acquisition and operating costs play an important role. As available open source software, Linux can be used without license expenditures. The source code is freely accessible. Thus the operating system can be modified, expanded and optimized as required. Studies have shown that Linux servers experience significantly fewer downtimes than NT servers. This stability reduces costs and increases efficiency.

Linux is highly scalable – additional servers can be integrated easily. Due to its reliability and flexibility, it is very well suited for infrastructure services, and also as an application server for the SAP solutions. However, all these arguments for Linux might not have convinced the people in charge of IT at VHV if there had not been something more: “A key decision factor for us was the commitment of IBM to Linux. This offers us the certainty that we are adopting future-oriented solutions,” says Peter Schadel.

High availability at its best:

IBM @server zSeries.

With the decision in favor of Linux, the way to server consolidation on the mainframe was clear. As many applications as possible were to be integrated into the high-performance, highly available and secure system environment of the zSeries. In the past, VHV had already relied on the IBM S/390® server architecture for its insurance applications. Now, in a first step the SAP solutions, which had previously been run on Intel servers, are also being moved onto the mainframe. Linux, the optimized architecture, and the excellent capacity of the zSeries make this

provides the capability, storage capacity and functionality that are necessary for growing volumes of transactions and data. Up to 30 logical partitions (LPARs) are supported on the z990, and the newest version of z/VM offers the ability to set up hundreds of virtual Linux servers quickly and administer them effectively. Linux and the zSeries complement each other ideally.

For VHV, system availability plays a decisive role. As a study showed, the insurance applications must be up and running perfectly again within six hours of a total system failure. "Otherwise the company could incur damages in the

More power – on demand.

The zSeries used at VHV have an individual processor capacity of 250 MIPS in the z900 and 450 MIPS in the z990. In the z900, five processors are available; in the z990 there are four. Is that enough? In normal operation, yes, but at peak times – at the beginning of January when bill transaction in the vehicle business occurs - things can get tight. For Peter Schadel and his team, however, this will be no problem! 'Capacity on Demand' is the name of the solution. What it means is that processor capacity on the z990 server can be released temporarily – on demand, for the time required. Fees are charged only for the capacity actually used. "The on-demand solution is ideal for us," says Peter Schadel. "There are no unnecessary hardware, operating, or maintenance costs; instead, we can 'buy' the additional power precisely when we need it."

SAP for 2700 users.

At VHV, there are currently eleven large production, test, and development systems running the SAP solutions. These systems cover the entire range of business applications (financial accounting, cost accounting, controlling, inventory management, etc.) and personnel. And the mySAP Business Intelligence solution is used for the finance sector. All 2700 employees have access to the SAP applications, if to varying extents: from power users who work with SAP daily, to casual users who use it e.g. to handle their travel expense invoices or book internal seminars. A self-developed portal providing easy access to the systems is available to all of them.

"With the migration of the SAP solutions to our new zSeries/Linux environment, we will reduce costs and achieve a significant improvement in performance," says Peter Schadel.



possible – and sensible. Peter Schadel is convinced: "Thus the SAP application environment also profits from the advantages of consolidation." Here, server consolidation means a lot more than just the grouping of 'boxes.' It involves the optimization and simplification of the entire IT infrastructure. Software and services are also part of the consolidation, as are system management methods that combine all components into a whole.

An IBM @server zSeries 900 and an IBM @server zSeries 990 are used at VHV. Especially the z990, the new flagship of the IBM @server family, with its innovative z/Architecture™

millions, not to mention the loss of image," remarks Peter Schadel. Now that a backup concept with mirrored disks, FICON connections between the storage systems and servers, and real-time exchange of production data between the two remote data center locations have been implemented, he feels much better. "We recently proved that the concept works by simulating a disaster situation," he says.

The high availability of the zSeries is unquestioned. Nevertheless, Schadel wants to continue the upgrading of the Storage Area Network (SAN) with new technology in order to achieve even greater security for all system components.

After all, data traffic between the server partitions is handled via internal high-speed connections – this means: memory speed rather than network speed in communication between application servers and database! The use of the DB2® information management software on the zSeries also has decisive advantages compared to the previous Oracle® solution: Schadel is convinced: "With the SAP solutions under Linux on zSeries, we have found a combination that is perfect for us." In the SAP environment, IBM DB2 delivers optimal performance - as has been proved. Furthermore, DB2 is already the strategic database software at VHV. Peter Schadel: "Our DB2 expertise is high and our experiences are positive. Therefore it is only logical and consistent that we should now also entrust the SAP solutions to this database."

IBM WebSphere: a gateway for all employees.

For VHV, the server consolidation provides the impetus to further standardize and simplify system access in the workplace. This means not just browser-oriented portal solutions and web services for VHV employees, but also access to the systems for brokers: via the Internet. An access to VHV was created especially for them - Makler-Extranet (broker extranet): VHV Max.Net – which provides a quick, direct access to the customer and inventory data they need, and simplifies the updating of this information. An integral component and the technological basis of these solutions is the IBM WebSphere Application Server. This application server forms the basis of the IBM WebSphere software platform, and offers developers a complete portfolio of programming tools, and the associated transaction management and security routines, for the highest capability of the programs. These web services, which today are still running on distributed NT servers, will 'tomorrow' be moved to the zSeries in order to make even better use of the advantages of server consolidation. Mr. Schadel looks to the future with confidence: "It's good to know that we can now develop at precisely the speed and to precisely the extent that our business requires. We have created the necessary technical basis."



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