



OMV moves into the next gear with IBM and SAP.

OMV AG, based in Vienna, is Austria's largest, quoted industrial company and with total turnover of over euro 7.74 billion and just under 5,700 employees one of Central and Eastern Europe's largest oil and gas groups.

OMV is involved in exploration and production projects worldwide, operates an efficient oil and gas supply system and has a comprehensive network of petrol stations across Central and Eastern Europe. Half of the production comes from Austria and the rest from Great Britain, Libya and Australia. Two refineries in Schwechat near Vienna and Burghausen in Bavaria work with a capacity of 270,000 bbl/d. The Schwechat refinery is one of the largest in Europe. OMV supplies gas to 90 per cent of Austria. The Viennese company operates a pipeline network that covers around 2,000 kilometres. Around one third of all Russian gas exports to Western Europe pass through the OMV network.

The company also holds an excellent market position in chemicals and plastics – the market leader for plant feeds in Austria and most neighbouring regions, second in the world for melamine (resin for floors, furniture, slabs etc.) and the global leader in geotextiles (fleeces for construction).

Dynamic markets – rapid reactions

OMV always had a powerful IT structure so it could react quickly to changing market conditions and new customer requirements. So as far back as 1988 the company chose to introduce SAP R/2, which even then with its functions and modules 'set the standard' for company-wide application software. Eight years later the migration to SAP R/3 was successfully completed and 1998 the S/390 was introduced.

Industry	Petroleum
Application	mySAP.com mySAP CRM SAP BW IS-OIL IS-Retail
Software	z/OS™ AIX® Linux® Tivoli Enterprise™
Hardware	IBM @server® zSeries™ IBM @server® pSeries™



“Linux on zSeries is a solution that gives us availability, reliability and scalability and at the same time is cost-effective and economic to run.”

Walter Rotter, IT-Manager, OMV



The decision about the hardware platform was much more difficult: OMV looked at UNIX®- and Windows®-based systems and compared them to a mainframe. The comparison even at that time demonstrated the strengths of the S/390® platform (now known as the IBM @server zSeries) in a productive SAP environment with high data volumes. When implementing SAP, the database server is the component that presents the greatest demands in terms of reliability, availability and performance and ultimately decides the scalability of the whole system. "The practical test demonstrated clearly that the zSeries is superior to its competitors," says Walter Rotter, IT manager at OMV.

Ultimate security: zSeries in Geoplex

In addition to the existing IBM S/390 server (9672 X37 with 480 MIPS) OMV has also been using a new IBM @server zSeries Model 900 (2064 103 with 680 MIPS) since last October. In addition to the three normal processors this server has two IFL (Integrated Facility for Linux) processors. The configuration is designed as a geographically dispersed parallel sysplex (Geoplex). The servers and memories are in separate locations and are connected to each other redundantly using an ICF (Integrated Coupling Facility) in order to ensure interruption-free operation even if faults occur. The changeover from one location to another occurs completely automatically. The parallel sysplex solution also permits linear scalability through the use of parallel database technologies in order to meet the growing requirements for system performance without changing the architecture. Two IBM RS/6000® SPs with 40 nodes and 20 AIX servers are also used as application servers for certain applications and are linked to the database servers via a gigabit Ethernet. Four disk sub-systems that undertake automatic data mirroring using the peer-to-peer copy function are used for storage. The snapshot function is used for back-up and cloning SAP R/3 systems so that OMV can secure all the data as quickly as possible. System management and workload scheduling tasks are completed using the IBM Tivoli Enterprise.

New performance push with Linux for zSeries

Until now OMV has operated around half of its 27 SAP systems under AIX on the RS/6000 SP. Why? Some applications

are older versions that are (still) best kept in this environment. It has also been advantageous to date for cost reasons to run certain SAP application server work processes (e.g. dialog) under AIX. But OMV's strategy is clear: consolidation onto zSeries.

They have already taken the next step: five OMV application systems are now run either in part or as a whole under Linux for zSeries. With this solution it is possible today to run all SAP work processes on the zSeries server and to utilise the complete bandwidth of the excellent zSeries architecture with all its performance and high availability. Several systems can run on one server under the z/OS operating system without difficulty. This brings with it substantial consolidation effects (lower CPU, memory and disk requirements), causes no additional costs and reduces the total cost of ownership.

mySAP.com on Linux

OMV's IT strategy is based on these advantages. All the new SAP solutions – including for example Customer Relationship Management (mySAP CRM) and Business Information Warehouse (SAP BW) – are introduced on Linux for zSeries. Walter Rotter says, "We are basing our growth systems exclusively on the new solution. And the others will be transferred slowly to this environment." Productive SAP solutions with Linux for zSeries have been stable and successful since spring 2002. They started with IS-Retail for the petrol station shops – a system that is extremely important for the OMV petrol station growth markets in Central and Eastern Europe. The dialog processes generated in batches in this system could be shortened from nine hours at night to around four hours. "But the time advantage is not the only decisive issue. What is more important is that at certain times we can use the resources that are being freed up for new applications without needing to invest in extra hardware."

Even in the largest OMV SAP system with around 2,500 names users and a database size of 350 GB the application servers are now run under Linux.

Initially they were set up purely as batch processes. Walter Rotter was impressed by the strong increase in performance. "The duration of our batch jobs in our large application system was shortened on average by 60 to 70 %."

For OMV the road to the future is paved with Linux and zSeries. Walter Rotter is convinced: "Our consolidation strategy has already brought us substantial advantages in terms of costs, performance, availability and scalability. With this solution in future we'll be able to move into the next gear."



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