

# Case Study

## MOL Group/SLOVNAFT

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Ádám Köteles, SAP Technical Team lead, MOL Group SAP implementation project



### The customer

MOL Group is a leading international integrated oil and gas company from Hungary with over 75 years of experience in its markets. In addition to its strong refinery and commercial position in central and eastern Europe, the company focuses increasingly on exploration and production assets. MOL Group has more than 30,000 employees worldwide. Reported net revenues for 2013 were US\$24.1 billion. MOL Group operates in 40 countries across Europe, the Middle East, Africa, and Asia.

SLOVNAFT is a refinery in Bratislava, Slovakia, with a processing capacity of up to six million tons per year. The core business is production, warehousing, wholesale, retail sales, and distribution. SLOVNAFT has the largest retail network in Slovakia, offering top-quality motor fuels and lubricants as well as customer services, including shops, gastro services, car washes, and more. In Slovakia, mineral oil processing began in 1895 with the foundation of the first refining facility, Apollo. Since 2004, SLOVNAFT has been an integral part of MOL Group. The refinery ranks among the top three in Europe.

### The challenge

Planning an all-new SAP infrastructure is not easy. Decision makers must take current needs and development plans into consideration. Because there is a good deal of uncertainty about the future, an infrastructure’s agility and adaptability must be high. At MOL Group, the IT management wanted to introduce a separate platform running on SAP ASE® for several group companies, starting with SLOVNAFT. One objective was to run the core SAP modules ERP, HR, SRM, CRM, and GRC with three systems each. The second objective was to migrate from Oracle® Financials to SAP and to move this system onto the new platform as well.

“A green field approach is exciting. You can choose from the latest technologies without any concerns. Our goal was to have a cost-effective solution that would deliver 24/7 uptime reliably, adapt to growing workloads easily, and require as little administration as possible,” says Ádám Köteles, SAP Technical Team lead at MOL Group SAP implementation project.

### The customer

Country: Hungary  
 Industry: Oil and gas  
 Website: [www.mol.hu](http://www.mol.hu)  
[www.slovnaft.sk](http://www.slovnaft.sk)



### The challenge

Build an all-new shared infrastructure for SAP® systems across two sites.

### The solution

Deploy Fujitsu and NetApp® solutions including application virtualization and SAP management through the Proactive Management System (PMS) from LNW-Soft.

### The benefit

- Leverage NetApp Snapshot™ technology for a tiered backup model and cloning
- Gain value and simplify by using the latest technologies
- Set to scale seamlessly
- Adapt to change on demand to increase the efficiency of running the SAP environment

### Products and services

- 1x FUJITSU Server PRIMERGY BX900 S2
- 2x NetApp FAS3250
- NetApp Snapshot Technology
- Cisco® Nexus® 3048 Switches
- SUSE Linux
- LNW-Soft Proactive Management System
- SAP Adaptive Server Enterprise
- SAP Business Suite with ERP, HR, SCM, CRM, GRC

### The solution

Careful market research resulted in an infrastructure solution featuring Fujitsu PRIMERGY blade servers, NetApp FAS3250 clustered storage, SUSE Linux®, and PMS and application virtualization from LNW-Soft. PMS helps to monitor and manage SAP landscapes and private clouds, automate workflows, and manage users. For comprehensive and compliant SAP operations it's also integrated with SAP NetWeaver® Landscape Virtualization Management software.

Based on these technologies and according to the SAP Adaptive Computing Concept, Fujitsu Hungary set up a complete, tested, and integrated two-data-center solution, from planning to hand-over. "The solution's failover and disaster recovery capabilities were clearly a winning argument. Fujitsu's solution offered very good price/performance," says Köteles.

The infrastructure needs to span two data centers in Budapest and Bratislava over 210 km and combine site access preferences with business continuity. To provide fast data access efficiently, each SAP system is hosted close to the majority of its users. SAP HR, for example, has its home on one site, whereas SAP ERP resides on the opposite site.

The SAP infrastructure foundation, however, has a symmetrical design at both sites, including powerful Fujitsu PRIMERGY servers and NetApp storage with switched data paths, communication via NFS, and nondisruptive storage operations through the NetApp clustered Data ONTAP® operating system. Thus, the team can easily apply SAP ASE server replication to deliver seamless access in case of disaster and support smooth operations.

### Data protection included

The integrated solution delivers a range of options through NetApp software features for SAP systems, including replication on the storage layer and Integrated Data Protection with fast, point-in-time backups. Within minutes or even seconds, NetApp Snapshot technology can protect an SAP environment or deliver system copies for development, test, training, and QA. "It was impressive to see NetApp software at work. Cloning 15 SAP systems was a matter of just 10 minutes," acknowledges Köteles.

The SAP team favors a tiered backup approach following daily, weekly, and monthly turns with a mix of disk-to-disk backup through NetApp Snapshot technology and disk-to-tape backup at each site. Tight integration with the application enables automated routines. Incremental backups save storage space and allow backup density as needed.

### The benefit

The move to an integrated platform combines best-in-class solutions within an innovative infrastructure. Shared resources, tiered backup, and native support of NFS increase efficiency. Seamless integration from storage and servers to LNW-Soft's PMS and a building block approach provide adaptability and agility. Whatever happens at the application and system management level is reflected on the hardware layer. This and the reliable monitoring and management tools help to run the infrastructure with minimal headcount.

### Ready for future growth

"Adaptability is a big topic for us. We need to make sure that we can add more users, capacity, and performance as needed and without risk or interruption," comments Köteles. "NetApp clustered Data ONTAP will be very helpful to support 24/7 SAP operations from daily business to maintenance."

Fujitsu engineers and MOL Group's team implemented and tested the infrastructure before they split it into its Budapest and Bratislava halves. Several SAP systems for production, dev/ test, and training are already up and running. However, there is still plenty to do from infrastructure fine-tuning to customizing SAP landscape design to training users to gain acceptance of the new ERP system quickly. The team plans to enable 1,700 users initially with another 300 to follow.

**"This SAP project is of major importance for our company. From what we have seen so far, I am confident that Fujitsu, NetApp, and LNW-Soft will deliver on their promises."**

*Ádám Köteles, SAP Technical Team lead, MOL Group SAP implementation project*

In collaboration with



NetApp

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