MAXIMA boosts retail operations efficiency with HPE and SAP

Drives higher SAP performance with HPE servers, storage and data protection

Objective
Streamline business processes and supply chain logistics to improve efficiency serving retail customers across 500 stores

Approach
Modernize business-critical SAP infrastructure with HPE Gen9 servers and HPE 3PAR StoreServ storage

IT Matters
• Accelerated nightly SAP batch processes dramatically
• Reduced cycle times to replenish merchandise at stores
• 3X faster backups and restores

Business Matters
• Ensured business continuity and data integrity with active-active data centers
• Enabled recovery of business operations within one hour in the event of a site loss
• Gained an IT infrastructure that will support business expansion for the next five years

Strengthening the SAP backbone

MAXIMA’s roots trace back to 1992 when a small group of enterprising students started a retail business to put food on store shelves in their home city of Vilnius, Lithuania. Today, MAXIMA has become the largest Lithuanian-based company in the Baltic States and an international enterprise that operates in five countries.

With more than 500 shopping centers, 64,000 products, and 4,300 suppliers from 60 countries around the world, MAXIMA requires a sophisticated technology platform to manage business operations. For that, the company relies on SAP as the backbone for everything from inventory management and pricing, to supply chain logistics, distribution, sales forecasting, and financial reporting. SAP simply must perform—without fail—to ensure happy customers and healthy business revenues.

Mažvydas Stundžia, MAXIMA’s chief information officer, remarks, “If SAP fails, customers might not find the bread and milk they need on store shelves. Or members of our loyalty program could miss promotions that would help them save money. SAP is of vital importance to our business.”
“Our business people want to make everything faster—delivery times, order generation, forecasts—which requires IT to promise more performance and efficiency to the business. With the SAP system improvements enabled by our latest HPE infrastructure, IT is now in a position to fulfill those promises.”

— Mažvydas Stundžia, Chief Information Officer, MAXIMA

Therefore, MAXIMA has long turned to Hewlett Packard Enterprise (HPE) as its trusted provider for the server and storage infrastructure running SAP. Traditionally, MAXIMA operated SAP out of a single data center for all five countries where it conducts business. But given the criticality of SAP, the company recognized the need for greater business continuity assurance in case a major system failure or natural disaster struck its primary data center.

With its existing HPE infrastructure approaching end of warranty, MAXIMA also saw the opportunity to modernize. This would provide the company with added performance and capacity to handle ongoing business growth, as well adopt resource-demanding SAP technologies such as HANA.

HPE proves to be the right choice for SAP

MAXIMA evaluated several major IT vendors, including IBM and Dell, before choosing HPE. Unlike the other competitors, HPE offered more than just hardware. HPE brought deep knowledge and experience with SAP, and was able to advise MAXIMA on an optimal infrastructure design to get the most out of its SAP environment, including HANA. After a two-day workshop in HPE’s SAP competency center, followed by a proof-of-concept to validate the benefits HANA could deliver on the right architecture, MAXIMA was convinced.

“HPE’s expertise in SAP was very important in our decision,” says Mažvydas. “We operate a highly complex SAP environment so it was critical that the vendor could not only provide an infrastructure capable of running SAP, but also had people knowledgeable in SAP who could help us architect a complete solution. Considering technology, architecture expertise, and SAP knowledge, HPE was the best choice for us.”

HPE developed a new architecture for MAXIMA, which includes two active-active data centers to ensure continuous availability of SAP if the main site goes down. At the infrastructure level, MAXIMA replaced legacy HPE servers running UNIX with the latest HPE ProLiant Gen9 servers and a Linux operating environment. In addition, MAXIMA upgraded its legacy HPE XP storage to the latest HPE 3PAR StoreServ storage for its superior performance, density, and capacity. MAXIMA engaged HPE Technology Services for Installation and Deployment Services.
Specifically, the new infrastructure includes an SAP HANA Tailored Data Center Integration (TDI) implementation, with HPE ProLiant BL460 Gen9 Server Blades running SAP Forecasting and Replenishment (F&R). This included a migration of F&R from Oracle to SAN HANA. The infrastructure also provides HPE ProLiant DL580 Gen9 Servers to run SAP Enterprise Resource Planning (ERP) and HPE ProLiant BL460 Gen9 Server Blades to run SAP NetWeaver Process Integration (PI), both supported by Oracle databases.

In addition, MAXIMA relies on HPE 3PAR StoreServ 8400 for production storage, supporting both Oracle and SAP HANA. To protect Oracle and SAP HANA data, MAXIMA uses HPE StoreOnce 4500 System and HPE StoreOnce Catalyst software, along with HPE StoreEver MSL6480 Tape Library. MAXIMA uses HPE OneView to centrally manage the infrastructure, which is backed by HPE Technology Services Support for BladeSystem and 3PAR Storage.

“We’ve been using HPE BladeSystem for years to run SAP applications and our other virtualized systems,” notes Mažvydas. “HPE BladeSystem has demonstrated excellent performance and reliability for a reasonable price, so it was a natural choice to continue with the Gen9 servers. HPE could also provide a complete solution with the latest storage technology. We considered competitive storage, but none could offer a platform as fully developed as HPE as part of a full solution stack.”

**Higher performance streamlines retail operations**

Since adopting the new HPE infrastructure, MAXIMA has improved SAP performance dramatically, affecting everything from overnight batch processing of store orders to real-time inventory monitoring and accelerated merchandise distribution. For example, the time to generate an inventory report and move merchandise from the distribution center to the stores has been reduced substantially.

“Our business people are focused on streamlining the supply chain and accelerating order processing,” notes Mažvydas. “They want to make everything faster—delivery times, order generation, forecasts—which requires IT to promise more performance and efficiency to the business. With the SAP system improvements enabled by our latest HPE infrastructure, IT is now in a position to fulfill those promises.”

Moving from Oracle to HANA on the HPE infrastructure also added to improved performance for the SAP F&R application. “With Oracle, to have optimal F&R performance, it was very important to carry out statistics updates of certain tables at precisely the right time,” Mažvydas explains. “Sometimes we had to use locked statistics and other similar methods to achieve the correct execution plan. With HANA we do not have any database performance optimization issues at all.”
Customer at a glance

Application
- SAP Enterprise Resource Planning (ERP), SAP NetWeaver Process Integration (PI), SAP Forecasting and Replenishment (F&R)

Hardware
- HPE ProLiant DL580 Gen9 Servers
- HPE ProLiant BL460 Gen9 Server Blades
- HPE 3PAR StoreServ 8400 Storage
- HPE StoreOnce 4500 System
- HPE StoreEver MSL6480 Tape Library

Software
- Red Hat Enterprise Linux 7 and Red Hat Enterprise Linux 6
- HPE OneView
- HPE StoreOnce Catalyst
- HPE Data Protector
- SAP HANA
- Oracle Database

Services
- HPE Technology Services Installation and Deployment Services
- HPE Technology Services Support for BladeSystem and 3PAR Storage

Assured business continuity

With active-active data centers and a highly reliable data protection infrastructure from HPE, MAXIMA is also assured of maintaining business continuity and data integrity.

Mažvydas Stundžia points out, “With HPE, we have reduced potential downtime to a minimum. If a disaster struck our primary data center, it would take us no more than one hour to be back up and operational.”

On a day-to-day basis, data backup and recovery is also much faster with HPE StoreOnce 4500 System, which ensures valuable business data is properly protected and helps keep the business productive.

“We chose StoreOnce as we needed a faster backup solution than we had before,” Mažvydas advises. “The disk-based backup appliance is three times faster for both backup and recovery compared to our previous HPE StorageWorks solution. For longer-term archives, StoreEver is the perfect complementary solution as tape is still the most economical media for long retention times.”

As MAXIMA continues to grow and expand operations into new markets, Mažvydas is confident that the HPE infrastructure will stand up to increased SAP workloads. “We designed the HPE infrastructure to support our projected business needs for the next five years,” he says. “It provides the performance and scalability to cope with more stores, more users, and more data. We have worked with HPE for a long time and trust their ability to support our needs well into the future.”

Learn more at hpe.com