

HP customer case study: Cost-effective new technology supports ambitious business expansion

Industry: Confectionery manufacturing

New HP infrastructure cuts operating costs by 30 per cent at KRAŠ



“By eliminating the expensive support of past generation hardware, our new HP server environment has enabled us to achieve an approximate 30 per cent annual savings in operating costs. The new SAN has also decreased backup and restore times by about 50 per cent, which gives us more room to manoeuvre in case of a disaster.”
Nikola Svenda, IT director, KRAŠ

Objective:

Leading Eastern-European confectionery manufacturer KRAŠ wanted to decrease operational costs and increase business efficiency through the implementation of new technology.

Approach:

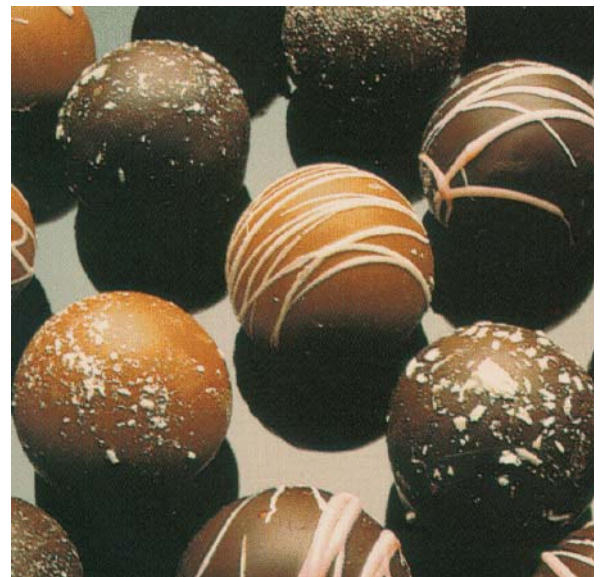
- KRAŠ engaged with HP to replace its ageing PA-RISC servers with higher performing, less costly technology.
- With leases running out on its existing hardware, it also implemented new HP storage and backup solutions.
- Migration specialist ECS was called in to achieve a smooth implementation.

IT improvements:

- With a two-fold increase in Storage Area Network (SAN) throughput, backup and restore times have decreased by 50 per cent and disk space has been optimised by the use of Fibre Channel (FC) and Fibre Attached Technology Adapted (FATA) disks.
- KRAŠ now has more room to manoeuvre in case of an IT disaster.
- The new infrastructure has no single point of failure.
- Use of HP BladeSystem technology and HP migration software supports ongoing cyclical hardware replacement.
- Use of technologically advanced equipment enables better monitoring and management.

Business benefits:

- Operational costs have been reduced by approximately 30 per cent.
- IT personnel can be reduced because of easier management.
- The faster and more powerful infrastructure improves business efficiency by delivering high data availability, better stability and more streamlined administration.



Zagreb-based KRAŠ has become the largest manufacturer of confectionery products in South-Eastern Europe with a wide product range that includes leading brands of chocolates, biscuits and crisps.

With 2,100 employees, KRAŠ has eight subsidiaries both in Croatia and abroad and exports approximately 33 per cent of its production, worth €33 million a year.

To support strong expansion strategies, KRAŠ constantly invests in new capital projects and its IT environment is no exception. Recently it decided to replace its ageing PA-RISC servers with more performant, less costly technology. It also needed to replace its central storage system, for which the lease was running out.

Cost saving

Serving 600 users and mainly situated at the KRAŠ headquarters in Zagreb, Croatia, the old environment included one small 32-bit Intel® server, ten HP ProLiant p-Class HP server blades and one entry-class HP Integrity server with a 64-bit Windows 2003 platform dedicated to hosting Microsoft SQL 2000 Server. Two PA-RISC machines were clustered and ran the Enterprise

Customer solution at a glance

Primary applications

- File and print, ERP and IT management applications
- Oracle Database

Primary hardware

- HP BladeSystem c7000 enclosure
- 8 x HP ProLiant BL460c G1 server blades with Quad-Core Intel® Xeon® processors
- 2 x HP Integrity rx3600 servers with Dual-Core Intel® Itanium® 2 processors
- HP StorageWorks Enterprise Virtual Array EVA4000 disc array
- HP StorageWorks MSL3000 tape library
- Brocade network switches

Primary software

- HP-UX operating system
- HP Serviceguard
- Microsoft Exchange and SQL Server
- Cognos Business Intelligence
- HP Data Protector
- HP ProLiant Essentials Server Migration Pack - Physical to ProLiant (P2P) and Physical to Virtual (P2V)

HP Services

- Design consultation services
- Implementation and comprehensive SAN migration consultancy
- 24x7 on-site support for all hardware with four hour call to repair

Oracle relational database. The servers had access to high capacity external storage through a Storage Area Network (SAN).

“The old environment was purchased on a three-year leasing contract and part of the equipment was more than five years-old,” says Nikola Svenda, IT director for KRAŠ. “Our main reasons for wanting a change were to decrease operating costs and to update the technology. Additional benefits were the consolidation of the server infrastructure, preparation of the infrastructure for easier ongoing three-year replacement and a decrease in energy costs.”

Since KRAŠ is traditionally an HP partner, it did not consider any other vendors for the new solution. Minimal downtime and a seamless migration were major requirements and were achieved to planned timescales by leading Croatian system integrator ECS which carried out all implementation with the exception of the SAN, which was installed and integrated by HP. Efficient and speedy migration was achieved with HP ProLiant Essentials Server Migration Pack - Physical to ProLiant Edition (P2P) software. Downtime was measured in minutes and scheduled to have no effect on the business.

Increased capacity

The upgraded environment is based on HP ProLiant BL460c G1 server blades with Quad-Core Intel® Xeon® processors. HP server blades are used both alone and clustered, and are connected over Local Area Network (LAN) and SAN via a virtual connect module.

Aggregate network connections are used to achieve load balancing and fault tolerance. The old PA-RISC machines were replaced with HP Integrity rx3600 servers with Dual-Core Intel® Itanium® 2 processors, connected in a cluster running HP-UX operating system and protected by HP Serviceguard.

These next-generation HP Integrity rx3600 servers were ideal in helping KRAŠ meet its goal of reducing operating costs because they delivered expanded computing capabilities while at the same time provided a high return on investment through flexible capacity, secured availability and simplified management. Another feature of these Integrity servers that attracted KRAŠ was their excellent performance in clustered environments.

To increase online storage, an older HP StorageWorks Enterprise Virtual Array EVA3000 was replaced by a new EVA4000 storage array. Likewise, KRAŠ increased tape capacity by replacing an old HP StorageWorks MSL6000 tape library with a new MSL3000. To further

increase through-put, KRAŠ has also implemented new, fast Ultrium 2 recording technology and new 4Gb Brocade SAN switches.

As part of the project, thought was also given to the company's longer term aim of cyclical replacement of equipment. It was decided that implementing blade technology in conjunction with P2P and P2V (Physical to Virtual) migration tools would give KRAŠ the greatest flexibility and the maximum decrease in network downtime during future migration phases.

The applications running on the new servers include Exchange, SQL Server, Oracle Database, Cognos Business Intelligence and clustered network services for file and print share, Windows Internet Services and DHCP (Dynamic Host Configuration Protocol). They are critical to the work of all 600 users so high availability is vital.

Fault tolerance

“The new HP StorageWorks EVA4000 satisfies our requirements for a fault tolerant storage solution,” adds Svenda. “Furthermore, the MSL3000 and servers connected in a completely redundant SAN infrastructure, ensure a bullet-proof environment for KRAŠ. As a logical progression of this comprehensive solution, the use of HP Data Protector software secures a quick, reliable and integrated system for backup and restore purposes.

“By upgrading our environment with HP components, we have maintained our high level of availability but at the same time, manageability has increased which means savings on personnel costs. We have achieved a completely new, faster and more powerful infrastructure with which we can respond to the needs of the business more efficiently, with greater flexibility and more control. We have decreased operating costs while at the same time retaining or increasing the availability of individual services. In addition, with the new server system, we have optimised the use of disk space through the usage of a combination of Fibre Channel (FC) and Fibre Attached Technology Adapted (FATA) disks. We have also increased SAN throughput two-fold, retaining complete redundancy which means that we no longer have any single point of failure.

“We believe that through the use of technologically advanced equipment from HP, through better management and the ability to improve the monitoring of the system, we have achieved all our aims which were directed at lowering costs, improving efficiency, stability and administration while at the same time not decreasing availability,” concludes Svenda.

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