

# Bankart credits HP blade-storage virtualization solution with ensuring business continuity



"HP ProLiant Blade servers and HP StorageWorks virtualized systems provide best-in-class, all-around solutions that work optimally together. This enables Bankart to serve our customers consistently."

– IT Manager Gregor Pirc, Bankart d.o.o.

**Business need:**

Bankart d.o.o. supplies credit-card and ATM processing services in Slovenia, and must comply with certain government and financial industry regulations regarding customer reference data. The latest requirement is that Bankart must obtain a license from the National Bank of Slovenia to exchange data about banking transactions. To receive the license, Bankart needed to establish a secure disaster-recovery site and suitable systems for business continuity and information lifecycle management (ILM). The firm also faced two other hurdles: how to lower IT costs and become more efficient with less staff.

**Solution overview:**

HP Services recommended storage consolidation on an HP data virtualization solution – the HP StorageWorks Enterprise Virtual Array 5000 (EVA5000) – and server consolidation to the HP ProLiant Blade servers (models BL20p G2 and BL40p G2). HP virtualization technology allows the pooling and sharing of IT resources across applications and processes to optimize utilization. The technology enables an Adaptive Enterprise that is flexible enough to respond rapidly to business changes. To aid its compliance with laws governing data recovery and retention, Bankart uses HP StorageWorks Continuous Access EVA replication software.



**Charging up HP Information Lifecycle Management (ILM) with a virtualization solution**

Based in Ljubljana, Slovenia, Bankart is the leader of three major players in the Slovenia credit-card market. Bankart processes cards for at least 15 banks, and issued 134,765 active Eurocards as of year-end 2003.

Besides needing a license to conduct credit-clearing processes, Bankart (and its competitors) must operate their computing networks according to the chip-based EMV (Europay MasterCard Visa) payment-process standard by January 1, 2005. In addition, the Slovenia government regulates data retention and customer privacy. These laws necessitate adaptive, resilient, high-performance storage systems and servers.

HP Services consulted with Bankart about requirements to fulfill its disaster-recovery objectives. To meet these goals and lay a foundation for the company to implement future ILM strategies, HP Services configured two EVA5000 systems into storage area networks (SANs), which support Bankart's MasterCard and private local card-management systems at its primary and disaster-recovery site.

"HP Services implemented our HP StorageWorks Enterprise Virtual Array 5000 systems expertly," says Bankart's IT Manager Gregor Pirc. "HP also provided a business-continuity assessment and backup strategy workshops. These services were very valuable to our organization."

Bankart's Chief Executive Officer Aleksander Kurtevski concurs: "The most appreciated contribution from HP was the consulting role they played in the project of implementing our business continuity. HP Services professionals provided the methodology used to implement business-continuity plans and suggested the





best possible uses of our current and new infrastructure. They significantly contributed to achieving our goals, which are to offer our customers better service, comply with regulations and industry standards, and at the same time optimize our costs."

Pirc and his staff listed excellent availability, management, control, and utilization among their storage requirements. After considering options from HP, EMC, and IBM, Bankart's IT team tapped HP for a virtualized storage system. They believed that the EVA5000 would be an excellent addition to Bankart's infrastructure because they already enjoyed success with HP storage technology. For several years, the IT staff used a Modular Array 8000 (MA8000) and were very satisfied with the system.

"We did not have very good experience with the services provided by another vendor for the storage system we previously owned," Pirc explains. "Yet we have enjoyed success with HP storage arrays, and we have gained a solid return on our investment. We have been an HP-oriented customer for 10 years, and know what to expect from HP. In fact, the HP NonStop architecture is the most common platform for our ATM and POS networks. The platform is quite stable and reliable, which is a vital requirement in our business."

Two HP Carrier-Grade Servers rp5470-4 and rp5430-4 running the HP-UX 11i operating system and Oracle8i database connect to the primary, 10 TB StorageWorks EVA5000. HP Services installed a second 3 TB EVA5000 in the company's disaster-recovery center. It ran in test mode, then went live in September 2004. Bankart also is testing a new credit clearing/settlement service on the EVA5000, which connects to HP ProLiant Blade servers running the Microsoft® Windows® 2003 operating system.

**Gaining from HP storage technology**

The EVA5000, in conjunction with the HP OpenView Storage Management Appliance, gives Bankart's IT staff the flexibility to reconfigure storage at will. A staffer spends about 5 hours weekly managing the EVA5000 systems versus 10 hours a week managing the previous storage environment. "The HP OpenView Storage Management Appliance saves time, reduces unnecessary mistakes, and definitely improves efficiency," Pirc emphasizes. "Normally, our system administrator has to do little to the EVA5000 systems – and he is managing 45 percent more storage now."

Additionally, Bankart is realizing newfound efficiency. According to Pirc, HP's virtualization technology:

- reduces application downtime when conducting maintenance
- enables consolidation and integration with other devices
- makes it simple to manage and maintain storage
- increases storage utilization
- provides data replication across heterogeneous devices

"Thanks to the HP StorageWorks Enterprise Virtual Array 5000, our staff is gaining back 20 percent of the time they used to spend on storage-management chores," says Pirc. "Being able to control our storage resources puts us in a better position to accommodate business workload or market changes. We also will reduce support contract expenses for individual servers and other storage devices."

The staff plans to use the virtual snapclone technology of the EVA5000 to streamline backups. "We can also use snapshots to improve disk-utilization efficiency during

local replication operations," adds Pirc. "HP's use of industry-standard interfaces on the StorageWorks EVA5000 solutions make them ideal to use with third-party products." Bankart backs up the EVA5000 with a StorageTek library running Veritas software.

"The most appreciated contribution from HP was the consulting role they played in the project of implementing our business continuity. HP Services professionals provided the methodology used to implement business-continuity plans and suggested the best possible uses of our current and new infrastructure. They significantly contributed to achieving our goals, which are to offer our customers better service, comply with regulations and industry standards, and at the same time optimize our costs."

– Chief Executive Officer Aleksander Kurtevski, Bankart d.o.o.

Bankart also chose HP StorageWorks Continuous Access EVA – host-independent software, which ensures that data stays current should systems at the primary location fail. A controller-based application, Continuous Access performs real-time replication between Bankart's HP EVA5000 systems. The software provides fast application recovery – with minimal or no transaction loss – and creates disaster-tolerant copies, thereby increasing the availability of customer credit data.

"We can't afford to be down even for a few hours," Pirc says. "With HP storage software, we are strengthening services to our customers."

#### **Unifying assets to lower overall TCO**

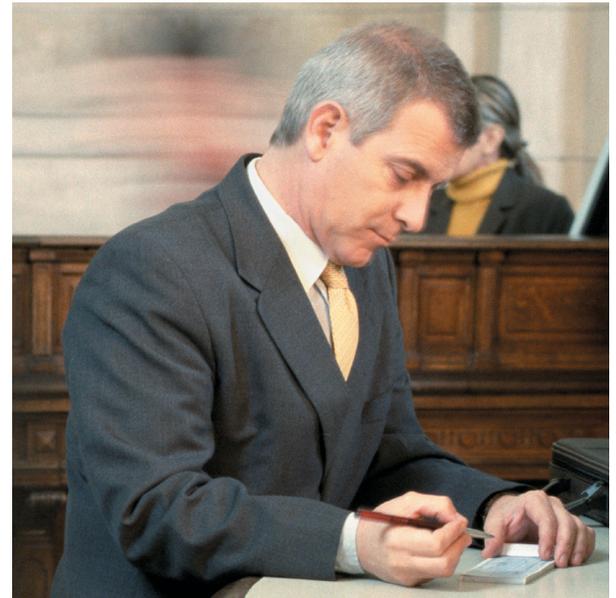
Before purchasing HP ProLiant Blade servers for its clearing service, Bankart, with HP Services' assistance, engaged in a total-cost-of-ownership (TCO) calculation. The staff saw that the power-efficient ProLiant Blade servers would reduce data-center electricity and cooling requirements – saving more than \$13,000 (SIT 2.6 million) annually.

Consequently, Bankart can reduce the amount of physical real estate – possibly avoiding data-center costs and freeing up space for other purposes. The small footprint of

ProLiant Blades makes it all possible. For example, instead of the four 42U racks, HP Services suggested a blade configuration providing robust performance and fitting one 42U rack. Additionally, by deploying ProLiant Blades, Bankart can save nearly \$65,000 (SIT 12.7 million) in initial purchase, lease, installation, and technical support costs.

"These HP ProLiant Blade TCO numbers are impressive," says Pirc. "We also discovered that configurations and recovery would be quick and easy using the ProLiant Essentials Rapid Deployment Pack with ProLiant Blade systems."

Through a SAN implementation with the ProLiant Blade servers (model BL20p G2), Bankart can improve system availability, scale capacity easily, and consolidate disk resources. Pirc concludes: "We plan to migrate everything possible to HP ProLiant Blade systems, because the overall total cost of ownership is low, and we get equal amounts of performance as rack-mounted machines. HP ProLiant Blade servers and HP StorageWorks virtualized systems provide best-in-class, all-around solutions that work together optimally."



#### **About Bankart d.o.o.**

Based in Ljubljana, Slovenia, Bankart d.o.o. ([www.bankart.si](http://www.bankart.si)) supplies credit-card and ATM processing services, along with point-of-sale (POS) terminals to banks, financial institutions, and non-banking organizations in Slovenia. Bankart processes cards for at least 15 banks, and provides its users with data for effecting credit-card and debit-card payments.

# Bankart credits HP blade-storage virtualization solution with ensuring business continuity

## Challenge

- Comply with government and financial industry regulations regarding customer-reference data
- Implement a disaster-recovery site and business-continuity strategies
- Lower IT costs
- Become more efficient with less people
- Establish a foundation for information lifecycle management (ILM) strategies

## Solution

### Hardware

- 2 HP StorageWorks Enterprise Virtual Array 5000 (EVA5000) systems
- 30 HP ProLiant servers, including models DL380 and DL560
- 2 HP ProLiant Blade Server BL20p G2 systems
- 2 HP Carrier-Grade Servers rp5470-4 and rp5430-4
- 1 HP AlphaServer system 800
- 2 HP NonStop servers S7604 and S7404
- HP OpenView Storage Management Appliance
- StorageTek tape library from Storage Technology Corporation

### Software

- HP OpenView Storage Management Appliance software
- HP StorageWorks Continuous Access EVA
- HP-UX 11i operating system
- Microsoft Windows 2003 operating system
- Microsoft Cluster Services (MSCS)
- Oracle8i database
- Veritas backup software

### HP Services

- Consulting and integration
- Implementation
- Business-continuity consultation
- Backup strategy workshops
- HP Care Pack services – 24x7 4-hour response

## Results

- The HP solution helps ensure Bankart's compliance with government and industry regulations concerning customer reference data, data retention, and customer privacy.
- HP storage-virtualization technology and replication software provide superior disaster-recovery capabilities, comprehensive scalability, and rock-solid security.
- The HP ProLiant Blade architecture will deliver estimated savings of more than \$13,000 in annual power and cooling costs, and nearly \$65,000 in initial purchase, lease, installation, and technical support costs.
- By virtualizing data and consolidating storage on a centralized HP SAN with ProLiant Blade servers, the IT staff eases deployment and management and can leverage resources based on business priorities.
- The HP StorageWorks Enterprise Virtual Array 5000 saves 20 percent in storage management time, reduces errors, and improves efficiency (one person now manages 45 percent more storage).
- HP StorageWorks arrays and software provide a platform for future Bankart ILM strategies to ensure document retention, data archiving, and customer privacy.

For more information on how working with HP can benefit you, contact your local HP representative, or visit us at [www.hp.com](http://www.hp.com).

© Copyright 2004 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft and Windows are trademarks of Microsoft Corporation. Oracle is a trademark of Oracle Corporation.

5982-8615EN, 10/2004

