

“ Hitachi Unified Storage VM has enabled us to increase critical banking application stability and performance, and at the same time lower TCO. Virtualization farms provide adequate performance and work downtime-free thanks to guaranteed 100% availability.”

Ladislav LÁLA
Head of Enterprise Platforms
Česká spořitelna



ECONOMICS DISCOVER INNOVATION
CHANGE INTELLIGENT TECHNOLOGIES
SPECIAL INFRASTRUCTURE INTEGRATION

Hitachi Virtualization Solutions Bring Česká spořitelna 100% Data Availability, Excellent Performance and Significant Cost Reduction

Need: Aging infrastructure no longer met demanding banking requirements, and costs were excessively high.

Solution: Consolidate to a flash-based solution with lower operational cost and faster performance.

Outcomes: Achieved significantly reduced costs, maximized capacity and increased performance and speed.

The Need

Česká spořitelna was established in 1825 as a first savings institution in the territory of the Czech Republic. It is the biggest bank in the Czech Republic with more than 5 million clients, including citizens, small and medium-sized businesses (SMBs) and municipalities. The bank therefore processes large quantities of clients' sensitive data every day. So it needs a fast as well as an extremely reliable solution.

The bank's older midrange and enterprise storage systems did not meet the demanding banking requirements, and their total cost of ownership (TCO) was excessively high. Česká spořitelna decided to deploy an entirely new, modern data storage platform. The bank would migrate data from the aging storage systems to the new platform. Migration to an existing centralized

high-class platform was out of the question because the related costs would be excessively high.

The bank faced a challenging task: It had to find a new data storage platform. The platform would need to have low TCO and preserve maximum data availability, to support a high standard of provided services and technologies necessary for critical banking applications. At the same time, Česká spořitelna decided to migrate its virtualization farms, with high demands on capacity and response times, to the new storage.

By deploying the latest technologies, the bank aimed at lowering its TCO as well as dramatically reducing its energy consumption and ecological footprint. The solution thus had to be fast, efficient and environmentally friendly.



Česká spořitelna

INDUSTRY

Banking

SOLUTION

Enterprise, Flash

HARDWARE

Hitachi Unified Storage VM, Hitachi Accelerated Flash

SOFTWARE

Hitachi Tuning Manager, Hitachi Command Director, Hitachi Storage Cluster, Hitachi Dynamic Provisioning, Hitachi Dynamic Tiering

Outcomes

- Hitachi provisioning and tiering technologies increased storage capacity by up to 40%.
- Solution reduced data storage costs by 75% and ensured 100% reliability.
- Automation and efficiencies of Hitachi Command Suite eased and improved management.

In addition to high performance and guaranteed availability, the bank demanded easy monitoring and reporting. The storage solution had to incorporate high-quality hardware as well as state-of-the-art software intended to monitor storage key features, and enable timely response to nonstandard situations.

The bank aimed at finding a solution that would meet the requirements typical for cutting-edge block storage, but for a much lower price. Hitachi Unified Storage VM was the only solution that met such demanding requirements.

The Solution

After listing very demanding performance and availability requirements, the bank asked a large number of enterprise storage vendors for a quote. Hitachi Unified Storage VM from Hitachi Data Systems was an undisputed winner. It was the only solution that met the bank's requirements and provided a unique combination of high performance, cost-effective capacity and cutting-edge technologies.

Because Česká spořitelna deployed Hitachi Unified Storage VM on two mirrored locations, Hitachi guaranteed 100% data availability. Thanks to our innovative Hitachi Accelerated Flash modules, with four times the performance of solid-state disks (SSDs) and dramatically lower response times, the storage system offers fast response.

"First, we moved the entire VMware virtualization farm, Microsoft® SQL Server® database farm and almost entire [Microsoft] Windows® platform to the new platform. As soon as the platform proved its abilities, we immediately migrated the critical finance market applications and Citrix profile management, which hadn't been efficient enough on the old platform," says Head of Česká spořitelna SAN and Storage Services Roman Chalupa.

Because the solution offers a unique combination of extreme power and adequate capacity, the bank also uses it as an external data pool for the central database farm and for the UNIX platform. And in this case it performs excellently.

Hitachi Command Suite takes care of the management and control of the entire solution. This application pack includes tools that the administrators need to secure reliable storage system operation and complex management. The task automation both raises the solution reliability and lowers TCO and management complexity.

The Outcomes

Thanks to the new solution, Česká spořitelna accomplished its primary aim to optimize costs, and simultaneously maintained high availability levels and high standards for the services it provides. In addition to realizing substantial reduction of TCO, Česká spořitelna managed to cut data storage costs by 75%.

The owners of the bank applications that are run in the virtual environment shared very positive feedback towards Hitachi Unified Storage VM. Virtualization farms enjoy faster speeds, better performance and larger disk storage capacity, and thus the applications run faster. Last, but not least, the bank also appreciates the 100% data availability guarantee and the resulting minimization of application downtime.

At the same time, Hitachi Dynamic Provisioning, Hitachi Dynamic Tiering and other cutting-edge technologies increase storage capacity by up to 40%. When the bank needs to enlarge the capacity in the future, HUS VM has an online upgrade feature. So the capacity can be enlarged, downtime-free. Moreover, the unique Hitachi nondisruptive data migration significantly streamlines migration to new hardware, which runs very easily online.

Virtualization of external disk systems enables easy migration. The bank uses this technology to migrate data from the old disk system, which is virtualized and then migrated to the new Hitachi solution. The whole process is automatic and offers timesavings of up to 90% over standard migration times.

With Hitachi Command Suite, Česká spořitelna has made a leap in storage system management automation. Hitachi Command Suite can automatically move data among individual storage system tiers and optimize their usage.

"Thanks to the easy management, we can deploy the technologies that we didn't previously use with the enterprise arrays due to their complexity. We implement multipath drivers with central console and monitoring, Replication Manager for central graphic clone management and mirroring, and many other technologies," says Chalupa.

Hitachi Accelerated Flash has not only met the Česká spořitelna's requirements, but also surpassed them in the terms of performance and reliability. Thanks to HDS, the costs of 1TB of storage space has decreased by 75%, and with a 100% availability guarantee the bank needn't worry about critical banking application downtime.

About HDS

Hitachi Data Systems innovates technology for business and social prosperity. Our IT solutions and services drive strategic management and analysis of the world's data. Ask us how we can help you get started.
HDS.com



For more information about Hitachi Accelerated Flash scan this QR code.

@Hitachi Data Systems

Corporate Headquarters
2845 Lafayette Street
Santa Clara, CA 95050-2639 USA
www.HDS.com community.HDS.com

Regional Contact Information
Americas: +1 866 374 5822 or info@hds.com
Europe, Middle East and Africa: +44 (0) 1753 618000 or info.emea@hds.com
Asia Pacific: +852 3189 7900 or hds.marketing.apac@hds.com

