

Telekom Slovenia Group calls upon IBM XIV for dynamic business growth

Protects revenues and drives new services with high-performing virtualized storage

Overview

The need

Telekom Slovenia Group needed a high-performance, high-capacity storage solution to support new revenue-assurance and anti-fraud applications. Easy management and energy efficiency were key criteria.

The solution

Deployed two full IBM® XIV® Storage Systems, asynchronously mirrored over a 140-km distance, supporting Sun Solaris systems and more than 400 VMware virtual machines.

The benefit

Ultra-high I/O supports demanding new systems; rapid thin-provisioning serves internal demands; easy management cuts costs; built-in asynchronous mirroring provides cost-effective business continuity.

Headquartered in Ljubljana, Slovenia, Telekom Slovenia Group is a major regional telecommunications provider, made up of multiple subsidiaries and offering fixed-line, mobile, data and IPTV solutions to consumers and businesses across Slovenia, Croatia, Kosovo, Bosnia and Herzegovina, the Republic of Macedonia, and Gibraltar. The company has an extremely advanced digital network, and its customers are keen adopters of new technology - for example, 60 percent of the Slovenian population uses its Internet TV service. Telekom Slovenia Group employs over 4800.

To be able to continue investing in innovation even as the global economy was contracting, Telekom Slovenia Group needed urgently to cut its revenue loss from billing errors and fraud. To this end, the company purchased two applications: Subex Moneta for revenue assurance and Subex Nikira for fraud management. The new software created a requirement for extremely robust and high-performance storage.

Explains Domen Rakovec, CIO of Telekom Slovenia Group: "For a telecommunications company, the most important IT system is billing; it must be available 100 percent of the time. The Subex systems are like running a second billing system in parallel - we needed high capacity and a very high volume of I/O per second." Telekom Slovenia Group sought an enabling data storage platform that would meet its new performance and rapid capacity growth requirements while being manageable enough to avoid adding IT headcount, and efficient enough to avoid overstressing energy demands at its data centers.



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—Domen Rakovec, CIO,
Telekom Slovenia Group

Dragoslav Radin, Head of IT Infrastructure Services, says: “We chose the IBM XIV Storage System as the best-of-breed solution that gave us exactly what we needed in terms of stability, reliability and performance. In addition to the technical superiority of its design, the XIV system offers extremely easy management and fabulously low power consumption per terabyte.”

Dramatic time saver

Telekom Slovenia Group installed two full IBM XIV Storage Systems, discovering immediately the system’s advantageous speed and ease of management.

“The XIV systems gave us the high performance we needed to run the new revenue-assurance solutions - and these are providing major financial benefits by identifying missed and incorrect billing,” says Radin. “The ease of management was surprising. As a manager, I haven’t had recent hands-on experience with storage, but was able to create new LUNs and present them to servers within a matter of minutes and with no training - that’s how intuitive the interface is!”

He adds: “You have to forget everything you know about storage management when you start to use XIV. You don’t manage RAID groups, and that is a big difference. You can create a LUN in seconds and present it to the host in seconds. That’s amazing. In the past, we spent a lot of time creating and adding new volumes and expanding the existing volumes. Using the XIV systems has dramatically shortened the time it takes to provision storage.”

High speed and synergy with VMware

Having met its storage goals for performance and efficiency, Telekom Slovenia Group began populating its XIV systems with increasingly more applications, eventually opting for the IBM platform to play a central role in its storage infrastructure.

“The XIV systems have proved stable, reliable and high-performing for numerous requirements,” said Rakovec. “In particular, we found a great synergy with our VMware landscape—we have migrated more than 400 VMware virtual servers to the XIV environment. It’s very easy to manage the combination of XIV Storage System and VMware vSphere, and this also offers ample performance for applications with demanding I/O requirements.”

Telekom Slovenia Group’s strategy is now to expand the XIV environment and to consolidate more systems to it. As the company looks to develop its cloud computing capabilities, it sees the flexibility and simplicity of the XIV systems as a key element.

IBM Solution Components

Hardware

- IBM® XIV® Storage System
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—Dragoslav Radin, Head of IT Infrastructure Services, Telekom Slovenia Group

IT Environment

Operating systems

- Sun Solaris
- Microsoft® Windows® Server 2003 and 2008
- HP-UX
- Linux®

Databases

- Oracle
- Microsoft SQL Server

Applications

- Subex Moneta
- Subex Nikira

Virtualization

- VMware vSphere 4
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Thin provisioning removes barriers to innovation

An aggressive user of its technology resources, Telekom Slovenia Group has put to advantageous use several capabilities that come as standard with the XIV Storage System, including thin-provisioning, snapshots, reporting and performance monitoring.

Built-in thin-provisioning has made it easy for Telekom Slovenia Group to give internal users the storage capacity they want, when they want it. In the past, the IT team was simply unable to meet all requests for dedicated storage, as doing so would have required too much expenditure on additional capacity. With thin-provisioning, storage volumes effectively occupy less disk space for a given capacity - since the internal teams typically use less storage than they request.

“Thin-provisioning makes the storage administration team’s life much, much easier,” comments Radin. “And the internal customers are happy because they think they’ve got all the volume they asked for. In the past, our inability to give them the space they needed was potentially a barrier to innovation. With the XIV systems, that barrier is gone!”

Radin adds, “Some of our databases are so big that we can’t complete online backups within the required timeframe. Instead, we take a snapshot using the built-in XIV software, mount that snapshot, and back it up easily throughout the day without disturbing the production environment.”

Zero-impact asynchronous mirroring

Initially, the XIV systems were synchronously mirrored and housed in the same data center. Later, raising its disaster recovery protection to the next level, the company moved one system to its secondary data center 140 kilometers away and activated asynchronous mirroring.

“We were able to switch to asynchronous mirroring very simply and quickly - it took us one day to set up and configure the whole environment,” says Radin. “XIV asynchronous mirroring is easy to manage and has zero impact on production performance. It is also fast, accurate, and keeps us informed about status at all times.”

With built-in asynchronous mirroring of its XIV systems, Telekom Slovenia Group has a powerful yet cost-effective solution for ensuring business continuity in the event of a disaster at its primary location, making the business more resilient and better able to serve its customers.

For more information

Contact your IBM sales representative or IBM Business Partner, or visit us at: ibm.com/storage/disk/xiv/

For more information about Telekom Slovenia Group, visit:

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