VINCI PLC builds the future with IBM XIV Storage

Meets complex growth with simplified storage

Overview

Challenge

To consolidate several acquisitions and implement a new ERP system, VINCI PLC needed to extend its storage infrastructure and sought a reliable, flexible, easy-to-manage platform for handling rapid growth

Solution

The IBM XIV® Storage System at VINCI PLC is mirrored across two sites, with IBM Tivoli® Storage Manager. It handles 2,500 Microsoft® Exchange 2007 users and ERP storage volumes, and is integrated with VMware ESX Server 3.5

Benefits

- Improved application reliability and performance
- Backup/restore times cut by 50 percent
- Online, migration-free, optimized capacity growth

VINCI PLC, based in Watford, UK, is the largest British arm of VINCI, the world's leading concession and construction group. The Company operates in the sectors of building, civil engineering, air, facilities and technology. VINCI PLC has in the region up to 4,000 employees and its annual turnover exceeds £1 billion.

"We have teams working on high-profile projects all around the UK," explains Tina Parfitt, Head of IT at VINCI PLC. "As a result, we have a complex IT network, which extends beyond our offices to our project sites and even to client facilities."

Meeting the needs of a dynamically growing business

Over the past three years, this complexity has been further increased by a number of major acquisitions.

"Acquisitions mean that you need to be flexible," explains Ben Paddick, Technical Design Architect. "Suddenly you have 50 or 60 new systems that need to be consolidated, and you have to keep the whole infrastructure manageable."

After acquiring a new construction company, VINCI PLC needed to extend its Microsoft Exchange 2007 e-mail solution to a total of 2,500 users. It also sought to introduce COINS, a construction and engineering industry ERP solution, and to improve performance with its IBM Cognos® environment.

"We needed more storage to accommodate the new users and the COINS environment, and we also wanted to relieve the strain on our aging HP storage systems," says Paddick. "With the possibility of further expansion and acquisitions in the future, we wanted a storage environment that would be flexible enough to handle unpredictable changes in demand."

Parfitt adds: "We needed to choose the right technology to support the business in the long term."

> *"Space, power and cooling in the data center are at a premium, so the XIV is a very practical option; moreover, energy-efficient hardware makes a major contribution to achieving our carbon reduction objectives."*
>
> —Tina Parfitt, Head of IT, VINCI PLC

Implementation like a dream

After evaluating several enterprise vendors, VINCI PLC installed the IBM XIV Storage System at its main production in Watford, with remote mirroring to a second rack at the Widnes backup site, more than 200 miles away. VINCI PLC worked with Silverstring Ltd., an IBM Premier Business Partner with XIV and Tivoli AAA accreditations, and one of the UK's leading providers of storage management solutions.

"The implementation went like a dream—it was even easier than the IBM sales team said it would be," comments Paddick. "We were able to get our first applications up and running within a couple of hours. Later, when we decided to go ahead with the implementation of the COINS ERP system, we were able to create 32 storage volumes in less than ten minutes using an automated script; on the old storage, this would probably have taken a whole day."

He adds: "The support from IBM has been fantastic. If something goes wrong, the XIV immediately 'calls home,' and IBM responds instantly. I came to work one morning to find that a disk had failed overnight: I already had an email and a voice mail from IBM telling me that an engineer was en route, and the new disk had been delivered and was sitting on my desk!"

Boosting performance, reducing complexity

IBM XIV stripes data across a large number of high-capacity disks and reads them in parallel, obviating the need for complex storage tiers while delivering the performance of high-speed storage using less expensive disks.

"The biggest thing our XIV solution has done for us is give us a system that performs correctly," says Paddick. "With our different business applications, we have busy points that might overlap. With the IBM XIV, we can step back and know that the system is going to perform, regardless of peaks."

"By simplifying the storage environment with IBM XIV, we are getting rid of one of the major headaches," says Paddick. "We can just rely on XIV to deliver the performance we need, so we don't have to spend so much time on capacity planning."

IBM Solution components

Hardware

- IBM XIV® Storage System

Software

- IBM Tivoli® Storage Manager 5.5
- IBM Cognos® 8 Business Intelligence

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IT Environment

Operating systems

- Microsoft Windows Server 2003 SP2
- Microsoft Windows Server 2008
- HP-UX 11i v3

Databases

- Progress
- Microsoft SQL Server 2005

Applications

- Microsoft Exchange Server 2007 (2,500 users)
- COINS ERP

Virtualization

- VMware ESX Server 3.5

Low total cost flexibility in a rich package

"What we wanted from the XIV was something that could give us almost linear scalability, as much reliability as we could have without paying the overhead, and a full suite of products without the cost: asynchronous replication, unlimited and instantaneous snapshots, thin provisioning. All of these bits and pieces are fully included and so our costs are known," explains Paddick.

The software that comes as standard with IBM XIV has also helped VINCI PLC reduce the backup and restore times, using IBM Tivoli Storage Manager, by around 50 percent—bringing it easily within the overnight backup window.

User satisfaction

From a user perspective, the introduction of the IBM XIV storage has been completely invisible.

"We used to have performance issues, which led to complaints from senior managers," comments Paddick. "The XIV system enabled us to migrate data from the old storage in the background, while the application was still running—the users didn't notice a thing. The XIV has improved performance so much that we no longer get complaints about response times!"

Building on XIV

Success with the XIV system has led VINCI PLC to move systems onto the new platform ahead of schedule and, within nine months of the initial implementation, upgrade from six modules to nine.

"IBM XIV is so flexible, you can just plug in more modules when you need them, and it still fits in a single 42-U rack," explains Parfitt. "Space, power and cooling in the data center are at a premium, so the XIV is a very practical option; moreover, energy-efficient hardware makes a major contribution to achieving our carbon reduction objectives. Ultimately, we are aiming to move all of our data onto XIV and retire our older storage, gaining significant operational cost savings."

For more information

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

For more information about VINCI PLC visit: vinci.com

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