

KCC Engineering & Construction Co. Ltd.

Accelerating File Backup 10-fold Helps Build Success with Solutions from Veritas and WIZCORE, Inc.

KCC Engineering & Construction Co. Ltd. is building major projects around the world, and its ability to protect critical data needed to keep up. The IT team sought advanced technology and chose a data protection appliance solution from Veritas and WIZCORE, Inc. Results include 10-fold faster file backup, more than 90 percent deduplication, a sixfold faster recovery point objective, up to three times faster recovery, and 100 percent payback in less than four years.

Award-winning value creation

Create maximum value. It's a daily challenge for just about everyone in business, and KCC Engineering & Construction Co. Ltd. (KCC E&C) has made this focus a corporate mission. KCC E&C wants to be the leading source of value creation in its field.

Creating value by using advanced technology was very much on the mind of Kilho Lee recently, as the manager of KCC E&C's IT team. Effective sharing of data is essential to success in construction, and Mr. Lee and his IT team wanted new technology that could better protect data from potential loss or damage. The challenge was that backing up 10 terabytes of primarily enterprise resource planning (ERP) data to tape was taking too long, as were recoveries. If data couldn't be recovered quickly, deadlines and profitability were unnecessarily at risk.

A need for speed

"We had issues regarding backup speed and performance," says Mr. Lee. "If backups were faster, we could back up more frequently, and we would have more recovery points available. That would reduce the amount of data lost when we had to do a recovery."

KCC E&C wanted to change its backup strategy from disk-to-tape to disk-to-disk-to-tape, speeding recoveries. It also wanted to get deduplication technology that would minimize backup storage requirements.

Mr. Lee's team evaluated CommVault Simpana, HP Data Protector, and the Veritas NetBackup™ 5220 Appliance. "We benchmarked the Veritas NetBackup appliance for one month and got higher than expected deduplication and speed," says Mr. Lee. "We also liked the reliability and market-leading reputation of NetBackup and the fact that the NetBackup Accelerator feature was unique to Veritas and very promising." The team chose the Veritas solution.



Organization profile

Website: www.kccworld.net

Industry: Construction

Founded: 1989

Headquarters: Seoul, Republic of Korea

Employees: More than 1,000

FOCUS ON R&D has made company a global leader in construction

Veritas solutions

Data Protection

Strategic IT trends

Information Explosion

Why Veritas?

- Faster file backup from exclusive technology
- Deduplication rate higher than expectations
- All-in-one appliance speeds deployment and simplifies maintenance
- Faster overall performance

Cutting hours into minutes

File backups are critical to KCC E&C, which has 100,000 files to protect. "A full backup of 1.5 terabytes worth of files during the NetBackup proof of concept took three hours," Mr. Lee recalls. "Then we used the Veritas NetBackup Accelerator, and it took approximately 20 minutes—almost 10 times faster."

By transmitting only changed file data, NetBackup Accelerator delivers traditional, full backups at the speed and cost of incremental backups without sacrificing the fast recovery time associated with full backups. One result is that KCC E&C system resources now have more bandwidth for more productive work, Mr. Lee notes.

Reducing backup data by 90 percent

Other efficiency gains come from the NetBackup Data Protection Optimization option, which KCC E&C uses to deduplicate data within the appliance. "We are achieving more than 90 percent deduplication with NetBackup, reducing the full 20-terabyte backup each day to less than 2 terabytes," Mr. Lee says. "That frees about KR₩30.6 million (US\$28,438) worth of disk for more valuable uses."

10-fold faster backup

In addition, a full backup to tape in the prior backup environment took about 10 hours. With NetBackup Accelerator and NetBackup deduplication, it now takes one hour. With data growing at about 10 percent annually, it's now easier to stay within the backup window.

Solutions at a glance

Key challenges

- Speed up backup and recovery times while ensuring reliability
- Reduce recovery point objective
- Cut backup storage requirements through deduplication
- Minimize IT overhead

Veritas products

- Veritas NetBackup™ 7.x
- Agent for Microsoft Exchange Server
- Agent for Databases
- NetBackup Data Protection Optimization
- Veritas NetBackup 5220 Appliance

Incumbent

- HP Data Protector

Competition

- CommVault Simpana, HP Data Protector

Veritas services

- Veritas Basic Maintenance Services

Veritas Gold Partner

- WIZCORE Inc. (wizcore.co.kr)
- Specializations: Archiving and eDiscovery, High Availability, Storage Management, Data Protection with NetBackup

Technology environment

- Server platform: HP servers running Windows Server 2008 and 2003, CentOS, and a few Microsoft Hyper-V virtualized servers; 200 desktops using Microsoft Virtualization Desktop Infrastructure (VDI)
- Applications: Oracle ERP, Microsoft ASP.NET
- Databases: Oracle, Microsoft SQL Server
- Storage: HP EVA 8100 and HP P4500
- Tape library: HP StoreEver MSL 8096

Business results and technical benefits

Data protection

- Sixfold shorter recovery point objective
- Up to three times faster recovery time objective

Operational efficiencies and cost savings

- 10-fold faster file backup due to NetBackup Accelerator
- More than 90% deduplication, saving KR₩30.6 million (US\$28,438) in storage costs
- Overall 10 hours in backup time reduced to 1 hour, enhancing scalability
- 50% reduction in weekly backup administration (10 hours cut to 5)
- KR ₩12.7 million (US\$11,858) saved in hardware and tape operational costs
- Projected 100 percent payback in less than 4 years

Faster recoveries for the business

There are several important additional gains from a faster, more space-efficient backup. One is that with less backup data to store, KCC E&C has the space and system resources to back up its most important data every hour instead of every six hours. The result is a sixfold shorter recovery point objective. "The business is much better off by having more current data in case there needs to be a recovery," Mr. Lee says.

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Kilho Lee

Manager of IT

KCC Engineering & Construction Co. Ltd

KCC E&C can also now retain six months of data on disk for its most important applications, and one month of data for its less important applications. Having the data on disk rather than tape means a faster recovery time objective. "Restoring a 100 gigabyte file is about two-to-three times faster from disk than from tape," says Mr. Lee.

Since deploying NetBackup, backup and recovery success rates have been virtually 100 percent, Mr. Lee adds. One employee administers NetBackup in less than five hours a week, 50 percent less time than the 10 hours a week the prior solution required.

Appliance saves time and money

The fact that the solution comes as an appliance has also resulted in gains. "We liked that the NetBackup appliance provides us with an all-in-one solution for data protection," says Mr. Lee. "It combines the media server, NetBackup software, and optimized, scalable storage in one appliance."

As a result, deployment was faster. "We brought the NetBackup system up in 30 minutes instead of the two-to-three hours that a traditional backup system would take," Mr. Lee notes. "It's easier to manage, update, and patch an appliance. And if there are any issues, we deal with one vendor instead of several."

Hardware costs are also reduced. "Because we don't need a separate media server with the NetBackup appliance, we redeployed an HP server for other uses, saving about KRW10.7 million (US\$10,000)," Mr. Lee says. Reduced tape operations saves another KRW2 million (US\$1,858).

To conduct "hot," online backups of its critical databases, KCC E&C uses

NetBackup Microsoft Exchange and Database Agents. "It's a business requirement that we keep databases available during the backup process," Mr. Lee explains.

100 percent payback in four years

Adding up the gains from the new solution, KCC E&C projects 100 percent payback within four years, Mr. Lee adds.

For help in enhancing data protection, KCC E&C turned to WIZCORE, Inc., a Seoul-based Veritas Gold Partner. "WIZCORE's advice in selecting, designing, and deploying the NetBackup appliance solution was very valuable," says Mr. Lee. "They understood our needs and worked as if they were on our team. They have a specialist credential from Veritas in NetBackup, and their expertise really showed."

KCC E&C also has Veritas Basic Maintenance Services for technical support. "We haven't needed to use this service yet," says Mr. Lee, "but it's comforting to know it's there."

As the company expands, the IT team has put important details in place. "Because of Veritas NetBackup, we can now backup and recover data faster and serve the business better as a result," says Mr. Lee. "We find the product extremely reliable

For more information

Contact your local Veritas Sales Representative or Business Partner, or visit our website at www.veritas.com.

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