

Leading Construction Company Builds a Better Data Protection Environment

OVERVIEW

The largest world construction company in the world.

BACKUP APPLICATION

Tivoli Storage Manager

KEY BENEFITS

- Elimination of backup media failure
- Elimination of administration time/cost of media management for daily backups
- 94% savings in capacity per backup job through DeltaStor deduplication
- Dramatic improvement in backup and restore times
- The ability to restore data instantly from TSM without recalling offsite tape
- Reduction of restore times of massive data volumes from days to minutes
- Reduced risk through immediate replication of backup data to offsite location
- Dramatic cost savings through reduced TSM complexity

One of the world's largest construction companies needed a way to improve the efficiency of its data protection environment while accommodating its rapid data growth and changing needs over time. The company implemented two SEPATON S2100®-ES2 enterprise-class data protection systems and two S2100-DS3 systems for a consolidated, enterprise-wide data protection environment. The SEPATON systems have dramatically reduced costs, improved backup times, reduced administration complexity, and enabled fast, efficient replication for disaster protection.

The world's largest construction company comprises a number of specialist businesses operating throughout the UK to provide comprehensive services from inception, to project completion, to ongoing facility maintenance. The company's 9000 employees in 215 locations rely on a variety of large databases and IT systems housed in three data centres. These systems include SharePoint, COINS finance system, Microsoft Exchange, IBM Cognos Data Ware House, and various .Net Web applications. To protect vital data in these systems, the company uses Tivoli Storage Manager (TSM) backup application.

With the addition of new databases and IT systems and the company's increased reliance on them, the IT staff faced the challenge of keeping them available for more hours each business day – shrinking already short backup windows.

MASSIVE GROWTH

Data growth was also a costly challenge. From 2007 to 2010, the company's data under protection grew from

50 TB to 120 TB of usable storage. To accommodate this growth, the IT staff purchased more and more costly disk resources for their TSM primary disk pool. As the IT team looked ahead to future company acquisitions, implementation of new data-intensive IT systems and databases, and continued organic data growth, they recognised the need for a flexible, cost-efficient platform for their data protection.

ENTERPRISE-WIDE DATA PROTECTION

The company implemented two two-node SEPATON S2100-ES2 systems, each with 160 TB of usable capacity and DeltaStor deduplication and DeltaRemote replication software. One system was installed in their production site and one at their disaster recovery site. Data was replicated between the systems over a 100 Mbps MPLS Network with Riverbed Steelhead WAN optimisation. They migrated from TSM Copy Storage Pools for disaster recovery to DeltaRemote replication software only, enabling them to restore data instantly without recalling physical tapes from their DR site.

OPTIMISING EFFICIENCY WITH S2100-DS3

After implementing the new S2100-ES2 systems, the company conducted a TSM review and redesign exercise and identified a potential area of savings. The company recognised that they placed a lower value on their generic file system data compared to their business critical databases and mail systems. Whereas previously, they had backed up both types of data to SEPATON S2100®-ES2 systems, they considered moving file system data to lower cost systems. They evaluated several options, including competing products that offered fewer features. However, after careful analysis, the IT team calculated the significant cost savings to be realised by instead moving the file system data

to SEPATON S2100-DS3 systems. Designed for smaller data protection environments than the ES2, the DS3 systems were able to deliver a level of flexibility, management control, and performance that no other system could approximate. The DS3's ability to match the class of backup target to their needs was also an important benefit. The company's careful analysis ensured that they maintained a low capital cost profile.

The construction company now has a highly efficient TSM data protection environment that is able to accommodate their massive data growth, business acquisitions, and short backup windows with ease.

THE RESULTS

The construction company's SEPATON data protection systems have delivered a variety of significant benefits, including:

- Reduction of risks of backup media failure to zero
- 94% savings in capacity per backup job through DeltaStor deduplication
- Elimination of administration time/cost of media management for daily backups
- Dramatic improvement in backup and restore times
- The ability to restore data instantly from TSM without recalling offsite tape
- Reduction of restore times of massive data volumes from days to minutes
- The ability to store more data within backup platform and retain data longer
- Reduced risk through immediate replication of backup data to offsite location
- Lower administration cost and risk due to reduced TSM system complexity, including elimination of TSM virtual volumes and TSM library sharing; simpler TSM server recovery process
- More efficient use of storage - the removal of virtual volumes results in less data fragmentation