CIPD Chooses ExaGrid for System Scalability and Manageability of Backup

CIPD

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>
> **Mark Boardman**
> **Infrastructure Manager**

UNITED KINGDOM

Key Benefits:

- CIPD no longer manages and transports 750 tapes per month or manages workarounds
- Retention period increased from one month to the preferred three months
- Application agnostic ExaGrid works seamlessly with Symantec NetBackup

Customer Overview

The Chartered Institute of Personnel and Development (CIPD) is the professional association for human resource management professionals. Established in 1913 and headquartered in Wimbledon, London, England, the organization has over 130,000 members internationally, working in HR, learning and development, people management, and consulting across private businesses and organizations in the public and voluntary sectors. The CIPD is committed to championing better work and working lives for the benefit of individuals, businesses, the economies, and society by improving practices in people and organization development.

Too Many Tapes and Management Issues

Supporting the needs of 130,000 members around the world requires a very effective backup function to ensure that data in all the critical business systems is available when it's needed most. Mark Boardman, Infrastructure Manager at the CIPD, is responsible for the CIPD's backups, which average up to 40TB of data in a daily full backup. Historically, managing this data volume required moving 24 tapes offsite on a daily basis – almost 750 tapes per month – which proved to be a slow, tedious, and time-consuming process.

The limitations of tape caused a number of issues. First, the CIPD was unable to run full backups every day. Second, using tape also began to affect retention. The team aimed to have three months' retention, but Boardman saw this progressively decline to under two months. In addition, there were issues backing up VMware, which required the team to create various workarounds – wasting precious team time.

"We had an awful lot of tapes," said Boardman. "One of the main problems we faced was cataloguing and indexing, which took a lot of time. We were going through over 20 tapes a day! In a DR test, we could spend at least two days just rendering each time, and this proved to be really inconvenient. We thought that there must be a better way of handling backup, so we decided to look into moving to disk."

The company was also changing its DR provider, so that was yet another reason to review the backup process at the same time.

ExaGrid Chosen for Flexibility and Proven Performance

The CIPD reviewed appliances from three vendors – Data Domain, Symantec, and ExaGrid.

"We looked at Data Domain but dismissed it almost immediately due to cost. The Symantec appliance was ruled out because it only supported its own backup application and because it was new, which was a bit of a worry, unlike ExaGrid's EX Series which has been developed over a number of years. We changed our backup application to NetBackup six months earlier, and Symantec would not have offered us the flexibility of being application agnostic," said Boardman.

CIPD ultimately implemented ExaGrid's disk-based backup solution with data deduplication because it is cost-effective, easy to install, and supports the company's existing backup applications.

Architecture Provides Many Benefits

"I really like the concept of ExaGrid's architecture and the fact that we can simply add more processing and capacity when we need it. I'm a big fan of the fact that the latest backup is stored in full form so that it's available in real time and that there's no grief in restoring it, even if we need to restore older data," said Boardman. "In fact, if we didn't have the latest backup available in a hydrated format (on the ExaGrid landing zone), a restore would be horrifically slow."

When an ExaGrid system needs to be expanded, additional appliances are attached

EXAGRID®

to the system, bringing with them additional processing power, memory, and bandwidth as well as disk. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, and you only pay for what you need when you need it. In addition, as new appliances are added to the system, it automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the system.

ExaGrid appliances have a unique landing zone where the most recent full backup is kept and then deduplicated data is stored behind the landing zone. Because the most recent backups are in their full form, there is no need to wait for the data to be rehydrated. This makes restores (including VM restores), tape copies, and recoveries very fast.

Data Deduplication Reduces Amount of Data Stored

ExaGrid combines standard compression along with zone-level data deduplication, which stores changes from backup to backup instead of storing full file copies. This unique approach reduces the disk space required by a range of 10:1 to 50:1 or more, delivering unparalleled cost savings and performance. The CIPD's current deduplication ratios are as high as 20:1.

ExaGrid delivers extremely fast backup performance because data is written directly to disk, and data deduplication is performed after the data is stored to reduce data. When a second site is used, the cost savings are even greater because ExaGrid's zone-level data deduplication technology moves only the changes from backup to backup, requiring minimal WAN bandwidth.

ExaGrid Improves Retention and Enables DR Site

Another key factor in choosing ExaGrid was the cost. "The ExaGrid appliance only costs two-thirds of the price of the Symantec appliance, so we were able to get three ExaGrid boxes for the price of two Symantec ones," explained Boardman.

The ExaGrid price advantage meant that the CIPD was able to purchase three ExaGrid EX13000E appliances – two for onsite backup and a third appliance at the DR site.

"We previously spent a lot of time managing our backup process and had to put a lot of effort into keeping daily

retention at one month. The ExaGrid appliance has saved us time by removing the hassle from managing tapes, and the various workarounds and complex scripts we had to create and maintain to keep the backup process stable could now be removed. We have also been able to achieve our desired three-month daily retention targets and are very impressed with the inter-site replication from HQ to the DR site," explained Boardman.

Easy Setup and Quick Support

The ExaGrid system was designed to be easy to set up and maintain, and ExaGrid's industry-leading customer support team is staffed by trained, in-house engineers who are assigned to individual accounts. The system is fully supported, and was designed and manufactured for maximum uptime with redundant, hot-swappable components.

"The installation was easy with ExaGrid putting it all together for us, although you can actually set it up on your own. ExaGrid also helped us to mock-up a DR site to prove that it would work as required," Boardman said.

"I think the ExaGrid customer support team is very good. When I call them, they get back to me right away. I simply tell them the problem, and they tell me what's wrong and sort it out. I like the fact that we get 'super alerts' that keep us informed and that we can just hop on a WebEx to talk through any issues we may have," said Boardman.

ExaGrid and Symantec NetBackup

Symantec NetBackup™ delivers high performance data protection that scales to protect the largest UNIX, Windows, Linux, and NetWare environments. With complete protection from remote office to center to vault, NetBackup offers a single console for all backup and recovery operations. Organizations using NetBackup can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as NetBackup, providing faster and more reliable backups and restores. In a network running NetBackup, using ExaGrid in place of a tape backup system is as easy as pointing existing backup jobs at a NAS share on the ExaGrid system. Backup jobs are sent directly from the backup application to the ExaGrid for onsite backup to disk.

About ExaGrid

ExaGrid provides hyper-converged secondary storage (HCSS) for backup with a unique landing zone and scale-out architecture. The landing zone enables the fastest backups, restores, and instant VM recoveries. The scale-out architecture includes full appliances in a scalable system and ensures a fixed-length backup window as data grows, eliminating expensive and disruptive forklift upgrades. Learn more at **www.exagrid.com**.