



Backup Express

Success Story: Brunel University

Backup Express Solves UNIX, Windows and Clustering Objectives for U.K.-based Brunel University

Organizational Profile

- A highly respected U.K. University excelling in many disciplines
- Consists of a student community of 18,000 spread over four campuses

Business Needs

- Frequent backups of approximately 900 gigabytes
- Back up on multiple platforms without increasing personnel
- Cluster support
- NAS support

Environment

- Windows clusters and UNIX
- Dell PowerVault 136 LTO, 130 DLT, and 220 NAS
- Dell 6450s and 2550s

Benefits

- Large, fast backups completed within daily windows
- Runs on Windows, UNIX, Linux and NetWare and any combination of SAN
- Backs up and restores data on NAS appliances with NDMP
- Provides transparent cluster support

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Khushroo Talati
Systems Development Manager
Brunel University

The Challenge:

Located in West London, Brunel University is spread over four campuses and consists of a student community of 18,000. The University decided to switch to Windows for a number of applications, but some needed to stay on UNIX, at least for the near-term. Khushroo Talati, Systems Development Manager, had to find a backup and restore solution that would work with both the Unix and Windows systems, as well as support his NAS and new LTO drives he was planning on acquiring. He found that Backup Express had all the features he needed, especially heterogeneous network support, cluster support and NAS support, and so he decided to implement it.

The Solution:

Using Backup Express, Talati has reduced his base backup time down to seven hours, for approximately 900 GB of data. That time includes tape maintenance and regular cleaning of the tape drives. To maintain security and data integrity, Talati has arranged his network in three separate domains. For the student and academic staff's domain, Brunel runs Backup Express on a Dell 2550 running Windows 2000 SP3 Server with both Windows and UNIX clients, all on a SAN connected to two Dell PowerVault LTO and DLT Libraries. The PowerVault Libraries provide approximately 315-tape capacity. This allows for several days before tapes need to be exchanged. The Windows servers being backed up are Dell 6450s, clustered. Two of the clusters are Exchange servers which are running in an Active-Passive combination, and the other two clusters are FileStore servers which run in Active-Active combination, so there is a total of eight servers for Exchange and eight for FileStore.

They have another FileStore that is clustered on 2550s as well, for the completely separate administration domain. Talati explains that for security reasons they have their own file storage in a separate domain. "As far as our twelve domain controllers go, we use Windows 2000 backup for our systems state backups. We dump them as backup files onto the Dell PowerVault 220 NAS at night, and then once during the day we pick up all the system state backups and put them onto tape with Backup Express. The backup generally takes about two or three minutes to complete and we get a whole load of twelve backup files every day on the NAS device. Each file relates to a particular server and is created with the server name. The rest of the stuff we back up using regular Backup Express jobs and schedules. We did a risk assessment about needing an authoritative restore for Active Directory and found that the possibility would be low. Hence we decided to use our backup window for user data," Talati explains. By doing this, he has negated the impact of that system's backups on the SAN, and freed it up for his other backups. "Effectively this allows us to have a completely separate window to do the systems state backup and doesn't interfere with our regular file and



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Exchange backups during the night.”

The third base domain includes user files, web sites, online e-learning, and the complete MS Exchange database as well as the public folder databases from Exchange. “After struggling with the heavily customized Unix backup system, my UNIX team took one look at the ease of operation and user friendly nature of Backup Express and were quite happy to move some of their UNIX servers onto Backup Express.”

The Benefits:

The Brunel team appreciated the assistance that the Backup Express technical support gave them in setting it up and ironing out some of the problems that came from the Windows 2000 implementation and not from Backup Express. After correcting the Windows issues, he re-contacted tech support in England. “All and all we were very happy. I think the Backup Express people worked with us as partners rather than viewing us as customers....We have a really good relationship with Syncsort.”

Another function that helps out the Brunel group is report via email of all the logs of the backup jobs, because it helps minimize the time needed to resolve any network issues. They can pinpoint the problem immediately via the email logs. Also they find that the ability to manage a backup remotely from a central GUI has simplified the task of unifying the enormous network.

They have no need for a dedicated backup person; indeed, Talati doesn't believe in them, “because when the dedicated person goes on leave, you've got everyone looking around with a blank face.” Backup Express provides them with the flexibility and ease of use so that everyone in the group could use it without dedicated training.

About Backup Express:

Backup Express is an enterprise-wide backup and restore solution designed for UNIX, Windows, and NetWare environments and provides support for the broadest range of technologies and platforms. Backup Express is the only solution that supports any combination of UNIX, Windows, Netware, and NDMP/NAS in a SAN, performs backup of all data directly across the fibre network, dynamically shares all tape drives, and controls this single enterprise environment with a single catalog and easy to use GUI. Backup Express also supports all eight NDMP incrementals.

Backup Express's distributed architecture allows it to back up to any device in the network whether it is running UNIX, Linux, Windows, or NetWare, while maintaining a single central catalog for the entire enterprise. Backup Express can attach tape drives, including large automated libraries, at any server on the enterprise; dynamically allocate drives within a SAN; keep sensitive data off the network; and allow on-line backups of large database servers such as Oracle, SAP, MS Exchange, SQL Server, Sybase, DB2 and Lotus Notes. For more information, call 201-930-8200 or visit www.syncsort.com.