



# Backup Express

## Success Story: IT Services Group for a Major U.S. City

### An IT Services Group for a Major U.S. City Slashes Their Backup Window by Up to 75% with Backup Express

#### Organizational Profile

- IT Services Group for a major U.S. city

#### Business Needs

- A backup and restore solution that supports any combination of UNIX, Windows, and NetWare
- The solution also had to support NetWare and Windows in a SAN
- A faster solution for protecting several terabytes of data

#### Environment

- 75 Intel servers running Windows 2000 or 2003, NetWare, or UNIX
- A SAN with a StorageTek 9176 SAN Array
- Six LTO drives

#### Benefits

- Backup Express is certified for multiple client environments and offers a wide choice of methods for protecting any node
- Supports any combination of UNIX, Windows, NetWare/OES, Linux and NDMP/NAS in a SAN
- Backup Express significantly reduced the group's backup window, cutting the backup time for incrementals by 75%, and reducing the time for full backups by 60%

*"We cut the backup time for incrementals by 75%... For the full backups, we were able to reduce the backup time by approximately 60%."*

Network Administrator  
IT Services Group  
City Government

#### The Challenge:

The IT Services Group of a major city in the U.S. is charged with backing up critical data contained on 75 Intel servers. 50 run either Windows 2000 or 2003, 24 are NetWare servers and one is a UNIX server. The group uses a StorageTek L180 robotic tape library with 180 tapes and six fibre-attached LTO drives. They also have a storage area network (SAN) in place. In the SAN, they have a StorageTek 9176 SAN Array with 3.5 terabytes of storage. The fabric goes through five Brocade 3800 switches and then out to the servers. There are 28 NetWare or Windows servers that are connected on the SAN. The six LTO drives are also fibre-attached and come through the Brocade switches. The IT Services Group faced special challenges when trying to develop an effective backup and restore strategy for this environment. They needed to find a data protection solution that supports any combination of UNIX, Windows, and NetWare. The solution also had to support NetWare and Windows in a SAN. Another problem the group experienced was meeting the weekend backup window. They back up approximately 2.6 terabytes of data each weekend and their previous backup product was taking almost three days to complete.

#### The Solution:

Once the group found out that Syncsort has a relationship with Novell and tested the solution, they selected Backup Express. Now the full backups of all the servers are completed each weekend. With Backup Express, it takes approximately 20 hours to back up 2.6 terabyte data in the heterogeneous environment. Incremental backups are run each weeknight, which takes about three hours. On the Novell side, the data that is backed up includes user documents, GroupWise e-mail, databases, and file data. On the Windows side, various databases are backed up such as Microsoft Access and SQL. The group has to do a number of restores on the Novell side, averaging about two or three restore requests per week. On one occasion, the entire GroupWise e-mail directory got deleted on one of the servers, but they were able to quickly get that back. The whole e-mail directory from the night before was operating again within 30 minutes.

#### The Benefits:

The Network Administrator said, "Not only was Backup Express compatible with NetWare, Windows and UNIX, but it also allowed us to significantly reduce our backup window. We cut the backup time for incrementals by 75%. Previously, we were having terrible problems getting the nightly incremental backups done in time. For the full backups, we were able to reduce the backup time by approximately 60%." The group also utilizes Backup Express's SAN Resource Sharing Option (SRS) in their backup and restore strategy. SRS allows tape devices, both stand-alone or in a robotic library, to be dynamically shared among multiple Backup Express Device Servers. The Network Administrator added, "This gives us a lot of flexibility as to how we want to run the jobs. What we tend to do is frontload our jobs for our backups at night so we can kick off several at one time. The jobs just cue themselves up and as a tape drive becomes available, it just automatically grabs the first available tape drive. The next job that was waiting will then kick off. We've been able to shrink our backup window considerably using that technique."