UltraBac Makes it a Good Day in the Outback

"We are very happy with UltraBac as the backbone of both our image-based and file-by-file backups — it works reliably. UltraBac solutions provide plenty of features while remaining flexible enough for the administrator that wants to fully customize daily or weekly backup procedures."

- John Heller, IT Administrator
Ngaanyatjarra Services

The Challenge

Located near Canning in Perth, Australia (Alice Springs, NT), Ngaanyatjarra Services is a non-profit, self-funded Aboriginal organization providing services to 12 communities in the Ngaanyatjarraku Shire in the remote Western Australian Outback. The vast area covers 100,000 square miles (160,000 square kilometers) in the central Western Australian desert and has a population of approximately 2,000 people.

Services provided by this organization include financial management for community organizations and businesses; an airplane courier service providing full payroll security to all of Ngaanyatjarra; building and construction supervision for all the Ngaanyatjarra communities; and maintenance to community power, water, and waste water systems.

The community that is closest to the central office is an eight-hour trip by 4-wheel drive vehicle; the furthermost community is a 16-hour drive.

Ngaanyatjarra Services is also responsible for each community's IT system, including all of the mission critical data necessary to conduct day-to-day business and government services.

Managing the IT systems for 12 remote communities is a challenging task. Safe-guarding the mission critical data gathered and stored by more than 50 dispersed workstations, in the event of a data disaster, is a necessity.

The Situation

Each community in the Ngaanyatjarraku Shire services approximately 166 citizens and has from four to six PCs, which are used to enter financial, point-of-sale, human resources, and other data key to daily operations. These computers are used in the daily operations of each community, which has, at a minimum, a Council Office to conduct local government affairs, a store with a fuel station, and a health clinic.

Each of the PCs in the remote communities run Citrix MetaFrame XP connected via satellite to the central office Citrix Server. This allows Ngaanyatjarra Services to virtually centralize the management and data of the geographically dispersed network of the more than 50 workstations.

In addition to many files being centrally accessed and modified via MetaFrame, each community's mission-critical files are stored locally and on Ngaanyatjarra Services servers. Once a week, each community sends in critical files on Iomega ZIP disks,

which are then copied to Ngaanyatjarra's servers. These files arrive via a regularly scheduled courier plane.

When IT Administrator, John Heller, joined Ngaanyatjarra Services, the organization was already using UltraBac Software's UBDR (UltraBac Disaster Recovery) Pro to provide weekly image-based backups of three servers. This was in addition to Veritas' Backup Exec file-by-file backup being used on these same servers. The IT needs of Ngaanyatjarra Services have grown so rapidly that the implementation of four more servers are in the works. In order to streamline backups, Heller realized that the organization now required one backup solution that would meet all of their expanding needs.

The Solution

Heller wanted to expand the file-by-file solution to include all of Ngaanyatjarra Services' servers to effectively back up all remote data entered in the field. He also wanted a solution to replace Backup Exec, which had become increasing difficult to manage for the organization's customized needs. Several backup solutions, such as CA's ARCserve, were also considered, however Heller wanted a solution that would be a logical addition to the image-based backup technology already successfully being used with UBDR Pro from UltraBac Software.

Heller decided the best solution would be to upgrade to UltraBac Enterprise Edition. This option provided Ngaanyatjarra Services with seven server licenses, as well as the complete protection of having both a file-by-file and image-based backup solution.

"Now we have the ability to accomplish all of our file-by-file and image-based backups with one solution," said Heller. "UltraBac is more flexible than other solutions we tried. This flexibility has allowed us to fully tailor the solution for our unique needs."

File-by-file backups are now accomplished on every server using UltraBac and are scheduled to occur twice per week with the data being stored to AIT tapes on each server. Heller prefers to physically manage this small number of tapes himself but is also considering a tape library to let UltraBac automatically control and manage them.

In the recent months leading up to expanding the backup solution, Ngaanyatjarra Services had also added several new workstations in the field. To keep up with the increasing data and to ensure that backups could still be recovered as quickly, the organization purchased a rack mounted LaCie 500GB NAS (Network Attached Storage) device to store the images of the server disks generated by UBDR Pro.

Image-based backups of each server are now accomplished using UBDR Pro. Twice a week, a complete 'snapshot' of each of the server's hard disks is imaged and stored to the LaCie NAS device. There is a separate directory for every server on the NAS for each image backup.

"UltraBac has been very dependable for our file-by-file backups. I've also successfully tested an image recovery, but fortunately have not yet had to perform one. However, having the ability to restore our 10GB SQL Database in 20 to 30 minutes is a very nice plus," concluded Heller.

The Benefits

According to Heller, UltraBac is the best solution for Ngaanyatjarra Services varied backup needs and has enabled the organization to:

- Centrally back up more than 50 geographically disparate workstations via 4-7 servers
- Back up mission critical field data
- Reduce their need for storage hardware
- Perform both file-by-file and image-based backups
- Customize their backup implementation through flexible administration