

CUSTOMER PROFILE

SITA

Overview

- SITA is the world's leading provider of global Information Technology & Telecommunications (IT&T) solutions to the air transport and associated industries. As a partner with airlines, airports, & the many related air transport organizations, SITA has worked closely with the industry as it has evolved over the last 55 years.

Industry

- Travel
- Aviation
- Logistics

Hardware

- Compaq Servers
- Diverse PC & Kiosk hardware running Terminal Emulators (TEs) from many airlines
- HP ProLiant NAS Device
- HP StorageWorks Tape Drives

UltraBac Software Products

- UltraBac Enterprise Edition
- UBDR Gold
- Media Library Module, SQL, & Locked File Backup Agents

Other Software

- Windows 2003 Server
- Windows XP Pro
- Microsoft SQL Server

Benefits

- Flexibility in creating customized backups.
- Quick and easy Active Directory restores.
- Single CD recovery.
- UltraBac staff is helpful beyond the call of duty.

Backup and Recovery Sets Soaring Speed for the Airline Industry

"With UltraBac, we now have a fast, flexible, and reliable backup and recovery system that perfectly meets our needs."

- Dave Wald, Senior Systems Integration Engineer
SITA

The Challenge

SITA is owned by the airline industry, and the company's mission is to provide innovative and community-focused solutions that offer the industry greater cost savings no matter where they are located in the world. Working with and for the air transport industry, SITA helps drive and shape industry standards. SITA pioneered the definition of common use technologies such as hosted solutions, open IT standards, and more. All of SITA's initiatives and solutions aim to ensure interoperability and the cost-effective use of technologies for the industries the company serves.

Ticket agents, baggage handlers, and other key personnel constantly access and input data into the system via hundreds of computer terminals at each airport. Every airline has its own software programs consisting of DOS, Windows 16-bit, Windows 32-bit, or Java applications. It is SITA's job to ensure all of the data that is entered and extracted by these heterogeneous applications, across all airlines, are readily and reliably accessible on a 24x7 basis.

Ultimately the data is stored and accessed on a couple of main Windows servers at each airport. This design makes these servers one of the most crucial pieces of the architecture. In the event of a data disaster, the information on any of the servers must be recoverable and accessible in the shortest amount of time possible – making a dependable data backup solution a must.

SITA's design also relies heavily on Microsoft Active Directory (AD) and Microsoft SQL Server to manage the accounts and data access of hundreds of terminals at each airport. Therefore, any chosen backup solution would need to have superior abilities to back up and recover AD and SQL Server on the affected server within minutes. Also, because the servers must constantly be live and available for use, the ability to back up these 'open' files was a requirement.

As Senior Systems Integration Engineer for SITA, Dave Wald and his staff were charged with ensuring that a dependable, fast, comprehensive and reliable data backup and recovery plan was in place. "We needed to standardize on a solution that would be fast, easy-to-use, and full-featured for the right price," said Wald.

SITA's IT staff were familiar with many backup solutions on the market. In the search for a solution that would meet or surpass SITA's specialized needs, many products were considered and underwent testing, including products from Microsoft,

Acronis, Symantec, Veritas, and UltraBac Software.

One solution continued to meet many of the testing requirements, UltraBac Backup and Disaster Recovery from UltraBac Software. Many of the staff were familiar with UltraBac Software's solutions, as an earlier version of UltraBac had been used in the past when SITA ran Windows NT Servers. SITA decided the latest version of UltraBac was up to the challenge to handle the complex backup and disaster recovery requirements of their new Windows 2003 servers.

The Situation

The data that SITA is responsible for resides at hundreds of airports worldwide. SITA has a computer network domain at every airport that it helps facilitate. These domains are literally the IT backbone of the daily operations at these airports. The multiple Windows servers that make up the domains store, process, and allow access to mission-critical data to the world's airline industry. Each network handles data from applications such as departure control and boarding systems, flight information displays, and resource management for all of the airlines operating at that airport. Small "Lite" airports can share data with larger "Hub" locations.

Losing any of this data in the event of a technological, man-made, or natural disaster could bring airport operations to an instant standstill. Since ticketing and billing information might be shared with other airports in the system, multiple airports could also be affected.

The Solution

After testing many leading solutions that claim to accomplish both file-by-file and image-based backups and recoveries, the staff at SITA chose UltraBac when it performed as advertised.

"We needed a solution that could quickly restore our servers and data," said Wald. "Key factors were the ability to restore AD and SQL Server databases with open file backup capabilities. As far as simplicity and speed went, there was no comparison between UltraBac and the other products we tested.

"Still, we had several specialized needs that no backup vendor could meet exactly, and that's when we made a call to UltraBac Software's support and development teams. The staff was surprisingly responsive to our requests. We asked them to build in several features that would be key to our implementation and, within a few weeks, we were testing and piloting a solution built with our needs in mind."

Wald elaborated saying, "When we tested UltraBac against Backup Exec, we found UltraBac performed better on Active Directory restores. Also, overall restoring with UltraBac was a much simpler process. Backup Exec required a unique CD for every server to be restored, a CD that we had to continually update. UltraBac simply required one standardized CD to restore, which they provided.

"We also tested UBDR (UltraBac Disaster Recovery) Gold's image backup capabilities. There were no errors in the event viewer and the replication showed the restore as normal."

SITA bought an enterprise corporate license agreement to use UltraBac products at airports. New SITA network domains are being installed with UltraBac Backup and Disaster Recovery for all of the company's servers, at all future airports worldwide. The average airport SITA serves has three servers that will be backed up using these products.

The solution is now running file-by-file and image backups successfully at many locations. Along with UBDR Gold, UltraBac's Media Library Module, SQL, and Locked File Backup Agents are being used to accomplish the backup of SITA's live, data intensive servers.

At airports where the solution has already been implemented, UltraBac is now automatically scheduled to complete a full file-by-file backup on a daily basis (Monday through Saturday). Additionally, on Sundays, UBDR Gold completes a full image backup.

At any point in time, SITA has at least four image-based backups to pull a restore from, and six daily file-by-file backups as well. The file-by-file backups and image-based backups are saved to a NAS (Network Attached Storage). Image-based backups are also saved weekly to tape, for up to four weeks back. This data backup to tape is further safeguarded by being stored in a separate location from the servers. A tape autoloader is used at some locations instead of the NAS and single tape drive. At small airport "Lite" sites, an external USB 2.0 RAID 5 hard drive solution is utilized.

The Benefits

"As a result of implementing UltraBac as the backbone of our backup and disaster recovery system, we have been able to allot our administration time to other efforts.

"We found UltraBac to be superior to the other solutions we tested. Not only do we receive really good technical support, but also it was important to us that they were willing to meet our needs for customization. In addition, we found UltraBac to be easier to use, less expensive overall, and faster than their competitors.

"Now our file backup and restore speeds are twice as fast, allowing us to fully utilize our 100MB networks. If any server fails, we only need one standardized UBDR Restore CD to rescue the complete image of the server's drive within minutes. With other products, we had to first have a unique CD to restore the operating system and then restore the data from tape.

"We have really enjoyed the level of personalized tech support that UltraBac has provided us with. Their staff has answered our requests within minutes. With UltraBac, we now have a fast, flexible, and reliable backup and disaster recovery system that perfectly meets our needs," concluded Wald.