

Industry

A leading adhesive manufacturing industry

Overview

Since its inception in 1959, customer has been a pioneer and market leader in Craftsmen Products, DIY (Do-it-Yourself) Products and Industrial specialty Chemicals in India.

Customer is amongst the leading companies of India and their brands are amongst the most trusted brands of India.

Product range of includes Adhesives and Sealants, Construction and Paint Chemicals, Art Materials, Industrial and Textile resins and Organic Pigments and Preparations.

Products conform to global quality standards and are exported to developing and developed countries all over the world.

Customer's Challenges

Data growth in the production environment

As the production environment grows it became costly and difficult to manage the deluge of information. The growth of information in the production environment leads to the excessive growth in the backup environment which makes it more difficult to manage and meet service level objectives.

Data backup & recovery was too long.

Since there is data growth, the time taken to backup the production and non production data was too long and the result was it was not meeting backup window. It was forcing either an early stop or later start for production applications.

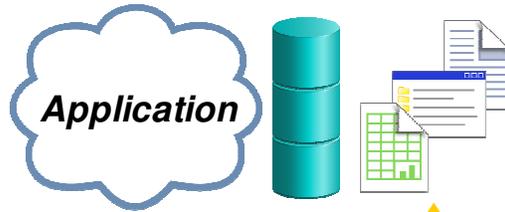
Backup & restoration management was not easy

The existing data protection (HP Data Protector) solution which they were using was not user friendly to manage. More trained people were required. It was resulting requirement of dedicated resource and head count.

No application aware backups & no backup consistency

Offline (Cold)

1
Shut down
application



2
Backup
application



3
Restart
application



The customer is having Oracle & SQL databases as a production databases, Lotus Domino servers for mailing solution and some file servers. The existing backup solution (HP Data Protector) was unable to perform hot database backups & online mail backups and the result was downtime during production hours. The backup was failing around 20% which was resulting no data consistency.

Understood Requirement

As per above mentioned challenges, we have understood the requirements are in for following areas of Data Protection & Backups.

- Requirement of backup solution for online backups.
- Improvement in backup and restore performance
- Get more out of IT investment through better utilization of resources & Differ Investments.
- Lower TCO & Improved ROI
- Lower RPO and RTO
- Consolidated Data Backup

Solution implemented

Based on our understanding of requirement, we intended to propose the following solution by using building blocks provided by various tools:-

Symantec Backup software solution – (Online Backup/Restore)
Symantec Backup Exec System Recovery – (Bare metal Restore)
Tape Library – (Automated Backup Provisioning)

The solution was designed using Symantec Backup Exec 11D, Symantec Backup Exec System Recovery 7.5 and Tandberg Storage loader T40 Tape Library.

Symantec Backup Exec 11D is configured in a Local Area Network (LAN). This is taking care of online database backups, mail backups & file level backups. Used agents and options for respective backup types. Configured separate backup jobs for database backups and file level backup. Installed tape library with 2 nos LTO 4 tape drives. Partitioned the library and defined backup jobs schedule such a way so that the drive will not be ideal for a minute.

Since the agent and options were used so the backup is started happening online and the result is now customer is able to perform the database & mail backup during production hours without having downtime. The backup which was running out of backup window previously, now it is successfully completing in maximum 10 hours. As the database and file level backups are separated, the success percentage is reached to 98%

Symantec Backup Exec System Recovery 7.5 implemented as a complete disk-based system recovery solution for Microsoft® Windows based servers that allow businesses to recover from system loss or disasters in minutes, not hours or days— even to dissimilar hardware platforms, to virtual environments, or in remote, unattended locations. Implemented BESR as a Bare Metal Recovery solution for critical application and database servers.

Implementation Phase & Technical Challenges

Since the customer was looking for the change over from existing backup solution to new solution i.e. Symantec Backup Exec, initially production server's downtime was an issue. Also customer wanted to analyze the new backup software functionality for one month. Since we have planned an implementation in 6 phases those are as bellows

- (1) New backup server implementation
- (2) Deploying agents
- (3) Testing data backup & restoration
- (4) Configuring scheduling for backup jobs
- (5) Analyzing the solution for some period
- (6) User awareness and hand over

Since customer wanted to remove the old backup solution after analyzing and testing new full proof backup software so we have started with a test server having better hardware configuration. Installed Backup Exec and respective licenses on this server and then deployed remote agents on few servers. After deploying remote agents, we found that there was conflict with HP Data Protector Agent. The result was backup was failure. To resolve this issue tested data backup by disabling HP Data Protector Agent service on few servers. The backup was successful.

After this we checked the pre-requisites and deployed remote agents on all remote servers as per no. of license customer have procured. Some of them were open file agents so deployed them as per the downtime. After deploying the agents, tested file level and database level backup which has got successfully completed within the backup window. This have gained customer's confidence in Symantec Backup Exec and customer have allowed us to remove the old backup solution and implement Backup Exec on live backup server which has SCSI tape library was attached.

We planned the downtime & did the software installation on live backup server. Again started testing the backups of live remote servers. In this testing Database backup was successful but for file backup time recorded backup window was very big so we started trouble shooting in which we have logged the case with Microsoft as well as Symantec Tech Support. Finally the root cause was the backup were happening slowly because of sufficient ports range was not opened on the firewall. So we have opened 50 higher range ports additionally on the firewall i.e. 3100 to 3150. Did the required changes in all backup jobs and tested backups again this time backups are completed within the backup window.

Another challenge which we have faced during the configuring backup job for Domino database i.e. using Domino agent we were unable to expand the Domino database in the backup selection list. So logged the case with Symantec Technical Support and the required changes as per support's recommendation and it has got resolved.

After resolving all issues we had given the technical training to the respective person and customer is agreed that this software is very much user friendly than the previous one. Customer has observed the backup & restoration performance for more than 1 month and customer found that yes! Symantec Backup Exec is the most suitable software solution for his environment.

Solution component used

1. Backup Exec 11D for Windows Servers
2. Agent for Microsoft SQL Server for Windows
3. Advance Open File Option for Windows
4. Agent for Lotus Domino Server.
5. Agent for Windows Server.
6. Agent for Oracle Server.
7. Library Expansion Option.
8. Backup Exec System Recovery 7.5

Business Benefits

1. All database servers which are critical can be backed up online and no downtime is required.
2. Backup reporting will be ease.
3. Backup can be completed in expected / Available Backup windows which was unachievable in native backup.
4. Quick and instant recovery on dissimilar hardware can be achieved by Symantec backup exec system recovery and reduces RTO.
5. Performing full system restoration, even to bare -metal systems, in minutes - without the need to manually reinstall and reconfigure operating systems, applications, system settings, and preferences.