

# Choice Case Study

## Backup Solution for National Remote Sensing Centre (NRSC)

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### The Challenge

National Remote Sensing Centre (NRSC) is one of the centers of Indian Space Research Organization under the Department of Space, Govt. of India, engaged in operational remote sensing activities. The operational use of remote sensing data span wide spectrum of themes which include water resources, agriculture, soil and land degradation, mineral exploration, groundwater targeting, geomorphologic mapping, coastal and ocean resources monitoring, environment, ecology and forest mapping, etc.

NRSC was planning to implement a backup solution for data security and availability of the data on the server's. The environment is completely an UNIX environment where the servers are running with very old versions of UNIX flavors and where the databases and application will not support operating systems that are involved with databases like oracle, MS SQL. It was also for the operating system as well the servers. The existing servers are high-end and the data criticality is very high. Currently they don't have any automated backup on their environment and the existing backup tapes are too small for the data needs.

## The Solution

### 1. VERITAS Netbackup

The Choice Solutions Ltd. team in conjunction with the technical team of Infotech worked closely for this project. The job was to make it possible that the solutions provided would overcome the limitations and support for the environment. Finally the suggestion was put forward that VERITAS Netbackup software be deployed on their environment. There would also be a dedicated server along with it to take care of the backup for the other servers. Further it was suggested that Tape Library should also be connected to the SAN Switch.

This solution was suggested because SAN based backup will reduce the backup window with its high data access rate as well as reduce the burden. Through this solution, bandwidth chocking of local LAN can also be avoided. Data will be directly transferring only from the SAN Storage box to SUN Storagetek Tape library.

### 2. Key Solution Component

- **Backup Software:** Backup software for heterogeneous environments and robustness in backup to reduce the backup window.
- **SSO Option:** The best agent was used along with Netbackup which helped to transferred the data between the storage box and the tape library without any interference of the original hosted servers.
- **LEO:** This option from the backup software helped a lot in accessing the tape drives connected in SAN Switch through the FC channels and writing the data at a high speed in the drives parallel.
- **Tape Library:** Utilized the existing tape library to leverage the existing hardware. This hardware component is highly performed and data has been written simultaneously in two drives.

## The Benefits

This architecture will put fewer burdens on the servers where users don't find any difference while backup. SAN based backup will reduce the backup window drastically when compared to the standard LAN based backup method.

The recovery of the data is also in the same speed as customer will get the recovered data in less time window. Leveraging the existing hardware will reduce the investment of customer.

Dedicated server for backup will help the other servers to reduce their hardware and software resource utilization for backup and allow them to concentrate on their own server responsibilities.

## About Choice Solutions

Established in 1991 Choice Solutions Ltd. is a leading IT and Facilities solutions provider. Choice Solutions Ltd. business comprises of Six different practices, namely

### IMS

- Desktop, Server, Network, Storage, Support, OS, Assets, Apps, Non IT
- Hardware - A-Add, M-Modify, I-Install, C-Change, R-Repair
- Assets, Security, Software Distribution, Upgrades

### Networking

- Packaged Services Monitoring & Management
- Products, Security, Design, Deploy, Maintain
- Auditing & Compliance, SOC

### Datacenter

- DC Audit, Monitor & Manage, Training
- Assess, Design, Built, Deploy, Disaster Recovery

### Consulting

- Business Consulting, CIO & Technology Services, Physical Security, Power Devices, IT Consulting
- DC Consulting, ERP, CRM & Custom Apps

### Cloud Computing

- Cold Site – Backup, Disaster Recovery
- Hot Site – HaaS, Software, Manage
- Public Cloud, Private Cloud, Hybrid Cloud
- CaaS, License Software, IaaS
- Disaster Recovery

### Power

- Power Audit, Equipment Management
- Physical Security, Power Devices
- Power Saving Devices
- Design & Audit
- Renewable Energy Products