

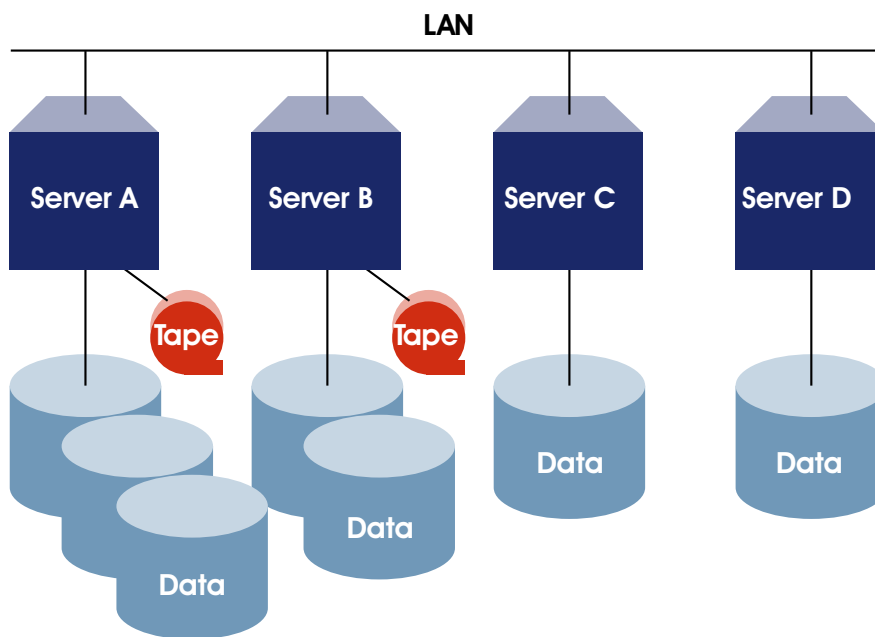


enlightenment

in a complex IT world

Data Protection

The diagram below shows a typical data environment present in many of your end user customers. Data is dispersed across many servers making the backup and recovery inefficient and man power intensive.



According to a recent survey from Contingency Planning Research, nearly half of all companies report each hour that downtime costs them \$50,000. For one in four companies, the cost of each minute of downtime ranges from \$250,000 to more than \$1 million or more. As recent events have shown us, one major event can put your company out of business – for good.

So what are the ways in that we can achieve effective data backup and recovery?

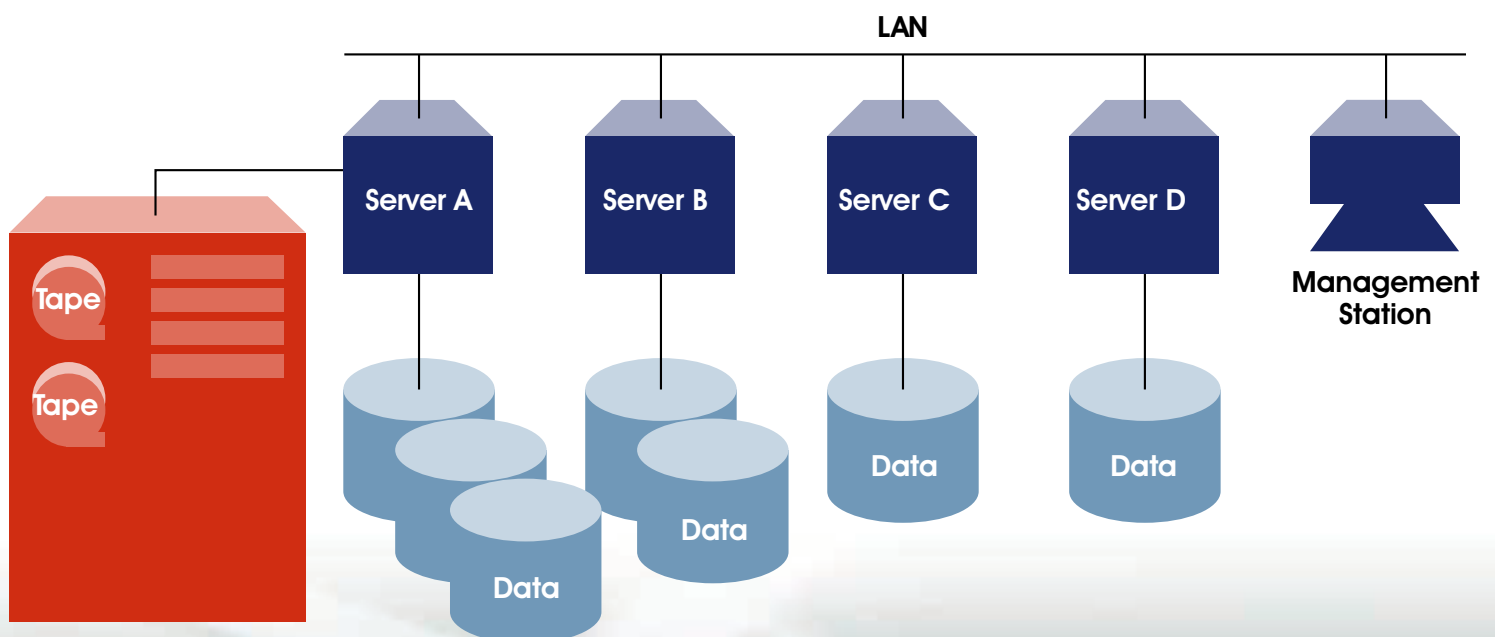
- Consolidation of backup devices to larger multi tape libraries will reduce management overheads and remove the human element of tape changing. In addition consolidation of software to a single management console will reduce the risk of failed backups going unnoticed and provide a simpler method for recovery.

- Remove data traffic from of the corporate LAN. This can mean introducing a Storage Area Network to provide dedicated bandwidth without impacting the performance for corporate LAN users.
- More frequent backups are becoming essential for organisations, as it is no longer acceptable to loose a day's data and recover from the previous nights tape. Using zero downtime tools such as snapshots and on-line application agents will reduce the performance issues related to backup, as these methods can takes minutes rather than hours enabling the backups to be taken during working hours and more frequently reducing the amount of data loss in the event of a failure.
- Off site copies can help protect business from localised disasters such as fire or floods but can add huge expense to the management, by using software tools such as HP OpenView Media Operations Manager or VERITAS Vault Option to mange off site copies, rotation and usage the management costs are once again reduced.

Consolidation of Backup Devices and Software

The diagram below shows a consolidated backup infrastructure.

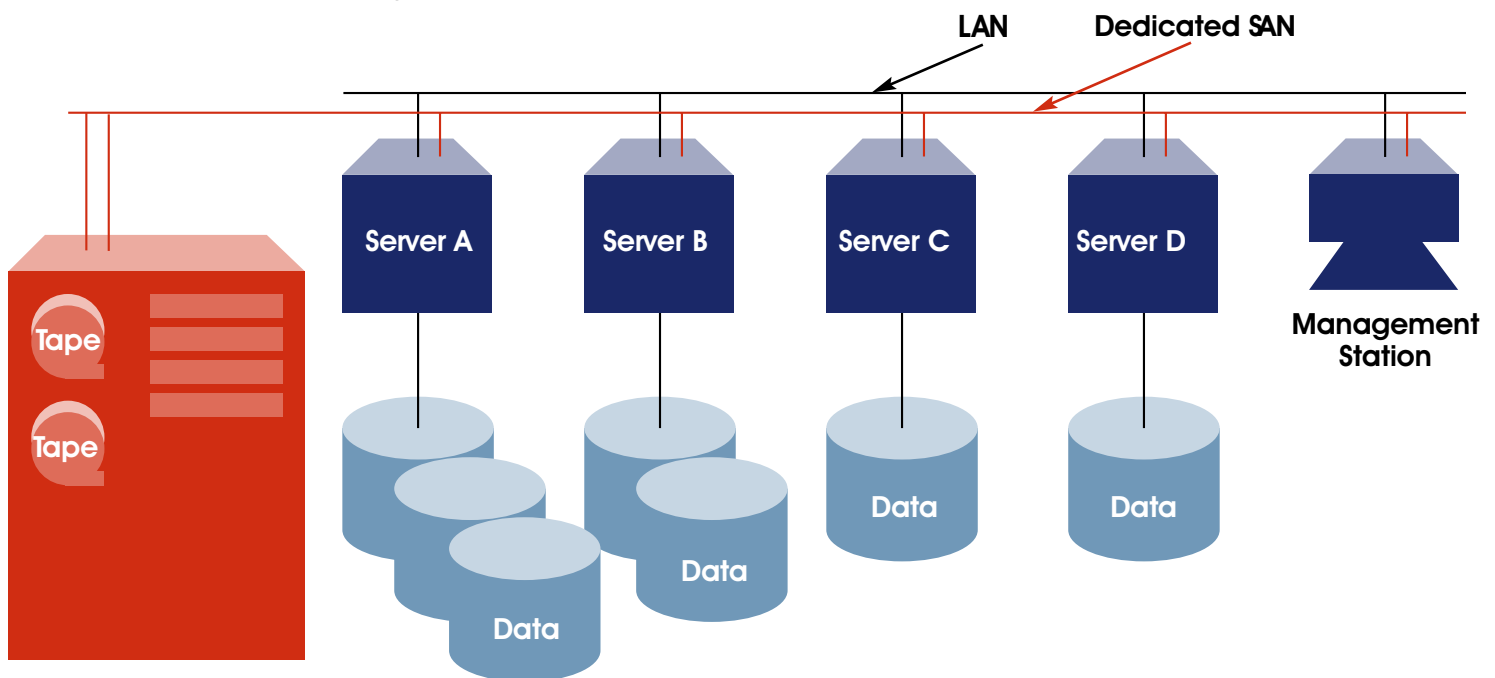
- Reduces number of interfaces and locations used to backup data
- Increases ability to scale within same people print
- Reduces management costs
- Increases tape utilisation



Removal of data traffic from the LAN for backup

When consolidation of hardware and software has taken place the next major issue will be the traffic generated over the corporate LAN. This is because you will be sending backup data across the LAN to the consolidated backup device. To overcome this you would normally create a dedicated Storage Area Network.

- Removes backup data traffic from the LAN freeing up valuable bandwidth for users
- Provides a means to perform backups in normal business hours
- Increases flexibility with regards to frequency of backups

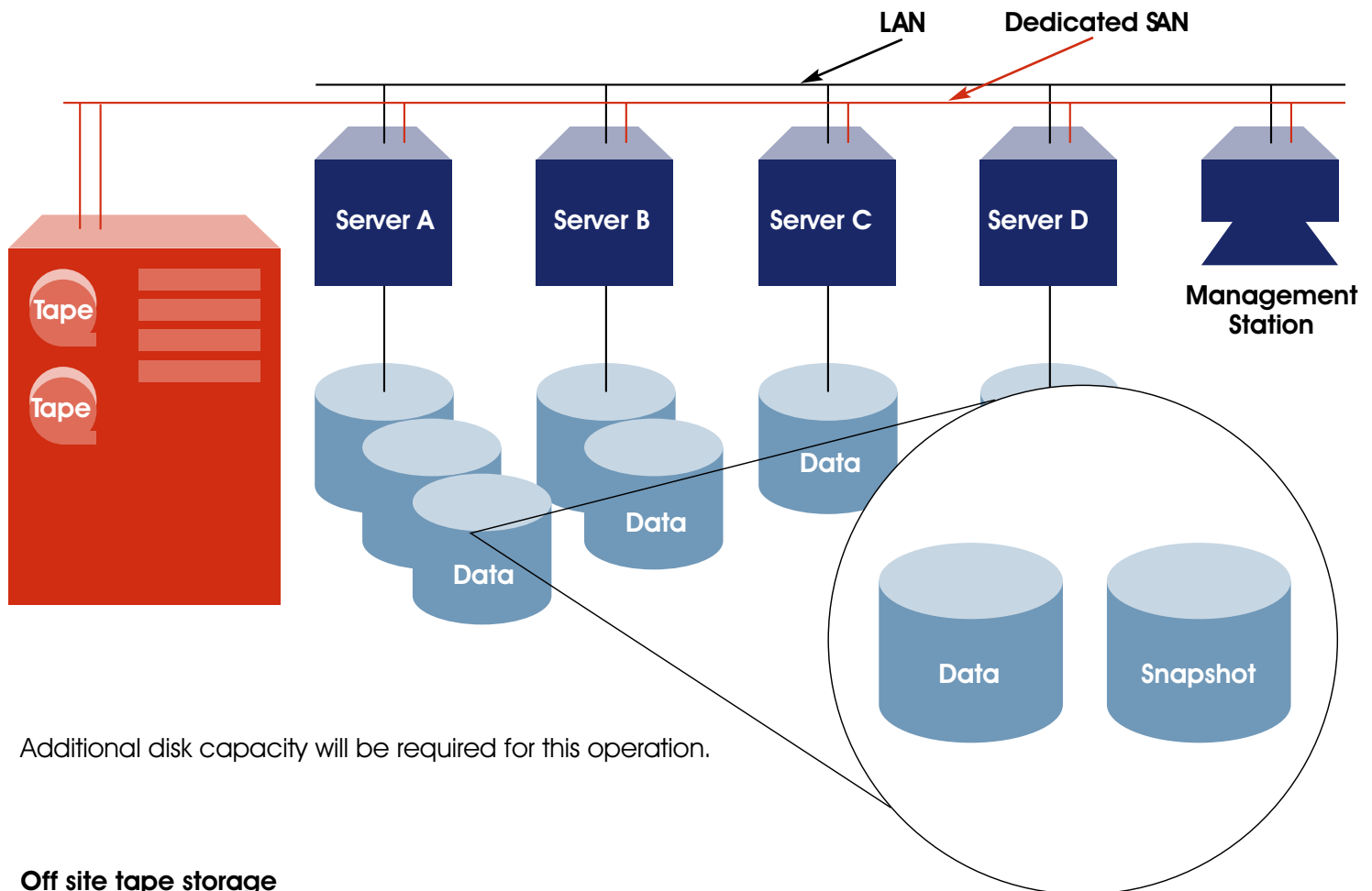


The diagram shows the SAN in red with the tape library logically attached.

Online and Snapshot Backups

With business dictating longer operational hours and in some cases 24 x 7 continuous activity with no interruption technologies such as Online and Snapshot, backups will have to be used.

- Reduces business interruption for the purpose of backup
- Increases the potential frequency of backups
- Provides on-line instant point in time copy of data



Additional disk capacity will be required for this operation.

Off site tape storage

To protect against localised fires or floods etc it is necessary to hold copies of backup tapes off site in a secure location, often bank vaults are used. However managing this process is time consuming and can be administratively very complex. By using Media management software in conjunction with your backup software it will remove this headache.

- Reduce management cost for off site copies
- Provide a real-time reporting mechanism
- Manage the life cycle of the tape media
- Allow delegation of tasks to no technical admin staff