

## PROCESS

### Backup actions to copy files/folder to separate location

#### - The Traditional method -

Conventional general practices include the backup of files to disk, copying disk to tape, rotating tapes to off-site storage.

##### Stage 1:

Ensure backup software is configured correctly to backup appropriate files and folders. And/or schedule backup out of hours.



##### Stage 2:

Monitor for failures and positively confirm backup successful.



**Stage 3:** Review errors and where applicable, raise and allocate helpdesk ticket for remediation.



##### Stage 4:

Arrange for Backups to be transferred to tape. A person must physically load the tape and instruct the system to invoke the backup service. This involves:

1. Identifying correct media. Typically the oldest but this can be complicated if specific archiving policies are used or if the multiple backup sets are employed.

- 1.a OR Expensive auto tape library system is used.



##### Stage 5:

Arrange for tapes to be transferred to off-site storage facility, recording tape details on rotation schedule and documenting contents

#### - The Managed service option -

Fully managed service with 24x7x365 monitoring, with automatic scheduled data snapshot retention

##### Stage 1:

Backup appliance (supplied F.O.C) uses inbuilt scheduler to scan the network to identify files, folders, servers, workstations. Data is copied to appliance. Appliance uses heart-beat monitor to check in with Backup centre to confirm successful operation and or highlight failures. Failures reported to IT dept team and/or backup retried automatically.

##### Automated:

Backup files are automatically archived to off-site backup centre via internet using compression and encryption to reduce size and maintain security of information.

## RECOVERY

### File or Folder Restore

#### - The Traditional method -

##### Stage 1: File/Folder Recovery

Identify correct file/folder, location, date and version.



##### Stage 2:

If file/folder is residing on media offsite request tape to be transported/retrieved from offsite storage facility {Depending on location and date, this could take 24 hours or more.}



##### Stage 3:

Upon confirmation of media, mount media and wait for system to re-scan. Once complete reload file/folder to original location.



##### Stage 4:

This is further complicated if incremental backups have been taken as opposed to daily overwrites.

#### Server failure

##### Stage 1: Server failure

In the event of a server failure the full backup needs to be restored.



##### Stage 2:

As per all the stages 1-4 illustrated above.



##### Stage 3:

Restore all the incremental tapes in the correct order/sequence. {If only one of the tapes is damaged, the server cannot be fully restored.}

#### - The Managed service option -

##### Stage 1: File/Folder Recovery

Logon to appliance from any workstation equipped with Windows Explorer: point, click and drag. The file is restored.

#### Server failure

Stage 1: In the event of a server failure; drag the whole directory tree over to your new server and every file will be repatriated automatically.

{Each night, the system automatically sends that days changed files over an encrypted internet connection to the data centre. In the event of a disaster, backup systems will despatch a new appliance to any location, fully loaded with all your business critical data}

## MAINTENANCE

### Support & Costs

#### - The Traditional method -

##### Cost Considerations:

Traditional way:

1. Tapes systems have a limited life span. Tapes typically need to be replaced every five months of continued usage



2. Tape drives need regular cleaning to ensure the heads are free from dust and particles.

{A "verification" of the backup on the creating drive will not necessarily ensure that the backup will function on an alternative recovery drive. Drive alignment is a serious concern for disparate system recovery}



3. In the event of a site disaster it is very important that the tapes are located offsite each night.



4. Staff must be allocated with specific duties to remove and rotate tapes off site.



5. Tapes need to be stored in an environment compliant & safe location.

{Temperature, humidity, Physical access control to prevent unauthorised access and Flood/Fire protection} otherwise the benefit of off-site storage is lost.

#### - The Managed service option -

##### Cost Considerations:

Managed Backup Service:

1. Each night, the system automatically sends that day's files over an encrypted internet connection to a data centre. In the event of a disaster, Backup Systems will despatch a new appliance to any location, fully loaded / pre-disposed with all your business critical data.

{All appliances are pro-actively monitored 24 hours a day. Should an issue arise, customers are alerted before it becomes a problem. The appliance is fully maintained by Backup Systems.}

{All data centres have full environmental and security controls to international standards}

## COST OVERVIEW COMPARISON

#### Traditional

- "Backup" Software Maintenance
- Disk storage space
- Media tape replacements
- Tape library system
- Off site storage facility
- Media transport costs
- Support resources

#### Managed Backup

- 1 x Service initiation charge
- Annual Subscription