



Backup: Supporting incident response, disaster recovery and business continuity

- Backup methods must be used according to an established policy:
 - How often to back up
 - How long to retain the backups
 - What must be backed up
- Data files and critical system files should be backed up daily, with one copy on-site and one copy off-site
- Nonessential files should be backed up weekly
- Full backups: keep at least one copy in a secure location offsite
- Decreasing costs of storage media, especially hard drives and removable drives, precludes the time-consuming nature of tape backup – restoration is much faster
- Storage area networks provide on-line backups

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Backup: Supporting incident response, disaster recovery and business continuity

- Full backup:
 - Includes entire system, including applications, OS components, and data
 - Pro: provides a comprehensive snapshot
 - Con: requires large media; time consuming

Differential backup:

- Includes all files that have changed or been added since the last full backup
- Pro: faster and less storage space than full backup; only 1 backup file needed to restore from full backup
- Con: gets larger each day and takes longer; one corrupt file loses everything

- Incremental backup:

- Includes only files that were modified that day
- Pro: requires less space and time than the differential
- Con: multiple incremental backups are required to restore from the last full backup

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The importance of site backup: Shared site

- Timeshare
 - Leased site shared with other organizations
 - Possibility that more than one organization might need the facility simultaneously
- Service bureau
 - Service agency that provides physical facilities in the event of a disaster
 - May provide off-site data storage
- Mutual agreement
 - Contract between two organizations to provide mutual assistance in the event of a disaster
 - Each organization is obligated to provide facilities, resources, and services to the other
 - Good for divisions of the same parent company, between business partners, or when both parties have similar capabilities and capacities
 - A memorandum of agreement (MOA) should be drawn up with specific details

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The importance of site backup

- If the primary business site is not available, alternative processing capability may be needed
- Exclusive control options:
 - Hot sites
 - Warm sites
 - Cold sites
- Shared-use options:
 - Timeshare
 - Service bureaus
 - Mutual agreements

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The importance of site backup: Hot site

- Fully configured computer facility
- Duplicates computing resources, peripherals, phone systems, applications, and workstations
- Can be 24/7 if desired
- Can be a mirrored site that is identical to the primary site

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The importance of site backup: Warm site

- Provides some of the same services and options as a hot site
- May include computing equipment and peripherals but not workstations
- Has access to data backups or off-site storage
- Lower cost than a hot site, but takes more time to be fully functional

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The importance of site backup: Cold site

- Provides only rudimentary services and facilities
- No computer hardware or software are provided
- Communications services must be installed when the site is occupied
- Often no quick recovery or data duplication functions on site
- Primary advantage is cost

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The importance of site backup: Other options

- Rolling mobile site configured in the payload area of a tractor-trailer
- Rental storage area with duplicate or second generation equipment
- Service agreement:
 - A contractual document guaranteeing certain minimum levels of service provided by a vendor
 - Service agreement should specify:
 - The parties in the agreement
 - Services to be provided by the vendor
 - Fees and payments for those services
 - Statements of indemnification
 - Nondisclosure agreements and intellectual property assurances
 - Noncompetitive agreements

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The importance of site backup: Mobile site





Source: http://www.availability.sungard.com/Resources/Virtual+Tours/Mobile/NA-Mobile+Recovery-Slideout.htm

Mobile site

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