PALMTECH
I.T. SOLUTIONS FOR BUSINESS

# Seven Fundamentals for a Great Backup Solution

1. **It must have both offsite as well as onsite storage.** Onsite storage of backup images allows for a quick recovery in the event of common hardware failures. Offsite storage gives an extra level of protection in the event the server and backup systems are stolen, the building burns down, or if a flood occurs.

2. **It must be automatic (no human intervention required).** More than 90 percent of all backup failures are the result of "inaction". Poorly designed backup systems require that a person attends to them daily. This may involve swapping tapes or hard drives. Any backup system that requires daily interaction WILL fail at some point because we all live busy lives and backups are one of those tasks that ultimately get neglected.

3. **It lets you know that it is healthy and also tells you when it has failed.** This can be accomplished by a daily/weekly email report that is automatically generated and sent to key staff members.

4. **It is performed AT LEAST daily but an excellent backup continuously backs up your data throughout the day.** We recommend our clients have hourly incremental backups for a high level of protection.

5. **It uses the latest in disk imaging technology and takes a hardware-independent "snapshot" of the entire server.** This insures that if a hardware failure occurs, the backup can be instantly restored to a wide range of off-the-shelf hardware to get the server back up within hours of a failure. For mission critical applications, the same technology can be used with a "standby" server for even faster recovery depending on the size of the dataset. This contrasts with traditional "file by file" backup methods that only backup critical data but not the operating system. File by file methods secure the data but do not insure Business Continuity the way an Image based backup solution does.

6. **It maintains at least 6 months of historical data.** Some industries require more backup history due to legal and professional requirements. This means that a file be restored from anytime in the past where a recovery point is available. PalmTech recommends at least one year if it is economically and technically feasible.

7. **It must have the ability to self-audit the backup image files.** It must have a hands-off way to audit and guarantee that the system is working without having to perform a test restore; however periodic test restores provide the ultimate level of accountability.