Backing Up

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Greetings once again from the realm of Cyberspace. This article will deal with the somewhat uncommon practice, by many of us, of backing up our computer systems on a regular basis.

Before we dive into this topic, ask yourself - "How often do you backup your computer system?" A regular system backup schedule could very well be the most common overlooked procedure by members of our organization.

Although there are several different backup schedules that may be employed, for the sake of brevity, we will discuss only one backup procedural plan.

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This backup plan is commonly referred to as the "4+2" backup plan. The number of backup media, generally tapes, needed for this backup plan is six (6). This is how the backup plan got its name.

The "+ 2" portion of the backup plan refers to the number of rotating monthly backups that are performed. Let's refer to these two monthly backups as "2a" and "2b" respectively.

For example, on the last Friday of the month we perform a "complete" system backup of all computer files onto Tape "2a." The following month, on the last Friday, we perform the same procedure - a "complete" system backup using Tape "2b."

These two (2) monthly tapes are then rotated on a monthly basis. By this we mean, on the last Friday of the third month we reuse and overwrite the information saved on the first monthly tape ("2a").

The "4" portion of the backup plan refers to the number of daily incremental backups performed on your system. For those that are unfamiliar with the term "incremental" - this refers to the backing up of ONLY those daily files which have changed since the last backup was performed.

Tape "4a" would contain five (5) incremental backups for the first week of the month. Tape "4b" would contain the five (5) incremental backups for the second week of the month. The fourth-week daily backup tape may be slightly different, however. Tape "4d" would only contain the daily incremental backups for Monday through Thursday.

You could include the incremental backup for the last Friday of the month if you wish, however this is also the day that we perform our "complete" system monthly backup.

The weekly incremental backup tapes may be reused until they are filled with incremental backups. By this we mean, you may wish to reuse Tape "4a" allowing the incremental backups to be added to or "appended" to this tape.

> *"... store the monthly backups OFF-SITE."*

In effect our Tape "4a" could contain the incremental backups for the first week of the months of January, February, March, and April. This will depend however on the amount of data that you generate on your computer system.

These backup procedures are very flexible and may be altered to meet your specific needs. You may wish to increase the number of monthly backups by implementing a "4 + 4" backup plan.

The one aspect of these backup plans that is VERY important - is the need to store the monthly backups OFF-SITE. These backups could be kept in a fire-resistant safety box at the owner's home or the home of the Computer Systems Manager.

Another important aspect is the need to have the necessary diskettes to accompany these backup tapes. These tapes, by themselves, are USELESS.

> *"... have the necessary diskettes to accompany these backup tapes."*

At a minimum these tapes need to be accompanied with a set of your operating system diskettes and the tape backup software diskettes. Before you could use your backup tapes, you would need to reload your operating system and tape backup software at a minimum.

The availability and inexpensive costs for today's external tape backup systems cannot be used as an excuse for not having an established "Backup Procedural Plan."

Many external tape backup systems can be purchased today for less than $200.00. This cost far outweighs the lost time and revenue from ONE computer system crash or computer virus.

See you in cyberspace!

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