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World Backup Day

World Backup Day is an annual event that occurs on March 31st to remind businesses and employees about the importance of backing up your critical business data. This event goes hand in hand with **Business Continuity Awareness Week (BCAW)** which takes place between the May 15th and 19th 2017.

Scheduled for the day before April Fool's Day, an easy reminder that it just would not be funny to tell your CEO that all company data has been lost due to a virus. Not backing up your PC or IT systems is no joke under any circumstances.

The Who has a song titled, ***Won't Get Fooled Again.*** The lyrics in the song have a compelling message related to the integrity of data backup strategy; *"and the world looks just the same and history ain't changed."* As a BCM Practitioner, I interpret it the same as if you have a good backup IT data strategy; the information is available if needed in the future.
The following is an approach on how an organization can construct their critical data backup plan for **Business or** disaster recovery.

Create a Data Backup Strategy

The strategy needs to be robust enough to ensure the recovery of data in any circumstance including fire, catastrophic hardware or software failure, file deletion, **virus or hacker attacks.** Data can be destroyed by system malfunction or by accidental or intentional means. Adequate backups will allow data to be readily recovered as necessary. Also, have a strategy that supports capturing 'critical data' as defined by a business impact assessment (BIA). Also, consider having two copies of your data available – one local (office or place of business) and one offsite via a third party service provider to store it remotely on their premises or secure servers.

- Data backup and restoring the data needs to be tailored to your business and operating environments, but flexible and scalable as your business data demands expand. Generally speaking, a data backup strategy should have the capability to enhance data availability with minimal data loss and corruption.
- An essential element of a data backup strategy includes the protection against viruses, deteriorating hard drives, disasters, and human errors. It is suggested to encrypt data when it is being copied.

Selecting a Reliable Backup Media

Choose backup media that can be managed internally or by external vendors/suppliers.

- Magnetic Tape –commonly used (less favorite) medium for bulk data storage, backup and archiving
- Hard Disk - The cost of hard disks have been dropping due to the progression of the technology but the big issue is that they are prone to damage
- Recordable CDs, DVDs, and Blu-ray Discs - Affordable and commonly used for personal computers and have low media unit costs
- Floppy Disk - Used from the dawn of PCs and are now virtually extinct
- Solid State Storage - Stick flash memory, thumb drives, and USB flash drives are affordable but easily misplaced
- Hard Drive - USB external or internal HD - probably your best option
- Remote Backup Service - Broadband Internet access to geographically remote locations
- Cloud Based Storage - Fairly new model of online network storage where data is stored in virtualized pools and hosted by third parties (use caution if using a third party service provider to ensure the privacy and integrity of the data)

Depending on the backup media used, the best protection against data loss is having a copy of the data replicated.

Understand your Recovery Point Objective (RPO) for critical data used in IT systems or applications.

RPO which is defined by business continuity planning as the maximum tolerable period in which data might be lost from an IT service due to a major incident. For example, if the RPO is set to four hours, then in practice, offsite mirrored backups must be continuously maintained - a daily offsite backup on tape will not suffice.

Deploy Data Backup Routines as part of normal business practices. Examples can include:

- Full backups (end of day/week or month)

- Incremental backups that only include files that have changed since the last full backup (faster than a full backup)
- Mirrored data replication is when the entire database is duplicated on a separate platform or disk drive. A mirror database can restore date without recovering it.

Do a Performance Test Periodically

No matter how confident you are about your data backup strategy, ensure it meets your recovery and restoration performance (as established by business users as the recovery time objective) on an annual basis (minimal), and test the data backup file quality by restoring them to alternate IT infrastructure. This on-demand recovery effort will identify gaps or data integrity issues, which can then be addressed.

Recovery Time Objective: This is the period after a disaster when 'must preserve' business functions need to be restored.

Backing up your critical data may be perceived as costly with limited value. The real benefit is when an unfortunate incident occurs, and your data has been compromised, it takes less time and money to get your business back on track, keep your customers satisfied, than it does to re-input information and re-start your business. This can enhance your business as a differentiator from your competitor.