

Types of data backup solutions for enterprises

Data is so crucial for your organization that your loss of data can be someone else's gain. What might seem to you as a redundant piece of information can be a game changer for your competitor?

However, you can't place the entire data in the same bucket and set the rules to have it backed up at certain intervals of time. It takes a dedicated team to identify which data is extremely crucial from the redundant lot. Accordingly, you can have the data backup solutions planned on a daily or weekly basis. At **Techno Edge Systems**, we offer [Data backup and recovery solutions](#) as we understand the importance of data and how it can turn around a business.



What are the different types of data backup solutions?

While there are primarily three types of data backup solutions – Full data backup, Incremental data backup, and the differential data backup solutions; they can be further augmented into Synthetic data backup and Incremental – forever data backup methods which can offer versatility to your backup solutions.

Let's see each in detail to understand their respective advantages and drawbacks:

- 1. Full data backup:** The full backup essentially stores a backup of the entire data at a scheduled time for example on a daily or a weekly basis.
 - The full data backup is basically a foolproof way to have your data protected.
 - Data recovery is easier.
 - Time-consuming and the entire data backup has to be scheduled during the off-peak hours to manage productivity issues.
 - A large amount of storage is required like the tapes or disks.
- 2. Incremental Backup:** Incremental data backup is performed at regular intervals after a full backup. For example, a full backup is performed on Saturday, and the incremental backup is chosen for the rest of the week, then the backup is performed only on the changes made to the data since Saturday, on Sunday, then further changes in the data on Monday and so on.
 - Less time consuming than full data backup.
 - Less storage consumption.
 - The disadvantage, however, is that restoration is difficult. All the tapes since the first full back up need to be included if a file from Wednesday has to be recovered.

3. Differential backup: Differential backup is basically more like an incremental backup with the exception that during every differential backup the changes made in the data since the full data backup will be saved. For example, after a full data backup on Saturday, the changes made since then are saved on Sunday. At this point, it is more like incremental backup. However, on Monday, the differential backup kicks in. It stores all the changes made since Saturday.

- Less time consuming than full data backup.
- Restoration is easier as compared to the incremental backup as fewer numbers of tapes are required. A file that needs to be recovered on Wednesday only requires two tapes at the maximum.
- The storage, however, will require more space than the incremental backup.

4. Synthetic full Backup: This back is a variation of the incremental backup, where all the changes to the data are backed up after a full backup, however, the server produces the copy of the full backup. Therefore, the synthetic full backup is more like a full backup, only the time consumption is also lower.

- The end result is similar to a traditional full backup.
- Less time consuming for data backup.
- Data restoration is easier as a fewer number of tapes are required for **data recovery**.

5. Incremental-forever backup: This data backup is very much similar to incremental backup. One full data backup is performed and then the subsequent incremental backups are performed. However, the difference is the restoration process is automated. Unlike the incremental backup where the data is stored on different tapes, the incremental-forever-backup stores in a large disk array or a tape library. Hence, one needn't manually figure out what tapes need to be included in the restoration process, it is fully automated and the system performs the sorting.

- Restoration is easier as it is automated.
- Less storage space.
- Time consumption for backup is low.

While these are the different types of data backup solutions available, talking to a professional data backup solutions provider will help you figure out the right kind of [Data backup solutions](#) for your enterprise. Talk to our team at **Techno Edge Systems** for the data backup solutions you require. Contact us at [+971-50-8740112](tel:+971-50-8740112) or visit our website www.itamcsupport.ae for more information.