How **Live Backup** Solves Big Challenges for Windows Servers

Live Backup technology *captures data as it changes* and forwards it immediately to the backup server's Repository. Live Backup benefits are immediate, tangible and can elevate your level of disaster readiness for Windows Servers to that of a large company, but for a fraction of the cost.

The principle is simple:

- Data is transferred as it changes so you always have another copy of your data on another machine (the AIMstor Repository) up to the last second,
- Because the data is always updated, you don't have to schedule those massive backups that impact CPU, disk and bandwidth for everyone in your organization,
- You have effectively **eliminated the backup window**. Plus, because backups are snapshots inside the Repository, you can have **increased recovery points**.
- Data is **Deduplicated** at both ends of the network, **Source and Target**, for maximum speed and efficiency.

Live Backup is applicable to many data protection solutions in the Windows Server environment. Below are a few examples of how Cofio's AIMstor Software uses Live Backup as its main component to solve data protection problems quickly, and provide enterprise type value in a hardware agnostic and simple to use software solution.

1. Live Backup Handles Different Needs

Businesses normally have a variety of different needs for data recovery, so they typically purchase products for different backup needs. Emerging challenges such as compliance for HIPPA, Sarbanes Oxley, Bank Secrecy and other regulatory guidelines, together with virtualization and distributed organization architectures, have imposed an evolving set of needs that normal backup products simply cannot handle.

AIMstor however, was designed to solve a variety of backup problems through one unified product, enabling it to tackle all of the most common backup problems faced by small to medium enterprises.

2. Application Backup

Applications often make up most of the core value of business data. Email servers, database and CRM systems, factory production systems, etc., are the lifeblood of organizations and they require very granular and specific Recovery Point Objectives (RPO's). AIMstor's Live Backup can provide you with another copy of your data with RPOs to the last second, and separate RPO's for any minute or hour for the past several days or weeks.

3. File Server Backup

File servers often have many more files and data than normal servers, resulting in very lengthy backup operations that can frequently exceed the backup window and tax servers with long scans and large data transfers. AIMstor Live Backup attacks these problems by sending only data as it changes in real-time. This completely removes the need for backup windows. Fileserver backup can be augmented with AIMstor Archive that is unified with Live Backup to provide lifecycle capture of files with a searchable index. Ideal for compliance needs.

4. Virtual Environments

Virtual environments such as Hyper-V, VMware and XenServer offer a new set of challenges. Although having more machines provides flexibility, it also increases issues because VM's draw on a host machine's resources exponentially. Simultaneous scans of multiple VM file systems combined with transfers of VM backup sets during a critical time window can render machines and networks to a standstill.

AIMstor Live Backup helps avoid such problems with key benefits to Virtual Environments:
- AIMstor is designed so that a multitude of machines can be added to a backup system easily - reducing the administrative overhead.
- AIMstor's Live Backup eliminates the backup window, as there is no longer the need to hit machines with wasteful backup process.
- AIMstor automatically senses machines that are virtual or physical, allowing the administrator to create convenient groups and policies specific to VM needs.

5. Remote Office

Because they normally reside outside the network and depend on low bandwidth connections, Remote Offices have always presented large headaches for backup administrators. AIMstor's unique changed byte transfer helps by supporting low bandwidth networks, keeping data moving across the network while it is still small. AIMstor remote office setups are centrally managed by the administrator, but the remote offices become auto-self-managing once they have been given instructions by the AIMstor Master. This reduces the chance for backup failures typically experienced using normal backup.

6. Laptop / Desktop Backup

Unlike servers, it is often impossible to establish a convenient time for Laptop / Desktop backups. Predictably, many of these machines go unprotected with a growing risk to the organization. But with AIMstor Live Backup you can capture data as it changes, and transfer data when appropriate. If the systems have connectivity to the backup Repository then data is sent at that moment. If the systems are disconnected, changed data is cached until the connection is re-established. No more scans or inconvenient large data transfers for users to suffer through.

7. More Advantages of Live Backup
- **Changed Byte Transfer** – Because only changes are sent, this is suitable for backups of not just documents but also large files such as Outlook PST files. If 4KB's of changes are made to a 2GB PST files then only 4KB's are transmitted , not the whole 2GB PST file.
- **Deduplication at Source and Target** – Reduces network bandwidth compared to normal backups by 95%. Also reduces backup copy storage on disk by 90% to 98% compared to normal backups.
- **Fast and Flexible Recovery** – Via Search with powerful Index, or via Snapshot View of File System
- **Flexible Retention for Compliance Needs** – Any Retention parameter imaginable
- **User Initiated Restores** – Through user interface with full search and file system selection capability

AIMstor: Many Functions in One Application

Click the links below to explore more capabilities of AIMstor, and how it unifies numerous data protection functions together with Live Backup for Windows Server environments in an easy, Drag 'n Drop interface.

Bare Metal Recovery
Ability to recover to similar or dissimilar systems, either physical or virtual, from Bare Metal or a new VM.
Remote Office Backup
Ability to support remote office connections over WAN and public networks.
Continuous Data Protection
Used together with Live Backup for added granularity in file and system restores.
File Archiving
Versioning with adjustable retentions and tracking for specific files, based on user driven data classifications.
Real Time Replication
Replication of any data (database, email, file server) across network for data aggregation, migration, standby server failover and other needs, based on specific data classifications to avoid replication of unneeded data.
Linux Server Support
Heterogeneous support for Windows and Linux machines and applications.
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