



HIGH PERFORMANCE FILE MANAGEMENT SOFTWARE FOR LARGE VOLUMES

Atempo-Digital Archive for Big Data and High Performance Computing







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OVERVIEW

Atempo-Digital Archive (ADA) is a data protection software solution with centralized management designed to handle large volumes of data. ADA supports backup and archive workflows, is able to integrate any other data movement required by new workloads, and operates in high performance and heterogeneous storage infrastructures, including Parallel File Systems/disk arrays, tape, object and cloud.

SOLUTION

ADA offers a solution for enterprises, research facilities and scientific laboratories that face new storage-related challenges common in High Performance Computing (HPC)/Big Data projects. With the explosion in volume and number of files of unstructured data, ADA is becoming more suitable to a broader range of industries who can benefit from the high performance solution. Classical applications and workflows are handled properly by most of the standard backup solutions. However, HPC/Big Data poses new challenges in terms of backup performance requirements, backup windows, overall storage optimization and the ability to retrieve data in a granular and flexible manner. ADA ensures that an organization's most valuable data is protected and easily accessible - while at the same time freeing up expensive disk space, lowering storage costs, and reducing the backup window.

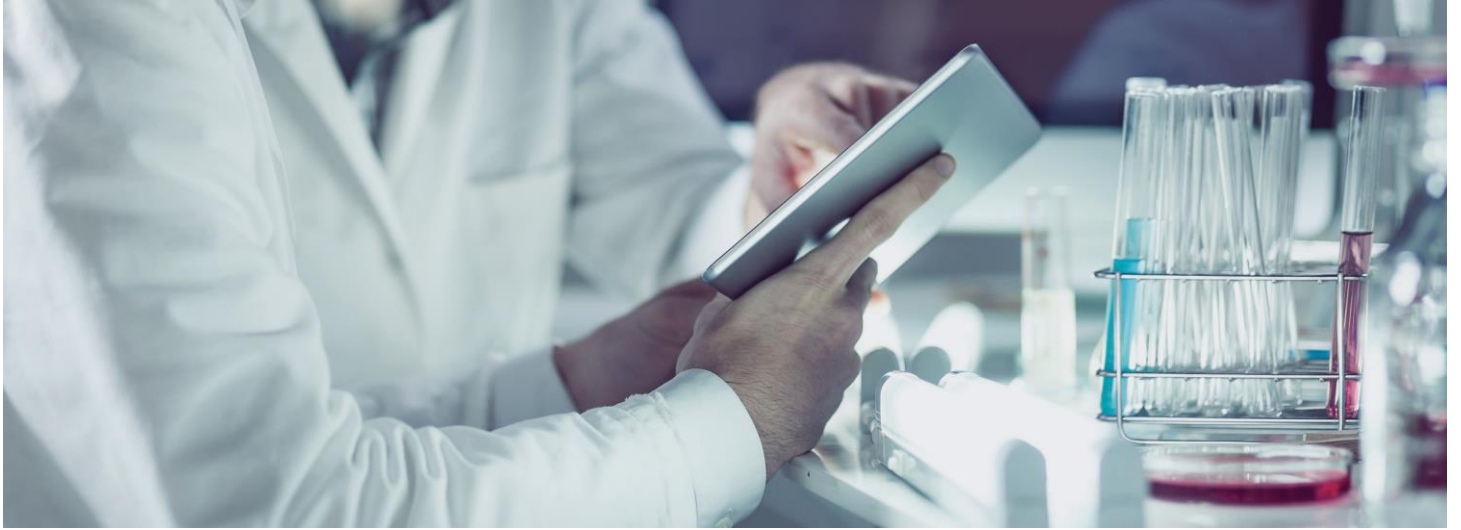
HPC AND BIG DATA STORAGE NEEDS ARE COVERED

EXPLODING BACKUP WINDOWS

Large volumes and tremendous number of files extend backup windows, putting data at risk. There is often a bottleneck somewhere so parallelizing data flow is key to ensure efficiency. ADA Data Movers can scale up to any infrastructure, matching the data throughput and maximizing the available bandwidth.

DEALING WITH HETEROGENEOUS STORAGE

To address performance, capacity and cost challenges, storage architectures need to integrate heterogeneous technologies such as Flash, disk, object storage, optical disk, tape, cloud, and any combination of these platforms. As archiving and backup need to cope with all storage tiers, ADA offers broad storage compatibility with a deep integration level guaranteeing the best performance and avoiding vendor lock-in.



FACING PROPRIETARY FORMATS

With ADA, you won't have to worry about proprietary formats since ADA only uses open formats. Our solution lets you maintain the original folder structure of your data in its native format on disk or in the cloud, and benefit from the widely used TAR and LTFS format on tape. Access to files for recovery is direct and easy whether for day-to-day use, for mid and long term retention, or for sharing data with third parties.

SPEED & SCALABILITY

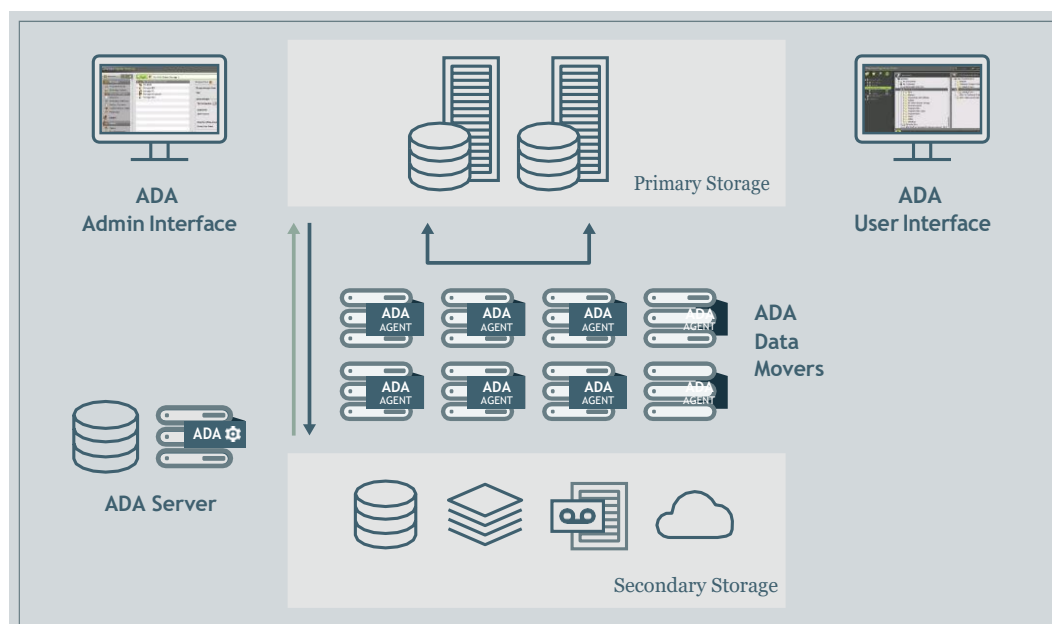
Our customers use ADA to process extremely large files as well as hundreds of millions of small files between Petabyte storages. Thanks to a tight integration with storages, ADA can leverage snapshots and fastscan technologies with selected brands. Large volumes of data are transferred by scalable farms of ADA Data Movers, which can move GB/s and deliver more throughput than most networks can handle. To increase performance, simply add a data mover. Scalability is no longer a concern. In addition, all data movements are restricted to authorized storages and authorized users, and are strictly monitored.

FACING RECOVERY

If you just lost data from a storage for which ADA had a duplicated copy, you'll find that the copy is complete with all the folders, sub-folders structure and file attributes. Recovery can be based on "Point in Time", and you have the ability to browse the storage to choose the files to recover. If you need to retrieve an archived project or folder, use metadata searches or browse and find the relevant version of your assets and restore it where you need it.

INTEGRATING OBJECT STORAGE

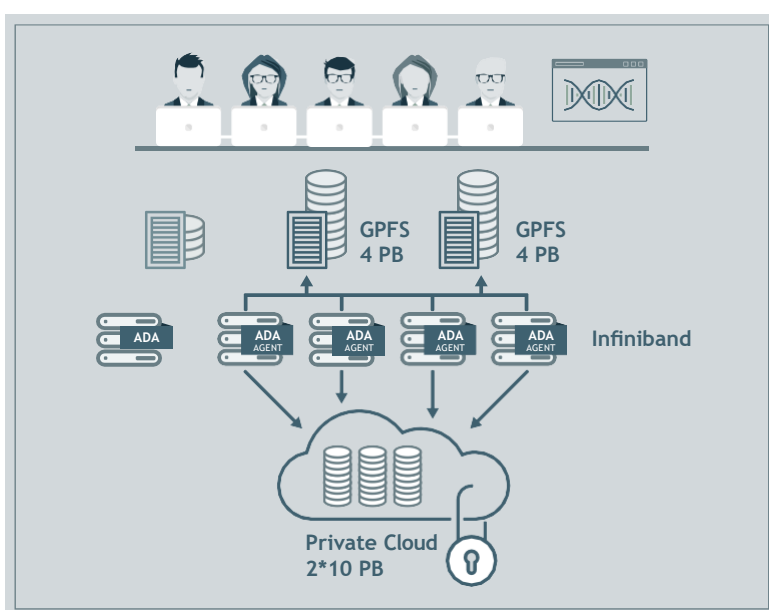
In the past, large volumes were often stored on tape. Now, when it comes to making full and incremental backups of large amounts of data, tape is challenged by object storage. Object storage will be able to quickly restore any version of a file. Writing speed is best served with the right number of ADA Data Movers that make ADA a scalable backup solution for Big Data.



AMERICAN HOSPITAL REBUILDS THEIR IT BACKUP SYSTEM

An American hospital specialized in DNA sequencing and cancer research had a primary storage system that was soon to be obsolete. The overall backup was done with 10 LTO6 drives and over 2000 cartridges. A full backup took over 10 weeks.

The hospital chose to recreate its storage infrastructure by replacing its primary storage with two GPFS storages of 4 PB each. The backup storage was replaced by an object-oriented solution becoming an in-house private cloud. A pool of ADA Data Movers secures the GPFS data in the 2x10 PB private cloud at 5 GB/s, supporting not only backup but also archiving workloads.



FEATURES

- Scalable farms of Data Movers provide limitless throughput
- Parallelized backup/copy/move jobs adapt to storage capabilities
- Tight interfacing with primary storages
- Fastscan detects file changes on source storages
- Copy, move & archiving. All actions are logged
- Incremental forever in Petabyte environments

TECHNICAL SPECIFICATIONS

ADA SERVER SUPPORTED OPERATING SYSTEMS

Microsoft Windows, Linux, UNIX

USER INTERFACE SUPPORTED OPERATING SYSTEMS

Microsoft Windows, macOS, Java for UNIX and Linux platforms

SUPPORTED STORAGES AND MEDIA (SELECTED LIST)

DataDirect Networks Grid, ExaScalers & WOS, Scalify RING, Dell EMC Isilon & ECS, HGST ActiveScale, NetApp FAS & StorageGRID, Caringo Swarm, ObjectMatrix, Amazon S3, and disk, tape, object, cloud and file servers running Windows, macOS, Linux, Unix

SHARED FILE SYSTEMS

GPFS, Lustre, Stornext, ...

USE CASES

- Petabyte backup
- Storage tiering
- Data movement & migration
- Mid and long term archiving

Since 1992, Atempo provides business continuity solutions to secure and preserve essential business data for thousands of companies around the world. Our integrated suite of solutions include our market leading data backup and disaster recovery offerings (Time Navigator and Live Navigator) and our innovative archiving solution (Atempo-Digital Archive) which features intuitive retrieval interfaces and supports a broad scope of platforms. Based on high performance data movers our solutions are extremely scalable. The Atempo products are, therefore, suitable for the data protection needs of midsized to petabyte scale businesses and large distributed enterprises.

Atempo is headquartered south of Paris, France, in Les Ulis with operations in Europe, the Americas and Asia; it has a sales and support network of over 100 resellers, partners and Managed Service Providers (MSP) serving our customers worldwide. Learn more at www.atempo.com.

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