

Athinio Disaster tolerant, multi-site File Storage platform for Data driven organizations

Solution Brief

Organizations of all sizes have different data silos, where they store various forms of file level storage at disparate file storage systems such as file servers, or NAS heads, backup vaults. Employees located at different departments or locations create new data, such as design documents, research drawings, diagrams, which needs to be centrally stored and protected for sharing with others and for compliance/data protection, and managed for long term data governance and organizational control on data assets. CIOs and IT managers struggle with data loss, missed backups, lost data tapes or disasters at sites. IT admins and users needed a simpler file storage solutions that automatically protect, manage their data as its business value changes. Users need a distributed storage platform that will help distributed employees access, store data at a central place.....CIOs and IT heads need a centralized storage without storing all data in one place, for added data security and disaster tolerance. CFOs need a reduced capex and lower Opex, by reducing the purchases or data storage complexity by out-sourcing to a third-party, without out sourcing control. Cost-conscious CIOs now started looking for cloud-integrated, file storage solutions that autommatically "spill over" to cloud, but without being locked-in to a single cloud provider. Multi-departmental IT environments need tools for various users to access and store data. Such tools include standard protocol level access such as CIFS (Common Internet File System) on windows environments or NFS(Network File systems) on Unix or Linux enviornments. Some times, various departments may not be in the same LAN, and may be located on the other side of WAN connection, in which case they need easy tools to upload or retrieve files, securely. Other key features that will enable the IT team located at HQ office is to access the file storage as if a local file system, and manage it centrally, for storage migration or capacity scale out. These pains are very business-criticial for verticals such as healthcare/medical transcription partners, Technology/research companies.

Athinio just delivers all these solutions, from a single file storage platform, radically revolutionalizing file storage paradigm from its Universal file storage platform. Athinio delivers all these compelling functionalities in a single platform – a Universal file storage controller (software-only solution), having a distributed, Disaster tolerant Object storage back-end, with easier tools to access the storage for users. Athinio has several international patents pending, around



cloud-integrated file storage technologies.

Please Refer, deployment diagram shown below; Various employees are located in the same or different LAN. From the same LAN, the central storage is accessible as a large local drive by drive mapping(on windows) or a file system mounting (Linux). For those who are away across a WAN, they access the files using installable software agents or through a browser. With this architecture, individuals need not do any data management and no more copies in the USBs required. All data is centrally stored, and managed by the built-in software, without needing any expensive high end storage system. Athinio platform delivers distributed data access, with centralized management while actual data is stored in a Disater tolerant, distribute storage vaults.

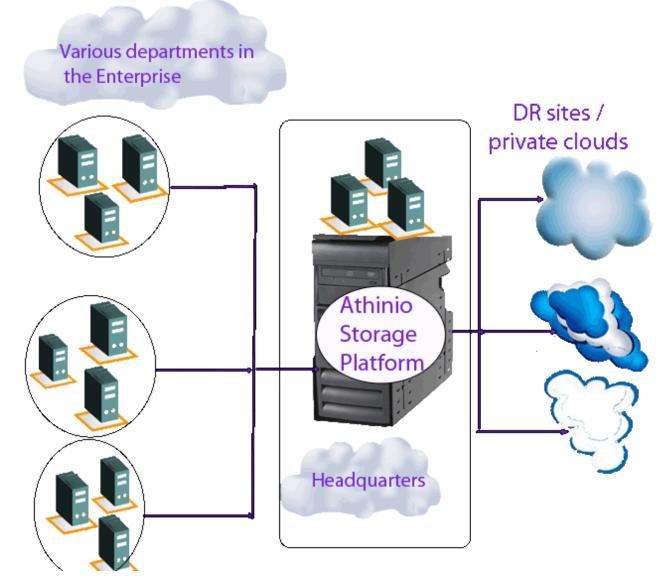


Fig 1.0

A-602 Ajmera Green Acres, Kalena Agrahara, Near Meenakshi Temple, Bannerghatta Road, Bangalore-560076. Tel. No: 08042179002, website: www.athinio.com



All files are erasure coded, based on the reed-solomon dispersal algorithms, and can be distributed with N:M availability redundancies or customer can host low-cost, commodity x-86 storage servers which runs Athinio object storage system, that can store petabytes of cold data, on an active archive manner. Athinio gateway can also be configured manually, where data older than a specified period to be moved to an external disk, which can also be guided by the gateway, with a manual intervention of a support staff, when data access is needed or when data needs to be moved to the tape or external media.

Athinio key benefits:

- 0) Radically simplified File storage platform needing no separate backup or off-site replication or archival of older data, as its built-in to the file system itself. Delivers storage, data management and very secure offsite-storage-integration from a single platform. Athinio storage platform has built-in CDP with replication to a DR site.
- 1) Zero data loss, data availability-first architecure, with no single point of failure.
- 2) Complete investment protection to exsisting, expensive storage. Athinio solutions can be used as a lower-cost, primary storage for Tier 2 or older file storage. Athinio system can transparantly migrate data from exsisting high end storage box, freeing it from older data.
- 3) Older Data can spill over to cloud, with un-hackable cloud(private cloud) integration with information therotical security: Data stored in the private cloud after a key-less encryption and information dispersal. If data is hacked at a single site or two sites, reveal no information. This security cannot be broken by brute force, which is computational. Athinio security is information theroitical without key management issues.
- 4) Efficient replication or more than five 9s storage availabilit of big data.
- 5) Active archive or petabytes of data: Data can be accessed from the athinio gateway, regardless of the actual location of the data (whether in the gateway itself or in the clouds).
- 6) Information life cycle management with onPremise-cloud stroage



migration.Data can be migrated from exsisting storage systems to athinio or cloud, with no disruption to any applications.

- 7) Maximum customer options: Customer can chose a fully onPremise or a hyrbid cloud solution.
- 8) Simple to install and use.

Conclusion

With Athinio multi-cloud storage virtualization technologies, File storage market is disrupted that brings radical simplicity, and dramatical cost reductions, without compromizing on security or availability of the stored files. Athinio offers various software components that collects data from even captive storage, that doesn't understand standard network protocols, and customers will truly be fortunate to keep their digital files, for a longer period, without worrying for hugely expensive and complex scale-out storage systems.