Cloudian HyperStore Connect for Files

SMB/NFS/FTP File Services, Global Namespace, and Versioning

Cloudian HyperStore® Connect for Files allows enterprises to offer scalable file services on top of Cloudian HyperStore object storage using industry standard protocols such as NFS, CIFS, and FTP. File based environments can gain from the extreme durability, availability, geo dispersal, multi-tenancy and low cost of Cloudian HyperStore object storage.

Traditional NAS Challenge

Files stored on traditional storage never seem to expire and management costs continue to escalate. Most files are still stored in “Isolated Islands of Segregated Silos” on monolithic NAS appliances. This approach results in vendor lock-in, complexity, and expensive management.

Global File Access Challenge

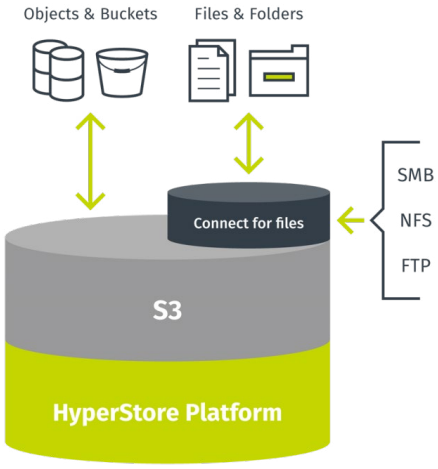
For global enterprises files are created at various locations across the world and may need to become immediately available to the entire enterprise. Distributing data across geographies presents a major problem for corporations. Imagine uploading a file to the cloud in Office A and having immediate access to the file in Office B. Today there is still no simple and cost-effective solution.

HyperStore Connect for Files

Cloudian can now deliver a global namespace with standard file access protocols. It provides global file services on top of HyperStore object storage system. HyperStore Connect for Files is comprised of two modules — Stateless Access Points and optional Global View Manager.

File Access Point

Access Points provide an easy and secure method for providing file access to data centers, work groups and remote locations just like traditional file servers. Access Points translate file protocols such as SMB, NFS, and FTP directly to HyperStore object storage using the S3 protocol. Access Points can be installed as virtual or physical appliances.



Global View Manager

Global View Manager is designed for organizations requiring global file accessibility, collaboration, and workflow distribution across geographically dispersed offices. Customers can connect multiple access points to a Global View Manager to offer a global namespace or view. It also ensures namespace consistency between sites.

Global Namespace with Global View Manager

A local namespace can be easily scaled to a global namespace by deploying additional File Access Points and Global View Manager. Once a new File Access Point connects to the Global View Manager, file storage is immediately available and accessible to all participating locations.

FEATURES

Active Directory
Fully integrated with Active Directory including ACL support.

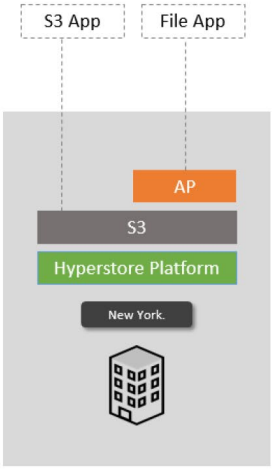
Delete with Version Control
Deleted files within HyperStore Connect for Files will be automatically moved to a Cloud Recycle Bin that will maintain versions based on a user-defined policy for easy recovery.

Parallel & Multi-Threaded Access
Parallel path and multi-threaded architecture provides a variety of tuning mechanisms to optimize file IO. HyperStore Connect for Files automatically splits data blocks in many slices which when combined with parallel writes provide unprecedented performance.

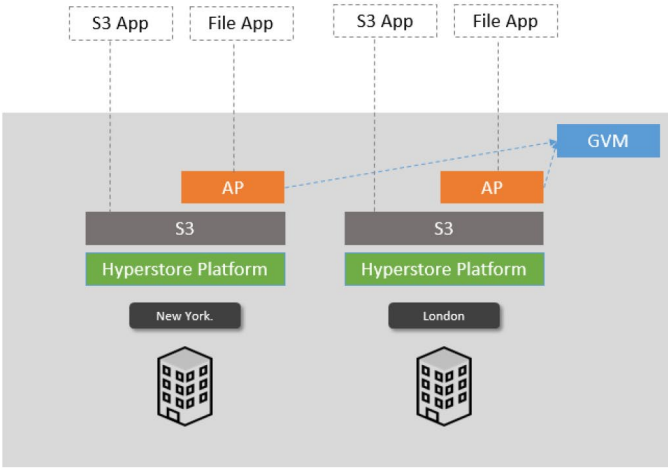
Full Support File Re-Names
Easily rename and/or move folder and files within HyperStore.

Easy Recovery
Eliminate namespace catalog corruption with the ability to rebuild all metadata directly from HyperStore.

Deployment Models



Single Namespace,
Single Data Center



Single Namespace, Multiple Data Centers

Metadata in Object Storage

Apart from file data, all namespace metadata and catalog information is always saved in the HyperStore object storage and cached in the Global View Management. In case of a catastrophic failure, the Global View Manager cache may be rebuilt from the actual metadata stored in HyperStore.

Inline Performance

File Access Points always directly reads and writes to/from HyperStore. The Global View Manager only manages metadata and is not in the data path. This prevents the Global View Manager from becoming a bottleneck especially for data flowing between Access Points and Global View Manager.

Stateless Access Points

Access Points never cache any writes and always writes through all the data directly to HyperStore. This makes the Access Points easy to recover in case of issues.

On-Line Expansion

Add multiple File Access Points for increased performance or for additional redundancy locally or globally in real time.

Cloudian, Inc.
177 Bovet Road, Suite 450
San Mateo, CA 94402
Tel: 1.650.227.2380
Email: info@cloudian.com
www.cloudian.com