

Scale-Out Smart Object Storage for Exploration & Production

CLOUDIAN HYPERSTORE[®] PROVIDES COST EFFECTIVE, EFFICIENT OBJECT STORAGE FOR OIL AND GAS COMPANIES



Cloudian HyperStore Benefits:

- Scales from 100s of Terabytes to 100s of Petabytes at low cost
- Dynamically scales performance and capacity as cluster expands
- Ease of use with Single console administration
- Always-on Availability with Transparent Fault Detection
- Tiering, Disaster Recovery (DR) and Data Migration (Built-in)
- Smart Storage for analytics on your metadata and data in-place
- Multi-protocol access supports S3, NFS, SMB and HDFS
- Cloud Compatible with 100% S3

Solution Overview

The energy industry is struggling with a seemingly impossible challenge – store more data, increase adoption of valuable analytics and lower cost. Cloudian HyperStore[®] presents the ideal solution to meet this challenge. It's a software defined, S3 object storage which can grow with your demand. It scales horizontally from 100s of terabytes to 100s of petabytes of data and with intuitive, centralized management. Adopting scale-out object storage can solve your data challenges today.

Challenges for Energy Companies

- Lower Costs
- Managing Capacity growth
- Unpredictable demand requires dynamic expansion and reduction of storage
- Complexity of Storage Operations increases costs
- Maintaining storage uptime to be always-on
- Data distribution across sites and geographies
- Becoming Cloud-ready

More Data, More Storage, Lower Cost

According to IDC, new technology offers Oil and Gas companies a way to improve operations and enhance their bottom line "Over the past year, the oil and gas picture has changed dramatically," said Chris Niven, research director of Oil and Gas, IDC Energy Insights. "Our research shows that oil and gas companies do believe that technology – automation, Big Data and analytics, and the cloud – can mitigate the risk of low oil and gas prices. The industry needs to keep a focus on innovation to be ready whatever comes next". The need for an affordable and effective approach to information management and storage has never been greater.

HyperStore Software
Enterprise-Scale. Unprecedented Efficiency

 Natively S3	 Hybrid Storage Cloud	 Extreme Durability	 Multi-Tenant
 Geo-Distribution	 Intelligence in Software	 Scale out	 Smart Support
 Billing & Reporting	 Data Protection	 Quality of Service	 Programmable

Cloudian HyperStore Benefits for the Energy Sector

The Cloudian HyperStore storage system allows oil and gas companies to consolidate and store vast amounts of data at a very low cost. It is 100% S3 compatible and allows you to build a cloud first architecture for your capacity storage.. The system can be simply deployed using standard servers (x86) or can be deployed as an pre-configured appliance.

Enterprise Use Cases

- Backup and Store
- Long-Term Archiving
- File Sync and Share
- Remote Office File Storage
- Storage as as Service (STaaS)
- Secondary Storage for Openstack & Cloudstack

Think Big, Scale as You Grow

HyperStore allows you to cost effectively scale to hundreds of petabytes simply by adding nodes, or leveraging tiering to the AWS cloud as your capacity requirements grow. You can scale your capacity by adding nodes to your environment without any service downtime. Allowing you to start small and scale with your demand.

Additionally per-node I/O operations are optimized with Virtual nodes (vNodes) which provide highly parallelized data striping without the overhead of traditional RAID schemes.

Always On, Secure Storage

HyperStore data is protected from any type of failure – disk failure, node failure, network failure or even disasters. It provides configurable erasure coding for deep archive efficiency and flexible redundancy, giving you robust data protection without consuming precious disk space.

Data is encrypted for security with AES-256 Server-Side Encryption and transport can be encrypted with SSL or TLS encryption for data confidentiality.

Multi Datacenter

Data can be deployed across datacenters and geographies and HyperStore will maintain the consistency of the data. This allows you to manage multi-datacenter storage as a single storage pool.

Multi-Tenancy and QoS

Advanced identity and access management allows system administrators to provision and manage groups and users, define specific classes of service and configure billing and charge-back. Multiple credentials per user is also supported. Quality of Service (QoS) is configurable at a group and user-level. QoS settings ensure groups and users do not exceed storage quotas or consume bandwidth in a manner that impacts other tenants.

NFS/SMB Support

Cloudian is known for its S3 compatibility but we also provide a robust NFS and SMB gateway service, HyperStore Connect for Files (HCF), which allows any file based application to interface to the storage. HCF is highly available and all data persistence and metadata is persisted in the HyperStore object storage system.

S3 Compatibility

With complete S3 compatibility, HyperStore ensures seamless S3 integration with every available AWS/S3 application. HyperStore allows unmatched choice in deploying applications and storage on-and off-premises archiving; NFS/CIFS gateways; and desktop file storage & backup; Cloudian uniquely supports them all.

ABOUT CLOUDIAN

Based in Silicon Valley, Cloudian is the leader in software-defined smart data storage. Our flagship product, Cloudian HyperStore®, is the only fully S3-compatible storage platform that enables service providers and enterprises to build reliable, affordable and scalable hybrid cloud storage solutions. Join us on LinkedIn, follow us on Twitter (@CloudianStorage) and Facebook, or visit us at www.cloudian.com.

For more information, or to try Cloudian HyperStore, visit www.cloudian.com.



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