Cloudian HyperStore Software-Defined Storage

Accommodate your most capacity-intensive workloads with Cloudian® HyperStore® software-defined storage. Get the scalable, S3-compatible storage you need for use cases such as big data, media archives, healthcare records, and video surveillance. Compatible with industry standard X86 servers, Cloudian provides intuitive management tools and built-in data protection that make it easy to manage and grow.

S3-Compatible and Hybrid/Multi-Cloud Ready

Cloudian's native S3 API implementation offers the industry's highest level of S3 interoperability, letting you capitalize on the rapidly growing ecosystem of S3-enabled applications. It's also compatible with public cloud platforms including AWS, Google, and Microsoft. Integrated data management tools make it easy to integrate your on-prem and cloud storage environments.

File and Object Storage Support

Proven in over nine years of deployments, HyperStore's native S3 API implementation eliminates gateways or access layers to give you guaranteed compatibility with your S3-enabled applications. For files, deploy Cloudian HyperFile, the optional SMB/NFS interface. Together with Cloudian HyperStore, HyperFile provides a cost-effective solution for your capacity-intensive, less-frequently used files.

Uncompromising Data Durability

Get up to 14 nines data durability and configurable data protection. Only HyperStore offers granular management that lets you customize data protection for various data types within a cluster. Select from multiple levels of data replication and erasure coding.

Object Lock for Immutable Data

Object Lock prevents object version deletion during a user-defined retention period. Immutable S3 objects are protected using object- or bucket-level configuration of WORM and retention attributes. The retention policy is defined using the S3 API or bucket-level defaults. Objects are locked for the duration of the retention period, and legal hold scenarios are also supported. This functionality provides data protection from accidental or malicious deletion as well as ransomware. Regulatory compliance with SEC Rule 17a-4(f), FINRA Rule 4511, CFTC Regulation 1.31 is validated in an independent assessment.

Integrated Multi-Site Capability

Extend your storage with the industry's most flexible geo-distribution architecture. Replicate data across regions to provide local access and resilience in the event of a data center failure. Configurable consistency levels let you select either synchronous or asynchronous replication. Or employ distributed erasure coding to stripe data across sites as a highly-efficient disaster recovery option.

Scalable Performance

Process multiple requests in parallel, across all nodes in HyperStore's shared-nothing cluster. This eliminates bottlenecks and allows performance to grow as you add nodes. For large file transfers, multi-part upload lets you transfer files seamlessly between sites or to the public cloud.

Features

- Limitlessly scalable capacity
- Non-disruptive capacity expansion
- Fully native S3 API for guaranteed application compatibility
- Efficient data protection with replication and erasure coding
- Bucket-level granularity for all storage policies
- Encryption for secure data storage
- Comprehensive multi-tenant services
- Quality of Service (QoS) controls
- Integrated billing, management, and software
- Multi-data center support via replication and erasure coding
- Compatible with industry-standard X86 servers

Multi-Tenancy

Establish multiple user spaces with HyperStore's multi-tenancy capabilities. Provide individual management domains and namespaces within a shared cluster. Cloudian offers QoS controls and billing features that let you manage bandwidth and chargebacks.

Intuitive Management

Manage Cloudian via the intuitive GUI or automate tasks using the RESTful API. Cluster management tasks are simple as well. Add or remove nodes and update system software without disruption.

Variable-size Metadata Tags

Record metadata along with user data to facilitate data management and data search. Elastic Search integration provides near real-time search capability. Variable metadata tag sizes give you flexibility not found in other object storage systems. Security HyperStore AES-256 Server-Side Encryption enables enterprises and service providers to easily encrypt data stored at rest. SSL encryption ensures data confidentiality for data in transit (HTTPS). And with S3-compatible object-level ACLs, system administrators can better manage access to buckets and objects.

Compatible with Industry Standard Servers

Cloudian HyperStore is compatible with bare-metal, industry-standard X86 servers. Minimum devices configurations are shown below. Three or more devices are required to form a cluster.

Server Recommended

• 16 cores

• 128GB RAM

• 2x 960GB SS; 12x 4TB HDD

• 2x 10GbE ports