



10 Top Reasons Why Customers Choose Cloudian HyperStore

On-premises, S3-compatible object storage provides cloud flexibility and multiple data protection options



Are you weighing the benefits of cloud vs on-premises storage?

If so, the right answer might be to use both — a mix of on-premises and public cloud services with data mobility between the two platforms.

Here are 10 top reasons why customers choose Cloudian HyperStore:

1 S3 Enabled

Simple Storage Service (S3), pioneered by Amazon, has become the “de facto” standard for object storage in the cloud. Companies and developers implementing S3 apps that may run on-premises, or in hybrid/private cloud should consider Cloudian HyperStore® as it is 100% native S3. It even reports the same error codes as AWS. Customers’ existing HTTP S3 applications are guaranteed to work and can even use the same AWS S3 SDK for building S3 apps.

2 Multi-Tenancy & Self Service

Cloudian HyperStore allows multiple users on a single, shared infrastructure without compromising security. Data for each user is logically separated from other users’ data and cannot be accessed by any other user unless access permission is explicitly granted. Cloudian HyperStore gives role-based access to system and group administrators and to users. Users can select and provision storage services on-demand from a service catalog, all done via a self-service portal.

3 QoS & Quotas

Cloudian HyperStore administrators can set usage rate limits and storage quotas on a per-group and per-user basis. Group administrators can set rate controls and quotas for individual members of the group, allowing prioritization and ensuring preferred access to resources for select users within a group. This level of granular control also ensures that resource consumption (BW, capacity) does not go beyond the limits of the Cloudian HyperStore storage system.

4 Protect & Distribute Data with Storage Policies

Cloudian HyperStore provides storage policies (administrator selectable) for implementing data protection based on the value of the data. Users can choose which pre-configured storage policy to effect in order to protect the data. Customers can protect and distribute data using **Replication** or **Erasure Coding**.

- With **Replication**, a configurable number of copies of each data object are maintained in the system, and each copy is stored on a different node. Copies can exist at various sites if desired.
- With **Erasure Coding**, each object is encoded into a configurable number of data fragments plus a configurable number of redundant parity fragments. Each fragment is stored on a different node, and the object can be decoded from any number of fragments.

Storage policies also provide fine grain control of data placement across data centers, taking into consideration factors such as cost efficiency, security levels, and proximity.

5 Scale Out with Low-Cost Commodity Hardware

Running on off-the-shelf commodity hardware, a Cloudian HyperStore system can scale up to thousands of nodes across multiple data centers, supporting millions of users and hundreds of petabytes of data. New nodes — heterogeneous if desired — can be added without service interruption. Performance, capacity, and resiliency also increase in the process. Each node is an S3 server and can provide

data access across the cluster, resulting in a true peer-to-peer platform with no single point of failure or bottleneck.

6 Hybrid Cloud Tiering Tier to Other S3 Platforms

With Clodian HyperStore, you can define a tiering policy per bucket. Objects in that bucket can be tiered to Amazon S3 or Glacier, Google Cloud Platform, Microsoft Azure, a different HyperStore cluster, or an S3-compatible off-line storage system such as tape. Warm data can be stored on Clodian, cold data can be stored on tape, etc.

7 Charge Back & Accounting

Clodian HyperStore provides system-wide, detailed reporting for a group or individual rate of consumption, such as storage size, data transfer (in and out), number of object get and put operations, and number of metadata get and put operations. The first step is to define a rating plan, where a price is associated to a particular metric. For example, consumption of storage up to 100GB would be \$.1/GB per mo. Automatically, statistics are recorded about the users' and groups' consumption. At the end of the billing cycle, a report can be generated calculating the bill for each of group or user based on usage rates.

8 Tunable Consistency Levels

HyperStore also provides the ability to configure the level of data consistency when using replication or EC to protect objects across sites. For example, the default consistency requirement for read and write operations can be defined as "quorum," meaning that a read or write operation must succeed on a quorum (or majority) before a success response is returned to the client application. For mission-critical data objects, the system can wait until acknowledgment is received from ALL nodes across a single or multiple data center locations.

9 One Platform for Objects & Files

Clodian HyperStore Connect for Files (CHCF) allows file services on top of Clodian HyperStore object storage using industry standard protocols like NFS, CIFS, and FTP. File-based environments can gain tremendous benefits from the rich feature set intrinsic to Clodian HyperStore object storage, such as high durability and availability, geo dispersal, multi-tenancy, and low cost.

10 Object Lifecycle Management

With Clodian HyperStore, you can configure expiration for objects through Object Lifecycle Management. For example, you can impose a policy on an object so that after a year the object will be deleted (expired) automatically. Through object publishing, you can make an object available and accessible via the Web. You can publish it through a URL, allow a number of downloads against the object, and place an expiration. URL access will vanish accordingly.