



Technology Partner



# Dell and Cloudian: Creating a Scalable and Hybrid Cloud Solution.

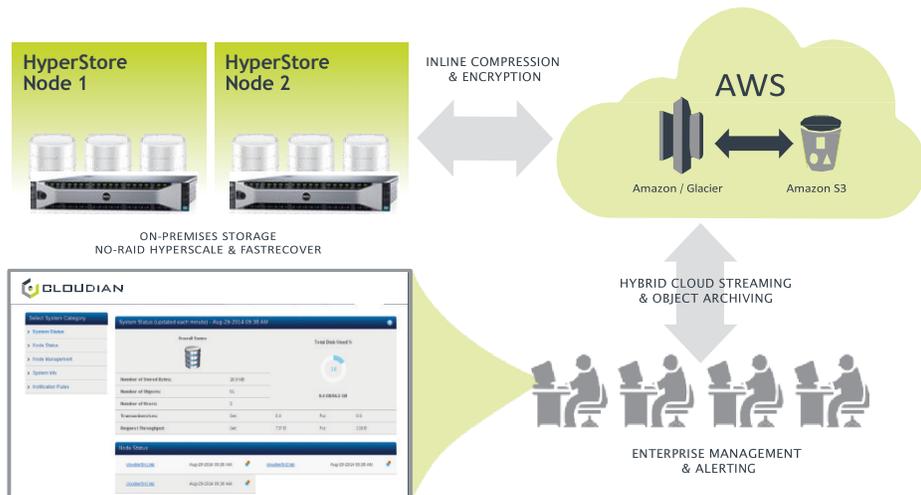
## The Dell | Cloudian HyperStore integrated solutions provide the following benefits:

- Pre-tested and certified: HyperStore on Dell's Enterprise-leading PowerEdge Servers and PowerVault Storage
- Easy out-of-the-box deployment
- Scalable to hundreds of petabytes across many regions
- Simple to grow – add capacity on demand
- Data protection with replication and erasure coding
- Encryption for secure data storage
- Efficiency with data compression
- Comprehensive multi-tenant services & QoS
- Dynamic data tiering to Amazon S3, Glacier, and S3-compatible clouds

Faced with storing and managing an ever-growing amount of data, enterprises need storage solutions that provide a simple way to scale up capacity without downtime. In addition, organizations have a keen interest in tiering data to different clouds. Turn-key storage solutions that capitalize on industry standards and have been pre-tested and certified help simplify deployments and avoid implementation risks and other incompatibilities.

### The Solution

Cloudian HyperStore® software, together with Dell PowerEdge Servers and PowerVault Storage, makes it easy to build full-featured, on-premise, Amazon S3-compliant cloud storage. Cloudian HyperStore-integrated solutions provide multi-data center storage, unlimited scale, fully automated data tiering to the cloud, plus support for all S3 applications – all behind your firewall.



Cloudian provides enterprise-grade storage solutions for private and hybrid clouds. Its flagship product, Cloudian HyperStore, is an S3-compatible storage platform that enables scalable, secure, and cost-effective hybrid cloud storage solutions. You can deploy HyperStore as software to be implemented atop your existing storage infrastructure or as a fully integrated rack-ready appliance. Both deployment options deliver multi-data center storage with no constraints on data.

### Common Use Cases

- Backup and Archive
- Enterprise File Synchronization and Sharing
- Data Analytics
- Private and Hybrid Cloud Storage

## Cloudian HyperStore Architecture

Cloudian HyperStore® software uses a fully distributed and replicated peer-to-peer architecture with no single point of failure. It easily scales horizontally with Dell PowerEdge industry standard x86 servers so deployments can start with a few servers in a single data center and then scale out to thousands of servers distributed across multiple data centers that manage hundreds of petabytes of data. Its distributed architecture with automatic replication and recovery services makes it highly resilient to network and node failures without data loss. Similarly, when scaling the storage cluster or performing maintenance, changes in node availability are automatically detected without service interruption.

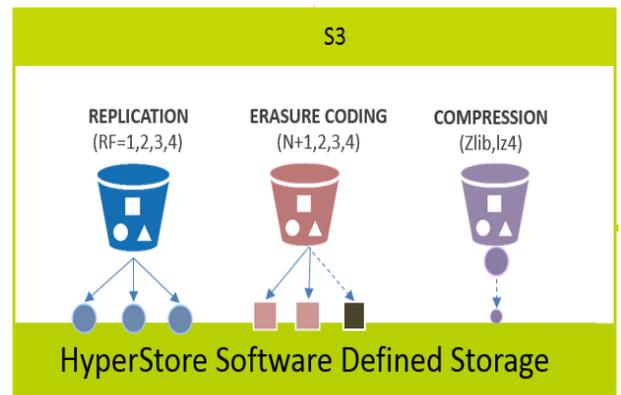
## Multiple Data Centers and Regions

By having multiple region and datacenter capabilities, Cloudian HyperStore enables service providers to efficiently control where data is kept. Having multiple datacenters helps provide a disaster recovery solution and aids in keeping the storage service in production if a data center goes down. Multiple region support allows users to store data in geographically separated regions.



## Extending the S3 API

Cloudian HyperStore features extensions to the S3 API by providing a RESTful HTTP API through which administrators can provision users and groups, manage rating plans and quality of service (QoS) controls, and perform various administrative tasks. Cloudian HyperStore administrators can also monitor the system by using the built-in SNMP and JMX monitoring statistics. Users have the ability to encrypt their data by activating server-side encryption. From the beginning, system administrators or group administrators have the ability to generate billing and usage reports. Through the Cloudian HyperStore API, the same information can be pulled and fed to an external billing system. By having these extensions to the S3 API, organizations have the enterprise features that will help them scale their business and provide advanced features to their users or customers.



## Data Protection

Cloudian HyperStore can store data via replication or erasure code. Replication provides a higher level of data integrity and has greater performance. Erasure code is more cost-effective because the data is stored in smaller chunks across the cluster. Cloudian HyperStore also supports multiple compression algorithms that save space. The best option depends on your storage size and needs. If the media content stored on the cluster is meant for archiving and not accessed frequently, erasure code is the best choice. If the media content requires the greatest performance, and replication size is not a factor, replication is the best choice.

## About Cloudian

Cloudian is a Silicon Valley-based software company specializing in enterprise-grade storage. Its flagship product, Cloudian HyperStore®, is an S3-compatible hybrid storage platform that enables service providers and enterprises to build reliable, affordable and scalable hybrid cloud storage solutions.

## The Dell Technology Partner Program

Cloudian is a Dell Technology Partner, and HyperStore is certified by Dell to run on the Dell platforms specified in the above technical overview.

The [Dell Technology Partner Program](#) is a multi-tier program that includes ISVs, IHVs and Solution Providers. This global program helps partners build innovative and competitive business solutions using Dell platforms. Program resources keep customer costs low and help to sustain competitiveness.

The program has a structured and streamlined process that combines technology and business strategies with Dell Solution Center expertise to onboard and test partner products on Dell platforms. This testing process helps ensure that products have met the technical requirements to perform well on Dell platforms.

