

## Faster, more reliable backup using the backup solution you have now



Cloudian scale-out storage simplifies and accelerates your data backup and recovery processes. Cloudian is local disk-based storage, with the option for cloud integration. This combination helps you meet your backup window and RTO/RPO objectives, while enabling an offsite data recovery strategy that dovetails seamlessly into your daily backup workflow. All at 70% less cost than other disk-based solutions.

Cloudian acts as an on-premises, disk-based backup target that is compatible with your existing Veritas, Veeam, Commvault, HYCU, IBM, and Rubrik solutions. High streaming bandwidth and parallel processes ensure predictable backup success.

Policy-based migration tools let you migrate older data to the public cloud (Amazon S3, Google Cloud, Microsoft Azure, and other S3-compatible services). This minimizes on-site disk costs while ensuring that a DR copy is maintained offsite.

Cloudian provides a simple, drop-in replacement for existing backup target technologies or as a complementary offsite DR target.

### The Data Protection Challenge

Data protection remains a challenge for IT. Today's backup targets — tape, disk, and cloud — all have limitations that hinder your ability to meet your objectives.

- **Tape:** Low-cost media, but concerns include reliability, long-term durability, and management workload.
- **Disk:** A fast and effective solution, but becomes costly as capacities grow.
- **Cloud:** Low-cost, but often has access bandwidth issues that can limit ability to meet SLAs.

Resulting issues include excessive backup times — especially when backups fail — and the challenge of meeting RTO and RPO SLAs.

### Cloudian Solutions

#### Hybrid Cloud Backup and Archive

Cloudian combines a petabyte-scalable, high-performance on-premises backup target, seamless cloud storage integration, and full interoperability with the most popular backup solutions. Together, this hybrid cloud implementation lets you retain a familiar workflow while ensuring success on the objectives that matter to you: backup window predictability, and repeatable RTO / RPO.

Cloudian is a scale-out storage cluster comprised of shared-nothing storage nodes. Communication with the cluster is via the Amazon S3 API, the same API used in Amazon and Google cloud storage services. Media servers connect to the on-prem Cloudian cluster via Ethernet and view the cluster as cloud storage.

With full cloud-compatibility, Cloudian is viewed by your backup software exactly as it views Amazon, Azure, or Google cloud storage. Backups complete quickly due to fast local access, and recovery is similarly fast. Older snapshots can be moved to the cloud via policy-based migration, which both frees up local capacity, and also provides an offsite copy for DR use.

### BACKUP CHALLENGES

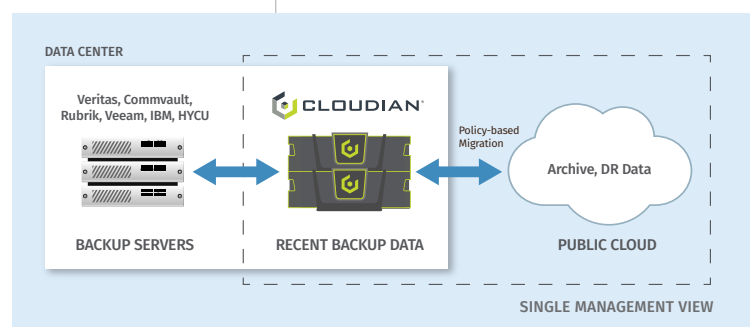
- Backup jobs exceeding window
- Difficult to meet RTO/RPO objectives
- High cost of backup appliances
- Offsite backup or DR adds significant cost and/or logistical issues

### CLOUDIAN SOLUTIONS

- Hybrid cloud backup and archive
- Secondary backup target

### FEATURES & BENEFITS

- Petabyte-scalable storage
- Scalable throughput (>18 TB/hr with 16 nodes)
- Compatible with Veritas, Veeam, Commvault, HYCU, IBM, and Rubrik solutions
- Policy-based tiering to public cloud
- Costs under \$.01 per GB per mo, including support
- Target deduplication (optional)



#### Hybrid Cloud Backup and Archive

This solution combines a high-performance on-premises backup target and policy-based migration to the cloud for archive and disaster recovery.

## Secondary Backup Target

If you prefer to maintain your existing primary target, Cloudian can still provide substantial savings by acting as a secondary backup target for disaster recovery.

Compared with cloud-based DR targets, this approach provides the benefit of secure, offsite storage for data that cannot go to the cloud. For this information — whether restricted by data governance, privacy, or compliance policies — Cloudian provides secondary storage at costs that approach archival cloud storage.

Compared with dedicated backup appliances, Cloudian saves by substantially reducing hardware costs and by eliminating costly data replication licenses.

## Solution Advantages

### Performance to handle the largest environments

Cloudian scales to petabytes with a scaling model that grows in both capacity and bandwidth. Predictable backup windows result from Cloudian's streaming bandwidth. Data write bandwidth in excess of 5,000MB/s (or 18TB per hour) can be achieved.

### Petabyte-scalable

You can start small with just three nodes, and scale to petabytes simply by adding nodes. Scaling is seamless and does not require downtime.

### 70% less cost than conventional disk

Built on industry-standard hardware, Cloudian drives down the cost of on-prem, disk-based storage to ½¢/GB/month or less, including support.

### Drop-in integration

Cloudian can be immediately integrated with backup software packages that support cloud storage, including Veritas NetBackup, Veritas Backup Exec, Commvault Simpana, Veeam, IBM Spectrum Protect, HYCU, and Rubrik. Install tools that support S3 storage also support Cloudian. If information is migrated by Cloudian to cloud storage for DR purposes, Cloudian transparently retrieves that data when needed and presents it to the media server.

### Manage one data pool

Cloudian maintains data in a single pool across all nodes. Nodes can be in a single data center or distributed across multiple data centers, enhancing data durability. No need to juggle what's "active" or "passive," create complex policies and snapshot management techniques, or track which sites are replicating to where.

### Distributed architecture for global data protection

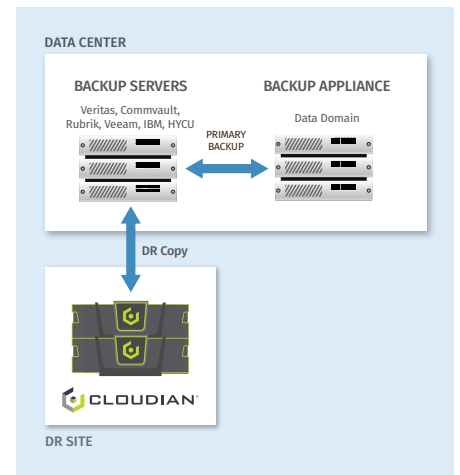
Enterprises struggle to manage backup at remote offices. With Cloudian, clustered nodes can be deployed globally and interconnected, thus allowing data to be automatically replicated across sites. Because the nodes form a single namespace, you can implement policy-based data migration to the cloud for DR purposes. You get global data protection with fast local recovery, all managed from a single location.

### Deploy as appliances, or on your own servers

Cloudian is built on industry-standard hardware. You have the flexibility to buy either pre-configured, fully supported appliances, or software for installation on the servers you choose. Either way, you benefit from the value of commodity hardware.

### Target deduplication

If target deduplication is desired, Cloudian offers optional software which can achieve backup data reduction ratios of 30:1 or more. The deduplication software runs on industry-standard servers. For archive or DR applications, the solution can be co-located with the backup servers, thus minimizing the traffic over the remote link.



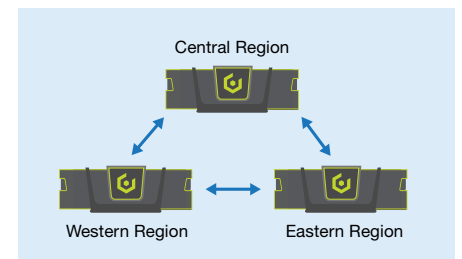
### Secondary Backup Target

With reduced hardware costs and the elimination of replication licenses, Cloudian provides substantial savings as a secondary backup target for disaster recovery.



### Drop-in Integration

Cloudian integrates immediately with backup software that supports cloud storage.



### Distributed Architecture

Real time data replication across sites, with multiple data consistency options for global data protection.

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