Load balancing Cloudian with Commvault
An essential component of the solution for enterprise data protection

Data loss or unplanned downtime can affect organizations differently depending on the nature of their business. To some, like Healthcare and Universities, it can be devastating.

Data protection becomes critical so many IT teams revert to Commvault with Cloudian for an efficient backup, object storage and disaster recovery solution that can support multiple geographical locations. But having highly available backups is equally key as being left scrambling to access them during a disaster recovery operation is not an option.

That’s why Commvault with Cloudian will truly become reliable when integrated with Loadbalancer.org. Because the load balancer maintains uninterrupted access to your backups, maximizes efficiency of the storage solution and provides multi-site resiliency for the very best high availability needs.

Key Benefits
- Highly available backups
- Quicker recovery
- Performance at scale
- Multisite resilience

Key Features
- Robust, feature-rich ADC
- Built on Open Source technology
- Easy to use & maintain
- Flexible licensing & pricing
- Free platform migration
- Seamless integration - Validated by vendors
- Consultative & tierless support
- Cloudian HyperStore deployment guide
How it works

Commvault delivers reliable backup and recovery across applications, platforms, and virtual environments. It contains modules to protect, archive, analyze, replicate, and search your data. A single console unites the management and reporting of both on-premises and cloud information providing operating efficiencies and simplified administration.

Cloudian HyperStore seamlessly integrates with Commvault serving as the storage target for backups. Cloudian can scale to hundreds of nodes in multiple data centres contained in a single or multiple regions. Policy-based tiering to the cloud lets you automatically migrate data to any S3-compatible public cloud storage for disaster recovery and long-term archive.

Loadbalancer.org sits in front of the Cloudian deployment and manages the traffic distribution between Commvault and Cloudian for high availability. The load balancer ensures that traffic is distributed evenly across the nodes optimising the load on each node. It also monitors and performs health checks on a node to ensure traffic is routed correctly to healthy nodes. Without the use of a load balancer, an offline or failed node would still receive traffic, causing failures.

The same load balancer can also be leveraged to provide uninterrupted and reliable access to the Web Console/Command Center. This is achieved by configuring an additional VIP to handle HTTP and HTTPS traffic on ports 80 & 443. Persistence is enabled to ensure that connections from a particular client during a session are handled by the same Web Console.

Multi-Site Storage

In each site, Loadbalancer.org appliances can sit in front of a Cloudian deployment, preferably two to avoid introducing a single point of failure. DNS delegation can then be used to delegate responsibility for the relevant sub domain/endpoint (e.g. s3.example.com) to the GSLB service on the load balancers. Once delegated, it is the GSLB service on each load balancer that is responsible for providing intelligent DNS responses to inbound queries for the endpoint. The responses given depend on the health of each Cloudian deployment and the location of the DC relative to the client making the request if Topology is configured.

The example opposite shows a three site setup with an HA pair of load balancers in each site. Once GSLB and DNS delegation are correctly configured, the six load balancers act as intelligent name servers for the endpoint in question.
Why Loadbalancer.org
The business value

Resiliency and speedy recovery
Eliminate potential bottlenecks that could impact access to backups therefore slowing recovery. Adding Loadbalancer.org ensures that your backups from the Commvault and Cloudian solution are resilient and reliable. This undoubtedly helps accelerate and achieve critical RTO and RPO SLAs.

Optimal performance and scalability
Load balancing improves responsiveness and increases the availability of storage applications by distributing network or application traffic across the nodes. While Cloudian Hyperstore provides unlimited scalability, Loadbalancer.org performs the necessary health checks and failover required when adding new nodes to the system avoiding any overload on one cluster.

Zero downtime especially in multisite environments
Load balancers allow distribution of backups and facilitate replication in multiple locations. They can use a myriad of Access Control Lists (ACLs), rules and topology information to direct users to the correct location to access storage. For multi-site deployments, the GSLB functionality enables location affinity ensuring access to local backups unless a failover occurs. When a site failover occurs, users are rerouted to a different location, thus ensuring uninterrupted data access.

THE LOADBALANCER.ORG ADVANTAGE
First choice for storage expertise
Loadbalancer.org is at the vanguard, helping object-based storage providers prepare for change. We’re the experts in creating dedicated load balancing offerings which are tailored to the needs of storage solutions. We work closely with Cloudian and end-users developing high performing yet scalable solutions which support highly available, future-proofed storage systems.