Integrating Loadbalancer with Huawei OceanStor® for Enterprise object storage

Harness enterprise-grade protection with this resilient storage solution from Huawei OceanStor® for backup data across cloudnative, Kubernetes and Kubevirt environments, powered by Loadbalancer for comprehensive availability, scalability, and performance.



Navigating complex data management challenges

Enterprise data environments are incredibly difficult to manage, with insufficient capacity, and inflexible storage architecture coming at a high financial and operational cost.

Slow storage severely impacts service delivery, and harnessing the exponential growth in structured and unstructured data can prove extremely challenging.

Integrating storage within and across diverse and siloed IT environments is also no easy task. While the use of Kubernetes, and massive growth in HPC and AI datasets has exploded, reduced visibility of underlying system processes makes it harder to spot potential security threats and vulnerabilities and secure workloads across multiple nodes and clusters.

At the same time, the need for more regular maintenance and upgrades has increased, leading to a much greater risk of downtime, compromising data integrity, security, and ransomware mitigation.

A custom solution is therefore required to address these challenges.





High availability

Loadbalancer provides failover and redundancy for Huawei OceanStor®, automatically rerouting client requests during node or service failures. This minimizes downtime, ensuring business continuity during upgrades, maintenance, or hardware issues.



Optimum performance

Workloads for Huawei OceanStor® NAS, SAN, and object storage are load balanced, meaning traffic is distributed evenly across controllers to maximize throughput and prevent performance bottlenecks.



Huawei OceanStor® can be seamlessly expanded as new nodes are added without impacting on the user. This flexible architecture supports scale-out for HPC, AI, and cloud storage growth.



Multi-site resilience

Global Server Load Balancing routes traffic across multiple Huawei OceanStor® deployments, intelligently directing users to the nearest or healthiest site based on location, availability, or performance, ensuring optimal user experience and disaster recovery.



Health monitoring

Monitor the health of Huawei OceanStor® services and nodes in real-time, automatically removing unhealthy nodes from the pool.



LOADBALANCER

SOLUTION OVERVIEW

Why Huawei OceanStor® for data protection?

Huawei OceanStor® delivers unparalleled data protection and recovery for all storage environments, as well as backup and migration solutions, disaster recovery, and robust ransomware protection.

The walls of siloed cloud, cluster and container environments can be easily broken down and scaled, allowing applications and data to move between them.

Why Loadbalancer for high availability and scalability?

Loadbalancer's Enterprise ADC hardware provides high availability and fast cluster failover of storage applications and data, spanning clouds, clusters and containers.

This facilitates the seamless restore of diverse network and storage workflows and application mobility across platforms for ultimate scalability and performance.

Joint solution features and capabilities

Integrating Loadbalancer.org's external Enterprise ADC with Huawei OceanStor® data storage solution brings significant benefits, enhancing application performance, availability, and scalability for workloads that rely on the OceanStor backend.

Together they provide a more advanced, comprehensive solution for application-level data management, delivering:

- Enterprise data protection and end-to-end ecosystem support.
- Unrestricted, large-scale deployments across hybrid cloud environments.
- Tiered, redundant, reliable data management without the need for caching.
- Reduced hardware storage requirements with data compression services.
- Robust, multi-layered cyber threat and ransomware protection with immutable file systems, encryption, and RBACs to prevent, detect, and analyze threats.

Next steps

Loadbalancer is the engineers' choice for smarter load balancing. Our intuitive ADC is designed to save time and money with a clever, not complex, WebUI, reducing complexity for a difference you can see in just minutes.

Find out how our products can help you to scale and secure your storage workloads, with powerful, user-friendly application delivery solutions from the load balancing experts.



