Solution Overview

VMware Cloud Director Object Storage Extension (OSE) 2.2

HIGHLIGHTS

Ideal for unstructured data
OSE provides a seamless interface to object storage platforms that can store and index a wide variety of multimedia formats.

Reduced customer cost
Affordable, cost-effective tiered cloud storage ensures customers are not overpaying for non-latency sensitive data, while maintaining a ready repository of secondary data.

Hybrid cloud-ready
OSE is S3-API compatible to ensure easy migrations and seamless continuity across premises and clouds.

What is OSE?

VMware Cloud Director Object Storage Extension (OSE) is modern data storage exclusive to the VMware Cloud Director and Cloud Director service ecosystem. OSE is easy-to-use, highly available, and compatible with S3, a widely adopted and massively scalable object storage service.

OSE is seamlessly accessible through the VMware Cloud Director UI and API and offers a native user experience by leveraging the VMware Cloud Director extensibility engine. OSE protects the persistent state of applications and makes backup data productive for accelerating Kubernetes application development. It also offers dynamic provisioning for multi-tenancy, multi-site, multi-user—and now multi-region storage.

Object Storage Interoperability Service (OSIS)

With OSIS, cloud providers have the flexibility to integrate any third-party S3-compatible object storage platform into VMware Cloud Director, allowing them to expand their offerings and collaborate with numerous partners. Example of supported storage includes Cloudian HyperStore, Dell ECS, Ceph, and native AWS S3. A dedicated reference implementation guide for Ceph is available to cloud providers and their tenants upon request.

LEARN MORE ABOUT OSE 2.2

Partner opportunities with OSE

The evolution of technology and digital transformation has opened the floodgates for large volumes of unstructured, noisy data. Despite cloud-based storage slowly becoming the norm, enterprises are still searching for a solution that avoids storage silos and data anarchy. In today's cloud-first world, there are compelling use cases for cloud object storage.

1. **Cloud infrastructure modernization and migration**
   To keep up with rapid innovation, enterprises need to modernize their infrastructure and create a virtualized ecosystem. On-premises to cloud migration is becoming the norm, driving demand for highly compatible object storage services. VMware Cloud Director Object Storage is highly available and reliable—an indispensable asset for cloud continuum.
2. **Cloud security and protection**
   Cloud providers with IaaS offerings are frequently challenged to demonstrate better security and resiliency compared to on-premises infrastructure. VMware Cloud Director Object Storage protects a wide variety of unstructured data through on-demand Kubernetes backup and restore, native AWS S3 Object Lock, and custom bucket and policy encryption features. OSE removes a lot of the stress around data protection, increasing security and performance of cloud infrastructure.

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WHAT ELSE IS REQUIRED?

To work with VMware Cloud Director Object Storage Extension, the VMware Cloud Director instance must support VMware Cloud Director service provider admin portal and VMware Cloud Director tenant portal, hence must be version greater than 10. Cloudian version 7.4+ is currently supported by this solution.

LEARN MORE ABOUT OSE 2.2

What's new OSE 2.2 Blog

OSE 2.2 release notes

OSE 2.2 upgrade guidelines

OSE solution web page

Customer Connect for download

3. **Expand cloud provider service portfolio**
   OSE allows cloud providers to offer modern object storage that is robust, agile, and extensible, which can mean adding high-value services including:

   - Storage-as-a-Service (STaaS) for archive, dev/test, and other storage requirements
   - Backup-as-a-Service (BaaS) for cloud-based backup
   - Archive-as-a-Service (AaaS) for long-term data storage
   - Disaster Recovery-as-a-Service (DRaaS) for offsite data copy
   - Big Data-as-a-Service (BDaaS) for scalable data lake services

What's new in OSE 2.2?

Multi-region S3 for Cloudian HyperStore

Building multi-region applications allows cloud providers to improve latency for end users and achieve higher resiliency and availability in case of unanticipated events and disasters. With multi-region S3 support for Cloudian, cloud providers can:

- Configure multi-region S3 for one or more Cloud Director sites.
- Manage persistent data elements, create buckets, and backup vApps as well as Kubernetes clusters across different regions. (Capabilities also available to tenants).
- Activate and deactivate tenant access to one or more regions to facilitate collaboration or ascertain sole control over the storage process.
- In most cases, multi-region deployment can be used to distribute the object load over several sites to reduce latency for local requests.

Multi-region Cloudian storage policy management

Storge policies permit cloud providers to establish a set of rules for how data will be managed, protected, and maintained across multiple regions. This allows cloud providers to publish and unpublish storage policies, giving tenants full autonomy to change policies for each region.

Multi-region bucket replication

Multi-region bucket replication provides a safeguard against regional outages, aids in disaster recovery efforts, and addresses redundancy compliance requirements. Cloud providers and their tenants can replicate objects in one bucket to another in one or more regions. Users can set up replication rules to define what S3 applies during replication such as server-side encryption, replica ownership, transitioning replicas to another storage class, and more. Replication rules can be two-way, allowing users to select source region, bucket, and destination regions.