

# VMware Cloud Director Object Storage Extension 2.1 Release Notes

VMware Cloud Director Object Storage Extension 2.1

You can find the most up-to-date technical documentation on the VMware website at:

<https://docs.vmware.com/>

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# Introduction

# 1

VMware Cloud Director Object Storage Extension 2.1 | 23 SEP 2021 | Build 18626693

Check for additions and updates to these release notes.

# What's New

# 2

VMware Cloud Director Object Storage Extension 2.1 provides a list of new features:

- **Kubernetes Backup and Restore**

Tenants can back up and restore their Kubernetes clusters using VMware Cloud Director Object Storage Extension. See [Backing up and Restoring Kubernetes Clusters](#).

- **Cloudian Storage Policies**

- Cloud providers have the option to create custom storage policies for tenants who use the Cloudian platform. Storage policies help you to protect your data and to avoid losses in case of a failure. See [Cloudian Storage Policies](#).
- Tenant users can apply the storage policies when creating buckets and objects. See [Apply a Cloudian Storage Policy](#).

- **Global Bucket Synchronization**

Cloud providers can now synchronize VMware Cloud Director Object Storage Extension platform with the underlying storage platform by on-demand requests or scheduling. See [Global Bucket Synchronization](#).

- **Archived Object Restoration**

Tenant users can restore objects from AWS S3 Glacier and Glacier Deep storage classes. See [Restore an Archived Object](#).

- **vApp Import and Export Enhancements**

Tenant users can import and export vApps directly through the VMware Cloud Director tenant portal. See [Working with vApps](#).

- **Improved User Role Management**

- Cloud providers can customize the rights for built-in roles. See [Edit Roles](#).
- A new user role for organization administrators named **operator role** is introduced. Operators can add an additional layer of granularity for tenant roles. Tenant administrators can now fine-tune access and permissions for certain features for other tenant users. See [Edit Subordinate Roles](#).

# Upgrade

# 3

You can upgrade directly to VMware Cloud Director Object Storage Extension 2.1 from versions 2.x and 1.5. See [Upgrading VMware Cloud Director Object Storage Extension](#).

# Resolved Issues

## 4

- **When you access S3 resources by using virtual hosted-style API requests, if your FQDN contains a hyphen (-), the API calls fail.**

When you access S3 resources using virtual hosted-style API requests, if the URL contains a hyphen, for example <https://a-bucket.s3.ose-host.com/xyz.txt>, the request fails.

This issue is now resolved.

# Caveats and Limitations

## 5

- **Bucket synchronization supports up to 10 million objects per a single synchronization job**

When the cloud provider enables bucket synchronization for a tenant in the provider portal, the synchronization can support up to 10 million objects for the tenant. VMware Cloud Director Object Storage Extension 2.1 does not support the synchronization for more than 10 million objects per a single bucket synchronization job.

- **If you are using ECS storage, using S3 API, or the find a bucket feature, you cannot visit a bucket that belongs to a different tenant organization in the ECS platform.**

- **VMware Cloud Director and the underlying storage systems have different limitations on user names. To use VMware Cloud Director Object Storage Extension, user names must comply with both the requirements of VMware Cloud Director and the underlying storage system. A best practice is to use short user names (under 50 bytes) and to use alphanumeric characters.**

- If you are using Cloudian storage, increase the maximum length of user IDs from 64 bytes to 255 bytes.

- If you are using ECS storage, the maximum length of user IDs is 91 bytes.

- **S3 API requests authenticated with application credentials do not support the following use cases:**

- Accessing a shared bucket if another user grants you permissions for the bucket.

- Deleting multiple objects simultaneously with a single API request.

- Restriction on copying objects from buckets that you own.



# Product Documentation

# 6

All documentation is available on the [VMware Cloud Director Object Storage Extension Documentation](#) page.

# Known Issues

# 7

- **You cannot log in to VMware Cloud Director Object Storage Extension as a service administrator**

When you try to log in to VMware Cloud Director Object Storage Extension as a service administrator, the login is unsuccessful. The problem is observed on a random basis and it occurs if you have multiple groups which are mapped to multiple VMware Cloud Director roles.

**Workaround:** Log in to VMware Cloud Director Object Storage Extension with a user that has a single group, mapped to their VMware Cloud Director role.

- **You cannot push images to the VMware Harbor Registry**

When you try to push an image to the VMware Harbor Registry and the VMware Harbor Registry server uses VMware Cloud Director Object Storage Extension S3 as a backend storage, the process fails. The problem is observed when VMware Harbor Registry is configured with VMware Cloud Director Object Storage Extension S3 endpoint and credentials.

**Workaround:** Request a hotfix from VMware.

- **Bucket synchronization does not synchronize all objects when object paths contain special symbols**

VMware Cloud Director Object Storage Extension synchronizes the first 1,000 objects to the database. Special symbols include characters that might be encoded in the URL.

**Workaround:** None.

- **You cannot create a bucket policy with a UI-generated service instance ID**

When you try to create a bucket policy and use the UI to generate the service instance ID, the process fails.

**Workaround:** Create the service instance ID manually and ensure it does not include the hyphen symbol (-) .

- **The S3 service of VMware Cloud Object Storage Extension is unavailable**

When you start or view VMware Cloud Object Storage Extension, the VMware Cloud Object Storage Extension service is active, but the S3 service is unavailable, with the following error message in the log file:

```
S3_TOKEN_AUTH_ERROR
```

The issue is observed if the time gap between the S3 client and the VMware Cloud Object Storage Extension VM is over 20 seconds.

**Workaround 1:** Change the gap time between the S3 client and the VMware Cloud Object Storage Extension VM to less than 20 seconds, for example, NTP for the VMware Cloud Object Storage Extension VM.

**Workaround 2:** Run the command `oss.s3.request-expire-time=3600` and restart the VMware Cloud Object Storage Extension service.

- **Kubernetes clusters are not listed in VMware Cloud Director Object Storage Extension for Container Service Extension (CSE) 3.2 and later**

When a tenant administrator tries to back up a Kubernetes cluster for CSE 3.2 or later, the tenant cannot see the Kubernetes clusters list in VMware Cloud Director Object Storage Extension.

**Workaround:**

- a Go to the CSE UI plugin.
- b Select the Kubernetes cluster and download the kubeconfig file to your local system.
- c Go to **Object Storage > Kubernetes**.
- d Click **Add External Cluster Now**.
- e Enter a name for the cluster and select the kubeconfig file from your local system.

The cluster is now listed in the Kubernetes Clusters tab.

- **The usage of the S3 HEAD method on a folder causes the service to fail with an error**

When a folder contains huge objects, repeated calls of the HEAD method on the folder leads to an `OutOfMemoryError`.

**Workaround:** Restart the VMware Cloud Director Object Storage Extension service.

- **Restore from a vApp backup times out**

If the vApp backup contains NVRAM files, the restoring of the backup fails with a `Timed Out` error.

**Workaround:** Download the vApp backup to your local desktop and import it to VMware Cloud Director manually.

- **Synchronization tasks of buckets with more than 60 thousand objects fail with a timeout error**

When you try to sync a bucket that contains more than 60 thousand objects, the synchronization task expires after 24 hours.

**Workaround:** Click the Sync Now button repeatedly until the synchronization task completes successfully.

■ **Sync Now option does not work when synchronizing buckets**

When objects or folders are uploaded through the S3 API, the changes are not showing up in VMware Cloud Director Object Storage Extension after clicking the Sync Now button.

**Workaround:** Click the Sync Now button after the bucket accumulates enough number of object changes - more than 500 new objects. New objects might not be displayed in the portal but they can be accessed through the VMware Cloud Director Object Storage Extension S3 API directly.