



VASA Provider: How to recover when VASA Provider has been lost/is inaccessible

https://kb.netapp.com/data-mgmt/OTV/VASA_Provider_Kbs/VASA_Provider__How_to_recover_when_...

Updated: Fri, 04 Jul 2025 17:45:13 GMT

Applies to

- NetApp ONTAP Tools for VMware vSphere (OTV) 9.6 and later
- NetApp VASA Provider

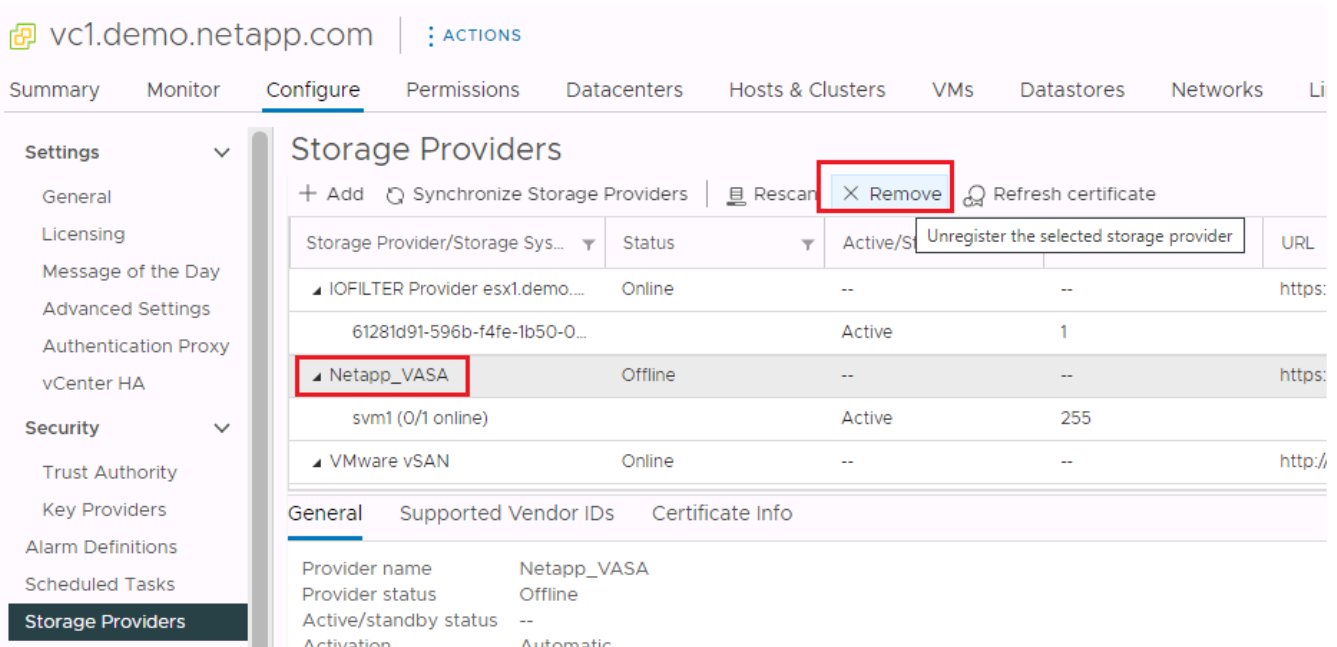
Description

- If the VASA Provider (VP) virtual appliance has been lost, rendered inaccessible, or otherwise non-functional, it might be necessary to perform a VP Disaster Recovery
- vVol metadata is stored in Data ONTAP (in a .vp_metadata file present on the backing flexvols associated with vVol datastores)
- The recovery commands allow the VASA Provider to reload this metadata into its database

Procedure

Perform the following steps when the VASA Provider has been lost/is inaccessible:

1. Within the vSphere Client, navigate to **vCenter > Configure > Storage Providers**
2. Select the offline Netapp_VASA storage provider
3. Select **Remove** to unregister the offline Netapp_VASA storage provider:



The screenshot shows the vSphere Client interface for configuring storage providers. The left sidebar shows the navigation tree with 'Storage Providers' selected. The main pane displays a table of storage providers. The 'Netapp_VASA' provider is highlighted with a red box. Above the table, the 'Remove' button is highlighted with a red box, and a tooltip indicates 'Unregister the selected storage provider'.

Storage Provider/Storage Sys...	Status	Active/S...	URL
IOFILTER Provider esx1.demo...	Online	--	https://
61281d91-596b-f4fe-1b50-0...	Active	1	
Netapp_VASA	Offline	--	https://
svm1 (0/1 online)	Active	255	
VMware vSAN	Online	--	http://

General Supported Vendor IDs Certificate Info

Provider name Netapp_VASA
Provider status Offline
Active/standby status --
Activation Automatic

4. Confirm that the original VASA Provider virtual machine (VM) is either powered off or no longer in inventory:

OTV1 | | ACTIONS

Summary | Monitor | Configure | Permissions | Datastores | Networks | Snapshots | Updates

Guest OS ACTIONS ▾

Powered Off

[LAUNCH REMOTE CONSOLE](#) ⓘ

[LAUNCH WEB CONSOLE](#)

Power Status Powered Off

Guest OS Debian GNU/Linux 11 (64-bit)

VMware Tools Not running, version:11333 (Guest Managed) ⓘ

DNS Name (1) otv1

IP Addresses

Encryption Not encrypted

5. Make sure to unmount **all** vVol datastores from vCenter. This will require dropping VMs from vCenter inventory
 - a. This is a necessary step as you will be deploying a new OTV appliance. This OTV appliance will have a new Array ID
 - b. Still mounted inaccessible vVol datastores will be associated with a **old** Array ID
 - c. If the old Array ID is still being referenced by ESXi (because the old vVol datastore is still in inventory), then any recovered vVol container will be associated with a old Array ID and Protocol Endpoints (needed to communicate to vVol objects on storage) will not be created
6. Install and configure a new OTV appliance

Note: Hostname / IP can be the same or different from the original OTV Appliance

7. Add storage to OTV via **NetApp ONTAP tools > Storage Systems**
8. Register VASA Provider with vCenter as per [Enable VASA Provider for configuring virtual datastores](#)

Overview

Storage Systems


Storage capability profile

Storage Mapping

Settings


Settings

Administrative Settings
ONTAP tools Settings
NFS VAAI tools

 **Manage Capabilities**

VASA Provider: Disabled

Storage Replication Adapter (SRA): Disabled





 **Export ONTAP tools for VMware vSphere Logs**

- Navigate to the VASA Provider Control Panel at https://<VP_IP>:9083
- Login with the administrator username and password

Note: Newer versions of OTV also require a login token

- Click on **Web based CLI interface**
- Run `cluster list` to confirm VASA can see storage

← → ↺
192.168.0.37:9083/cli

 vCenter1
 vCenter2
 Cluster1
 Cluster2

Command:

Executed:

```
cluster list
```

Returned:

```
ClusterAdmin 192.168.0.101 admin 7fb2627a-0f3a-11e7-b209-0050560113b8
StorageController svm1 192.168.0.101 admin f56d87e6-0f41-11e7-b20a-0050560113b8 aggregates = [aggr1_cluster1_1, aggr2_cluster1_1]
FlexVol backing04 has 20477MB available out of 20480MB
FlexVol backing03 has 20467MB available out of 20480MB
FlexVol iscsi1 has 12174MB available out of 15616MB
FlexVol backing05 has 20467MB available out of 20480MB
FlexVol nfs1 has 70026MB available out of 102400MB
FlexVol nfs2_dest has 7752MB available out of 39987MB
FlexVol deleteme has 20477MB available out of 20480MB
FlexVol backing01 has 20447MB available out of 20480MB
FlexVol backing07 has 15356MB available out of 15360MB
FlexVol backing06 has 20477MB available out of 20480MB
FlexVol nfs3 has 32834MB available out of 48640MB
FlexVol svm1_root has 18MB available out of 19MB
```

- Run `vp dr_recoverdb -vcenter_guid=<vCenter_GUID> -match_vcguid=true` to perform a VASA database recovery:

Command:

Executed:

```
vp dr_recoverdb -vcenter_guid=9a63f98f-8db4-4aa1-8023-d36c93f0b228 -match_vcguid=true
```

Returned:

Recovery Summary

Storage Container Recovery Summary

Cluster Name	svm1	SVN Name	Container Name	Flexvol Name	Vvol counts
cluster1	svm1	iscsi_vvol_01	backing01		Data:2 Config:3 Swap:0 Memory:0 Other:0 Total:5

Note: For instructions on how to obtain the vCenter GUID, see [Obtaining the vCenter GUID](#)

14. In vCenter, go to the New Datastore wizard, select vVol and add the container back into inventory:

New Datastore

1 Type

2 Name and container selection

3 Hosts accessibility

4 Ready to complete

Name and container selection

Specify datastore name and backing storage container.

Name

Backing Storage Container

Name	Identifier	Maximum Disk Size	Existing Datastore
iscsi_vvol_01	vvol:391a5b97fc09408b-b9fc00000099fb...	16 TB	--

1 item

For SCSI-backed vVol datastores, PE LUNs need to be configured manually. Configure SCSI PE LUNs before creating a datastore. If the datastore is created without configuring PE LUNs, the ESXi host marks corresponding vVol datastore as inaccessible.

Backing Storage Container Details

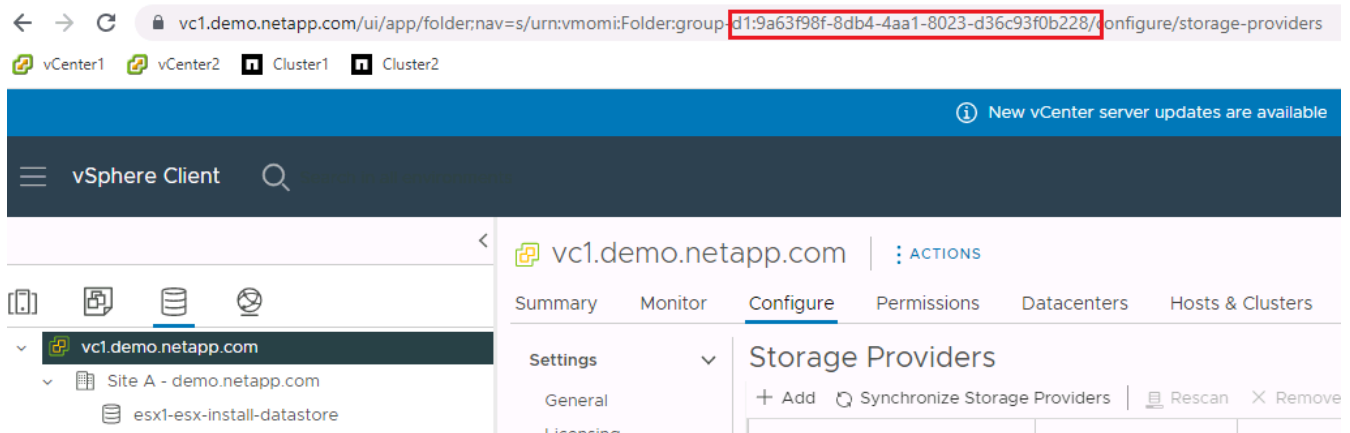
Storage array(s)	svm1
Storage provider(s)	NetApp-VP

Additional Information

Obtaining the vCenter GUID

1. Click on vCenter within the vSphere UI

2. Make note of the GUID in the URL:



[VASA Provider Recovery Resolution Guide](#)