



Monitor vVols datastores and virtual machines using the vVol dashboard

VSC, VASA Provider, and SRA 9.7

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Monitor vVols datastores and virtual machines using the vVol dashboard

You can monitor the performance and view the top five SAN VMware Virtual Volumes (vVols) datastores in your vCenter Server based on the parameters that you select by using the vVol dashboard of the virtual appliance for Virtual Storage Console (VSC), VASA Provider, and Storage Replication Adapter (SRA).

Before you begin

- You should have enabled OnCommand API Services 2.1 or later if you are using ONTAP 9.6 or earlier.

You do not require to register OnCommand API Services with VASA Provider to get the details of SAN vVols datastore or SAN vVols VM datastore report for ONTAP 9.7.

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- You should be using ONTAP 9.3 or later for your storage system.

vVol dashboard data requirements

About this task

The IOPS data that is provided by ONTAP is rounded off and displayed on the vVol dashboard. There might be a difference between the actual IOPS value that is provided by ONTAP and the IOPS value that is displayed on the vVol dashboard.

- If you are registering OnCommand API Services for the first time, then you can view all of the performance metrics data for SAN vVols datastores on the vVol dashboard only after 15 to 30 minutes.
- The vVol dashboard data is refreshed periodically, at an interval of 10 minutes.
- If you have added, modified, or deleted a storage system from your vCenter Server instance, then you might not notice any change in the data on the vVols dashboard for some time.



This is because OnCommand API Services takes time to obtain updated metrics from ONTAP.

- The Total IOPS value that is displayed in the **Overview** portlet of the vVol dashboard is not a cumulative value of the Read IOPS value and Write IOPS value.

Read IOPS, Write IOPS, and Total IOPS are separate metrics that are provided by OnCommand API Services. If there is a difference between the Total IOPS value and the cumulative IOPS value (Read IOPS value + Write IOPS value) provided by OnCommand API Services, then the same difference is observed in the IOPS values on the vVol dashboard.

Steps

1. From the vSphere Client home page, click **Virtual Storage Console**.
2. Select the required vCenter Server using the **vCenter server** drop-down menu to view the datastores.
3. Click **vVol Dashboard**.

The **Datastores** portlet provides the following details:

- The number of vVols datastores that are managed by VASA Provider in your vCenter Server instance
- The top five vVols datastores based on resource usage and performance parameters You can change the listing of the datastores based on the space utilized, IOPS, or latency and in the order required.

4. View the details of the virtual machines using the **Virtual Machines** portlet.

The **Virtual Machines** portlet provides the following details:

- Number of virtual machines using ONTAP datastores in your vCenter Server
- Top five virtual machines based on IOPS, latency, throughput, committed capacity, uptime, and logical space You can customize how the top five virtual machines are listed in the vVol dashboard.

vVol dashboard data requirements

You must verify some important requirements of the vVol dashboard to display dynamic details of the VMware Virtual Volumes (vVols) datastores and virtual machines.

The following table presents an overview of what you should verify if the vVol dashboard does not display the performance metrics for the provisioned SAN vVols datastores and virtual machines.

Considerations	Description
First-time deployment of OnCommand API Services	<ul style="list-style-type: none">• If you are having ONTAP clusters 9.6 or earlier, then you are using OnCommand API Services 2.1 or later. You do not require OnCommand API Services to be registered with VASA Provider if you are using ONTAP 9.7 and later.• You must have followed the installation instructions that are provided in the <i>OnCommand API Services Installation and Setup guide</i> after downloading and installing OnCommand API Services from the NetApp Support Site.• Each VASA Provider instance must have a dedicated OnCommand API Services instance. OnCommand API Services must not be shared among multiple VASA Provider instances or vCenter Servers.• OnCommand API Services is running and accessible.

Considerations	Description
Storage system	<ul style="list-style-type: none">• You are using ONTAP 9.3 or later.• You are using appropriate credentials for the storage system.• Your storage system is active and accessible.• The virtual machine that you selected must be using at least one vVols datastore, and I/O operations are executing on the disk of the virtual machine.

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