Manage data tiering

Cloud Tiering

NetApp
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Managing data tiering from your clusters

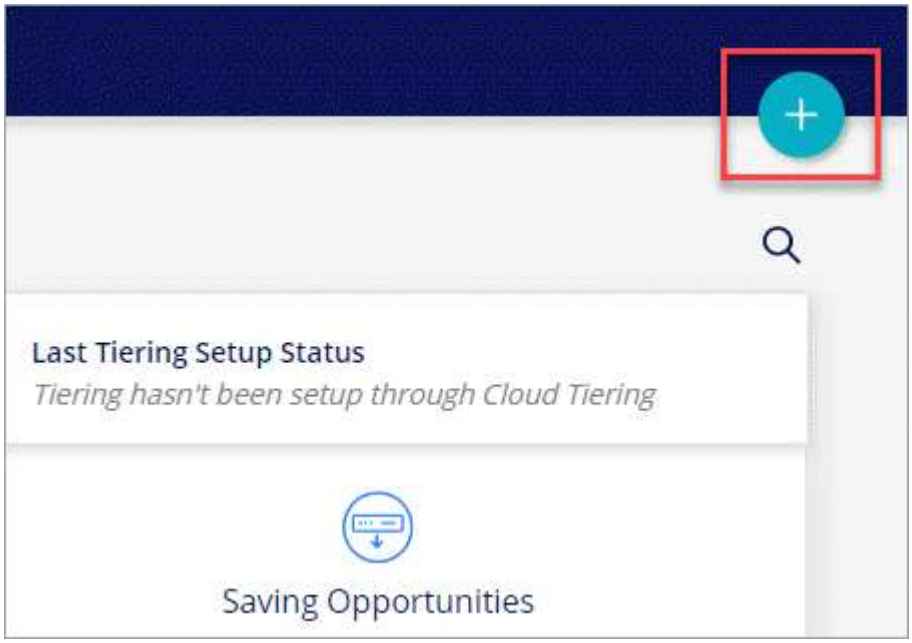
Now that you've discovered and tiered data from your first ONTAP cluster, you can tier data from additional volumes, discover additional clusters, and more.

Discovering additional clusters

Add additional ONTAP clusters at any time to start tiering inactive data from those clusters.

Steps

1. From the Cluster Dashboard, click the following icon:



2. Enter the cluster management IP address and the user name and password of an account that has administrator-level privileges.
3. Click **Discover Cluster**.

   If you already have an existing Service Connector, then Cloud Tiering automatically attempts to use that Service Connector.

4. If you have an existing Service Connector and Cloud Tiering can't use it, then you'll need to do one of two things:
   - Click **Add Service Connector** to create a new Service Connector.
   - Check the status and connectivity of any existing Service Connectors and then try to discover the cluster again.

What's next?

Click **Tier Volumes** to start tiering inactive data from the cluster.

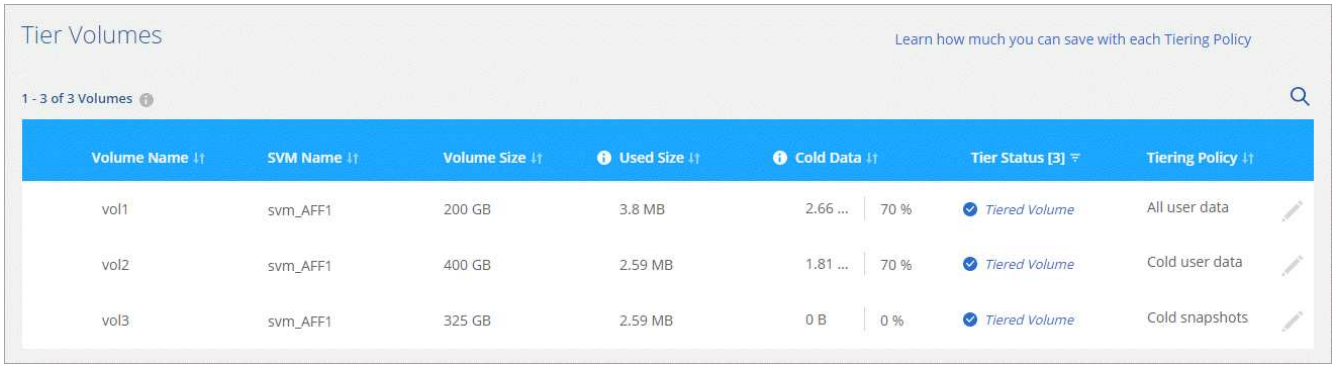
Tiering data from additional volumes

Set up data tiering for additional volumes at any time—for example, after creating a new volume.

Steps

1. From the **Cluster Dashboard**, click **Tier Volumes**.
2. For each volume, click the icon, select a tiering policy, optionally adjust the cooling days, and click **Apply**.

   Learn about volume tiering policies and cooling days.



You don’t need to configure the object storage because it was already configured when you initially set up tiering for the cluster. ONTAP will tier inactive data from these volumes to the same object store.

3. When you’re done, click **Close**.

Changing a volume’s tiering policy and cooling period

Changing the tiering policy for a volume changes how ONTAP tiers cold data to object storage. The change starts from the moment that you change the policy—it changes only the subsequent tiering behavior for the volume.

Steps

1. From the **Cluster Dashboard**, click **Tier Volumes** for the cluster.

2. Click the icon, select a tiering policy, optionally adjust the cooling days, and click **Apply**.

   Learn about volume tiering policies and cooling days.

Managing tiering settings on aggregates

Each aggregate has two settings that you can adjust: the tiering fullness threshold and whether inactive data reporting is enabled.

Tiering fullness threshold

Setting the threshold to a lower number reduces the amount of data required to be stored on the performance tier before tiering takes place. This might be useful for large aggregates that contain little active data.

Setting the threshold to a higher number increases the amount of data required to be stored on the performance tier before tiering takes place. This might be useful for solutions designed to tier only when aggregates are near maximum capacity.

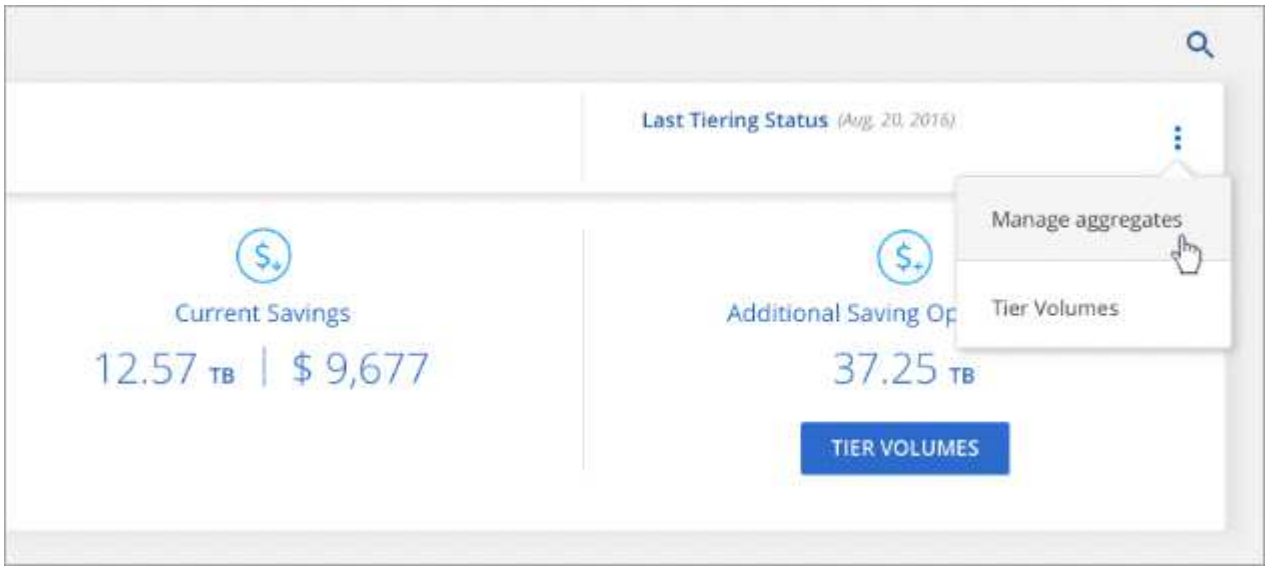
Inactive data reporting

Inactive data reporting (IDR) uses a 31-day cooling period to determine which data is considered inactive. The amount of cold data that is tiered is dependent on the tiering policies set on volumes. This amount might be different than the amount of cold data detected by IDR using a 31-day cooling period.

It's best to keep IDR enabled because it helps to identify your inactive data and savings opportunities. IDR must remain enabled if data tiering was enabled on an aggregate.

Steps

1. From the **Cluster Dashboard**, click menu icon for a cluster and select **Manage Aggregates**.



2. On the **Manage Aggregates** page, click the icon for an aggregate in the table.
3. Modify the fullness threshold and choose whether to enable or disable inactive data reporting.

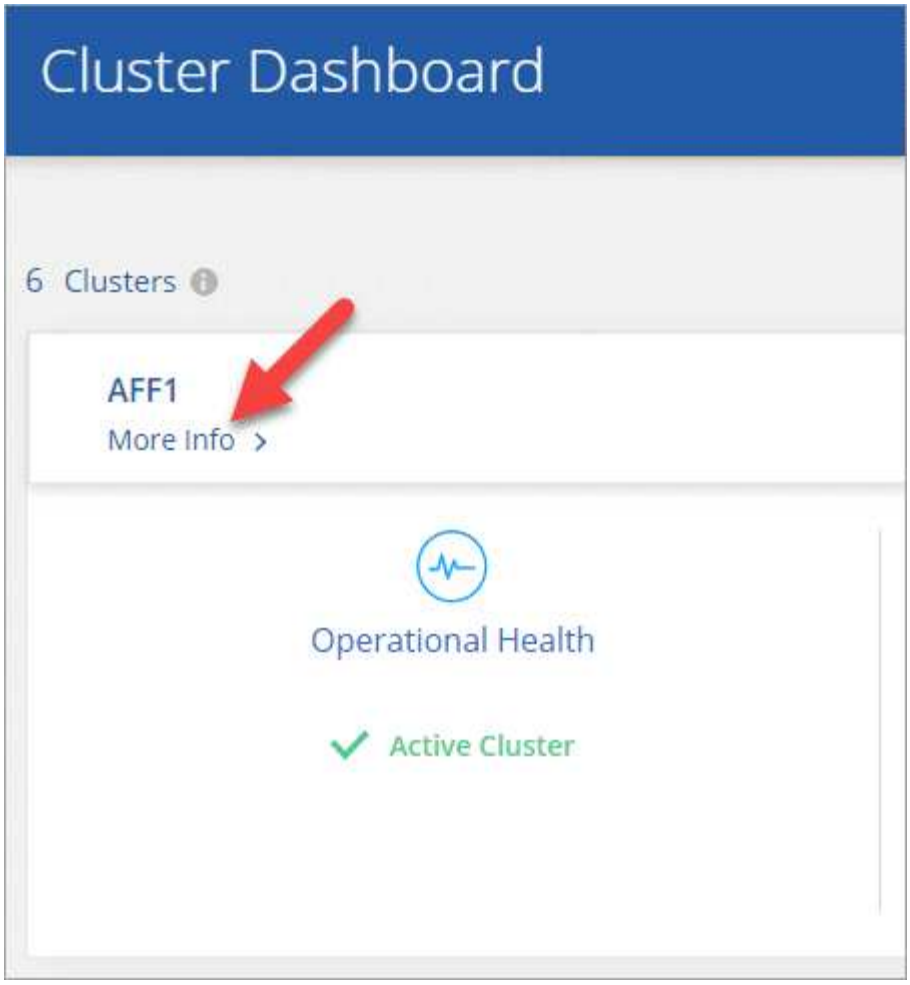
4. Click **Apply**.

Reviewing tiering info for a cluster

You might want to see how much data is in the cloud tier and how much data is on disks. Or, you might want to see the amount of hot and cold data on the cluster's disks. Cloud Tiering provides this information for each cluster.

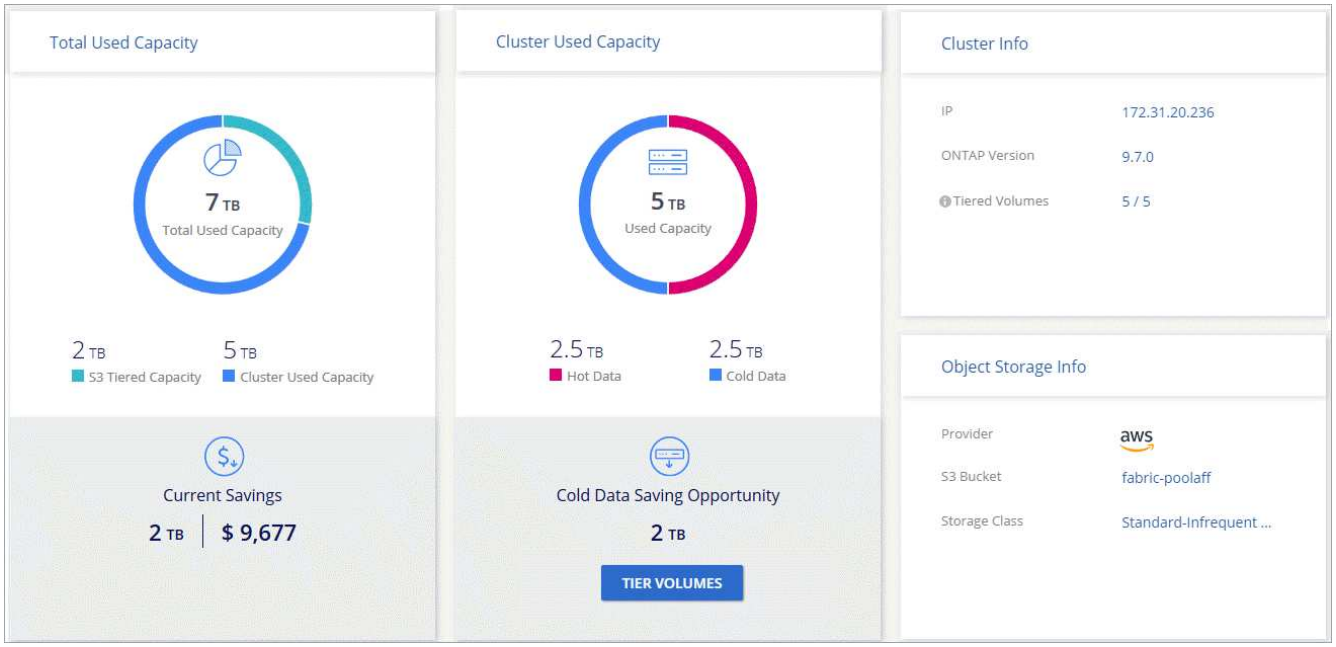
Steps

1. From the **Cluster Dashboard**, click **More info** for a cluster.



2. Review details about the cluster.

   Here's an example:

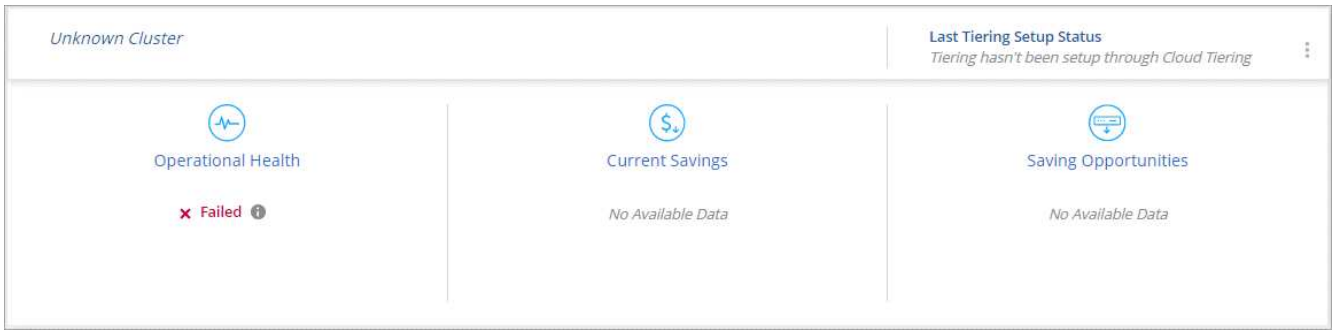


Fixing operational health

Failures can happen. When they do, Cloud Tiering displays a "Failed" operational health status on the Cluster Dashboard. The health reflects the status of the ONTAP system and the Service Connector.

Steps

1. Identify any clusters that have an operational health of "Failed."



2. Hover over the icon to see the failure reason.
3. Correct the issue:
   a. Verify that the ONTAP cluster is operational and that it has an inbound and outbound connection to your object storage provider.
   b. Verify that the Service Connector is running and that it has outbound connections to the Cloud Tiering service, to the object store, and to the ONTAP clusters that it discovers.

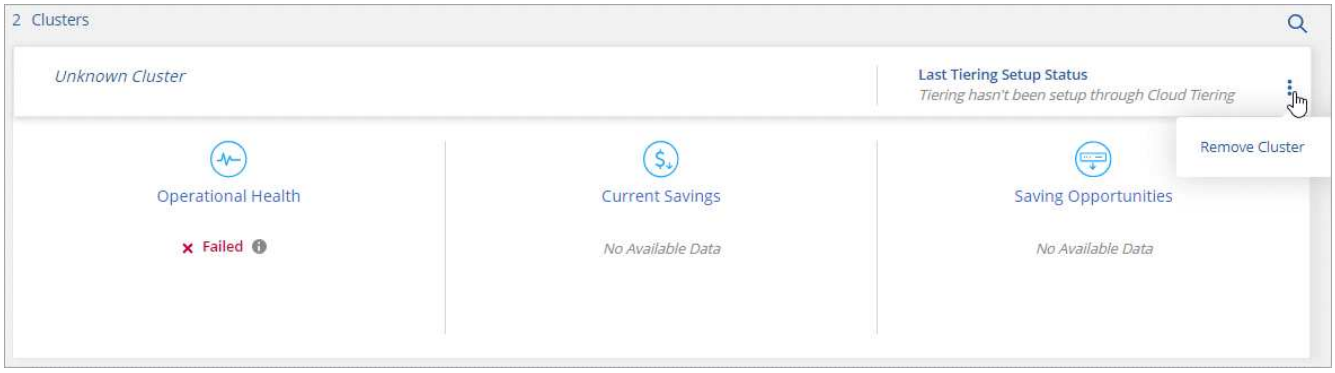
The name of the Service Connector instance/virtual machine is prefixed with "Service-connector."

Removing a failed cluster

If the health of a cluster is failed, you can remove it from the dashboard to focus on the operational clusters.

Steps

1. From the **Cluster Dashboard**, identify any clusters that have an operational health of "Failed."
2. Click menu icon for a cluster and select **Remove Cluster**.



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