Extend to the cloud

ONTAP System Manager

NetApp
November 18, 2020

This PDF was generated from https://docs.netapp.com/us-en/ontap/concept_cloud_overview.html on November 18, 2020. Always check docs.netapp.com for the latest.

Table of Contents

Extend to the cloud . . . 1
- Cloud overview . . . 1
- Tier data to cloud . . . 1
- Tier data to local bucket . . . 2
- Create tags for tiering objects . . . 2
- Enable inactive data reporting . . . 2

Extend to the cloud

Cloud overview

You can use FabricPool to automatically tier data depending on how frequently the data is accessed.

FabricPool is a hybrid storage solution that uses an all flash (all SSD) aggregate as the performance tier and an object store as the cloud tier. Using a FabricPool helps you reduce storage cost without compromising performance, efficiency, or protection.

The cloud tier can be located on NetApp StorageGRID or ONTAP S3 (beginning with ONTAP 9.8), or one of the following service providers:

- Alibaba cloud
- Amazon S3
- Google Cloud
- IBM cloud
- Microsoft Azure Blob Storage

Tier data to cloud

Storing data in tiers can enhance the efficiency of your storage system. You can manage storage tiers by using FabricPool to store data in a tier, based on how frequently the data is accessed.

This procedure sets up an object store as the cloud tier for FabricPool. Keep in mind that once you attach to a local tier (aggr) the cloud tier cannot be unattached.

A FabricPool license is not required when using StorageGRID or ONTAP S3 as the cloud tier or when using Amazon S3, Google Cloud Storage, or Microsoft Azure Blob Storage as the cloud tier for Cloud Volumes for ONTAP. A FabricPool license is required for other cloud tier locations.

If you are tiering to ONTAP S3, there must be an entry for the remote ONTAP S3 server's hostname in the DNS server configured for the admin storage VM, including the S3 server's FQDN name and the IP addresses on its network interfaces.

You also have the option to create a volume tiering policy in System Manager.

Steps

1. Click **Storage** > **Tiers** > **Add Cloud Tier** and select the object store provider you want to use.
2. If you want to create a cloud mirror, click **Add as FabricPool Mirror**.

Tier data to local bucket

Beginning with ONTAP 9.8, you can tier data to local object storage using ONTAP S3.

Tiering data to a local bucket provides a simple alternative to moving data to a different local tier. This procedure uses an existing bucket on the local cluster, or you can let ONTAP automatically create a new storage VM and a new bucket.

Keep in mind that once you attach to a local tier (aggr) the cloud tier cannot be unattached.

An S3 license is required for this workflow, which creates a new S3 server and new bucket, or uses existing ones. A FabricPool license is not required for this workflow.

Step

1. Tier data to a local bucket: click **Tiers**, select a tier, then click ⋮.
    - You have the option to create a new tier (ONTAP S3) or use an existing one.
    - You have the option to edit an existing volume tiering policy.

Create tags for tiering objects

Starting in ONTAP 9.8, you can create object tags to help you classify and sort tiering objects for easier data management. You can set tags only on FabricPool volumes attached to StorageGRID. These tags are retained during a volume move.

Steps

1. Navigate to **Storage** > **Tiers** > **Volumes**.
2. Locate the volume you want to tag and select **Click to enter tags**.

Enable inactive data reporting

Starting in ONTAP 9.8, you can enable inactive data reporting to show how much inactive data can be tiered to the cloud.
You can enable inactive data reporting on HDD aggregates.

Steps

1. Choose one of the following options:
    - When you have existing HDD aggregates, navigate to **Storage** > **Tiers** and click ⋮ for the aggregate on which you want to enable inactive data reporting.
    - When no cloud tiers are configured, navigate to **Dashboard** and click the **Enable inactive data reporting** link under **Capacity**.

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