Cloud Tiering technical FAQ

Cloud Manager

Ben Cammett
June 08, 2020

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Cloud Tiering technical FAQ

This FAQ can help if you're just looking for a quick answer to a question.

ONTAP

The following questions relate to ONTAP.

What are the requirements for my ONTAP cluster?

It depends on where you tier the cold data. Refer to the following:

- Tiering data from on-premises ONTAP clusters to Amazon S3
- Tiering data from on-premises ONTAP clusters to Azure Blob storage
- Tiering data from on-premises ONTAP clusters to Google Cloud Storage
- Tiering data from on-premises ONTAP clusters to StorageGRID

Does Cloud Tiering enable inactive data reporting?

Yes, Cloud Tiering enables inactive data reporting on each aggregate. This setting enables us to identify the amount of inactive data that can be tiered to low-cost object storage.

Can I tier data from NAS volumes and SAN volumes?

You can use Cloud Tiering to tier data from NAS volumes to the public cloud and from SAN volumes to a private cloud using StorageGRID.

Object storage

The following questions relate to object storage.

Which object storage providers are supported?

Amazon S3, Azure Blob storage, Google Cloud Storage, and StorageGRID using the S3 protocol are supported.

Can I use my own bucket/container?

Yes, you can. When you set up data tiering, you have the choice to add a new bucket/container or to select an existing bucket/container.

Which regions are supported?

- Supported AWS regions
- Supported Azure regions
- Supported Google Cloud regions

Which S3 storage classes are supported?

Cloud Tiering supports data tiering to the *Standard*, *Standard-Infrequent Access*, *One Zone-IA*, or *Intelligent* storage class. See Supported S3 storage classes for more details.

Which Azure Blob access tiers are supported?

Cloud Tiering automatically uses the *Hot* access tier for your inactive data.

Which storage classes are supported for Google Cloud Storage?

Cloud Tiering uses the *Standard* storage class for inactive data.

Does Cloud Tiering use one object store for the entire cluster or one per aggregate?

One object store for the entire cluster.

Can I apply policies to my object store to move data around independent of tiering?

No, Cloud Tiering does not support object lifecycle management rules that move or delete data from object stores.

Cloud Manager

The following questions relate to Cloud Manager.

Where does Cloud Manager need to be installed?

- When tiering data to S3, Cloud Manager can reside in an AWS VPC or on your premises.
- When tiering data to Blob storage, Cloud Manager must reside in an Azure VNet.
- When tiering data to Google Cloud Storage, Cloud Manager must reside in a Google Cloud Platform VPC.
- When tiering data to StorageGRID, Cloud Manager must reside on an on premises Linux host.

What's the difference between Cloud Manager and a Service Connector?

There's no difference, really. A Service Connector is part of Cloud Manager.

You might be familiar with the Service Connector term if you've accessed the Cloud Tiering service directly from NetApp Cloud Central. Cloud Tiering prompts you to deploy a Service Connector to discover your on-prem clusters. That's not necessary when you use Cloud Tiering from within Cloud Manager because Cloud Manager acts as the Service Connector—it communicates with ONTAP clusters to discover information about active and inactive data, and to set up data tiering.

Networking

The following questions relate to networking.

What are the networking requirements?

- The ONTAP cluster initiates an HTTPS connection over port 443 to your object storage provider.

  ONTAP reads and writes data to and from object storage. The object storage never initiates, it just responds.

- For StorageGRID, the ONTAP cluster initiates an HTTPS connection over a user-specified port to StorageGRID (the port is configurable during tiering setup).
- Cloud Manager needs an outbound HTTPS connection over port 443 to your ONTAP clusters, to the object store, and to the Cloud Tiering service.

For more details, see:

- Tiering data from on-premises ONTAP clusters to Amazon S3
- Tiering data from on-premises ONTAP clusters to Azure Blob storage
- Tiering data from on-premises ONTAP clusters to Google Cloud Storage
- Tiering data from on-premises ONTAP clusters to StorageGRID

Permissions

The following questions relate to permissions.

What permissions are required in AWS?

Permissions are required to manage the S3 bucket.

What permissions are required in Azure?

No extra permissions are needed outside of the permissions that you need to provide to Cloud

Manager.

What permissions are required in Google Cloud Platform?

Storage Admin permissions are needed for a service account that has storage access keys.

What permissions are required for StorageGRID?

S3 permissions are needed.