



Manage Google Cloud Storage buckets

Google Cloud Storage

NetApp

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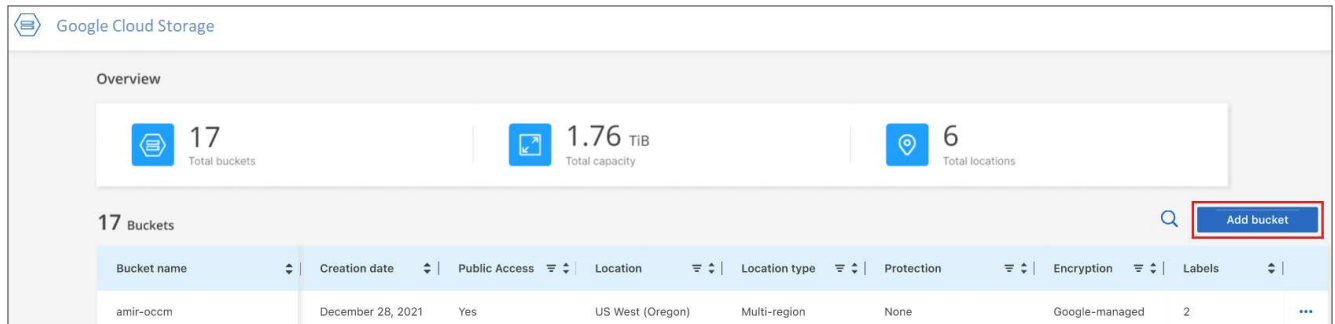
Manage Google Cloud Storage buckets

Add Google Cloud Storage buckets

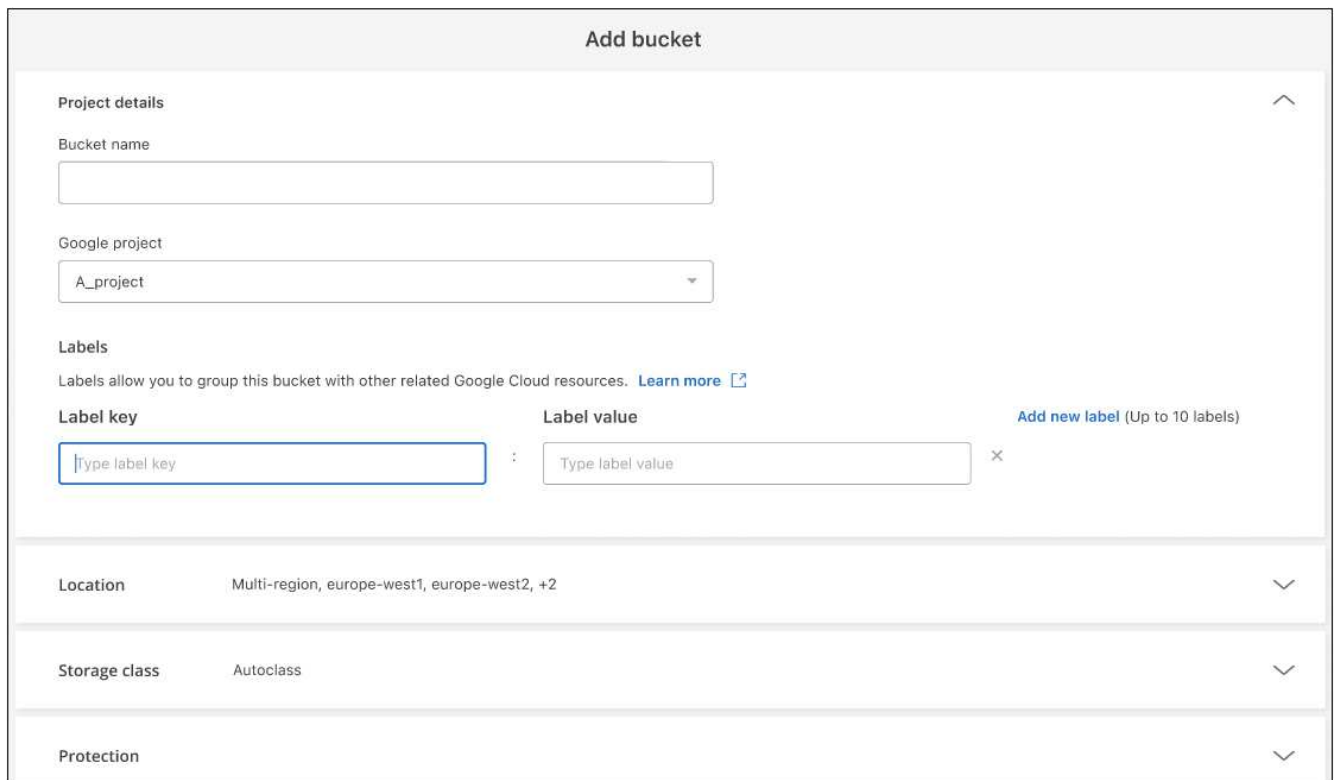
Once your Google Cloud Storage working environment is available in the Canvas, you can add additional buckets directly from BlueXP.

Steps


1. From the Canvas, double-click the Google Cloud Storage working environment to view the Google Cloud Storage buckets Overview page, and click **Add bucket**.



The *Add bucket* page is displayed.



2. Enter the required information in the *Project details* section.

Field	Description
Bucket name	Enter the name you want to use for the bucket. See the Google Cloud documentation for naming requirements.
Google project	<p>Select the Google project that will be the owner of the bucket. This can be the primary project where the Connector was deployed, or it can be a different project.</p> <p>If you don't see any additional projects in the drop-down list, then you haven't yet associated the BlueXP service account with other projects. Go to the Google Cloud console, open the IAM service, and select the project. Add the service account with the BlueXP role to that project. You'll need to repeat this step for each project.</p> <div style="border-left: 1px solid #ccc; padding-left: 10px; margin-top: 10px;">  This is the service account that you set up for BlueXP, as described on this page. </div>
Labels	<p>Labels are metadata for your Google Cloud resources. You can add up to 10 label key:value pairs when creating a bucket.</p> <p>See the Google Cloud documentation for more information about labels.</p>

- In the *Location* section, select the location type and region (or regions) where the bucket will be created. You can select from three different types of locations.

If you select the "Location type"...	Then select...
Region	A single region from the "Available regions" field.
Dual-region	<p>The geographic location (a single continent) from the "Available locations" field, and then select two regions in the "Available regions" field.</p> <p>You can enable "Turbo replication" if you want to guarantee geo-redundancy for all newly written objects within a target of 15 minutes.</p>
Multi-region	The geographic multi-region from the "Available multi-regions" field.

Note that all Cloud Storage data is redundant across at least two zones within at least one geographic place as soon as you upload it. [See the Google Cloud documentation for more information about bucket locations.](#)

- In the *Storage class* section, select the storage class that will be used for objects in your bucket. You can select from among four storage classes, or you can select *Autoclass* to have Google adjust the class as needed.

Storage class	Description
Standard	Standard storage is best for data that is frequently accessed ("hot" data) and/or stored for only brief periods of time.

Storage class	Description
Nearline	Nearline storage is a low-cost, highly durable storage service for storing infrequently accessed data.
Coldline	Coldline storage is a very-low-cost, highly durable storage service for storing infrequently accessed data.
Archive	Archive storage is the lowest-cost, highly durable storage service for data archiving, online backup, and disaster recovery.
Autoclass	Autoclass automatically transitions objects in your bucket to the appropriate storage classes based on each object's access pattern.

The cost and retrieval fees are different for each storage class. [See the Google Cloud documentation for more information about storage classes.](#)

5. In the *Protection* section, choose whether you want to use any data protection tools to protect objects in the bucket, or any data encryption configuration to protect access to your data.

Data protection	Description
None	By default, no protection tools are enabled on the bucket.
Object versioning	<p>The bucket will retain a noncurrent object version each time you update, replace, or delete a live object version - continuously maintaining a protected version of the object. When you select "Object versioning" you can specify two options:</p> <ul style="list-style-type: none"> • Max. number of versions per object - Enter the number of noncurrent versions per object that will be created. • Expire noncurrent versions after - Enter the number of days after which the older, noncurrent objects will be removed.
Retention policy	<p>A retention policy ensures that all current and future objects in the bucket cannot be deleted or replaced until they reach the age you define in the retention policy. When you select "Retention policy" you can specify two options:</p> <ul style="list-style-type: none"> • Retain objects for - Enter the number of seconds, days, months, or years that objects will be retained. • Time frame - Select whether the time is in seconds, days, months, or years.

The object versioning and retention policy protection tools can't be enabled at the same time. See the Google Cloud documentation for [more information about object versioning](#), and [more information about retention policies](#).

Data encryption	Description
Google-managed encryption key	By default, Google-managed encryption keys are used to encrypt your data.

Data encryption	Description
Customer-managed encryption key (CMEK)	<p>You can use your own customer-managed keys for data encryption instead of using the default Google-managed encryption keys. If you're planning to use your own customer-managed keys, you'll need to have created them already so you can select the Keys in this page.</p> <p>The keys can be in the same Project as the bucket, or you can select a different Project.</p>

See the Google Cloud documentation for [more information about Google-managed encryption keys](#), and [more information about Customer-managed encryption keys](#).

6. Click **Add** and the bucket is created.

Change Google Cloud Storage bucket settings

Once your Google Cloud Storage working environment is available in the Canvas, you can change some bucket properties directly from BlueXP.

Note that you can't change the bucket name, Google project, or protection settings.

The bucket properties you can change include:

- Storage class for all future objects in the bucket.
- You can choose to add, edit, and remove labels to the objects in the bucket.
- Turbo replication mode - only if the bucket is in a dual-region location.

You can change these bucket settings directly from BlueXP by clicking **...** > **Edit bucket details** for a bucket.

Overview

158 Total buckets | 3.55 TiB Total capacity | 18 Total locations

Buckets (55) Add bucket

Bucket name	Creation date	Public Access	Location	Location type	Protection	Encryption	Labels
allenc-demo-tlveng	November 8, 2021	Yes	EU	Multi-region	None	Google-managed	2
amir-occm	December 28, 2021	Yes	US	Multi-region	None	Google-managed	
appstream-app-settings-us-east	August 16, 2021	Yes	US	Multi-region	None	Google-managed	
appstream2-36fb080bb8-us-ea	March 19, 2019	Yes	EU, US	Dual-region	Object versioning	Google-managed	
Azure-logs-Sub1111-us-east-1	March 19, 2019	Yes	EU, US	Dual-region	Object versioning	Google-managed	

Change the storage class

The Storage class section enables you to make only certain changes:

- If *Autoclass* was selected when the bucket was created, you can disable Autoclass and select another storage class.

- If any other storage class was selected when the bucket was created, you can change to any other storage class - except *Autoclass*.

Objects that were in a different class will stay in that class, but any new objects will use the new class setting.

Add or change labels for objects in the bucket

Labels are metadata that you can use to group resources to identify applications, environments, regions, cloud providers, and more. Labels consists of a key and a value. You can add labels to a bucket so that the labels are applied to objects when they are added to the bucket. You can also change and delete labels and label values.

After you add or edit a label, click **Apply** to save your changes. If you want to add more labels, click **Add new label**. You can add up to 10 labels per bucket.

Change whether turbo replication is enabled in dual-region locations

If the bucket is in a dual-region location, you can enable or disable whether turbo replication mode is enabled or disabled. "Turbo replication" enables you to guarantee geo-redundancy for all newly written objects within a target of 15 minutes.

No other location details can be changed after the bucket has been created.

Use NetApp data services with Google Cloud Storage buckets

After you discover Google Cloud Storage buckets in BlueXP, you can use NetApp data services for backup, tiering, and data synchronization.

- Use **BlueXP backup and recovery** to back up data from your on-premises ONTAP and Cloud Volumes ONTAP systems to Google Cloud object storage.

To get started, go to the Canvas and drag and drop an on-premises ONTAP or Cloud Volumes ONTAP working environment on your Google Cloud Storage working environment.

[Learn more about backing up ONTAP data to Google Cloud Storage.](#)

- Use **BlueXP tiering** to tier inactive data from on-premises ONTAP clusters to Google Cloud object storage.

To get started, go to the Canvas and drag and drop an on-premises ONTAP working environment on your Google Cloud Storage working environment.

[Learn more about tiering ONTAP data to Google Cloud Storage.](#)

- Use **BlueXP copy and sync** to synchronize data to or from Google Cloud Storage buckets.

To get started, go to the Canvas and drag and drop the source working environment on the target working environment. Your Google Cloud Storage working environment can be either the source or target.

You can also select your Google Cloud Storage working environment and click **Copy & sync** from the Services panel to synchronize data to or from Cloud Storage buckets.

[Learn more about the BlueXP copy and sync service.](#)

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