
Tagging Dataplex Assets

Tools Used:

- **Google Cloud Console**
 - **Cloud Dataplex**
 - **Data Catalog**
 - **BigQuery**
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Objective


The objective of this lab was to demonstrate how to use Google Cloud's **Dataplex** and **Data Catalog** to:

1. Create a lake, zone, and asset.
2. Build and apply a **tag template** to a dataset.
3. Search for and identify assets using the applied tags.

Enable Dataplex and Data Catalog APIs

1. In the Google Cloud Console, enter **Cloud Dataplex API** in the top search bar.
2. Click on the result for **Cloud Dataplex API** under Marketplace.
3. If not already enabled, click **Enable**.
4. Repeat steps 1-3 for **Google Cloud Data Catalog API**.

[←](#) API/Service Details [■ Disable API](#)



Cloud Dataplex API


Dataplex API is used to manage the lifecycle of data lakes.

By Google

Service name	Type	Status	Documentation	Explore
dataplex.googleapis.com	Public API	Enabled	Learn more	Try in API Explorer


[Metrics](#) [Quotas & System Limits](#) [Credentials](#) [Cost](#)

[←](#)
API/Service Details
[■ Disable API](#)



Google Cloud Data Catalog API

A fully managed and highly scalable data discovery and metadata management service.


By Google Enterprise API 

Service name	Type	Status	Documentation	Explore
datacatalog.googleapis.com	Public API	Enabled	Documentation Pricing info	Try in API Explorer

Task 1. Create a lake, zone, and asset

In this task, you create a new Dataplex lake to store customer order information, add a curated zone to the lake, and then attach a pre-created BigQuery dataset as a new asset in the zone.

Create a lake

1. In the Google Cloud Console, in the **Navigation menu** () , click **View all products**. Under **Analytics**, click **Dataplex Universal Catalog**.

If prompted Welcome to the new Dataplex experience, click **Close**.

2. Under **Manage lakes**, click **Manage**.
3. Click **Create**.
4. Enter the required information to create a new lake:

Property	Value
Display Name	Orders Lake
ID	Leave the default value.
Region	_____

Leave the other default values.

5. Click **Create**.

[←](#) Create New Lake

Display name

Orders Lake

ID *

orders-lake

Letters, numbers and dashes allowed. Must be unique in the project. Cannot be changed after creation.

Description

Optional

0 / 1024

Region *

us-east4



You can add zones for regional and multi-regional data in this lake.

[DISMISS](#)

[←](#) Create New Zone

Display name

Customer Curated Zone

Zone ID *

customer-curated-zone

Letters, numbers and dashes allowed. Cannot be changed after creation.

Type *

Curated Zone

Description

Optional

0 / 1024

Data locations

Choose whether this zone supports regional or multi-regional data. Single region and multi-region data cannot be mixed in the same zone. This cannot be changed later.

[Learn more](#)

☒ Regional (us-east4)

☐ Multi-regional (US)

• • •
Add a zone to the lake

1. On the **Manage** tab, click on the name of your lake.
2. Click **Add zone**.
3. Enter the required information to create a new zone:

Property	Value
Display Name	Customer Curated Zone
ID	Leave the default value.
Type	Curated zone
Data locations	Regional

Leave the other default values.

For example, the option for **Enable metadata discovery** under **Discovery settings** is enabled by default and allows authorized users to discover the data in the zone.

4. Click **Create**.

← Orders Lake

EDIT

DELETE

LEARN

Zones requiring action

0

Assets requiring action

0

Lake ID

orders-lake

Display name

Orders Lake

Status

✓ Lake active

ZONES

DETAILS

PERMISSIONS

ACTIONS

+ ADD ZONE

− DELETE ZONE

Filter

Filter instances

III

<input type="checkbox"/>	Display name ↑	Type	Status	Assets requiring action	Assets	Data locations	Last modified	Labels	
<input type="checkbox"/>	CUSTOMER CURATED ZONE	Curated Zone	✓ Active	<div></div>	0	Regional (us-east4)	June 23, 2025	None	⋮

Attach an asset to a zone

1. On the **Zones** tab, click on the name of your zone.
2. On the **Assets** tab, click **Add assets**.

3. Click **Add an asset**.
4. Enter the required information to attach a new asset:

Property	Value
Type	BigQuery dataset
Display Name	Customer Details Dataset
ID	Leave the default value.
Dataset	____.customers

Leave the other default values.

5. Click **Continue**.
6. For **Discovery settings**, select **Inherit** to inherit the Discovery settings from the zone level, and then click **Continue**.
7. Click **Submit**.

[←](#) Create template

Template display name
Protected Data Template

Template ID *
protected_data_template



Cannot be changed after creation

Location *
us-east4 (Northern Virginia)

Cannot be changed after creation

Visibility

- ☒ **Public (recommended)**
Any user who has the required view permissions for a data entry can view all the public tags associated with it. Public tags support using simple search.
- ☐ **Private**
Users can search or view the tags and the data entries associated with the tags only if they are granted the required view permissions on both the tag template and the data entries. Private tags don't support simple search.
- Private tags are not migrated to Dataplex Universal Catalog. Consider selecting public visibility.

Fields

Attach Tags

Tags are deprecated. Consider using Aspects to take advantage of the latest functionalities.

✓ Choose what to tag

Selected targets	zip
	state
	last_name
	country
	age
	email
	latitude
	first_name
	city

✓ Choose the tag templates

Selected tag templates	Protected Data Template
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③ Fill in tag values

The selected tag templates will be attached to the selected targets.

Task 2. Create a tag template

To start tagging data, you first need to create one or more tag templates. A tag template can be a public or private tag template. When you create a new tag template, the option to create a public tag template is the default and recommended option. Users who have the required view permissions for a data asset can view all the public tags associated with it. This supports simple search for discovery while also adhering to data access controls already implemented on the underlying data.

In this task, you create a public tag template to label BigQuery table columns with a protected status. With a public tag template, users who have access to the underlying BigQuery table columns will be able to see the tags applied to the columns.

1. On the left menu, under **Manage Metadata**, click **Catalog**.
2. Click **Create tag template (Deprecated)**.
3. When prompted **Are you sure you want to continue?**, click **Proceed**.

Note: Tag templates are being replaced by aspect types but are still functional at this time. You can proceed with the next steps to create a tag template.

This lab is scheduled to be updated to use aspect types, and these changes will be reflected soon.

4. Enter the required information to define the tag template:


Property	Value
Template Display Name	Protected Data Template
Template ID	Leave the default value.
Location	_____
Visibility	Public

5. Click **Add field**, and enter the required information to add a new field to the template:


Property	Value
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Field Display Name	Protected Data Flag
Field ID	Leave the default value.
Type	Enumerated

6. For **Enumerated values > Values 1**, enter YES.
7. Click **Add value**, and for **Values 2**, enter NO.
8. Click **Done**.
9. Click **Create**.


^ **New field**


Field display name
Protected Data Flag




Field ID *
protected_data_flag


Field description

☐ Make this field required

Type *
Enumerated


Enumerated Values

Values 1 *
1




+ ADD VALUE

Task 3. Apply a tag template to Dataplex assets

After you create a tag template, you can use it to attach tags to any number of desired data assets to which you have access.

In this task, you apply your previously created tag template to specific columns in the BigQuery table that you want to label with a protected data status.

1. On the left menu, under **Discover**, click **Search**.
2. For **Filters > Systems**, enable the checkbox for **Dataplex**.
3. Click on the **customer_details** table.

If you do not see the **customer_details** table, wait a few minutes and then refresh the page to allow the Dataplex asset list to be updated.

4. Click **Attach tags**.
5. For **Choose what to tag**, enable the checkboxes for the following columns:
 - a. zip
 - b. state
 - c. last_name
 - d. country
 - e. email
 - f. latitude
 - g. first_name
 - h. city
 - i. longitude
6. Click **OK**.
7. For **Choose the tag templates**, select **Protected data template**.
8. For **Protected data flag**, select **YES**.
9. Click **Save**.

Attach Tags

⚠ Tags are deprecated. Consider using Aspects to take advantage of the latest functionalities.

✓

Choose what to tag

Selected targets

zip
state
last_name
country
age
email
latitude
first_name
city

✓

Choose the tag templates

Selected tag templates

Protected Data Template

3

Fill in tag values

The selected tag templates will be attached to the selected targets.

Key Learnings

- **Dataplex** provides a centralized and intelligent way to manage data lakes and warehouses.
 - **Data Catalog** enhances discoverability and governance with metadata tagging.
 - **Tag Templates** enable reusable and consistent metadata annotation across datasets.
 - **Public tags** help maintain transparency and easy access within permission boundaries.
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Conclusion

This lab successfully demonstrated how Google Cloud's **Dataplex** and **Data Catalog** can be used together to **organize, tag, and search** data assets efficiently. By applying structured metadata through tag templates, teams can better manage **data governance, compliance, and discoverability** in large-scale data environments.
