

# **TIBCO Flogo® Connector for Google Cloud Storage User's Guide**

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# TIBCO Documentation and Support Services

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## How to Access TIBCO Documentation

Documentation for TIBCO products is available on the TIBCO Product Documentation website, mainly in HTML and PDF formats.

The TIBCO Product Documentation website is updated frequently and is more current than any other documentation included with the product. To access the latest documentation, visit <https://docs.tibco.com>.

Documentation for TIBCO Flogo<sup>®</sup> Connector for Google Cloud Storage is available on the TIBCO Flogo<sup>®</sup> Connector for Google Cloud Storage Product Documentation page.

## Product-Specific Documentation

The following documents for this product can be found on the TIBCO Documentation site:

- *TIBCO Flogo<sup>®</sup> Connector for Google Cloud Storage Installation*
- *TIBCO Flogo<sup>®</sup> Connector for Google Cloud Storage User's Guide*
- *TIBCO Flogo<sup>®</sup> Connector for Google Cloud Storage Release Notes*

## How to Contact TIBCO Support

You can contact TIBCO Support in the following ways:

- For an overview of TIBCO Support, visit <http://www.tibco.com/services/support>.
- For accessing the Support Knowledge Base and getting personalized content about products you are interested in, visit the TIBCO Support portal at <https://support.tibco.com>.
- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to <https://support.tibco.com>. If you do not have a user name, you can request one by clicking Register on the website.

## How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the [TIBCO Ideas Portal](https://community.tibco.com). For a free registration, go to <https://community.tibco.com>.

## Overview

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Google Cloud Storage provides a way to store and retrieve data world-wide in a unified manner. This connector allows Create, Update, Get, and Delete operations for bucket and object within Google Cloud Storage projects.



For details on using Google Cloud Storage, see the [Google Cloud Storage product documentation](#).

# Creating a Google Connection

You must create a Google connection before you can use the TIBCO Flogo® Connector for Google Cloud Storage. The Google connection is used by all the activities in the Google Cloud Storage category.



Before you create a Google connection, be sure that you have an active Google Cloud Storage account.

Use the following procedure to create a Google connection:

1. On the Flogo Enterprise page, click the **Connections** tab and perform one of the following actions:
  - If you are creating a connection for a TIBCO Flogo® connector for the first time, click the **Google Connector** tile.
  - If you already have an existing connection for any TIBCO Flogo connector, the connection is displayed on the **Connections** page. Click the **Add Connection** link. Then click the **Google Connector** tile.
2. In the **Google Connector** dialog box, enter the connection details. For field descriptions, see the [Google Connection Details](#) topic.
3. Click **Connect**.

## Google Connection Details

You must provide the details for a Google connection in the **Google Connector** dialog box.

The **Google Connector** dialog box contains the following fields:

Field	Required	Description
Connection Name	Yes	The unique name of the connection. It is displayed in the <b>Connection Name</b> drop-down selection box for each activity in TIBCO Flogo® Connector for Google Cloud Storage.
Description	No	A brief description of this Google connection.
Service Account Key	Yes	The Google service account JSON key file. This is a unique identifier.

# GoogleCloudStorageCreate

This activity creates a bucket or an object in Google Cloud Storage.

## Configuration

This tab has the following fields.

Field	Description
Connection Name	The connection name to use when accessing the Google Cloud Storage service. If you have created multiple Google connections, select the one you want to use from the drop-down list.
Object Name	The Google Cloud Storage object to use for this activity from the drop-down list. The default value for this field is <b>Bucket</b> .

## Input

You can either enter the input manually, or you can map the input to the output from a preceding activity if the preceding activity has an output. (For details on how to use the mapper, see the "Using the Mapper" section in *TIBCO Flogo® Enterprise User's Guide*.) The input tree displayed for this activity depends on the **Object Name** that you select in the **Configuration** tab.

### Bucket

If you have selected **Bucket** under **Object Name** in the **Configuration** tab, then this tab has the following mandatory fields.

Field	Description
name	The name of the bucket to create in Google Cloud Storage.
projectName	The name of the project where a bucket is to be created in Google Cloud Storage.


- The **labels** field accepts a string only in the following format: key1:value1, key2:value2, and so on. There is no restriction on the number of key-value pairs that can be supplied.
- The GoogleCloudStorageCreate activity does not support customer managed encryption key.
- The values in **entityId**, **etag**, **id**, **kind**, **selfLink** within the **acl** and **defaultObjectAcl** fields are ignored because these values are set to default values by Google Cloud Storage.

### Object

If you have selected **Object** under **Object Name** in the **Configuration** tab, then this tab has the following mandatory fields.

Field	Description
bucket	The name of the bucket in which to create an object in Google Cloud Storage.
name	The name of the object to create in Google Cloud Storage.



Field	Description
uploadType	<p>The supported upload types are media and multipart.</p> <div>  <p>To check the maximum limit for object upload, see the Google Cloud Storage documentation.</p> </div>
data	The content to be uploaded as part of the object in Google Cloud Storage.



- The create activity accepts data only in string format.
- It is recommended to specify the **contentType** field to ensure that the object is uploaded in the proper format. In this release, we support only plain text.
- The **metadata** field accepts a string only in the following format: key1:value1, key2:value2, and so on. There is no restriction on the number of key-value pairs that can be supplied.

### Output

The **Output** tab displays the activity output schema in a tree format. The output is read-only. The schema varies according to the object name that you selected in the **Configuration** tab. The elements that you see in the schema can be mapped as input to the activities which follow this activity in the flow.

# GoogleCloudStorageDelete

This activity deletes a bucket or an object from Google Cloud Storage.

## Configuration

This tab has the following fields.

Field	Description
Connection Name	The connection name to use when accessing the Google Cloud Storage service. If you have created multiple Google connections, select the one you want to use from the drop-down list.
Object Name	The Google Cloud Storage object to use for this activity from the drop-down list. The default value for this field is <b>Bucket</b> .

## Input

You can either enter the input manually, or you can map the input to the output from a preceding activity if the preceding activity has an output. (For details on how to use the mapper, see the "Using the Mapper" section in *TIBCO Flogo® Enterprise User's Guide*.) The input tree displayed for this activity depends on the **Object Name** that you select in the **Configuration** tab.

### Bucket

If you have selected **Bucket** under **Object Name** in the **Configuration** tab, then this tab has the following mandatory fields.

Field	Description
bucket	The name of bucket to delete in Google Cloud Storage.



- Only an empty bucket can be deleted. If a bucket contains objects, the objects must be deleted before deleting the bucket.

### Object

If you have selected **Object** under **Object Name** in the **Configuration** tab, then this tab has the following mandatory fields.

Field	Description
bucket	The name of bucket that contains an object to be deleted in Google Cloud Storage.
object	The name of object to delete in Google Cloud Storage

## Output

The **Output** tab displays the activity output schema in a tree format. The output is read-only. The schema varies according to the object name that you selected in the **Configuration** tab. The elements that you see in the schema can be mapped as input to the activities which follow this activity in the flow.

# GoogleCloudStorageGet

This activity gets a bucket or an object from Google Cloud Storage.

## Configuration

This tab has the following fields:

Field	Description
Connection Name	The connection name to use when accessing the Google Cloud Storage service. If you have created multiple Google connections, select the one you want to use from the drop-down list.
Object Name	The Google Cloud Storage object to use for this activity from the drop-down list. The default value for this field is <b>Bucket</b> .

## Input

You can either enter the input manually, or you can map the input to the output from a preceding activity if the preceding activity has an output. (For details on how to use the mapper, see the "Using the Mapper" section in *TIBCO Flogo® Enterprise User's Guide*.) The input tree displayed for this activity depends on the **Object Name** that you select in the **Configuration** tab.


### Bucket

If you have selected **Bucket** under **Object Name** in the **Configuration** tab, then this tab has the following mandatory fields.

Field	Description
bucket	The name of the bucket to get from Google Cloud Storage.

### Object

If you have selected **Object** under **Object Name** in the **Configuration** tab, then this tab has the following mandatory fields.

Field	Description
bucket	The name of the bucket that contains an object to get from Google Cloud Storage.
object	The name of the object to get from Google Cloud Storage.  By default both the object content and its metadata are retrieved. If you require only object metadata, set the 'metadataOnly' field to true.

## Output

The **Output** tab displays the activity output schema in a tree format. The output is read-only. The schema varies according to the object name that you selected in the **Configuration** tab. The elements that you see in the schema can be mapped as input to the activities which follow this activity in the flow. The **data** field in output holds the object data received from Google Cloud Storage.

# GoogleCloudStorageUpdate

This activity updates a bucket or an object in Google Cloud Storage

## Configuration

This tab has the following fields.

Field	Description
Connection Name	The connection name to use when accessing the Google Cloud Storage service. If you have created multiple Google connections, select the one you want to use from the drop-down list.
Object Name	The Google Cloud Storage object to use for this activity from the drop-down list. The default value for this field is <b>Bucket</b> .

## Input

You can either enter the input manually, or you can map the input to the output from a preceding activity if the preceding activity has an output. (For details on how to use the mapper, see the "Using the Mapper" section in the TIBCO Flogo<sup>®</sup> Enterprise User's Guide.) The input tree displayed for this activity depends on the **Object Name** that you select in the **Configuration** tab.

### Bucket

If you have selected **Bucket** under **Object Name** in the **Configuration** tab, then this tab has the following mandatory fields.

Field	Description
acl	The access control list for the bucket to update.
bucket	The name of the bucket to update in Google Cloud Storage.

- The **labels** field accepts a string only in the following format: key1:value1, key2:value2, and so on. There is no restriction on the number of key-value pairs that can be supplied.
- The GoogleCloudStorageUpdate activity does not support customer managed encryption key.
- The values in **entityId**, **etag**, **id**, **kind**, **selfLink** within **acl** and **defaultObjectAcl** are ignored because these values are set to default values by Google Cloud Storage.

### Object

If you have selected **Object** under **Object Name** in the **Configuration** tab, then this tab has the following mandatory fields.

Field	Description
acl	The access control list for the object to update.
bucket	The name of the bucket in which to update an object in Google Cloud Storage.
object	The name of the object to update in Google Cloud Storage.



- Only the object metadata can be updated and not the actual object.
- The **metadata** field accepts a string only in the following format: key1:value1, key2:value2, and so on. There is no restriction on the number of key-value pairs that can be supplied.

### Output

The **Output** tab displays the activity output schema in a tree format. The output is read-only. The schema varies according to the object name that you selected in the **Configuration** tab. The elements that you see in the schema can be mapped as input to the activities which follow this activity in the flow.