

Adding and Updating DAGs (workflows)

This page describes how to determine the storage bucket for your environment and how to add, update, and delete a DAG from your environment.

Cloud Composer uses [Cloud Storage](#) (/storage) to store Apache Airflow DAGs, also known as *workflows*. Each environment has an associated Cloud Storage bucket. Cloud Composer schedules only the DAGs in the Cloud Storage bucket.

Before you begin

- Because Apache Airflow does not provide strong DAG isolation, we recommend that you maintain separate production and test environments to prevent DAG interference. For more information, see [Testing DAGs](#) (/composer/docs/how-to/using/testing-dags).
- The following [permissions are required to add and update plugins](#) (/composer/docs/how-to/access-control) in the Cloud Storage bucket for the Cloud Composer environment:
 - `storage.objectAdmin` to upload files.
 - `composer.environments.get` to look up the DAG destination bucket. This permission is not required when using the Cloud Storage API or `gsutil`.
- DAG changes occur within 3-5 minutes. You can see task status in the [Airflow web interface](#) (/composer/docs/how-to/accessing/airflow-web-interface).

Determining the storage bucket name

To determine the name of the storage bucket associated with your environment:

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1. Open the Environments page in the Cloud Console.

[Open the Environments page](https://console.cloud.google.com/composer/environments) (https://console.cloud.google.com/composer/environments)

2. In the **Name** column, click the name of the environment to open the Environment details page.

On the **Configuration** tab, the name of the Cloud Storage bucket is shown to the right of the **DAGs** folder.

3. (Optional) To view the bucket in Cloud Storage, click the bucket name.

Adding or updating a DAG

To add or update a DAG, move the Python `.py` file for the DAG to the environment's `dags` folder in Cloud Storage.

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2. In the **Name** column, click the name of the environment to open the Environment details page.

On the **Configuration** tab, the name of the Cloud Storage bucket is shown to the right of the **DAGs** folder.

3. To view the bucket in Cloud Storage, click the bucket name.

By default, the `dags` folder opens.

4. Click **Upload Files** and select the local copy of the DAG you want to upload.

5. To upload the file to the `dags` folder, click **Open**.

Deleting a DAG

Deleting a DAG in your environment

To delete a DAG, remove the Python `.py` file for the DAG from the environment's `dags` folder in Cloud Storage. Deleting a DAG does not remove the DAG metadata from the Airflow web interface.

1. Go to the Environments page in the Cloud Console.

[Open the Environments page](https://console.cloud.google.com/composer/environments) (https://console.cloud.google.com/composer/environments)

2. In the **Name** column, click the name of the environment to open its Environment details page.

On the **Configuration** tab, the name of the Cloud Storage bucket is shown to the right of the DAGs folder.

3. To view the bucket in Cloud Storage, click the bucket name.

By default, the `dags` folder opens.

4. Click the checkbox next to the DAG you want to delete.

5. At the top of the Cloud Console, click **Delete**.

6. In the dialog that appears, click **OK**.

- Airflow 1.9.0: The metadata for deleted DAGs remains visible in the Airflow web interface.
- Airflow 1.10.0 or later: You can use the `gcloud` tool to [remove the DAG metadata](#) (`#delete-md`).

Removing a DAG from the Airflow web interface

Requires Airflow 1.10.0 or later.

To remove the metadata for a DAG from the Airflow web interface, enter:

```
gcloud composer environments run --location LOCATION \
ENVIRONMENT_NAME delete_dag -- DAG_NAME
```

where:

- `ENVIRONMENT_NAME` is the name of the environment.
- `LOCATION` is the Compute Engine region where the environment is located.
- `DAG_NAME` is the name of the DAG to delete.

What's next

- [Troubleshooting DAGs \(/composer/docs/how-to/using/troubleshooting-dags\)](/composer/docs/how-to/using/troubleshooting-dags)
- [Airflow Tutorial \(https://airflow.incubator.apache.org/tutorial.html\)](https://airflow.incubator.apache.org/tutorial.html)
- [Airflow Scheduling & Triggers \(https://airflow.incubator.apache.org/scheduler.html\)](https://airflow.incubator.apache.org/scheduler.html)

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