

Setting Environment Variables

This page describes the requirements for setting environment variables in Cloud Composer.

When you create or update an environment, you can add environment variables, which Cloud Composer provides to the Apache Airflow scheduler, worker, and webserver processes. For example, Cloud Composer uses the Apache Airflow [sendgrid module](https://github.com/apache/incubator-airflow/blob/master/airflow/contrib/utils/sendgrid.py)

(<https://github.com/apache/incubator-airflow/blob/master/airflow/contrib/utils/sendgrid.py>) for email notifications. To [configure email notifications](/composer/docs/how-to/managing/creating#notification)

(</composer/docs/how-to/managing/creating#notification>), you need to set the `SENDGRID_API_KEY` and `SENDGRID_MAIL_FROM` environment variables.

Cloud Composer uses the environment variables described on this page to alter the runtime behavior of [Apache Airflow](http://airflow.apache.org) (<http://airflow.apache.org>) or your workflows. Cloud Composer does not use these environment variables to configure Airflow.

Requirements

Environment variables must match the regular expression `[a-zA-Z_][a-zA-Z0-9_]*`.

Environment variables must not specify Apache Airflow software configuration overrides. This means the variables cannot use the format `$AIRFLOW_{SECTION}_{KEY}` or match the regular expression `AIRFLOW__[A-Z0-9_]+_[A-Z0-9_]+`.

Reserved names

The following names are reserved and cannot be used:

- `AIRFLOW_HOME`
- `C_FORCE_ROOT`
- `COMPOSER_ENVIRONMENT`
- `COMPOSER_GKE_NAME`

- `COMPOSER_GKE_ZONE`
- `COMPOSER_LOCATION`
- `COMPOSER_PYTHON_VERSION`
- `CONTAINER_NAME`
- `DAGS_FOLDER`
- `GCP_PROJECT`
- `GCS_BUCKET`
- `GKE_CLUSTER_NAME`
- `GOOGLE_APPLICATION_CREDENTIALS`
- `SQL_DATABASE`
- `SQL_INSTANCE`
- `SQL_PASSWORD`
- `SQL_PROJECT`
- `SQL_REGION`
- `SQL_USER`

Cloud Composer uses these reserved names for variables that internal processes use. Do not refer to reserved names in your workflows. Variable values can change without notice.

Before you begin

- The following permissions are required to set environment variables:
 - `composer.environments.create` to set environment variables during environment creation
 - `composer.environments.update` to update environment variables

For more information, see [Cloud Composer Access Control](https://cloud.google.com/composer/docs/how-to/access-control) (`/composer/docs/how-to/access-control`).

- Most `gcloud composer` commands require a location. You can specify the location by using the `--location` flag or by setting the default location (`/composer/docs/gcloud-installation`).

Adding and updating environment variables

To set environment variables:

[Consolegcloud](#) (#gcloud)[API](#) (#api)

To add an environment variable:

1. Open the **Create Environment** page in the Google Cloud Console.

[Open the Create Environment page](https://console.cloud.google.com/composer/environments/) (<https://console.cloud.google.com/composer/environments/>)

2. Under **Node configuration**, click **Add environment variable**.
3. Enter the **NAME** and **VALUE** for the environment variables.

Removing environment variables

To remove environment variables:

[Consolegcloud](#) (#gcloud)[API](#) (#api)

1. Open the **Environments** page.

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

2. On the **List Environments** page, click the name of the environment to view its details.
3. Under **Environment Variables**, click **Edit**
4. To the right of the variable value, click the trash can icon.

Except as otherwise noted, the content of this page is licensed under the [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/) (<https://creativecommons.org/licenses/by/4.0/>), and code samples are licensed under the [Apache 2.0 License](https://www.apache.org/licenses/LICENSE-2.0) (<https://www.apache.org/licenses/LICENSE-2.0>). For details, see the [Google Developers Site Policies](https://developers.google.com/site-policies) (<https://developers.google.com/site-policies>). Java is a registered trademark of Oracle and/or its affiliates.

Last updated 2020-06-30 UTC.