

This topic describes how to mirror a GitHub repository to Cloud Source Repositories. With this configuration, commits that you push to the GitHub repository are copied, or *mirrored*, into a repository hosted in Cloud Source Repositories.

When you mirror a repository, you must provide GitHub authentication credentials. These credentials let Cloud Source Repositories access the contents of the GitHub repository.

If you're using [GitHub organizations](https://help.github.com/articles/about-organizations/) (<https://help.github.com/articles/about-organizations/>), we recommend that you use a [machine user account](https://developer.github.com/v3/guides/managing-deploy-keys/#machine-users) (<https://developer.github.com/v3/guides/managing-deploy-keys/#machine-users>) specifically dedicated to automated tasks, such as mirroring a repository. This account must have administrative access to your repository.

This section shows how to mirror a GitHub repository to Cloud Source Repositories.

Make sure you're signed out of GitHub before you mirror a repository. Signing out helps ensure you select the right GitHub repository when you connect the GitHub repository to Cloud Source Repositories.

In this process, you need your GitHub machine user credentials to grant Google Cloud read access to the GitHub repository.

1. In the Google Cloud Console, open Cloud Source Repositories.

[Open Cloud Source Repositories](https://source.cloud.google.com/repos) (<https://source.cloud.google.com/repos>)

2. Click **Add repository**.

The **Add a repository** page opens.

3. Select **Connect external repository** and click **Continue**.

The **Connect external repository** page opens.

4. In the **Project** drop-down list, select the Google Cloud project to which the mirrored repository belongs.

If you don't have a project, you can click **Create project** to [create a project](https://cloud.google.com/source-repositories/docs/creating-an-empty-repository#creating_a_project) (https://cloud.google.com/source-repositories/docs/creating-an-empty-repository#creating_a_project).

5. In the **Git provider** drop-down list, select **GitHub**.

6. Select the checkbox to authorize Cloud Source Repositories to store your credentials.

7. Click **Connect to GitHub**.

8. Sign in to GitHub with your machine user credentials.

9. Click **Authorize GoogleCloudPlatform**.

This option grants Google Cloud read access to your repository.

When authorization finishes, you're returned to the **Connect external repository** page. A list of repositories opens.

10. From the list of repositories, select the repository you want to mirror.

11. Click **Connect Selected Repository**.


The main repository page opens. This page contains a list of the repositories for this Google Cloud project, including the new repository you just created.

Cloud Source Repositories makes it clear which of your repositories are mirrors of GitHub repositories:

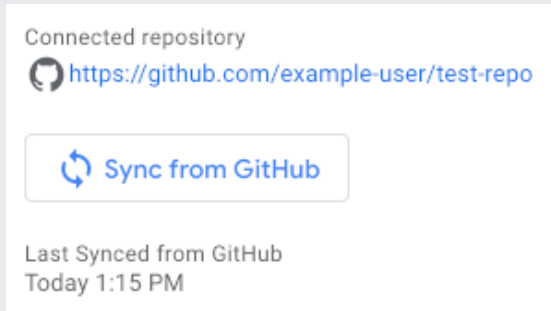
- Each GitHub repository is represented with the GitHub logo.
- The name of the repository has `github_` added to the beginning of its name.

After you set up mirroring, Cloud Source Repositories automatically syncs your repository with the mirrored repository when a user commits a change. Cloud Source Repositories lets you view the last

time your mirrored repository was synced and manually force a sync if necessary.

1. In the GCP Console, browse to the mirrored GitHub repository.
2. Click **Settings** .

The sync status is displayed.



3. To manually force a sync of the repositories, click **Sync from GitHub**.

Repositories connected using an older version of the connected repository service may not have these options.