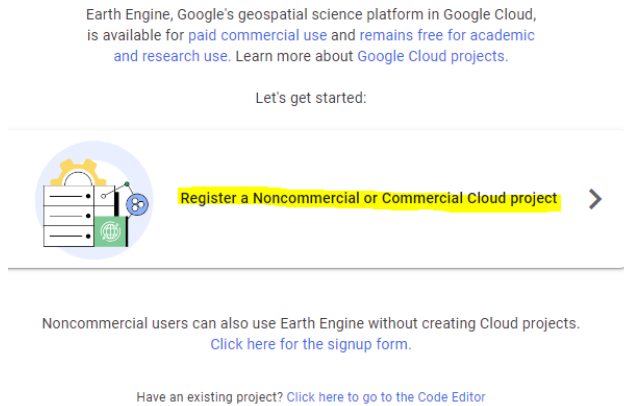


SETTING UP A GOOGLE EARTH ENGINE (GEE) USER MANAGED ACCOUNT

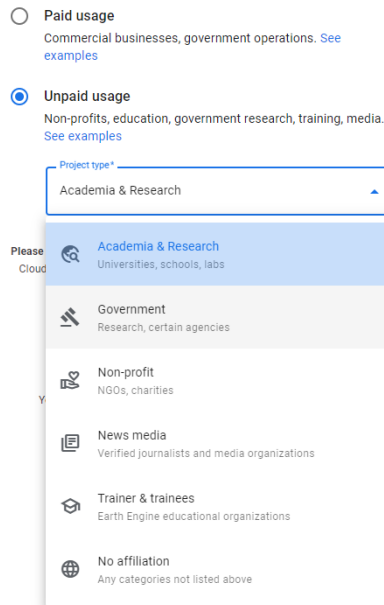
This is a one-time setup process. **You will need a Gmail account** to register a GEE cloud project. In this tutorial we use giscenter2024@gmail.com as an example. You should use your own Gmail account however.

1. Click the following link <https://code.earthengine.google.com/register>. Then you will see **Get started using Earth Engine**



2. Click **Register a Noncommercial or Commercial Cloud Project**. You will be prompted with:

How do you want to use Earth Engine?



3. Select the **Unpaid usage** option

- Next, choose the **Academia & Research** or **Government** option as the Project Type depends on your organization.
- Then click the **NEXT** button.

Please note: If you will be accessing Earth Engine as a customer of a Google Cloud Platform reseller, please contact your reseller for terms and pricing governing your use of Earth Engine.

BACK NEXT

- The following screen will appear. You do not need to enter anything here. However, if your Gmail account is associated with your organization like it is here at Idaho State University, the Organization setting has an option to associate your Google Cloud Project with your Organization. Otherwise, leave it blank. The Project-ID is usually in the form of ee-YOUR GMAIL USERNAME. You can also overwrite the default Project-ID by giving it a different name.

Create or choose a Cloud Project to register

Create a new project in Google Cloud, or choose one you are authorized to access to enable the API:

Create a new Google Cloud Project

Organization

Project-ID*

Choose a unique ID. This cannot be changed later.

Project Name (optional)

Choose a name to help you identify the Cloud Project.

Choose an existing Google Cloud Project

BACK CONTINUE TO SUMMARY

- Click the **CONTINUE TO SUMMARY** button, and you will be asked to accept the Cloud Terms of Service.


 You must accept the [Cloud Terms of Service](#) before a Cloud Project can be created.

- Click and read the **Cloud Terms of Service**.
- Agree to the Terms of Service as appropriate.



Welcome gis center!

Create and manage your Google Cloud instances, disks, networks, and other resources in one place.

 gis center
giscenter2024@gmail.com

[SWITCH ACCOUNT](#)

Country

United States ▼



Terms of Service

I agree to the [Google Cloud Platform Terms of Service](#), and the terms of service of [any applicable services and APIs](#).

[AGREE AND CONTINUE](#)

- Next, click the **AGREE AND CONTINUE** link and the prompt will return to step 6.
- After clicking the **CONTINUE TO SUMMARY**, you will be presented the following

Confirm your Cloud Project information

Project usage Government 
Project info ee-giscenter2024 Earth Engine Default Project 

[BACK](#) [CONFIRM](#)

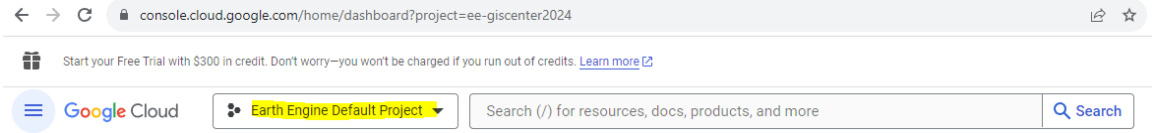
- Click the **CONFIRM** button.
- This will complete your registration.



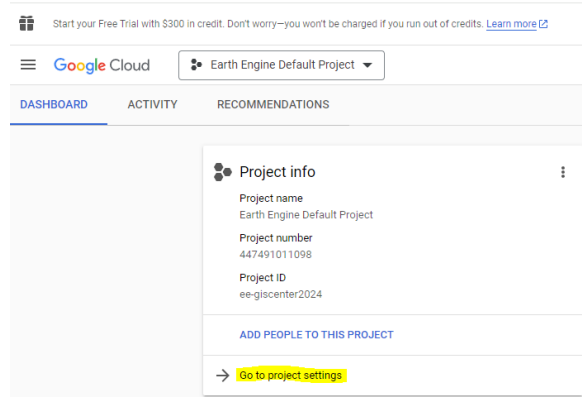
Project ee-giscenter2024 is registered.

REDIRECTING TO THE CODE EDITOR...

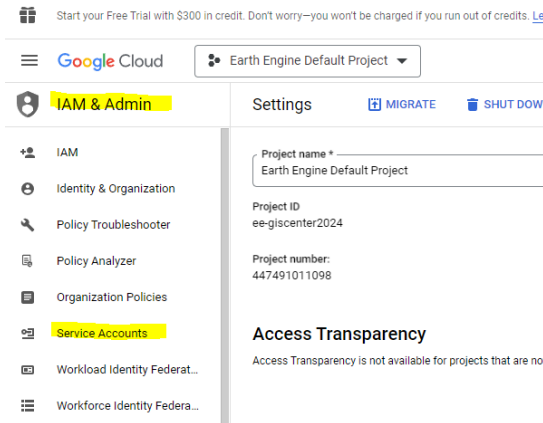
- Next go to <https://console.cloud.google.com/home/>.
 - Enter your Gmail account to log in.
 - You will see an overview of your account.
 - From the account DASHBOARD we can see the Earth Engine Default Project is selected, which confirms how we set up this project earlier.



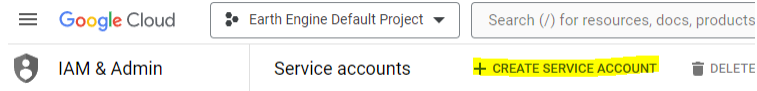
15. We need to set up a service account for the project next.
16. From the Project info card, click **Go to project settings**



- a. From the left side of the IAM & Admin screen, click **Service Accounts**



- b. Then click the **+CREATE SERVICE ACCOUNT** link near the top of this screen.



- c. You will see the 'Service account details. 'Service account name' and 'Service account ID' should be inherited from your previous setting. You can type in your project brief description under 'Service account description'.

1 Service account details

Service account name
ee-giscenter
Display name for this service account

Service account ID *
ee-giscenter X ↻

Email address: ee-giscenter@ee-giscenter2024.iam.gserviceaccount.com 📧

Service account description
geemap downloading
Describe what this service account will do

CREATE AND CONTINUE

- d. Click the **CREATE AND CONTINUE** button.
- e. Select **Owner** under the Role drop down list box.
- f. Then click the **CONTINUE** button.

2 Grant this service account access to project (optional)

Grant this service account access to Earth Engine Default Project so that it has permission to complete specific actions on the resources in your project. [Learn more](#)

Role: Owner IAM condition (optional) ? + ADD IAM CONDITION 🗑️

Full access to most Google Cloud resources. See the list of included permissions.

+ ADD ANOTHER ROLE

CONTINUE

- g. From the step 3 screen, click the **DONE** button.

17. Now your service account should look simliar to the following

Service accounts + CREATE SERVICE ACCOUNT 🗑️ DELETE 👤 MANAGE ACCESS 🔄 REFRESH 📖 LEARN

Service accounts for project "Earth Engine Default Project"

A service account represents a Google Cloud service identity, such as code running on Compute Engine VMs, App Engine apps, or systems running outside Google. [Learn more about service accounts.](#)

Organization policies can be used to secure service accounts and block risky service account features, such as automatic IAM Grants, key creation/upload, or the creation of service accounts entirely. [Learn more about service account organization policies.](#)

Filter Enter property name or value

<input type="checkbox"/>	Email	Status	Name ↑	Description	Key ID	Key creation da	Actions
<input type="checkbox"/>	ee-giscenter2024@ee-giscenter2024.iam.gserviceaccount.com	Enabled	ee-giscenter2024		No keys		⋮

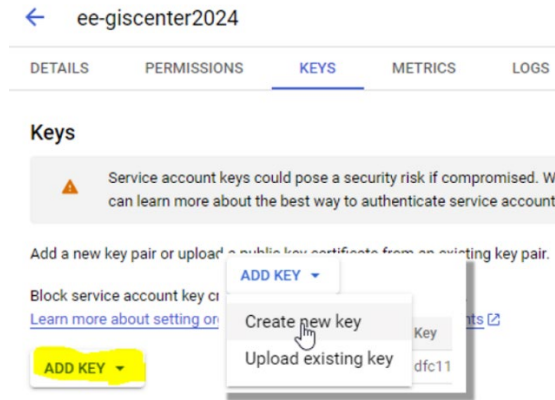
- a. Click the three dots under Actions and choose **Manage Keys**.

OAuth 2 Client ID ⓘ Actions

105846746272036908306

- Manage details
- Manage permissions
- Manage keys
- View metrics
- View logs
- Disable
- Delete

- b. Click the **ADD KEY** button and choose to Create new Key



- c. Select the recommended **JSON** setting
- d. Then click the **CREATE** link.

Create private key for "ee-giscenter2024"

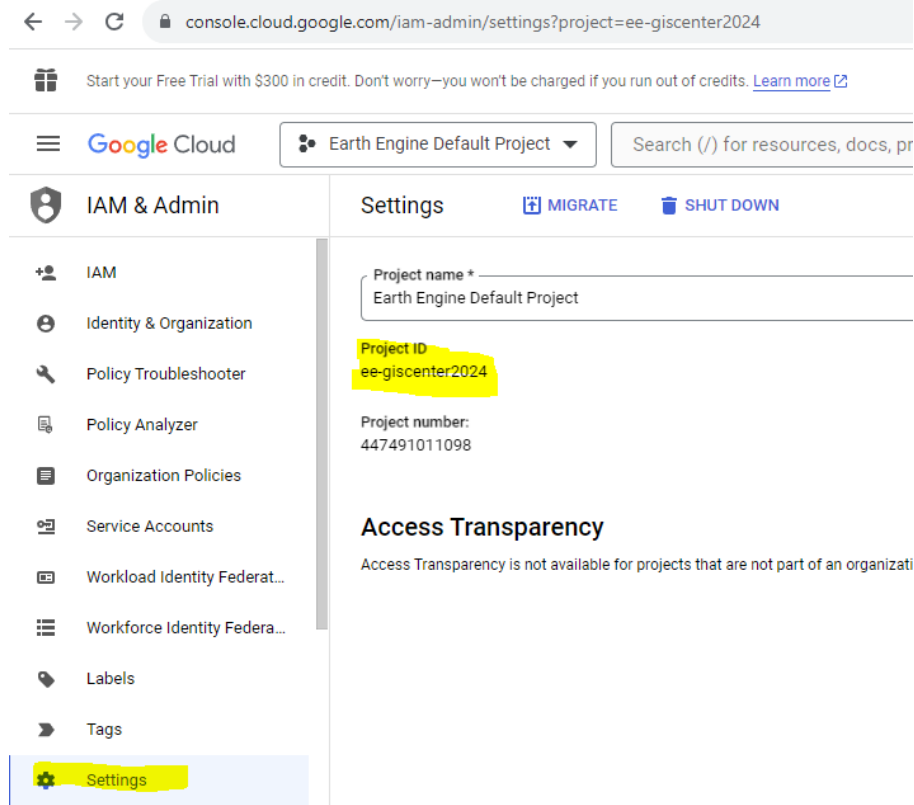
Downloads a file that contains the private key. Store the file securely because this key can't be recovered if lost.


Key type

- JSON
Recommended
- P12
For backward compatibility with code using the P12 format

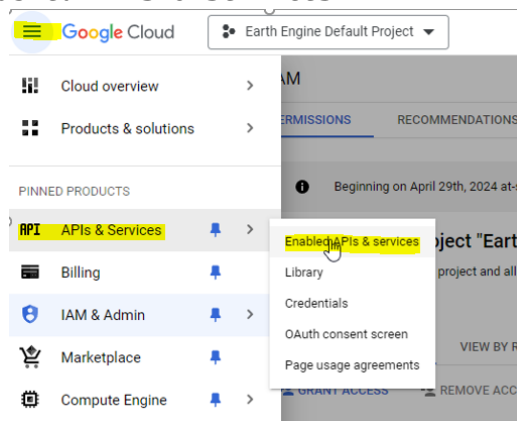
CANCEL CREATE

- e. You will see a pop-up confirming the key was created and saved to your local computer's download folder.
 - f. Click **Close**.
18. From the Google Cloud Dashboard (IAM & Admin pane), click the **Settings** on the left side of the screen.
- a. Here you can see the project ID associated with the *Earth Engine Default Project*. This is the project ID we will use in the NASA RECOVER Long-Term Post-Fire Monitoring tool.

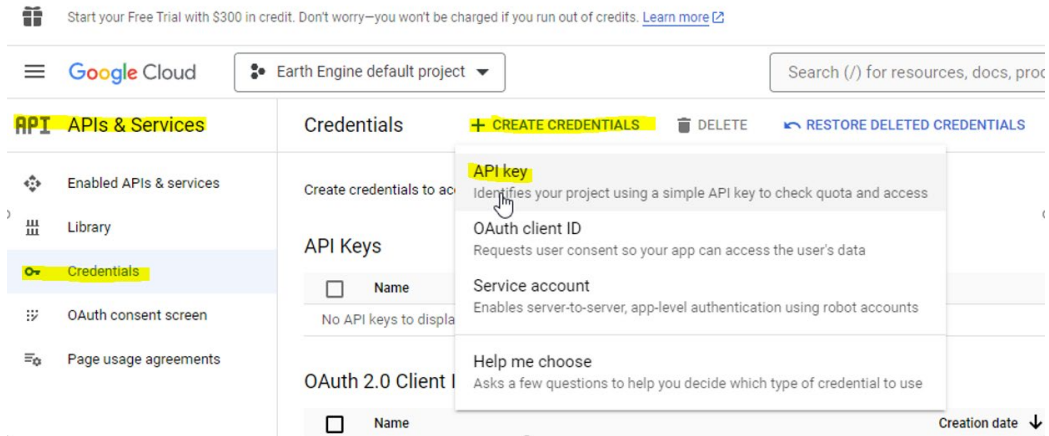


19. Click the hamburger menu button  in the upper-left corner of the Google Cloud navigation window

- a. Click APIs & Services (NOTE: You may need to click the VIEW ALL PRODUCTS button and then choose APIs and Services).
- b. Then click the **Enabled APIs & services** link.



- c. From the left side of the screen, click **Credentials**
- d. Then, click the **+CREATE CREDENTIALS** button near the top of the window
- e. From the fly-out menu choose **API key**



- f. If API key was successful created, you will see popup window similar to that shown below.

API key created

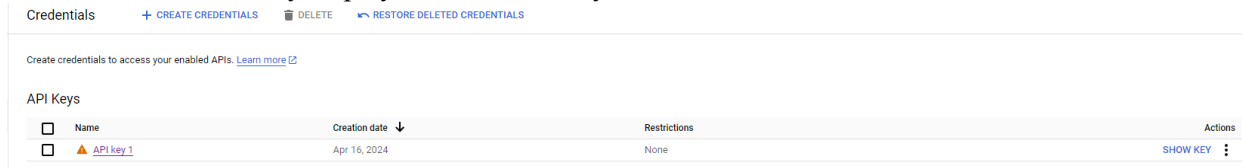
Use this key in your application by passing it with the `key=API_KEY` parameter.

Your API key
 AIzaSyBe7NG14JQKAUev1h5PCg77907DgU3YYBw

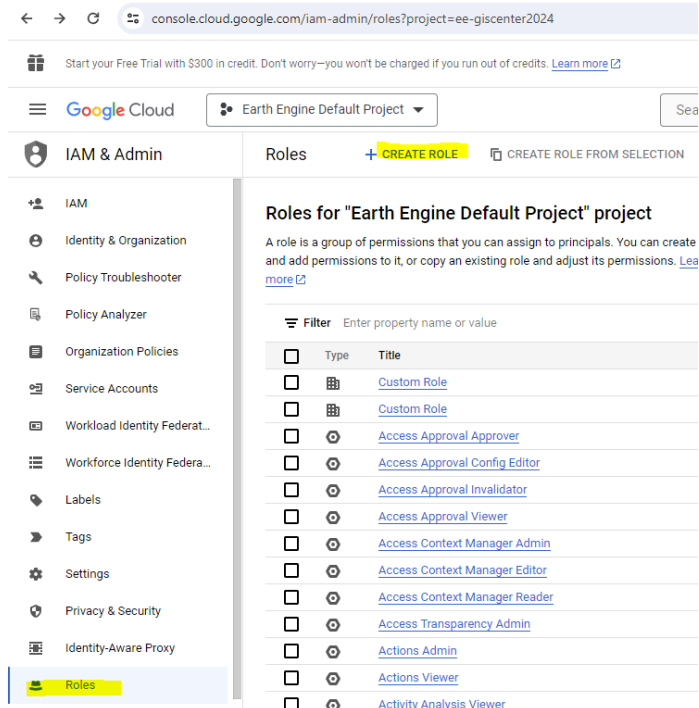
⚠ This key is unrestricted. To prevent unauthorized use, we recommend restricting where and for which APIs it can be used. [Edit API key](#) to add restrictions. [Learn more](#)

CLOSE

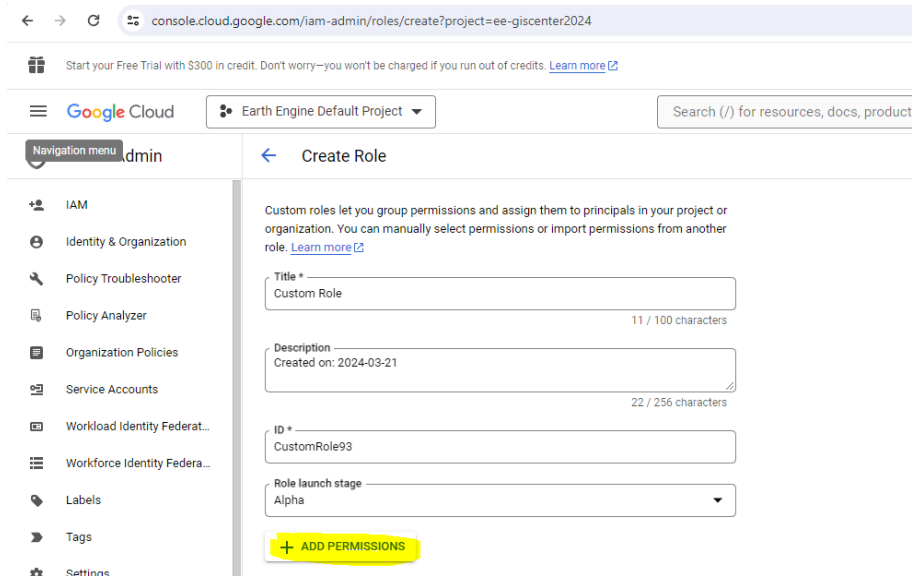
- g. Click Close.
 h. You will see the API key displayed under API Keys on the Credentials screen.



20. In addition to these steps, we also need to give the permission to the roles that grant access for the project. To do this, we need to return to the IAM & Admin screen (HINT: From the hamburger menu, click Cloud Overview---Dashboard. Then from the Dashboard's Project Info card, click Go to Project settings).
21. From the IAM & Admin pane, click **Roles** from the left side of the screen (see the screenshot below for help).
- a. From the top of this screen click the **+CREATE ROLE** link.



b. Click the **+ADD PERMISSIONS** button.



c. Make sure all the *accessapproval* options are selected.

Add permissions

Filter permissions by role

Select all rows Enter property name or value

<input type="checkbox"/>	Permission ↑	Status
<input checked="" type="checkbox"/>	accessapproval.requests.approve	Supported
<input checked="" type="checkbox"/>	accessapproval.requests.dismiss	Supported
<input checked="" type="checkbox"/>	accessapproval.requests.get	Supported
<input checked="" type="checkbox"/>	accessapproval.requests.invalidate	Supported
<input checked="" type="checkbox"/>	accessapproval.requests.list	Supported
<input checked="" type="checkbox"/>	accessapproval.serviceAccounts.get	Supported
<input checked="" type="checkbox"/>	accessapproval.settings.delete	Supported
<input checked="" type="checkbox"/>	accessapproval.settings.get	Supported
<input checked="" type="checkbox"/>	accessapproval.settings.update	Supported
<input type="checkbox"/>	accesscontextmanager.accessLevels.create	Non-applicable ⚠

1 - 10 of 9511 < >

CANCEL ADD

- d. Click the **Add** button.
 - e. Click **CREATE**.
22. The custom role has been created. It usually takes about 3-4 days for Google to review your service account when first applied. After your service account is approved, you can start using it for any of your GEE applications.

END