

Translation is available in [two editions](/translate/docs/editions) (/translate/docs/editions). This guide provides all required setup steps to start using Cloud Translation - Advanced.

The [Google Cloud Console](https://console.cloud.google.com/) (https://console.cloud.google.com/) is a web UI used to provision, configure, manage, and monitor systems that use Google Cloud products. You use the Google Cloud Console to set up and manage Cloud Translation resources.

To use services provided by Google Cloud, you must create a *project*. A project organizes all your Google Cloud resources. A project consists of a set of collaborators, enabled APIs (and other resources), monitoring tools, billing information, and authentication and access controls. You can create one project, or you can create multiple projects and use them to organize your Google Cloud resources in a [resource hierarchy](/resource-manager/docs/cloud-platform-resource-hierarchy) (/resource-manager/docs/cloud-platform-resource-hierarchy). For more information on projects, see the [Resource Manager documentation](/resource-manager/docs/creating-managing-projects) (/resource-manager/docs/creating-managing-projects).

If you plan on using your project for more than just basic access to Cloud Translation - Basic, or you plan on using the API, you should create a project with the Google Cloud Console as described below.

You should create separate projects for experiments, testing, and production. When creating a project, take note of the [project number or ID](/resource-manager/docs/creating-managing-projects#identifying_projects) (/resource-manager/docs/creating-managing-projects#identifying\_projects). You must provide the project number (or ID) when making calls to the Cloud Translation API.

The project ID works as well, but the project number is preferred going forward.

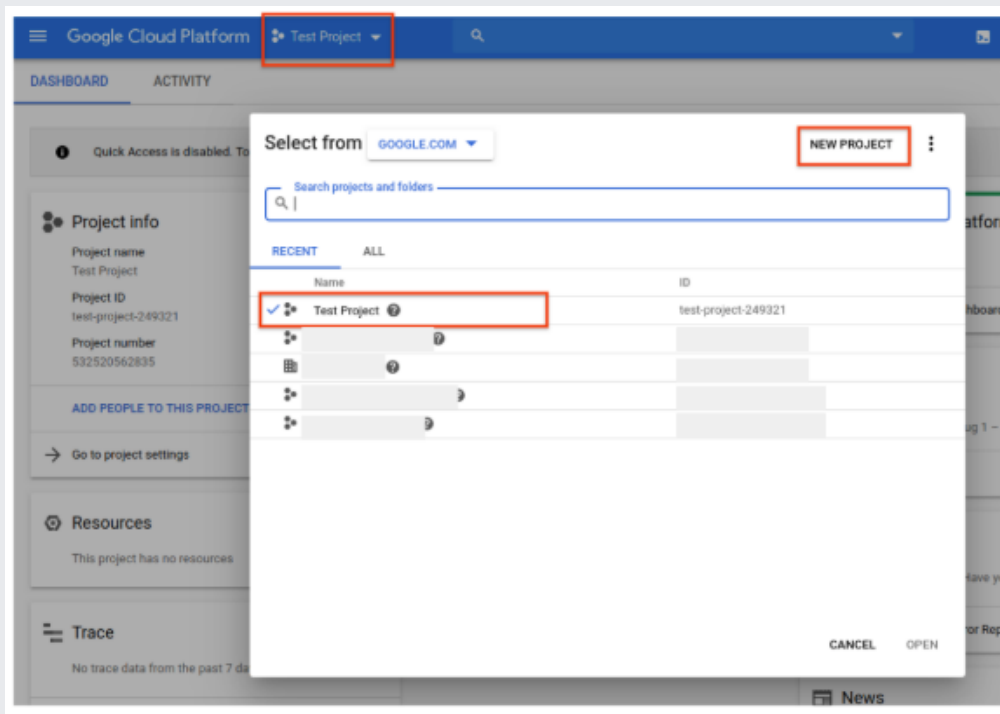
In the Cloud Console, on the project selector page, select or create a Cloud project.

[Go to the project selector page](https://console.cloud.google.com/projectselector2/home/dashboard) (https://console.cloud.google.com/projectselector2/home/dashboard)

You must enable billing to use the Translation, however you are not charged unless you exceed the free quota of 1-10,000 API calls per month. See the [pricing](/translate/pricing/) page for more details.

A billing account is used to define who pays for a given set of resources, and it can be linked to one or more projects. Project usage is charged to the linked billing account. In most cases, you configure billing when you create a project. For more information, see the [Billing documentation](https://cloud.google.com/billing/docs/).

1. Go to the [Google Cloud Console](https://console.cloud.google.com/).
2. Navigate to the drop-down menu at the top of the page and choose the Google Cloud project that you'd like to associate with Cloud Translation. If you have previously created one or more projects, they appear in a list in the pop-up menu. You can either choose a pre-existing project (a check mark appears next to the project you select) or create a new project by clicking **New Project**. For more details on creating a Google Cloud project, see [Creating and Managing Projects](/resource-manager/docs/creating-managing-projects/).



3. Select/verify billing account.
- If you create a new project, you are prompted to link a billing account for this project.
  - If you are using a pre-existing project, make sure that you have billing enabled. You can access the project's billing information at any time by going to the main navigation menu (☰) and clicking the Billing option.

To enable Translation, you must accept the Data Logging Terms & Conditions.

1. Go to the main navigation menu (☰) in the [GCP Console](http://console.cloud.google.com/) (<http://console.cloud.google.com/>).
2. Scroll down to the **Artificial Intelligence** section and select **Translation**.
3. Click **Overview** from the menu that pops up.

To enable the Cloud Translation - Advanced for use with your Google Cloud project, click **Enable**. The data logging page appears. You must accept the terms & conditions to have full access to Cloud Translation - Advanced features. Click **Enable**.

If you would first like to try the API without linking it to your project, choose the **[Try this API](#)** (</translate/docs/reference/rest/v3/projects/translateText>) option.

You can skip this step if you are not going to use the API.

Once you've enabled data logging, you are prompted to link one or more service accounts to the Cloud Translation API. If you plan to use the Translation, you must to set up authentication. Any client application that uses the API must be authenticated and granted access to the requested resources. This section describes important authentication concepts and provides steps for setting up authentication. For more information, see the [Google Cloud authentication overview](/docs/authentication/) (</docs/authentication/>).

A service account provides credentials for applications, as opposed to end-users. Service accounts are owned by projects, and you can create many service accounts for a project. For more information, see [Service accounts](/docs/authentication/#service_accounts) ([/docs/authentication/#service\\_accounts](/docs/authentication/#service_accounts)).

When the API is called, Google Cloud requires that the caller has the appropriate permissions. You can grant permissions by granting *roles* to a service account. For example, if you want to use your service account to

translate text, you would assign the `roles/cloudtranslate.user` role to it. For the purpose of trying the Cloud Translation API, you can use the **Project > Editor** role in steps below, which grants the service account full access to the project. See [IAM permissions \(/translate/docs/intro-to-v3#iam\)](/translate/docs/intro-to-v3#iam) for full details on the available roles and the permissions allowed for each role.

For more information on understanding roles, see the [Cloud Identity and Access Management documentation \(/iam/docs/understanding-roles\)](/iam/docs/understanding-roles).

Service accounts are associated with one or more public/private key pairs. When you create a new key pair, you download the private key. Your private key is used to generate credentials when calling the API. You are responsible for security of the private key and other management operations, such as key rotation.

Set up authentication:

1. In the Cloud Console, go to the **Create service account key** page.

[Go to the Create Service Account Key page \(https://console.cloud.google.com/apis/credentials/serviceaccountkey\)](https://console.cloud.google.com/apis/credentials/serviceaccountkey)

2. From the **Service account** list, select **New service account**.
3. In the **Service account name** field, enter a name.
4. From the **Role** list, select **Project > Owner**.

★ **Note:** The **Role** field authorizes your service account to access resources. You can view and change this field later by using the [Cloud Console \(https://console.cloud.google.com/\)](https://console.cloud.google.com/). If you are developing a production app, specify more granular permissions than **Project > Owner**. For more information, see [granting roles to service accounts \(/iam/docs/granting-roles-to-service-accounts\)](/iam/docs/granting-roles-to-service-accounts).

5. Click **Create**. A JSON file that contains your key downloads to your computer.

Provide authentication credentials to your application code by setting the environment variable **GOOGLE\_APPLICATION\_CREDENTIALS**. Replace **[PATH]** with the file path of the JSON file that contains your service account key, and **[FILE\_NAME]** with the filename. This variable only applies to your current shell session, so if you open a new session, set the variable again.

You can skip this step if you will not be using the API.

If you plan to use the Translation, you need to install and initialize the Cloud SDK. Cloud SDK is a set of tools that you can use to manage resources and applications hosted on Google Cloud. This includes the `gcloud` (/sdk/gcloud/) command line tool. The following link provides instructions:

[Install and initialize the Cloud SDK \(/sdk/docs/\)](/sdk/docs/).

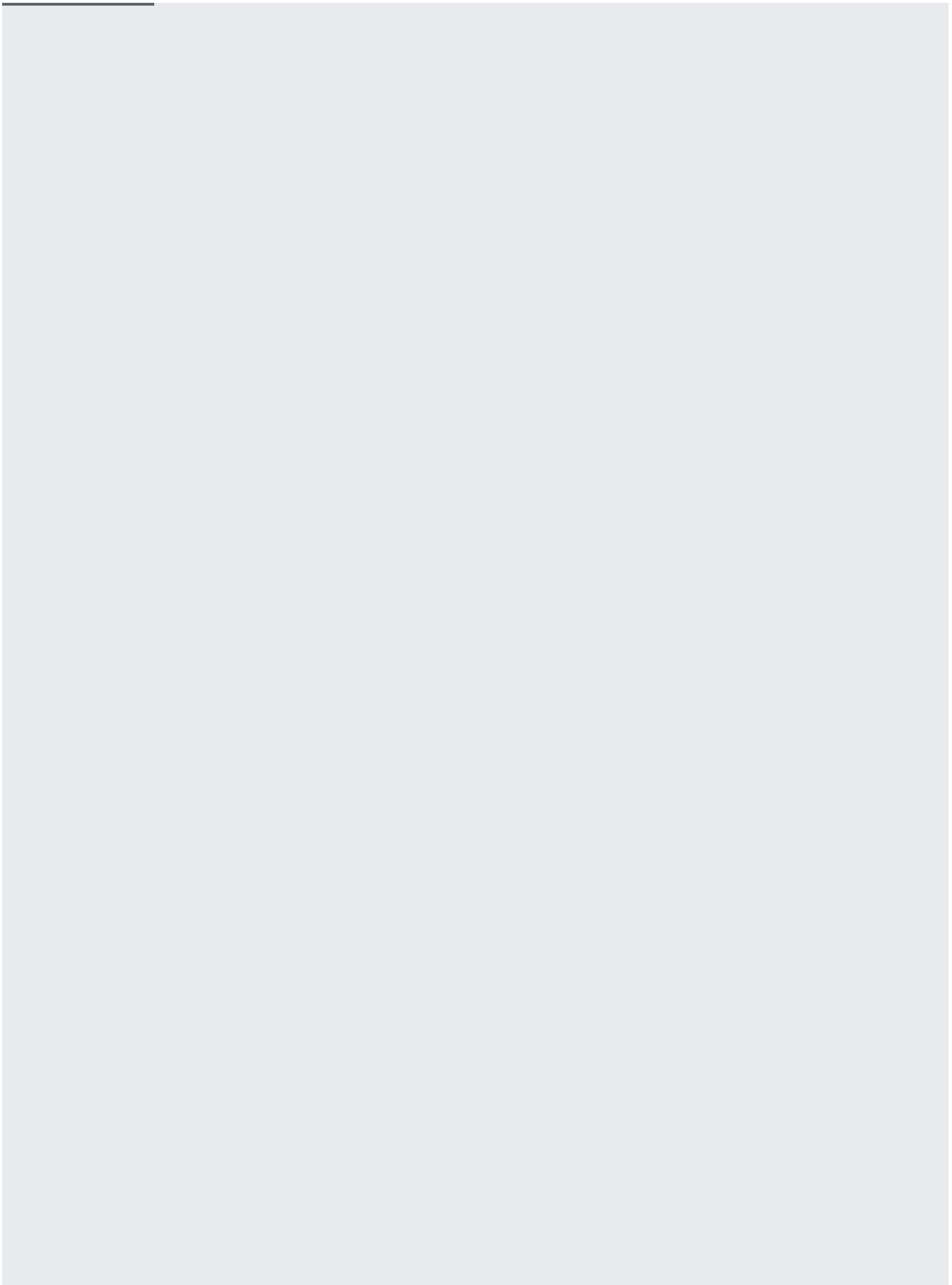
You can skip this step if you will not be using the API.

If you have set up authentication in previous steps, you can use the `gcloud` tool to test your authentication environment. Execute the following command and verify that no error occurs and that credentials are returned:

That command is used by all Cloud Translation - Advanced command line REST samples to authenticate API calls.

You can skip this step if you are not going to use the API.

The client libraries are available for several popular languages, and these are the recommended option. To install a client library:



Go to [Translation Client Libraries](/translate/docs/reference/libraries/v3/overview-v3) (/translate/docs/reference/libraries/v3/overview-v3) for installation instructions for each supported language.

To avoid unnecessary Google Cloud charges, use the [GCP Console](http://console.cloud.google.com/) (http://console.cloud.google.com/) to delete your project if you do not need it.

- Try these features and added support now available in Cloud Translation - Advanced:
  - [Using glossaries](/translate/docs/advanced/glossary) (/translate/docs/advanced/glossary)
  - [Making batch requests](/translate/docs/advanced/batch-translation) (/translate/docs/advanced/batch-translation)
  - [Translating text using an AutoML Translation custom model](/translate/docs/advanced/translating-text-v3#automl-model) (/translate/docs/advanced/translating-text-v3#automl-model)
  - [Reporting usage with labels](/translate/docs/advanced/labels) (/translate/docs/advanced/labels)



- Work through the Sample Applications.
- Learn more about the Translation REST API:
  - [Translating Text with REST \(/translate/docs/advanced/translating-text-v3\)](/translate/docs/advanced/translating-text-v3)
  - [Attribution requirements \(/translate/attribution\)](/translate/attribution)
  - [HTML markup requirements \(/translate/markup\)](/translate/markup)