This page describes what a service account is, how to create one to authenticate requests to the Video Intelligence API, and how to use your service account to set <u>Application Default Credentials</u> (/accounts/docs/application-default-credentials).

To allow your application code to use the Video Intelligence API, you must set up the proper credentials for your application to *authenticate* its identity to the service and to obtain *authorization* to perform tasks. (These credential-related mechanisms are known as *auth* schemes.)

Authentication and authorization are large topics. How you set up your application or service depends on a variety of factors, including what application, you want to authenticate, what tasks you want to allow the authenticated entity to perform (commonly referred rization), and what, if any, container you use—for example, Compute Engine or App Engine. See the Google Cloud Platform Auth Guides/authentication) for more information.

Google Cloud API authentication and authorization (commonly grouped together as "auth") is typically done using a service account. A service account allows your code to send application credentials directly to the Video Intelligence API. A service account, like a user account, is represented by an email address. Unlike a user account, a service account is associated only with an application.

Before you can authenticate, you must first enable the Video Intelligence API.

- 1. Sign in (https://accounts.google.com/Login) to your Google Account.
 - If you don't already have one, sign up for a new account (https://accounts.google.com/SignUp).
- 2. In the Cloud Console, on the project selector page, select or create a Cloud project.
- Note: If you don't plan to keep the resources that you create in this procedure, create a project instead of selecting an existing project. After you finish these steps, you can delete the project, removing all resources associated with the project.

<u>Go to the project selector page</u> (https://console.cloud.google.com/projectselector2/home/dashboard)

- 3. Make sure that billing is enabled for your Google Cloud project. <u>Learn how to confirm billing is enabled for your project</u> (/billing/docs/how-to/modify-project).
- 4. Enable the Cloud Video Intelligence API.
 - <u>Enable the API</u> (https://console.cloud.google.com/flows/enableapi?apiid=videointelligence.googleapis.com)
- 5. Set up authentication:
 - a. In the Cloud Console, go to the Create service account key page.

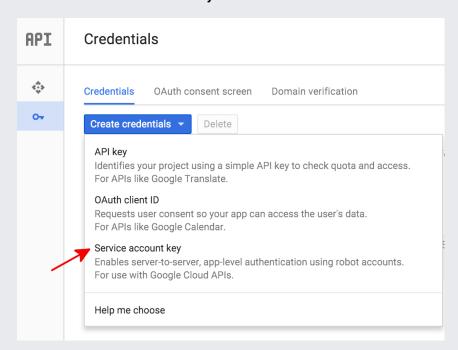
Go to the Create Service Account Key page (https://console.cloud.google.com/apis/credentials/serviceaccountkey)

- b. From the Service account list, select New service account.
- c. In the **Service account name** field, enter a name.
- d. Don't select a value from the **Role** list. No role is required to access this service.
- e. Click **Create**. A note appears, warning that this service account has no role.
- f. Click **Create without role**. A JSON file that contains your key downloads to your computer.
- 6. Set the environment variable **GOOGLE_APPLICATION_CREDENTIALS** to the path of the JSON file that contains your service account key. This variable only applies to your current shell session, so if you open a new session, set the variable again.

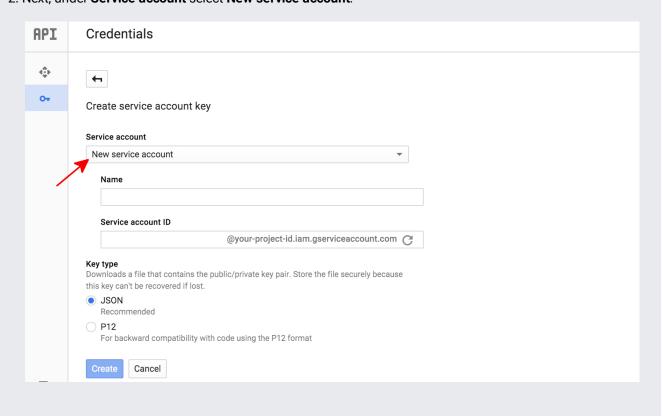
7. Install and initialize the Cloud SDK (/sdk/docs/).

To create a service account using the Google Cloud Console, do the following:

1. From the Cloud Console <u>Credentials</u> (https://console.cloud.google.com/apis/credentials) page, select **Create credentials > Service account key**.



2. Next, under Service account select New service account.



- 3. In the **Service account name** box, enter a name for your service account. This name is used as the default name for your **Service account ID** (to the left of the "@" in the generated service account ID address), but you can change this service account ID name. These names are arbitrary; it is only important that you remember them.
- 4. Under **Key type** select **JSON** for most new projects.
- 5. Click Create.

The Cloud Console then generates a JSON key (as a .json text file), prompts you to download the file to your computer, and displays a **Service account created** dialog box.

Service account created The service account "<service account name>" was given editor permission for the project. The account's public/private key pair <downloaded-filename>.json has been saved on your computer. This is the only copy of the key, so store it securely. Close

The generated JSON key will be similar to the following sample JSON key:

Store this JSON file securely, as it contains your private key (and this file is the only copy of that key). You must refer to this service account key file within your code when you send annotation requests to Video Intelligence API.

| The simplest way for applications to authenticate to Video Intelligence API is by using <u>Application Default</u> |
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| Credentials (/accounts/docs/application-default-credentials) (ADC). Services using ADC first search for credentials within |
| a GOOGLE_APPLICATION_CREDENTIALS environment variable. Unless you specifically require ADC to use other |
| credentials (for example, user credentials), you should set this environment variable to point to your service account |
| key file (the .json file downloaded when you created a service account key. |
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