

AI Deep Learning with TensorFlow & Keras on Google Cloud Platform (GCP)

Create Service Account for a GCP Project

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1. Overview

To make requests to the Natural Language API, the user needs to use a **Service Account**.

- A Service Account belongs to a particular project, and it is used by the Python client library to make Natural Language API requests.
- Like any other user accounts, a service account is represented by an email address.
- In this section, the user uses the Cloud SDK to create a service account and then create credentials he/she will need to authenticate as the service account.

First, the user needs to create a service account for a project.

2. Create Service Account for a GCP Project

Access Google Cloud Console

- Open Google Chrome browser
- Enter [Google Cloud Console](#) into the URL search text box
 - **NOTES:** *Be sure click to select the **correct** link.*

<https://cloud.google.com> > cloud-console ⓘ

Google Cloud console - Web UI Admin

The **Google Cloud console** helps you deploy, scale, and diagnose production issues in a simple web-based interface. Search to quickly find resources and connect ...

[Powerful Web Admin Ui](#) · [Features](#) · [Technical Resources](#)

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Open **IAM & Admin: Service Accounts** page

- Click **Product and Services** icon → Open a drop-down menu
- Click **IAM & Admin** → Open a drop-down menu
- Click to select: **Service Accounts**

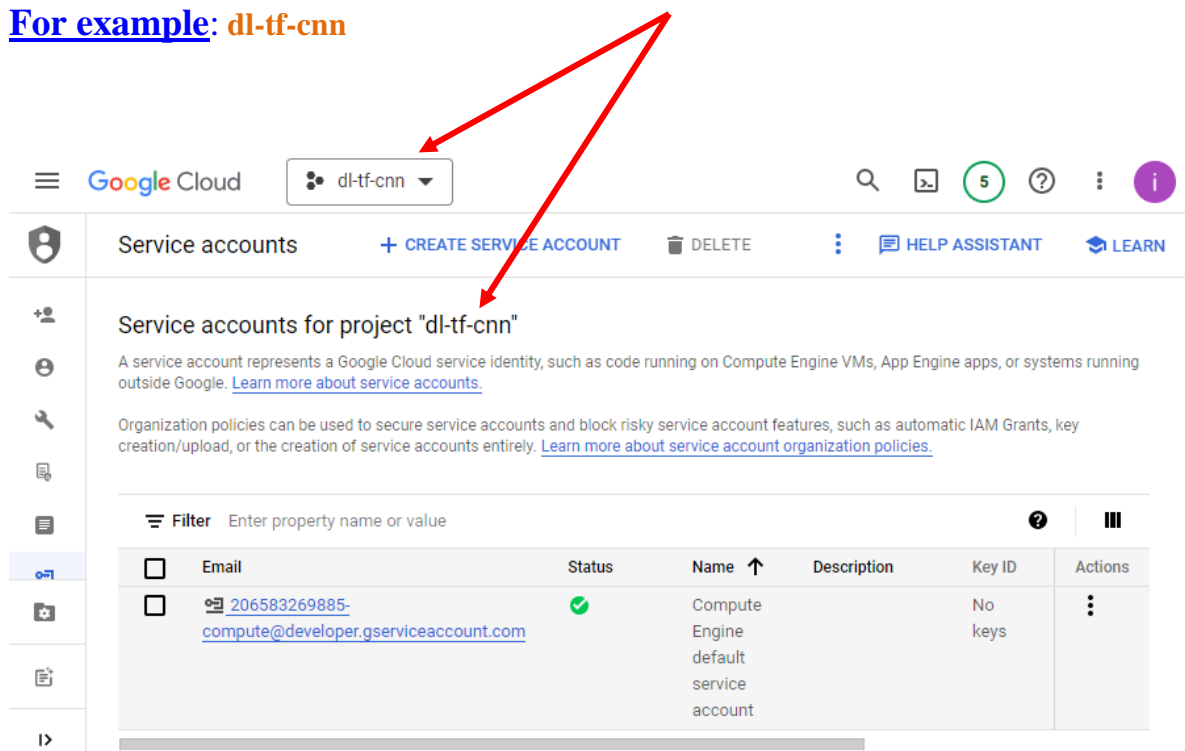
The screenshot shows the Google Cloud console interface. A red arrow points to the 'Product and Services' icon (three horizontal lines) in the top-left corner. The navigation menu is open, showing the 'IAM & Admin' section selected. The 'Service Accounts' option is highlighted in the sub-menu. Below the navigation menu, the 'IAM & Admin' page is displayed. The page title is 'Service Accounts'. A message states: 'To view this page, select a project.' with links for 'SELECT PROJECT' and 'CREATE PROJECT'. Below this, there is a section titled 'Select a recent project' with a grid of project cards. The cards are:

- dl-tf-cnn**
Project ID: dl-tf-cnn
Organization: No organization
Accessed just now
- EXAMPLE-PROJECT**
Project ID: example-project-288722
Organization: No organization
Accessed 7 hours ago
- nlp-projs**
Project ID: nlp-projs
Organization: No organization
Accessed 7 hours ago
- ADTA-5240**
Project ID: adta-5240
Organization: No organization
Accessed 7 hours ago
- dl-tf-keras-ann**
Project ID: dl-tf-keras-ann
Organization: No organization
Accessed 7 hours ago
- hadoop-spark-2**
Project ID: hadoop-spark-2
Organization: No organization
Accessed Feb 2, 2020

Click to select a **project**

NOTES: This service account is created for this project, i.e., for all its vm instances.

For example: dl-tf-cnn



Google Cloud dl-tf-cnn

Service accounts + CREATE SERVICE ACCOUNT DELETE HELP ASSISTANT LEARN

Service accounts for project "dl-tf-cnn"

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	Actions
<input type="checkbox"/>	206583269885-compute@developer.gserviceaccount.com	✓	Compute Engine default service account		No keys	⋮

Click to start: + **CREATE SERVICE ACCOUNT**

← Create service account

1 Service account details

Service account name

Display name for this service account

Service account ID *

Email address: <id>@dl-tf-cnn.iam.gserviceaccount.com

Service account description

Describe what this service account will do

CREATE AND CONTINUE

2 Grant this service account access to project (optional)

3 Grant users access to this service account (optional)

DONE CANCEL

Enter: **Service account name**
For example: **service-acc-dl-tf-cnn**

NOTES: *The service account ID is automatically created. The user can change it at this step if he/she wants. Otherwise, the ID is set permanently.*

1 Service account details

Service account name

Display name for this service account

Service account ID * ✕ ↺

Email address: service-acc-dl-tf-cnn@dl-tf-cnn.iam.gserviceaccount.com 📋

Service account description

Describe what this service account will do

[CREATE AND CONTINUE](#)

Click to start: **CREATE AND CONTINUE**

✓ Service account details

2 Grant this service account access to project (optional)

Grant this service account access to dl-tf-cnn so that it has permission to complete specific actions on the resources in your project. [Learn more](#)

Select a role ▼ IAM condition (optional) ? 🗑

[+ ADD IAM CONDITION](#)

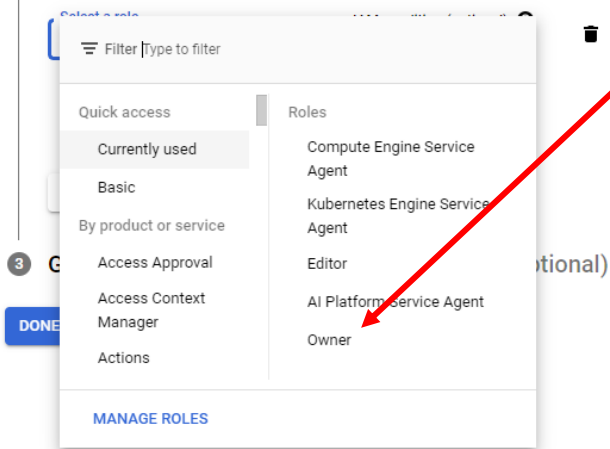
[+ ADD ANOTHER ROLE](#)

[CONTINUE](#)

Click to open a **menu:** **Select a role**

2 Grant this service account access to project (optional)

Grant this service account access to dl-tf-cnn so that it has permission to complete specific actions on the resources in your project. [Learn more](#)



Click to select: **Owner**

2 Grant this service account access to project (optional)

Grant this service account access to dl-tf-cnn so that it has permission to complete specific actions on the resources in your project. [Learn more](#)

Role IAM condition (optional) ?

[+ ADD IAM CONDITION](#)

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

[+ ADD ANOTHER ROLE](#)

[CONTINUE](#)

IMPORTANT NOTES:

--) *The user should read the text.*

--) *The service account has been granted with the permission to become the owner of this project, i.e., the owner of all the vm instances created for the project.*

--) *In other word, this service account can be used to **authenticate** the permission and roles of the owner of any vm instances created for the project*

Click: **CONTINUE**

3 Grant users access to this service account (optional)

Grant access to users or groups that need to perform actions as this service account. [Learn more](#)

Service account users role



Grant users the permissions to deploy jobs and VMs with this service account

Service account admins role



Grant users the permission to administer this service account

DONE

CANCEL

Enter: The user's **Gmail account**

3 Grant users access to this service account (optional)

Grant access to users or groups that need to perform actions as this service account. [Learn more](#)

Service account users role

monica@gmail.com



monica@gmail.com - i

Service account admins role



Grant users the permission to administer this service account

Enter: The user's **Gmail account**

3 Grant users access to this service account (optional)

Grant access to users or groups that need to perform actions as this service account. [Learn more](#)

Service account users role

[redacted]@gmail.com x



Grant users the permissions to deploy jobs and VMs with this service account

Service account admins role

[redacted]@gmail.com x



Grant users the permission to administer this service account

DONE

CANCEL

Click: **DONE**

Service accounts for project "dl-tf-cnn"

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Filter Enter property name or value									?	
<input type="checkbox"/>	Email	Status	Name ↑	Description	Key ID	Key creation date	OAuth 2 Client ID ?	Actions		
<input type="checkbox"/>	206583269885-compute@developer.gserviceaccount.com	✓	Compute Engine default service account		No keys		100905254062634528482			
<input type="checkbox"/>	service-acc-dl-tf-cnn@dl-tf-cnn.iam.gserviceaccount.com	✓	service-acc-dl-tf-cnn		No keys		109948114473978072539			

IT'S DONE!
SERVICE ACCOUNT HAS BEEN CREATED SUCCESSFULLY!