

Google Cloud ML Engine Setup

Create New Project

Manage resources

CREATE PROJECT

DELETE

HIDE INFO PANEL

Filter by name, ID, project number, or label

Columns

<input type="checkbox"/> Project name	Project ID	
<input type="checkbox"/> AEDMobile	firebase-aedmobile	
<input type="checkbox"/> AEDweb	aedweb-1354	
<input type="checkbox"/> BikeRideApp	bikerideapp	
<input type="checkbox"/> Fiduche	fiduche-5d0bb	
<input type="checkbox"/> Fiduche	fiduche-153522	
<input type="checkbox"/> FightBuddy	fightbuddy-27102	
<input type="checkbox"/> FightBuddy	fightbuddy-147115	
<input type="checkbox"/> FirebaseTest	firebaseetest-140205	
<input type="checkbox"/> Google Play Android Developer	api-project-216161238124	
<input type="checkbox"/> GraffitiCloud	graffiticloud-905	
<input type="checkbox"/> Little Library Buddy	fir-e57cd	
<input type="checkbox"/> MLTest	mltest-229502	
<input type="checkbox"/> PopUp Buddy	popup-buddy	
<input type="checkbox"/> PostMe	postme-3f7d3	

Rows per page: 50

1 - 14 of 14



Select a resource

PERMISSIONS

LABELS

Please select at least one resource.

Create a Project - give it a name

New Project



You have 11 projects remaining in your quota. Request an increase or delete projects. [Learn more](#)

[MANAGE QUOTAS](#)

Project Name *

MyAIProject



Project ID: myaiproject-232619. It cannot be changed later. [EDIT](#)

Location *



No organization

[BROWSE](#)

Parent organization or folder

CREATE

CANCEL

Refresh Manage Resources page to see newly created project

← Manage resources

+

 CREATE PROJECT

🗑

 DELETE

HIDE INFO PANEL

Filter by name, ID, project number, or label

Columns ▾

<input type="checkbox"/> Project name	Project ID	
<input type="checkbox"/> AEDMobile	firebase-aedmobile	⋮
<input type="checkbox"/> AEDweb	aedweb-1354	⋮
<input type="checkbox"/> BikeRideApp	bikerideapp	⋮
<input type="checkbox"/> Fiduche	fiduche-5d0bb	⋮
<input type="checkbox"/> Fiduche	fiduche-153522	⋮
<input type="checkbox"/> FightBuddy	fightbuddy-27102	⋮
<input type="checkbox"/> FightBuddy	fightbuddy-147115	⋮
<input type="checkbox"/> FirebaseTest	firebase-test-140205	⋮
<input type="checkbox"/> Google Play Android Developer	api-project-216161238124	⋮
<input type="checkbox"/> GraffitiCloud	graffiticloud-905	⋮
<input type="checkbox"/> Little Library Buddy	fir-e57cd	⋮
<input type="checkbox"/> MLTest	mltest-229502	⋮
<input type="checkbox"/> MyAIProject	myai-project-232619	⋮
<input type="checkbox"/> PopUp Buddy	popup-buddy	⋮
<input type="checkbox"/> PostMe	postme-3f7d3	⋮

Rows per page: 50 ▾ 1 - 15 of 15 < >

Select a resource

PERMISSIONS

LABELS

ⓘ Please select at least one resource.

Create a Service Account for your project

Google Cloud PlatformMyAIProject

IAM & admin

IAM

Identity & Organization

Organization policies

Quotas

Service accounts

Labels

Privacy & Security

Settings

Cryptographic keys

Identity-Aware Proxy

Roles

Audit Logs

Manage resources

Service accounts

+ CREATE SERVICE ACCOUNT

DELETE

HIDE INFO PANEL

Service accounts for project "MyAIProject"

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](#)

Filter table

Email	Name ↑	Description	Key ID	Key creation date	Actions
No rows to display					

Permissions

You can allow specific users to have ownership and access to service accounts and their settings. Users with primitive project owner and project editor roles can already modify service accounts, but you might want to restrict access for some users so that they can take only specific actions against service account resources. [Learn more](#)

To assign a project role to a service account, use the IAM page.

Please select at least one resource.

Create Service Account Roles

Google Cloud Platform MyAIProject

IAM & admin

Create service account

1 Service account details — 2 Grant this service account access to project (optional) — 3 Grant users access to this service account (optional)

Service account permissions (optional)

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

Select a role

Type to filter

- Genomics
- IAM
- Kubernetes Engine
- Logging
- Machine Learning En...
- Memorystore Redis
- Monitoring

- ML Engine Admin
- ML Engine Developer
- ML Engine Viewer

MANAGE ROLES

MyAIProject

Create service account

1 Service account details — 2 Grant this service account access to project (optional) — 3 Grant users access to this service account (optional)

Service account permissions (optional)

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

Role

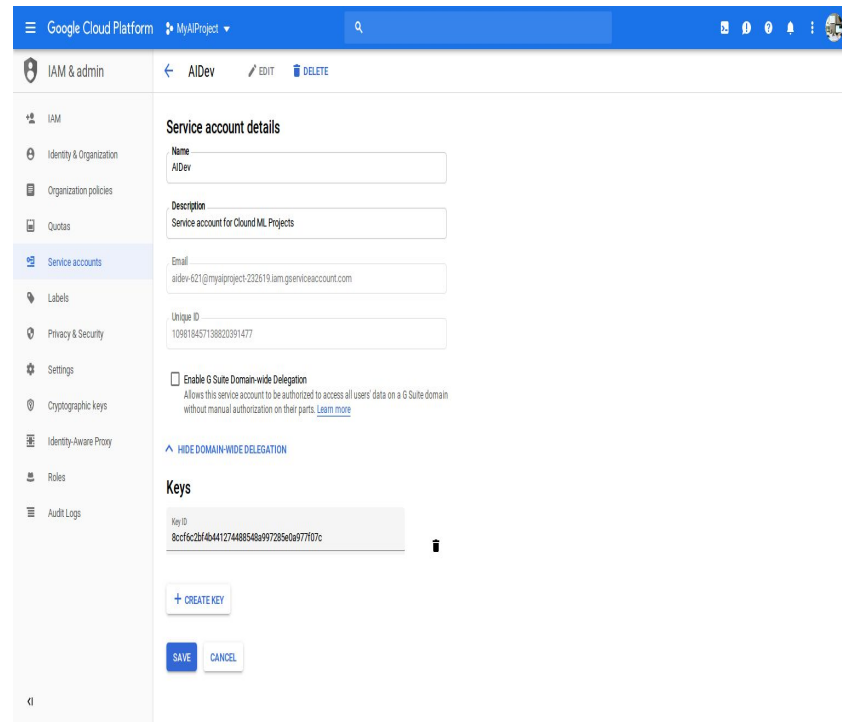
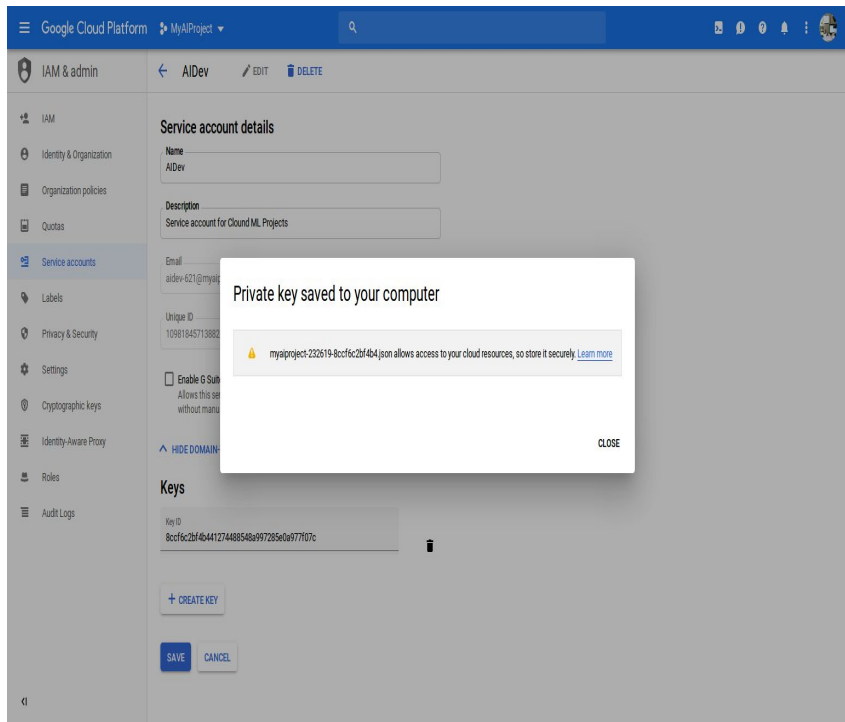
ML Engine Developer

Access to create training and prediction jobs, models and versions, send online prediction requests.

+ ADD ANOTHER ROLE

CONTINUE CANCEL

Create and Download service account Key json file



Service Account Created

Google Cloud Platform

MyAIProject

IAM & admin

IAM

Identity & Organization

Organization policies

Quotas

Service accounts

Labels

Privacy & Security

Settings

Cryptographic keys

Identity-Aware Proxy

Roles

Audit Logs

Manage resources

<

Service accounts

+ CREATE SERVICE ACCOUNT

DELETE

HIDE INFO PANEL

Service accounts for project "MyAIProject"

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Filter table

Name ↑

Description

Key ID

Actions

Email

aidev-621@myaiproject-232619.iam.gserviceaccount.com

AI Dev

Service account for Clound ML Projects

8ccf6c2bf4b441274488548a997285e0d...

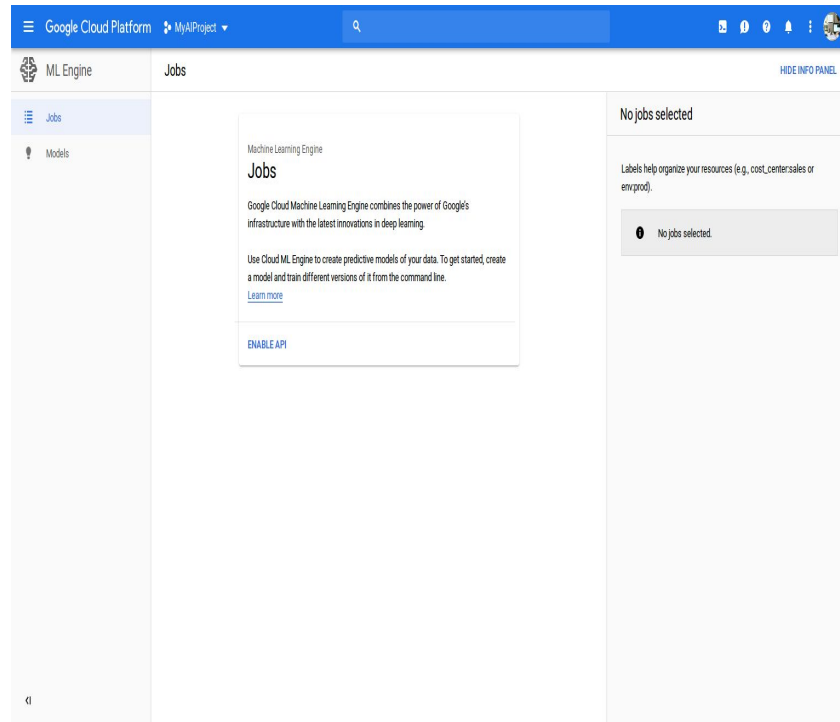
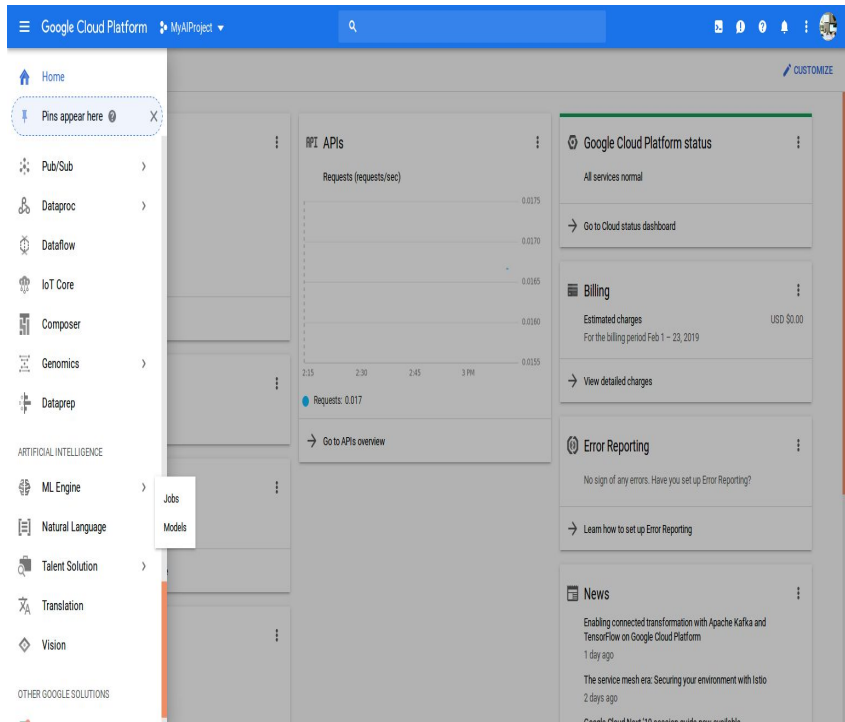
Permissions

You can allow specific users to have ownership and access to service accounts and their settings. Users with primitive project owner and project editor roles can already modify service accounts, but you might want to restrict access for some users so that they can take only specific actions against service account resources. [Learn more](#)

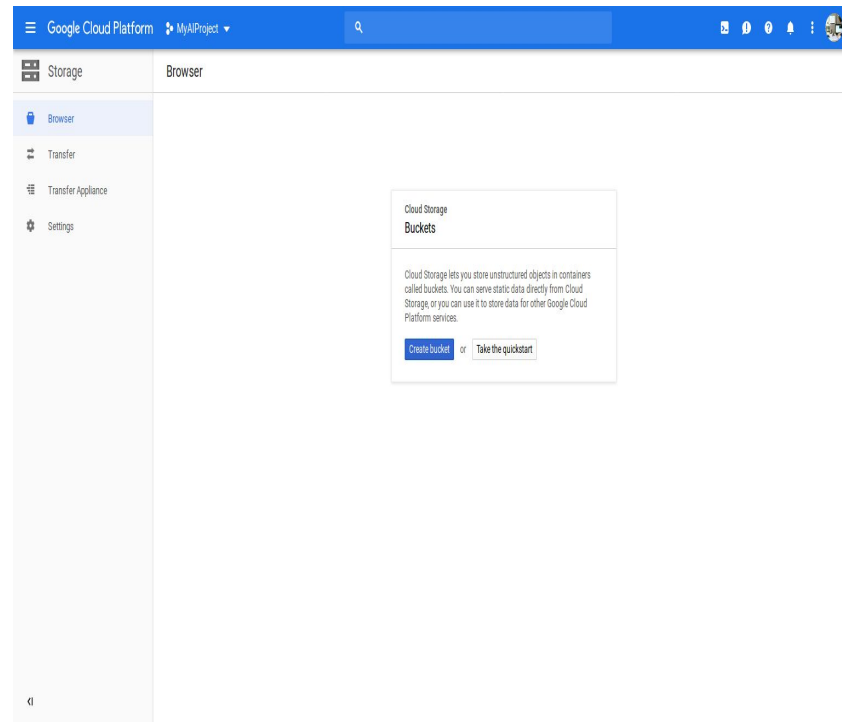
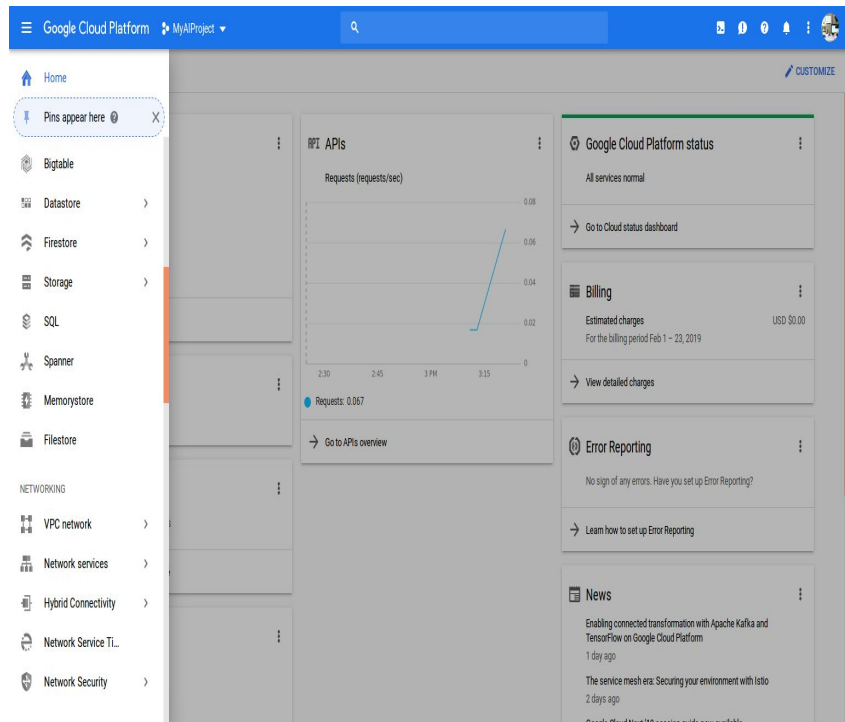
To assign a project role to a service account, use the IAM page.

Please select at least one resource.

Enable ML API from Project Navigation Menu



Create Cloud Storage Bucket from Project Navigation Menu



Enable Project billing from Project Navigation Menu And Complete Payments Settings Menu Item

This screenshot shows the Google Cloud Platform navigation menu. The 'Billing' item is highlighted with a blue dashed border. The menu includes sections for Home, Pins, Marketplaces, Billing, APIs & Services, Support, IAM & admin, Getting started, Security, COMPUTE (App Engine, Compute Engine, Kubernetes Engine, Cloud Functions), STORAGE (Bigtable), and a footer with Google Cloud and Bigtable logos.

This screenshot shows the Google Cloud Platform Billing account settings page. The 'Billing' menu item is selected in the left sidebar. The main content area displays the 'My Billing Account 1' overview, including the billing account ID (0167A1-DE80FB-022BFF), credits status (No credits to display), and a list of projects linked to the billing account. The right sidebar shows the 'PERMISSIONS' section for the billing account, listing the 'Billing Account Administrator' role.

Copy Project Name, Project ID from project Dashboard

Google Cloud Platform MyAIProject

DASHBOARD ACTIVITY

Project info

- Project name: MyAIProject
- Project ID: myaiproject-232619
- Project number: 1017158575203

→ Go to project settings

Resources

- Storage: 1 bucket

Trace

No trace data from the past 7 days


→ Get started with Stackdriver Trace

Getting Started

- API: Explore and enable APIs
- Deploy a prebuilt solution

API APIs

Requests (requests/sec)



Requests: 0.017

→ Go to APIs overview

Google Cloud Platform status

All services normal

→ Go to Cloud status dashboard

Billing

Estimated charges: USD \$0.00
For the billing period Feb 1 – 23, 2019

→ View detailed charges

Error Reporting

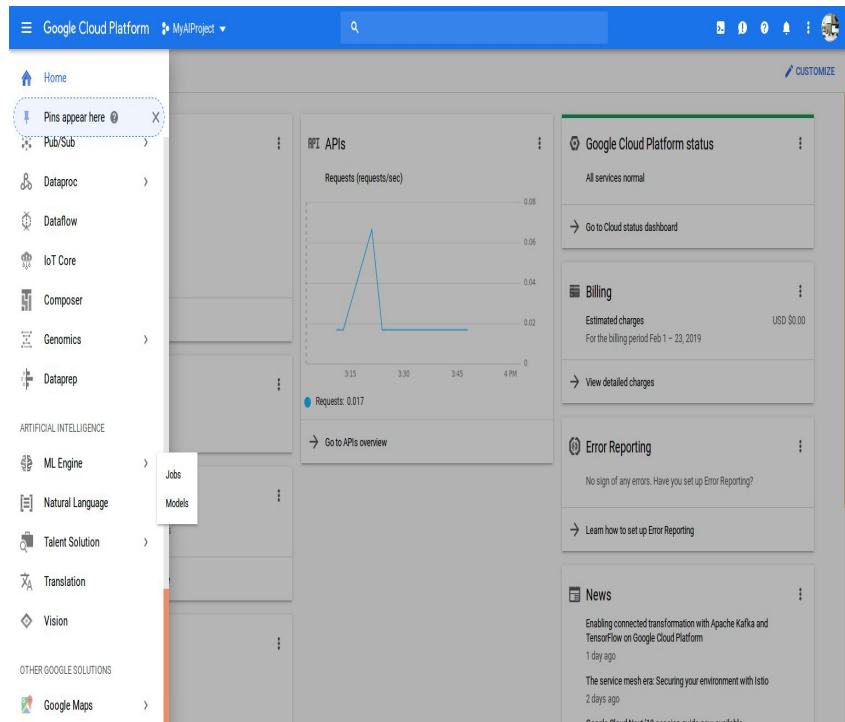
No sign of any errors. Have you set up Error Reporting?

→ Learn how to set up Error Reporting

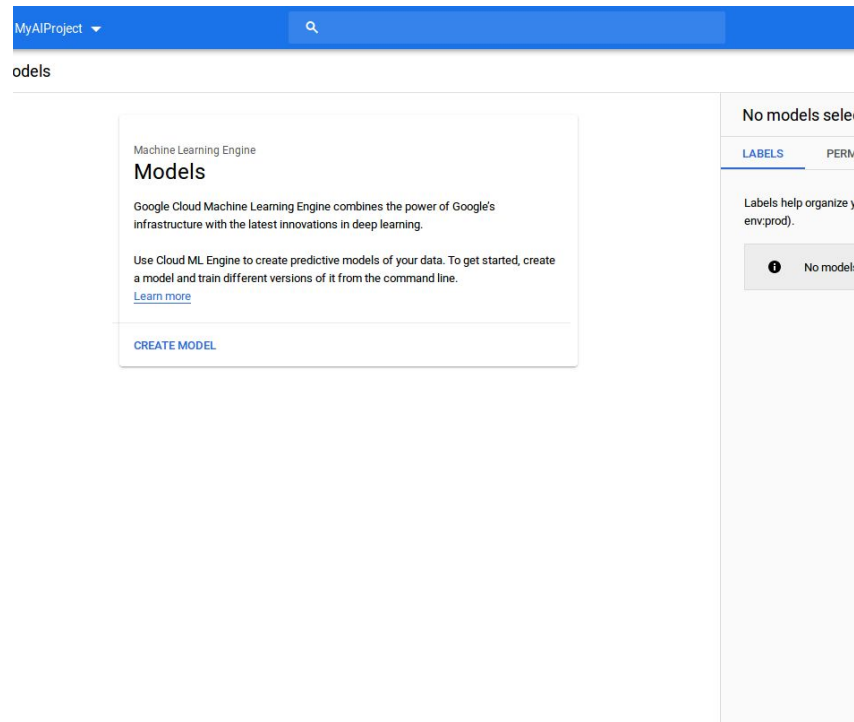
News

- Enabling connected transformation with Apache Kafka and TensorFlow on Google Cloud Platform (1 day ago)
- The service mesh era: Securing your environment with Istio (2 days ago)
- Google Cloud Next '19 session guide now available

Deploy Model to Cloud ML Engine from Cloud Bucket - Create Model

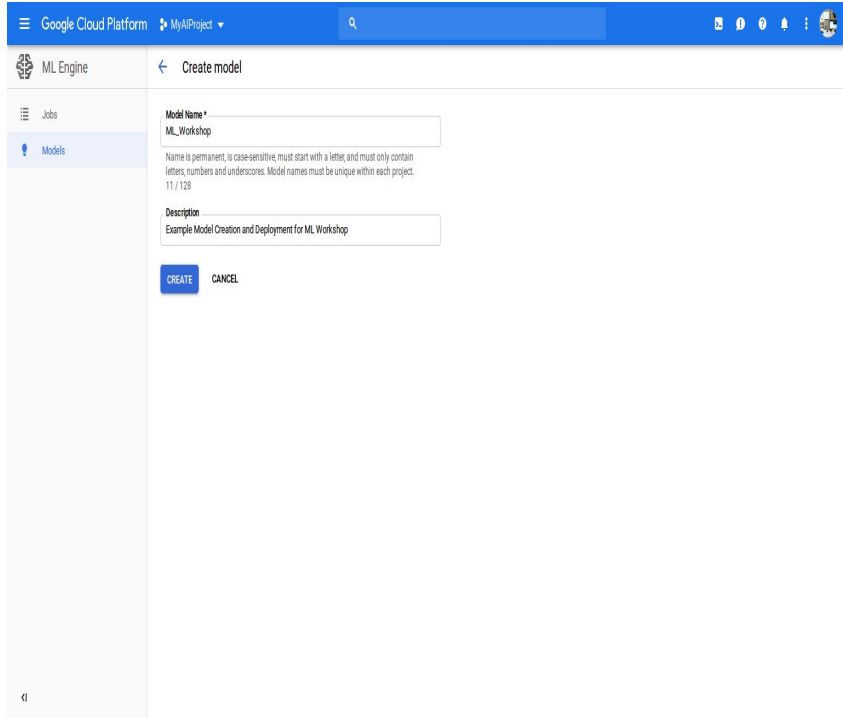


The screenshot shows the Google Cloud Platform console interface. The left sidebar contains a navigation menu with categories like 'Home', 'Pub/Sub', 'Dataproc', 'Dataflow', 'IoT Core', 'Composer', 'Genomics', 'Dataprep', 'ARTIFICIAL INTELLIGENCE', and 'OTHER GOOGLE SOLUTIONS'. Under 'ARTIFICIAL INTELLIGENCE', 'ML Engine' is selected, and a sub-menu shows 'Jobs' and 'Models'. The main content area displays the 'ML APIs' section with a line graph titled 'Requests (requests/sec)' showing a peak around 3:30. Below the graph, it indicates 'Requests: 0.017' and a 'Go to APIs overview' link. On the right, there are several informational cards: 'Google Cloud Platform status' (All services normal), 'Billing' (Estimated charges: USD \$0.00), 'Error Reporting' (No sign of any errors), and 'News' (Enabling connected transformation with Apache Kafka and TensorFlow on Google Cloud Platform).



The screenshot shows the 'Models' page in the Google Cloud ML Engine console. The header bar is blue with 'MyAIProject' and a search icon. The main content area is titled 'Models' and includes a description: 'Google Cloud Machine Learning Engine combines the power of Google's infrastructure with the latest innovations in deep learning.' It also states: 'Use Cloud ML Engine to create predictive models of your data. To get started, create a model and train different versions of it from the command line.' A 'Learn more' link is provided. A prominent 'CREATE MODEL' button is visible. On the right side, there is a section titled 'No models selected' with tabs for 'LABELS' and 'PERM'. Below this, it says 'Labels help organize your models (e.g., env:prod)' and a button with an information icon and the text 'No models selected'.

Deploy Model to Cloud ML Engine from Cloud Bucket - Create Model II



The screenshot shows the 'Create model' page in the Google Cloud Platform ML Engine interface. The left sidebar has 'Models' selected. The main area contains a 'Model Name' field with the value 'ML_Workshop' and a 'Description' field with the value 'Example Model Creation and Deployment for ML Workshop'. Below the fields are 'CREATE' and 'CANCEL' buttons.

Google Cloud Platform MyAIProject

ML Engine Create model

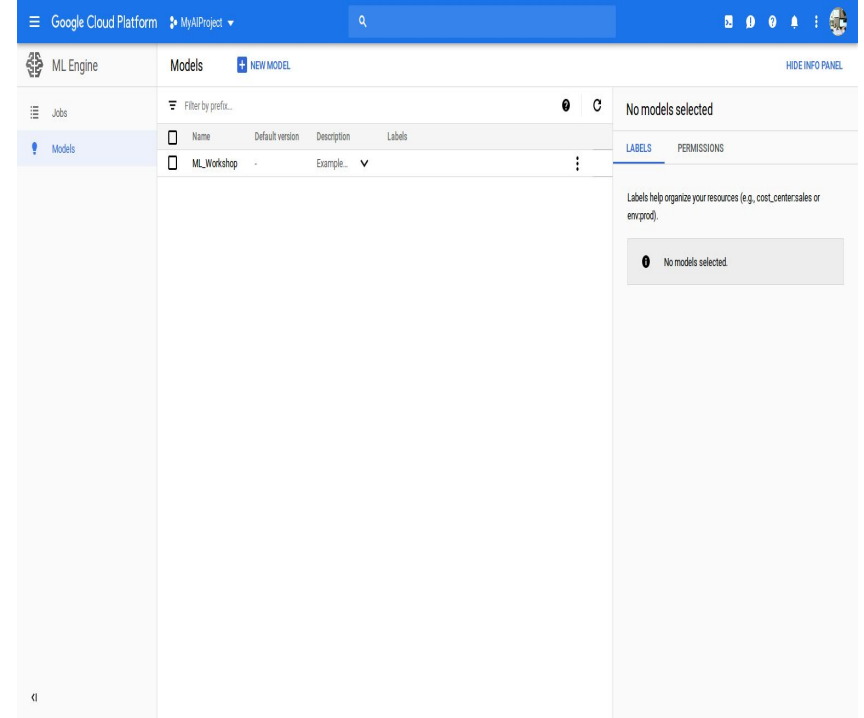
Jobs Models

Model Name *
ML_Workshop

Name is permanent, is case-sensitive, must start with a letter, and must only contain letters, numbers and underscores. Model names must be unique within each project.
11 / 128

Description
Example Model Creation and Deployment for ML Workshop

CREATE CANCEL



The screenshot shows the 'Models' page in the Google Cloud Platform ML Engine interface. The left sidebar has 'Models' selected. The main area displays a table of models. The table has columns for Name, Default version, Description, and Labels. One model is listed: 'ML_Workshop' with a default version of '-' and a description of 'Example...'. The right sidebar shows 'No models selected' and 'LABELS PERMISSIONS' tabs.

Google Cloud Platform MyAIProject

ML Engine Models NEW MODEL

Jobs Models

Filter by prefix...

<input type="checkbox"/>	Name	Default version	Description	Labels
<input type="checkbox"/>	ML_Workshop	-	Example...	

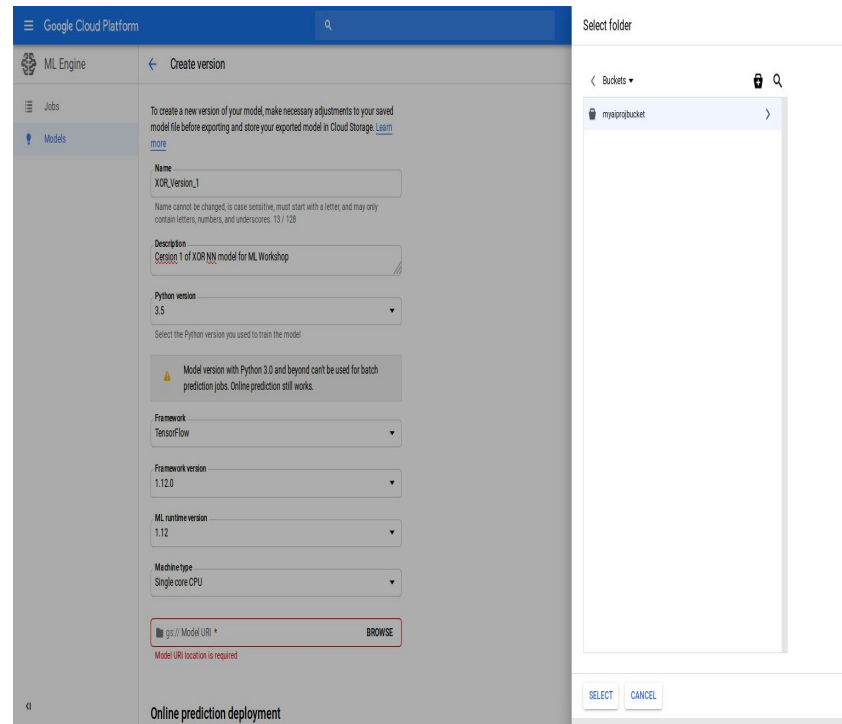
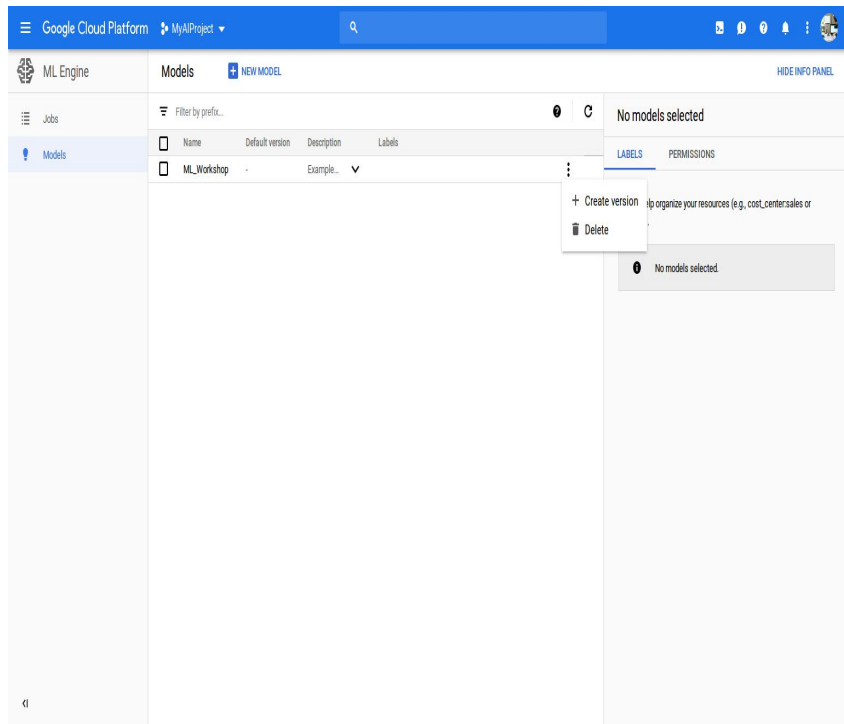
No models selected

LABELS PERMISSIONS

Labels help organize your resources (e.g., cost_center/sales or env/prod).

No models selected.

Deploy Model to Cloud ML Engine from Cloud Bucket - Create Model Versions



Deploy Model to Cloud ML Engine from Cloud Bucket - Save/Deploy Model Versions

Google Cloud Platform

ML Engine

Create version

Python version: 3.5

Select the Python version you used to train the model

Model version with Python 3.0 and beyond can't be used for batch prediction jobs. Online prediction still works.

Framework: TensorFlow

Framework version: 1.12.0

ML runtime version: 1.12

Machine type: Single core CPU

Model URI: gs://myapigbucket BROWSE

Cloud Storage path to the entire SavedModel directory. [Learn more](#)

Online prediction deployment

Scaling: Auto scaling

Minimum number of nodes (optional)

Keeping a minimum number of nodes running all the time will avoid dropping requests due to nodes initialization after the service has scaled down. This setting can increase cost, as you pay for the nodes even when no predictions are served.

SAVE CLEAR CANCEL

Google Cloud Platform

ML Engine

Create version

To create a new version of your model, make necessary adjustments to your saved model file before exporting and store your exported model in Cloud Storage. [Learn more](#)

Name: XOR_Version_1

Name cannot be changed, is case sensitive, must start with a letter, and may only contain letters, numbers, and underscores. 12 / 128

Description: Version 1 of XOR-NN model for ML Workshop

Python version: 3.5

Select the Python version you used to train the model

Model version with Python 3.0 and beyond can't be used for batch prediction jobs. Online prediction still works.

Framework: TensorFlow

Framework version: 1.12.0

ML runtime version: 1.12

Machine type: Single core CPU

Model URI: gs:// Model URI BROWSE

Model URI location is required

Online prediction deployment

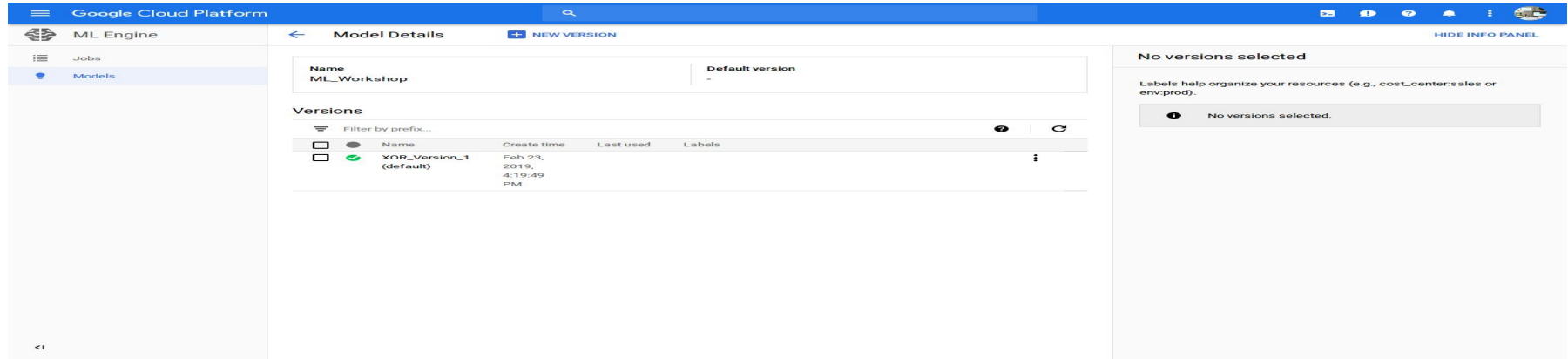
Select folder

Buckets

myapigbucket

SELECT CANCEL

Deploy Model to Cloud ML Engine from Cloud Bucket - Copy Desired Model Version Name from Model Details Page and use it with googleapiclient to make online prediction request from this model



The screenshot shows the Google Cloud Platform interface for ML Engine. The left sidebar has 'ML Engine' selected, with 'Jobs' and 'Models' sub-items. The main area is titled 'Model Details' for 'ML_Workshop'. It shows a 'Default version' field with a minus sign. Below is a 'Versions' table with one entry: 'XOR_Version_1 (default)'. The table has columns for Name, Create time, Last used, and Labels. The 'Create time' is 'Feb 23, 2019, 4:19:49 PM'. On the right, a panel titled 'No versions selected' contains a message about labels.

Name	Create time	Last used	Labels
XOR_Version_1 (default)	Feb 23, 2019, 4:19:49 PM		

```
response = service.projects().predict(  
    name='projects/myaiproject-232619/models/ML_Workshop/versions/XOR_Version_1',  
    body={"instances": [{"inputs": [1.0,1.0]}, {"inputs": [0.0,0.0]}, {"inputs": [1.0,0.0]}}  
)
```