

# Google-Cloud-Platform's

**why what how**

Strayn 2016.10.12

# WHY Google?

Free

for 60 days

Fancy

ML-firsted Google

# WHY Google?

And it **WORKs...**

Free

for 60 days

Fancy

ML-firsted Google

# How GCP works

## What we do locally

- 1) Collect your data
- 2) Label your data

```
"sad", "Feeling kind of low...."  
"excited", "OMG! Just had a fabulous day!"  
"bored", "Eating eggplant. Why bother?"
```

## What we do with GCP

- 1) Upload data to STORAGE
- 2) Train it with API
- 3) Predict as you want

# Why google is better?

## BAG OF WORDS

- Data Collections

api/rvest/tm

- Correlation Mining

qdap

- Fancy Displays

wordcloud/network/pyramidplot/  
treemap

## GOOGLE

- Entities

Save time for Dictionary of Nouns

- Sentiment


Save time for learner tuning

- Syntax


Save time for dictionary of grammar

# WHAT?




**Project: dmg6**  
ID: **dmg6-145123** (# 129451453671)  
[→ Manage project settings](#)

 **Billing**  
\$0.00  
Approximate charges so far this month

---

 **View detailed charges**

## Resources

-  **App Engine**  
0 instances
-  **Compute Engine**  
1 instance
-  **Cloud Storage**  
3 buckets

Trace

### Compute Engine

CPU (%) ▾

The chart displays CPU usage as a blue line. The y-axis is labeled from 0.02 to 0.12 in increments of 0.02. The x-axis shows two time points: Oct 12, 13:30 and Oct 12, 14:03. The usage starts around 0.08, fluctuates, peaks at approximately 0.11 around 13:50, and ends at approximately 0.08 at 14:03.

CPU: 0.083

[Go to the Compute Engine dashboard](#)

The chart displays the request rate for the 'API APIS' endpoint. The y-axis represents 'Requests (requests/sec)' with a scale from 0.002 to 0.01. The x-axis shows time on 'Oct 12', with labels at '13:30' and '14:03'. The data shows a baseline of approximately 0.0003 requests per second, which spikes to nearly 0.01 requests per second at 14:03 before returning to the baseline.

Time	Requests (requests/sec)
Oct 12, 13:30	0.0003
Oct 12, 14:03	0.0095
Oct 12, 14:05	0.0003

Legend: ■ Requests: 0.0003

[Go to APIs overview](#)

The screenshot shows the Google Cloud App Engine dashboard. At the top, there's a header with the App Engine logo and the text 'App Engine'. Below this, a section titled 'Summary (count/sec)' is visible. The main content area contains a message: 'There is no data for this chart.' At the bottom of the dashboard, there is a navigation bar with a right-pointing arrow and the text 'Go to the App Engine dashboard'.

## Error Reporting

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

→ Set up Error Reporting

## News



Home



Dashboard



Activity

## Dashboard

CUSTOMIZE



## Project: dmg6

ID: dmg6-145123 (# 129451453671)



Manage project settings



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## Compute Engine

CPU (%) ▾



CPU: 0.133



Go to the Compute Engine dashboard



## App Engine

Summary (count/sec) ▾

There is no data for this chart.



Go to the App Engine dashboard



## Error Reporting

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



Set up Error Reporting



## News

New undersea cable expands capacity for Google APAC customers and users  
2 hours ago

Transform your business; become a Google Certified Professional Data Engineer



## APIs


Requests (requests/sec)




Requests: 0










Go to APIs overview


 Google Cloud Platform


dmg6






 Home


 Dashboard

 Activity

 Project: dm6

ID: dm6-145123 (# 129451453671)

[Manage project settings](#)


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\$0.00


Approximate charges so far this month


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Resources

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0 instances


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1 instance

 Cloud Storage  
3 buckets

 Trace


 Compute Engine

CPU (%)




CPU: 0.133

[Go to the Compute Engine dashboard](#)


 APIs

Requests (requests/sec)



Requests: 0


[Go to APIs overview](#)

 App Engine

Summary (count/sec)


There is no data for this chart.

[Go to the App Engine dashboard](#)

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Transform your business; become a Google Certified Professional Data Engineer



Filter products & services

- Home
- API API Manager**
- Billing
- Cloud Launcher
- Support
- IAM & Admin

COMPUTE

- App Engine
- Compute Engine**
- Container Engine
- Networking

STORAGE

- Bigtable
- SQL
- Datastore
- Storage**

board

CUSTOMIZE

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Compute Engine

CPU (%)



Go to the Compute Engine dashboard

App Engine

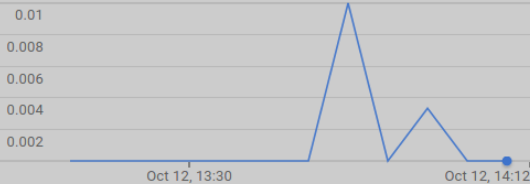
Summary (count/sec)

There is no data for this chart.

Go to the App Engine dashboard

API APIs

Requests (requests/sec)



Requests: 0

Go to APIs overview

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Train it on COMPUTE ENGINE through API

Google Cloud Platform

Filter products & services

Home

API API Manager

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COMPUTE

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Compute Engine

Container Engine

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STORAGE

Bigtable

SQL

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board

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\$0.00

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Resources

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Trace

Compute Engine

CPU (%)




Oct 12, 13:30 Oct 12, 14:12

CPU: 0.1

Go to the Compute Engine dashboard

APIs

Requests (requests/sec)



Oct 12, 13:30 Oct 12, 14:12

Requests: 0

Go to APIs overview

App Engine

Summary (count/sec)

There is no data for this chart.

Go to the App Engine dashboard

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API API Manager

Dashboard

Library

Credentials

Library

Google APIs Private APIs

🔍 Search all 100+ APIs

Popular APIs



Google Cloud APIs

Compute Engine API  
BigQuery API  
Cloud Storage Service  
Cloud Datastore API  
Cloud Deployment Manager API  
Cloud DNS API  
Cloud Monitoring API  
Cloud Pub/Sub API  
Cloud SQL API  
Cloud Storage JSON API  
Compute Engine Instance Group Manager API  
Compute Engine Instance Groups API  
Container Engine API  
**Prediction API**  
Genomics API  
Vision API

⤴ Less



YouTube APIs

YouTube Data API  
YouTube Analytics API  
YouTube Reporting API



Google Maps APIs

Google Maps Android API  
Google Maps SDK for iOS  
Google Maps JavaScript API  
Google Places API for Android  
Google Places API for iOS  
Google Maps Roads API  
Google Static Maps API  
Google Street View Image API  
Google Maps Embed API  
Google Places API Web Service  
Google Maps Geocoding API  
Google Maps Directions API  
Google Maps Distance Matrix API  
Google Maps Geolocation API  
Google Maps Elevation API  
Google Maps Time Zone API

⤴ Less



Google Apps APIs

Drive API  
Calendar API  
Gmail API  
Sheets API  
Google Apps Marketplace SDK  
Admin SDK  
Contacts API  
CalDAV API

⤴ Less



Mobile APIs

Google Cloud Messaging  
Google Play Game Services  
Google Play Developer API  
Google Places API for Android



Social APIs

Google+ API  
Blogger API  
Google+ Pages API  
Google+ Domains API



Advertising APIs

AdSense Management API  
DCM/DFA Reporting And Trafficking API  
Ad Exchange Seller API  
Ad Exchange Buyer API  
DoubleClick Search API  
DoubleClick Bid Manager API




Other popular APIs

Analytics API  
Translate API  
Custom Search API  
URL Shortener API  
PageSpeed Insights API  
Fusion Tables API  
Web Fonts Developer API

Google API toolbox

[Link back](#)

API	Requests	Errors	Error ratio	Latency, median	Latency, 98%	
 Google Compute Engine API	5	0	0%	— ?	— ?	Disable
Admin SDK	—	—	—	—	—	Disable
Analytics API	—	—	—	—	—	Disable
BigQuery API	—	—	—	—	—	Disable
Contacts API	—	—	—	—	—	Disable
Container Analysis API Private API ?	—	—	—	—	—	Disable
Genomics API	—	—	—	—	—	Disable
Gmail API	—	—	—	—	—	Disable
Google Calendar API	—	—	—	—	—	Disable
Google Cloud APIs	—	—	—	—	—	Disable
Google Cloud Container Builder API	—	—	—	—	—	Disable
Google Cloud Dataproc API	—	—	—	—	—	Disable
Google Cloud Dataproc Control API Private API ?	—	—	—	—	—	Disable
Google Cloud Datastore API	—	—	—	—	—	Disable
Google Cloud Deployment Manager API	—	—	—	—	—	Disable
Google Cloud Deployment Manager V2 API	—	—	—	—	—	Disable
Google Cloud DNS API	—	—	—	—	—	Disable
Google Cloud Monitoring API	—	—	—	—	—	Disable
Google Cloud Pub/Sub API	—	—	—	—	—	Disable
Google Cloud SQL	—	—	—	—	—	Disable
Google Cloud SQL API	—	—	—	—	—	Disable
Google Cloud Storage	—	—	—	—	—	Disable
Google Cloud Storage JSON API	—	—	—	—	—	Disable
Google Cloud Vision API	—	—	—	—	—	Disable
Google Compute Engine Instance Group Manager API	—	—	—	—	—	Disable

## APIs I currently enable



## Cloud Prediction API

Product Overview  
Documentation  
Quickstart

## How-to Guides

All How-to Guides  
Developer's Guide  
Smart Autofill Spreadsheets Add-on  
› Use Cases

## APIs &amp; Reference

All APIs & Reference  
› V1.6 (Latest)   
Samples and Libraries  
Prediction Gallery  
PMML Support  
Performance Tips  
Batch HTTP Requests

## Resources

All Resources  
[Pricing](#)  
Glossary  
Release Notes  
› Support  
Service Level Agreement

Prediction API &gt; Documentation



## 目录

Pricing  
Free Quota  
Paid Usage  
Terms of Service

## Pricing and Terms of Service

### Pricing

This page describes the pricing schedule for using the Google Prediction API, including free usage quota.

When charging in local currency, Google will convert the prices listed into applicable local currency pursuant to the conversion rates published by leading financial institutions.

#### Free Quota

Usage is free for the first six months, up to the following limits per [Google Cloud Platform Console](#) project. This free quota applies even when billing is enabled, until the six-month expiration time.

- **Usage limits:**
  - **Predictions:** 100 predictions/day
  - **Hosted model predictions:** Hosted models have a usage limit of 100 predictions/day/user across all models.
  - **Training:** 5MB trained/day
  - **Streaming updates:** 100 streaming updates/day
- **Lifetime cap:** 20,000 predictions.
- **Expiration:** Free quota expires six months after activating Google Prediction for your project in the [Google Cloud Platform Console](#).

Note that some Prediction API usage scenarios depend on [Google Cloud Storage](#), which has different pricing terms from the Prediction API.

[Link back](#)

Cooked data on kaggle sizes 3.4MB

#### Paid Usage

Paid usage comes with a 99.9% availability service level agreement. Read more about the SLA [here](#).



## Cloud Prediction API

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» Support  
Service Level Agreement

## Paid Usage

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Monitor your usage on the [Google Cloud Platform Console](#). Any usage beyond the free usage quota will fail if you have not enabled billing for the project. Once you exceed the free quota, the following prices and limits apply:

- **Base fee:** \$10 monthly fee per [Google Cloud Platform Console](#) project.
- **Usage fees:**
  - **Prediction:**
    - **10,000** predictions/month: \$0.00
    - **10,001+** predictions/month: \$0.50/1,000 predictions beyond the initial 10,000
  - **Training:**
    - **\$0.002/MB bulk trained** (maximum size of each dataset: 2.5GB)
    - **0-10,000 streaming updates:** \$0.00
    - **10,001+ streaming updates:** \$0.05/1,000 updates beyond the initial 10,000.
- **Usage limits:**
  - If you intend to make more than 40,000 predictions/day, [please contact us](#).
  - Google Prediction has a default limit of 2,000,000 predictions/day per project for your own models.
  - Hosted models have a usage limit of 100 predictions/day/user across all demonstration models. Developers can set higher paid usage limits for models they create. Please see each model's documentation for more details.



**Important:** These charges do not include any Google Cloud Storage fees that might be required to hold training data. Please see the [pricing sheet for Google Cloud Storage](#) to determine any additional costs that you might incur.

## 目录

Pricing  
[Free Quota](#)  
Paid Usage  
Terms of Service

And it's not a bad idea to pay

## Terms of Service

**HOW?**

**HOW?**

**RTFM**



Basically 3 ways to use it

- 1)Through Google API Manager
- 2)Through Spreadsheet
- 3)Through Python

# Sample Codes

#In the request body, supply data with the following structure:

```
{
  "input": {
    "csvInstance": [
      'hello'
    ]
  }
}
```

```
import httplib2, webapp2
from oauth2client.appengine import AppAssertionCredentials
from apiclient.discovery import build

http =
AppAssertionCredentials('https://www.googleapis.com/auth/prediction').authorize(httplib2.H
ttp())
service = build('prediction', 'v1.6', http=http)

class MakePrediction(webapp2.RequestHandler):
    def get(self):
        result = service.hostedmodels().predict(project='414649711441',
hostedModelName='sample.sentiment', body={'input' {'csvInstance': ['hello']}}).execute()

        self.response.headers['Content-Type'] = 'text/plain'
        self.response.out.write('Result: ' + repr(result))

app = webapp2.WSGIApplication([
    ('/makePrediction', MakePrediction),
], debug=True)
```

**App Engine+Compute Engine**

# Terms you might confuse

## Model

- 1) Hosted/Hosted models
- 2) Query Parameters
- 3) Batch: send multi query
- 4) PMML

## Security

- 1) OAUTH 2.0
- 2) KEY

Get hands dirty

```
strayn@strayn-Lenovo-Y50-70:~$ bash next
```

```
If you want to share my GCP, reply this email with the gmail you want to be use on this GCP project, and I will send invitation to this address.
```

```
next: line 2: Or: command not found
```

```
strayn@strayn-Lenovo-Y50-70:~$ sudo shutdown -h now
```