

Title : Installation and configure Google App Engine.

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Class : - TE Computer

Subject : - Cloud Computing

Date : -

Google Cloud CLI

Welcome to the Google Cloud CLI! Run "gcloud -h" to get the list of available commands.

Welcome! This command will take you through the configuration of gcloud.

Your current configuration has been set to: [default]

You can skip diagnostics next time by using the following flag:

```
gcloud init --skip-diagnostics
```

Network diagnostic detects and fixes local network connection issues.

Checking network connection...done.

Reachability Check passed.

Network diagnostic passed (1/1 checks passed).

You must sign in to continue. Would you like to sign in (Y/n)? y

Your browser has been opened to visit:

```
https://accounts.google.com/o/oauth2/auth?
response_type=code&client_id=32555940559.apps.googleusercontent.com&redirect_uri=http%3A
%2F%2Flocalhost%3A8085%2F&scope=openid+https%3A%2F%2Fwww.googleapis.com%2Fauth
%2Fuserinfo.email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloud-platform+https%3A
%2F%2Fwww.googleapis.com%2Fauth%2Fappengine.admin+https%3A%2F
%2Fwww.googleapis.com%2Fauth%2Fsqlservice.login+https%3A%2F%2Fwww.googleapis.com
%2Fauth%2Fcompute+https%3A%2F%2Fwww.googleapis.com%2Fauth
%2Faccounts.reauth&state=pwrndi7Ejr71VQTt6MKV3TSOg71eFF&access_type=offline&code_cha
llenge=Qhbvl_ksmCg37hXYKptQUgeX4OdyrZlzR4OIM6MfOik&code_challenge_method=S256
```

You are signed in as: [mehatabsanadi94@gmail.com].

This account has no projects.

Would you like to create one? (Y/n)? y

Enter a Project ID. Note that a Project ID CANNOT be changed later.

Project IDs must be 6-30 characters (lowercase ASCII, digits, or hyphens) in length and start with a lowercase letter. cloudcomputing

Please make sure to create the project [cloudcomputing] using

```
$ gcloud projects create cloudcomputing
```

or change to another project using

```
$ gcloud config set project <PROJECT ID>
```

The Google Cloud CLI is configured and ready to use!

* Commands that require authentication will use mehatabsanadi94@gmail.com by default

Run ``gcloud help config`` to learn how to change individual settings

This gcloud configuration is called [default]. You can create additional configurations if you work with multiple accounts and/or projects.

Run ``gcloud topic configurations`` to learn more.

Some things to try next:

* Run ``gcloud --help`` to see the Cloud Platform services you can interact with. And run ``gcloud help COMMAND`` to get help on any gcloud command.

* Run ``gcloud topic --help`` to learn about advanced features of the CLI like arg files and output formatting

* Run ``gcloud cheat-sheet`` to see a roster of go-to ``gcloud`` commands.

```
C:\Program Files (x86)\Google\Cloud SDK>gcloud config set project bold-crossbar-454513-s4
Updated property [core/project].
```

```
C:\Program Files (x86)\Google\Cloud SDK>gcloud app create --region=us-central
```

You are creating an app for project [bold-crossbar-454513-s4].

WARNING: Creating an App Engine application for a project is irreversible and the region cannot be changed. More information about regions is at
<<https://cloud.google.com/appengine/docs/locations>>.

WARNING: Starting from March, 2025, App Engine sets the automatic scaling maximum instances default for standard environment deployments to 20. This change doesn't impact existing apps. To override the default, specify the new max_instances value in your app.yaml file, and deploy a new version or redeploy over an existing version. For more details on max_instances, see
<https://cloud.google.com/appengine/docs/standard/reference/app-yaml.md#scaling_elements>.

Creating App Engine application in project [bold-crossbar-454513-s4] and region [us-central]....done.
Success! The app is now created. Please use `gcloud app deploy` to deploy your first app.

```
C:\Program Files (x86)\Google\Cloud SDK>gcloud app describe
```

authDomain: gmail.com

codeBucket: staging.bold-crossbar-454513-s4.appspot.com

databaseType: CLOUD_DATASTORE_COMPATIBILITY

defaultBucket: bold-crossbar-454513-s4.appspot.com

defaultHostname: bold-crossbar-454513-s4.uc.r.appspot.com

featureSettings:

splitHealthChecks: true

useContainerOptimizedOs: true

gcrDomain: us.gcr.io

id: bold-crossbar-454513-s4

locationId: us-central

name: apps/bold-crossbar-454513-s4

serviceAccount: bold-crossbar-454513-s4@appspot.gserviceaccount.com

servingStatus: SERVING

sslPolicy: DEFAULT

C:\Program Files (x86)\Google\Cloud SDK>gcloud components install app-engine-python

Restarting command:

\$ gcloud components install app-engine-python

C:\Program Files (x86)\Google\Cloud SDK>gcloud components install app-engine-go

Restarting command:

\$ gcloud components install app-engine-go

C:\Program Files (x86)\Google\Cloud SDK>gcloud components install app-engine-java

Restarting command:

\$ gcloud components install app-engine-java

C:\Program Files (x86)\Google\Cloud SDK>mkdir my-flask-app

C:\Program Files (x86)\Google\Cloud SDK>cd my-flask-app

C:\Program Files (x86)\Google\Cloud SDK\my-flask-app>python -m venv env

C:\Program Files (x86)\Google\Cloud SDK\my-flask-app>env\Scripts\activate

(env) C:\Program Files (x86)\Google\Cloud SDK\my-flask-app>gcloud app deploy

WARNING: You might be using automatic scaling for a standard environment deployment, without providing a value for automatic_scaling.max_instances. Starting from March, 2025, App Engine sets the automatic scaling maximum instances default for standard environment deployments to 20. This change doesn't impact existing apps. To override the default, specify the new max_instances value in your app.yaml file, and deploy a new version or redeploy over an existing version. For details on

max_instances, see https://cloud.google.com/appengine/docs/standard/reference/app-yaml.md#scaling_elements.

Services to deploy:

```
descriptor:      [C:\Program Files (x86)\Google\Cloud SDK\my-flask-app\app.yaml]
source:          [C:\Program Files (x86)\Google\Cloud SDK\my-flask-app]
target project:  [bold-crossbar-454513-s4]
target service:  [default]
target version:  [20250323t015237]
target url:      [https://bold-crossbar-454513-s4.uc.r.appspot.com]
target service account: [bold-crossbar-454513-s4@appspot.gserviceaccount.com]
```

Do you want to continue (Y/n)? y

Beginning deployment of service [default]...

Uploading 0 files to Google Cloud Storage

100%

File upload done.

Updating service [default]...done.

Setting traffic split for service [default]...done.

Deployed service [default] to [https://bold-crossbar-454513-s4.uc.r.appspot.com]

You can stream logs from the command line by running:

```
$ gcloud app logs tail -s default
```

To view your application in the web browser run:

```
$ gcloud app browse
```

(env) C:\Program Files (x86)\Google\Cloud SDK>gcloud app browse

Opening [https://bold-crossbar-454513-s4.uc.r.appspot.com] in a new tab in your default browser.

main.py

```
from flask import Flask

app = Flask(__name__)

@app.route('/')
def home():
    return 'Hello, Google App Engine!'

if __name__ == '__main__':
    app.run(host='0.0.0.0', port=8080)
```

app.yaml

```
runtime: python39
entrypoint: gunicorn -b :$PORT main:app
```

