

Cloud Onboarding for GCP

GCP (Google Cloud Platform)

The Google Cloud is a smaller player in the cloud world, but they have a unique offering like access to Tensorflow based AutoML systems and deep integration into edge-based workflows using TFHub⁵⁶ and Coral.AI⁵⁷

GCP Educational Resources

There is a lot to like for educators in the GCP cloud platform. One excellent option is students and Faculty can request free training lab credits and courses through Google Education⁵⁸. All educational institutions teaching cloud computing should take advantage of these free resources.

- GCP Free Tier Personal account⁵⁹

The Google Cloud has a generous Free Tier, just like the other cloud providers.

- Qwiklabs⁶⁰

Qwiklabs is an incredible resource for both teaching and exploration, and Google owns it. Students and Faculty can get free credits through a web request form⁶¹.

- On-demand training courses with Coursera

Students and Faculty can receive free credits for Coursera courses that directly map to Google Cloud Certifications. Students and Faculty can get free credits through a web request form⁶².

Onboard to GCP (Google Cloud Platform)

What is Continuous Delivery (CD) and Why Do It?

Learn what Continuous Delivery (CD) is in the screencast.

Video Link: <https://www.youtube.com/watch?v=0IAcF4cfGmI>

⁵⁶<https://tfhub.dev>

⁵⁷<https://coral.ai>

⁵⁸<https://edu.google.com/programs/faculty/benefits>

⁵⁹<https://cloud.google.com/free>

⁶⁰<https://www.qwiklabs.com/>

⁶¹<https://edu.google.com/programs/faculty/training-benefits/>

⁶²<https://edu.google.com/programs/faculty/training-benefits/>

Introduction to Google Cloud Shell

Learn what Google Cloud Shell is and how to use it in this screencast. The source code for the tutorial is in this Github Repo⁶³.

Video Link: https://www.youtube.com/watch?v=_NgXtLRKbnw⁶⁴

A few highlights to remember are:

Steps to run

- 1 gcloud app create
- 2 gcloud app deploy

Gotchas/How To

1. Fork the repo
2. Setup trigger in Cloud Build
3. Make sure you enable these settings

The screenshot shows the Google Cloud Platform console interface. On the left, the 'Cloud Build' menu is open, and the 'Settings' option is selected. The main panel displays the 'Settings' page for Cloud Build, with the 'SERVICE ACCOUNT' tab active. It shows the service account email: 318125260996@cloudbuild.gserviceaccount.com. Below this, a table lists various GCP services and their roles, with 'App Engine Admin' highlighted. The table has columns for 'GCP Service', 'Role', and 'Status'.

GCP Service	Role	Status
Cloud Functions	Cloud Functions Developer	ENABLED
Cloud Run	Cloud Run Admin	DISABLED
App Engine	App Engine Admin	ENABLED
Kubernetes Engine	Kubernetes Engine Developer	DISABLED
Compute Engine	Compute Instance Admin (v1)	DISABLED
Firebase	Firebase Admin	DISABLED
Cloud KMS	Cloud KMS CryptoKey Decrypter	DISABLED
Secret Manager	Secret Manager Secret Accessor	DISABLED
Service Accounts	Service Account User	ENABLED

Roles not listed here can be managed in the [IAM section](#)

Screen Shot 2020-11-04 at 8 07 18 PM

Continuous Delivery of GCP Google App Engine

One unique feature of Google is GAE or Google App Engine. Learn how to use it to perform Continuous Delivery of a Flask application.

Video Link: <https://www.youtube.com/watch?v=2BJSUlaKMjQ>⁶⁵

⁶³<https://github.com/noahgift/gae-continuous-delivery>

⁶⁴https://www.youtube.com/watch?v=_NgXtLRKbnw

⁶⁵<https://www.youtube.com/watch?v=2BJSUlaKMjQ>