Goggle Compute Engine install - Motum

Adolfo Centeno

May 30, 2018

Table of contents

The cloud computing stack – SaaS, PaaS, and IaaS

We can represent cloud computing as a stack of three different categories:

- Software as a Service (SaaS)
- Platform as a Service (PaaS)
- Infrastructure as a Service (IaaS)

Hosting + Compute

There are two options if we want to host an application on Google Cloud Platform:

1. Google App Engine: This is Google's PaaS and it will not be covered in this project.
2. Google Compute Engine: This is Google's IaaS and lets users run virtual machines on Google's infrastructure with a variety of hardware and software configurations.

Windows install

Update and install the Cloud SDK in windows

`https://cloud.google.com/sdk/downloads`

Ubuntu/Debian install (Part I)

Create an environment variable for the correct distribution

```
export CLOUD_SDK_REPO="cloud-sdk-$(lsb_release -c -s)"
```

Add the Cloud SDK distribution URI as a package source:

```
echo "deb http://packages.cloud.google.com/apt $CLOUD_SDK_REPO main" |
    sudo tee -a /etc/apt/sources.list.d/google-cloud-sdk.list
```

Import the Google Cloud public key:

```
curl https://packages.cloud.google.com/apt/doc/apt-key.gpg | sudo apt-key add -
```

Ubuntu/Debian install (Part II)

Update and install the Cloud SDK:

```
sudo apt-get update && sudo apt-get install google-cloud-sdk
```

Install the additional component:

```
sudo apt-get install google-cloud-sdk-app-engine-python
```

GCE/login

Run gcloud auth login to get started:

```
$ sudo gcloud auth login  # login to Google
```

NOTE:
gmail user : adolfo.centeno@kubeet.com
password : 5i5i5i5i

Connect to Google Compute Engine

Set project/connect with ssh to GCE

```
# set the default project
$ sudo gcloud config set project sanguine-office-187416

# print virtual private servers
$ sudo gcloud compute instances list

# check network connectivity
$ ping

# login with secure shell (ssh) to compute instance with [username]
$ sudo gcloud compute ssh [username]@jenkins --zone us-east1-b

# show home directory
$ ls /home
```

GCE firewall

Open firewall in GCE

```
# show firewall list
$ sudo gcloud compute firewall-rules list

# create new rule to open 8085 port
$ sudo gcloud compute firewall-rules create http_8085 allow -tcp:8085
```