Google Cloud Platform: Quick Overview

Build, test and deploy applications on Google's infrastructure

Fethi DILMI

Technical Manager at +GDG Algiers

Google Student Ambassador 2013-2014

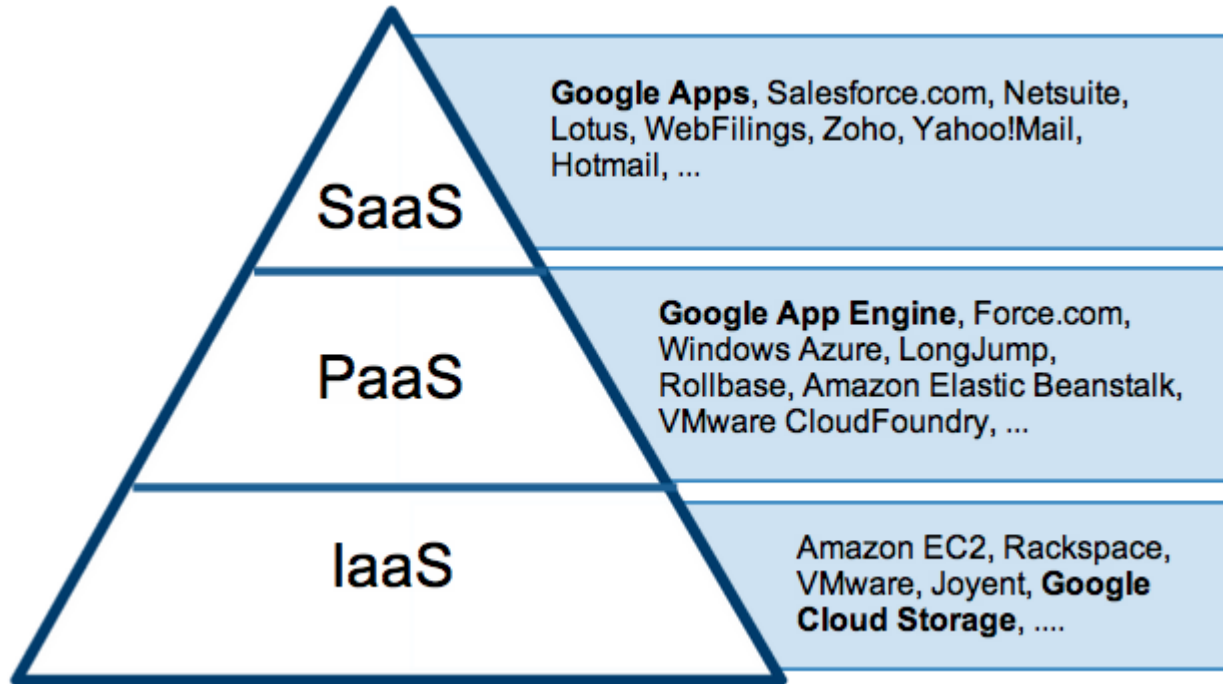**What's Google Cloud Platform ?**

Wwaaitt !! You said Cloud ??

Generally, we talk about **cloud computing** when taking applications and running them on infrastructure other than your own.

As a developer, think of **cloud computing** as a service that provides a resource that your application needs to work (this resource may be a platform, an infrastructure (i.e. servers), a framework..)

Cloud Industry Service Levels

Example: Cloud Computing as Gartner sees it !!

SaaS
Google Apps, Salesforce.com, Netsuite, Lotus, WebFilings, Zoho, Yahoo!Mail, Hotmail, ...

PaaS
Google App Engine, Force.com, Windows Azure, LongJump, Rollbase, Amazon Elastic Beanstalk, VMware CloudFoundry, ...

IaaS
Amazon EC2, Rackspace, VMware, Joyent, **Google Cloud Storage**, ...

What's Google Cloud Platform ?

Google Cloud Platform is a set of services that enables developers to **build**, **test** and **deploy** applications on Google's reliable infrastructure.

Build. Store. Analyze.

#1 Run on Google's Infrastructure

Build on the same infrastructure that allows Google to return billions of search results in milliseconds, serve 6 billion hours of YouTube video per month and provide storage for 425 million Gmail users.

➔ Global Network
➔ Redundancy
➔ Innovative Infrastructure

#2 Focus on your product

Rapidly develop, deploy and iterate your applications without worrying about system administration. Google manages your application, database and storage servers so you don't have to.

➔ Managed services
➔ Developer Tools and SDKs
➔ Console and Administration

#3 Mix and Match Services

Virtual machines. Managed platform. Blob storage. Block storage. NoSQL datastore. MySQL database. Big Data analytics. Google Cloud Platform has all the services your application architecture needs.

➜   Compute
➜   Storage
➜   Services

#4 Scale to millions of users

Applications hosted on Cloud Platform can automatically scale up to handle the most demanding workloads and scale down when traffic subsides. You pay only for what you use.

➔ **Scale-up**: Cloud Platform is designed to scale like Google's own products, even when you experience a huge traffic spike. Managed services such as App Engine or Cloud Datastore give you auto-scaling that enables your application to grow with your users.

➔ **Scale-down**: Just as Cloud Platform allows you to scale-up, managed services also scale down. You don't pay for computing resources that you don't need.

#5 Performance you can count on

Google's compute infrastructure gives you consistent CPU, memory and disk performance. The network and edge cache serve responses rapidly to your users across the world.

➔ CPU, Memory and Disk
➔ Global Network
➔ Transparent maintenance

#6 Get the support you need **(My favourite :D)**

With a worldwide community of users, partner ecosystem and premium support packages, Google provides a full range of resources to help you get started and grow.

Google Cloud Platform Services: First Insight !!

First insight of Google Cloud Platform Services

Compute
- Compute Engine
- App Engine

Storage
- Cloud Storage
- Cloud SQL
- Cloud Datastore
- Persistent Disk

App Services
- BigQuery
- Cloud Endpoints
- Caching
- Queues

#1 Compute

Cloud Platform offers both a fully managed platform and flexible virtual machines, allowing you to choose a system that meets your needs. Use [App Engine](#), a Platform-as-a-Service, when you just want to focus on your code and not worry about patching or maintenance.

Or get access to raw virtual machines with [Compute Engine](#) and have the flexibility to build anything you need.

#2 Storage

Google Cloud Platform provides a range of storage services that allow you to maintain easy and quick access to your data.

With [Cloud SQL](#) and [Datastore](#) you get MySQL or schemaless NoSQL databases, while [Cloud Storage](#) provides flexible object storage with global edge caching.

#3 App Services

Use Google APIs and services to quickly enable a wide range of functionality for your application. You don't need to build these from scratch, just take advantage of easy integration within Cloud Platform.

Where to go now !!

Somethings to consider !!

→ Consider to migrate your web application to Google Cloud Platform for better performance using **#GoogleAppEngine**.

→ Your application should go wherever your users go: Scale your application using **#GoogleCloudEndpoints**.

→ Integrate Google's services into your Application using **#GoogleAPIs**.

Useful links :D

➔ Google Cloud Platform Developers Portal: https://cloud.google.com/developers
➔ Google Developers Global Portal: https://developers.google.com
➔ Google Cloud Platform Products list: https://cloud.google.com/products/compute-engine/
➔ Understanding Google APIs: https://fethidilmi.blogspot.com/2013/01/understanding-google-apis.html

<Thank You :) />

http://fethidilmi.blogspot.com

fethidilmi@gmail.com

google.com/+FethiDilmi

@fethidilmi

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