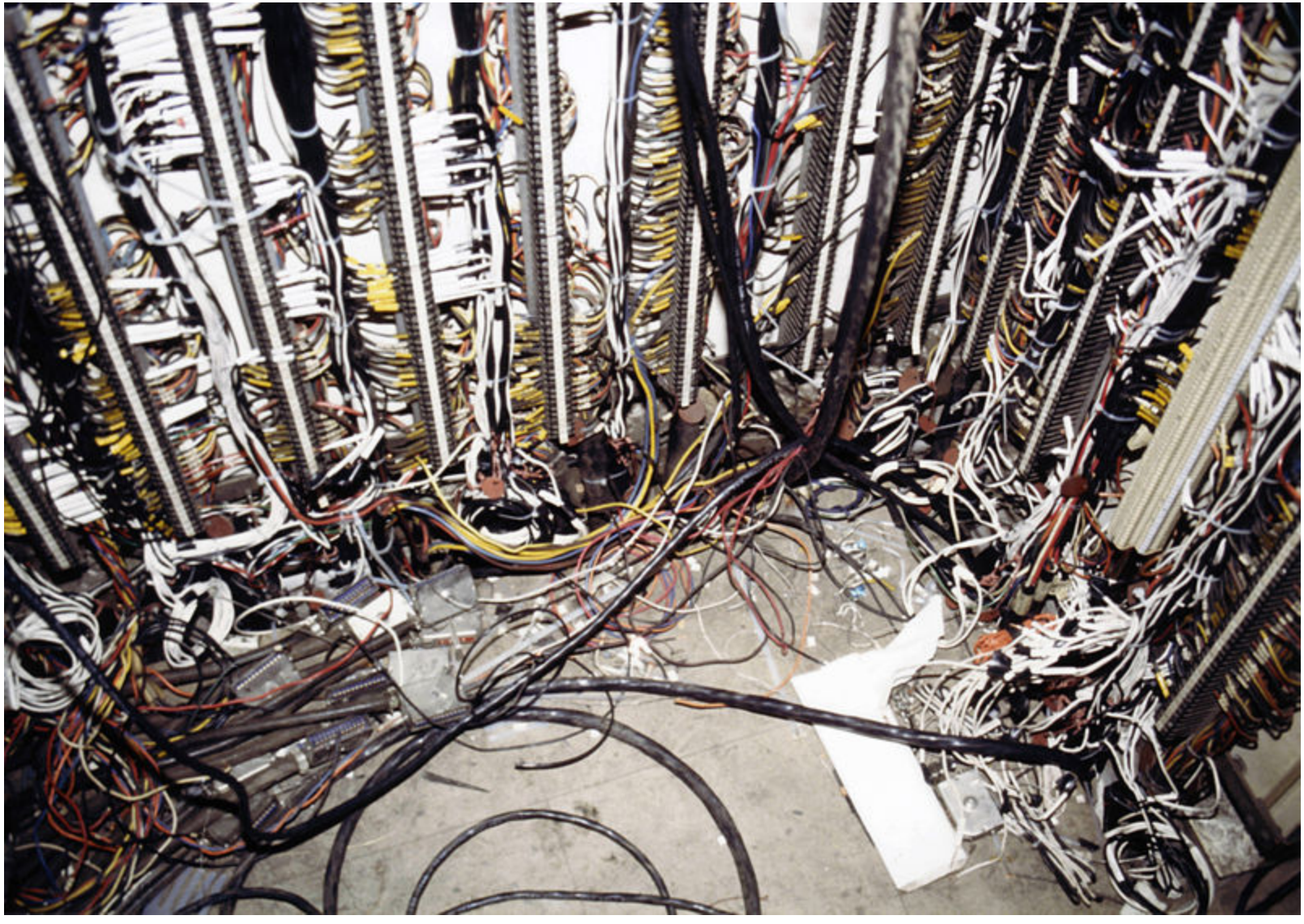
What your infrastructure shouldn't look like



Developing Awesome Apps on Google Cloud

Presented by

Eric Jiang (lorderikir)

This presentation's code/slides can be found on
https://github.com/lorderikir/googlecloud-techtalk

Google Cloud Platform

Talk Summary

1. Introduction to Google Cloud
2. Deep-Dive
    a. Setting up SDK tools
3. Google App Engine
4. Other Tools

[NOTE]: You can play with Google Cloud Platform off your student accounts

Introduction

What is Google Cloud Platform?

> Google Cloud Platform lets you build and host applications and websites, store data, and analyze data on Google's scalable infrastructure.

Composes of many applications, such as:

- Google App Engine (GAE)
- Google Container Engine (GCE)
- Google DataStore
- Cloud ML (built off TF tech)
- and much more


Compute
Storage
Big Data
Services
App Engine
Compute Engine
Container Engine
Cloud Storage
Cloud Datastore
SQL
Cloud SQL
Cloud Bigtable
BigQuery
Cloud Dataflow
Cloud Dataproc
Cloud Pub/Sub
Cloud Endpoints
Translate API
Prediction API

Google App Engine

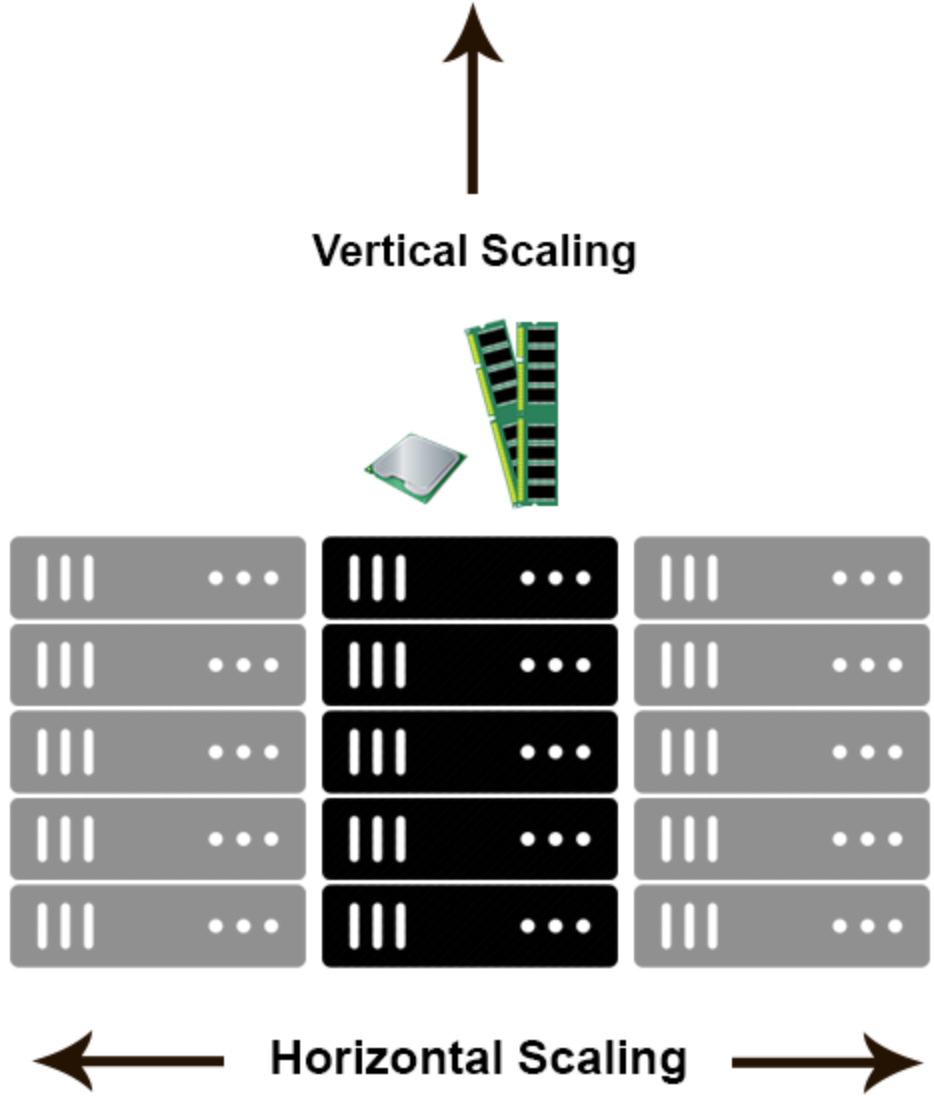
- designed around the fact that *Google just can't send everyone into their datacentre(s) and update applications across their many datacenters*
- Built off Remote Deployments

Language	Environment
Java 7 (Kotlin)	Standard
Java 8	Standard (Beta)/Flexible
Node.js	Flexible
Python 2,7	Standard
Python 3.5	Flexible

Standard Environments run in a specialised envrionment. Though building the application is more constrained then other environments, it means scaling up is faster.

Flexible Environment applications run off a Docker container, it is designed for applications that recieve constant traffic.

Horizontal vs Veritcal Scaling



Me when I look at Scaling:

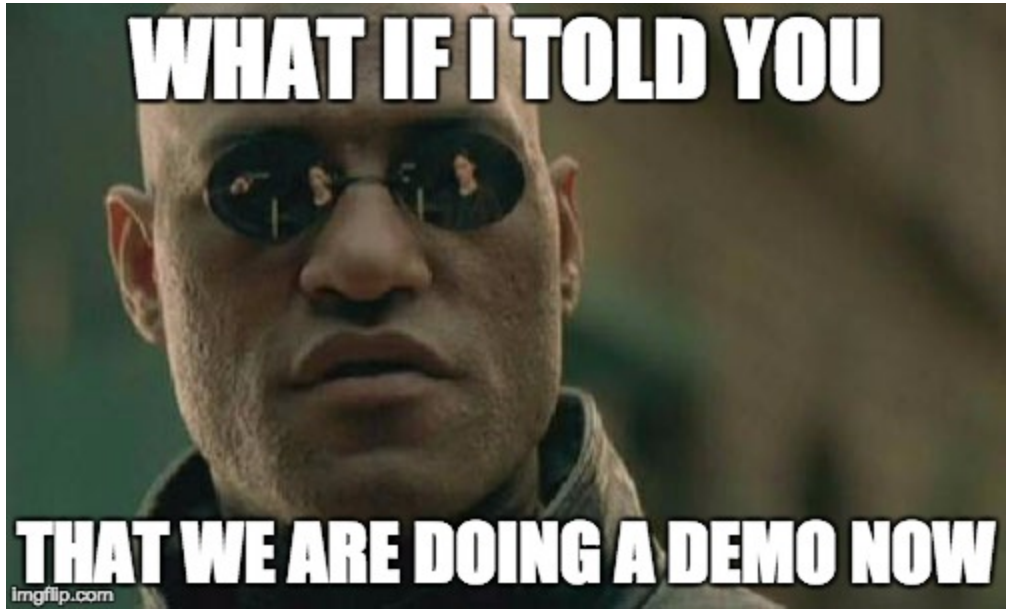
Installing the SDK

1. Install the SDK over https://cloud.google.com/sdk/downloads
2. Authenticate Using `gcloud init` (login using your Monash Student Account)
3. You may need Java (JDK 1.8) and Maven (MVN) Installed if you are using the package provided.

> If you are interested in developing on the framework provided I strongly suggest for you to read the docs.

Framework: https://github.com/MonashUnitPlanner/springboot-base-gae-java8

Demo Section



Other Available Tools

- Cloud ML (Google Cloud Machine Learning): built off TensorFlow
- Compute Engine
- Kubernetes
- Container Engine
- Cloud Storage
- Network Balancer
- APIs such as NLP, Sentiment Analysis, DLP, etc.
- and Much more

Questions