Introduction to Google Cloud Platform

Harvesting, Storing, and Retrieving Data

Why are we here?

- What is Cloud Computing?
- Why would we want cloud computing?
- How is it different from traditional architecture?
- What are the types of cloud computing
- What is Google Cloud Platform?
  - Benefits
  - Services
  - Interaction
  - How vast is the GCP network?

What is Cloud Computing

It is Not in the Cloud

Distributed Architecture

High Performance

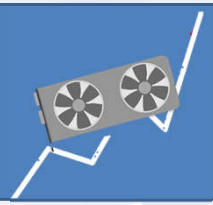
Flexible and Elastic

Less Expensive

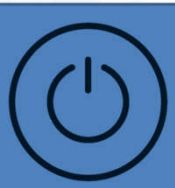
Managed/Unmanaged

Why Cloud Computing

Instantaneity

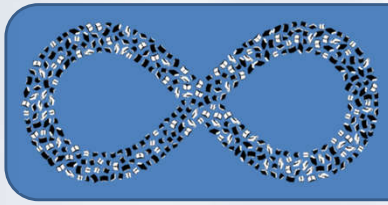


Graphics Processing Unit (GPU)



On-Demand

Controlled Accessibility

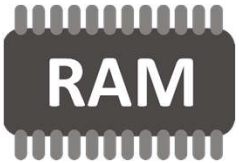


Unlimited Resources

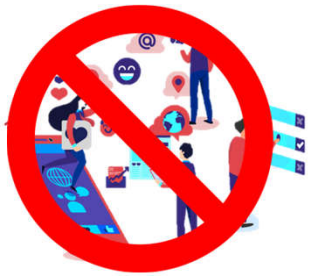
Controlled Security

Why Cloud Computing: Use Case

Challenges not integrating with the cloud



Low memory space



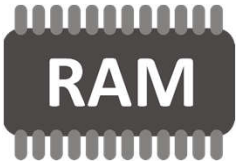
High Traffic causing system to crash

Low number of servers

Image by Rosario C S from Pixabay

Why Cloud Computing: Use Case

With the integration of Cloud services



Increase memory space

Control the load

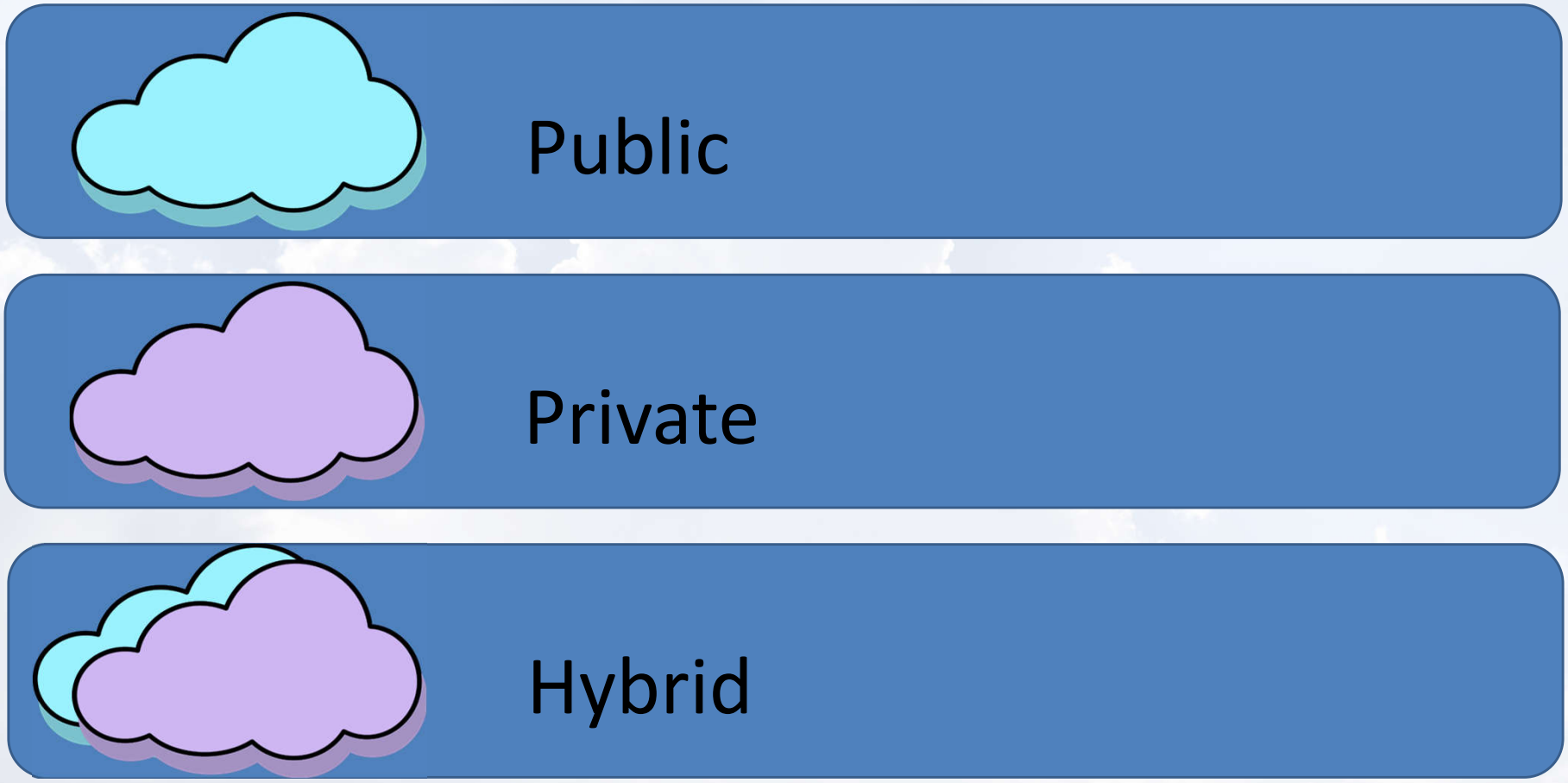
Utilizing as many servers as needed

Image by Rosario C S from Pixabay

Cloud vs. Traditional Architecture

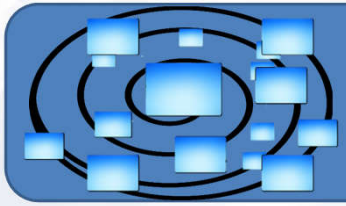
Buy IT services	Build infrastructure and buy assets
Pay-as-you-go	Pay for fixed assets
Access from the Internet	Access via corporate internal network
Shared, Multi-Tenant, Diverse, & Dynamic	Single tenant, static

Types of Cloud Computing

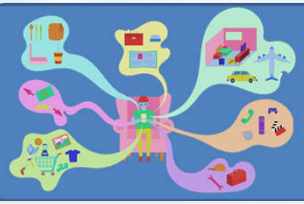


Cloud Services

Infrastructure as a Service (IaaS)



Platform as a Service (PaaS)



Software as a Service (SaaS)

What is GCP

Why GCP over AWS and Azure

Better Pricing

Fast response times

Live Migration

Simple Setup and Configuration

Benefits of GCP

- High Productivity
- Redundant Backups
- Work from Anywhere
- Reliable
- Quick Collaboration
- High Security

GCP Services

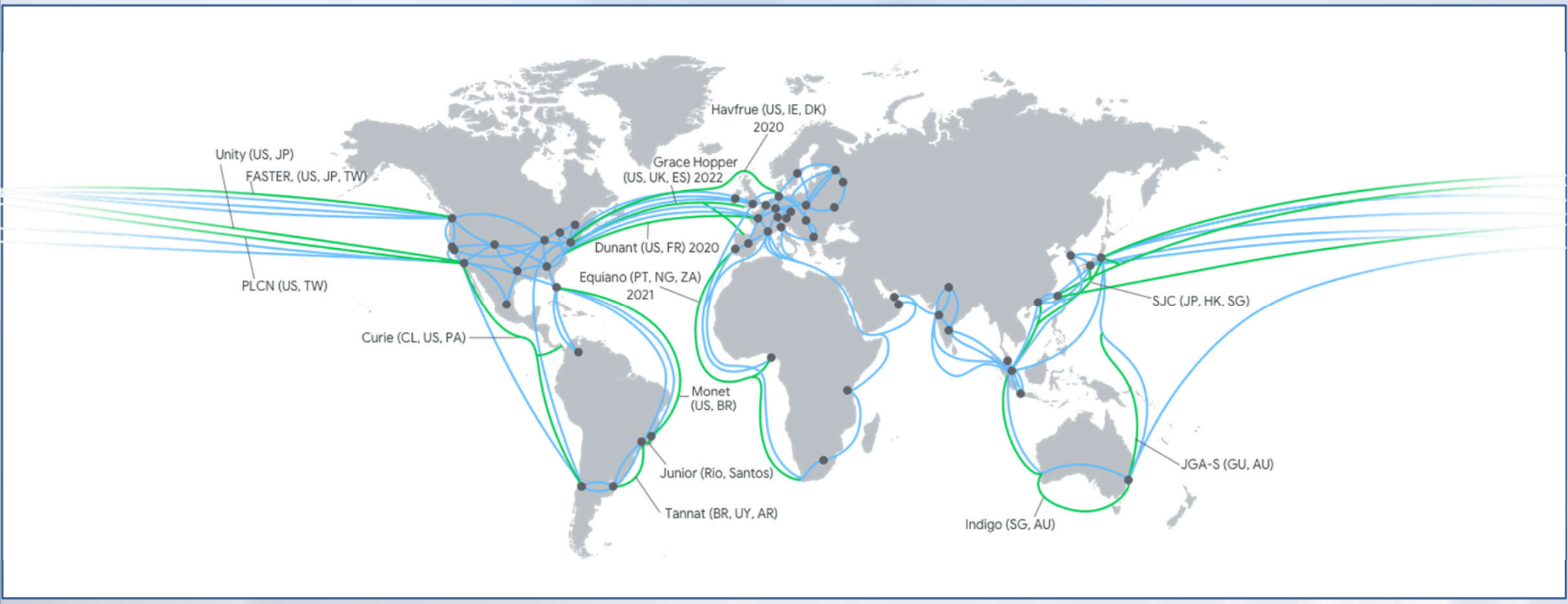
4 Ways you can Interact with GCP Platform

- Web UI
- Cloud Shell
- APIs for Custom Applications
- Mobile App

GCP Projects

- All GCP resources must belong to a GCP Project
- Projects are billed and managed separately
- Project ID has to be unique and is generated automatically
- Can't reuse project names of a deleted project

How Vast is GCP's Network



GCP's Cloud Locations