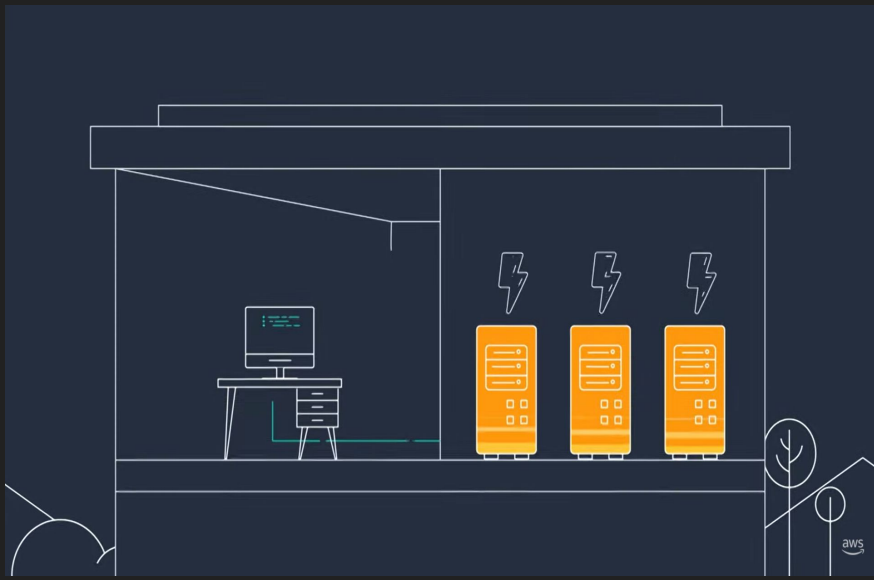amazon
web services

WHAT IS A "CLOUD" IN IT?

HOW CAN YOU DEFINE "CLOUD" ?

What is the cloud?

In the simplest terms, cloud computing means storing and accessing data and programs over the internet instead of your computer's hard drive.

Top cloud providers

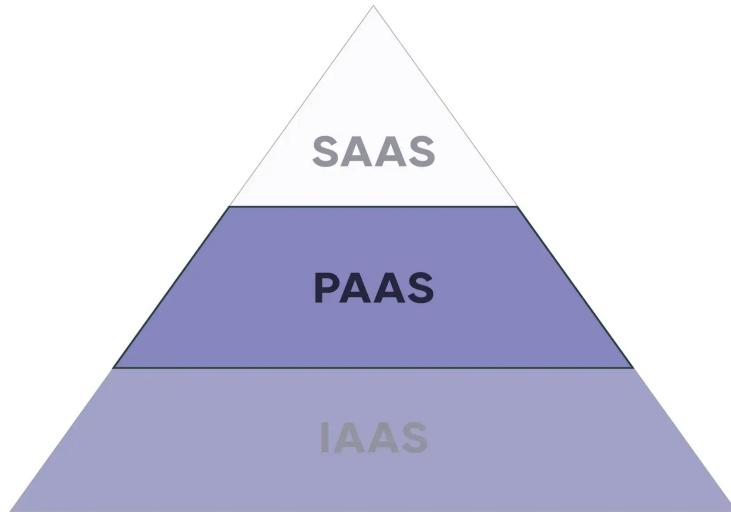# Cloud Terminology

cloud services

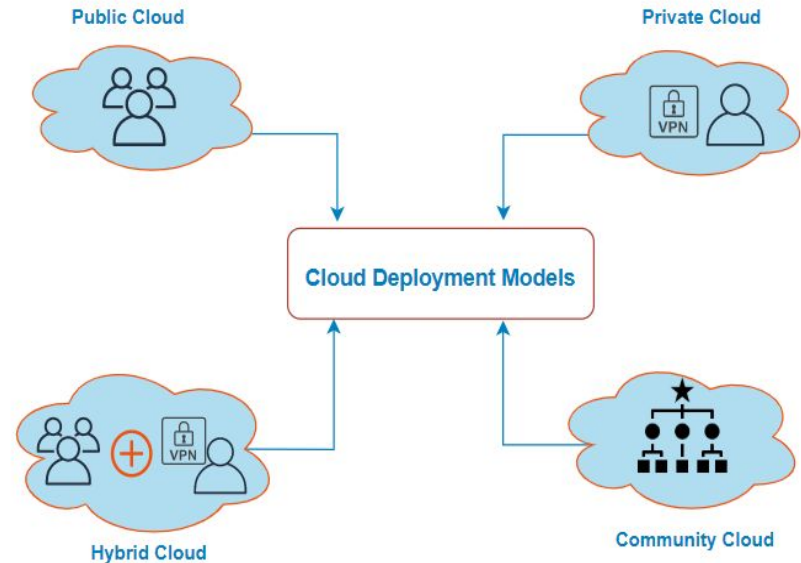Cloud Service Providers

Client vs Consumer

Pay-as-you-use

"X" as a service

Cloud computing services models

IaaS vs PaaS vs SaaS

Infrastructure as a service	Platform as a service	Software as a service
A service model in cloud computing that provides virtualized computing resources over the internet	A cloud computing model that delivers tools necessary for application development over the internet	A service model in cloud computing that hosts software and makes them available for clients over the internet
Provides access to resources such as virtual machines, virtual storage etc.	Provides runtime environments, development & deployment tools for applications	Provides software as services to the end users
Server storage network OS & Middleware packaged software	Server storage network OS & Middleware	Server storage network
Used by network architects	Used by developers	Used by end users

Examples of SaaS, PaaS, and IaaS

SaaS examples: BigCommerce, <u>Google Apps</u>, <u>Salesforce</u>, <u>Dropbox</u>, MailChimp, ZenDesk, DocuSign, Slack, Hubspot.

PaaS examples: <u>AWS Elastic Beanstalk</u>, Heroku, <u>Windows Azure (mostly used as PaaS)</u>, Force.com, OpenShift, Apache Stratos, Magento Commerce Cloud.

IaaS examples: <u>AWS EC2</u>, Rackspace, <u>Google Compute Engine (GCE)</u>, Digital Ocean, Magento 1 Enterprise Edition*.

<u>MORE ABOUT CLOUD SERVICES</u>

cloud computing deployment models

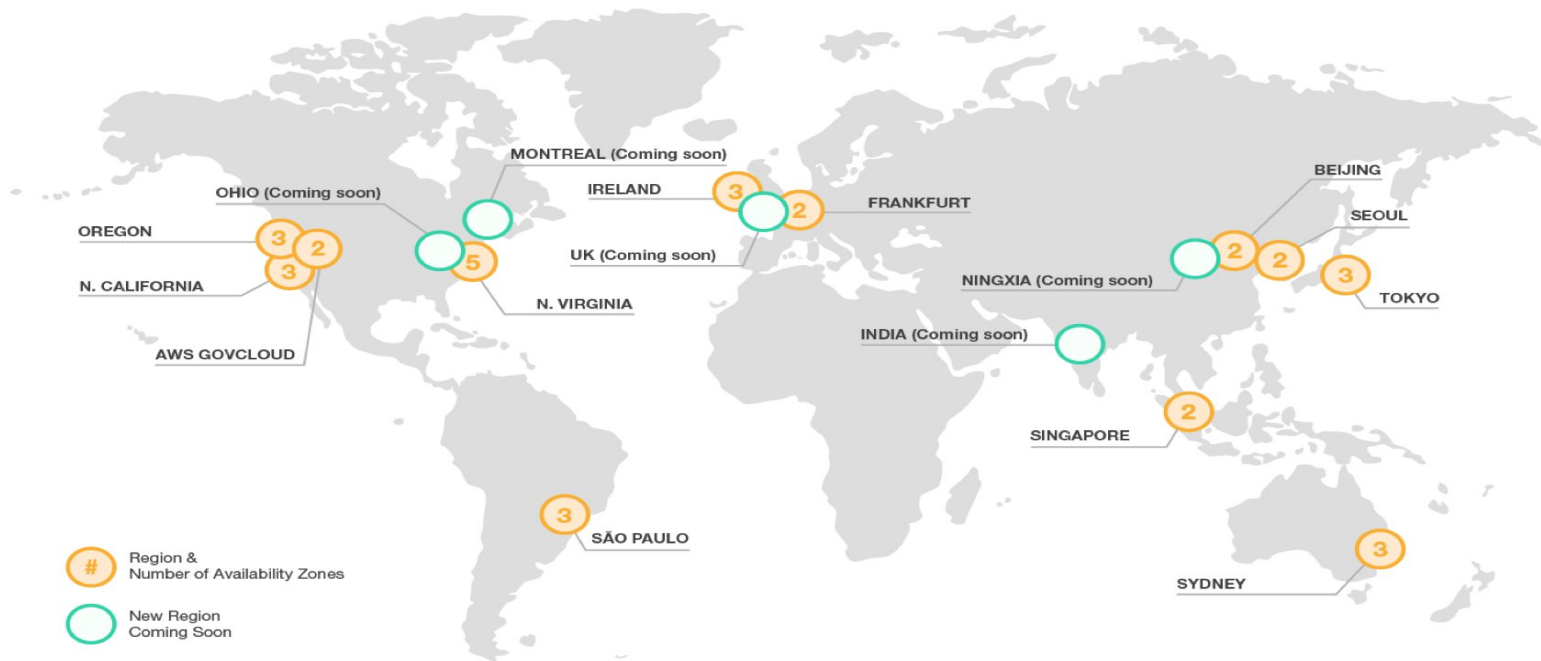| Private Cloud	Community Cloud	Public Cloud	Hybrid Cloud
Operated solely for a single organization Maybe on premise or off premise	Shared by several entities that have a common purpose. Maybe on premise or off premise	Available to the general public and owned by a single organization selling cloud services.	Any combination of two or more private / community or public clouds.
DATA CENTERS	C1 ⇐⇒ C2	AWS	

REGIONS AND AVAILABILITY ZONES

AWS GLOBAL INFRASTRUCTURE

SOME OF THE AMAZON WEB SERVICES

1. **Amazon EC2** (Elastic Compute Cloud)

2. **Amazon S3** (Simple Storage Service)

3. **Amazon EBS** (Elastic Block Store)

4. **Amazon IAM** (Identity and Access Management)

5. **Amazon Route53**

FEW MORE SERVICES

EC2 - ELASTIC COMPUTE CLOUD

Amazon Elastic Compute Cloud (Amazon EC2) is a web-based service that allows businesses to run <u>application</u> programs in the Amazon Web Services (<u>AWS</u>) <u>public cloud</u>. Amazon EC2 allows a developer to spin up virtual machines (<u>VMs</u>), which provide compute capacity for IT projects and cloud workloads that run with global AWS <u>data centers</u>.

<u>Instances</u> An EC2 instance is used to run applications on the Amazon Web Services infrastructure.

Amazon EC2 Instance Types

1 General Purpose

2 Compute Optimized

3 Memory Optimized

4 Accelerated Computing

5 Storage Optimized

https://aws.amazon.com/ec2/instance-types/

LETS CREATE AN EC2 INSTANCE