Certification

Solutions Architect – Associate

Batch-1011 | Moon International Karachi Pakistan

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Lesson Plan

1. Introduction & Overview

    1.1. Group Introduction
    1.2. Course Introduction
    1.3. Who is Solution Architect?
    1.4. About Us
    1.5. Course Prerequisites
    1.6. Eligibility Criteria
    1.7. Passing Criteria
    1.8. After completing this course
    1.9. The History Of AWS
    1.10. AWS General Overview
    1.11. How To Sign Up To AWS.
    1.12. Introduction & Overview Quiz

1.1 Group Introduction

1. Name
2. Organization
3. Last Education
4. Why you want to learn this course
5. Your Expectations from us

1.1.1 About Us

1. About Me
2. About Institute
3. Other Courses

1.2 Course Introduction

Total Sessions	:	10
Class Days	:	Saturday / Sunday
Class Time	:	2:00 PM to 5:00 PM
Reference Material	:	https://docs.aws.amazon.com
Outline	:	Attached

1.2.1 Course Prerequisites

AWS Account	:	Free Trial Account (Credit Card Required)
Computer	:	PC / MAC / Laptop
Operating System	:	Linux / Mac / Windows
Ram	:	Min 2 GB

Internet

Your own domain name (optional, but recommended)

1.2.2 Eligibility Criteria

AWS Absolute Beginners. No prior AWS experience necessary

Existing Solutions Architects

Programmers Interested in Deploying Applications on AWS

People interested in hosting highly scalable, fault tolerant applications (such as Wordpress and Joomla) on the AWS cloud.

Programming Experience : Not required

System Engineer Experience : Not required

1.2.3 Passing Criteria

Final Exam	:	75% Marks Min
Quiz	:	70% Marks
Attendance	:	80%
Lab performance	:	50%

1.2.4 After completing this course

- Pass the AWS Certified Solutions Architect - Associate Exam
- Become Intimately Familiar With The AWS Platform
- Become A Cloud Guru
- Design Highly Resilient and Scalable Websites on AWS
- Become Amazon Certified

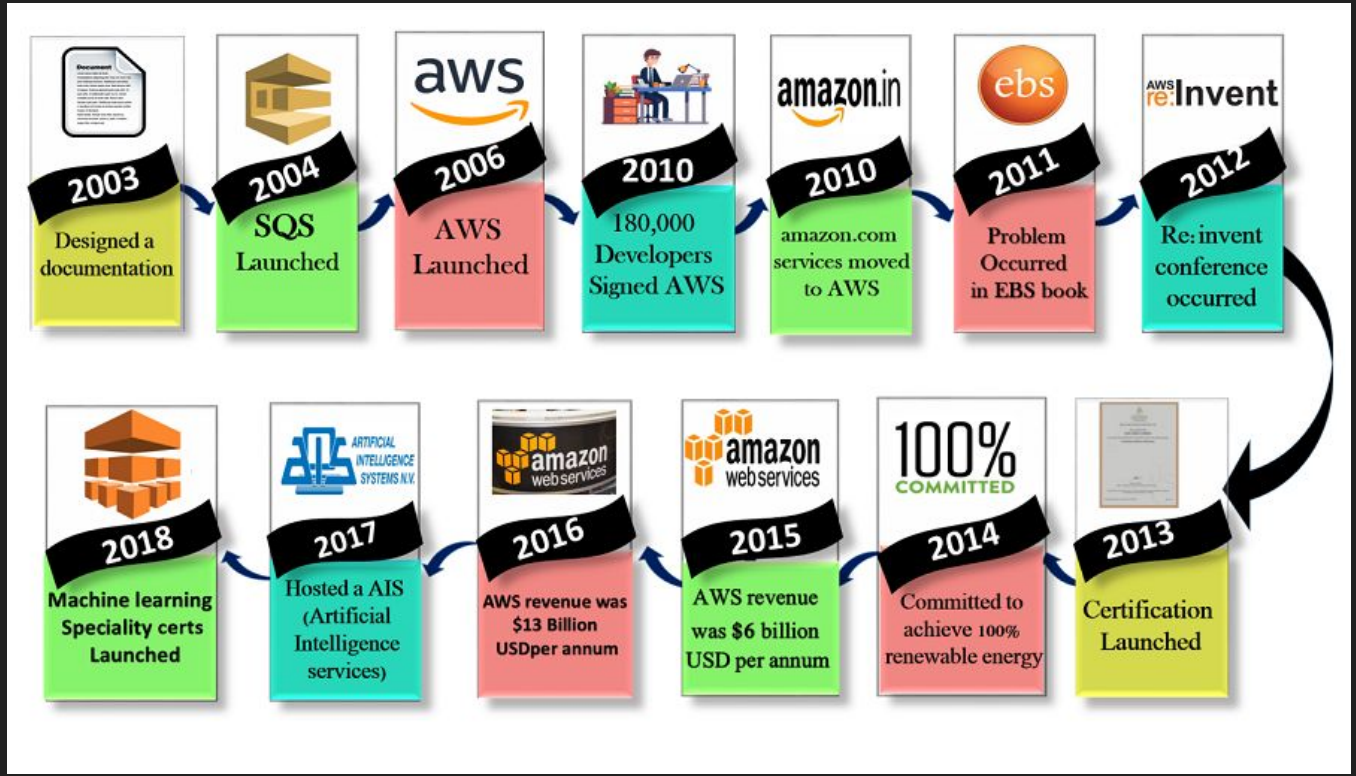
1.2.5 Who is Solution Architect?

Solution architecture is a practice of defining and describing an architecture of a system delivered in context of a specific solution and as such it may encompass description of an entire system or only its specific parts.

Definition of a solution architecture is typically led by a solution architect

1.3 AWS History

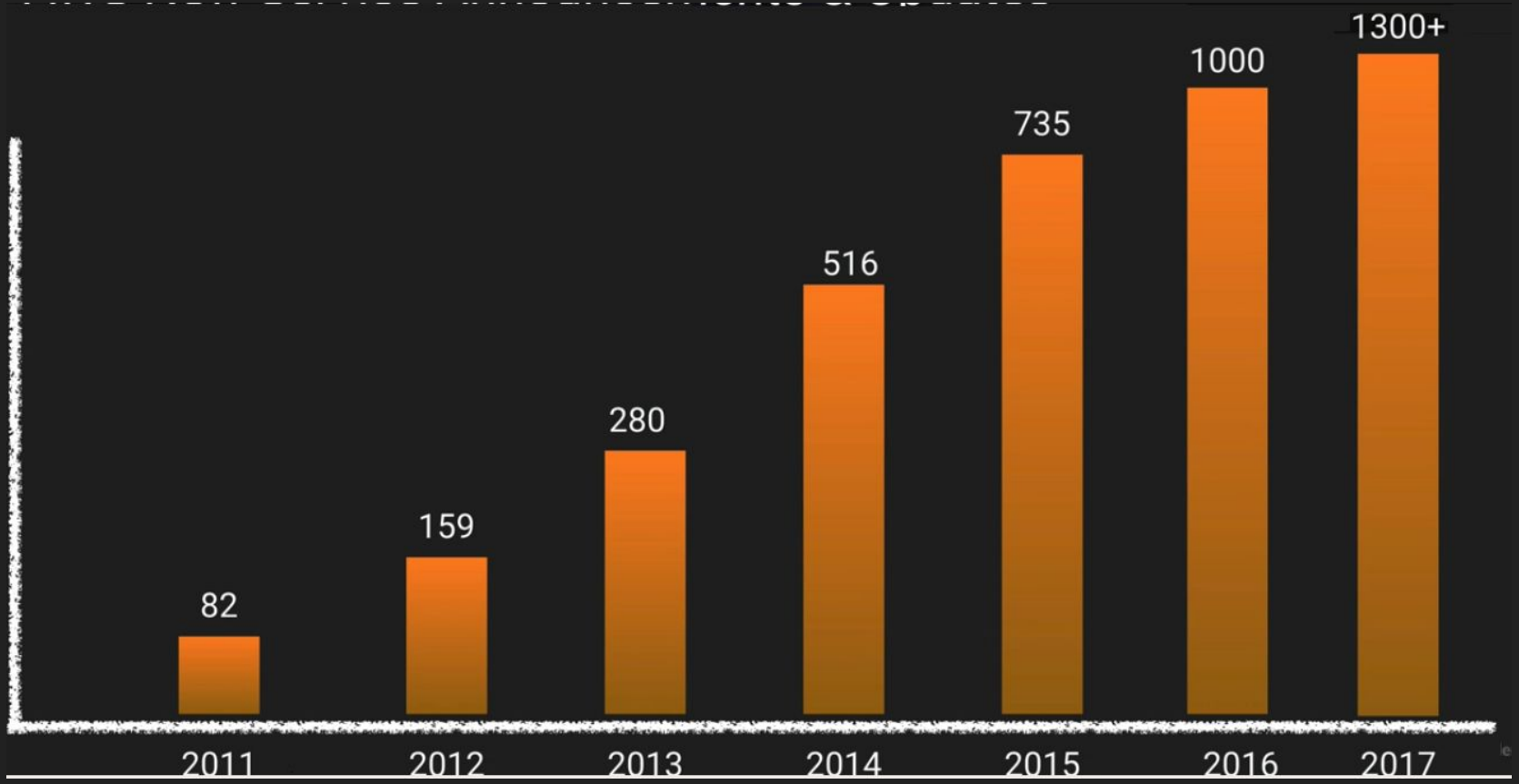
- What is AWS



1.3.1 AWS History | Timeline of AWS

- 2003 - Chris Pinkhan & Benjamin Black present a paper on what Amazon's own internal infrastructure should look like
- Suggested selling it as a service and prepared a business case.
- SQS officially launched in 2004
- AWS Officially launched in 2006
- 2007 over 180,000 developers on the platform
- 2010 all of amazon.com moved over
- 2012 First re:Invent Conference
- 2013 Certifications Launched
- 2014 Committed to achieve 100% renewable energy usage for its global footprint
- 2015 AWS breaks out its revenue: $6 Billion USD per annum and growing close to 90% year on year
- 2016 Run rate of $13 billion USD.
- 2017 AWS re:invent releases a host of Artificial Intelligent Services as well as Virtual Reality services.

1.3.2 AWS History | Service Announcements

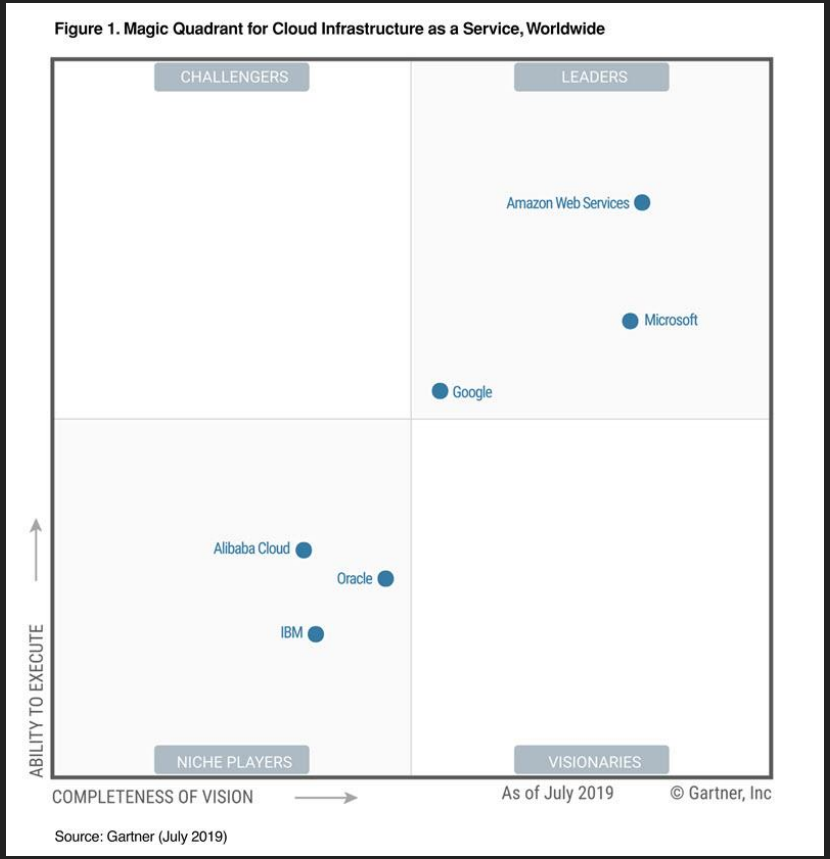


1.3.3 AWS Overview | Gartner Magic Quadrant

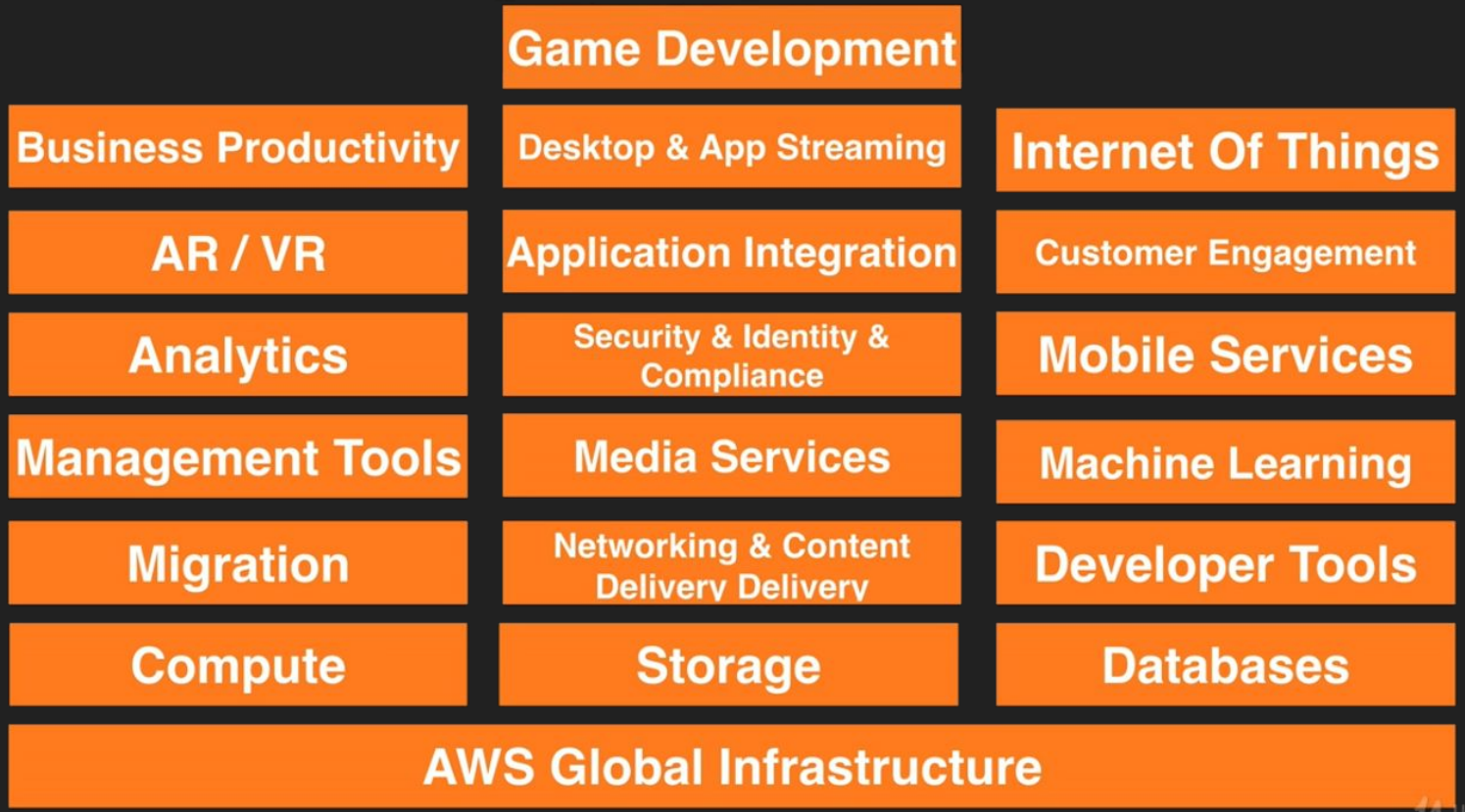
Gartner Magic Quadrant 2019

AWS

Google Cloud



1.4.1 AWS Overview | The Platform



1.4.2 AWS Overview | Global Infrastructure

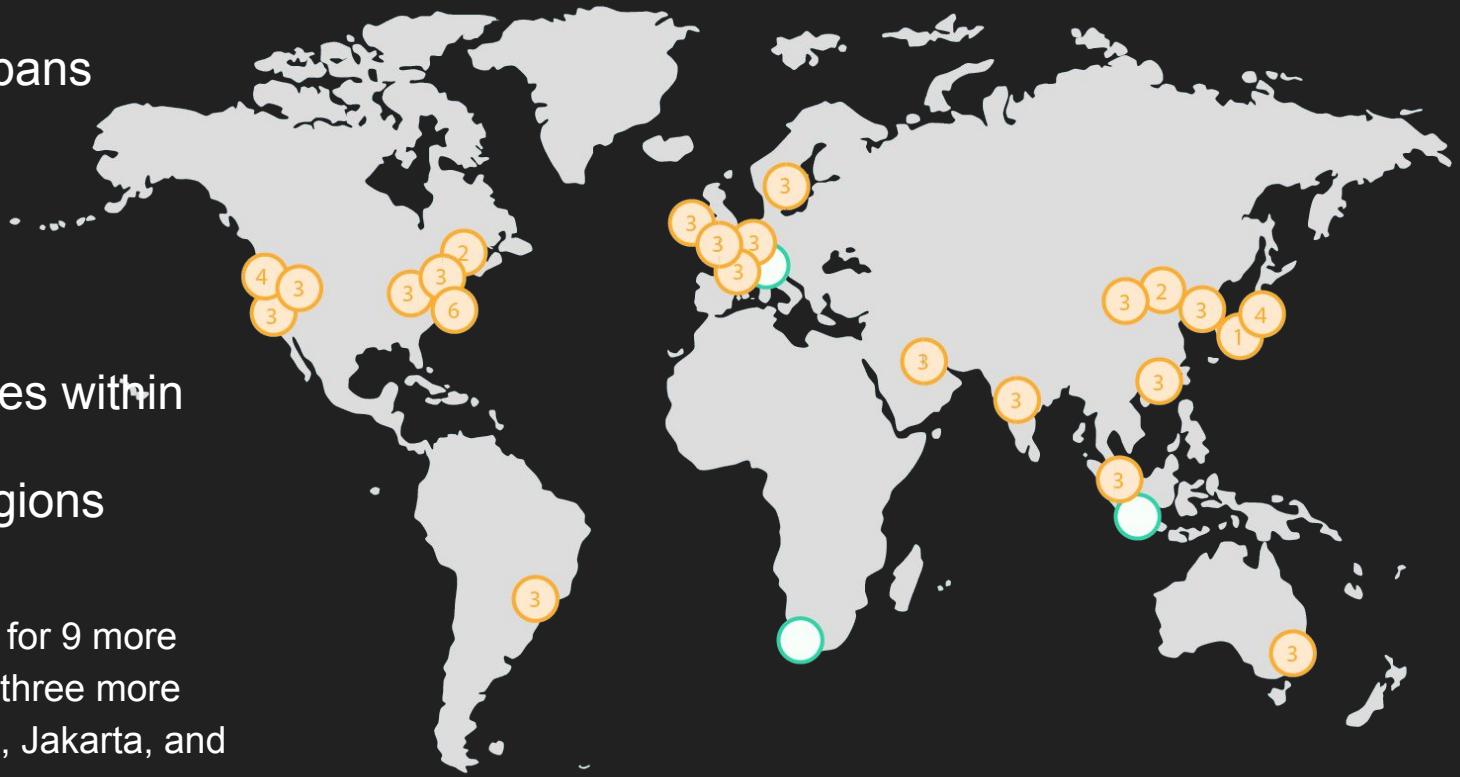
The AWS Cloud spans

(July-2019)

69 Availability Zones within

22 geographic Regions

With announced plans for 9 more Availability Zones and three more Regions in Cape Town, Jakarta, and Milan.



1.4.2.1 AWS Overview | Region & AZ

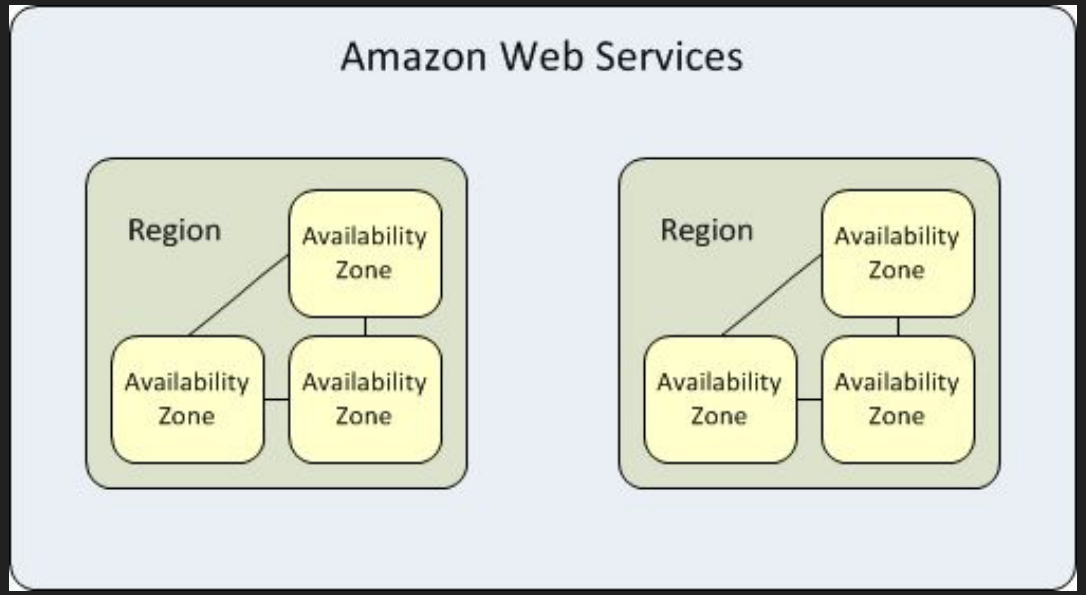
What is Region and Availability Zone

Region is a geographical area and is completely independent.

Availability Zone is isolated.

Availability Zones in a Region are connected through low-latency links.

Availability Zones is a **Data Center**



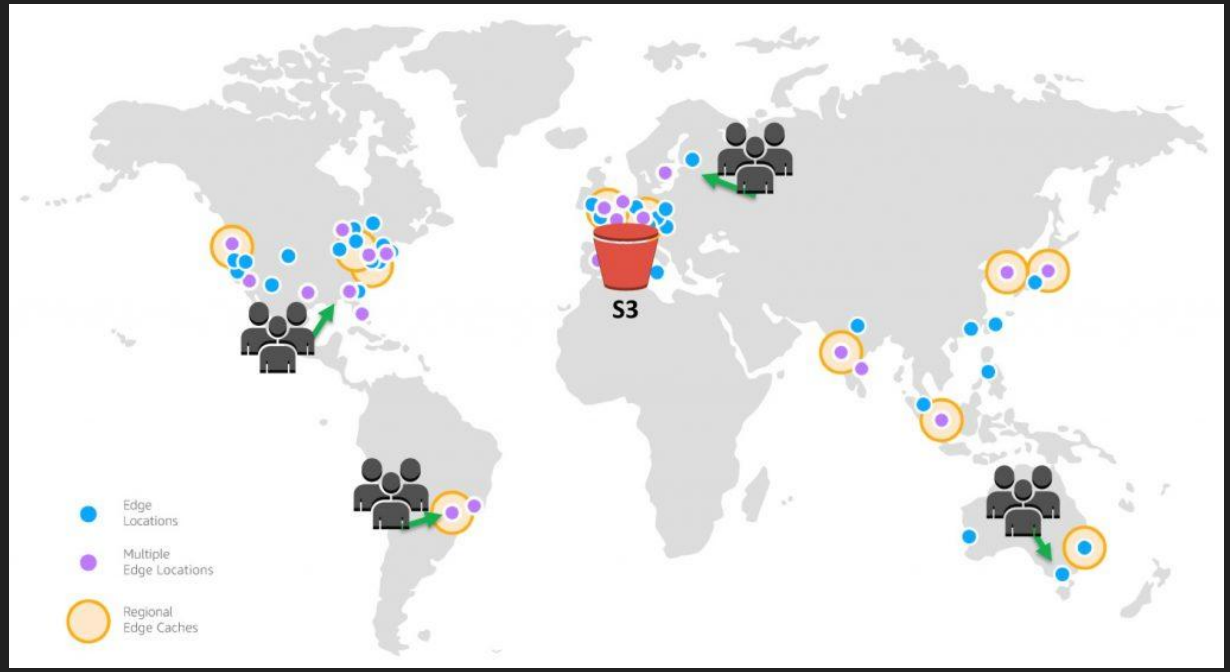
1.4.2.2 AWS Overview | Edge Location

What is Edge Location

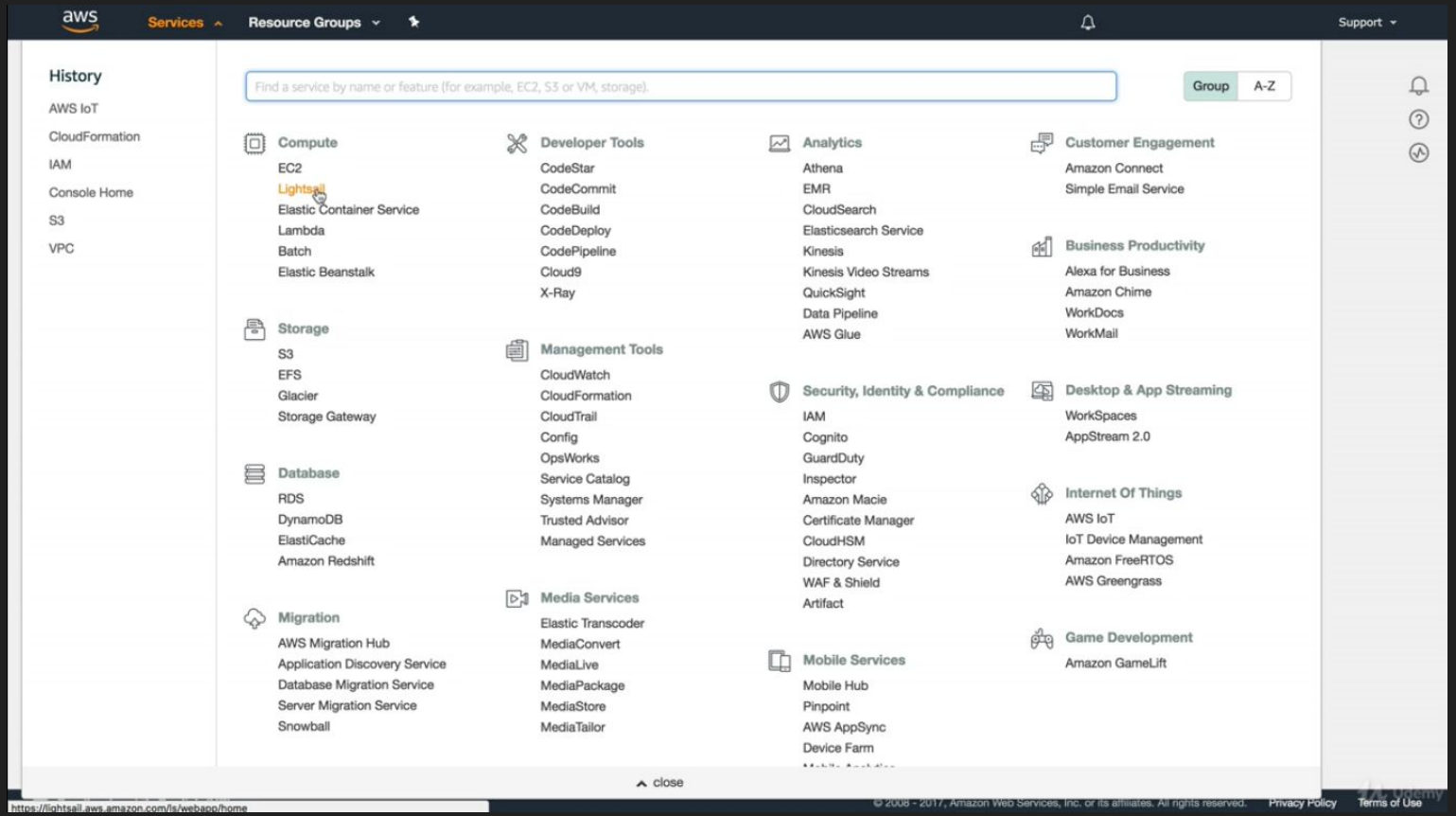
Edge Locations are endpoints for aws which are used for caching content.

A site that CloudFront uses to cache copies of your content for faster delivery to users at any location.

Edge location is where end users access services located at AWS.



1.4.3 AWS Overview | Services



1.4.3 .1 Overview | Services | Compute | EC2

What is Amazon Elastic Compute Cloud

Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizeable computing capacity

Virtual machine inside the AWS platform

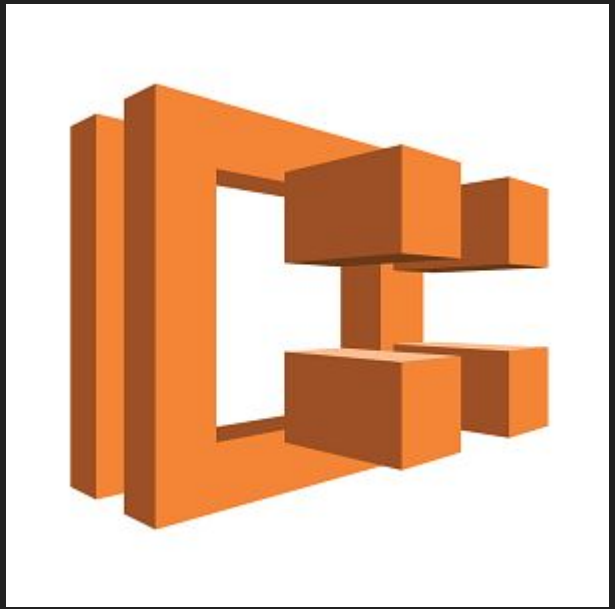
EC2 reduces the time required to obtain and boot new server instances to minutes, allowing you to quickly scale capacity, both up and down

1.4.3 .2 Overview | Services | Compute | ECS

What is Amazon Elastic Container Service

Amazon Elastic Container Service (Amazon ECS) is a highly scalable, high-performance container orchestration service that supports Docker containers and allows you to easily run and scale containerized applications on AWS

Amazon ECS eliminates the need for you to install and operate your own container orchestration software, manage and scale a cluster of virtual machines, or schedule containers on those virtual machines.



1.4.3 .2 Overview | Services | Compute | Beanstalk

What is AWS Elastic Beanstalk

AWS Elastic Beanstalk is an easy-to-use service for deploying and scaling web applications and services developed with Java, .NET, PHP, Node.js, Python, Ruby, Go, and Docker on familiar servers such as Apache, Nginx, Passenger, and IIS.

Elastic Beanstalk automatically scales your application up and down based on your application's specific need using easily adjustable Auto Scaling settings

1.4.3 .3 Overview | Services | Compute | Lambda

What is AWS Lambda

AWS Lambda lets you run code without provisioning or managing servers. You pay only for the compute time you consume - there is no charge when your code is not running.

Run code for virtually any type of application or backend service - all with zero administration.

Just upload code and Lambda takes care of everything required to run and scale your code with high availability