**AWS Introduction**

**What is AWS?**

**Amazon Web Services is a secure cloud services platform, offering compute power, database storage, content delivery and other functionality to help businesses scale and grow.**

**Roadmap of AWS:**

2003: Designed a Documentation

2004: SQS Launched

2006: AWS Launched

2010: 1.8 L dev’s signed AWS

2010: amazon.com services moved to AWS

2011: EBS book Problem

2012: Re: Invent Conf occurred

2013: Certifications Launched

2014: 100% Renewable Energy committed to Achieve

2015: $6 billion USD per annum

2016: $13 billion

2017: Hosted a AIS

2018: Machine Learning Certs

2019: $35.02 billion in Annual Revenue

……..

AWS accounts for 47% of the market in 2019 (Microsoft is 2nd with 22%)

Pioneer and Leader of the AWS Cloud Market for the 12th consecutive year

A white grid with blue dots

Description automatically generated

**Region: Geographical Location / Physical Location:**

**33 Data Centres (Jan 2024).**

**Every Region contains multiple AZs. (Min 2)**

**AZ /Availability Zone: Data Center / Combination of Multiple DCs…**

**105 AZs across globe.**

* Systems can span multiple Availability Zones (AZs).
* Each AZ is designed as an independent failure zone.
* AZs are all redundantly connected to multiple tier-1 transit providers.

**POP (Point of Presence) / Edge Location: CDN (Content Delivery Network)…**

**We can deliver data/application with low latency…**

**It caches the data at customer nearby locations.**

A diagram of a computer network

Description automatically generated with medium confidence

**Refer this :** [**https://aws.amazon.com/about-aws/global-infrastructure/regions\_az/**](https://aws.amazon.com/about-aws/global-infrastructure/regions_az/)

**How to Create an AWS account and first steps.**

**IAM:**

Identity and Access management.

How to manage users…

Create, Provide, and manage access on AWS services…

**S3:**

Simple Storage Service.

Storage service in AWS…

We can store any data... AWS version of Google Drive...

**EC2:**

Elastic Compute Cloud.

We launch/manage servers…

Instance/Virtual machine/Engine/Azure vm: Server

**VPC:**

Virtual private Cloud.

Networking part in AWS...

Ip address (public/private), ip4 classes, Subnet calc...

**RDS:**

Relational Database Service.

Database as a Service: MySQL/MSSQL/oracle/Postgres/maria/aurora...

**Route53:**

AWS DNS Service.

Map IPs to FQDN (Fully Qualified Domain Names) and vice versa...

**Security & Monitoring & Logging:**

CloudWatch, CloudTrail, config, WAF, KMS (encry/decry), Trusted advisor...

**Developer Service:**

Lambda, CloudFormation, Cloud9, CDK (Cloud development kit), cli,

Containers: ECR Elastic container registry / ECS...

**General:**

Resume, Interview, Project...

**Free Tier:**

From day of your account creation, first 12 Month, Trying services service won’t cost us...

**IAM: Always free**

**S3: 5 gb free storage...**

**ec2: t2.micro (1 CPU, 1 RAM) ...**

**Windows x 750 Hrs / Month...**

**Linux x 750 hrs / Month...**

**VPC: free**

**RDS: db.t2.micro.. 750 Hrs/ Month...**

31 x 24 hrs = 744 hrs.. 750 hrs.???

1 Server x 31 Days.. 6 hrs left..

2 Servers.??? 1 Day = 48 Hrs.. : 16 Days..!!