



CLOUD SERVICES

S Thenmozhi

Department of Computer Applications

CLOUD SERVICES

Cloud Computing Essentials

S Thenmozhi

Department of Computer Applications

It is **global cloud platform** which allows to host applications and services on the internet.

Used by around 80% of fortune 500 companies to **host the infrastructure**

They provide IaaS(EC2,VPC,S3),

PaaS (java,php,ruby,python),

SaaS (workemail,workdocs)

Hosting provider

CLOUD SERVICES

Why AWS?

- Free tier availability
- Variety of Billing Strategies for user
 - Per Hour Billing, Micro Billing, Region specific pricing, term specific billing,
- Spot resources
- Services are stable
- Offers Lot of services (currently 175)
- Trusted vendor
- 20 regions
- Massive data centres in each region (3000 – 5000)
- Multiple availability zones per region (0 Failure)


CLOUD SERVICES

Major Services


- Compute and Networking Services
 - EC2, VPC, ELB, Autoscaling, Route 53, Lambda, ECS
- Storage and Content Delivery services
 - S3, CloudFront, EBS, Glacier
- Security and Identity Services
 - IAM, Directory Service
- Database Services
 - RDS, Redshift, DynamoDB
- Analytics Services
 - EMR, Kinesis, ML, Data Pipeline
- Application Services
 - Appstream, CloudSearch, SNS, SES, SQS
- Management Tools
 - Cloudwatch, Cloudtrail, CloudFormation, Service catalog

CLOUD SERVICES

Regions

 thenmozhi ▾ Mumbai ▲ Support ▾

Stay connected on the go

 Download on the App Store or Get it on Google Play

Explore AWS

Amazon Elastic Compute Cloud

Fully managed operational cloud

US East (N. Virginia) us-east-1

US East (Ohio) us-east-2

US West (N. California) us-west-1

US West (Oregon) us-west-2

Africa (Cape Town) af-south-1

Asia Pacific (Hong Kong) ap-east-1

Asia Pacific (Mumbai) ap-south-1

Asia Pacific (Seoul) ap-northeast-2

Asia Pacific (Singapore) ap-southeast-1

Asia Pacific (Sydney) ap-southeast-2

Asia Pacific (Tokyo) ap-northeast-1

Canada (Central) ca-central-1

Europe (Frankfurt) eu-central-1

CLOUD SERVICES

Regions and AZ



- **Regions**
- Region is a specific geographic area where Data Centres are located
- Region Identifiers ends in **numbers**
- By having specific regions, you can have your application in the region closer to you, so that access can be faster
- **Availability Zones**
- Each **region** has multiple, isolated locations known as **Availability Zones (AZ)**
- AZ identifiers ends in alphabets

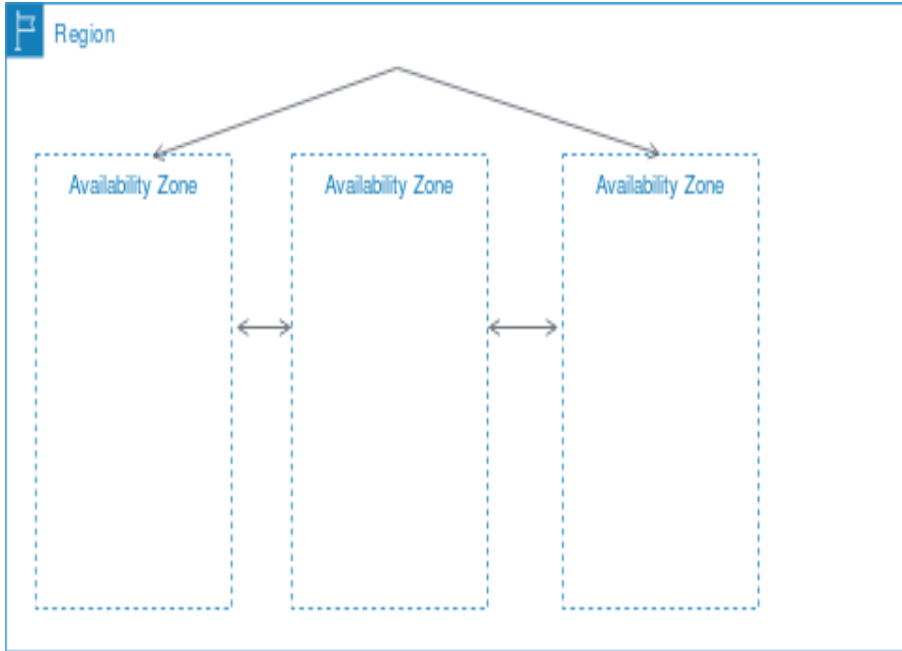
CLOUD SERVICES

Regions and AZ

- Each AZ are isolated to manage failures
- AZ provide inexpensive, low latency, network connectivity to other zones in the same region
- By placing resources in separate Availability Zones, you can protect your website or app from the failure of a single location
- EC2 is AZ specific i.e, Resources aren't replicated across regions unless you do so specifically.
- Aws services are tied to regions or AZs

CLOUD SERVICES

Regions and AZ



Asia Pacific (Mumbai) - ap-south-1

Default Availability Zones

ap-south-1a (aps1-az1)

ap-south-1b (aps1-az3)

ap-south-1c (aps1-az2)



THANK YOU

S Thenmozhi

Department of Computer Applications

thenmozhis@pes.edu

+91 80 6666 3333 Extn 393